

# **Data Management Plan**

DEPT. NAT. RES &amp; ENV



PE804131

<b>Activity:</b>	<b>Exploration Program</b>
<b>Title:</b>	<b>VIC/P42</b>
<b>Holder:</b>	<b>Apache Northwest Pty Ltd (Operator) Bass Strait Oil Company Ltd Inpex Alpha Ltd</b>

Prepared by: **Apache Northwest Pty Ltd**

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## CONTENTS

1. **General Information**
  - 1.1 Work Program
2. **Part 1 - Specific Requirements of DMP**
3. **Part 2 - Reports**
  - 3.1 Daily Drilling Reports – Exploration Permit
  - 3.2 Weekly Survey Reports – Exploration Permit
  - 3.3 Quarterly Reports – Exploration Permit
  - 3.4 Annual Reports – Exploration Permit
4. **Enclosures**
  1. Map of Activity area
5. **Data Submission and Reporting Tables**
  - Table A: 2D Seismic Survey
  - Table B: 2D Seismic Reprocessing
  - Table C: 3D Seismic Survey
  - Table D: 3D Seismic Reprocessing
  - Table E: Well Documents & Samples
  - Table F: Studies and Data Reviews
  - Table G: Studies on Cores and Cuttings

**1. General Information (Regulation 12)**

The following information is applicable to **VIC/P42** (refer to map Enclosure 1):

**AREA:** 1876km<sup>2</sup> (28 Graticular Blocks)  
**STATE:** Victoria  
**BASIN:** Gippsland  
**AWARDED:** 14 May 1998  
**EXPIRY DATE:** 13 August 2008

**OPERATOR:** Apache Northwest Pty Ltd  
Level 3, 256 St Georges Terrace  
Perth, Western Australia

**ACT:** Commonwealth – P(SL)A 1967

**1.1 Work Program**

The activities tabled in this Data Management Plan include the current requirements for the Work Program for the Title Area.

In the event that an activity which is not tabled is undertaken as part of the Work Program, either a separate DMP will be submitted for the activity, or the Title DMP will be revised and re-submitted as a variation to the existing DMP.

## 2. Specific Requirements of DMP - Schedule 1 Part 1

101	Description of a. each activity to which DMP relates b. each location where activity will be carried out	<ul style="list-style-type: none"> <li>The Work Program to be undertaken during the Permit Term is detailed in <b>Table 1 in Section 1</b>.</li> </ul>
102	Description of reports & information that will be made and kept	<ul style="list-style-type: none"> <li>The <b>Tables in Section 5</b> list the information that will be made/collected during the Permit Term.</li> <li>All information and reports will be submitted to the Designated Authority.</li> </ul>
103	Explanation of a. data to be given to DA without request by DA b. information to be kept	<ul style="list-style-type: none"> <li>Data to be submitted – refer <b>Tables in Section 5</b></li> <li>Data to be withheld – Internal Processing</li> </ul>
104	Description of media and formats for information, cores, cuttings or samples held	<ul style="list-style-type: none"> <li>The information and reports will be submitted in the format and on the media outlined in <b>Tables in Section 5</b>.</li> </ul>
105	Explanation of how media and formats in 104 a. are appropriate for type & volume of data collected b. comply with DA requirements c. comply with good industry practice	<ul style="list-style-type: none"> <li>Data medias and formats described in <b>Tables in Section 5</b> comply with the, current <b>Guidelines</b> for submission of petroleum data required under State / Territory and Commonwealth Petroleum Data Management Regulations (2004).</li> </ul>
106	Undertake to allow access to data that is publicly available and explain how access will be allowed	<ul style="list-style-type: none"> <li><b>The Operator</b> acknowledges that, upon notification by the Designated Authority, it will allow reasonable access to any publicly available information or samples under its control.</li> </ul>
107	Describe arrangements that ensure information is preserved according to good archive practice	<ul style="list-style-type: none"> <li>Data preservation will be ensured via contracts covering data services, in addition to in-house data management practice, and will comply with the <b>Guidelines (See 105)</b>.</li> </ul>
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.	<ul style="list-style-type: none"> <li><b>Tables in Section 5</b> list the timing of submission of data that will be made / collected during the period of the DMP, giving precedence to the relevant open-file release dates.</li> </ul>
109	Summary of a. data management performance objectives against which performance will be measured and b. measurement criteria that define the objectives	<ul style="list-style-type: none"> <li>Data and reports will be submitted on time and in accordance with the <b>Guidelines. (see 105)</b></li> <li>Archival and Environmental conditions will comply with the <b>Guidelines. (see 105)</b></li> </ul>

