

# Data Management Plan



<b>Permit</b>	<b>VIC/P 56</b>
<b> Holders</b>	<b>Nexus Energy Aust NL</b> (*company responsible for data)

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.

**To: Designated Authority**

Horacio Haag  
 Manager Petroleum Operations, Safety and Environment  
 Department of Primary Industries  
 GPO Box 4440  
 Melbourne VIC 3001  
 Horacio.Haag@dpi.vic.gov.au

Signed for and on behalf of

**Nexus Energy Aust NL**

Per: *Philip M. Smith*  
 .....  
 Philip M Smith  
 Exploration Manager

Date: 29/11/2004

Version: 1.0

**Designated Authority acceptance:** .....

## CONTENTS

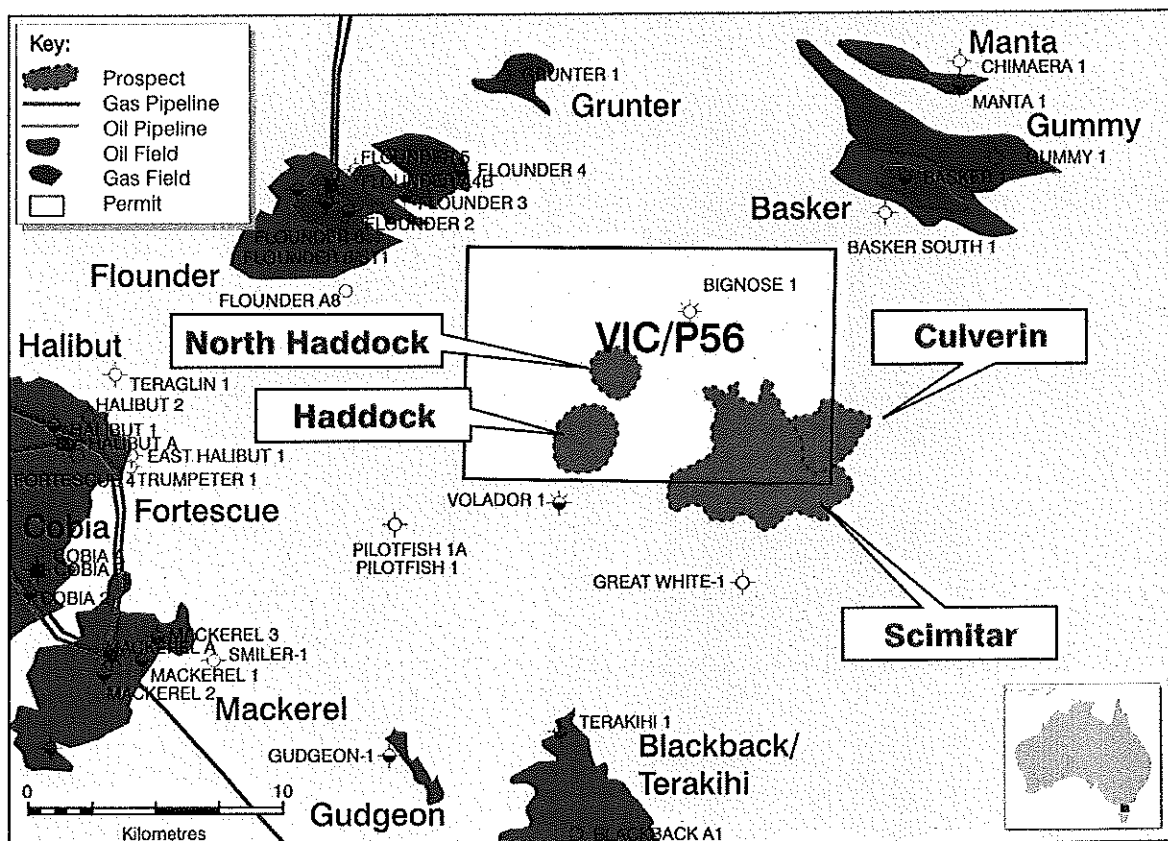
1.	Location/Description of Title/Activity area .....	3
2.	Specific Requirements of DMP per Schedule 1 .....	4
3.	Activity .....	6
3.1.	2D Seismic Acquisition & Processing .....	6
3.1.1.	General Information (Regulation 12) .....	6
3.1.2.	Written Information and Documentation (Regulation 14) .....	6
3.1.3.	Reporting - Weekly Progress reports (Schedule 1, Part 2, item 202) .....	6
3.1.4.	Data Submission and Reporting Tables .....	7
3.2.	3D Seismic Acquisition & Processing .....	8
3.2.1.	General Information (Regulation 12) .....	8
3.2.2.	Written Information and Documentation (Regulation 14) .....	8
3.2.3.	Reporting – Weekly Progress reports (Schedule 1, Part 2, item 206).....	8
3.2.4.	Data Submission and Reporting Tables .....	9
3.3.	2D & 3D Seismic Reprocessing.....	10
3.3.1.	General Information (Regulation 12) .....	10
3.3.2.	Written Information and Documentation (Regulation 14) .....	10
3.3.3.	Reporting (Schedule 1, Part 2, item 202) .....	10
3.3.4.	Data Submission and Reporting Tables .....	11
3.4.	Gravity, Magnetic and Other Survey Data .....	12
3.4.1.	General Information (Regulation 12) .....	12
3.4.2.	Written Information and Documentation (Regulation 14) .....	12
3.4.3.	Weekly Progress reports (Schedule 1, Part 2, item 206).....	12
3.4.4.	Data Submission and Reporting Tables .....	13
3.5.	Wells .....	14
3.5.1.	General Information (Regulation 12) .....	14
3.5.2.	Written Information and Documentation (Regulation 13) .....	14
3.5.3.	Reporting – Daily Drill reports (Schedule 1, Part 2, item 206) .....	15
3.5.4.	Data Submission and Reporting Tables .....	16
3.6.	Geological and geochemical surveys.....	18
3.6.1.	General Information (Regulation 12) .....	18
3.6.2.	Written Information and Documentation (Regulation 15) .....	18
3.6.3.	Reporting (Schedule 1, Part 2, item 206) .....	18
3.6.4.	Data Submission and Reporting Tables .....	19
3.7.	Studies and Data Reviews as meeting Permit Work Commitment .....	20
3.7.1.	General Information (Regulation 12) .....	20
3.7.2.	Written Information and Documentation (Regulation 15) .....	20
3.7.3.	Reporting (Schedule 1, Part 2, item 206) .....	20
3.7.4.	Data Submission and Reporting Tables .....	21
3.8.	Reports to be submitted (as appropriate, based on type of license) .....	22
3.8.1.	Annual Report – Exploration Permit (Schedule 1, Part 2, item 205) .....	22
3.8.2.	Annual Report - Retention License (Schedule 1, Part 2, item 205).....	22
3.8.3.	Annual Report – Production Licence (Schedule 1, Part 2, item 205).....	22
3.8.4.	Quarterly Reports – Exploration Permits (Schedule 1, Part 2, item 204).....	23
3.8.5.	Monthly reports – Production License (Schedule 1, Part 2, item 203) .....	23

