Newman Quarrying

Slys Quarry, Tullymorgan-Jackybulbin Road, Mororo

Annual Review

December 2019

Annual Review title block

Feature	Details
Name of operation	Slys Quarry
Name of operator	Newman Quarrying Pty Ltd
Development consent/project approval #	SSD 6624
Name of holder of development consent/project approval	Newman Quarrying Pty Ltd
Mining lease #	NA
Name of holder of mining lease	NA
Water licence #	NA
Name of holder of water licence	NA
MOP/RMP start date	NA
MOP/RMP end date	NA
Annual Review start date	01 July 2018
Annual Review end date	30 June 2019
I, Mark Newman, certify that this annual review is a true and accurate record of the compliance status of Slys Quarry for the period 01 July 2018 to 30 June 2019 and that I am authorised to make this statement on behalf of Newman Quarrying Pty Ltd. *Note.* *a) The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000.* *b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or $22,000, or both).*	
Name of authorised reporting officer	Mark Newman
Title of authorised reporting officer	Director
Signature of authorised reporting officer	
Date	26/09/2019

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Table index

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Appendices

Abbreviations

Abbreviations	Terms
AQMP	Air Quality Management Plan
BMP	Blast Management Plan
BRMP	Biodiversity and Rehabilitation Management Plan
CoA	Conditions of Approval
CVC	Clarence Valley Council
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EPL	Environmental Protection Licence
HMP	Heritage Management Plan
LGA	Local Government Area
Newman Quarrying	Newman Quarrying Pty Ltd
NMP	Noise Management Plan
SEPP	State Environmental Planning Policy
SWMP	Soil and Water Management Plan
TMP	Traffic Management Plan
TSS	Total suspended solids
WMP	Waste Management Plan

1. Statement of compliance

The expansion of Slys Quarry was approved by Project Approval SSD 6624 and has an Environmental Protection Licence (EPL 11649). In regards to the compliance of the operations with the Project Approval (SSD 6624) and EPL a statement of compliance, as at the end of the reporting period, is provided in Table 1-1. Table 1-2 provides more detail in regards to the non-compliances, including the compliance status, in accordance with Table 1-3.

Table 1-1 Statement of compliance

Were all conditions of the relevant approvals complied with	
SSD 6624	No
EPL 11649	Yes

Table 1-2 Non-compliances

Relevant approval	Condition	Condition description	Compliance status	Comment	Where addressed in Annual Review
SSD 6624	Condition 28, Schedule 3	Security of offsets	Non compliant	Refer to Section 9.2	Section 9.2
	Condition 31, Schedule 3	Biodiversity and Rehabilitation Plan	Non compliant	Refer to Section 9.2	Section 9.2
	Condition 13, Schedule 5	Access to information	Non compliant	Refer to Section 9.2	Section 9.2

Table 1-3 Compliance status

Risk level	Colour code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

2. Introduction

Newman Quarrying Pty Ltd (Newman Quarrying) operate a sandstone quarry known as Sly's Quarry at Tullymorgan-Jackybulbin Road, Mororo, NSW. Sly's Quarry is located at Lot 2 DP 1055044, approximately 2.6 km west of the Pacific Highway, in the Clarence Valley Local Government Area (LGA). The location of the site is presented in Figure 2-1. The primary purpose of the quarry is to supply quarry materials required for current and proposed Pacific Highway works, and for supply to local councils and contractors.

Newman Quarrying have been operating since the early 1990's, however the site has reportedly been used as a quarry since the 1950's. On 5 May 2016, development consent (SSD 6624) was granted for the expansion of the quarry and involved the following:

- Expand main quarry pit (Site A) by 11.1 hectares to 18 hectares
- Close and rehabilitate other quarry pits (Sites B and C)
- Extraction depth 44 m AHD
- Increase the extraction rate up to 500,000 tonnes per annum
- Estimated resource 7,000,000 tonnes
- Estimated operating period 15-40 years with approval to 31 May 2041

2.1 Quarry contacts

Table 2-1 provides contact details for key personnel who are responsible for the environmental management of Sly's Quarry.

Table 2-1 **Sly's Quarry Contacts**

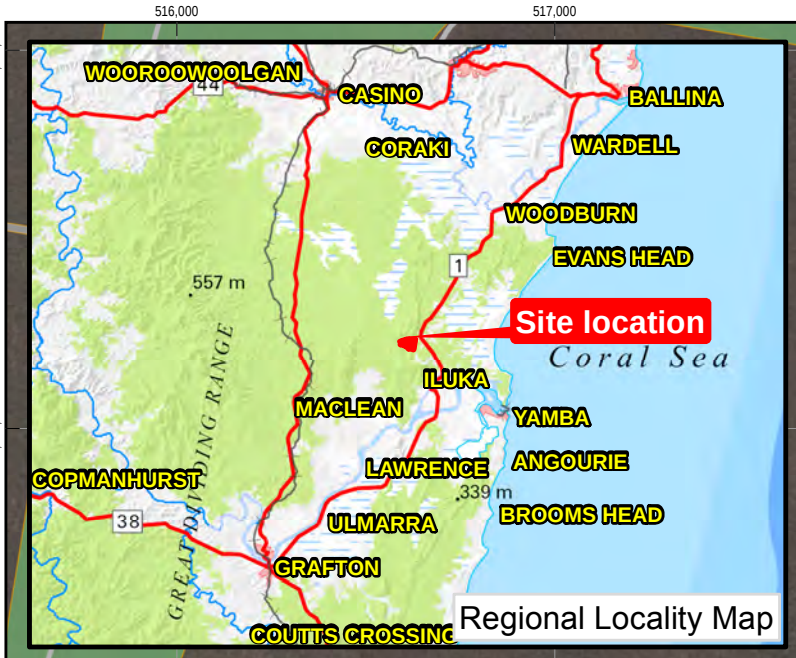
Quarry Owner/Manager:	Mark Newman
Company:	Newman Quarrying Pty Ltd
Address:	Tullymorgan-Jackybulbin Road, Mororo
Phone:	0427 822 667
Email:	newmanquarrying@gmail.com

2.2 Purpose and scope of this report

This Annual Review has been prepared to satisfy the Conditions of Development Consent (SSD 6624), in particular Condition 10 of Schedule 5. The Annual Review covers the period from the 1 July 2018 until 30 June 2019 (herein referred to as the reporting period).

This Annual Review provides a summary of actual operational and environmental management activities undertaken at Sly's Quarry during the reporting period. The Annual Review also addresses any complaints made during the reporting period.

The Annual Review has been prepared generally in accordance with the *Annual Review Guideline* (2015) where practicable.



BUNDJALUNG StateConservationArea

BUNDJALUNG NationalPark

SLYS ROAD

PACIFIC HIGHWAY

TULLYMORGAN-JACKYBULBIN ROAD

TABBIMOBLE CREEK

A

B

C

MCMAHONS TRAIL

MORORO STATE FOREST

GIBBERAGEE STATE FOREST

Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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6,761,000 6,760,000 6,759,000 6,758,000 6,757,000 6,756,000 6,755,000

LEGEND

- Current Quarry Areas
- Lot 2 DP 1055044
- Road
- Lot
- Waterways
- Waterbody
- Natural Parks
- State Forest

Paper Size A3

0 100 200 400 600 800

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Newman Quarrying
Sly's Quarry Environmental Impact Statement

Job Number 22-17528
Revision A
Date 11 Dec 2014

Site location

Figure 2-1

N:\AU\Coffs Harbour\Projects\22\17528\GIS\Maps\Deliverables\22_17528_Z006_Lot2_Site_location.mxd

Level 15, 133 Castlereagh Street Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

Data Source: NSW Department of Lands: Cadastre - Jan 2014; Geoscience Australia: 250k Data - Jan 2014; NSW Department od Primary Industry - Jan 2014; ESRI imagery Jan 2014. Created by: qjchung

2.3 Limitations

This report has been prepared by GHD for Newman Quarrying Pty Ltd and may only be used and relied on by Newman Quarrying Pty Ltd for the purpose agreed between GHD and the Newman Quarrying Pty Ltd.

GHD otherwise disclaims responsibility to any person other than Newman Quarrying Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Newman Quarrying Pty Ltd and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

Site conditions (including the presence of hazardous substances and/or site contamination) may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change.

3. Approvals and licences

Table 3-1 summarises the key approvals currently held by Newman Quarrying which are relevant to the operations at Sly's Quarry.

Table 3-1 Key approvals, consents and licences

Description	Date granted/ commencement date	Expiry/duration
Project Approvals		
Development Consent (SSD 6624)	5 May 2016. Modified 19 October 2017	31 May 2041
Environmental Protection Licences		
EPL 11649	12 June 2002. Licence varied 10 October 2017	In perpetuity (Anniversary 1 January) until surrendered

The requirements of the Development Consent, relevant to the Annual Review, are shown in Table 3-2.

Table 3-2 Annual Review Requirements

Licence, Approval or Guideline	Section Reference	Requirement	Reference in this report
Development consent and CoA SSD 6624	Schedule 2, Condition 16	The Applicant must: (a) provide annual quarry production data to DRG using the standard form for that purpose; and (b) include a copy of this data in the Annual Review (see condition 9 of Schedule 5).	Appendix A
	Schedule 2, Condition 19	The Applicant must pay to Council an annual financial contribution toward the maintenance of Tullymorgan-Jackybulbin Road. The contribution must be determined in accordance with the Maclean Shire Council S.94 Contribution Plan for Maintenance of Quarry Roads, November 1994, or any subsequent relevant contributions plan adopted by Council. The annual contribution must be paid to Council prior to 31 July each year and reported in the Annual Review required in condition 9 of Schedule 5.	Appendix B
	Schedule 3, Condition 1	The Applicant must comply with the operating hours set out in Table 1. *Table 1: Operating Hours* **Activity** / **Permissible Hours** Employee arrival: • From 6:30 am Monday to Saturday inclusive • From 7:30 am Sundays or public holidays if engaged in maintenance, site security or other similar activities Quarrying operations including loading and dispatch of laden trucks: • 7 am to 6 pm Monday to Friday • 7 am to 1 pm Saturday • 7 am to 4 pm Saturday if fulfilling a contract for the supply of quarry products to the Pacific Highway update project (SSD 4963)* • At no time on Sundays or public holidays Blasting: • 9 am to 3 pm Monday to Friday (except public holidays) Maintenance: • May be conducted at any time, provided that these activities are not audible at any privately-owned residence *Note: Evidence of contracts that cover those periods during which extended Saturday afternoon operating hours are undertaken must be reported in the Annual Review required by condition 9 of Schedule 5.	Not applicable – the quarry has not operated on Saturday afternoons during the reporting period

Licence, Approval or Guideline	Section Reference	Requirement	Reference in this report
	Schedule 3, Condition 36	The Applicant must: a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council; b) minimise the waste generated by the development; c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Section 6.7
	Schedule 5, Condition 10	Annual Review By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must:	Entire Report
		a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;	Section 4
		b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures / criteria; • requirements of any plan or program required under this consent; • monitoring results of previous years; and • relevant predictions in the Environmental Impact Statement (EIS);	Section 5 and 7
		c) identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to ensure compliance;	Section 8
		d) identify any trends in the monitoring data over the life of the development;	Section 5
		e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Section 8
		f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.	Section 5

4. Operations summary

During the reporting period, the quarry has continued to extract material from the north of Stage 1, as shown on Figure 4-1. Extraction has involved a process of blasting, crushing, screening and stockpiling as described in the *Environmental Impact Statement* (GHD, 2015) submitted with the development application.