## 2. Specific Requirements of DMP - Schedule 1 Part 1 (Continued)

110	Explain how the measurement criteria will confirm that the performance objectives have been met.	<ul style="list-style-type: none"> <li>The Submissions timetable will be monitored in-house.</li> <li>Storage handling conditions will be controlled via contracts for data services.</li> </ul>
111	Summary of arrangements for: <ol style="list-style-type: none"> <li>secure storage of documents and records at a nominated address</li> <li>maintenance of documents and records in a way that makes retrieval of documents etc practicable.</li> </ol>	<ul style="list-style-type: none"> <li>Information and reports will be stored at the <b>nominated address</b> in a secure data storage room prior to being submitted to the Designated Authority as per timetable above.</li> <li>The storage of data will meet the good digital archival principles as set out in the <b>Guidelines</b> for reporting and submission of petroleum data, and as recommended by the Australian Archives.</li> </ul>
112	Acknowledge responsibility for collection, storage, and submission of information, cores, cuttings & samples obtained until all have been submitted to DA.	<ul style="list-style-type: none"> <li><b>The Operator</b> acknowledges responsibility for the collection, storage, and submission of information, cores, cuttings &amp; samples obtained until all have been submitted to the Designated Authority.</li> </ul>
113	Any other information that is necessary to demonstrate that the DMP complies with the regulations.	<ul style="list-style-type: none"> <li>Any other information required by the Regulations which is not explicitly handled by this DMP will be supplied upon request from the Designated Authority.</li> </ul>

### 3. Reports – Schedule 1 Part 2

#### 3.1 Daily Drilling Reports – Exploration Permits (Regulation 201)

One copy will be submitted electronically to the Designated Authority, and a second copy will be submitted as directed by the Designated Authority, no later than midday on the day after the day to which the report relates.

Report Contents:

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	Estimated daily and cumulative well costs
h	Hole geometry
i	Summary of material usage
j	A leak off test summary

#### 3.2 Weekly Seismic Survey Reports – Exploration Permits (Regulation 202)

One copy will be submitted electronically to the Designated Authority, and a second copy will be submitted as directed by the Designated Authority, as soon as practicable after the end of the week to which the report relates.

Report Contents:

Survey operations carried out during the week
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### 3. Reports – Schedule 1 Part 2 (Continued)

#### 3.3 Quarterly Reports – Exploration Permits (Regulation 204)

The report covers exploration activities for the 3 month period after the day on which the permit was awarded, or the subsequent 3 month periods, and will be submitted not later than 1 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 Regulation 205.

One copy will be submitted electronically to the Designated Authority, and a second copy will be submitted as directed by the Designated Authority.

##### Report Contents:

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
e	List of reports and data that have been submitted during the quarter

#### 3.4 Annual Report – Exploration Permit (Regulation 205)

One copy will be submitted electronically to the Designated Authority, and a second copy will be submitted as directed by the Designated Authority, not later than 1 month after the period to which the report covers.

