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**Lakes Oil N.L.**

(A.B.N. 62 004 247 214)

**DATA MANAGEMENT  
PLAN  
VIC/P40(V)**

**October 2006**

# Data Management Plan

<b>Permit</b>	<b>VIC/P40(V)</b>
<b>Holder and JV Partner 1</b>	<b>Petro Tech Pty Ltd (Lakes Oil N.L.)</b> (*company responsible for data)
<b>JV Partner 2</b>	<b>Rilo Explorations Pty Ltd</b>
<b>JV Partner 3</b>	<b>Gippsland Offshore Petroleum Limited</b>

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: The Delegate  
 Terry McKinley  
 Manager Petroleum Operations, Safety and Environment  
 Department of Primary Industries  
 GPO Box 4440  
 Melbourne VIC 3001  
 Terry.McKinley@dpi.vic.gov.au

Signed for and on behalf of  
**Petro Tech Pty Ltd (Lakes Oil N.L.),**  
**Rilo Explorations Pty Ltd,**  
**Gippsland Offshore Petroleum Limited**  
 By  
**Petro Tech Pty Ltd (Lakes Oil N.L.)**

Per:

*I. B. Campbell*  
 .....  
 Ingrid Campbell  
 Exploration Operator  
 Lakes Oil N.L.

Date: 27/10/2006

Version: 1.0

Designated Authority acceptance: .....

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

The following general location information is applicable to Title VIC/P40(v)

<b>AREA:</b>	1076 km <sup>2</sup> , 18 Graticular Blocks
<b>STATE:</b>	Victoria
<b>BASIN:</b>	Gippsland Basin
<b>AWARDED:</b>	20 April 2004
<b>EXPIRY DATE:</b>	19 April 2010
<b>OPERATOR:</b>	Lakes Oil N.L. ("Lakes") ABN 62 004 247 214 Level 11, 500 Collins St Melbourne VIC 3000
<b>ACT:</b>	<i>Victorian State Petroleum (Submerged Lands) Act 1982 (State)</i>

## 2. Specific Requirements of DMP per Victorian State Schedule 4

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. 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: a. data to be given to The Delegate without request by The Delegate;  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 P(SL)A Guidelines for Data Submission version 6 (the Guidelines) in respect of the <i>Victorian State Petroleum (Submerged Lands) (Data Management) Regulations 2004 (State) (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: 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).
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 are currently stored at Lakes Oil's offices in a secure data storage rooms prior to being submitted to the Designated Authority as per timetable above. The data is stored at ~20°C, with UV-filtered fluorescent lighting and housed on wooden shelving. There are fire alarms and carbon dioxide extinguishers and access is controlled with only staff members permitted to use/view the data.
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 and Processing

##### General Information

a.	- Location of the activity - Period of the activity	See Survey Application
b.	Persons undertaking the survey activity	See Survey Application
c.	-The techniques and equipment used to collect the data -The techniques and equipment used to process the data -The techniques and equipment used to interpret the data	See Survey Application
d.	Progress reports	Weekly for field data At project closeout
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 acquisition report
g.	If interpretation is undertaken as part of the activity- the interpretation including maps	Interpretation report Maps

##### Written Information and Documentation

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

**Table 1: 2D SEISMIC DATA**

DATA REQUIRED	REPORT TYPE	FORMAT	DATA FOR STATE/ TERRITORY	DATE FOR SUBMISSION (prior to or by)	REMARKS
<b>Field Data</b>					
Navigation data Includes final processed navigation and bathymetry data	Documentary	UKOOA	One copy	12 months after completion of the acquisition	P1/90 or subsequent format with header information of navigation / shotpoint location data including bathymetry. Header data must include geodetic datum, spheroid, projection and clearly stated transformation parameters...
Raw Navigation data	Documentary	UKOOA	Transfer Proposal (TP) to be forwarded by DA	12 months after completion of the acquisition	P2/94 or subsequent format
Seismic field data	Documentary	SEG Standard	Transfer Proposal (TP) to be forwarded by DA	12 months after completion of the acquisition	
Seismic support data	Documentary	PDF	Transfer Proposal (TP) to be obtained from State DA	12 months after completion of the acquisition	Observers logs, For onshore data only: surveyors notes, chaining diagrams, intersections
Uphole data (onshore)	Documentary	ASCII	One copy	12 months after completion of the acquisition	Includes line number, shotpoint and time depth pairs for each uphole.
Itemised field tape listing	Documentary	Digital (ASCII)	One copy	12 months after the completion of the acquisition	Field data showing tape number, survey name, line number, shotpoint range.

