



Entreprise Tunisienne d'Activités Pétrolières
المؤسسة التونسية للأنشطة البترولية

Direction des Services Pétroliers
S/Direction Base de Données et Patrimoine

Guidelines for Submission of Well and Seismic Data and Reports to ETAP



Entreprise Tunisienne d'Activités Pétrolières
المؤسسة التونسية للأنشطة البترولية

Contents

1. INTRODUCTION	3
1.1. Objectives	3
1.2. General Requirements Regarding Data Transmission	3
1.3. Media and labelling	4
1.3.1. Media	4
1.3.2. Labelling	4
2. REPORTING GUIDELINES FOR WELL DATA	5
2.1. Predrilling	5
2.2. Well Log Data	5
2.3. Well Path Data	6
2.4. Core Data	6
2.5. Rock and Fluid Analysis Data	6
2.6. Well Seismic Data	6
2.7. Well Test Data	7
2.8. Field Development Data	7
2.9. Production Data	8
2.10. Well Operations Data	8
2.11. Reservoir Studies Data	8
2.12. G&G Studies Reports and Data Sets	8
3. REPORTING GUIDELINES FOR SEISMIC DATA	9
3.1. Data Exchange Format	9
3.2. Reports and Documents	9
3.3. Seismic Data Classification and Reporting Guidelines	10
4. APPENDIXES	20

1. Introduction

1.1. Objectives

The purpose of this document is to provide *Exploration Permit Holders, Prospecting Permit Licensees, Prospecting Authorization Licensees, and Production Licensees* as well as *Service Companies and Contractors* with the general requirements regarding the standards of Transmission and Delivery of Exploration and Production data to the Entreprise Tunisienne d'Activités Pétrolières ETAP.

Technical Data Transmission Standards are adopted by ETAP's Database to ensure that data sets are organized per data type, which in turn will help check the completeness of data for each data category. The requirements regarding delivery mode, forms and formats, and timeframe will normalize the transmission and reception of data sets, enhance communication between ETAP and its partners and also guarantee that data is of known quality and simplify its final storage and loading to the system of records.

The current version of this document provides consistent standards for reporting of Well and Seismic Data to ETAP after completion of acquisition. These standards do not provide an exhaustive list of all conceivable data sets for well and seismic data categories, but they establish a detailed framework for the transmission and reporting of well and seismic data.

1.2. General Requirements Regarding Data Transmission

It is expected that data producers (Operators, and Services Companies) will deliver original well and seismic data to **ETAP's Database Reception Desk** within the required timeframes for each data category as specified in tables 1&2.

Each data set should be sent with associated information containing the attributes and parameters (metadata) of the produced data and with respect of the forms and formats required in tables 1&2.

Every transmission of data sets should be ushered by the **Standard Transmittal Sheet** provided in the appendixes of this report and also distributed to all data producers.

All data files should be clearly marked with the name of the Well/Borehole/Seismic Survey, as well as the Permit/concession to which the data refers.

Preliminary data sets are preferred to be sent via email, only Final quality controlled data sets are to be delivered to the Database Reception Desk.*

In the case of correction of data sets, the corrected version should be submitted to the Database Reception Desk as soon as possible with a separate data file with information regarding the data sets corrected and the reasons of replacement/correction.

The Status of the data sets should be clearly marked on the media:

- Raw Data
- Edited Data
- Interpreted

Headers of Wells/Boreholes/Seismic surveys in Excel files should be filled as per ETAP's Data Standards and shall be encapsulated in the media.

Naming conventions, Reference lists and Units of Measurement should be respected as per ETAP's Standards and requirements for well and Seismic data.

The Coordinate Reference Systems adopted by ETAP are UTM North Zone 32, Datum Carthage and WGS84.

1.3. Media and labelling

1.3.1. Media

Accepted media types for each category of data are detailed in tables 1&2 for Well and Seismic Data Transmission.

Each media should contain only one category of data of only one permit/concession.

Each media should be original and clearly labelled.

1.3.2. Labelling

Each media should be individually labelled and contain:

- Company name and Logo (Reference list)
- Permit/concession Name (Reference list)
- Well/Wellbore Name and Short Name for Well Data
- Seismic survey/line for Seismic Data
- Acquisition date
- Data Transmission Date
- Report/Study title and date

2. Reporting Guidelines for Well Data

This sections concerns the data generated before, during and after well drilling; it includes digital data created during drilling operations and also final reports and analysis applied on samples (rocks and fluids).

The listing of the required formats, structures, and timeframes for this data type are provided in table 1.

Options regarding media type and delivery mode include the following:

Email: specifically preferred for preliminary data exchanged between operators and ETAP technical teams for revision and decision making.

CD/DVD/USB Drive: for final digital data and reports in PDF format, they should be clearly labelled as required in the previous section.

2.1. Predrilling

Documents relative to a new well planning should be transmitted to ETAP as per the timeframes and formats listed in table 1.

Well/Borehole headers should be shared with the Database teams as soon as they are created and agreed on with ETAP's Exploration and Production teams.

Naming conventions for well and borehole, reference lists and units of measurements should respect ETAP's Data Standards provided in appendix.

Tendering documents for all field operations should be transmitted to ETAP as soon as call for tender is announced.

2.2. Well Log Data

All raw, composite, and interpreted log and mud data recorded from all data acquisition passes (MWD/LWD, and Mud Log Data) should be transmitted to ETAP's Data Reception Desk as delivered to the operator by the contractor.

Headers of the logs shall be completed and no editing, or filtering should be applied to the originally acquired raw data.