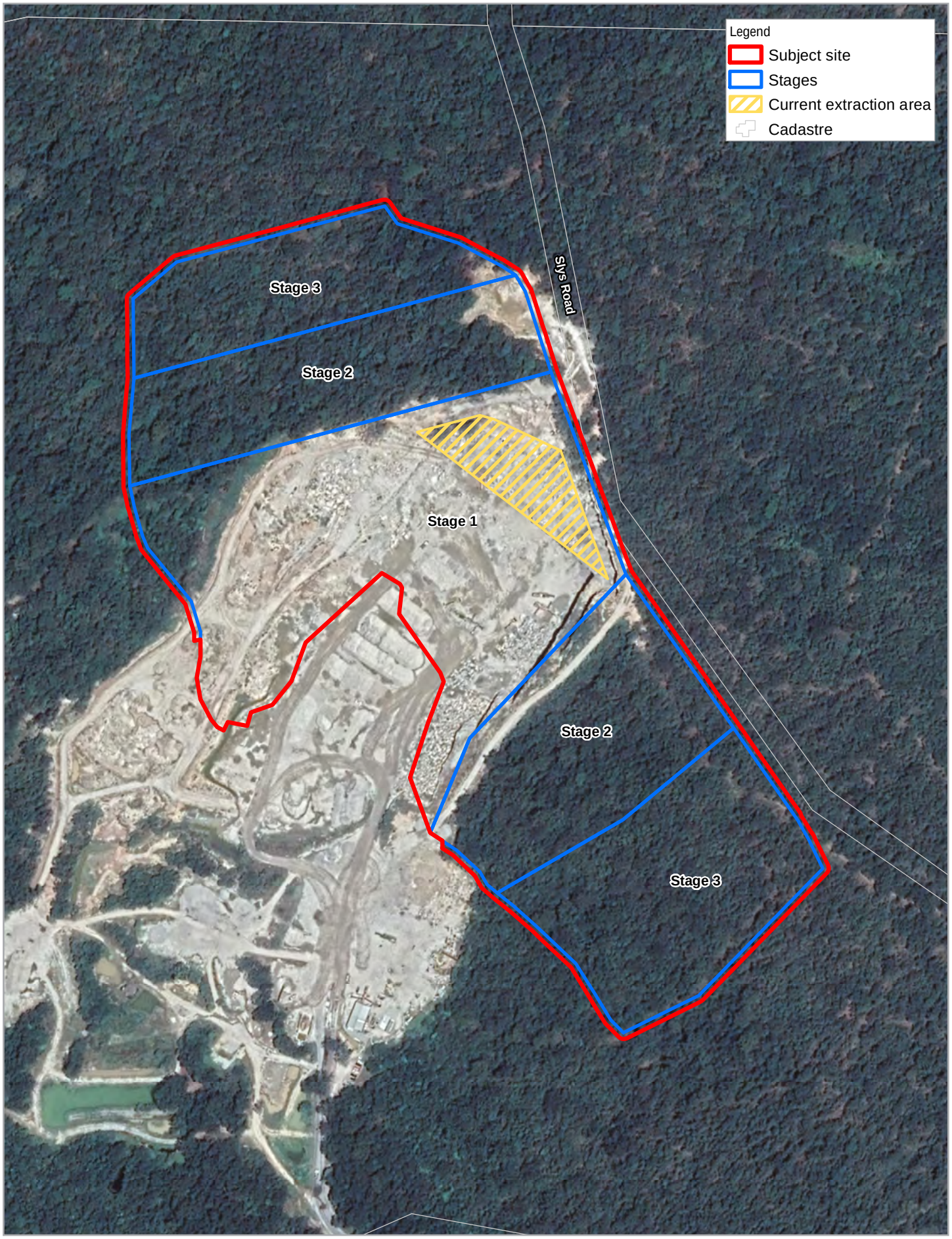
In the reporting period, there have been 12 blasts, as shown in Table 4-1. Table 4-1 also shows the volume and tonnes extracted from the quarry during each blast. The volume of material transported from Slys Quarry during the reporting period was 364,307.98 tonnes. This shows the material extracted and transported during the reporting period was within the approved limit of 500,000 tonnes.

Table 4-1 Blast and production summary

Date	Time	Volume (m^3)	Tonnes
2/07/2018	2.08pm	5,592	13,980.00
18/07/2018	12.07pm	16,376.96	40,942.40
8/08/2018	2.08pm	12,550.04	31,375.10
10/09/2018	1.36pm	10,738	26,845
24/09/2018	1.58pm	10,218	25,545
8/10/2018	2.36pm	12,352	30,880
30/11/2018	12.00pm	10,648.60	26,621.50
8/01/2019	1.55pm	13,937.80	34,844.50
11/03/2019	1.03pm	5,919	14,797.50
4/04/2019	1.03pm	16,950.50	42,376.25
4/06/2019	1.10pm	10,278.13	25,695.33
21/06/2019	1.45pm	11,328.75	28,321.88
Total		**136,890**	**342,224.46**

Other activities during the reporting period include:

- Extraction from Stage 1.
- Total extraction of 342,224 tonnes.
- Finalise BioBanking Agreement and establish BioBank site, commencing 21/01/2019.
- Area C rehabilitation has been ongoing.
- Ongoing environmental monitoring.
- The cessation of air quality monitoring and noise monitoring due to compliance with environmental criteria.



Paper Size ISO A4

0 25 50 75 100

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

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GHD

Newman Quarrying
Slys Quary
Annual Review

Current extraction area

Project No.	22-17528
Revision No.	0
Date	04 Dec 2019

FIGURE 4-1

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Print date: 04 Dec 2019 - 16:37

Data source: LPI: DTDB?DCDB, 2017. . Created by: TMorton

5. Actions from previous Annual Review

The actions identified during the previous Annual Review for implementation during the current Annual Review reporting period are presented in Table 5-1, along with the current status.

Table 5-1 Status of actions from previous Annual Review

Action required from previous Annual Review	Requested by	Action taken by the Operator	Reference
The requirements of the management plans, EPL and CoA will continue to be implemented at Sly's Quarry over the next reporting period.	A commitment from the previous Annual Review	Continued to operate the quarry in accordance with the management plans, EPL and CoA	Section 6
Trucks slow down when driving past residential receivers	A recommendation from the Noise Compliance report	The Quarry Manager advised all truck drivers and the following noise compliance monitoring indicated it was effective	Section 6.1
Survey of trucks to determine which trucks should be prioritised for maintenance or silencing.	A recommendation from the Noise Compliance report	It was decided this was not necessary because subsequent compliance noise monitoring results indicated compliance	Section 6.1
The BioBanking Agreement is also expected to be completed and implemented, which will require the establishment of a BioBank site.	A prediction from the previous Annual Review	The BioBanking Agreement has been issued and implementation has commenced.	Section 6.5

6. Environmental performance

6.1 Noise

6.1.1 Environmental management

Operational noise is managed by Newman Quarrying in accordance with the approved Noise Management Plan (NMP). The NMP covers all operational activities with the potential to generate noise at Sly's Quarry. It details specific noise management and mitigation measures, outlines monitoring and reporting requirements and provides clear definition of the roles and responsibilities for noise management. The objectives of the NMP are:

- Ensure full compliance with the relevant legislative requirements and CoA.
- No exceedance of the operational noise limits.
- No justified complaints from adjacent residents in relation to noise generation.
- No out of hours work.

Newman Quarrying proactively implements a range of noise mitigation measures for operational activities at Sly's Quarry. During the reporting period these included, but were not limited to the following:

- Ensuring machines were operated at low speed and were switched off when not being used.
- Progressive replacement of components of the existing fleet found to be generating excessive noise.
- Maintaining plant and equipment to manufacturer's standards.
- Scheduling noisy activities between 7:00 am and 6:00 pm where possible.
- Closing all engine covers while equipment is operating.
- Avoiding dropping materials from height and avoiding metal to metal contact on material.

Newman Quarrying engaged acoustic specialists to undertake attended noise monitoring quarterly, in accordance with the NMP.

6.1.2 Environmental performance

Quarterly attended noise monitoring surveys were carried out by GHD in August 2018. The noise monitoring locations are R3 and Roadside shown in Table 6-1. The Roadside location is to assess the road traffic noise.

Table 6-1 Noise monitoring locations

Receiver ID	Approximate distance and direction from quarry	Elevation above sea level[1]	Reason for selecting location
R3	1.4 km SW	40 m	EPL requirement
Roadside	1.6 km E	25 m	NMP road traffic noise requirement

Note: [1] The quarry site is approximately 40 metres above sea level

Project specific noise criteria are outlined in EPL 11649 and CoA SSD 6624. The operational noise limits of Sly's Quarry are 35 dB(A) $L_{eq\ (15\ minutes)}$ for day, evening and night. The adopted Road Noise Policy (RNP) criteria in the NMP is 55 dB(A).

The results of the monitoring are reported in individual *Compliance Noise Monitoring* reports, prepared by GHD .A summary of the attended noise monitoring results are provided in Table 6-2. The road traffic noise monitoring results are presented in Table 6-3.

Table 6-2 Summary of attended noise monitoring results at R3

Monitoring date	Sly's Quarry LAeq(period) dB(A)	Complies?
Noise criteria dB(A)	35	
August 2018	24.5	Yes

In previous years, the noise monitoring results at R3 have been less than 35dB(A), so the monitoring results during this reporting period are consistent. The predicted noise levels from the quarry at R3 were between 32 to 35 dB(A), so the average actual results are less than the predicted.