<b>Processed Data</b>					
Raw and final stacked	Documentary	SEG-Y	One copy	12 months after	Includes fully annotated EBCDIC



data, near/mid/far sub-stacks - if generated			completion of acquisition	header.
Raw and final migrated data including PSDM / PSTM, near/mid/far sub-stacks - if generated	Documentary	SEG-Y	12 months after completion of acquisition	Includes fully annotated EBCDIC header.
Fully annotated image of final processed migrated data. (Onshore)	Documentary	TIFF	12 months after completion of acquisition	The image must have a vertical scale of not less than 5cm/sec. See Appendix 2.2 for details of requirements for relevant States.
Shotpoint to CDP relationship	Documentary	ASCII	12 months after completion of acquisition	Sufficient SP/CDP data for workstation interpretation. At least SOL and EOL relationships for each line and a listing of equivalent CDP/SP pairs for each line.
Itemised process tape listing	Documentary	ASCII	12 months after completion of acquisition	Showing tape number, survey name, line number, shotpoint range, data type.
Velocity data	Documentary	ASCII (Western format)	12 months after completion of acquisition	Including line number, shotpoint, time versus RMS pairs for both stacked and migrated velocities.

<b>Final Reports</b>						
Final report (operations and navigation)	Documentary	PDF	One copy	12 months after completion of acquisition	Includes fully annotated EBCDIC header.	
Final processing report	Documentary	PDF	One copy	12 months after completion of acquisition	Includes fully annotated EBCDIC header.	
Final interpretation report	Derivative	PDF	One copy	18 months after completion of acquisition	The image must have a vertical scale of not less than 5cm/sec. See Appendix 2.2 for details of requirements for relevant States.	
Digital images of interpretation maps	Derivative	TIF	One copy	18 months after completion of acquisition	Sufficient SP/CDP data for workstation interpretation. At least SOL and EOL relationships for each line and a listing of equivalent CDP/SP pairs for each line.	

**3.2 3D Seismic Acquisition and Processing****General Information**

a.	- Location of the activity - Period of the activity	See Survey Application
b.	Persons undertaking the survey activity	See Survey Application
c.	-The techniques and equipment used to collect the data -The techniques and equipment used to process the data -The techniques and equipment used to interpret the data	See Survey Application
d.	Progress reports	Weekly for field data At project closeout
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 acquisition report
g.	If interpretation is undertaken as part of the activity- the interpretation including maps	Interpretation report Maps

**Written Information and Documentation**

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

Table 3: 3D SEISMIC DATA

DATA REQUIRED	REPORT TYPE	FORMAT	DATA FOR STATE/TERRITORY	DATE FOR SUBMISSION (prior to or by)	REMARKS
<b>Field Data</b>					
Final Processed Navigation data Includes bathymetry data.	Documentary	UKOOA	TP	18 months after completion of acquisition.	All associated data sufficient to re-process seismic data including shot and receiver coordinates. See Appendix 3.1 for example.
Raw Navigation data	Documentary	UKOOA	TP	18 months after completion of the acquisition	P2/94 or subsequent format.
Seismic field data	Documentary	SEG Standard	TP	18 months after completion of acquisition	To be submitted on high density media.
Seismic support data	Documentary	PDF	TP	18 months after completion of acquisition	Must include observer's logs For onshore/OBC data only: surveyors notes, chaining diagrams, intersections, SPS files
Uphole data (onshore)	Documentary	ASCII	One copy	18 months after completion of acquisition	Includes line number, shotpoint and time depth pairs for each uphole.
Itemised field tape listing	Documentary	ASCII	One copy only to be submitted to State DA	18 months after completion of acquisition	Showing tape number, survey name, line number, shotpoint range, data type in ASCII format.
<b>Processed Data</b>					
Raw stacked data, near/mid/far sub-stacks - if generated	Documentary	SEG-Y	TP	18 months after completion of acquisition	Includes fully annotated EBCDIC header.
Raw and final migrated data including PSDM / PSTM, near/mid/far sub-stacks - if	Documentary	SEG-Y	One copy	18 months after completion of acquisition	Includes fully annotated EBCDIC header.

