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bhpbilliton

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27 October 2004

H Haag
Manager Petroleum Operations, Safety and Environment
Department of Primary Industries
GPO BOX 4440
MELBOURNE VIC 3001

Dear Mr Haag:

SUBMISSION OF DATA MANAGEMENT PLAN

Thank you for your letter dated 30 July 2004, regarding the new Petroleum (Submerged Lands) (Data Management) Regulations 2004. BHP Billiton Petroleum has accordingly undertaken a review of the new regulations and available templates, and developed a general Data Management Plan (DMP) approach for our exploration and production activities in the Commonwealth adjacent areas of Victoria.

Please find attached a DMP for the BHP Billiton operated retention lease VIC/RL7, Otway Basin, Victoria. Upon acceptance of this our first DMP submission to the Designated Authority, we will proceed with submission of DMPs for all other operated areas and defined activities. For your reference, we also note that an equivalent DMP has been approved for use in adjacent areas of Western Australia.

Please review and provide us with feedback as soon as possible. If you require assistance with our submission please contact Mike Noble, AIM Manager – Data / Information on 08 9278 4673.

Yours sincerely,

Graham Bunn
Acting Technical Manager, Bass Strait
BHP Billiton Petroleum (Victoria) Pty Ltd

Attached: Data Management Plan for VIC/RL7

Cc: Ian Pedler - Santos

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DEPT. NAT. RES & ENV



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Data Management Plan

Permit	Vic/RL7
 Holders	BHP Billiton Petroleum (Victoria) Pty Ltd <small>(*company responsible for data)</small> Santos (BOL) Pty Ltd

This Data Management Plan (DMP) is designed to be a “cradle to grave” plan for all foreseeable activities to be undertaken within the title area. However, if the Guidelines for reporting and submission of Petroleum Data are updated, then this DMP will be revised. For other activities not covered in detail in this plan (or in the DMP Guidelines) the Company responsible for the data shall specifically detail information on that activity, as it arises.

Signed for and behalf of
BHP Billiton Petroleum (Victoria) Pty Ltd,
Santos (BOL) Pty Ltd.

by BHP Billiton Petroleum (Victoria) Pty Ltd

Per: 
.....
Graham Bunn
Acting Technical Manager, Bass Strait

Date: 27 October 2004

Version: 1.0

Designated Authority acceptance:

0030

Permit Vic/RL7 DMP

Prepared for, and on behalf of the Joint Venture by BHPBilliton Petroleum

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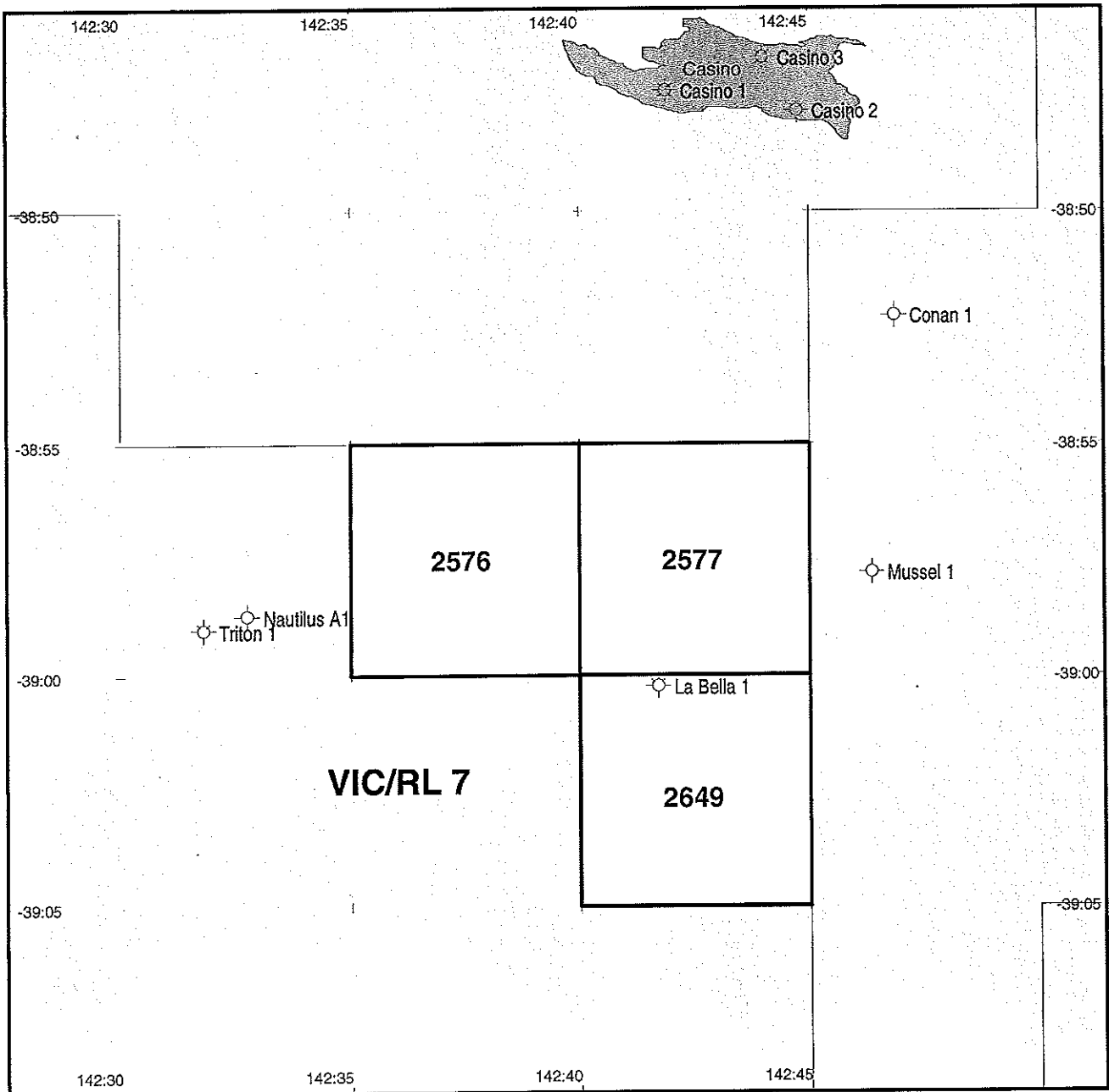
Media.....18

1. Location/Description of Title/Activity area

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The following general location information is applicable to Title Vic/RL7 (Regulation 12):

AREA: 200 km², 3 Graticular Blocks
STATE: Victoria
BASIN: Otway Basin
AWARDED: 19 December 2003
EXPIRY DATE: 19 December 2008
OPERATOR: BHP Billiton Petroleum (Victoria) Pty. Ltd. ("BHPB")
 ABN 99 006 923 879]
 180 Lonsdale Street
 Melbourne, Victoria 3000 Australia
ACT: Petroleum (Submerged Lands) Act 1967 (Cth)



2. Specific Requirements of DMP per Schedule 1

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Item	Regulatory Provisions	Application to this DMP
101	Description of: a. each activity to which DMP relates; b. each location where activity will be carried out.	This DMP is designed to be a "cradle to grave" plan for all foreseeable activities to be undertaken within the title area. However, if the Guidelines for reporting and submission of petroleum data are updated then this DMP will be revised. For other activities not covered in detail in this plan (or in the DMP Guidelines) the company responsible for the data shall specifically detail information on that activity, as it arises.
102	Description of reports & information, relevant to the activity, that will be made and kept.	As detailed throughout this document, relating to the specific activity.
103	Explanation of: a. data to be given to the Designated Authority without request by the Designated Authority; b. information to be kept.	a. Data to be submitted – refer to body of document, as pertinent to the associated activity. b. Data withheld – refer to body of document, as pertinent to the associated activity.
104	Description of media and formats for information, cores, cuttings or samples held.	The information and reports will be submitted in the format and on the media outlined in within the body of the document, as pertinent to the associated activity.
105	Explanation of how media and formats in item 104: a. are appropriate for type & volume of data collected; b. comply with Designated Authority requirements; c. comply with good industry practice.	Data medias and formats are described within the body of the document and these all comply with the Guidelines for data submission (the Guidelines) in respect of the <i>Petroleum (Submerged Lands) (Data Management) Regulations 2004 (Cth)</i> (the Regulations).
106	Undertake to allow access to data that is publicly available and explain how access will be allowed	BHP Billiton acknowledges that, upon notification by the Designated Authority, it will allow reasonable access to any publicly available information or samples under its control.
107	Describe arrangements that ensure information is preserved according to good archive practice.	Data preservation will be ensured via contracts covering data services in addition to in-house data management practice.
108	Issue a statement that reports & information will be given according to: a. the timetable outlined in Part 2 of the Schedule; or b. a timetable proposed in the DMP.	The timing of submission of data that will be made/collected during the period of the DMP is outlined within the body of the document, as pertinent to the associated activity.
109	Summary of: a. data management performance objectives against which performance will be measured; & b. measurement criteria that define the objectives.	Data and reports will be submitted on time and in accordance with Guidelines (see item 105). Archival and Environment conditions will comply with the Guidelines (see item 105).

2. Specific Requirements of DMP per Schedule 1 (continued)

Item	Regulatory Provisions	Application to this DMP
110	Explain how the measurement criteria will confirm that the performance objectives have been met.	Submissions timetable will be monitored in-house. Storage handling conditions will be controlled via contracts for data services.
111	Summary of arrangements for: <ul style="list-style-type: none"> a. secure storage of documents and records at a nominated address b. maintenance of documents and records in a way that makes retrieval of documents etc practicable. 	Information and reports will be stored at the nominated address in a secure data storage room prior to being submitted to the Designated Authority as per timetable above. The storage of data will meet the good digital archival principles as set out in the "Guidelines for reporting and submission of petroleum data" and recommended by the Australian Archives.
112	Acknowledge responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to the Designated Authority.	The Operator acknowledges responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to the Designated Authority.
113	Any other information that is necessary to demonstrate that the DMP complies with the Regulations.	As required, for specific instances.