A logging summary document should be generated containing a summary of all well logging operations and should be included in the final well logging report

Digital raw log data should be reported in ASCII, Lis, Dlis, Las, PDS and/or Excel formats.

Final logging data should be reported in PDF format as detailed in table 1.

2.3. Well Path Data

Also known as Deviation survey data, this data set should contain both raw and interpreted data of Azimuth and deviation. The recommended industry standard format for deviation survey data is ACSII.

2.4. Core Data

Coring Program, Coring operation reports and final Core analysis (Conventional and special) should be reported to ETAP's Database Reception Desk according to the formats and timeframes detailed in table 1.

Conventional and Special Core Analyses (progress and final) should be transmitted to ETAP in Excel file format and final analyses report as PDF.

Core related data issued from sedimentology, petrography, SEM, and clay analysis as well as any study carried out on core, plug, and side wall cores should be transmitted to ETAP.

All core data should be referenced on driller's depth. Shift information data should be clearly reported and conventional core data curves should be referenced on logger's depth.

The industry standard format for core image and core related data is TIF.

2.5. Rock and Fluid Analysis Data

PVT, Formation pressure, Fluid Analysis, Geochemistry, petrography, mineralogy and Biostratigraphy analysis reports (progress and final) should be transmitted to ETAP's Database Reception Desk as per the requirements in table 1.

Data sets formats for raw analysis data is general Excel, and PDF for final interpretation reports.

2.6. Well Seismic Data

Well seismic data refers generally to the Checkshot survey, velocity survey or VSP (Vertical Seismic Profile) with a purpose to measure vertical seismic velocities and calibrate seismic well logs and surface seismic.

Raw and processed well seismic survey data sets should be reported in SEG Y with original field records and channels in the header.

Acquisition, recording parameters and equipment details should be reported in PDF format.

Requirements relating to Well Seismic Data submission to ETAP's Database Reception Desk are specified in table 1.

2.7. Well Test Data

Daily well testing reports should be shared daily with ETAP's Exploration and Production teams for follow up and decision making. Industry formats for well test data are generally ASCII, Excel or PDF.

Final Well test reports (DST, PLT, RST, and MDT/RFT) as well as well testing parameters should be reported to ETAP's Exploration and Production teams and to the ETAP's Database Reception Desk as per timeframe requirements detailed in table 1.

2.8. Field Development Data

Operators should reach out to the Authority and ETAP immediately as soon as commercial discovery is being announced. Discovery reports regarding the delineation of the field are required.

A Discovery report traditionally contains test data (Initial Reservoir Pressure and Initial Productivity Index, permeability and fluid contacts), overview of fluid samples, geological and reservoir technical results, results of core analyses, and the size of the petroleum reserves.

The Preparation of the Plan of Development POD is governed by the Code des Hydrocarbures (article 47).

At an early stage of the planning phase, the Plan of Development documentations should initially include:

- Structural Map
- Static and Dynamic Models
- Petrophysical Study
- Reserves Estimation and Production Strategy
- Economic Calculations and Assessment
- Plan of construction and use of installations and facilities for the treatment, storage, transport and shipment of petroleum
- Plan for recruitment and training of the personnel, specifically locals.
- Plan for Health, Security and Environment procedures

This documentation is prepared by the Operator and should be transmitted to ETAP according to the timeframe requirements detailed in table 1. It is expected that the Plan of Development documentation should be relative to the size and scope of the field to develop.

ETAP's Exploration and Production teams also prepare their own Plan of Development Documentation simultaneously, which consists the basis of ETAP's decision whether to grant approval of the development plan and partner with the Operator in the production phase.

2.9. Production Data

Operators in Production licenses are expected to deliver Daily, Weekly, and Monthly production reports via email to ETAP's Production teams with a copy to the Database teams.

The required industry format for Daily, Weekly, and Monthly production reports is Excel file. A Standard template for this data type entry is provided by ETAP to simplify data loading and validating in the Production Database.

Production History and Recapitulation Reports shall be generated on ETAP's demand. Requirements regarding timeframe and format for this data type are detailed in table 1

2.10. Well Operations Data

Programs of various operations carried out on the well such as Acid Stimulation, Perforation, and Artificial Lifting shall be reported to ETAP's Production teams via email and to ETAP's Database Reception Desk in digital and physical formats as required in table 1.

2.11. Reservoir Studies Data

Scope of Work, Progress, and Final reports of any study conducted on the reservoir should be transmitted to ETAP's Database Reception Desk with respect of the standards and requirements detailed in table 1.

These studies might include, but not limited to:

- Petrophysical Studies
- Structural and Geologic Models
- Updated Reserves and Volumes Assessment

2.12. G&G Studies Reports and Data Sets

All Reports of any G&G study carried out on well or several wells in one Exploration Permit or Production license should be submitted to ETAP's Database Reception Desk.

Formats shall be generally PDF, ASCII and Excel formats are required for analyses results and metadata.

3. Reporting Guidelines for Seismic Data

The main objective of this section is to provide Operators and Seismic Acquisition contractors with basic requirements regarding the reporting of Seismic data and reports to ETAP's Database Reception Desk.

Adopting and applying industry standards relating to the indexing and reporting of seismic data to ETAP will guarantee that the delivery timeframe and formats for each data type are respected, quality is known and data is stored in a secure environment in order to be made available for use later for internal and external users.

3.1. Data Exchange Format

The industry standard format for seismic positioning data and raw navigation field data is UKOOA (United Kingdom Offshore Operators Association).