**1. Location/Description of Title/Activity area**

The following general location information is applicable to **Title VIC/P 56 (Regulation 12)**:

**AREA:** 134.6 km<sup>2</sup>, 2 Graticular Blocks  
**STATE:** Victoria  
**BASIN:** Gippsland Basin  
**AWARDED:** 28<sup>th</sup> August 2003  
**EXPIRY DATE:** 27<sup>th</sup> August 2009  
**OPERATOR:** Nexus Energy Aust NL ("Nexus")  
 ABN 87 090 835 608  
 17 Bennetts Lane,  
 Melbourne VIC 3000

**ACT:** *Petroleum (Submerged Lands) Act 1967 (Cth)*



## 2. Specific Requirements of DMP per Schedule 1

801520 004

Item	Regulatory Provisions	Application to this DMP
101	Description of: <ol style="list-style-type: none"> <li>a. each activity to which DMP relates;</li> <li>b. each location where activity will be carried out.</li> </ol>	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. Should a change in title type or Guidelines occur, the company shall review this DMP and resubmit a DMP for approval.
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: <ol style="list-style-type: none"> <li>a. data to be given to the Designated Authority without request by the Designated Authority;</li> <li>b. information to be kept.</li> </ol>	<ol style="list-style-type: none"> <li>a. Data to be submitted – refer to body of document, as pertinent to the associated activity.</li> <li>b. Data withheld – refer to body of document, as pertinent to the associated activity.</li> </ol>
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: <ol style="list-style-type: none"> <li>a. are appropriate for type &amp; volume of data collected;</li> <li>b. comply with Designated Authority requirements;</li> <li>c. comply with good industry practice.</li> </ol>	Data medias and formats are described within the body of the document and these all comply with the P(SL)A Guidelines for Data Submission version 5 ( <b>the Guidelines</b> ) in respect of the <i>Petroleum (Submerged Lands) (Data Management) Regulations 2004 (Cth) (the Regulations)</i> .
106	Undertake to allow access to data that is publicly available and explain how access will be allowed	The operator 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: <ol style="list-style-type: none"> <li>a. the timetable outlined in Part 2 of the Schedule; or</li> <li>b. a timetable proposed in the DMP.</li> </ol>	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: <ol style="list-style-type: none"> <li>a. data management performance objectives against which performance will be measured; &amp;</li> <li>b. measurement criteria that define the objectives.</li> </ol>	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)