Table 6-3 Calculated 1 hour road traffic noise, dB(A)

Monitoring date	Measured LAeq, 1 hour (roadside), dB(A)	Predicted LAeq, 1 hour at R2 facade, dB(A)	Complies?
RNP LAeq, 1 hour criteria		55	
August 2018	57	50	Yes

The predicted road traffic noise was 50 dB(A) and the previous year's results were between 49dB(A) and 52dB(A), so the average actual results are similar to the predicted and previous year's results.

In accordance with the NMP, Newman Quarrying requested the noise monitoring cease due to the consistent, compliant results. The DPE (now Department of Planning, Industry and Environment (DPI&E)) issued a letter, dated 17 October 2018, Appendix C, agreeing to the cessation of noise monitoring due to compliance with the applicable operational and road noise criteria in the approved NMP. The DPI&E expects that noise monitoring will recommence in accordance with the NMP if the site receives a noise complaint or makes an operational change that is likely to increase noise emissions from the site.

6.1.3 Improvements and initiatives

The NMP and CoA will continue to be implemented at Sly's Quarry over the next reporting period.

6.2 Blasting

6.2.1 Environmental management

Blast operations at Sly's Quarry are managed in accordance with the Blast Management Plan (BMP), which covers blasting activities associated with the quarry and appropriate mitigation measures. The objectives of blast management at Sly's Quarry are:

- Ensure full compliance with the relevant legislative requirements and CoA.
- No exceedance of the blasting criteria.
- No justified complaints from adjacent residents in relation to blasting and vibrations.

In order to meet these objectives Newman Quarrying proactively implements a range of mitigation measures for blasting activities at Sly's Quarry. During the reporting period these included:

- Only undertaking blasting operations between 09:00 and 15:00 Monday to Friday.
- Providing all sensitive receivers at least 24 hours notice when blasting operations were undertaken.

Newman Quarrying completed blast monitoring in accordance with the CoA and BMP.

6.2.2 Environmental performance

Blast monitoring was undertaken for all blasts at Sly's Quarry during the reporting period. Monitoring was undertaken from Receiver 3, as outlined in the EPL. Receiver 3 is located approximately 1.5 km south of the quarry boundary.

Project specific blast criteria are outlined in EPL 11649 and CoA SSD 6624. A summary of the blast criteria is provided in Table 6-4.

Table 6-4 **Sly's Quarry blast criteria**

Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Any residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

A total of 12 blasts were undertaken during the reporting period and none triggered during the monitoring, meaning they were less than the trigger value of 0.4mm/s and 106dBL. A summary of the blast monitoring is provided in Table 6-5.

Table 6-5 Summary of blast monitoring

Date	Time	Vibration (mm/s)	Pressure (dBL)	Complies
Blast criteria		5	115	
Trigger value		0.4	106	
2/07/2018	2.08pm	Not triggered	Not triggered	Yes
18/07/2018	12.07pm	Not triggered	Not triggered	Yes
8/08/2018	2.08pm	Not triggered	Not triggered	Yes
10/09/2018	1.36pm	Not triggered	Not triggered	Yes
24/09/2018	1.58pm	Not triggered	Not triggered	Yes
7/10/2018	2.36pm	Not triggered	Not triggered	Yes
30/11/2018	12.00pm	Not triggered	Not triggered	Yes
8/01/2019	1.55pm	Not triggered	Not triggered	Yes
11/03/2019	1.03pm	Not triggered	Not triggered	Yes
4/04/2019	1.03pm	Not triggered	Not triggered	Yes
4/06/2019	1.10pm	Not triggered	Not triggered	Yes
21/06/2019	1.45pm	Not triggered	Not triggered	Yes

Based on the predicted results in the EIS, presented in Figure 6-1, the actual results are less. This is similar to previous year's results when most did not trigger and the others were less than the criteria.

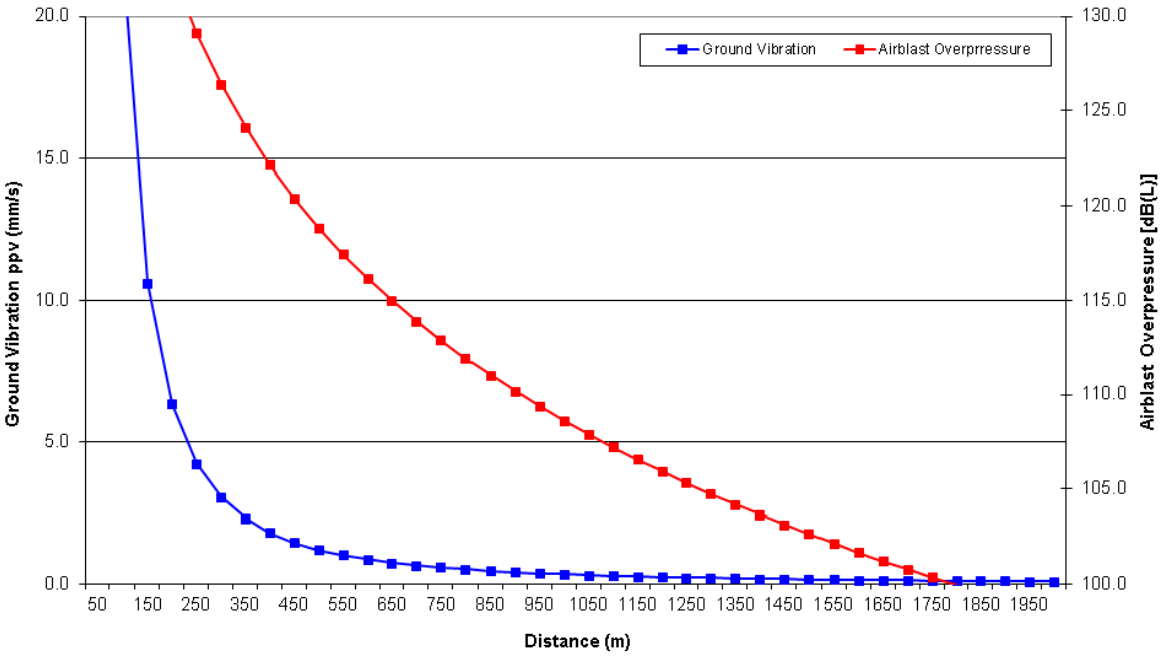

Figure 6-1 EIS estimated ground vibration and airblast overpressure levels from blasting

6.2.3 Improvements and initiatives

Given that no exceedances of the blast criteria were recorded in the reporting period, no improvements are considered necessary. Monitoring and mitigation measures identified in the CoA, EPL and BMP will continue to be implemented.

6.3 Air quality

6.3.1 Environmental management

Air quality at Sly's Quarry is managed in accordance with the Air Quality Management Plan (AQMP), CoA and EPL. The objectives of the AQMP are:

- Minimise and manage potential air quality/dust impacts from the development in accordance with relevant legislative requirements and CoA.
- Control dust and exhaust emissions of plant and equipment from quarrying activities.
- Achieve particulate matter and dust concentrations that meet the approved air quality criteria.
- No visible offsite dust emissions as a result of site operations.
- No justifiable complaints related to air quality attributable to site operation.

6.3.2 Environmental performance

The dust deposition monitoring results during the reporting period are presented in Table 6-6, which show compliance with the criteria. The predicted dust deposition rates were between 0.01 to 0.02g/m^2/month at the sensitive receivers, so the actual results are relatively consistent with the predicted.

Table 6-6 Dust deposition monitoring results

Date	DML1	Complies	DML2	Complies
Criteria	4 g/m^2/month		4 g/m^2/month	
9/5/18 - 8/6/18	<0.1	Yes	<0.1	Yes
9/6/18 - 8/7/18	<0.1	Yes	<0.1	Yes
9/7/18 - 8/8/18	<0.1	Yes	<0.1	Yes

Air quality monitoring ceased in August 2018, as agreed with DPI&E (refer to Appendix C), because all previous monitoring complied with the criteria. Air quality monitoring will recommence, in accordance with the AQMP, if the site receives a dust complaint or makes an operational change that is likely to increase dust emissions from the site.

6.3.3 Improvements and initiatives

Monitoring and mitigation measures identified in the CoA, EPL and AQMP will continue to be implemented.

6.4 Soil and water quality

6.4.1 Environmental management

Soil and water quality at Sly's Quarry are managed in accordance with the Soil and Water Management Plan (SWMP), which outlines appropriate mitigation measures for soil, surface water and groundwater management. The objectives of soil and water management at Sly's Quarry are:

- Ensure full compliance with the relevant legislative requirements and CoA.
- Meet EPL water discharge parameters for all planned discharges.
- Ensure training on soil and water management is provided to all relevant personnel through site inductions.

In order to meet these objectives, Newman Quarrying implements a range of mitigation measures and monitoring requirements as outlined in the SWMP, which include:

- Daily weather monitoring
- Daily rainfall monitoring
- Weekly monitoring of erosion and sediment controls, and following rain
- Baseline monitoring following rain
- Basin monitoring when discharging
- Basin capacity monitoring following rain
- Spill kit checks monthly and following use
- Quarterly groundwater monitoring

Newman Quarrying completed water quality monitoring in accordance with the EPL.

6.4.2 Environmental performance

Basin monitoring

Monitoring was undertaken for total suspended solids (TSS), pH and oil and grease at the outlet of the main basin (MP1) prior to discharging. This location is the EPL monitoring point. The criteria outlined in the SWMP and EPL is presented in Table 6-7.

Table 6-7 Basin monitoring criteria

Pollutant	Concentration/Limit
Oil and grease	Nil visible
pH	6.5-8.5
Total suspended solids (TSS)	50 mg/L

Results of the basin monitoring are summarised in Table 6-8 and detailed information is provided in Appendix D. This shows the water quality complied with the EPL criteria prior to discharging, as predicted in the EIS. The results are reasonably consistent with previous years, with most results less than 50mg/L and between a pH of 7 and 8.

Table 6-8 Summary of basin monitoring results

Date	Rain		Discharging	TSS (mg/L)	pH	Oil	Treated?	Discharged
	24 hrs	5 Days						
Criteria				50	6.5-8.5	Nil		
14.9.18	0	0	no	21	7.7	no	no	yes
31.10.18	0.6	0.6	no	8	7.4	no	no	yes
7.1.19	0	0	no	17	8.1	no	no	yes
15.3.19	0	0	no	9	7.3	no	no	yes
3.04.19	38.4	55.8	no	32	6.9	no	no	yes

Surface water

Surface water sampling was collected at WQ1 and WQ2 following greater than 10mm of rain in a 24 hour period. A total of 34 samples were collected during the reporting period. A summary of the results are presented in Table 6-9 and detailed results are provided in Appendix D. This shows the water quality at the two monitoring locations were relatively consistent. Although the pH is regularly less and the TSS occasionally above the EPL criteria, the water quality is considered to be relatively good, which is as predicted in the EIS. It appears the pH is naturally low which is not uncommon for the area. The TSS exceedance was on a day with 16.8 mm of rain in the prior 24 hours, which may have caused an increase in turbidity due to runoff entering the waterway.