3. Activity

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3.1. 2D Seismic Acquisition & Processing**3.1.1. General Information (Regulation 12)**

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements Weekly – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.1.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data
b	a report describing the acquisition and processing of the data
c	navigation data
d	Interpretation report

3.1.3. Reporting - Weekly Progress reports (Schedule 1, Part 2, item 202)

The following information will be submitted as soon as practicable after the end of the week to which the report relates:

Report on survey operations during the week

3.1.4. Data Submission and Reporting Tables

2D Seismic Survey – acquisition and processing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth			
Navigation data (offshore) includes elevation and bathymetry data.	1 copy	1 copy	Media UKOOA CD, DVD	One year after completion of processing of the survey	To be provided in P1/90
Seismic field data	1 copy *	DA to supply archive address	SEG 3590	One year after completion of processing of the survey	Observer's logs
Seismic support data	Include details on field tape TP *	-	PDF, HTML CD, DVD	One year after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Itemized field tape listing	Yes	Yes	ASCII Floppy, CD	One year after completion of processing of the survey	If generated as part of the processing sequence, including EBCDIC header including EBCDIC header
Raw and final stacked data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	Image file to be created using a time scale at least 5cm/sec.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	SOL/EOL relationships & listing of CDP/SP pairs for each line.
Fully annotated image of final processed data	1 copy	1 copy	CGM+, JPEG, TIFF, PDF 3590	One year after completion of processing of the survey	Including line number, shotpoint, time vs RMS pairs for both stacked & migrated velocities.
Shotpoint to CDP relationship	1 copy	DA to forward to relevant archive	ASCII CD	One year after completion of processing of the survey	
Velocity data	1 copy	DA to forward to relevant archive	ASCII, SEGY CD, 3590	One year after completion of processing of the survey	
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Final report – Derived data	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	TIFF, CGM, JPEG, PDF CD, DVD	One year after completion of processing of the survey	

* Transfer Proposal for the Field Tapes to be sent to the Designated Authority for approval to submit

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3.2. 3D Seismic Acquisition & Processing**3.2.1. General Information (Regulation 12)**

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements Weekly – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.2.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data
b	a report describing the acquisition and processing of the data
c	navigation data
d	Interpretation report

3.2.3. Reporting – Weekly Progress reports (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the end of the week to which the report relates:

Report on survey operations during the week

3.2.4. Data Submission and Reporting Tables

3D Seismic Survey – acquisition and processing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth			
Navigation data including field processed data	1 copy	1 copy	UKOOA CD, DVD	One year after completion of processing of the survey	To be provided in P1/90 including elevation and bathymetry data.
Seismic field data	1 copy*	DA to supply archive address	SEG 3590	One year after completion of processing of the survey	Observer's logs
Seismic support data	Include details on field tape TP *		PDF, HTML CD, DVD	One year after completion of processing of the survey	
Itemized field tape listing	1 copy	1 copy	ASCII Floppy, CD	One year after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type
Raw stacked data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	If generated as part of the processing sequence. Including EBCDIC header.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	Including EBCDIC header
Final processed grid (bin) coordinates	1 copy	1 copy	UKOOA 3D Binning Grids CD, 3590	One year after completion of processing of the survey	To be completed using UKOOA P6/98 format
Polygonal position data	1 copy	1 copy	ASCII CD	One year after completion of processing of the survey	
3D velocity data	1 copy	DA to forward to relevant archive	ASCII, SEGY CD, 3590	One year after completion of processing of the survey	Including bin number, time vs RMS pairs for stacking and migrated velocities.
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Final report – Derived data	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	One year after completion of processing of the survey	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks

* Transfer Proposal for the Field Tapes to be sent to the Designated Authority for approval to submit.

3.3. 2D & 3D Seismic Reprocessing

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3.3.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Activity Description
	ii	Period of the activity.	See Activity Description
b		Persons undertaking activity.	See Activity Description
c	i	The techniques and equipment used to process the data.	See Activity Description
	ii	The techniques and equipment used to interpret the data.	See Activity Description
d		Data processing report.	Data processing report
e		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps

3.3.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	a report describing the processing of the data
b	Interpretation report

3.3.3. Reporting (Schedule 1, Part 2, item 202)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout.
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3.3.4. Data Submission and Reporting Tables

2D & 3D seismic reprocessing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Raw stacked data (if generated as part of the processing sequence)	1 copy	DA to forward to relevant archive	Media SEGY 3590	One year after completion of processing of data	Includes EBCDIC header
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of data	Includes EBCDIC header
Fully annotated image of final processed data (applicable to 2D only)	1 copy	1 copy	CGM+, TIFF, JPEG, PDF CD, DVD	One year after completion of processing of data	Image file must be created using a time scale at least 5cm/sec
Final report (reprocessing)	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of data	
Final report (derived data)	1 copy	1 copy	PDF CD, DVD	One year after completion of the processing of data	
Digital images of interpretation maps	1 copy	1 copy	TIFF, CGM, JPEG, PDF CD, DVD	One year after completion of the processing of data	

Data to be supplied if the conditions of borrowing data from archives include transcription of field data to high-density media

Field tape transcription log	1 copy or TP *	DA to forward to relevant archive	ASCII Floppy, CD	One year after completion of processing of data	Showing the original tape number, new tape number, survey name, line number, shotpoint range, data type, transcription parameters
Seismic field tape copies	1 copy or TP *	DA to forward to relevant archive	SEG 3590	One year after completion of processing of data	

+ Only required for areas under Commonwealth jurisdiction

* Transfer proposals to be sent to the Designated Authority for approval to submit. The Designated Authority will then instruct as to which address the data is to be sent

3D seismic specific reprocessing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Final processed grid (bin coordinates (for 3D seismic))	1 copy	1 copy	UKOOA 3D Binning Grids	One year after completion of processing of data	To be completed using UKOOA P6/98 format

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3.4. Gravity, Magnetic and Other Survey Data**3.4.1. General Information (Regulation 12)**

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements At project closeout- see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.4.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data.
b	a report describing the acquisition and processing of the data.
c	Interpretation report

3.4.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.4.4. Data Submission and Reporting Tables

Gravity, magnetic and other survey data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Field magnetic located data	TP *	DA to supply archive address	Media ASEG-GDF	Six months after completion of the survey	Include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, GPS or barometric altimeter, and base station reading. All coordinate data must include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. A metadata file about the survey to accompany the field, located and gridded data to include the survey type, dates contractor parameters recorded and instruments used, altitude, line and tie spacing, line orientation aircraft identification, calibration and defined null values. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. Including raw loop data, raw elevations plus measurement times and dates. All coordinate data must also include clearly stated datum, spheroid and projection, clearly stated transformation parameters if not in same coordinate system as was acquired in the field. All elevation values must be AHD. For marine gravity using a L&R meter, the beam velocity, spring tension, cross-coupling and the 6 acceleration monitors. For a Bell geoscience instrument, the 3 inline and 3 cross-line accelerations and the accelerations of the stabilized platform Format of these data to be negotiated with the Designated Authority
Field gravity located data	TP *	DA to supply archive address	ASCII	Six months after completion of the survey	Format of these data to be negotiated with the Designated Authority
Field data for other types of surveys	TP *	DA to supply archive address	Digital	Six months after completion of the survey	Format of these data to be negotiated with the Designated Authority
Processed data for other types of surveys	TP *	DA to supply archive address	Digital	Six months after completion of the survey	Format of these data to be negotiated with the Designated Authority
Processed magnetic data (corrected and levelled) gridded data	TP *	DA to supply archive address	ASEG-GDF	Six months after completion of the survey	Digital data must include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, radar, GPS or barometric altitude, and base station reading. Include pre and post microllevelling data. A metadata file about the survey to accompany the field, located and gridded data to include the survey type, dates contractor parameters recorded and instruments used, altitude, line and tie spacing line orientation aircraft identification, calibration and defined null values. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as acquired in the field.
Processed gravity data (corrected and levelled) gridded data	1 copy	1 copy	ASEG-GDF	Six months after completion of the survey	Data must include: descriptive headers, station, measurement dates and times, XY (along coordinates, drift corrected meter reading, observed gravity value, Evos correction, elevation value, calculation errors, final processed gravity value. For a L&R meter, the Beam velocity, Spring tension, cross-coupling and the 6 acceleration monitors. For a Bell geoscience instrument, the 3 inline and 3 cross-line accelerations are recorder along with the accelerations of the stabilized platform. All coordinate data must also include clearly stated datum, spheroid and projection, also clearly stated transformation parameters if not in same coordinate system as acquired in the field. All elevation values must be AHD. A metadata file about the survey to accompany the located and gridded data to include details of the instruments used, the survey type, dates contractor parameters recorded and instruments used, station spacing, calibration and defined null values, meter type, scale factor for meter. Data must be tied to an Isogal station in the Australian Fundamental Gravity Network. Images derived from the survey, e.g. TMI, Bouguer
Geophysical images	1 copy	1 copy	Grids in ER Mapper format, PDF CD, DVD	Six months after completion of the survey	Images derived from the survey, e.g. TMI, Bouguer
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	Six months after completion of the survey	Must include location map and flight line map. Aeromagnetic surveys: Including aircraft and survey equipment details and specifications, flight line directions and terrain clearance, line spacing, total line kilometres. Gravity surveys: Including meter type, scale factor for meter. Data must be tied to an Isogal station in the Australian Fundamental Gravity Network. Processing report must include company details and processing parameters.
Final report (derived data)	1 copy	1 copy	PDF CD, DVD	Six months after completion of the survey	These include any maps included in the interpretation report as separate Geo-referenced TIF images
Digital images of interpretation maps	1 copy	1 copy	TIFCGM, JPEG, PDF CD, DVD	Six months after completion of the survey	These include any maps included in the interpretation report as separate Geo-referenced TIF images

Permit Vic/RL7 DMP

Prepared for, and on behalf of the Joint Venture by BHPBilliton Petro...jm

+ Only required for areas under Commonwealth jurisdiction

* Transfer proposals to be sent to the Designated Authority for approval to submit. The Designated Authority will then instruct as to which address the data is to be sent

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3.5. Wells**3.5.1. General Information (Regulation 12)**

The following written information and documents will be prepared as part of the activity:

a	i	Location of the activity.	See Well Program.
	ii	Period of the activity.	See Well Program.
b		Persons undertaking activity.	See Well Program.
c	i	The techniques and equipment used to collect the data.	See Well Program.
	ii	The techniques and equipment used to process the data.	See Well Program.
	iii	The techniques and equipment used to interpret the data.	See Well Program.
d		Progress reports.	Reporting requirements Daily.
e		Data acquisition report detailing the operations carried out as part of the activity.	Well Completion Report (Basic Data).
f		If processing is undertaken as part of the activity - data processing report.	Well Completion Report (Basic Data).
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Well Completion Report (Interpretive Data) Maps.

3.5.2. Written Information and Documentation (Regulation 13)

The following written information and documents about each well will be prepared as part of the activity as appropriate/applicable:

	Description
a	field and processed digital log data;
b	displays of logs generated
c	mud log displays
d	digital mud logging data
e	down hole survey data
f	report of the purpose, operation and progress of the well
g	photographs of the well core
h	a well completion report.