801520 005

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"> <li>a. secure storage of documents and records at a nominated address</li> <li>b. maintenance of documents and records in a way that makes retrieval of documents etc practicable.</li> </ul>	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	UKOOA	6 months after completion 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	12 months after completion of the survey	Observer's logs
Seismic support data	Include details on field tape TP *	DA to supply archive address	PDF	12 months after completion of the survey	
Itemized field tape listing	Yes	Yes	ASCII	12 months after completion of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Raw and final stacked data – if generated as part of processing sequence	1 copy	DA to forward to relevant archive	SEGY	3 months after completion of processing of the survey	If generated as part of the processing sequence. Including a fully annotated EBCDIC header
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY	3 months after completion of processing of the survey	Including a fully annotated EBCDIC header
Image Files for seismic sections	1 copy	No	CGM+	3 months after completion of processing of survey	Including fully detailed side panel showing processing sequence, location map, acquisition details, and stacking velocity boxes, SP/CDP annotations, and any processing/field statics graphs.
Shotpoint to CDP relationship	1 copy	DA to forward to relevant archive	ASCII	3 months after completion of processing of the survey	SOL/EOL relationships & listing of CDP/SP pairs for each line.
Itemized process tape listing	Yes	Yes	ASCII	3 months after completion of processing of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Velocity data	1 copy	DA to forward to relevant archive	ASCII	3 months after completion of processing of the survey	Including line number, shotpoint, time vs RMS pairs for both stacked & migrated velocities.
Final report – Basic data including Operations and Navigation.	1 copy	1 copy	PDF	6 months after completion of the survey	
Final processing report	1 copy	1 copy	PDF	3 months after completion of processing of the survey	The processing report will include a full tape listing and an example hardcopy printout of the SEGy headers.
Final interpretation report	1 copy	1 copy	PDF	18 months after completion of processing of the survey	
Digital images of interpretation maps	1 copy	1 copy	PDF	18 months after completion of processing of the survey	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks, and prospects and leads maps

+ Only required for areas under Commonwealth jurisdiction

\* Transfer Proposal for the Field Tapes 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.

801520 008

**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	Media to comply with Guidelines UKOOA	6 months after completion 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	12 months after completion of the survey	Observer's logs
Seismic support data	Include details on field tape TP *	DA to supply archive address	PDF	12 months after completion of the survey	
Itemised field tape listing	Yes	Yes	ASCII	12 months after completion of the survey	Showing tape number, survey name, line number, shotpoint range, data type
Raw stacked data – if generated as part of processing sequence	1 copy	DA to forward to relevant archive	SEGY	3 months after completion of processing of the survey	If generated as part of the processing sequence. Including a fully annotated EBCDIC header.
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY	3 months after completion of processing of the survey	Including a fully annotated EBCDIC header
Final processed grid (bin) coordinates	1 copy	1 copy	UKOOA P6/98	3 months after completion of processing of the survey	
Polygonal position data	1 copy	1 copy	ASCII	3 months after completion of processing of the survey	
3D velocity data	1 copy	DA to forward to relevant archive	ASCII	3 months after completion of processing of the survey	Including bin number, time vs RMS pairs for stacking, and migrated velocities.
Itemised process tape listing	1 copy	1 copy	ASCII	3 months after completion of processing of the survey	Showing tape number, survey name, line number, data type
Final report – Operations and Navigation	1 copy	1 copy	PDF	6 months after completion of the survey	
Final processing report	1 copy	1 copy	PDF	3 months after completion of processing of the survey	The processing report will include a full tape listing and an example hardcopy printout of the SEGY headers.
Final interpretation report	1 copy	1 copy	PDF	18 months after completion of processing of the survey	
Digital images of interpretation maps.	1 copy	1 copy	PDF	18 months after completion of processing of the survey	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks, and prospects and leads maps

+ Only required for areas under Commonwealth jurisdiction

\* Transfer Proposal for the Field Tapes 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.