There was greater than 20% difference between the TSS concentrations at the two monitoring locations on a regular basis but there was no trend (i.e., WQ1 results were greater than WQ2 and at other times WQ2 results were greater than WQ1) and the concentrations are relatively low, so this was not considered an issue.

Table 6-9 Baseline surface water monitoring results summary

	TSS (mg/L)		pH		Oil (visible)	
Site	WQ1	WQ2	WQ1	WQ2	WQ1	WQ2
Median	9.5	11	6.3	6.05	None	None
Maximum	32.0	52	7.1	6.9	None	None
Minimum	<1	<1	5.5	5.3	None	None

Groundwater

Quarterly groundwater monitoring was undertaken at the three groundwater wells. A summary of the results is presented in Table 6-10. This shows pH at GW2 is consistent over the monitoring period and conductivity at GW2 was elevated during the November 2018 sampling event. It is difficult to confirm the reason for the increased conductivity concentration but may be a result of the dry weather and the upstream migration of saline water in the surrounding

environment. GW1 results were consistent for August and November 2018 and was dry for February and May 2019 sampling events. GW3 was dry for all four sampling events.

The quarry has not intercepted groundwater, so as predicted by the EIS, the groundwater quality is not expected to be influenced by quarry activities.

Table 6-10 Quarterly groundwater monitoring results

	Rain		GW1		GW2		GW3	
Date	24 hrs	5 days	pH	Cond	pH	Cond	pH	Cond
8.8.18	0	0	5.4	106	5.3	236	Dry	Dry
5.11.18	5	5	5.9	147	5.4	492	Dry	Dry
8.2.19	10.2	13.6	Dry	Dry	5.3	186	Dry	Dry
21.5.19	0	0	Dry	Dry	5.4	231	Dry	Dry

Groundwater levels have also been monitored at the three groundwater wells with an automatic data logger. The data logger records the water level at hourly intervals and a summary of the levels are provided in Figure 6-2. This shows ground water level slowly decreasing in GW1 and GW2 until October 2018. GW3 was dry in late January/early February 2018 and, based on the water quality monitoring records in Appendix D, GW1 was dry in early 2019 (A psi of 10 indicates no water). GW2 decreases but not at the same rate as the other wells. This is considered to be due to its location in a lower part of the catchment which has maintained a more consistent groundwater level. The vegetation in the location of GW2, also indicates it is an area of consistent, shallow groundwater.

There is a gap in information between 24/10/2018 and 5/12/2018 and when logging recommences there is approximately a 4m increase in the levels for all wells. As GW1 and GW3 have remained dry since this date, the 4m increase is considered to be due to a technical error with the logger or software.

Despite the variation between wells and the technical issues, as predicted in the EIS, the quarry has not intercepted the groundwater nor does it appear to impact on groundwater level.

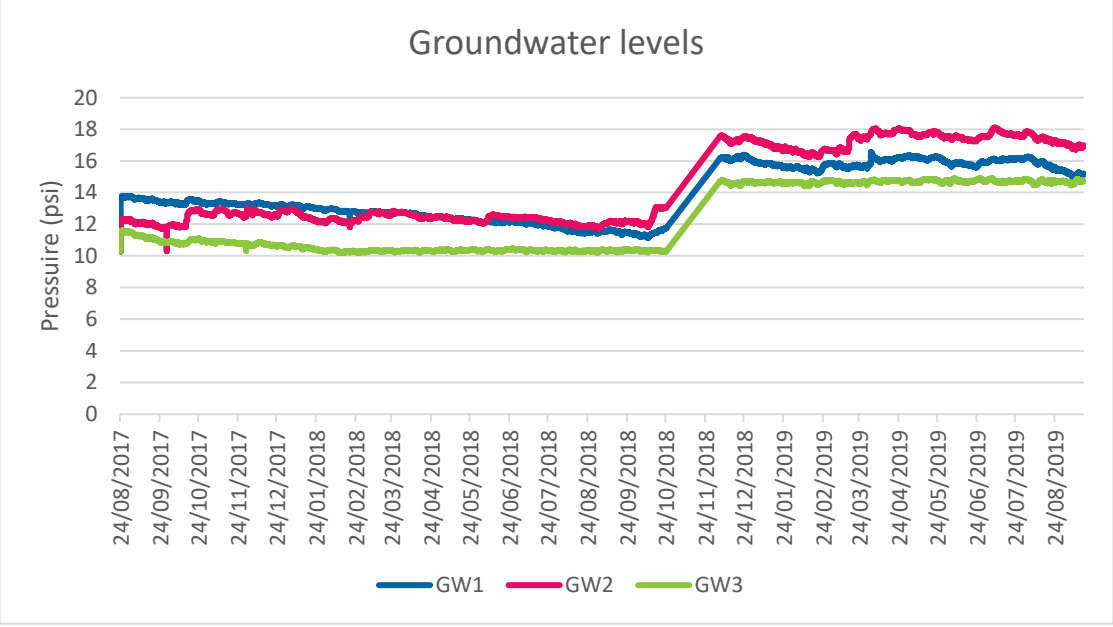

Figure 6-2 Groundwater levels

6.4.3 Improvements and initiatives

Newman Quarrying will continue to follow the SWMP and implement the appropriate mitigation measures and monitoring.

6.5 Biodiversity and rehabilitation

6.5.1 Environmental management

Biodiversity and rehabilitation at Sly's Quarry is managed in accordance with the Biodiversity and Rehabilitation Management Plan (BRMP) and CoA. The targets outlined in the BRMP include:

- Ensure full compliance with the relevant legislative requirements and CoA
- No fauna fatalities
- No unapproved disturbance of vegetation
- No new occurrences of weeds or pathogens on-site

6.5.2 Environmental performance

Newman Quarrying has implemented the mitigation measures outlined in the BRMP, including:

- Restricting vehicle movements to daylight hours
- Implementing speed limits at the site
- Revegetating Area B and C in accordance with the EIS
- Clearly marked the limits of clearing
- Nest box monitoring in accordance with the Nest Box Management Plan
- Finalised the BioBanking Agreement and established the Biobank site, including fencing and weed control

Due to the minimal clearing, the actual impacts are considered to be less than those predicted in the EIS. Rehabilitation of Areas B and C are via natural regeneration, as per the EIS and the Rehabilitation Plan in the Biodiversity and Rehabilitation Plan. Detailed monitoring of the revegetation of Areas B and C has not been completed previously but from opportunistic observations, Figure 6-3, Figure 6-4 and Table 6-11, the natural revegetation appears to have progressed with plants growing and additional species observed. The western half of Area C appears to be slow to revegetate and may require assistance if natural revegetation continues to fail in the next few years. The area is subject to poor, sandy soils, so with the current dry conditions, it would be difficult for young plants to survive.

Area B is within the Biobank/Stewardship site area and will in future be managed in accordance with the BioBank Agreement (refer below).

Figure 6-3 Aerial photograph of Area B rehabilitation between 5/10/2013 (left) and 25/10/2018 (right)

Figure 6-4 Aerial photograph of Area C rehabilitation between 5/10/2013 (left) and 25/10/2018 (right)

Table 6-11 Rehabilitation summary

Rehabilitation area	Previous reporting period (Actual)	This reporting period (actual)	Next Reporting Period (Forecast)
Quarry footprint	-	-	-
Area B	1ha	1ha	1ha
Area C	7ha	7ha	7ha
Stewardship site	-	180.5ha	180.5ha

In relation to the establishment of the offset or stewardship site and retirement of the required credits, as per Condition 27, Schedule 3, the Biobank Agreement (ID number 402) was established on 07 February 2019. Table 6-12 provides a summary of the credits included in the Biobank Agreement. Progress has also been made in relation to paying the Total Fund Deposit and retiring the required credits. This will be completed during the next reporting period.

Table 6-12 Credit summary

Credit type	Credit
Blackbutt – bloodwood dry heathy open forest on sandstone of the northern NSW North Coast Bioregion	1,735
Blackbutt – turpentine dry heathy open forest on sandstone of the lower Clarence of the NSW North Coast Bioregion	207
Paperbark swamp forest of the coastal lowlands of the NSW North Coast Bioregion	83
Spotted Gum – Grey Ironbark – Pink Bloodwood open forest of the Clarence Valley lowlands of the NSW North Coast Bioregion	91
Swamp Mahogany swamp forest on coastal lowlands of the NSW North Coast Bioregion and northern Sydney Basin Bioregion	101
Bordered Guinea Flower	19,497
Squirrel Glider	1,282
Koala	1,282
Brush-tailed Phascogale	277

6.5.3 Improvements and initiatives

Newman Quarrying will update the BRMP to include the Biodiversity Offset Strategy (which is the BioBank Agreement) and continue to implement it and the BioBank Agreement requirements to minimise impacts on biodiversity.

6.6 Heritage

6.6.1 Environmental management

Management of both historical and Aboriginal cultural heritage at Sly's Quarry is in accordance with the Heritage Management Plan (HMP) and CoA. The targets outlined in the HMP are to:

- Ensure full compliance with the relevant legislative requirements and CoA.
- No damage to heritage items.
- All site staff and contractors trained on unexpected finds protocol.

6.6.2 Environmental performance

During the reporting period, Newman Quarrying has followed the protocols outlined in the HMP. As predicted in the EIS, no unexpected finds of historical or Aboriginal heritage items have been recorded during the reporting period.

6.6.3 Improvements and initiatives

The HMP and CoA will continue to be implemented at Sly's Quarry over the next reporting period.

6.7 Waste

6.7.1 Environmental management

Waste at Sly's Quarry is managed in accordance with the Waste Management Plan (WMP), CoA and EPL. The objectives of the WMP are to:

- Ensure full compliance with the relevant legislative requirements and CoA.
- Waste generation minimised through the hierarchy of waste management priorities.
- Separable waste bins provided.

The WMP encouraged using the waste management hierarchy of avoid, reuse/recycle and then dispose to mitigate the impacts of waste from a number of sources, including excavated material, green waste, general construction waste, contaminated soil, liquid waste, wastewater, biological waste and domestic waste.