UKOOA Px/ (98, 94, 90, 11) has become the new format developed by the International Association of Oil and Gas Producers (IOGP), where x designates the data type:

P1: Navigation Position Data

P2: Field Navigation Raw Data

P6: Seismic Bin Grid Data

It is required that Seismic data types should be reported to ETAP's Database Reception Desk according to the formats and delivery timeframes specified in table 2.

The respect of the standards of seismic data transmission will simplify the loading, storage and retrieve of seismic data types in the seismic database

The expected format for raw field seismic data (Seismic Trace Data) is SEG-D 3.1 and SEG-D 2.1, and the required delivery media is LTO07 Disk and 3592 cartridges.

Any change or upgrade to a more recent format or media should be declared in the seismic acquisition planning phase and reported to ETAP's Database in advance.

3.2. Reports and Documents

Navigation reports, Acquisition reports, observer logs, Processing and Interpretation Reports should be submitted to ETAP's Database Reception Desk according to the transmission standards detailed in table 2.

Formats of reports shall be generally PDF and ASCII. Media is generally hard disk drives and they should be labelled according to guidelines detailed in section 1.2.2 of this report.

A list of deliverable should accompany the transmission of seismic data listing all the reports and documents enclosed.

Reports shall be submitted to ETAP's Database Reception Desk as final versions, any correction or revision made to the report should be incorporated in a newer version with a document indicating the reasons of correction or revision.

It is expected that Operators and Seismic Acquisition contractors are accountable for the compliance to the requirements and standards relating to the formats, delivery timeframe and reporting guidelines of seismic data.

3.3. Seismic Data Classification and Reporting Guidelines

The following tables define the classification of the minimum required seismic data and reports for each seismic data type with comments regarding the reporting guidelines. This classification takes into consideration the seismic processing perspective as well as the seismic survey type.

2D SEISMIC DATA		
1. Field Data		
Required Data	Format	Comments
Navigation data - Includes final processed navigation and bathymetry data	UKOOA SPS	P1/90 or subsequent format with header information of navigation / shotpoint location data including elevations or bathymetry. Header data includes geodetic datum, spheroid, projection and clearly stated transformation parameters.
Raw Navigation data	UKOOA SPS	P2/94 or subsequent format.
Seismic field data	SEG Standard	
Seismic support data	PDF, XLS, TXT	Observers logs, Surveyors notes, chaining diagrams, intersections,. All associated data sufficient to re-process seismic data including shot and receiver coordinates
Itemized field tape listing	Digital (ASCII), XLS	Field data showing survey name, line number and shotpoint range. file number range, tape number, range, start date and End data acquisition
Uphole data	Standard format	Including Uphole number, position (X,Y,Z)
Uphole support data	Digital (ASCII), XLS	Uphole summary including position/ seismic line SP (x,y,z), uphole depth, and depth for each sediment met during drilling
Uphole Interpretation Data	XLS, TIF,	Uphole depth, and time depth for each uphole associated with well log, lithology (rock type)

2D SEISMIC DATA		
2. Processed Data		
Required Data	Format	Comments
Final navigation data	UKOOA, SPS	SEG format
Un-processed Data (first time processing only)	SEGY	Shot Gathers: -Pre-stack gathers with geometry installed (identified gathers)
Raw and final stacked data, near/mid/far sub-stacks - if generated	SEG-Y	Includes fully annotated EBCDIC binary and trace header
Raw and final migrated data including PSDM / PSTM, near/mid/far sub-stacks - if generated	SEG-Y	Includes fully annotated EBCDIC binary and trace header.
Fully annotation image of final processed migrated data (seismic line)	TIF	The image must have a vertical scale of not less than 5 cm/sec, and horizontal scale not less than 10 tr/cm (or 20 tr/in)
Shotpoint to CDP relationship	ASCII, XLS	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.
Itemized process tape listing	ASCII, XLS	Showing tape number, survey name, line number, shot point range, cdp range and data type, processing phase.
Velocity data	ASCII , Standard format	Including line number, shot point and time versus RMS pairs for both stacked and migrated velocities.

2D SEISMIC DATA		
3. Final Reports		
Required Data	Format	Comments
Final report (operations and navigation)	PDF	Location map included. Onboard processing and any retained outputs to be documented in report.
Final processing report	PDF	-Description of seismic processing flow and algorithms (including examples in figures of processing products) and all related information such as amplitude signature. -To include sample print out of SEGY EBCDIC header.
Final interpretation report	PDF	
Digital images of interpretation maps	TIF	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks as Geo-referenced TIF images.

3D SEISMIC DATA		
1. Field Data		
Required Data	Format	Comments
Final Processed Navigation Data (Includes bathymetry Data)	UKOOA, SPS	All associated data sufficient to re-process seismic data including shot and receiver coordinates.
Raw Navigation data	UKOOA, SPS	P2/94 or subsequent format.
Seismic field data	SEG Standard	To be submitted on high density media.
Seismic support data	PDF, xls, txt,	Includes observer's logs. and All associated data sufficient to re-process seismic data
Itemized field tape listing	ASCII,XLS,	Showing tape number, survey name, line number, shotpoint range file range,Start and End acquisition date,energy source and data type.
Uphole data	Standart format	Including Uphole number, position (X,Y,Z) if possible
Uphole support data	Digital (ASCII), XLS	Uphole summary including position/ seismic line SP (x,y,z), uphole depth, and depth for each sediment met during drilling
Uphole Interpretation data	XLS, TIF,	Uphole depth, and time depth for each uphole associated with well log, lithology (rock type) and the