generated						
Final processed (grid) bin coordinates	Documentary	UKOOA 3D binning grids	One copy	18 months after completion of acquisition	See Appendix 3.2 for example.	
Polygonal position data (Full Fold Outline for offshore; Full Fold Outline and Surface Outline for onshore)	Documentary	ASCII tab delimited	One copy	18 months after completion of acquisition	Listing major inflection points of a polygon describing the location of the survey providing survey name, polygon point, inline/crossline nomenclature, latitude and longitude. See Appendix 3.3 for example	
Velocity data	Documentary	ASCII (Western Format)	One copy	18 months after completion of acquisition	Including bin number and time versus RMS velocity pair for both stacked and migrated velocities.	
2D data subset (non-exclusive surveys)	Documentary	SEG-Y	One copy	18 months after completion of acquisition	Final migrated data.	
Itemised process tape listing	Documentary	ASCII	One copy	18 months after completion of acquisition	Showing tape number, survey name, in-lines and crosslines, cdps, data type.	

<b>Final Reports</b>						
Final report (operations and navigation)	Documentary	PDF	One copy	18 months after completion of acquisition	Location map included. Operations and Navigation Reports can be supplied as separate volumes. Onboard processing and any retained outputs to be documented in report.	
Final processing report including grid definition	Documentary	PDF	One copy	18 months after completion of acquisition	To include sample print out of SEG-Y EBCDIC header, 3D grid definition details used for loading SEG-Y into interpretation work stations. See Appendix 3.3 for grid definition.	
Final interpretation report	Derivative	PDF	One copy	18 months after completion of acquisition		

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Digital images of interpretation maps	Derivative	TIF	One copy	18 months after completion of acquisition	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks as Georeferenced TIF images.
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**3.3 2D and 3D Seismic Reprocessing****General Information**

a.	-Location of the activity - Period of the activity	See Proposal
b.	Persons undertaking the activity	See Proposal
c.	The techniques and equipment used to process the data 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

**Written Information and Documentation**

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

**Table 3: REPROCESSED SEISMIC DATA**

DATA REQUIRED	REPORT TYPE	FORMAT	DATA FOR STATE/TERRITORY	DATE FOR SUBMISSION (prior to or by)	REMARKS
<b>Processed Data</b>					
Raw stacked data 2D and 3D, near/mid/far sub-stacks – if generated	Documentary	SEG-Y	One copy	Not later than the end of the title year in which the information was created.	Outputs must be in formats as specified in Tables 2 and 3.
Raw and final migrated data including PSDM / PSTM (2D and 3D), near/mid/far sub-stacks - if generated	Documentary	SEG-Y	One copy	Not later than the end of the title year in which the information was created.	Outputs must be in formats as specified in Tables 2 and 3.
Final processed (grid) bin coordinates	Documentary	UKOOA 3D binning grids	One copy	Not later than the end of the title year in which the information was created.	To be completed using UKOOA See Appendix 3.2 for example
Polygonal positions for 3D data (Full Fold Outline for offshore; Full Fold Outline and Surface Outline for onshore)	Documentary	ASCII tab delimited	One copy	Not later than the end of the title year in which the information was created.	Listing major inflection points of a polygon describing the location of the survey providing survey name, polygon point, inline/crossline nomenclature, latitude and longitude.
Itemised tape listing	Documentary	ASCII Plus Hardcopy for South Australia	One copy	Not later than the end of the title year in which the information was created.	Showing the tape number, survey name, line number, shotpoint, data-type and what original tapes are on the copy tapes.
Fully annotated image of final reprocessed migrated data. (Onshore only)	Documentary	See Appendix 2.2	One copy only to be submitted to State DA	Not later than the end of the title year in which the information was created.	The image must have a vertical scale of not less than 5cm/sec. See Appendix 2.2 for details of requirements for relevant States.
Velocity data	Documentary	ASCII (Western format)	One copy	Not later than the end of the title year in which the information was created.	Include line number, shotpoint, Time versus RMS pairs for both stacked and migrated velocities.