##### Report Contents:

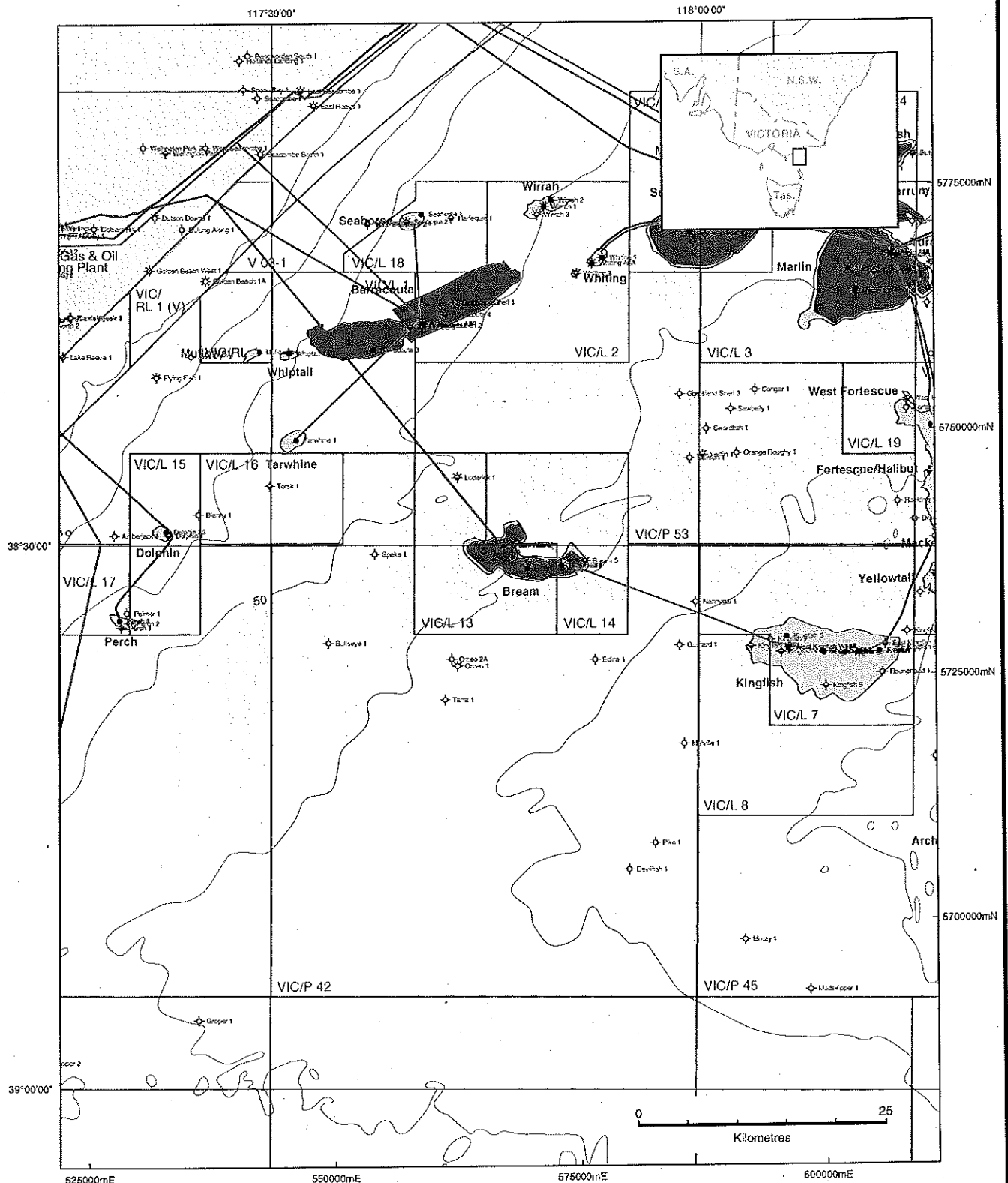
a	Description of exploration carried out
b	Conclusion derived from the exploration
c	List of reports that have been submitted during the year
d	Outline of planned operations for the next year
e	If appropriate – updated interpretation maps
f	Summary of exploration expenditure for the year

4. **Enclosures**

1. **Map of Activity area**



# VIC/P42 PERMIT LOCATION MAP



## 5. Data Submission and Reporting Tables

**Table A: 2D Seismic Survey data plan**

+ Only required for areas under Commonwealth jurisdiction.

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth +	Media to comply with Guidelines		
Processed Navigation data, including bathymetry	1 copy	1 copy	UKOOA	12 months after completion of acquisition of the survey	To be provided in P1/90 or subsequent format.
Raw Navigation data	1 copy / TP*	To be forwarded to GA	UKOOA	12 months after completion of acquisition of the survey	To be provided in P2/94 or subsequent format.
Seismic field data	1 copy / TP*	DA to supply archive address	SEG	12 months after completion of acquisition of the survey	Observer's logs
Seismic support data	Include details on field tape TP*	-	PDF	12 months after completion of acquisition of the survey	
Itemized field tape listing	Yes	Yes	ASCII	12 months after completion of acquisition of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Raw and final stacked data, including near/mid/far sub-stacks if generated as part of the processing sequence	1 copy	1 copy	SEGY	12 months after completion of acquisition of the survey	Including comprehensive EBCDIC header
Raw and final migrated data, including PSDM/PSSTM and near/mid/far sub-stacks if generated as part of the processing sequence	1 copy	1 copy	SEGY	12 months after completion of acquisition of the survey	
Shotpoint to CDP relationship data, sufficient for workstation interpretation	1 copy	1 copy	SEGY	12 months after completion of acquisition of the survey	Including comprehensive EBCDIC header
Itemized processed tape listing	Yes	Yes	ASCII	12 months after completion of acquisition of the survey	
Velocity data	1 copy	1 copy	ASCII	12 months after completion of acquisition of the survey	SOL/EOL relationships & listing of CDP/SP pairs for each line.
Final report – Basic data, including Operations and Navigation	1 copy	1 copy	ASCII	12 months after completion of acquisition of the survey	Showing tape number, survey name, line number, shotpoint range, data type.
Final Report – Processing	1 copy	1 copy	ASCII (Western) or SEG-Y	12 months after completion of acquisition of the survey	Including line number, shotpoint, time vs RMS pairs for stacked & migrated data.
Final report – Derived data	1 copy	1 copy	PDF	12 months after completion of acquisition of the survey	Including Location map, details of onboard processing and list of retained outputs
Digital images of interpretation maps	1 copy	1 copy	PDF	12 months after completion of acquisition of the survey	Including Location map, sample SEG-Y EBCDIC header and list of retained outputs
	1 copy	1 copy	PDF	18 months after completion of acquisition of the survey	
	1 copy	1 copy	TIF	18 months after completion of acquisition of the survey	As Geo-referenced TIF images; including key horizon TWT structure maps & sections