3D SEISMIC DATA		
2. Processed Data		
Required Data	Format	Comments
Raw stacked data, near/mid/far sub-stacks - if generated	SEG-Y	Includes fully annotated EBCDIC binary and trace header.
Un-processed Data (first time processing only)	SEGY	Shot Gathers: -Pre-stack gathers with geometry installed (indented gathers)
Raw and final migrated data including PSDM / PSTM, near/mid/far sub-stacks - if generated	SEG-Y	Includes fully annotated EBCDIC binary and Trace header.
Final processed (grid) bin coordinates	UKOOA 3D binning grids	To be completed using UKOOA P6/98 format.
Polygonal position data (Full Fold Outline)	ASCII tab delimited	Listing major inflection points of a polygon describing the location of the survey providing survey name, polygon point, inline/crossline nomenclature, latitude and longitude.
Velocity data	ASCII (Standard Format)	Includes bin number and time versus RMS velocity pair for both stacked and migrated velocities.
Itemized process tape listing	ASCII	Showing tape number, survey name, in-lines and crosslines, CDPs and data type.

3D SEISMIC DATA		
3. Final Reports		
Required Data	Format	Comments
Final report (Operations and navigation)	PDF	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	PDF	To include sample print out of SEGY EBCDIC header and 3D grid definition details used for loading SEGY into interpretation work stations.
Final interpretation report	PDF	
Digital images of interpretation maps	TIF	These include TWT structure maps at key horizons and representative sections showing seismic horizon picks as Georeferenced TIF images.

GRAVITY/MAGNETIC		
1. Field Data		
Required Data	Format	Comments
Aeromagnetic located field data	ASCII columns	Must include: descriptive headers, flight number, line number, date and time, 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
Gravity field data	ASCII columns	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
Altimeter, storm monitor, etc. (aeromagnetic only)	ASCII (appropriate format)	One copy of analog monitor records, daily records and altimeter records in an appropriate format.
Digital images of interpretation maps	TIF	These include any maps included in the Interpretation report as separate Georeferenced TIF images.

GRAVITY/MAGNETIC		
1. Processed Data		
Required Data	Format	Comments
Field and processed data	ASCII	ASCII data includes ASEG- GDF2 format.
Aeromagnetic processed data	ASCII GDF2	Including pre and post microlevelling data. All coordinate data must also include clearly stated datum, spheroid and projection also clearly stated transformation parameters
Gravity processed data	Standard Format	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
Geophysical images	PDF	

GRAVITY / MAGNETIC		
1. Final Reports		
Required Data	Format	Comments
Final report (operations, navigation and processing)	PDF	Must include location map and flight line map. Aeromagnetic surveys: Including all equipment details and specifications, flight line directions and terrain clearance, line spacing, total line kilometers. Gravity surveys: Including meter type, scale factor for meter. Processing report must include company details and processing parameters.
Final interpretation report	PDF	
Digital images of interpretation maps	TIF	These include any maps included in the Interpretation report as separate Digitized TIF images.

4. Appendixes

Appendix A: Table 1 Well Data Transmission and Reporting Standards

Document Title/Data Set	Data creation process	Format	Media Type/Delivery mode	Delivery timing/frequency	N° of Digital Copies	N° of Physical copies	Remarks
Well Header	Standard Template	Excel	CD/DVD/USB DRIVE	15 days after end of drilling	1		The template is to be socialized to operators
Borehole Header	Standard Template	Excel	CD/DVD/USB DRIVE	15 days after end of drilling	1		The template is to be socialized to operators

Pre Drilling							
Environmental Impact Assessment Study Report	Report	PDF/paper	CD/DVD/USB DRIVE/email	30 days after well drilling agreement	1	1	Environmental Impact assessment Study
ANPE Approval Report	Report	PDF/paper	CD/DVD/USB DRIVE/email	30 days after well drilling agreement	1	1	
Well Geological Program	Report	PDF/paper	CD/DVD/USB DRIVE/email	2 months prior to drilling	1	1	
Well Drilling Program	Report	PDF/paper	CD/DVD/USB DRIVE/email	2months prior to drilling	1	1	
Well Completion Program	Report	PDF/paper	CD/DVD/USB DRIVE/email	2 months prior to drilling	1	1	
Well Testing Program	Report	PDF/paper	CD/DVD/USB DRIVE/email	2 month prior to drilling	1	1	
Tendering documents	Document	PDF/paper	CD/DVD/USB DRIVE/email	1 month after call for tender	1	1	