6.7.2 Environmental performance

The following mitigation measures were implemented by Newman Quarrying during the reporting period to manage waste on-site:

- Re-using excess materials.
- Recycling metal, waste oil and old batteries.
- Appropriate storage of chemicals and fuels in bunded areas with 110% capacity.
- Diverting clean water from the site.
- Routine weekly inspection to ensure the site is clean and tidy.

A summary of the type and quantity of wastes generated by the quarry are presented in Table 6-13. The volumes of waste were not predicted in the EIS, however the type of wastes and disposal option is generally as predicted.

Table 6-13 Waste records

Waste	Amount	Management option
General rubbish	24 m^3	Landfill
Scrap steel	13.46 tonnes	Recycled
Cardboard	15 m^3	Recycled
Oil	2,300 L	Recycled
Aluminium cans	4 m^3	Recycled

6.7.3 Improvements and initiatives

Newman Quarrying will continue to implement the waste mitigation measures and conditions outlined in the WMP, CoA and EPL.

6.8 Traffic

6.8.1 Environmental management

Traffic at Sly's Quarry is managed in accordance with the Traffic Management Plan (TMP), CoA and EPL. The objectives of the TMP are:

- Ensure full compliance with the relevant legislative requirements and CoA.
- No justified complaints related to site traffic.

- No road damage from quarry vehicle movements beyond normal wear and tear.

6.8.2 Environmental performance

In order to meet these objectives Newman Quarrying implemented the following mitigation measures during the reporting period:

- Implementation of a code of conduct.
- No more than 150 laden trucks dispatched from the quarry on any day.

Newman Quarrying present a truck movement summary on their website, which is summarised in Table 6-14. Truck movements were compliant with the CoA and TMP.

Table 6-14 Truck movement summary

DAY	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1ST	0	63	2	0	150	1	0	61	90	10	89	12
2ND	69	68	0	97	140	0	0	3	13	10	144	0
3RD	40	52	5	95	14	31	0	0	0	4	112	11
4TH	12	0	0	75	0	26	0	51	86	71	21	29
5TH	13	0	3	4	42	56	0	72	51	12	0	139
6TH	15	34	6	0	149	26	0	89	50	5	9	81
7TH	0	37	19	0	130	14	18	11	28	0	13	15
8TH	0	73	0	62	56	3	35	40	2	9	81	0
9TH	72	77	0	22	19	0	56	14	1	43	16	0
10TH	51	61	34	38	0	17	60	0	0	69	74	0
11TH	40	46	73	3	112	10	107	57	38	42	48	67
12TH	75	0	143	6	118	22	33	63	23	32	0	90
13TH	62	30	35	0	114	36	0	65	9	5	32	56
14TH	64	37	32	0	127	27	71	48	72	0	24	68
15TH	0	103	16	1	66	0	27	54	35	15	21	1
16TH	118	101	0	0	29	0	93	27	0	12	59	0
17TH	117	74	17	0	0	9	58	0	0	92	21	34
18TH	150	7	12	3	0	18	34	42	8	68	15	114
19TH	145	0	37	2	45	12	0	49	39	0	0	119
20TH	134	83	32	0	34	7	0	76	19	0	18	122
21ST	76	72	70	0	83	0	72	62	22	0	29	104
22ND	0	119	20	31	7	0	93	15	17	0	12	6
23RD	124	125	0	45	59	0	72	0	18	6	29	0
24TH	72	31	80	58	10	0	75	0	0	31	28	3
25TH	95	0	84	39	0	0	44	14	24	0	26	2
26TH	80	0	28	36	35	0	0	44	35	18	0	3
27TH	105	6	42	74	41	0	0	90	7	31	47	9
28TH	2	15	19	0	25	0	0	90	19	0	20	16
29TH	0	27	0	64	12	0	67	0	35	13	109	0
30TH	118	47	0	46	14	0	99	0	2	133	76	0
31ST	137	23	0	92	0	0	69	0	0	0	32	

The traffic impacts were generally consistent with those predicted, however truck numbers have decreased compared to the previous reporting period.

6.8.3 Improvements and initiatives

Newman Quarrying will continue to implement the traffic mitigation measures and conditions outlined in the TMP, CoA and EPL.

7. Community

In accordance with the CoA, an Environmental Management Strategy (EMS) was prepared, which included details of a complaints handling process for the quarry. In accordance with the EMS, a complaints telephone line was established, with the number advertised on the Sly's Quarry entrance and on the Newman Quarrying website. The EMS requires all complaints to include:

- The date and time of the complaint.
- The method by which the complaint was made.
- Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect.
- The nature of the complaint.
- The action taken in relation to the complaint, including any follow-up contact with the complainant.
- If no action was taken, the reason why no action was taken.

Newman Quarrying records all complaints regarding quarry operations, in accordance with the EMS. The complaints are publically available on their website.

During the reporting period, no complaints were received.

8. Independent audit

The last independent environmental audit (IEA) of the Sly's Quarry Expansion was conducted in August 2017, so there was no IEA during the reporting period. The next IEA is due in 2020.

9. Incidents and non-compliance

9.1 Incidents

No incidents occurred during the reporting period.

9.2 Non compliance

As identified in Section 1, there have been three non-compliances identified during the reporting period. Each are discussed below.

9.2.1 Condition 28, Schedule 3 - Security of offsets

This condition requires the applicant to make suitable arrangements to provide appropriate long-term security for the Biodiversity Offset Strategy within 18 months of the consent. Establishing the offset/stewardship site has been a long and protracted process, due to:

- Waiting for a suitable time of year to undertake the fieldwork
- The original proposed biobank site boundary was not able to yield sufficient species credits for the Brush-tailed Phascogale
- Finding a suitable Brush-tailed Phascogale expert and having them approved by OEH
- Amending the biobank site boundary, in consultation with the expert, so it has sufficient species credits for the Brush-tailed Phascogale

Delays have also been caused by the processing times at OEH.

DPIE have been updated in regards to the delays but there has not been an official extension to the 18 month timeframe provided. However, there seems to have been some confusion between requests for an extension of this condition and the Biodiversity and Rehabilitation Plan extension (refer Section 9.2.2).

Regardless of the above, the BioBanking Agreement (ID number 402) was established on 07 February 2019 and the required credits were transferred on 08 August 2019.

9.2.2 Condition 31, Schedule 3 - Biodiversity and Rehabilitation Plan

This condition requires the submission of a Biodiversity and Rehabilitation Plan which includes a Biodiversity Offset Strategy, within six months of the consent. Due to the delays in finalising the BioBank Agreement (refer to Section 9.2.1) DPIE agreed that the Biodiversity and Rehabilitation Plan did not need to include the Biodiversity Offset Strategy initially, with several extensions granted. The last extension was issued on 23 November 2018, which required the Biodiversity and Rehabilitation Management Plan, with the inclusion of the Biodiversity Offset Strategy be submitted by 31 May 2019.

The updated Biodiversity and Rehabilitation Management Plan, with the inclusion of the Biodiversity Offset Strategy was not submitted by 31 May 2019, nor was another extension requested or granted. This was simply an oversight, as the focus had been on finalising and implementing the Biobank Agreement.

An updated Biodiversity and Rehabilitation Management Plan, with the inclusion of the Biodiversity Offset Strategy, has since been submitted.

9.2.3 Condition 13, Schedule 5 - Access to information

This condition requires the documents listed in condition 2(a) of Schedule 2 to be publicly available on the website. The EIS and SEE (MOD1) are not currently on the website. This was an oversight and has since been addressed.

9.3 Regulatory agency actions

There has been no regulatory agency action during the reporting period.

10. Activities to be completed in the next reporting period

In the next 12 months, activities at the quarry are anticipated to include:

Table 10-1 Next 12 month activities

Activity	Timeframe
Continue extraction from Stage 1.	Ongoing
Detailed review of management plans.	End of 2019
The requirements of the management plans, EPL and CoA will continue to be implemented.	Ongoing
Total expected extraction of 300,000 tonnes.	Ongoing
Modify the consent to update the biobank credit requirements and possibly modify the limits on importing mulch and topsoil.	Early 2020
Rehabilitation and establishment of the biobank area will continue.	Ongoing
Independent Environmental Audit	May 2020
Retirement of biodiversity credits	End of 2019
Update the Biodiversity and Rehabilitation Management Plan, with the inclusion of the Biodiversity Offset Strategy	End of 2019
Update website to include documents in condition 2(a) of Schedule 2	End of 2019

11. Conclusion

This Annual Review has been completed for Sly's Quarry, on behalf of Newman's Quarrying, in accordance with the CoAs (SSD 6624), to assess environmental compliance at the site from 1 July 2018 to 30 June 2019.

The primary quarry operations undertaken during the reporting period included:

- Extraction from Stage 1.
- Total extraction of 342,000 tonnes.
- Finalise BioBanking Agreement and establish BioBank site, commencing 21/01/2019.
- Area C rehabilitation has been ongoing.
- Ongoing environmental monitoring.
- The cessation of air quality monitoring and noise monitoring due to compliance with environmental criteria.

Activities proposed for the next reporting period include:

- Continue extraction from Stage 1.
- Total expected extraction of 300,000 tonnes.
- Detailed review of management plans.
- Modify the consent to update the biobank credit requirements and possibly modify the limits on importing mulch and topsoil.
- The requirements of the management plans, EPL and CoA will continue to be implemented.
- Rehabilitation and establishment of the biobank area will continue.
- Independent Environmental Audit
- Retirement of biodiversity credits

An assessment of the environmental monitoring completed at Sly's Quarry was undertaken, with compliance against CoA SSD 6624, EPL 11649 and the relevant management plans also assessed. Generally, environmental management at Sly's Quarry, during the reporting period, was as predicted, consistent with previous reporting periods and compliant.

Environmental management will continue to comply with the CoA of SSD 6624, EPL 11649 and the relevant management plans.

12. References

GHD 2015. *Environmental Impact Statement.* May 2015.

GHD 2017. *Air Quality Management Plan.* May 2017.

GHD 2017. *Biodiversity and Rehabilitation Management Plan*. May 2017.

GHD 2017. *Blast Management Plan*. May 2017.

GHD 2017. *Environmental Management Strategy*. May 2017.

GHD 2017. *Heritage Management Plan*. May 2017.

GHD 2017. *Noise Management Plan.* May 2017.

GHD 2017. *Soil and Water Management Plan*. May 2017.

GHD 2017. *Traffic Management Plan*. May 2017.

GHD 2017. *Waste Management Plan*. May 2017.