\* Transfer proposal for data to be sent to the Designated Authority for approval to submit the data.

Table B: 2D Seismic Reprocessing data plan

Data to be submitted	Copies required by		Format Media to comply with Guidelines	Data due date	Remarks
	State/Territory	Commonwealth +			
Raw stacked data, including near/mid/far sub-stacks if generated	1 copy	1 copy	SEG	6 months after the end of the study year	Including comprehensive EBCDIC header
Raw and final migrated data, including PSDM/PSTM and near/mid/far sub-stacks if generated	1 copy	1 copy	SEG	6 months after the end of the study year	Including comprehensive EBCDIC header
Velocity Data	1 copy	1 copy	ASCII (Western) or SEG	6 months after the end of the study year	Including Line number, shotpoint, time vs RMS pairs for stacked and migrated data
Itemised processed tape listing	1 copy	1 copy	ASCII	6 months after the end of the study year	Showing tape number, survey name, line number, shotpoint range, data type
Final report - Reprocessing	1 copy	1 copy	PDF	6 months after the end of the study year	Including Location map, sample SEG Y EBCDIC header and list of retained outputs
Final report - Derived data	1 copy	1 copy	PDF	6 months after the end of the study year	
Digital images of interpretation maps	1 copy	1 copy	TIF	6 months after the end of the study year	As Geo-referenced TIF images; including key horizon TWT structure maps & sections

## 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	DA to forward to relevant archive	ASCII	6 months after the end of the study year	Showing the original tape number, new tape number, survey name, line number, shotpoint range, data type, transcription parameters
Seismic field tape copies	1 copy / TP*	DA to forward to relevant archive	SEG	6 months after the end of the study year	

\* Transfer Proposal for Field Tape copies to be sent to the Designated Authority for approval to submit data

Table C: 3D Seismic Survey data plan

Data to be submitted	Copies required by		Format	Data due date	Remarks
	State/Territory	Commonwealth +			
Processed Navigation data, including bathymetry.	1 copy	1 copy	Media to comply with UKOOA Guidelines	18 months after completion of acquisition of the survey	To be provided in P1/90 or subsequent format.
Raw Navigation data	1 copy / TP*	To be forwarded to GA	UKOOA	18 months after completion of acquisition of the survey	To be provided in P2/94 or subsequent format.
Seismic field data	1 copy / TP*	DA to supply archive address	SEG	18 months after completion of acquisition of the survey	
Seismic support data	Include details on field tape TP*	-	PDF	18 months after completion of acquisition of the survey	Observer's logs
Itemized field tape listing	Yes	Yes	ASCII	18 months after completion of acquisition of the survey	Showing tape number, survey name, line number, shotpoint range, data type
Raw and final stacked data, including near/mid/far sub-stacks if generated	1 copy / TP*	To be forwarded to GA	SEG	18 months after completion of acquisition of the survey	Including comprehensive EBCCDIC header
Raw and final migrated data, including PSDM/PSTM and near/mid/far sub-stacks if generated	1 copy	1 copy	SEG	18 months after completion of acquisition of the survey	Including comprehensive EBCCDIC header
Final processed grid (bin) coordinates sufficient for workstation interpretation	1 copy	1 copy	UKOOA 3D Binning Grids	18 months after completion of acquisition of the survey	To be provided in P6/98 or subsequent format.
Polygonal survey position data	1 copy	1 copy	ASCII	18 months after completion of acquisition of the survey	Full fold outline, listing major polygon inflection points, survey name, polygon inline/crossline, latitude, longitude & datum
3D velocity data	1 copy	1 copy	ASCII (Western) or SEG	18 months after completion of acquisition of the survey	Including bin number, time vs RMS pairs for stacking and migrated velocities.
Itemised processed tape listing	1 copy	1 copy	ASCII	18 months after completion of acquisition of the survey	Showing tape number, survey name, inline number, crossline range, data type
Final report – Basic data, including Operations and Navigation	1 copy	1 copy	PDF	18 months after completion of acquisition of the survey	Including Location map, details of onboard processing and list of retained outputs
Final Report – Processing, Including grid definition for loading into interpretation workstation	1 copy	1 copy	PDF	18 months after completion of acquisition of the survey	Including Location map, sample SEG EBCCDIC header and list of retained outputs; and required 3D grid parameters
Final report – Derived data	1 copy	1 copy	PDF	18 months after completion of acquisition of the survey	
Digital images of interpretation maps	1 copy	1 copy	TIF	18 months after completion of acquisition of the survey	As Geo-referenced TIF images; including key horizon TWT structure maps & sections