Drilling

1. Daily							
Daily Moving Report	Raw/Report	PDF/word, Excel	CD/DVD/USB DRIVE/email	daily/before 10 am	1	1	Daily acquired data is mainly sent by email to a number of recipient/drilling project
Daily Drilling Report	Raw/Report	PDF/word, Excel	CD/DVD/USB DRIVE/email	daily/before 10 am	1	1	
Daily Geological Report	Raw/Report	PDF/word, Excel	CD/DVD/USB DRIVE/email	daily/before 10 am	1	1	
Daily Testing Report	Raw/Report	PDF/word, Excel	CD/DVD/USB DRIVE/email	daily/before 10 am	1	1	
Daily Workover Report	Raw/Report	PDF/word, Excel	CD/DVD/USB DRIVE/email	daily/before 10 am	1	1	
Daily Completion Report	Raw/Report	PDF/word, Excel	CD/DVD/USB DRIVE/email	daily/before 10 am	1	1	
Daily Ascii ML Data	Raw/Report	ASCII/Las/Excel	CD/DVD/USB DRIVE/email	daily/at the end of operation	1	1	
Daily MWD/LWD	Raw/Report	PDF/Excel/Las	CD/DVD/USB DRIVE/email	daily/at the end of operation	1		
Daily Gas log	Raw/Report	PDF/Excel/Las	CD/DVD/USB DRIVE/email	daily/at the end of operation	1	1	
2. Final							
Final Drilling Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Final Completion Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Final Geological Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Composite Log	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1month after end of drilling	1	1	
Mud Logging End of Well Report	Interp/Report	PDF/word	CD/DVD/USB DRIVE/email	1month after end of drilling	1	1	
PLT Interpretation Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1week after end of operation	1	1	
Drilling Fluids Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1month after end of drilling	1	1	
Drilling Cement Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	1month after end of drilling	1	1	
Imagery Report	Interp/Report	PDF/paper	CD/DVD/USB DRIVE/email	2 months after end of drilling	1	1	
Final Well logging Acquisition Report	Interp/Report	PDF/word/paper	CD/DVD/USB DRIVE	1month after logging operation	1	1	
Final Petrophysical Report	Interp/Report	PDF/word/paper	CD/DVD/USB DRIVE	1month after logging operation	1	1	
Final Well Report (contractor)	Interp/Report	PDF/word/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Final Workover Report	Interp/Report	PDF/word/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Final Completion Report	Interp/Report	PDF/word/paper	CD/DVD/USB DRIVE/email	2 months after end of drilling	1	1	
Final Well cost	Rpeort	PDF/Excel	CD/DVD/USB DRIVE/email	at the end of drilling	1	1	
Drilling Stock	Report	PDF/Excel	CD/DVD/USB DRIVE/email	2 months after end of drilling	1	1	

Logs/Wireline Logging							
Well logging Program	Report	PDF/word/paper	CD/DVD/USB DRIVE/email	2 months prior to drilling	1	1	
Drill Log Plot	Report/Plot	ASCII/PDF/Excel/TIF/paper	CD/DVD/USB DRIVE/email	Daily	1	1	
Mud Logging Data/calcimetry time and depth	Report/Plot	PDF/TIF/paper/ASCII	CD/DVD/USB DRIVE/email	Daily	1	1	
Mud Log Plot	Report/Plot	PDF/TIF/paper	CD/DVD/USB DRIVE/email	Daily	1	1	
Time Log Plot	Report/Plot	PDF/TIF/paper	CD/DVD/USB DRIVE/email	Daily	1	1	
Master Log	Interp/Report/plot	PDF/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Drilling Log	Interp/Report/plot	PDF/paper	CD/DVD/USB DRIVE/email	1 month after end of drilling	1	1	
Pressure Log Plot	Report/Plot	PDF/TIF/paper	CD/DVD/USB DRIVE/email	1 month after the operation	1	1	
Deviation Survey	RAW	Excel/ASCII	CD/DVD/USB DRIVE/email	Daily/after drilling operation	1		
Raw Well Log data (Main Pass/ Repeat Pass)	RAW	Las/ASCII/Lis/Dlis	CD/DVD/USB DRIVE/email	after logging operation	1	1	
Final Well logging Report	Interp/Report	PDF/word//paper	CD/DVD/USB DRIVE/email	1month after logging operation	1	1	

Well Path							
Original survey points	Report	ASCII/PDF/Excel/TIF/paper	CD/DVD/USB DRIVE/email	2 months before drilling	1	1	
Deviation Survey	Report	ASCII/PDF/Excel/TIF/paper	CD/DVD/USB DRIVE/email	daily/after drilling operation	1	1	
Final well position report	Report	ASCII/PDF/Excel/TIF/paper	CD/DVD/USB DRIVE/email	1 month before drilling	1	1	
Well site Survey	Report	ASCII/PDF/Excel/TIF/paper	CD/DVD/USB DRIVE/email	2 months before drilling	1	1	

Well Seismic							
1. Velocity Logs							
Time-Depth-Velocity: Depth based	RAW	Dlis/Las/ASCII/SEGY	CD/DVD/USB DRIVE/email	1 month after the processing	1		
Time-Depth-Velocity: Time based	RAW	Dlis/Las/ASCII/SEGY	CD/DVD/USB DRIVE/email	1 month after the processing	1		
2. VSP							
Well site survey	RAW/Report	ASCII/PDF/Excel/TIF/paper	CD/DVD/USB DRIVE/email	2 month before drilling	1	1	
Raw Wellbore Seismic Plot	RAW	TIF/PDF	CD/DVD/USB DRIVE	At the end of acquisition	1	1	
Processed Wellbore Seismic	RAW	SEGY/LAS	CD/DVD/USB DRIVE	At the end of processing	1	1	
Wellbore Seismic Acquisition Report	Report	TIF/PDF/word	CD/DVD/USB DRIVE	1 month after the acquisition	1	1	
Wellbore Seismic Processing Report	Report	TIF/PDF/word	CD/DVD/USB DRIVE	1 month after the processing	1	1	