<b>Final Reports</b>					
Final report (Reprocessing)	Documentary	PDF	One copy	12 months after the end of permit year in which processing was completed	Outputs must be in formats as specified in Tables 2 and 3.
Final report (Interpretive)	Derivative	PDF	One copy	12 months after the end of permit year in which processing was completed	Geo-referenced TIF to include TWT structure maps at key horizons and representative sections showing seismic horizon picks.
Digital images of interpretation maps	Derivative	TIF	One copy	12 months after completion of processing	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks as Georeferenced TIF images.

### 3.4 Gravity, Magnetic and Other Survey Data

#### General Information

a.	- Location of the activity - Period of the activity	See Survey Application
b.	Persons undertaking the survey activity	See Survey Application
c.	-The techniques and equipment used to collect the data -The techniques and equipment used to process the data -The techniques and equipment used to interpret the data	See Survey Application
d.	Progress reports	Weekly for field data At project closeout
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 acquisition report
g.	If interpretation is undertaken as part of the activity- the interpretation including maps	Interpretation report Maps

#### Written Information and Documentation

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

**Table 4: GRAVITY AND MAGNETIC SURVEY DATA**

DATA REQUIRED	REPORT TYPE	FORMAT	DATA FOR STATE/ TERRITORY	DATE FOR SUBMISSION (prior to or by)	REMARKS
<b>Field Data</b>					
Aeromagnetic located field data	Documentary	ASCII columns	One copy	6 months after completion of survey	Must include: descriptive headers, flight number, line number, date and time, fiducial, raw magnetic reading, processed magnetic reading, radar and 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.
Gravity field data	Documentary	ASCII columns	One copy	6 months after completion of 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.
Altimeter, storm monitor, etc. (aeromagnetic only)	Documentary	ASCII (appropriate format)	One copy	6 months after completion of survey	One copy of analog monitor records, diurnal records and altimeter records in an appropriate format.
Other types of surveys	Documentary	See remarks	See remarks	See remarks	Submission and format details to be negotiated with the Delegate
<b>Processed Data</b>					
Field and processed	Documentary	ASCII	One copy	6 months after	ASCII data includes ASEG- GDF2

<p>data Aeromagnetic processed data</p>	<p>Documentary</p>	<p>ASCII GDF2</p>	<p>One copy</p>	<p>completion of survey 6 months after completion of survey</p>	<p>format. Including pre and post microlevelling data. 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. Data must include: descriptive headers, station, XY lat/long coordinates, meter reading, observed gravity value, elevation value calculation errors, final processed gravity value. 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.</p>
<p>Geophysical images</p>	<p>Documentary</p>	<p>PDF</p>	<p>One copy</p>	<p>6 months after completion of survey</p>	
<p><b>Final Reports</b> Final report (operations, navigation and processing)</p>	<p>Documentary</p>	<p>PDF</p>	<p>One copy</p>	<p>6 months after completion of survey</p>	<p>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</p>

					company details and processing parameters.
Final interpretation report	Derivative	PDF	One copy	6 months after completion of processing	
Digital images of interpretation maps	Derivative	TIF	One copy	6 months after completion of processing	These include any maps included in the Interpretation report as separate Georeferenced TIF images.

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**3.5 Wells****General Information**

a.	- Location of the activity - Period of the activity	See Well Program
b.	Persons undertaking the survey activity	See Well Program
c.	-The techniques and equipment used to collect the data -The techniques and equipment used to process the data -The techniques and equipment used to interpret the data	See Well Program
d.	Progress reports	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- a 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 (Interpretative Data) Maps

**Written Information and Documentation**

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

	<b>Description</b>
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 and not required for ongoing studies:

	<b>Description</b>
a.	Cores, core cuttings and fluid samples
b.	Sample slides
c.	Residues