**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 Proposal
	ii	Period of the activity.	See Proposal
b		Persons undertaking activity.	See Proposal
c	i	The techniques and equipment used to process the data.	See Proposal
	ii	The techniques and equipment used to interpret the data.	See Proposal
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 within 12 months of completion 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 States/Territory	Commonwealth+	Format	Data due date	Remarks
Raw stacked data - if generated as part of the processing sequence	1 copy	DA to forward to relevant archive	SEGY	3 months after completion of processing of data	Includes a fully annotated EBCDIC header
Raw and final migrated data	1 copy	DA to forward to relevant archive	SEGY	3 months after completion of processing of data	Includes a fully annotated EBCDIC header
Itemised process tape listing	1 copy	1 copy	ASCII	3 months after completion of processing of data	Showing tape number, survey name, line number, shotpoint range, data type.
Final reprocessing report	1 copy	1 copy	PDF	3 months after completion of processing of data	The processing report will include a full tape listing and an example hardcopy printout of the SEGY headers.
Final interpretation report	1 copy	1 copy	PDF	18 months after completion of the processing of data	
Digital images of interpretation maps	1 copy	1 copy	PDF	18 months after completion of the processing of data	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks, and prospects and leads maps

+ Only required for areas under Commonwealth jurisdiction

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

Data to be submitted	Copies required by States/Territory	Commonwealth+	Format	Data due date	Remarks
Field tape transcription log	1 copy or TP *	DA to supply archive address	ASCII	3 months 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 supply archive address	SEG	3 months 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 States/Territory	Commonwealth+	Format	Data due date	Remarks
Final processed grid (bin) coordinates (for 3D seismic)	1 copy	1 copy	UKOOA 3D Binning Grids	3 months after completion of processing of data	To be completed using UKOOA P6/98 format

+ Only required for areas under Commonwealth jurisdiction

**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 Weekly for field data 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: The information will include, if 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. Weekly Progress reports (Schedule 1, Part 2, item 206)**

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

A report will be submitted within 12 months of completion of the project:

Final survey 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	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. 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 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	Yes	Yes	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, Etores 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 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.
Geophysical images	Yes	Yes	Grids in ER Mapper format, PDF	Six months after completion of the survey	Images derived from the survey, e.g. TMI, Bouguer
Final report – Basic data including Operations Navigation Processing	Yes	Yes	PDF	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)	Yes	Yes	PDF	Six months after completion of the survey	
Digital images of interpretation maps	Yes	Yes	TIF	Six months after completion of the survey	These include any maps included in the interpretation report as separate Geo-referenced TIF images. Including prospects and leads maps

+ 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

801520 014

**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:

	Description
a	field and processed digital log data;
b	displays of logs generated
c	mud log display
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	Summary of material usage
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 CD ROM or DVD or 3590	Commonwealth+ DA to forward to relevant archive				
Edited field and processed data for all wireline logs	CD ROM or DVD or 3590	DA to forward to relevant archive	LIS, LISTIF, DLIS, LAS or ASCII		Six 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	CD ROM or DVD or 3590	DA to forward to relevant archive	LIS, LISTIF, DLIS, LAS or ASCII		Six months after completion of the well	With a verification listing of the data supplied. The data shall include full header information.
Mudlogging data	CD ROM or DVD or 3590	DA to forward to relevant archive	LAS or ASCII		Six months after completion of the well	With a header giving filed names and units of measure
Processed data for velocity surveys	CD ROM or DVD or 3590	DA to forward to relevant archive	SEGY		Six months after completion of the well.	With a verification header file
Wireline log displays	CD ROM or DVD	CD ROM or DVD	PDF, PDS or TIF	200/500	Six months after completion of the well	
MWD or LWD log displays	CD ROM or DVD	CD ROM or DVD	PDF, PDS or TIF	200/500	Six months after completion of the well	
Mudlog	CD ROM or DVD	CD ROM or DVD	PDF or TIF	500	Six months after completion of the well.	
Well completion report Basic data	CD ROM or DVD	CD ROM or DVD	PDF		Six months after completion of the well.	Image files included in report PDF may also be submitted as separate TIF files.
Well index sheet	CD ROM or DVD	CD ROM or DVD	PDF		Six months after completion of the well.	Included in the derived data volume of the well completion report
Digital petrophysical, geochemical or other analyses	CD ROM or DVD	CD ROM or DVD	ASCII or Excel		Six months after completion of the well.	As a tab delimited ASCII file with metadata included. Attached to well completion report.
Velocity log displays	CD ROM or DVD	CD ROM or DVD	PDF	200	Six months after completion of the well.	
Well completion report Derived (interpretive) data	CD ROM or DVD	CD ROM or DVD	PDF		Twelve months after completion of the well.	Image files included in report PDF will also be submitted as separate TIF files.
Core, SWC photography	CD ROM or DVD	CD ROM or DVD	TIF, JPG or PDF		Six months after completion of the well or after receipt from external contractor	If prepared
Composite well log	CD ROM or DVD	CD ROM or DVD	TIF or PDF	500	Six months after completion of the well.	