The information will also include, if appropriate/applicable & not required for ongoing studies:

	Description
a	cores, core cuttings and fluid samples
b	sample slides
c	residues

3.5.3. Reporting – Daily Drill reports (Schedule 1, Part 2, item 206)

One email copy will be submitted to the Designated Authority no later than midday on the day after the day to which the report relates:

a	Name of well
b	Drilled depth
c	Work carried out
d	Lithology of formations penetrated
e	Any indications of petroleum
f	Results of surveys made in the well bore
g	A leak off test summary
h	Hole geometry
i	Results of surveys made in the well bore
j	Estimated daily and cumulative well costs

3.5.4. Data Submission and Reporting Tables

Well data plan (Documentary information)

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth				
Edited field and processed data for all wireline logs	1 copy	DA to forward to relevant archive	LIS, DLIS, LAS, ASCII CD, DVD		Twelve months after completion of the well.	With a verification listing of the data supplied. The data shall include full header information.
Edited field and processed data (including borehole deviation surveys) for all MWD or LWD tools	1 copy	DA to forward to relevant archive	LIS, DLIS, LAS, ASCII CD, DVD		Twelve months after completion of the well	With a verification listing of the data supplied. The data shall include full header information.
Mudlogging data	1 copy	DA to forward to relevant archive	LAS, ASCII CD, DVD		Twelve months after completion of the well	With a header giving filed names and units of measure
Processed data for velocity surveys	1 copy	DA to forward to relevant archive	SEGY, ASCII		Twelve months after completion of the well.	With a verification header file
Wireline log displays	1 copy	1 copy	PDF, PDS, TIFF, META CD, DVD	200/500	Twelve months after completion of the well	If another format is available, the appropriate view software (executable) will be supplied.
MWD or LWD log displays	1 copy	1 copy	PDF, PDS, TIFF, ASCII CD, DVD	200/500	Twelve months after completion of the well	If another format is available, the appropriate view software (executable) will be supplied.
Mudlog	1 copy	1 copy	PDF, TIFF, ASCII CD, DVD	500	Twelve months after completion of the well.	
Ditch cuttings	One set	One set			Twelve months after completion of the well.	A minimum of 100g dry weight and thoroughly cleaned, dried and packaged with indeleible printing of Well name, depth ranges.
Full hole cores, if cut	#	1/3 slab			Twelve months after completion of the well	Slabbed vertically
Well completion report	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Image files included in report PDF may also be submitted as separate files.
Basic data	1 copy	1 copy	PDF		Twelve months after completion of the well.	Included in the derived data volume of the well completion report
Well index sheet	1 copy	1 copy	ASCII, Excel CD, DVD		Twelve months after completion of the well.	As a tab delimited ASCII file with metadata included. Attached to well completion report.
Digital petrophysical, geochemical or other analyses	1 copy	1 copy			Twelve months after completion of the well.	
Velocity log displays	1 copy	1 copy	PDF CD, DVD	200	Twelve months after completion of the well.	

Remaining 2/3 slab to be supplied to State/Territory upon completion of all analysis

Well data plan (Documentary information) - continued

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth+				
Core, SWC photography	1 copy	1 copy	Media TIFF, JPG, PDF CD, DVD		Twelve months after completion of the well.	if prepared
Well completion report Derived (interpretive) data Composite well log	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Image files included in report PDF will also be submitted as separate files.
Gaseous hydrocarbon samples (in an API approved safety container)	1 copy	1 copy	CGM, PDF CD, DVD	500	Twelve months after completion of the well.	
Fluid hydrocarbon samples (in an API approved safety container)	No	Yes			Six months after completion of the well.	If collected & sufficient sample after operators analysis. Negotiation with Geoscience Australia will be done if collected.
Sidewall core material, if recovered	No	Yes	1 litre		Six months after completion of the well.	
Palynological slides and residues	Yes	No			Eighteen months after completion of the well.	if available
Palaeontological material Petrological slides	Yes	No			Eighteen months after completion of the well.	if Prepared

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3.6. Geological and geochemical surveys**3.6.1. General Information (Regulation 12)**

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements At project closeout – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.6.2. Written Information and Documentation (Regulation 15)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	Field and processed digital survey data.
b	A report describing the acquisition and processing of the data, as appropriate/applicable.
c	Interpretation report

3.6.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.6.4. Data Submission and Reporting Tables

Geological and geochemical surveys data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Data Review Reports	1 copy	1 copy	Media PDF CD, DVD	Six months after completion of study year	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	Six months after completion of study year	

Studies done on cores and cuttings

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Reports and data from investigation, analysis, etc of cuttings or cores	1 copy	1 copy	PDF ASCII CD, DVD	Six months after borrowing of material	
Annual report for exported samples for analyses	1 copy	1 copy	PDF ASCII CD, DVD	Annually from date of export	Required if cuttings and cores are retained overseas for more than twelve months after the approval from the Designated Authority.

3.7. Studies and Data Reviews**3.7.1. General Information (Regulation 12)**

The following information is applicable to the activity:

a	i	Purpose of the activity.	See Activity Description.
	ii	Location & period of the activity.	See Activity Description.
b		Persons undertaking activity.	See Activity Description.
c	i	The techniques and equipment used to interpret the data.	See Activity Description.
d		Progress reports.	Reporting requirements At project closeout – see below.

3.7.2. Written Information and Documentation (Regulation 15)

The following written information and documents will be prepared as part of the activity, as appropriate/applicable:

	Description
a	Digital data.
b	A report describing the studies, and or data reviews.

3.7.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.7.4. Data Submission and Reporting Tables

Studies and Data Reviews data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Review reports	1 copy	1 copy	Media PDF CD, DVD	Six months after completion of the study year	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	Six months after completion of the study year	

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3.8. Reports to be submitted (as appropriate, based on type of license)**3.8.1. Annual Report – Exploration Permit (Schedule 1, Part 2, item 205)**

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of exploration carried out.
b	Conclusion derived from the exploration.
c	List of reports that have been submitted during the year.
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of exploration expenditure for the year.

3.8.2. Annual Report - Retention License (Schedule 1, Part 2, item 205)

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of activities carried out
b	Conclusion derived from the activities.
c	List of reports that have been submitted during the year.
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of expenditure for the year.

3.8.3. Annual Report – Production Licence (Schedule 1, Part 2, item 205)

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of activities carried out.
b	Conclusion derived from the activities.
c	List of reports that have been submitted during the year .
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of expenditure for the year.

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3.8.4. Quarterly Reports – Exploration Permits (Schedule 1, Part 2, item 204)

The report covers exploration activities for the three month period after the day on which the Permit was awarded, and will be submitted not later than one month after the period to which the report covers.

No report will be submitted for the fourth quarter if relevant information is included in the annual report as per Schedule 1, Part 2, item 205.

Two copies of the report will be given to the Designated Authority.

a	Description of exploration carried out.
b	Outline of geological & geophysical interpretations made as a result of exploration, including any reprocessing or re-interpretation of basic data.
c	An estimate of exploration expenditure for the quarter.
d	Any other information required by the accepted DMP.

3.8.5. Monthly reports – Production License (Schedule 1, Part 2, item 203)

Two copies will be submitted to the Designated Authority by 15th of month after the month to which the report relates. Monthly Production Reports will include:

a		For each well:
✓	i	Identification name and number
✓	ii	Summary of all work performed on each well in the licence area during the previous month
✓	iii	Results of production tests, including choke sizes used and tubing and separation pressures observed during the test
✓	iv	Status at the end of the month
	v	Number of days of production
	vi	Cumulative quantities of liquid and gaseous petroleum and water produced or injected as at the end of the month
b		Total estimated quantities of liquid and gaseous petroleum and water produced or injected during the month
c		The total quantities of:
✓	i	Liquid & gaseous petroleum and water that have been produced
✓	ii	Liquid and gaseous petroleum that have been used
✓	iii	Gaseous petroleum that has been flared or vented
✓	iv	Liquid and gaseous petroleum and water that have been injected
✓	v	Liquid petroleum that has been stored
✓	vi	Liquid and gaseous petroleum that have been delivered from the area
d		The cumulative quantities of liquid and gaseous petroleum and water that have been produced or injected as at the end of the month



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BHP Billiton Centre 180 Lonsdale Street
Melbourne Victoria 3000 Australia
GPO Box 86A
Melbourne Victoria 3001 Australia
Tel +61 1300 55 47 57 Fax +61 3 9609 3015
bhpbilliton.com

27 October 2004

H Haag
Manager Petroleum Operations, Safety and Environment
Department of Primary Industries
GPO BOX 4440
MELBOURNE VIC 3001

Dear Mr Haag:

SUBMISSION OF DATA MANAGEMENT PLAN

Thank you for your letter dated 30 July 2004, regarding the new Petroleum (Submerged Lands) (Data Management) Regulations 2004. BHP Billiton Petroleum has accordingly undertaken a review of the new regulations and available templates, and developed a general Data Management Plan (DMP) approach for our exploration and production activities in the Commonwealth adjacent areas of Victoria.

Please find attached a DMP for the BHP Billiton operated retention lease VIC/RL7, Otway Basin, Victoria. Upon acceptance of this our first DMP submission to the Designated Authority, we will proceed with submission of DMPs for all other operated areas and defined activities. For your reference, we also note that an equivalent DMP has been approved for use in adjacent areas of Western Australia.

Please review and provide us with feedback as soon as possible. If you require assistance with our submission please contact Mike Noble, AIM Manager – Data / Information on 08 9278 4673.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'G. Bunn', is positioned below the 'Yours sincerely,' text.

Graham Bunn
Acting Technical Manager, Bass Strait
BHP Billiton Petroleum (Victoria) Pty Ltd

Attached: Data Management Plan for VIC/RL7

Cc: Ian Pedler - Santos

Data Management Plan

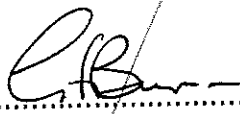
DRAFT

Permit	Vic/RL7
 HOLDERS	BHP Billiton Petroleum (Victoria) Pty Ltd <small>(*company responsible for data)</small> Santos (BOL) Pty Ltd

This Data Management Plan (DMP) is designed to be a "cradle to grave" plan for all foreseeable activities to be undertaken within the title area. However, if the Guidelines for reporting and submission of Petroleum Data are updated, then this DMP will be revised. For other activities not covered in detail in this plan (or in the DMP Guidelines) the Company responsible for the data shall specifically detail information on that activity, as it arises.