NSW Government 2015, *Post-approval requirements for State Significant mining developments – Annual Review Guideline.*

Appendices

Appendix A – Production data

NSW GOVERNMENT | Planning & Environment
Resources & Geoscience

Form S 1

RETURN FOR EXTRACTIVE MATERIALS: YEAR ENDED 30 JUNE 2018

Quote RIMS ID in all correspondence

Quarry Id: Rims ID: 400563

Operators Name: NEWMAN QUARRYING P/L
Address: PO Box 292
YAMBA NSW 2464

Email: newmanquarrying@gmail.com

Quarry Name: Sly's Quarry
Quarry Address: Shelly Bullen Rd, Maloga 2469

Inquiries please telephone:
(02) 4063 6713

Completed or Nil Returns
Email –
mineral.royalty@planning.nsw.gov.au
Postal Address (see address below)

Please amend name, postal address and location of mine or quarry if incorrect or incomplete

2018-2019

The return should be completed and forwarded to the **MANAGER ASSESSMENT COORDINATION, RESOURCE OPERATIONS, NSW PLANNING & ENVIRONMENT, PO BOX 344 HUNTER REGION MAIL CENTRE NSW 2310 on or before 31 October 2018**. If completion of the return is unavoidably delayed, an application for extension of time should be requested **before** the due date. If no work was done during the year, a **NIL** return must be forwarded.

The return should relate to the **above quarrying establishment**, and should cover the operations of quarrying and treatment (such as crushing, screening, washing etc.) carried out at or near the quarry. A return is required even if the operations are solely of a developmental nature, and whether the area being worked is held under a mining title or otherwise.

Director Titles Assessments

Please complete all of the following information to assist in identifying the location of the Quarry

Typical Geology SANDSTONE

Nearest Town to Quarry MACLEAN

Local Council Name CLARENCE VALLEY COUNCIL

Deposited Plan and Lot Number/s of Quarry LOT 2 DP 1055044

Email Address of Operator newmanquarrying@gmail.com

Name of Owner or Licensee MARK NEWMAN

Postal Address of Licensee PO BOX 292, YAMBA 2464

Licence/Lease Number/s (if any)
From Mineral Resources NSW (Industry & Investment NSW) N/A

From Department of Lands or other Department SSD6624

If any output was obtained from land NOT held under licence from the above Departments, state the Name/s and Address/es of the Owners of the land N/A.

- To the best of my knowledge, the particulars which have been entered in this return are correct and no blank spaces have been left where figures should have been inserted.
- **SIGNATURE of PROPRIETOR or MANAGER** [signature] **DATE** 1-7-19
- **PERSON to be contacted if queries arise regarding this return** MARK NEWMAN
- **NAME** (Block letters) MARK NEWMAN **Telephone** 0427822667

SALES During 2017-2018

Production information may be published in aggregated form for statistical reporting. However, production data for individual operations is kept strictly confidential.

Product	Description		Quantity Tonnes
Virgin Materials			
• **Crushed Coarse Aggregates**			—
Over 75mm	Cobble +75mm		49376.65
Over 30mm to 75mm	Crushed Aggregate		3195.33
5mm to 30mm	12-20 Agg.		736.06
Under 5mm	—		—
Natural Sand	—		—
Manufactured Sand	WASHED SAND -7mm		2913.24
Prepared Road Base & Sub Base	roadbase	Various.	274,617.04
Other Unprocessed Materials	rough Fill		20823.20
Recycled Materials			
• **Crushed Coarse Aggregates**	—		—
Over 75mm	—		—
Over 30mm to 75mm	—		—
5mm to 30mm	—		—
Under 5mm	—		—
Natural Sand	—		—
Manufactured Sand	—		—
Prepared Road Base & Sub Base	—		—
Other Unprocessed Materials	—		—
• **River Gravel**	—		—
Over 30mm	—		—
5mm to 30mm	—		—
Under 5mm	—		—
• **Construction Sand**	Excluding Industrial		10203.30
• **Industrial Sand**	—		—
Foundry, Moulding	—		—
Glass	—		—
Other (Specify)	—		—
• **Dimension Stone**	Building, Ornamental, Monumental		—
Quarried in Blocks			2443.16
Quarried in Slabs	—		←
• **Decorative Aggregate**	Including Terrazzo		—
• **Loam**	Soil for Topdressing, Garden soil, Horticultural purposes)		—
• **TOTAL SITE PRODUCTION**			364,307.98
• **Gross Value ($) of all Sales**	$4,371,695.76		
• **Type of Material**	SANDSTONE Products		
• **Number of Full-Time Equivalent (FTE) Employees**	Employees: 10	Contractors 1	

Please Note: A return for clay based products can be obtained by contacting the inquiry number.

Appendix B – Council contributions

clarence
VALLEY COUNCIL

ABN: 85864095684
Locked Bag 23
Grafton NSW 2460

Tax Invoice

Official Receipt

4/07/2019 **Receipt No:** 806618

To: Newman Quarrying Pty Ltd
P O Box 292
YAMBA NSW 2464

Applic	**Reference**	**Amount**
GL Receipt		
GL S94QuryRdsJacky		$8,214.78
1 - Annual S94 Contribution		
Qty 1, CredCardSurcharge		$44.81
1		
GL19997480		$4.48
Transaction Total:		**$8,264.07**
Includes GST of:		**$4.48**

Amounts Tendered

Cash	$0.00
Cheque	$0.00
Db/Cr Card	$8,264.07
Money Order	$0.00
Agency	$0.00
Total	$8,264.07
Rounding	$0.00
Change	$0.00
Nett	**$8,264.07**

You are a valued customer of Clarence Valley Council. We thank you for your payment.

Please Note: The print quality of this receipt will diminish over time.

A surcharge of 0.6% applies to payments by Credit Card

Printed 4/07/2019 12:49:50PM

Appendix C – DPI&E Correspondence

NSW GOVERNMENT | Planning & Environment

Contact: Craig Dunk
Phone: 02 6670 8660
Email: compliance@planning.nsw.gov.au

10 October 2018

Mr Mark Newman
Newman Quarrying Pty Ltd
Jackybulbin Road,
Mororo NSW 2469

Dear Mr Newman

Newman Quarrying Pty Ltd - Sly's Quarry (SSD 6624)

Dust Monitoring

I refer to the Dust Impact Assessment Report (Report) submitted to the Department of Planning and Environment (Department) via email on 18 June 2018 by GHD on behalf of Newman Quarrying Pty Ltd (Newman).

The Department acknowledges receipt of the Report and notes Newman's proposed intention to cease air quality monitoring at Slys Quarry (Site) as per the provision in the Site's approved Air Quality Management Plan.

The Department has reviewed the proposal and based on the results contains within the Report, approves the cessation of this monitoring.

However, if the Site receives a dust complaint or a makes an operational change that is likely to increase dust emissions from the Site, the Department expects that air quality monitoring will recommence in accordance with the approved Air Quality Management Plan.

If you wish to discuss this further, please contact Craig Dunk (02) 6670 8660 or email to compliance@planning.nsw.gov.au.

Yours sincerely,

10.10.18

Stewart Mclachlan
Principal Investigator – Compliance
As the Secretary's nominee

Planning Services
Resource Assessments
Contact: Genevieve Seed
Phone: 9274 6489
Email: Genevieve.seed@planning.nsw.gov.au

Mr Mark Newman
Newman Quarrying Pty Ltd
Jackybulbin Road,
Mororo NSW 2469

Dear Mr Newman

Sly's Quarry (SSD 6624)
Noise Monitoring

I refer to you letter dated 16 October 2018 seeking the Secretary's approval to cease noise monitoring at Sly's Quarry, in accordance with the approved Noise Management Plan.

The Department notes that quarterly noise monitoring has demonstrated compliance with the applicable operational and road noise criteria. On this basis, the Department agrees to the cessation of noise monitoring at this time.

However, if the site receives a noise complaint or makes an operational change that is likely to increase noise emissions from the site, the Department expects that noise monitoring will recommence in accordance with the approved Noise Management Plan.

If you wish to discuss this further, please contact Genevieve Seed at the details above.

Yours sincerely,

MgBDa 17/10/18

Megan Dawson
A/Director
Resource Assessments
As the Secretary's nominee

Appendix D – Water Quality Monitoring data

WATER QUALITY MONITORING RESULTS JUNE 2017 - JUNE 2018
SLY'S QUARRY
JACKYBULBIN RD , MORORO

DATE	WHO	WEATHER	RAIN PAST 24 HRS	RAIN PAST 5 DAYS	POINT	DISCHARGING?	TSS/TURB	PH	conduct	OIL	TREATED?	DISCHARGED?		
3.7.17	mark n	fine	0	28	pond e	no	13	7.2	n/a	no	no	yes		
20.7.17	markn	fine	0	5	pond e	no	24	7.9	n/a	no	no	yes		
1.9.17	mark n	fine	0	0	gw1	n/a	n/a	5.8	153	n/a	n/a	n/a	quarterly test	
1.9.17	mark n	fine	0	0	gw2	n/a	n/a	5.7	256	n/a	n/a	n/a	quarterly test	
1.9.17	mark n	fine	0	0	gw3	n/a	n/a	6.1	165	n/a	n/a	n/a	quarterly test	
3/10/2017	mark n	raining	18	18	wq1	n/a	3	6.5	n/a	no	n/a	n/a	surface water >10mm	stagnant
3/10/2017	mark n	raining	18	18	wq2	n/a	18	6.1	n/a	no	n/a	n/a	surface water >10mm	stagnant
16/10/2017	mark n	raining	87	87	wq1	n/a	5	6.2	n/a	no	n/a	n/a	surface water >10mm	running
16/10/2017	mark n	raining	87	87	wq2	n/a	5	6.2	n/a	no	n/a	n/a	surface water >10mm	running
17/10/2017	mark n	raining	24	111	wq1	n/a	5	6.2	n/a	no	n/a	n/a	surface water >10mm	running
17/10/2017	mark n	raining	24	111	wq2	n/a	6	5.9	n/a	no	n/a	n/a	surface water >10mm	running
23/10/2017	mark n	dry	24	53	wq1	n/a	3	6.4	n/a	no	n/a	n/a	surface water >10mm	running
23/10/2017	mark n	dry	24	53	wq2	n/a	4	6.2	n/a	no	n/a	n/a	surface water >10mm	running
1/11/2017	mark n	dry	0	0	pond e	no	9	7.8	n/a	no	n/a	yes		
6/11/2017	mark n	raining	39	39	wq1	n/a	10	6.1	n/a	no	n/a	n/a	surface water >10mm	running
6/11/2017	mark n	raining	39	39	wq2	n/a	5	6.1	n/a	no	n/a	n/a	surface water >10mm	running
7/11/2017	mark n	raining	19	58	wq1	n/a	10	6.6	n/a	no	n/a	n/a	surface water >10mm	running
7/11/2017	mark n	raining	19	58	wq2	n/a	17	6.5	n/a	no	n/a	n/a	surface water >10mm	running
21/11/2017	markn	raining	10.5	25.5	pond e	no	20	7.7	n/a	no	no	yes		
21/11/2017	markn	raining	10.5	25.5	wq1	n/a	5	6.3	n/a	no	n/a	n/a	surface water >10mm	running
21/11/2017	markn	raining	10.5	25.5	wq2	n/a	5	6.2	n/a	no	n/a	n/a	surface water >10mm	running
30/11/2017	markn	raining	18	18	wq1	n/a	7	6.2	n/a	no	n/a	n/a	surface water >10mm	running
30/11/2017	markn	raining	18	18	wq2	n/a	6	6.1	n/a	no	n/a	n/a	surface water >10mm	running
30.11.17	mark n	raining	18	18	gw1	n/a	n/a	5.7	209	n/a	n/a	n/a	quarterly test	