+ Only required for areas under Commonwealth jurisdiction

0086

801520 016



## Well data plan (Petroleum Mining Samples) - continued

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	States/Territory	Commonwealth <sup>+</sup>				
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 undertaken.
Fluid hydrocarbon samples (in an API approved safety container)	No	Yes	1 litre		Six months after completion of the well.	If collected & sufficient sample after operators analysis. Negotiation with Geoscience Australia will be undertaken.
Sidewall core material, if recovered	Yes	No			Eighteen months after completion of the well.	
Palynological slides and residues <sup>^</sup> palaeontological material Petrological slides	Yes	No			Eighteen months after completion of the well.	
Ditch cuttings	One set	One set			Six 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	¼ of the core	¼ of the core			¼ of the core six months after completion of the well for Geoscience Australia. Remaining ¾ eighteen months after completion of the well.	Operator to retain ¼ of the core until eighteen months after completion of the well, then forward to the local Designated Authority, with the understanding that access to sample the core will be unfettered, until the core is open file. That sampling of the ¾ core will avoid the cut face.

<sup>+</sup> Only required for areas under Commonwealth jurisdiction

<sup>^</sup> for Victoria only:

DPI (Victorian Designated Authority) require that companies submitting palynological/biostratigraphic slides make sure that they

- 1) obtain a valid range of Museum of Victoria unique "P" catalogue numbers from the Melbourne Museum
- 2) label the palynological slides with these P numbers, preferably on the slide itself rather than on a sticker
- 3) catalogue these slides and submit to DPI a catalogue of the slides showing things like

- (i) P Number
- (ii) well name
- (iii) sample type (core/cutt/swc)
- (iv) depth
- (v) depth range
- (vi) slide type (e.g. kerogen etc)
- (vii) other descriptive details
- (viii) remarks

- 4) submit a full biostratigraphic report to DPI

The slides and other material should be submitted to DPI, but the P number ranges to use can be obtained from the Museum:

Dermot Henry, Senior Collection Manager, Geosciences Group, Museum Victoria

dhenry@museum.vic.gov.au

+61 3 8341 7777

11 Nicholson St, Carlton, Victoria 3053

www.museum.vic.gov.au

801520 018

**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 Weekly for field data 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: The information will include, if 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)**

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
---

A report will be submitted within 12 months of completion of the project:

Final survey 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	Report: PDF	Six months after completion of study year	
Digital images of interpretation maps	1 copy	1 copy	TIF	Six months after completion of study year	

+ Only required for areas under Commonwealth jurisdiction

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 including PVT reports, Petrophysical reports, biostratigraphic reports.	1 copy	1 copy	Report: PDF Data: ASCII	Six months after borrowing of material	
Annual report for exported samples for analyses	1 copy	1 copy	Report: PDF Data: ASCII	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.

+ Only required for areas under Commonwealth jurisdiction

### 3.7. Studies and Data Reviews as meeting Title Work Commitment

#### 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:

The information will include, if 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 within 12 months of completion of the project:

Final survey 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 CD ROM or DVD 1 copy	Commonwealth+ CD ROM or DVD 1 copy			
Review reports	CD ROM or DVD 1 copy	Commonwealth+ CD ROM or DVD 1 copy	PDF	Six months after completion of the study year	
Digital images of interpretation maps	CD ROM or DVD 1 copy	CD ROM or DVD 1 copy	TIF	Six months after completion of the study year	Including prospects and leads maps

+ Only required for areas under Commonwealth jurisdiction

**3.8. Reports to be submitted (as appropriate, based on type of title)**

**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 Lease (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 Title 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 Designated Authority.
e	List of reports that have been submitted during the quarter.

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

Two copies will be submitted to the Designated Authority by 15<sup>th</sup> 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, and shut in well head pressure, if well was shut in for any reason during the month
	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		Estimates of average reservoir pressure per reservoir