Signed for and behalf of
BHP Billiton Petroleum (Victoria) Pty Ltd,
Santos (BOL) Pty Ltd.

by BHP Billiton Petroleum (Victoria) Pty Ltd

Per: 
 Graham Bunn
 Acting Technical Manager, Bass Strait

Date: 27 October 2004

Version: 1.0

Designated Authority acceptance:

see version that is newer

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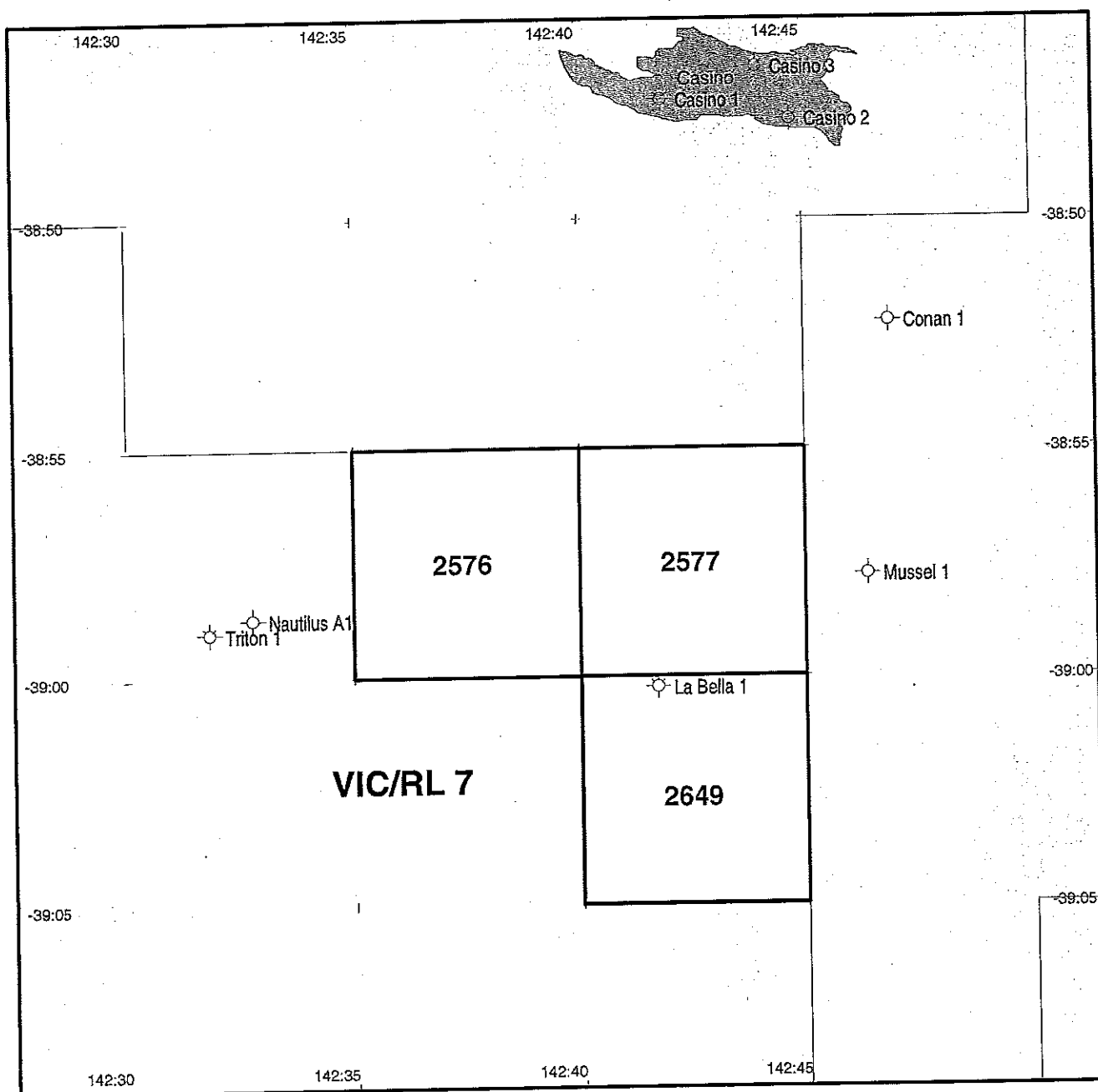
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1. Location/Description of Title/Activity area

The following general location information is applicable to Title Vic/RL7 (Regulation 12):

AREA: 200 km², 3 Graticular Blocks
STATE: Victoria
BASIN: Otway Basin
AWARDED: 19 December 2003
EXPIRY DATE: 19 December 2008
OPERATOR: BHP Billiton Petroleum (Victoria) Pty. Ltd. ("BHPB")
 ABN 99 006 923 879]
 180 Lonsdale Street
 Melbourne, Victoria 3000 Australia
ACT: *Petroleum (Submerged Lands) Act 1967 (Cth)*



2. Specific Requirements of DMP per Schedule 1

Item	Regulatory Provisions	Application to this DMP
101	Description of: a. each activity to which DMP relates; b. each location where activity will be carried out.	This DMP is designed to be a "cradle to grave" plan for all foreseeable activities to be undertaken within the title area. However, if the Guidelines for reporting and submission of petroleum data are updated then this DMP will be revised. For other activities not covered in detail in this plan (or in the DMP Guidelines) the company responsible for the data shall specifically detail information on that activity, as it arises.
102	Description of reports & information, relevant to the activity, that will be made and kept.	As detailed throughout this document, relating to the specific activity.
103	Explanation of: a. data to be given to the Designated Authority without request by the Designated Authority; b. information to be kept.	a. Data to be submitted – refer to body of document, as pertinent to the associated activity. b. Data withheld – refer to body of document, as pertinent to the associated activity.
104	Description of media and formats for information, cores, cuttings or samples held.	The information and reports will be submitted in the format and on the media outlined in within the body of the document, as pertinent to the associated activity.
105	Explanation of how media and formats in item 104: a. are appropriate for type & volume of data collected; b. comply with Designated Authority requirements; c. comply with good industry practice.	Data medias and formats are described within the body of the document and these all comply with the Guidelines for data submission (the Guidelines) in respect of the <i>Petroleum (Submerged Lands) (Data Management) Regulations 2004 (Cth)</i> (the Regulations).
106	Undertake to allow access to data that is publicly available and explain how access will be allowed	BHP Billiton acknowledges that, upon notification by the Designated Authority, it will allow reasonable access to any publicly available information or samples under its control.
107	Describe arrangements that ensure information is preserved according to good archive practice.	Data preservation will be ensured via contracts covering data services in addition to in-house data management practice.
108	Issue a statement that reports & information will be given according to: a. the timetable outlined in Part 2 of the Schedule; or b. a timetable proposed in the DMP.	The timing of submission of data that will be made/collected during the period of the DMP is outlined within the body of the document, as pertinent to the associated activity.
109	Summary of: a. data management performance objectives against which performance will be measured; & b. measurement criteria that define the objectives.	Data and reports will be submitted on time and in accordance with Guidelines (see item 105). Archival and Environment conditions will comply with the Guidelines (see item 105).

2. Specific Requirements of DMP per Schedule 1 (continued)

Item	Regulatory Provisions	Application to this DMP
110	Explain how the measurement criteria will confirm that the performance objectives have been met.	Submissions timetable will be monitored in-house. Storage handling conditions will be controlled via contracts for data services.
111	Summary of arrangements for: <ul style="list-style-type: none"> a. secure storage of documents and records at a nominated address b. maintenance of documents and records in a way that makes retrieval of documents etc practicable. 	Information and reports will be stored at the nominated address in a secure data storage room prior to being submitted to the Designated Authority as per timetable above. The storage of data will meet the good digital archival principles as set out in the "Guidelines for reporting and submission of petroleum data" and recommended by the Australian Archives.
112	Acknowledge responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to the Designated Authority.	The Operator acknowledges responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to the Designated Authority.
113	Any other information that is necessary to demonstrate that the DMP complies with the Regulations.	As required, for specific instances.

3. Activity

3.1. 2D Seismic Acquisition & Processing

3.1.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements Weekly – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.1.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data
b	a report describing the acquisition and processing of the data
c	navigation data
d	Interpretation report

3.1.3. Reporting - Weekly Progress reports (Schedule 1, Part 2, item 202)

The following information will be submitted as soon as practicable after the end of the week to which the report relates:

Report on survey operations during the week

3.1.4. Data Submission and Reporting Tables

2D Seismic Survey – acquisition and processing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth			
Navigation data (offshore) includes elevation and bathymetry data.	1 copy	1 copy	Media UKOOA CD, DVD	One year after completion of processing of the survey	To be provided in P1/90
Seismic field data	1 copy*	DA to supply archive address	SEG 3590	One year after completion of processing of the survey	Observer's logs
Seismic support data	Include details on field tape TP *		PDF, HTML CD, DVD	One year after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Itemized field tape listing	Yes	Yes	ASCII Floppy, CD, DVD	One year after completion of processing of the survey	If generated as part of the processing sequence. Including EBCDIC header including EBCDIC header
Raw and final stacked data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	Image file to be created using a time scale at least 5cm/sec.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	SOL/EOL relationships & listing of CDP/SP pairs for each line.
Fully annotated image of final processed data	1 copy	1 copy	CGM+, JPEG, TIFF, PDF 3590, DVD	One year after completion of processing of the survey	Including line number, shotpoint, time vs RMS pairs for both stacked & migrated velocities.
Shotpoint to CDP relationship	1 copy	DA to forward to relevant archive	ASCII CD, DVD	One year after completion of processing of the survey	
Velocity data	1 copy	DA to forward to relevant archive	ASCII, SEGY CD, 3590, DVD	One year after completion of processing of the survey	
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	TIFF, CGM, JPEG, PDF CD, DVD	One year after completion of processing of the survey	

DA
Requests
Itemized
processed
tape listing
(itemised to each
file on tape)

* Transfer Proposal for the Field Tapes to be sent to the Designated Authority for approval to submit

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3.2. 3D Seismic Acquisition & Processing

3.2.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements Weekly – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.2.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data
b	a report describing the acquisition and processing of the data
c	navigation data
d	Interpretation report

3.2.3. Reporting – Weekly Progress reports (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the end of the week to which the report relates:

Report on survey operations during the week

3.2.4. Data Submission and Reporting Tables

3D Seismic Survey – acquisition and processing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth			
Navigation data including field processed data	1 copy	1 copy	UKOOA CD, DVD	One year after completion of processing of the survey	To be provided in P1/90 including elevation and bathymetry data.
Seismic field data	1 copy*	DA to supply archive address	SEG 3590	One year after completion of processing of the survey	Observer's logs
Seismic support data	Include details on field tape TP *	-	PDF, HTML CD, DVD	One year after completion of processing of the survey	
Itemized field tape listing	1 copy	1 copy	ASCII Floppy, CD, DVD	One year after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type
Raw stacked data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	If generated as part of the processing sequence, including EBCDIC header.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	Including EBCDIC header
Final processed grid (bin) coordinates	1 copy	1 copy	UKOOA 3D Binning Grids CD, 3590, DVD	One year after completion of processing of the survey	To be completed using UKOOA P6/98 format
Polygonal position data	1 copy	1 copy	ASCII CD, DVD	One year after completion of processing of the survey	
3D velocity data	1 copy	DA to forward to relevant archive	ASCII, SEGY CD, 3590, DVD	One year after completion of processing of the survey	Including bin number, time vs RMS pairs for stacking and migrated velocities.
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Final report – Derived data	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	One year after completion of processing of the survey	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks

* Transfer Proposal for the Field Tapes to be sent to the Designated Authority for approval to submit.