Table 5: WELL DATA

DATA REQUIRED	REPORT TYPE*	FORMAT	DATA FOR STATE/ TERRITORY	DATE FOR SUBMISSION (prior to or by)	REMARKS
<b>Field and processed digital data</b>					
Edited field data and processed data for all wireline logs, MWD or LWD tools. Includes well test data	Documentary	LIS, DLIS, LAS	One copy	6 months after completion of the well	With verification listing of the data supplied. The data shall include full header information.
Edited field and processed data for borehole deviation surveys.	Documentary	LIS, DLIS, ASCII, LAS, XLS	One copy	6 months after completion of the well	The data shall include full header information.
Interpretative log analysis	Derivative	LIS, DLIS, ASCII, LAS, XLS	One copy	12 months after completion of the well	The data shall include full header information.
Mud logging data	Documentary	ASCII, LAS	One copy	6 months after completion of the well	With a header giving field names, curve names and units of measure
Velocity surveys -raw -processed -checkshot and time/depth analysis	Documentary	DLIS, SEGY ASCII (Checkshot data)	One copy	6 months after completion of the well	To include verification header file.
Core, side wall core natural light photography - UV light to be done in fluorescent sections	Documentary	JPEG, PNG or TIF	One copy	6 months after completion of the well	Provide minimum 300 DPI image in 24-bit colour. High-resolution images able to be magnified (zoom in) without pixilation.



Samples		One set	6 months after completion of the well	A minimum of 200g dry weight per sample interval set and thoroughly cleaned, dried and suitably packaged with indelible printing of well name, depth ranges.
Ditch cuttings	Petroleum Mineral Sample			
Offshore - Full hole conventional cores (if cut)	Petroleum Mineral Sample	Full hole core, not slabbled (after a year or as agreed)		
Gaseous hydrocarbon samples (in an API approved safety container)	Petroleum Mineral Sample	GA to advise the Delegate of receipt	On completion of test	If collected from wireline, drill stem or production tests. Consultation with GA recommended. (300 cc if available)
Fluid hydrocarbon samples (in an API approved safety container)	Petroleum Mineral Sample	GA to advise the Delegate of receipt	6 months after completion of the well or after collection of sample	If collected from wireline, drill stem or production tests. Consultation with GA recommended. (1ltr if available)
Sidewall core material (if recovered)	Petroleum Mineral Sample	One set	12 months after completion of the well	
Palynological slides and residues Palaeontological material Petrological slides	Petroleum Mineral Sample	One set	12 months after completion of the well	If prepared.

Reports and images ( Digital format preferred for all lodgements)						
Well Completion Report separated into: Documentary data		PDF	One copy	6 months after completion of the well 12 months after completion of the well	Security free basic and interpretive volumes must be separated, image files and logs included in reports must be submitted as separate JPEG or TIF files Interpretive volume to include composite well log.	
Derivative data		PDF	One copy			
Log displays.	Documentary	PDS/ META/ PDF	One copy	6 months after completion of the well	Software to be provided. Continuous page at a readable scale.	
Mudlog	Documentary	TIF/ PDF	One copy	6 months after completion of the well	Continuous page at a readable scale.	
Well index sheet	Derivative	PDF	One copy	12 months after completion of the well	Example to be provided.	
Petrophysical, geochemical or other sample analyses	Documentary	ASCII/ XLS	One copy	12 months after completion of the well	As a tab delimited ASCII file with metadata included.	
Composite well log	Derivative	TIF/JPEG	One copy	12 months after completion of the well		
Velocity log displays	Documentary	TIF/JPEG	One copy	6 months after completion of the well		
Special Study Submission Requirements						
Workover/re-entry report	Documentary	PDF	One copy	6 months after completion of the well	Documentary and derivative volumes must be separated; image files included in reports must also be submitted as separate JPEG or TIF files.	
Reports on investigation, analysis, etc. of cuttings or cores, and reports on any overseas investigation of cuttings or core plugs	Documentary / Derivative	PDF	One copy	12 months after sampling or borrowing material	An annual report is required for any cuttings or cores retained overseas for more than 12 months	

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Data from investigation, analysis, etc. of cuttings or cores	Documentary	ASCII/ XLS	One copy	12 months after sampling or borrowing material	As a tab delimited ASCII file with metadata included and attached to the analysis report.
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### 3.6 Geological and Geochemical Surveys

#### General Information

a.	- Location of the activity - Period of the activity	See Survey Application
b.	Persons undertaking the survey activity	See Survey Application
c.	-The techniques and equipment used to collect the data -The techniques and equipment used to process the data -The techniques and equipment used to interpret the data	See Survey Application
d.	Progress reports	Weekly for field data At project closeout
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 acquisition report
g.	If interpretation is undertaken as part of the activity- the interpretation including maps	Interpretation report Maps