\* Transfer Proposal for the data to be sent to the Designated Authority for approval to submit.

Table D: 3D Seismic Reprocessing data plan

Data to be submitted	Copies required by		Format Media to comply with Guidelines	Data due date	Remarks
	State/Territory	Commonwealth + GA			
Raw stacked data, including near/mid/far sub-stacks if generated	1 copy / TP*	To be forwarded to GA	SEGY	6 months after the end of the study year	Including comprehensive EBCDIC header
Raw and final migrated data, including PSDM/PSTM and near/mid/far sub-stacks if generated	1 copy	1 copy	SEGY	6 months after the end of the study year	Including comprehensive EBCDIC header
Final processed grid (bin) coordinates sufficient for workstation interpretation	1 copy	1 copy	UKOOA 3D Binning Grids	6 months after the end of the study year	To be provided in P6/98 or subsequent format.
Polygonal survey position data	1 copy	1 copy	ASCII	6 months after the end of the study year	Full fold outline, listing major polygon inflection points, survey name, polygon inline/crossline, latitude, longitude & datum
3D velocity data	1 copy	1 copy	ASCII	6 months after the end of the study year	Including bin number, time vs RMS pairs for stacking and migrated velocities.
Itemised process tape listing	1 copy	1 copy	ASCII	6 months after the end of the study year	Showing tape number, survey name, inline number, crossline range, data type
Final Report – Reprocessing, Including grid definition for loading into interpretation workstation	1 copy	1 copy	PDF	6 months after the end of the study year	Including Location map, sample SEGY EBCDIC header and list of retained outputs; and required 3D grid parameters
Final Report - Derived data	1 copy	1 copy	PDF	6 months after the end of the study year	
Digital images of interpretation maps	1 copy	1 copy	TIF	6 months after the end of the study year	As Geo-referenced TIF images; including key horizon TWT structure maps & sections

## 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	DA to forward to relevant archive	ASCII	6 months after the end of the study year	Showing the original tape number, new tape number, survey name, line number, shotpoint range, data type, transcription parameters
Seismic field tape copies	1 copy / TP*	DA to forward to relevant archive	SEG	6 months after the end of the study year	

\* Transfer Proposal for Field Tape copies to be sent to the Designated Authority for approval to submit data

Table E: Well data plan (Documentary Information)