Coring							
Coring SOW (Coring Program & Labs Evaluation)	Report	PDF	CD/DVD/USB DRIVE/email	2 months prior to drilling (drilling program)	1	1	
Core analysis reports (progress)	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	Weekly/Monthly progress report	1	1	
Final Core Analysis report (RCA/SCAL)/analysis results	Plot	PDF/Excel	CD/DVD/USB DRIVE/email	2 weeks after analysis completion	1	1	
Well CoreLog Plot/Chart	Plot	PDF/TIF	CD/DVD/USB DRIVE/email	at the end of coring job	1	1	
Raw Core analyses (Conventional)	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	3 months average	1	1	depending on samples number/workload
Raw Core analyses (Special)	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	6 months average	1	1	depending on samples number/workload
Depth shifted Core (Conventional)	Report	PDF/Excel	CD/DVD/USB DRIVE/email	at the end of coring job	1	1	Core gamma ray helps in shifting in-situ/lab
Petrography Core Analysis Report (thin section/description/counting/SEM)	LAB	PDF/Excel/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion	1	1	depending on samples number/workload
Coring Operations Report	Report	PDF	CD/DVD/USB DRIVE/email	at the end of coring job	1	1	
Description Core Analysis Report	Interp/Report/Plot	PDF/TIF/	CD/DVD/USB DRIVE/email	at the end of coring job/lab study	1	1	in situ: quick look, in lab: detailed report
Rock Mechanics Core Analysis Report	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	Special Core Analysis
SWC Core Analysis Report	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	
Core Plug Photograph	Lab Photo/Report	PDF/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	
Core CT Images	Lab Photo/Report	PDF/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	
Core/Sidewall Core Photograph (UV and white light)	Lab Photo/Report	PDF/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	
Micrograph Image (thin section photo)	Lab Photo/Report	PDF/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	
Core Photograph, Scale	Lab Photo/Report	PDF/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	
Core Photograph, 360	Lab Photo/Report	PDF/TIF	CD/DVD/USB DRIVE/email	2 weeks after analysis completion/if acquired	1	1	

PVT							
PVT SOW (PVT Program & Labs Evaluation)	Report	PDF	CD/DVD/USB DRIVE/email	2 months prior to drilling (drilling program)	1	1	
PVT alaysis reports (progress)	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	monthly progress report	1	1	
Final PVT alaysis reports	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	2 weeks after analysis/reporting completion	1	1	
Formation pressure Report	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	2 weeks after analysis/reporting completion	1	1	
Fluid Analysis Report	LAB	PDF/Excel	CD/DVD/USB DRIVE/email	2 weeks after analysis/reporting completion	1	1	

Well Testing							
Well Testing Prorgam	Report	PDF/paper	CD/DVD/USB DRIVE/email	3 weeks before operation	1	1	
Daily Testing Reports	RAW/Report	PDF/ASCII/EXCEL	CD/DVD/USB DRIVE/email	Daily		1	
Testing Raw Data (guages Data, Testing Parametres Data...)	RAW	PDF/ASCII/EXCEL	CD/DVD/USB DRIVE/email	5 to 10 days after operation	1	1	
Final Testing Reports (DST, PLT, RST, MDT/RFT)	RAW/Interp	PDF/ASCII/EXCEL	CD/DVD/USB DRIVE/email	5 to 10 days after operation	1	1	

Rock And Fluid Analysis							
Fluid Analysis Report/all fluids	LAB/Report	PDF/ASCII/EXCEL	CD/DVD/USB DRIVE	2 weeks after analysis/reporting completion	1	1	
Geochemical/petrography/mineralogy	LAB/Report	PDF/ASCII/EXCEL/TIF	CD/DVD/USB DRIVE	2 weeks after analysis/reporting completion	1	1	
Biostratigraphy Data Plot	LAB/Plot	PDF/TIF/paper	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Biostratigraphy Report	LAB/Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Cuttings Analysis Report/photographs	LAB/Report	PDF/ASCII/EXCEL/TIF	CD/DVD/USB DRIVE	2 weeks after analysis/reporting completion	1	1	

Field Development FDP							
Discovery Notification	Report	PDF/paper	CD/DVD/USB DRIVE/email	48h after discovery/after testing	1	1	
Discovery Report(Technical)	Report	PDF/paper	CD/DVD/USB DRIVE/email	90 days after notification	1	1	
Discovery Report(Delineation and usage)	Report	PDF/paper	CD/DVD/USB DRIVE/email	30 days after discovery	1	1	
Final Discovery report	Report	PDF/paper	CD/DVD/USB DRIVE/email	180 days after discovery	1	1	

Plan of Development POD Documents							
Structural Map	Map	PDF/TIF	CD/DVD/USB DRIVE/email	90 Days before submitting the POD	1	1	
petrophysical Study	Report	PDF/TIF	CD/DVD/USB DRIVE/email	90 Days before submitting the POD	1	1	
model statique	Map/Report	Petrel/Eclipse model/PDF	CD/DVD/USB DRIVE/email	90 Days before submitting the POD	1	1	
model dynamique	Map/Report	Petrel/Eclipse model/PDF	CD/DVD/USB DRIVE/email	90 Days before submitting the POD	1	1	
Reserves and production profile	Map/Report	PDF/Excel	CD/DVD/USB DRIVE/email	90 Days before submitting the POD	1	1	
calcul économique	Report	PDF/Excel	CD/DVD/USB DRIVE/email	90 Days before submitting the POD	1	1	
Development Plan	Report	PDF/paper	CD/DVD/USB DRIVE/email	60 days after discovery agreement	1	1	
Monthly developement report	Report	PDF/paper	CD/DVD/USB DRIVE/email	10 days into the month	1	1	

Production							
Daily production report	Raw/report	Excel/PDF	email	daily/before 10am	1		
Weekly Production report	Raw/report	Excel/PDF	email	weekly	1		
Monthly production report	Raw/report	Excel/PDF	email	monthly	1		
Production History	Raw/report	Excel	email	on demand	1	1	
Production recap	Raw/report	Excel	email	monthly	1	1	
monthly activity report	Raw/report	Excel	email	monthly	1	1	