3.3. 2D & 3D Seismic Reprocessing

3.3.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Activity Description
	ii	Period of the activity.	See Activity Description
b		Persons undertaking activity.	See Activity Description
c	i	The techniques and equipment used to process the data.	See Activity Description
	ii	The techniques and equipment used to interpret the data.	See Activity Description
d		Data processing report.	Data processing report
e		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps

3.3.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	a report describing the processing of the data
b	Interpretation report

3.3.3. Reporting (Schedule 1, Part 2, item 202)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout.
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3.3.4. Data Submission and Reporting Tables

2D & 3D seismic reprocessing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Raw stacked data (if generated as part of the processing sequence)	1 copy	DA to forward to relevant archive	Media SEGY 3590	One year after completion of processing of data	Includes EBCDIC header
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of data	Includes EBCDIC header
Fully annotated image of final processed data (applicable to 2D only)	1 copy	1 copy	CGM+, TIFF, JPEG, PDF CD, DVD	One year after completion of processing of data	Image file must be created using a time scale at least 5cm/sec
Final report (reprocessing)	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of data	
Final report (derived data)	1 copy	1 copy	PDF CD, DVD	One year after completion of the processing of data	
Digital images of interpretation maps	1 copy	1 copy	TIFF, CGM, JPEG, PDF CD, DVD	One year after completion of the processing of data	

Data to be supplied if the conditions of borrowing data from archives include transcription of field data to high-density media

Field tape transcription log	1 copy or TP *	DA to forward to relevant archive	ASCII Floppy, CD, DVD	One year after completion of processing of data	Showing the original tape number, new tape number, survey name, line number, shotpoint range, data type, transcription parameters
Seismic field tape copies	1 copy or TP *	DA to forward to relevant archive	SEG 3590	One year after completion of processing of data	

+ Only required for areas under Commonwealth jurisdiction

* Transfer proposals to be sent to the Designated Authority for approval to submit. The Designated Authority will then instruct as to which address the data is to be sent

3D seismic specific reprocessing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Final processed grid (bin coordinates (for 3D seismic))	1 copy	1 copy	UKOOA 3D Binning Grids	One year after completion of processing of data	To be completed using UKOOA P6/98 format

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3.4. Gravity, Magnetic and Other Survey Data

3.4.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements At project closeout— see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.4.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data.
b	a report describing the acquisition and processing of the data.
c	Interpretation report


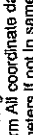
3.4.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.4.4. Data Submission and Reporting Tables

Gravity, magnetic and other survey data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+ DA to supply archive address			
Field magnetic located data	TP *	DA to supply archive address	Media ASEG-GDF	Six months after completion of the survey	Include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, GPS or barometric altimeter, and base station reading. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. A metadata file about the survey to accompany the field, located and gridded data to include the survey type, dates contractor parameters recorded and instruments used, altitude, line and tile spacing line orientation aircraft identification, calibration and defined null values. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. All coordinate data must also include clearly stated datum, spheroid and projection, clearly stated transformation parameters if not in same coordinate system as was acquired in the field. All elevation values must be AHD. For marine gravity using a L&R meter, the beam velocity, spring tension, cross-coupling and the 6 acceleration monitors. For a Bell geoscience instrument, the 3 inline and 3 cross-line accelerations and the accelerations of the stabilized platform Format of these data to be negotiated with the Designated Authority
Field gravity located data	TP *	DA to supply archive address	ASCII 	Six months after completion of the survey	
Field data for other types of surveys	TP *	DA to supply archive address	Digital 	Six months after completion of the survey	
Processed data for other types of surveys	TP *	DA to supply archive address	Digital	Six months after completion of the survey	Format of these data to be negotiated with the Designated Authority
Processed magnetic data (corrected and levelled) gridded data	TP *	DA to supply archive address	ASEG-GDF	Six months after completion of the survey	Digital data must include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, radar, GPS or barometric altitude, and base station reading. Include pre and post microlevelling data. A metadata file about the survey to accompany the field, located and gridded data to include the survey type, dates contractor parameters recorded and instruments used, altitude, line and tile spacing line orientation aircraft identification, calibration and defined null values. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. Data must include: descriptive headers, station, measurement dates and times, XY lat/long coordinates, drift corrected meter reading, observed gravity value, Eotvos correction, elevation value, calculation errors, final processed gravity value. For a L&R meter, the beam velocity, spring tension, cross-coupling and the 6 acceleration monitors. For a Bell geoscience instrument, the 3 inline and 3 cross-line accelerations are recorded along with the accelerations of the stabilized platform All coordinate data must also include clearly stated datum, spheroid and projection, also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. All elevation values must be AHD. A metadata file about the survey to accompany the located and gridded data to include details of the instruments used, the survey type, dates contractor parameters recorded and instruments used, station spacing, calibration and defined null values, meter type, scale factor for meter. Data must be tied to an Isogal station in the Australian Fundamental Gravity Network. Images derived from the survey, e.g. TMI, Bouguer
Processed gravity data (corrected and levelled) gridded data	1 copy	1 copy	ASEG-GDF	Six months after completion of the survey	
Geophysical images	1 copy	1 copy	Grids in ER Mapper format, PDF CD, DVD	Six months after completion of the survey	
Final report - Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	Six months after completion of the survey	Must include location map and flight line map. Aeromagnetic surveys: including aircraft and survey equipment details and specifications, flight line directions and terrain clearance, line spacing, total line kilometres. Gravity surveys: including meter type, scale factor for meter. Data must be tied to an Isogal station in the Australian Fundamental Gravity Network. Processing report must include company details and processing parameters.
Final report (derived data)	1 copy	1 copy	PDF CD, DVD	Six months after completion of the survey	
Digital images of interpretation maps	1 copy	1 copy	TIFCGM, JPEG, PDF CD, DVD	Six months after completion of the survey	These include any maps included in the interpretation report as separate Geo-referenced TIF Images

Permit Vic/RL7 DMP

Prepared for, and on behalf of the Joint Venture by BHPBilliton Petroleum

+ Only required for areas under Commonwealth jurisdiction

* Transfer proposals to be sent to the Designated Authority for approval to submit. The Designated Authority will then instruct as to which address the data is to be sent

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3.5. Wells

3.5.1. General Information (Regulation 12)

The following written information and documents will be prepared as part of the activity:

a	i	Location of the activity.	See Well Program.
	ii	Period of the activity.	See Well Program.
b		Persons undertaking activity.	See Well Program.
c	i	The techniques and equipment used to collect the data.	See Well Program.
	ii	The techniques and equipment used to process the data.	See Well Program.
	iii	The techniques and equipment used to interpret the data.	See Well Program.
d		Progress reports.	Reporting requirements Daily.
e		Data acquisition report detailing the operations carried out as part of the activity.	Well Completion Report (Basic Data).
f		If processing is undertaken as part of the activity - data processing report.	Well Completion Report (Basic Data).
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Well Completion Report (Interpretive Data) Maps.

3.5.2. Written Information and Documentation (Regulation 13)

The following written information and documents about each well will be prepared as part of the activity as appropriate/applicable:

	Description
a	field and processed digital log data;
b	displays of logs generated
c	mud log displays
d	digital mud logging data
e	down hole survey data
f	report of the purpose, operation and progress of the well
g	photographs of the well core
h	a well completion report.

The information will also include, if appropriate/applicable & not required for ongoing studies:

	Description
a	cores, core cuttings and fluid samples
b	sample slides
c	residues

3.5.3. Reporting – Daily Drill reports (Schedule 1, Part 2, item 206)

One email copy will be submitted to the Designated Authority no later than midday on the day after the day to which the report relates:

a	Name of well
b	Drilled depth
c	Work carried out
d	Lithology of formations penetrated
e	Any indications of petroleum
f	Results of surveys made in the well bore
g	A leak off test summary
h	Hole geometry
i	Results of surveys made in the well bore
j	Estimated daily and cumulative well costs

3.5.4. Data Submission and Reporting Tables

Well data plan (Documentary information)

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth				
Edited field and processed data for all wireline logs	1 copy	DA to forward to relevant archive	LIS, DLIS, LAS, ASCII CD, DVD, 359D 359D		Twelve months after completion of the well.	With a verification listing of the data supplied. The data shall include full header information.
Edited field and processed data (including borehole deviation surveys) for all MWD or LWD tools	1 copy	DA to forward to relevant archive	LIS, DLIS, LAS, ASCII CD, DVD, 359D 359D		Twelve months after completion of the well.	With a verification listing of the data supplied. The data shall include full header information.
Mudlogging data	1 copy	DA to forward to relevant archive	LAS, ASCII CD, DVD		Twelve months after completion of the well.	With a header giving filed names and units of measure
Processed data for velocity surveys	1 copy	DA to forward to relevant archive	SEGY, ASCII 359D 359D		Twelve months after completion of the well.	With a verification header file
Wireline log displays	1 copy	1 copy	PDF, PDS, TIFF, META CD, DVD	200/500	Twelve months after completion of the well.	If another format is available, the appropriate view software (executable) will be supplied.
MWD or LWD log displays	1 copy	1 copy	PDF, PDS, TIFF, ASCII CD, DVD	200/500	Twelve months after completion of the well.	If another format is available, the appropriate view software (executable) will be supplied.
Mudlog	1 copy	1 copy	PDF, TIFF, ASCII CD, DVD	500	Twelve months after completion of the well.	
Ditch cuttings	One set	One set			Twelve months after completion of the well.	A minimum of 100g dry weight and thoroughly cleaned, dried and packaged with indelible printing of Well name, depth ranges.
Full hole cores, if cut	#	1/3 slab			Twelve months after completion of the well.	Slabbed vertically
Well completion report Basic data	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Image files included in report PDF may also be submitted as separate files.
Well index sheet	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Included in the derived data volume of the well completion report
Digital petrophysical, geochemical or other analyses	1 copy	1 copy	ASCII, Excel CD, DVD		Twelve months after completion of the well.	As a tab delimited ASCII file with metadata included. Attached to well completion report.
Velocity log displays	1 copy	1 copy	PDF CD, DVD	200	Twelve months after completion of the well.	

Remaining 2/3 slab to be supplied to State/Territory upon completion of all analysis

Well data plan (Documentary information) - continued

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth+				
Core, SWC photography	1 copy	1 copy	Media TIFF, JPG, PDF CD, DVD		Twelve months after completion of the well.	if prepared
Well completion report Derived (interpretive) data	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Image files included in report PDF will also be submitted as separate files.
Composite well log	1 copy	1 copy	CGM, PDF CD, DVD	500	Twelve months after completion of the well.	
Gaseous hydrocarbon samples (in an API approved safety container)	No	Yes			Six months after completion of the well	If collected & sufficient sample after operators analysis. Negotiation with Geoscience Australia will be done if collected.
Fluid hydrocarbon samples (in an API approved safety container)	No	Yes	1 litre		Six months after completion of the well.	
Sidewall core material, if recovered	Yes	No			Eighteen months after completion of the well.	If available
Palynological slides and residues palaeontological material Petrological slides	Yes	No			Eighteen months after completion of the well.	If Prepared

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3.6. Geological and geochemical surveys

3.6.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements At project closeout – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.6.2. Written Information and Documentation (Regulation 15)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	Field and processed digital survey data.
b	A report describing the acquisition and processing of the data, as appropriate/applicable.
c	Interpretation report

3.6.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.6.4. Data Submission and Reporting Tables

Geological and geochemical surveys data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Data Review Reports	1 copy	1 copy	Media PDF CD, DVD	Six months after completion of study year	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	Six months after completion of study year	

Studies done on cores and cuttings

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Reports and data from investigation, analysis, etc of cuttings or cores	1 copy	1 copy	PDF ASCII CD, DVD	Six months after borrowing of material	
Annual report for exported samples for analyses	1 copy	1 copy	PDF ASCII CD, DVD	Annually from date of export	Required if cuttings and cores are retained overseas for more than twelve months after the approval from the Designated Authority.