#### Written Information and Documentation

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

**Table 6: GEOLOGICAL AND GEOCHEMICAL**

DATA REQUIRED	REPORT TYPE	FORMAT	DATA FOR STATE/ TERRITORY	DATA FOR SUBMISSION (prior to or by)	REMARKS
<b>Geological and geochemical surveys data plan</b>					
Data review reports	Documentary	PDF	One copy	Six months after completion of study	
Digital images of interpretation maps	Derivative	TIF	One copy	Six months after completion of study	
<b>Studies done on cores and cuttings</b>					
Reports and data from investigation analysis, etc of cuttings or cores, including PVT reports, Petrophysical reports, biostratigraphic reports	Documentary / Derivative	PDF, ASCII	One copy	Six months after borrowing of material	
Annual report for exported samples for analysis	Documentary / Derivative	PDF/ASCII	One copy	Annual from date of export	

**3.7 Reports to be submitted****DAILY REPORTS**

On each day before midday a daily report of the Drilling Operations for the previous 24 hours shall be sent to The Delegate via email.

**Daily Reports** shall contain where available:

a.	The name, location, elevation/water depth of the well;
b.	The drilled depth;
c.	The work carried out;
d.	The lithology of the formations penetrated;
e.	Any indications of petroleum;
f.	Results of surveys made in the well bore, and
g.	Estimated daily and cumulative well costs.
h.	Summary of material usage.
i.	Leak off test summary.

**WEEKLY REPORTS**

If a geological or geophysical survey is in progress, a report will be given about survey operations carried out during a week. The weekly report will be given as soon as practicable after the end of the week to which the report relates.

**QUARTERLY REPORTS**

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.

Two copies of each quarterly report shall be submitted to The Delegate no later than one month after the end of the quarter to which the report relates.

No report will be submitted for the fourth quarter if relevant information is included in the annual report as per Schedule 4, Part 2, item 205.

**Exploration Permit Reports** shall contain:

a.	A brief review of operations (including office studies) carried out with particular reference to fulfilling the work commitment for the permit year
b.	Estimated expenditure for the quarter
c.	Survey statistics
d.	Relevant geophysical and geological interpretations
e.	Such other relevant information as The Delegate, requires

**Summary of Records of Discharge of Produced Formation Water** shall include:

a.	The results of tests of equipment which monitors and records the concentration of petroleum in discharged formation water
b.	The rate of discharge of formation water

### ANNUAL REPORTS

Two copies of an annual report shall be submitted to The Delegate no later than one month of the end of the year to which the report relates.

**Annual Report** shall contain:

a.	A general discussion of permit status and operations carried out (including office studies) with particular reference to fulfilling the work commitment for the permit year
b.	Technical conclusions derived from the year's operations
c.	A list of reports submitted during the year
d.	An outline of work plans for the next year with particular reference to fulfilling the work commitment for the permit year
e.	If appropriate- updated interpretation maps of seismic and potential field data at an appropriate scale
f.	A summary of annual expenditure

### OTHER REPORTS

**Well Completion Report** shall be submitted to The Delegate and contain:

a.	The name of the well
b.	Water depth (WD) and kelly bushing (KB) or rotary table (RT)
c.	Well location in geographical coordinates, shotpoint number and seismic line annotations where appropriate, and including the permit name, graticular block number, and map sheet
d.	If the well is deviated or horizontal - the surveyed path of the well - coordinates of the bottom hole location, and -in the case of a potential producer, the coordinates at the intersection of the reservoir horizon
e.	The drilling rig and the drilling contractor used
f.	Wireline logging and mudlogging contractors used
g.	The spud date, date at which TD is reached, date of plug and abandonment (dry hole), and date of rig release
h.	The measured depth of the hole end, where appropriate, the true vertical depth (TVD) below the KB or RT
i.	A statement whether the well has been : -completed as a producer -suspended as a potential producer, or