30.11.17	mark n	raining	18	18	gw2	n/a	n/a	5.8	298	n/a	n/a	n/a	quarterly test	
30.11.17	mark n	raining	18	18	gw3	n/a	n/a	5.1	250	n/a	n/a	n/a	quarterly test	
1.12.17	mark n	raining	10	10	wq1	n/a	12	6.1	n/a	no	n/a	n/a	surface water >10mm	running
1.12.17	mark n	raining	10	10	wq2	n/a	9	6.2	n/a	no	n/a	n/a	surface water >10mm	running
2.12.17	mark n	raining	26	36	wq1	n/a	7	6.2	n/a	no	n/a	n/a	surface water >10mm	running
2.12.17	mark n	raining	26	36	wq2	n/a	7	6.2	n/a	no	n/a	n/a	surface water >10mm	running
6.12.17	mark n	raining	37	45.5	pond e	n/a	24	6.5	n/a	no	n/a	yes		
6.12.17	mark n	raining	37	45.5	wq1	n/a	3	6.8	n/a	no	n/a	n/a	surface water >10mm	running
6.12.17	mark n	raining	37	45.5	wq2	n/a	13	6.3	n/a	no	n/a	n/a	surface water >10mm	running
21.12.17	mark n	raining	18.6	20.4	wq1	n/a	9	6.13	n/a	no	n/a	n/a	surface water >10mm	running
21.12.17	mark n	raining	18.6	20.4	wq2	n/a	6	6.14	n/a	no	n/a	n/a	surface water >10mm	running
25.12.17	mark n	raining	35.4	54.6	wq1	n/a	11	6.09	n/a	no	n/a	n/a	surface water >10mm	running
25.12.17	mark n	raining	35.4	54.6	wq2	n/a	15	6.04	n/a	no	n/a	n/a	surface water >10mm	running
26.12.17	mark n	raining	13.8	49.8	wq1	n/a	9	6.22	n/a	no	n/a	n/a	surface water >10mm	running
26.12.17	mark n	raining	13.8	49.8	wq2	n/a	10	6.07	n/a	no	n/a	n/a	surface water >10mm	running
3.1.18	mark n	raining	19.5	27	pond e	no	9	6.23	n/a	no	no	no		
3.1.18	mark n	raining	19.5	27	wq1	n/a	4	6.15	n/a	no	n/a	n/a	surface water >10mm	running
3.1.18	mark n	raining	19.5	27	wq2	n/a	3	6.43	n/a	no	n/a	n/a	surface water >10mm	running
12.1.18	mark n	fine	0	2	pond e	no	47	7.53	n/a	no	no	yes		
22.1.18	mark n	raining	20.1	26.5	wq1	n/a	8	6.13	n/a	no	n/a	n/a	surface water >10mm	running
22.1.18	mark n	raining	20.1	26.5	wq2	n/a	11	6.25	n/a	no	n/a	n/a	surface water >10mm	running
23.1.18	mark n	raining	27.6	51.3	wq1	n/a	17	6.19	n/a	no	n/a	n/a	surface water >10mm	running
23.1.18	mark n	raining	27.6	51.3	wq2	n/a	22	6.29	n/a	no	n/a	n/a	surface water >10mm	running
29.1.18	mark n	raining	14.7	60.9	pond e	no	7	8.12	n/a	no	no	yes		
29.1.18	mark n	raining	14.7	60.9	wq1	n/a	2	6.47	n/a	no	n/a	n/a	surface water >10mm	running
29.1.18	mark n	raining	14.7	60.9	wq2	n/a	26	6.14	n/a	no	n/a	n/a	surface water >10mm	running
3.2.18	mark n	raining	21	56	wq1	n/a	4	6.59	n/a	no	n/a	n/a	surface water >10mm	running
3.2.18	mark n	raining	21	56	wq2	n/a	8	6.49	n/a	no	n/a	n/a	surface water >10mm	running

12.2.18	mark n	raining	18.6	20.4	wq1	n/a		2	6.52	n/a	no	n/a	n/a	surface water >10mm	running
12.2.18	mark n	raining	18.6	20.4	wq2	n/a		24	6.18	n/a	no	n/a	n/a	surface water >10mm	running
19.2.18	mark n	fine	0	0	gw1	n/a	n/a		5.61	136	no	n/a	n/a	quarterly test	
19.2.18	mark n	fine	0	0	gw2	n/a	n/a		5.36	235	no	n/a	n/a	quarterly test	
19.2.18	mark n	fine	0	0	gw3	n/a	n/a		4.8	615	no	n/a	n/a	quarterly test	
21.2.18	mark n	raining	22.9	25	wq1	n/a		6	6.38	n/a	no	n/a	n/a	surface water >10mm	running
21.2.18	mark n	raining	22.9	25	wq2	n/a		12	6.04	n/a	no	n/a	n/a	surface water >10mm	running
24.2.18	mark n	raining	12.9	46.5	wq1	n/a		7	6.29	n/a	no	n/a	n/a	surface water >10mm	running
24.2.18	mark n	raining	12.9	46.5	wq2	n/a		9	6.25	n/a	no	n/a	n/a	surface water >10mm	running
27.2.18	mark n	raining	26	39	wq1	n/a		7	6.39	n/a	no	n/a	n/a	surface water >10mm	running
27.2.18	mark n	raining	26	39	wq2	n/a		8	6.3	n/a	no	n/a	n/a	surface water >10mm	running
6.3.18	mark n	raining	38.7	47.7	wq1	n/a		13	6.09	n/a	no	n/a	n/a	surface water >10mm	running
6.3.18	mark n	raining	38.7	47.7	wq2	n/a		7	6.25	n/a	no	n/a	n/a	surface water >10mm	running
6.3.18	mark n	raining	38.7	47.7	pond e	no		67	7.53	n/a	no	yes	no	to be retested before release	
15.3.18	mark n	raining	28.5	37.5	pond e	no		12	7.53	n/a	no	no	yes	retest tss passed prior to release	
7.3.18	mark n	raining	10	51	wq1	n/a		4	6.33	n/a	no	n/a	n/a	surface water >10mm	running
7.3.18	mark n	raining	10	51	wq2	n/a		5	6.27	n/a	no	n/a	n/a	surface water >10mm	running
10.3.18	mark n	raining	10	60	wq1	n/a	<1		6.16	n/a	no	n/a	n/a	surface water >10mm	running
10.3.18	mark n	raining	10	60	wq2	n/a	<1		6.24	n/a	no	n/a	n/a	surface water >10mm	running
15.3.18	mark n	raining	28.5	37.5	wq1	n/a		3	6.5	n/a	no	n/a	n/a	surface water >10mm	running
15.3.18	mark n	raining	28.5	37.5	wq2	n/a		6	6.54	n/a	no	n/a	n/a	surface water >10mm	running
24.3.18	mark n	raining	44	48.5	wq1	n/a		3	6.23	n/a	no	n/a	n/a	surface water >10mm	running
24.3.18	mark n	raining	44	48.5	wq2	n/a		4	6.3	n/a	no	n/a	n/a	surface water >10mm	running
9.4.18	mark n	raining	10	15	wq1	n/a		7	6.17	n/a	no	n/a	n/a	surface water >10mm	running
9.4.18	mark n	raining	10	15	wq2	n/a		7	6.68	n/a	no	n/a	n/a	surface water >10mm	running
18.4.18	mark n	raining	10	10	wq1	n/a		10	6.27	n/a	no	n/a	n/a	surface water >10mm	running
18.4.18	mark n	raining	10	10	wq2	n/a		4	6.29	n/a	no	n/a	n/a	surface water >10mm	running
23.4.18	mark n	dry	29.1	36.9	wq1	n/a		4	6.33	n/a	no	n/a	n/a	surface water >10mm	running

23.4.18	mark n	dry	29.1	36.9	wq2	n/a		4	6.38	n/a	no	n/a	n/a	surface water >10mm	running
23.4.18	mark n	dry	29.1	36.9	pond e	no		18	7.89	n/a	no	no	yes		
8.5.18	mark n	raining	10	10	wq1	n/a		5	6.4	n/a	no	n/a	n/a	surface water >10mm	running
8.5.18	mark n	raining	10	10	wq2	n/a		16	6.21	n/a	no	n/a	n/a	surface water >10mm	running
8.5.18	mark n	raining	10	10	pond e	no		23	7.7	n/a	no	no	yes		
21.5.18	mark n	dry	0	10	gw1	n/a	n/a		5.48	113	no	n/a	n/a	quarterly test	
21.5.18	mark n	dry	0	10	gw2	n/a	n/a		5.2	222	no	n/a	n/a	quarterly test	
21.5.18	mark n	dry	0	10	gw3	well dry not obtainable								quarterly test	
30.5.18	mark n	raining	52.8	52.8	wq1	n/a		4	6.56	n/a	no	n/a	n/a	surface water >10mm	running
30.5.18	mark n	raining	52.8	52.8	wq2	n/a		6	6.48	n/a	no	n/a	n/a	surface water >10mm	running
15.6.18	mark n	dry	0	6	pond e	no		7	7.37	n/a	no	no	yes		
6.7.18	mark n	dry	11.5	24	wq1	n/a	<1		6.4	n/a	no	n/a	n/a	surface water >10mm	running
6.7.18	mark n	dry	11.5	24	wq2	n/a		4	6.3	n/a	no	n/a	n/a	surface water >10mm	running
27.8.18	mark n	dry	19	22	wq1	n/a		23	6.4	n/a	no	n/a	n/a	surface water >10mm	running
27.8.18	mark n	dry	19	22	wq2	n/a		30	6.4	n/a	no	n/a	n/a	surface water >10mm	running
4.9.18	mark n	raining	12	15	wq1	n/a		2	6.7	n/a	no	n/a	n/a	surface water >10mm	running
4.9.18	mark n	raining	12	15	wq2	n/a		6	6.4	n/a	no	n/a	n/a	surface water >10mm	running
5.9.18	mark n	raining	26	41	wq1	n/a		2	7	n/a	no	n/a	n/a	surface water >10mm	running
5.9.18	mark n	raining	26	41	wq2	n/a		11	6.4	n/a	no	n/a	n/a	surface water >10mm	running
14.9.18	mark n	dry	0	0	pond e	no		21	7.7	n/a	no	no	yes		
21.9.18	mark n	dry	13	13	wq1	n/a		15	6.4	n/a	no	n/a	n/a	surface water >10mm	running
21.9.18	mark n	dry	13	13	wq2	n/a		11	5.8	n/a	no	n/a	n/a	surface water >10mm	running
11.10.18	mark n	raining	11	11	wq1	n/a		10	6.4	n/a	no	n/a	n/a	surface water >10mm	runnning
11.10.18	mark n	raining	11	11	wq2	n/a		31	6.2	n/a	no	n/a	n/a	surface water >10mm	runnning
12.10.18	mark n	raining	34.8	45.8	wq1	n/a		9	6.3	n/a	no	n/a	n/a	surface water >10mm	running
12.10.18	mark n	raining	34.8	45.8	wq2	n/a		30	6.1	n/a	no	n/a	n/a	surface water >10mm	running
13.10.18	mark n	raining	24	69.8	wq1	n/a		8	6.2	n/a	no	n/a	n/a	surface water >10mm	running