3.7. Studies and Data Reviews

3.7.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Purpose of the activity.	See Activity Description.
	ii	Location & period of the activity.	See Activity Description.
b		Persons undertaking activity.	See Activity Description.
c	i	The techniques and equipment used to interpret the data.	See Activity Description.
d		Progress reports.	Reporting requirements At project closeout – see below.

3.7.2. Written Information and Documentation (Regulation 15)

The following written information and documents will be prepared as part of the activity, as appropriate/applicable:

	Description
a	Digital data.
b	A report describing the studies, and or data reviews.

3.7.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.7.4. Data Submission and Reporting Tables

Studies and Data Reviews data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Review reports	1 copy	1 copy	Media PDF CD, DVD	Six months after completion of the study year	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	Six months after completion of the study year	

3.8. Reports to be submitted (as appropriate, based on type of ~~license~~^{title})

X

3.8.1. Annual Report – Exploration Permit (Schedule 1, Part 2, item 205)

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of exploration carried out.
b	Conclusion derived from the exploration.
c	List of reports that have been submitted during the year.
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of exploration expenditure for the year.

3.8.2. Annual Report - Retention License (Schedule 1, Part 2, item 205)

lease X

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of activities carried out
b	Conclusion derived from the activities.
c	List of reports that have been submitted during the year.
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of expenditure for the year.

3.8.3. Annual Report – Production Licence (Schedule 1, Part 2, item 205)

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of activities carried out.
b	Conclusion derived from the activities.
c	List of reports that have been submitted during the year .
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of expenditure for the year.

3.8.4. Quarterly Reports – Exploration Permits (Schedule 1, Part 2, item 204)

The report covers exploration activities for the three month period after the day on which the Permit was awarded, and will be submitted not later than one month after the period to which the report covers.

No report will be submitted for the fourth quarter if relevant information is included in the annual report as per Schedule 1, Part 2, item 205.

Two copies of the report will be given to the Designated Authority.

a	Description of exploration carried out.
b	Outline of geological & geophysical interpretations made as a result of exploration, including any reprocessing or re-interpretation of basic data.
c	An estimate of exploration expenditure for the quarter.
d	Any other information required by the accepted DMP.

3.8.5. Monthly reports – Production License (Schedule 1, Part 2, item 203)

Two copies will be submitted to the Designated Authority by 15th of month after the month to which the report relates. Monthly Production Reports will include:

a		For each well:
	i	Identification name and number
	ii	Summary of all work performed on each well in the licence area during the previous month
	iii	Results of production tests, including choke sizes used and tubing and separation pressures observed during the test
	iv	Status at the end of the month
	v	Number of days of production
	vi	Cumulative quantities of liquid and gaseous petroleum and water produced or injected as at the end of the month
b		Total estimated quantities of liquid and gaseous petroleum and water produced or injected during the month
c		The total quantities of:
	i	Liquid & gaseous petroleum and water that have been produced
	ii	Liquid and gaseous petroleum that have been used
	iii	Gaseous petroleum that has been flared or vented
	iv	Liquid and gaseous petroleum and water that have been injected
	v	Liquid petroleum that has been stored
vi	Liquid and gaseous petroleum that have been delivered from the area	
d		The cumulative quantities of liquid and gaseous petroleum and water that have been produced or injected as at the end of the month

Data Management Plan


DRAFT

Permit	Vic/RL7
 Holders	BHP Billiton Petroleum (Victoria) Pty Ltd <small>(*company responsible for data)</small> Santos (BOL) Pty Ltd

This Data Management Plan (DMP) is designed to be a “cradle to grave” plan for all foreseeable activities to be undertaken within the title area. However, if the Guidelines for reporting and submission of Petroleum Data are updated, then this DMP will be revised. For other activities not covered in detail in this plan (or in the DMP Guidelines) the Company responsible for the data shall specifically detail information on that activity, as it arises.

Signed for and behalf of
BHP Billiton Petroleum (Victoria) Pty Ltd,
Santos (BOL) Pty Ltd.

by BHP Billiton Petroleum (Victoria) Pty Ltd

Per: 

 Graham Bunn
 Acting Technical Manager, Bass Strait

Date: 27 October 2004

Version: 1.0

Designated Authority acceptance:

see version that is newer

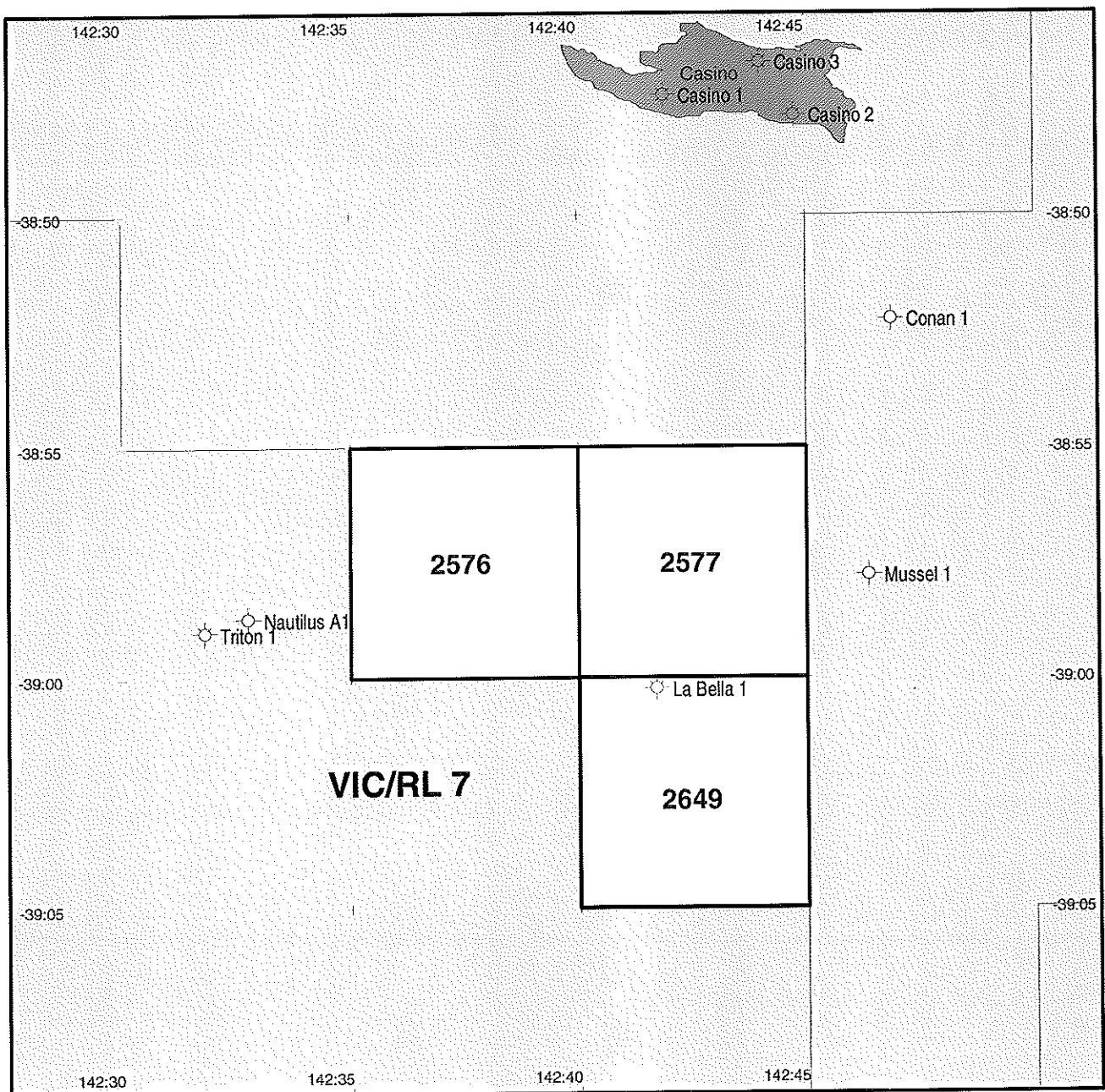
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1. Location/Description of Title/Activity area

The following general location information is applicable to **Title Vic/RL7 (Regulation 12)**:

AREA: 200 km², 3 Graticular Blocks
STATE: Victoria
BASIN: Otway Basin
AWARDED: 19 December 2003
EXPIRY DATE: 19 December 2008
OPERATOR: BHP Billiton Petroleum (Victoria) Pty. Ltd. ("BHPB")
 ABN 99 006 923 879]
 180 Lonsdale Street
 Melbourne, Victoria 3000 Australia
ACT: *Petroleum (Submerged Lands) Act 1967 (Cth)*



2. Specific Requirements of DMP per Schedule 1

Item	Regulatory Provisions	Application to this DMP
101	Description of: a. each activity to which DMP relates; b. each location where activity will be carried out.	This DMP is designed to be a "cradle to grave" plan for all foreseeable activities to be undertaken within the title area. However, if the Guidelines for reporting and submission of petroleum data are updated then this DMP will be revised. For other activities not covered in detail in this plan (or in the DMP Guidelines) the company responsible for the data shall specifically detail information on that activity, as it arises.
102	Description of reports & information, relevant to the activity, that will be made and kept.	As detailed throughout this document, relating to the specific activity.
103	Explanation of: a. data to be given to the Designated Authority without request by the Designated Authority; b. information to be kept.	a. Data to be submitted – refer to body of document, as pertinent to the associated activity. b. Data withheld – refer to body of document, as pertinent to the associated activity.
104	Description of media and formats for information, cores, cuttings or samples held.	The information and reports will be submitted in the format and on the media outlined in within the body of the document, as pertinent to the associated activity.
105	Explanation of how media and formats in item 104: a. are appropriate for type & volume of data collected; b. comply with Designated Authority requirements; c. comply with good industry practice.	Data medias and formats are described within the body of the document and these all comply with the Guidelines for data submission (the Guidelines) in respect of the <i>Petroleum (Submerged Lands) (Data Management) Regulations 2004 (Cth)</i> (the Regulations).
106	Undertake to allow access to data that is publicly available and explain how access will be allowed	BHP Billiton acknowledges that, upon notification by the Designated Authority, it will allow reasonable access to any publicly available information or samples under its control.
107	Describe arrangements that ensure information is preserved according to good archive practice.	Data preservation will be ensured via contracts covering data services in addition to in-house data management practice.
108	Issue a statement that reports & information will be given according to: a. the timetable outlined in Part 2 of the Schedule; or b. a timetable proposed in the DMP.	The timing of submission of data that will be made/collected during the period of the DMP is outlined within the body of the document, as pertinent to the associated activity.
109	Summary of: a. data management performance objectives against which performance will be measured; & b. measurement criteria that define the objectives.	Data and reports will be submitted on time and in accordance with Guidelines (see item 105). Archival and Environment conditions will comply with the Guidelines (see item 105).