	-abandoned
<b>Drilling</b>	
a.	The depth of the perforations in the petroleum reservoir (if any)
b.	Particulars of the equipment installed in or on the well
c.	Particulars of the casing and equipment installed in or on the well complete with schematics showing major dimensions
d.	Particulars of all deviation surveys made in the well
e.	Information on all cementing operations and schematics of abandonment
f.	Bit Records
g.	Drilling fluids (muds) used in the well
h.	Sample depths and types of all cores (including sidewall cores (SWC)), cuttings, and sample intervals
i.	Well evaluation logs (including measurement while drilling (MWD) logs, pressure detection logs, and mud logs), and fluid samples
j.	Particulars of any hydrocarbon indications
k.	Particulars of the operation and results, including raw pressure-time listings for all formation fluid sample tests and production tests (if any)
l.	The measured depth and TVD of marker horizons (formation tops)
m.	Particulars of the geological interpretations of the observations made as a result of drilling the well, including: -lithology and stratigraphy -reservoir quality, -source rock quality, and - trap integrity: for development wells- details of changes to the current reservoir model
n.	A discussion of the relevance of the findings of the well to the evaluation of the hydrocarbon potential of the area
<b>Appendices</b>	
a.	Reports of technical studies on velocity survey, logs, samples, cores, and side wall cores obtained from the well (including petrophysics, palaeontology, reservoir characteristics, fluid estimations, relative permeability, capillary pressure, fluid, and geochemical analysis)
b.	One copy of: -a composite well log -enclosures in the velocity survey report, -a mud log, and -if prepared- a wellsite geologist's lithology log
c.	A well index sheet
d.	Copies of revised structure maps and appropriate interpreted seismic sections illustrating post drilling structural and stratigraphic interpretation of the well

**Final Survey Reports** shall be submitted to The Delegate within the timeframe shown in the relevant tables:

<b>Acquisition Report</b>
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a.	Name and location of the survey including the titles in which it was conducted
b.	Dates of the start and finish of the survey
c.	Names of the contractors used to carry out the survey
d.	Details of all equipment used
e.	Geometry of acquisition parameters
f.	Line lists (the listings should be of individual tapes with the corresponding shot point ranges)
g.	System and equipment used for positioning and/or navigation
<b>Processing reports</b>	
a.	Name and location of the survey including the titles in which it was conducted
b.	Dates of the start and finish processing
c.	Name of the processing company
d.	Objectives of the processing
e.	All processing sequences and techniques used, required to reproduce the final product
f.	Sample EBCDIC header dump from the final dataset
g.	Comprehensive listings of all processed data (the listings are to contain data description, line and shot point ranges)
h.	Polygon position description- for 3D only
i.	Calculation for 3D line numbering convention (inline and crossline)
<b>Interpretation Reports</b>	
a.	Interpretations, including maps made as a result of the survey(unless the survey was a non-exclusive SPA)

**Notification of Discovery Reports** shall be submitted to The Delegate within 3 days of the discovery and shall contain particulars of:

a.	The chemical composition and physical properties of the petroleum
b.	The nature of the subsoil in which the petroleum occurs
c.	Any other matters relating to the discovery that are specified by The Delegate

**Table 7: DAILY, WEEKLY, QUARTERLY AND ANNUAL REPORTING**

DATA REQUIRED	REPORT TYPE	FORMAT	DATA FOR STATE/ TERRITORY	DATE FOR SUBMISSION (prior to or by)	REMARKS
Daily reports for wells	Documentary	PDF	One copy	By midday of the day after the day to which the report relates.	Must comply with Regulation 201 – see section 12 of Guidelines. Emailed to addresses designated by the Delegate.
Daily logs for wells	Documentary	PDF, PDS, META	One copy	By midday of the day after the day to which the logs relate.	Emailed to addresses designated by the Delegate.
Weekly reports for surveys	Documentary	PDF	One copy	As soon as practicable after the end of the week to which the report relates	Must comply with Regulation 202 – see section 13 of Guidelines. Emailed to addresses designated by the Delegate.
Quarterly reports for exploration permits	Documentary	PDF	One copy	No later than one month after the end of the quarter to which the report relates	Must comply with Regulation 204 – see section 15a of Guidelines. Emailed or delivered to addresses designated by the Delegate.
Annual reports for exploration permits and retention leases	Documentary	PDF	One copy	No later than one month after the end of the title year to which the report relates	Must comply with Regulation 205 – see section 16 of Guidelines. Emailed or delivered to addresses designated by the Delegate.