13.10.18	mark n	raining	24	69.8	wq2	n/a		35	6.2	n/a		no	n/a	n/a	surface water >10mm	running
15.10.18	mark n	raining	57	116	wq1	n/a		9	6.3	n/a		no	n/a	n/a	surface water >10mm	running
15.10.18	mark n	raining	57	116	wq2	n/a		35	6.2	n/a		no	n/a	n/a	surface water >10mm	running
16.10.18	mark n	raining	18.9	134.9	wq1	n/a		4	7.1	n/a		no	n/a	n/a	surface water >10mm	running
16.10.18	mark n	raining	18.9	134.9	wq2	n/a		10	6.9	n/a		no	n/a	n/a	surface water >10mm	running
17.10.18	mark n	dry	24	147.9	wq1	n/a		3	7	n/a		no	n/a	n/a	surface water >10mm	running
17.10.18	mark n	dry	24	147.9	wq2	n/a		8	6.9	n/a		no	n/a	n/a	surface water >10mm	running
21.10.18	mark n	dry	38.5	38.5	wq1	n/a		15	6.4	n/a		no	n/a	n/a	surface water >10mm	running
21.10.18	mark n	dry	38.5	38.5	wq2	n/a		11	5.8	n/a		no	n/a	n/a	surface water >10mm	running
31.10.18	mark n	dry	0.6	0.6	pond e	no		8	7.4	n/a		no	no	yes		
5.11.18	mark n	dry	5	5	gw1	n/a	n/a		5.9		147	no	n/a	n/a	quarterly test	
5.11.18	mark n	dry	5	5	gw2	n/a	n/a		5.4		492	no	n/a	n/a	quarterly test	
5.11.18	mark n	dry	5	5												
19.11.18	mark n	dry	17	19	wq1	n/a		5	6.2	n/a		no	n/a	n/a	surface water >10mm	stagnant
19.11.18	mark n	dry	17	19	wq2	n/a		9	6	n/a		no	n/a	n/a	surface water >10mm	stagnant
22.11.18	mark n	dry	18	37	wq1	n/a		3	6.3	n/a		no	n/a	n/a	surface water >10mm	stagnant
22.11.18	mark n	dry	18	37	wq2	n/a		2	6.1	n/a		no	n/a	n/a	surface water >10mm	stagnant
28.11.18	mark n	dry	12.3	12.3	wq1	n/a	<1		6.4	n/a		no	n/a	n/a	surface water >10mm	stagnant
28.11.18	mark n	dry	12.3	12.3	wq2	n/a		13	6	n/a		no	n/a	n/a	surface water >10mm	stagnant
17.12.18	mark n	dry	21	31.5	wq1	n/a		12	6.5	n/a		no	n/a	n/a	surface water >10mm	stagnant
17.12.18	mark n	dry	21	31.5	wq2	n/a		13	6.1	n/a		no	n/a	n/a	surface water >10mm	stagnant
21.12.18	mark n	dry	31	41	wq1	n/a		21	6.3	n/a		no	n/a	n/a	surface water >10mm	stagnant
21.12.18	mark n	dry	31	41	wq2	n/a	<1		6.1	n/a		no	n/a	n/a	surface water >10mm	stagnant
7.1.19	mark n	dry	0	0	pond e	no		17	8.1	n/a		no	no	yes		
4.2.19	mark n	dry	16.8	16.8	wq1	n/a		25	6.1	n/a		no	n/a	n/a	surface water >10mm	stagnant
4.2.19	mark n	dry	16.8	16.8	wq2	n/a		52	6.1	n/a		no	n/a	n/a	surface water >10mm	stagnant
8.2.19	mark n	dry	10.2	13.6	wq1	n/a		30	6.4	n/a		no	n/a	n/a	surface water >10mm	stagnant
8.2.19	mark n	dry	10.2	13.6	wq2	n/a		39	5.8	n/a		no	n/a	n/a	surface water >10mm	stagnant

8.2.19	mark n	dry	10.2	13.6	gw1	n/a	n/a	well dry not obtainable						quarterly test	
8.2.19	mark n	dry	10.2	13.6	gw2	n/a	n/a		5.3	186	no	n/a	n/a		
8.2.19	mark n	dry	10.2	13.6	gw3	n/a	n/a	well dry not obtainable						quarterly test	
22.2.19	mark n	rain	48.9	49.8	wq1	n/a		15	6.4	n/a	no	n/a	n/a	surface water >10mm	stagnant
22.2.19	mark n	rain	48.9	49.8	wq2	n/a		29	5.8	n/a	no	n/a	n/a	surface water >10mm	stagnant
4.3.19	mark n	dry	10	22	wq1	n/a		32	6.8	n/a	no	n/a	n/a	surface water >10mm	stagnant
4.3.19	mark n	dry	10	22	wq2	n/a		6	5.9	n/a	no	n/a	n/a	surface water >10mm	stagnant
8.3.19	mark n	dry	27.3	27.3	wq1	n/a		9	6.2	n/a	no	n/a	n/a	surface water >10mm	stagnant
8.3.19	mark n	dry	27.3	27.3	wq2	n/a		9	5.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
15.3.19	mark n	dry	0	0	pond e	no		9	7.3	n/a	no	no	yes		
16.3.19	mark n	rain	70.1	70.1	wq1	n/a		13	6.2	n/a	no	n/a	n/a	surface water >10mm	stagnant
16.3.19	mark n	rain	70.1	70.1	wq2	n/a		8	5.8	n/a	no	n/a	n/a	surface water >10mm	stagnant
27.03.19	mark n	rain	14.4	14.4	wq1	n/a		19	6.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
27.03.19	mark n	rain	14.4	14.4	wq2	n/a		38	57	n/a	no	n/a	n/a	surface water >10mm	stagnant
01.04.19	mark n	dry	17.4	35.9	wq1	n/a		10	6.4	n/a	no	n/a	n/a	surface water >10mm	stagnant
01.04.19	mark n	dry	17.4	35.9	wq2	n/a		7	5.8	n/a	no	n/a	n/a	surface water >10mm	stagnant
03.04.19	mark n	dry	38.4	55.8	wq1	n/a		3	5.9	n/a	no	n/a	n/a	surface water >10mm	stagnant
03.04.19	mark n	dry	38.4	55.8	wq2	n/a		22	5.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
03.04.19	mark n	dry	38.4	55.8	pond e	no		32	6.9	n/a	no	no	yes		
06.04.19	mark n	dry	10	48.4	wq1	n/a		3	6.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
06.04.19	mark n	dry	10	48.4	wq2	n/a		11	5.6	n/a	no	n/a	n/a	surface water >10mm	stagnant
13.04.19	mark n	dry	13	14.2	wq1	n/a		17	5.8	n/a	no	n/a	n/a	surface water >10mm	stagnant
13.04.19	mark n	dry	13	14.2	wq2	n/a		10	6.1	n/a	no	n/a	n/a	surface water >10mm	stagnant
20.04.19	mark n	rain	25.2	26.7	wq1	n/a		7	6.2	n/a	no	n/a	n/a	surface water >10mm	stagnant
20.04.19	mark n	rain	25.2	26.7	wq2	n/a		8	5.8	n/a	no	n/a	n/a	surface water >10mm	stagnant
21.04.19	mark n	rain	26.1	52.8	wq1	n/a		13	5.9	n/a	no	n/a	n/a	surface water >10mm	stagnant
21.04.19	mark n	rain	26.1	52.8	wq2	n/a		9	6.1	n/a	no	n/a	n/a	surface water >10mm	stagnant
17.05.19	mark n	dry	25	28.9	wq1	n/a		18	6	n/a	no	n/a	n/a	surface water >10mm	stagnant

17.05.19	mark n	dry	25	28.9	wq2	n/a		4	5.7	n/a	no	n/a	n/a	surface water >10mm	stagnant
21.05.19	mark n	dry	0	1.8	gw1	n/a	n/a	well dry not obtainable						quarterly test	
21.05.19	mark n	dry	0	1.8	gw2	n/a	n/a		5.4	231	no	n/a	n/a	quarterly test	
21.05.19	mark n	dry	0	1.8	gw3	n/a	n/a	well dry not obtainable						quarterly test	
25.06.19	mark n	rain	15.3	17.4	wq1	n/a		5	6.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
25.06.19	mark n	rain	15.3	17.4	wq2	n/a		11	5.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
27.06.19	mark n	rain	10.2	27.6	wq1	n/a		3	5.5	n/a	no	n/a	n/a	surface water >10mm	stagnant
27.06.19	mark n	rain	10.2	27.6	wq2	n/a		14	6.5	n/a	no	n/a	n/a	surface water >10mm	stagnant
28.06.19	markn	rain	10.2	37.8	wq1	n/a		4	6.3	n/a	no	n/a	n/a	surface water >10mm	stagnant
28.06.19	markn	rain	10.2	37.8	wq2	n/a		19	5.3	n/a	no	n/a	n/a	surface water >10mm	stagnant

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