2. Specific Requirements of DMP per Schedule 1 (continued)

Item	Regulatory Provisions	Application to this DMP
110	Explain how the measurement criteria will confirm that the performance objectives have been met.	Submissions timetable will be monitored in-house. Storage handling conditions will be controlled via contracts for data services.
111	Summary of arrangements for: a. secure storage of documents and records at a nominated address b. maintenance of documents and records in a way that makes retrieval of documents etc practicable.	Information and reports will be stored at the nominated address in a secure data storage room prior to being submitted to the Designated Authority as per timetable above. The storage of data will meet the good digital archival principles as set out in the "Guidelines for reporting and submission of petroleum data" and recommended by the Australian Archives.
112	Acknowledge responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to the Designated Authority.	The Operator acknowledges responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to the Designated Authority.
113	Any other information that is necessary to demonstrate that the DMP complies with the Regulations.	As required, for specific instances.

3. Activity

3.1. 2D Seismic Acquisition & Processing

3.1.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements Weekly – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.1.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data
b	a report describing the acquisition and processing of the data
c	navigation data
d	Interpretation report

3.1.3. Reporting - Weekly Progress reports (Schedule 1, Part 2, item 202)

The following information will be submitted as soon as practicable after the end of the week to which the report relates:

Report on survey operations during the week

3.1.4. Data Submission and Reporting Tables

2D Seismic Survey – acquisition and processing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth			
Navigation data (offshore) includes elevation and bathymetry data.	1 copy	1 copy	Media UKOOA CD, DVD	One year after completion of processing of the survey	To be provided in P1/90
Seismic field data	1 copy *	DA to supply archive address	SEG 3590	One year after completion of processing of the survey	Observer's logs
Seismic support data	Include details on field tape TP *	-	PDF, HTML CD, DVD	One year after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Itemized field tape listing	Yes	Yes	ASCII Floppy, CD	One year after completion of processing of the survey	Including EBCDIC header
Raw and final stacked data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	Image file to be created using a time scale at least 5cm/sec.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	SOL/EOL relationships & listing of CDP/SP pairs for each line.
Fully annotated image of final processed data	1 copy	1 copy	CGM+, JPEG, TIFF, PDF 3590	One year after completion of processing of the survey	Including line number, shotpoint, time vs RMS pairs for both stacked & migrated velocities.
Shotpoint to CDP relationship	1 copy	DA to forward to relevant archive	ASCII CD	One year after completion of processing of the survey	
Velocity data	1 copy	DA to forward to relevant archive	ASCII, SEGY CD, 3590	One year after completion of processing of the survey	
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Final report – Derived data	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	TIFF, CGM, JPEG, PDF CD, DVD	One year after completion of processing of the survey	

* Transfer Proposal for the Field Tapes to be sent to the Designated Authority for approval to submit

3.2. 3D Seismic Acquisition & Processing

3.2.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements Weekly – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.2.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data
b	a report describing the acquisition and processing of the data
c	navigation data
d	Interpretation report

3.2.3. Reporting – Weekly Progress reports (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the end of the week to which the report relates:

Report on survey operations during the week

3.2.4. Data Submission and Reporting Tables

3D Seismic Survey – acquisition and processing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth			
Navigation data including field processed data	1 copy	1 copy	UKOOA CD, DVD	One year after completion of processing of the survey	To be provided in P1/90 including elevation and bathymetry data.
Seismic field data	1 copy*	DA to supply archive address	SEG 3590	One year after completion of processing of the survey	Observer's logs
Seismic support data	Include details on field tape TP *	-	PDF, HTML CD, DVD	One year after completion of processing of the survey	
Itemized field tape listing	1 copy	1 copy	ASCII Floppy, CD	One year after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type
Raw stacked data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	If generated as part of the processing sequence. Including EBCDIC header.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of the survey	Including EBCDIC header
Final processed grid (bin) coordinates	1 copy	1 copy	UKOOA 3D Binning Grids CD, 3590	One year after completion of processing of the survey	To be completed using UKOOA P6/98 format
Polygonal position data	1 copy	1 copy	ASCII CD	One year after completion of processing of the survey	
3D velocity data	1 copy	DA to forward to relevant archive	ASCII, SEGY CD, 3590	One year after completion of processing of the survey	Including bin number, time vs RMS pairs for stacking and migrated velocities.
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Final report – Derived data	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	One year after completion of processing of the survey	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks

* Transfer Proposal for the Field Tapes to be sent to the Designated Authority for approval to submit.

3.3. 2D & 3D Seismic Reprocessing

3.3.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Activity Description
	ii	Period of the activity.	See Activity Description
b		Persons undertaking activity.	See Activity Description
c	i	The techniques and equipment used to process the data.	See Activity Description
	ii	The techniques and equipment used to interpret the data.	See Activity Description
d		Data processing report.	Data processing report
e		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps

3.3.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	a report describing the processing of the data
b	Interpretation report

3.3.3. Reporting (Schedule 1, Part 2, item 202)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout.
--

3.3.4. Data Submission and Reporting Tables

2D & 3D seismic reprocessing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Raw stacked data (if generated as part of the processing sequence)	1 copy	DA to forward to relevant archive	Media SEGY 3590	One year after completion of processing of data	Includes EBCDIC header
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY 3590	One year after completion of processing of data	Includes EBCDIC header
Fully annotated image of final processed data (applicable to 2D only)	1 copy	1 copy	CGM+, TIFF, JPEG, PDF CD, DVD	One year after completion of processing of data	Image file must be created using a time scale at least 5cm/sec
Final report (reprocessing)	1 copy	1 copy	PDF CD, DVD	One year after completion of processing of data	
Final report (derived data)	1 copy	1 copy	PDF CD, DVD	One year after completion of the processing of data	
Digital images of interpretation maps	1 copy	1 copy	TIFF, CGM, JPEG, PDF CD, DVD	One year after completion of the processing of data	

Data to be supplied if the conditions of borrowing data from archives include transcription of field data to high-density media

Field tape transcription log	1 copy or TP *	DA to forward to relevant archive	ASCII Floppy, CD	One year after completion of processing of data	Showing the original tape number, new tape number, survey name, line number, shotpoint range, data type, transcription parameters
Seismic field tape copies	1 copy or TP *	DA to forward to relevant archive	SEG 3590	One year after completion of processing of data	

+ Only required for areas under Commonwealth jurisdiction

* Transfer proposals to be sent to the Designated Authority for approval to submit. The Designated Authority will then instruct as to which address the data is to be sent

3D seismic specific reprocessing data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
Final processed grid (bin) coordinates (for 3D seismic)	1 copy	1 copy	UKOOA 3D Binning Grids	One year after completion of processing of data	To be completed using UKOOA P6/98 format

3.4. Gravity, Magnetic and Other Survey Data

3.4.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements At project closeout— see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.4.2. Written Information and Documentation (Regulation 14)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	field and processed digital survey data.
b	a report describing the acquisition and processing of the data.
c	Interpretation report

3.4.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.4.4. Data Submission and Reporting Tables

Gravity, magnetic and other survey data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth+			
	TP *	DA to supply archive address	Media ASEG-GDF	Six months after completion of the survey	Include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, GPS or barometric altimeter, and base station reading. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as was acquired in the field. A metadata file about the survey to accompany the field, located and gridded data to include the survey type, dates contractor parameters recorded and instruments used, altitude, line and tie spacing line orientation aircraft identification, calibration and defined null values. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as acquired in the field.
Field gravity located data	TP *	DA to supply archive address	ASCII	Six months after completion of the survey	Including raw loop data, raw elevations plus measurement times and dates. All coordinate data must also include clearly stated datum, spheroid and projection, clearly stated transformation parameters if not in same coordinate system as was acquired in the field. All elevation values must be AHD. For marine gravity using a L&R meter, the beam velocity, spring tension, cross-coupling and the 6 acceleration monitors. For a Bell geoscience instrument, the 3 inline and 3 cross-line accelerations and the accelerations of the stabilized platform. Format of these data to be negotiated with the Designated Authority
Field data for other types of surveys	TP *	DA to supply archive address	Digital	Six months after completion of the survey	
Processed data for other types of surveys	TP *	DA to supply archive address	Digital	Six months after completion of the survey	Format of these data to be negotiated with the Designated Authority
Processed magnetic data (corrected and levelled) gridded data	TP *	DA to supply archive address	ASEG-GDF	Six months after completion of the survey	Digital data must include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, radar, GPS or barometric altitude, and base station reading, include pre and post microlevelling data. A metadata file about the survey to accompany the field, located and gridded data to include the survey type, dates contractor parameters recorded and instruments used, altitude, line and tie spacing line orientation aircraft identification, calibration and defined null values. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters if not in same coordinate system as acquired in the field.
Processed gravity data (corrected and levelled) gridded data	1 copy	1 copy	ASEG-GDF	Six months after completion of the survey	Data must include: descriptive headers, station, measurement dates and times, XY lat/long coordinates, drift corrected meter reading, observed gravity value, Eobvcs correction, elevation value, calculation errors, final processed gravity value. For a L&R meter, the Beam velocity, Spring tension, cross-coupling and the 6 acceleration monitors. For a Bell geoscience instrument, the 3 inline and 3 cross-line accelerations are recorder along with the accelerations of the stabilized platform. All coordinate data must also include clearly stated datum, spheroid and projection, also clearly stated transformation parameters if not in same coordinate system as acquired in the field. All elevation values must be AHD. A metadata file about the survey to accompany the located and gridded data to include details of the instruments used, the survey type, dates contractor parameters recorded and instruments used, station spacing, calibration and defined null values, meter type, scale factor for meter. Data must be tied to an Isogal station in the Australian Fundamental Gravity Network. Images derived from the survey, e.g. TMI, Bouguer
Geophysical images	1 copy	1 copy	Grids in ER Mapper format, PDF CD, DVD	Six months after completion of the survey	
Final report – Basic data including Operations Navigation Processing	1 copy	1 copy	PDF CD, DVD	Six months after completion of the survey	Must include location map and flight line map. Aeromagnetic surveys: Including aircraft and survey equipment details and specifications, flight line directions and terrain clearance, line spacing, total line kilometres. Gravity surveys: Including meter type, scale factor for meter. Data must be tied to an Isogal station in the Australian Fundamental Gravity Network. Processing report must include company details and processing parameters.
Final report (derived data)	1 copy	1 copy	PDF CD, DVD	Six months after completion of the survey	
Digital images of interpretation maps	1 copy	1 copy	TIFCGM, JPEG, PDF CD, DVD	Six months after completion of the survey	These include any maps included in the Interpretation report as separate Geo-referenced TIF images

Permit Vic/RL7 DMP

Prepared for, and on behalf of the Joint Venture by BHPBilliton Petroleum

+ Only required for areas under Commonwealth jurisdiction

* Transfer proposals to be sent to the Designated Authority for approval to submit. The Designated Authority will then instruct as to which address the data is to be sent

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3.5. Wells

3.5.1. General Information (Regulation 12)

The following written information and documents will be prepared as part of the activity:

a	i	Location of the activity.	See Well Program.
	ii	Period of the activity.	See Well Program.
b		Persons undertaking activity.	See Well Program.
c	i	The techniques and equipment used to collect the data.	See Well Program.
	ii	The techniques and equipment used to process the data.	See Well Program.
	iii	The techniques and equipment used to interpret the data.	See Well Program.
d		Progress reports.	Reporting requirements Daily.
e		Data acquisition report detailing the operations carried out as part of the activity.	Well Completion Report (Basic Data).
f		If processing is undertaken as part of the activity - data processing report.	Well Completion Report (Basic Data).
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Well Completion Report (Interpretive Data) Maps.