Well operations							
Acid Stimulation program	document	PDF/word	CD/DVD/USB DRIVE/email	2 weeks after operation completion	1	1	
Perforation program	document	PDF/word	CD/DVD/USB DRIVE/email	2 weeks after operation completion	1	1	
Slickline Program	document	PDF/word	CD/DVD/USB DRIVE/email	2 weeks after operation completion	1	1	
Artificial system Installing Program(SR"/ESP/GAS LIFT)	document	PDF/word	CD/DVD/USB DRIVE/email	2 weeks after operation completion	1	1	

Reservoir Studies/Petrophysical							
Reservoir Studies: SOW	Report	PDF	CD/DVD/USB DRIVE/email	1 month before the study	1	1	
Reservoir Studies: Progress	Report	PDF	CD/DVD/USB DRIVE/email	Weekly/monthly progress report	1	1	
Reservoir Studies: Final Reports	Report	PDF	CD/DVD/USB DRIVE/email	1 month after the study	1	1	
Static & Dynamic Models+Report	Report	Petrel/Eclipse models+PDF	CD/DVD/USB DRIVE/email	1 month after the study	1	1	
Stimulation Studies (acid job, HF, TTP...)	Report	PDF	CD/DVD/USB DRIVE/email	3 weeks before the operation	1	1	

G&G Studies							
Playnological study	Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Geochemical Study	Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Geological Report	Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Lithological Report	Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Stratigraphical Report	Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	
Sedimentological Report	Report	PDF	CD/DVD/USB DRIVE/email	1 month after study completion	1	1	

HSE							
1. Performance Monitoring							
Weekly HSE Report	Report	Excel PDF	CD/DVD/USB DRIVE/email	Every Monday	1		
Monthly HSSE Report	Report	Excel/PDF	CD/DVD/USB DRIVE/email	10th of next month	1		
Annual Environmental and Social Report (ETAP's Template)	Report	Word/PDF	CD/DVD/USB DRIVE/email	30 days into the next year (February max)	1	1	
ANPE Annual Report	Report	PDF	CD/DVD/USB DRIVE/email	3 months into the next year (March max)	1	1	
Incident Notification Report	Report	PDF	email	24h for severe accidents-7 days for moderate-in monthly report for low severity	1		As indicated in ETAP notification Matrix
Incident Investigation Report	Report	PDF	email	as soon as completed	1		
2. Safety Studies							
EIE and approval letter	Document	PDF	CD/DVD/USB DRIVE/email	prior to project	1	1	
HSE PLAN (for projects/drilling/workover,,)	Report	PDF	CD/DVD/USB DRIVE/email	prior to project	1	1	
PGES	Report	Word/PDF	CD/DVD/USB DRIVE/email	prior to project	1	1	
Hazard Study	Report	PDF	CD/DVD/USB DRIVE/email	prior to project	1	1	
Depollution Study	Report	PDF	CD/DVD/USB DRIVE/email	prior to project	1	1	
other HSE Studies (HAZOP/HAZID/SAFETY CASE,,)	Report	PDF	CD/DVD/USB DRIVE/email	prior to project	1	1	
3. Management System							
Updated HSE procedures	Report	PDF	CD/DVD/USB DRIVE/email	as soon as completed	1	1	
Audit reports	Report	PDF	CD/DVD/USB DRIVE/email	as soon as audit report is completed	1	1	
4. Safety Meetings							
HSE Workshops	Report	PDF	CD/DVD/USB DRIVE/email	as soon as completed	1	1	
Safety Meetings MOMs	Report	PDF	CD/DVD/USB DRIVE/email	as soon as completed	1	1	
Action Plans and Presentations	Report	PDF	CD/DVD/USB DRIVE/email	as soon as completed	1	1	
5. Operations Reports							
Project HSE Daily Report	Report	PDF/WORD/EXCEL	CD/DVD/USB DRIVE/email	daily	1	1	
Project HSE Monthly Report	Report	PDF/WORD/EXCEL	CD/DVD/USB DRIVE/email	monthly	1	1	
Drilling/Workover HSE Reports	Report	PDF/WORD/EXCEL	CD/DVD/USB DRIVE/email	as soon as completed	1	1	
Water/Air/Soil Analysis Reports	Report	PDF/WORD/EXCEL	CD/DVD/USB DRIVE/email	as soon as completed	1	1	
End of mud Treatment Reports	Report	PDF/WORD/EXCEL	EMAIL/FAX	as soon as completed	2	2	Second copy for ANPE

Appendix B: Table 2 Seismic Data Transmission and Reporting Standards

Dataset type	Data/Report	Dataset Name	Supported Formats	Media Type	Delivery timing	N° of Digital Copies	N° of Physical copies
Field data	Data	Trace data (Raw Field Seismic Data)	SEG-D 3.0, SEG-D 2.1, LAS, DAT	LTO7, 3592 cartridge	nearly 6 months	1	
	Data	Metadata Table	PDF, XLS	Hard disk	nearly 6 months	1	
	Data	Up hole raw data	SGY et DAT	Hard disk	nearly 6 months	1	
	Data	Significant data relevant to other parties	SEG-D 3.0, SEG-D 2.1	Hard disk	nearly 6 months	1	
Pre-stack data	Data	Nav-seis merge	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Pre Mig Gathers	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Post Mig Gathers	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Significant data relevant to other parties	SEGY	Hard disk	depending on processing timing & area of interest	1	
Post-stack data	Data	Stack with Pre-stack Migration (PSTM/PSDM) - Raw	SEGY	Hard disk	depending on processing timing & area of interest	1	