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	State/Territory	Commonwealth +				
Edited field and processed data for all wireline logs	1 copy	DA to forward to relevant archive	Media to comply with Guidelines LIS, DLIS, LAS		6 months after completion of the well	With a verification listing of the data supplied. The data will include full header information.
Edited field and processed data (including borehole deviation surveys) for all MWD/LWD tools	1 copy	DA to forward to relevant archive	LIS, DLIS, LAS ASCII for deviation data		6 months after completion of the well	With a verification listing of the data supplied. The data will include full header information and will be in original recorded format.
Mudlogging data	1 copy	DA to forward to relevant archive	LAS, ASCII		6 months after completion of the well	With a header giving field names, curve names and units of measure
Velocity survey data – raw, processed, checkshot and time/depth analysis	1 copy	DA to forward to relevant archive	DLIS, SEGY ASCII for Checkshot data		6 months after completion of the well	With a verification header file
Well completion report: Basic data	1 copy	1 copy	PDF		6 months after completion of the well	Image files included in report will also be submitted as separate files.
Wireline log displays	1 copy	1 copy	PDF, PDS, TIF, META	200/500	6 months after completion of the well	Software to be supplied where relevant. Continuous page at a readable scale.
MWD or LWD log displays	1 copy	1 copy	PDF, PDS, TIF	200/500	6 months after completion of the well	Software to be supplied where relevant. Continuous page at a readable scale.
Mudlog	1 copy	1 copy	PDF, TIF	500	6 months after completion of the well	Continuous page at a readable scale
Velocity log displays	1 copy	1 copy	PDF, TIF, JPEG	200	6 months after completion of the well	
Core, SWC photography (if prepared)	1 copy	1 copy	JPEG, TIF, PDF, PNG		6 months after completion of the well	Minimum 300dpi image, 24bit colour. Hi-Resolution images to be magnified without pixelation.
Well completion report Derived (interpretive) data	1 copy	1 copy	PDF		12 months after completion of the well	Image files included in report will also be submitted as separate files.
Well index sheet	1 copy	1 copy	PDF		12 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		12 months after completion of the well	As a tab delimited ASCII file with metadata included. Attached to well completion report.
Interpretative log analysis (additional)	1 copy	1 copy	LIS, DLIS, LAS, ASCII, XLS		12 months after completion of the well	If performed. The data will include full header information.
Composite well log	1 copy	1 copy	PDF, TIF, JPEG	500	12 months after completion of the well	Included in the derived data volume of the well completion report
Workover/re-entry report: Basic & Derivative Volumes	1 copy	1 copy	PDF		12 months after re-entry of the well	Image files included in report will also be submitted as separate files.

Table E: Well data plan (Petroleum Mineral Samples)

Data to be submitted	Copies required by		Format	Scales required	Data due date	Remarks
	State/Territory	Commonwealth +				
Ditch cuttings -- Water Based Mud	One set	One set	Sample to comply with Guidelines		6 months after completion of the well	A minimum of 200g dry weight and thoroughly cleaned, dried and packaged with indelible printing of Well name, depth ranges.
Ditch cuttings -- Synthetic Based Mud	One set	One set			6 months after completion of the well	A minimum of 200g, thoroughly cleaned, with moisture content minimised, and packaged with indelible printing of Well name, depth ranges.
Full hole cores, if cut	(1/3 slab)*	1/3 slab			6 months after completion of the well	Sampling is to avoid cut face of core. * Also refer Note below.
Gaseous hydrocarbon samples (in an API approved safety container)	No++	Yes			6 months after completion of the well or after collection of sample	If collected, and remaining after analysis. By negotiation with G.A. 300cc will be submitted if available.
Fluid hydrocarbon samples (in an API approved safety container)	No++	Yes	1 litre		6 months after completion of the well or after collection of sample	If collected, and remaining after analysis. By negotiation with G.A. 1 litre will be submitted if available.
Sidewall core material	Yes	No			18 months after completion of the well	If recovered.
Palynological slides and residues Palaeontological material Petrological slides	Yes	No			18 months after completion of the well	If prepared. A listing of slides with required fields to be supplied in digital and hardcopy format.

++ These samples to be sent to Geoscience Australia irrespective of whether the well was drilled in State or federal acreage.

\* The core will be submitted as follows:

- Slabbed vertically of which at least 1/3 each to be submitted

Except where the condition of the acquired core requires alternative slabbing in order to retain the integrity of the sample.

Table F: Data plan for Studies and Data Reviews

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth +			
Report and Data from Study / Data Review	1 copy	1 copy	Media to comply with Guidelines Report: PDF Data: ASCII	6 months after the end of the study year	
Digital images of interpretation maps	1 copy	1 copy	TIF	6 months after the end of the study year	

Table G: Data plan for Studies on Cores and Cuttings

Data to be submitted	Copies required by		Format	Data due date	Remarks
	States/Territory	Commonwealth +			
Reports on investigation, analysis etc of cuttings or cores	1 copy	1 copy	Media to comply with Guidelines PDF	12 months after borrowing of material	
Data from investigation, analysis etc of cuttings or cores	1 copy	1 copy	ASCII	12 months after borrowing of material	As a tab delimited ASCII file with metadata included and attached to the analysis report. *Required if cuttings and cores are retained overseas for more than twelve months after the approval from the Director.
Annual report for exported samples for analyses*	1 copy	1 copy	Report: PDF Data: ASCII	Annually from date of export	