3.5.2. Written Information and Documentation (Regulation 13)

The following written information and documents about each well will be prepared as part of the activity as appropriate/applicable:

	Description
a	field and processed digital log data;
b	displays of logs generated
c	mud log displays
d	digital mud logging data
e	down hole survey data
f	report of the purpose, operation and progress of the well
g	photographs of the well core
h	a well completion report.

The information will also include, if appropriate/applicable & not required for ongoing studies:

	Description
a	cores, core cuttings and fluid samples
b	sample slides
c	residues

3.5.3. Reporting – Daily Drill reports (Schedule 1, Part 2, item 206)

One email copy will be submitted to the Designated Authority no later than midday on the day after the day to which the report relates:

a	Name of well
b	Drilled depth
c	Work carried out
d	Lithology of formations penetrated
e	Any indications of petroleum
f	Results of surveys made in the well bore
g	A leak off test summary
h	Hole geometry
i	Results of surveys made in the well bore
j	Estimated daily and cumulative well costs

3.5.4. Data Submission and Reporting Tables

Well data plan (Documentary information)

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth				
Edited field and processed data for all wireline logs	1 copy	DA to forward to relevant archive	Media LIS, DLIS, LAS, ASCII CD, DVD		Twelve months after completion of the well.	With a verification listing of the data supplied. The data shall include full header information.
Edited field and processed data (including borehole deviation surveys) for all MWD or LWD tools	1 copy	DA to forward to relevant archive	LIS, DLIS, LAS, ASCII CD, DVD		Twelve months after completion of the well	With a verification listing of the data supplied. The data shall include full header information.
Mudlogging data	1 copy	DA to forward to relevant archive	LAS, ASCII CD, DVD		Twelve months after completion of the well	With a header giving filed names and units of measure
Processed data for velocity surveys	1 copy	DA to forward to relevant archive	SEGY, ASCII		Twelve months after completion of the well.	With a verification header file
Wireline log displays	1 copy	1 copy	PDF, PDS, TIFF, META CD, DVD	200/500	Twelve months after completion of the well	If another format is available, the appropriate view software (executable) will be supplied.
MWD or LWD log displays	1 copy	1 copy	PDF, PDS, TIFF, ASCII CD, DVD	200/500	Twelve months after completion of the well	If another format is available, the appropriate view software (executable) will be supplied.
Mudlog	1 copy	1 copy	PDF, TIFF, ASCII CD, DVD	500	Twelve months after completion of the well.	
Ditch cuttings	One set	One set			Twelve months after completion of the well.	A minimum of 100g dry weight and thoroughly cleaned, dried and packaged with indelible printing of Well name, depth ranges.
Full hole cores, if cut	#	1/3 slab			Twelve months after completion of the well	Slabbed vertically
Well completion report Basic data	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Image files included in report PDF may also be submitted as separate files.
Well index sheet	1 copy	1 copy	PDF CD, DVD		Twelve months after completion of the well.	Included in the derived data volume of the well completion report
Digital petrophysical, geochemical or other analyses	1 copy	1 copy	ASCII, Excel CD, DVD		Twelve months after completion of the well.	As a tab delimited ASCII file with metadata included. Attached to well completion report.
Velocity log displays	1 copy	1 copy	PDF CD, DVD	200	Twelve months after completion of the well.	

Remaining 2/3 slab to be supplied to State/Territory upon completion of all analysis

Well data plan (Documentary information) - continued

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth+				
Core, SWC photography	1 copy	1 copy	Media TIFF, JPG, PDF CD, DVD		Twelve months after completion of the well.	if prepared
Well completion report Derived (interpretive) data	1 copy	1 copy	PDF		Twelve months after completion of the well.	Image files included in report PDF will also be submitted as separate files.
Composite well log	1 copy	1 copy	CGM, PDF CD, DVD	500	Twelve months after completion of the well.	
Gaseous hydrocarbon samples (in an API approved safety container)	No	Yes			Six months after completion of the well.	If collected & sufficient sample after operators analysis. Negotiation with Geoscience Australia will be done if collected.
Fluid hydrocarbon samples (in an API approved safety container)	No	Yes	1 litre		Six months after completion of the well.	
Sidewall core material, if recovered	Yes	No			Eighteen months after completion of the well.	If available
Palynological slides and residues palaeontological material Petrological slides	Yes	No			Eighteen months after completion of the well.	If Prepared

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3.6. Geological and geochemical surveys

3.6.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Location of the activity.	See Survey Application.
	ii	Period of the activity.	See Survey Application.
b		Persons undertaking activity.	See Survey Application.
c	i	The techniques and equipment used to collect the data.	See Survey Application
	ii	The techniques and equipment used to process the data.	See Survey Application.
	iii	The techniques and equipment used to interpret the data.	See Survey Application.
d		Progress reports.	Reporting requirements At project closeout – see below.
e		Data acquisition report detailing the operations carried out as part of the activity.	Data acquisition report.
f		If processing is undertaken as part of the activity - a data processing report.	Data processing report.
g		If interpretation is undertaken as part of the activity - the interpretation, including maps.	Interpretation report Maps.

3.6.2. Written Information and Documentation (Regulation 15)

The following written information and documents about each survey will be prepared as part of the activity, as appropriate/applicable:

	Description
a	Field and processed digital survey data.
b	A report describing the acquisition and processing of the data, as appropriate/applicable.
c	Interpretation report

3.6.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.6.4. Data Submission and Reporting Tables

Geological and geochemical surveys data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Data Review Reports	1 copy	1 copy	Media PDF CD, DVD	Six months after completion of study year	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	Six months after completion of study year	

Studies done on cores and cuttings

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Reports and data from investigation, analysis, etc of cuttings or cores	1 copy	1 copy	PDF ASCII CD, DVD	Six months after borrowing of material	
Annual report for exported samples for analyses	1 copy	1 copy	PDF ASCII CD, DVD	Annually from date of export	Required if cuttings and cores are retained overseas for more than twelve months after the approval from the Designated Authority.

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3.7. Studies and Data Reviews

3.7.1. General Information (Regulation 12)

The following information is applicable to the activity:

a	i	Purpose of the activity.	See Activity Description.
	ii	Location & period of the activity.	See Activity Description.
b		Persons undertaking activity.	See Activity Description.
c	i	The techniques and equipment used to interpret the data.	See Activity Description.
d		Progress reports.	Reporting requirements At project closeout – see below.

3.7.2. Written Information and Documentation (Regulation 15)

The following written information and documents will be prepared as part of the activity, as appropriate/applicable:

	Description
a	Digital data.
b	A report describing the studies, and or data reviews.

3.7.3. Reporting (Schedule 1, Part 2, item 206)

Will be submitted as soon as practicable after the finalisation of the project:

Report on project at project closeout

3.7.4. Data Submission and Reporting Tables

Studies and Data Reviews data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth			
Review reports	1 copy	1 copy	Media PDF CD, DVD	Six months after completion of the study year	
Digital images of interpretation maps	1 copy	1 copy	CGM, JPEG, PDF CD, DVD	Six months after completion of the study year	

3.8. Reports to be submitted (as appropriate, based on type of license)**3.8.1. Annual Report – Exploration Permit (Schedule 1, Part 2, item 205)**

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of exploration carried out.
b	Conclusion derived from the exploration.
c	List of reports that have been submitted during the year.
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of exploration expenditure for the year.

3.8.2. Annual Report - Retention License (Schedule 1, Part 2, item 205)

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of activities carried out
b	Conclusion derived from the activities.
c	List of reports that have been submitted during the year.
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of expenditure for the year.

3.8.3. Annual Report – Production Licence (Schedule 1, Part 2, item 205)

Two copies of the report will be submitted to the Designated Authority not later than one month after the period to which the report covers.

a	Description of activities carried out.
b	Conclusion derived from the activities.
c	List of reports that have been submitted during the year .
d	Outline of planned operations for the next year.
e	If appropriate/applicable – updated interpretation maps.
f	Summary of expenditure for the year.

3.8.4. Quarterly Reports – Exploration Permits (Schedule 1, Part 2, item 204)

The report covers exploration activities for the three month period after the day on which the Permit was awarded, and will be submitted not later than one month after the period to which the report covers.

No report will be submitted for the fourth quarter if relevant information is included in the annual report as per Schedule 1, Part 2, item 205.

Two copies of the report will be given to the Designated Authority.

a	Description of exploration carried out.
b	Outline of geological & geophysical interpretations made as a result of exploration, including any reprocessing or re-interpretation of basic data.
c	An estimate of exploration expenditure for the quarter.
d	Any other information required by the accepted DMP.

3.8.5. Monthly reports – Production License (Schedule 1, Part 2, item 203)

Two copies will be submitted to the Designated Authority by 15th of month after the month to which the report relates. Monthly Production Reports will include:

a		For each well:
	i	Identification name and number
	ii	Summary of all work performed on each well in the licence area during the previous month
	iii	Results of production tests, including choke sizes used and tubing and separation pressures observed during the test
	iv	Status at the end of the month
	v	Number of days of production
	vi	Cumulative quantities of liquid and gaseous petroleum and water produced or injected as at the end of the month
b		Total estimated quantities of liquid and gaseous petroleum and water produced or injected during the month
c		The total quantities of:
	i	Liquid & gaseous petroleum and water that have been produced
	ii	Liquid and gaseous petroleum that have been used
	iii	Gaseous petroleum that has been flared or vented
	iv	Liquid and gaseous petroleum and water that have been injected
	v	Liquid petroleum that has been stored
	vi	Liquid and gaseous petroleum that have been delivered from the area
d		The cumulative quantities of liquid and gaseous petroleum and water that have been produced or injected as at the end of the month