	Data	Stack with Pre-stack Migration (PSTM/PSDM) - Final	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Partial stacks	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Stack with Post-stack Migration - Raw	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Stack with Post-stack Migration - Final	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Seismic Inversion Cubes	SEGY	Hard disk	depending on processing timing & area of interest	1	
	Data	Significant data relevant to other parties	SEGY	Hard disk	depending on processing timing & area of interest	1	
Navigation data	Data	Raw navigation	SPS, UKOOA (P2/94 or later)	Hard disk	nearly 6 months	1	
	Data	Source-receiver navigation	SPS, UKOOA (P1/90 or later)	Hard disk	nearly 6 months	1	
	Data	Pseudo nCDP	SPS, UKOOA (P1/90 or later)	Hard disk	nearly 6 months	1	
	Data	nCDP	SPS, UKOOA (P1/90 or later)	Hard disk	nearly 6 months	1	
	Data	Post-plot CMP and BIN	SPS, UKOOA (P1/90 or later)	Hard disk	nearly 6 months	1	
	Data	GRID Navigation	SPS, UKOOA (P6/98 or later)	Hard disk	nearly 6 months	1	
	Data	SPS Files	SPS Format	Hard disk	nearly 6 months	1	
	Data	Significant data relevant to other parties	UNKNOWN	Hard disk	nearly 6 months	1	

Velocity Data	Data	PSTM PSDM Velocity products	SEGY	Hard disk	from 6 to 10 months	1	
	Data	Multi-component data	SEGY	Hard disk	from 6 to 10 months	1	
	Data	Significant data relevant to other parties	SEGY	Hard disk	from 6 to 10 months	1	
Reports and Other Documentation	Scouting Report	Scouting Report	PDF	Hard disk	from 6 to 10 months	1	1
	Report	Survey startup reports	PDF	Hard disk	1 week	1	1
	Report	Permitting reports	PDF	Hard disk	1 week	1	1
	Report	Surveying report	PDF	Hard disk	1 week	1	1
	Report	Daily acquisition reports	XLS, PDF	Hard disk	1 week	1	1
	Report	Weekly acquisition reports	WPRD, PDF	Hard disk	Once a Week	1	1
	Report	Monthly acquisition reports	PDF	Hard disk	Once a Month	1	1
	Report	Final Acquisition reports	PDF, TIF	Hard disk	1 month	1	1
	Report	Navigation reports	PDF, ASC	Hard disk	from 2 to 3 months	1	1
	Report	Navigation QC reports	PDF, ASC	Hard disk	from 2 to 3 months	1	1
	Report	Observer logs	PDF, ASC	Hard disk	from 2 to 3 months	1	1
	Report	HSE Reports	PDF	Hard disk	from 2 to 3 months	1	1
	Report	Daily processing reports	PDF, ASC	Hard disk	weekly to monthly	1	1
	Report	Weekly processing reports	PDF, ASC	Hard disk	Once a Week	1	1
	Report	Monthly processing reports	PDF, ASC	Hard disk	Once a Month	1	1
	Report	Up Hole Reports	PDF, XLS, DOC	Hard disk	1 month	1	1
	Report	Final Processing reports	PDF, ASC, WORD	Hard disk	daily	1	1
	Report	Interpretation reports	PDF, ASC	Hard disk	from 2 to 3 months	1	1
	Report	Tape Logs and Toc	PDF, ASC	Hard disk	from 2 to 3 months	1	1
	Report	Coverage maps	CGM, PDF, GIF	Hard disk	from 2 to 3 months	1	1

	Report	Misc media backup (Cart./DVD/CD/USB)	TAR	Hard disk	from 2 to 3 months	1	1
	Report	Well site survey (Offshore)	Pdf, word, ppt, segy, segd, excel, ukooa (navigation P190), .dat	Hard disk	from 2 to 3 months	1	1
	Report	Non Seismic Acquisition daily, weekly & monthly reports (GPR, gravi, magnetic, electromagnetic)	PDF, XLS, DOC, TIF	Hard disk	from 2 to 3 months	1	1
	Report	Final Non Seismic Acquisition reports (GPR, gravi, magnetic, electromagnetic)	PDF,WORD	Hard disk	daily, weekly & monthly	1	1
	Report	Significant data relevant to other parties	CGM,PDF,GIF,ASC	Hard disk	from 2 to 3 months	1	1
	Report	Final supervision report for seismic acquisition : Crew equipment & Personnel - Instrument acceptance test - Convergence analysis results - Program design & specifications - Startup testing - Geophone rotation - HPVA QC - Final brute stacks - GPR - Daily statistics	PDF, XLS, PPT	Hard disk	nearly 6 monts	1	1
Gravity/Magnetic data	Data	Grav/Mag data	P1/90 or later	Hard disk	3 to 6 months	1	
	Data	Gridded datasets	ASC	Hard disk	3 to 6 months	1	
Well Seismic	Data	Seismic well data report	PDF	Hard disk	nearly 4 to 6 months	1	1
	Data	Seismic well raw data	SEGY, SEGD	Hard disk	nearly 6 months	1	

	Report	Technical & Commercial Bidders response	PDF,WORD	Hard disk	1 to 2 months	1	1
	Report	Technical support presented by selected company	PDF,WORD	Hard disk	immediatly	1	1

