EXAMPLE OF PREFERRED FORMAT

GEOPHYSICAL DATA AND INFORMATION STATEMENT (GDIS)

Complete the GDIS form by: 1) Providing contact information; 2) Checking Option A and/or Option B; 3) Identifying the Area/Block(s) for the Option chosen; 4) Having a company official sign the document; and 5) Submitting the document to the Bureau of Ocean Energy Management (BOEM).

For all blocks listed, identify each survey (Proprietary and Reprocessed Speculative) that was used to evaluate the Sale block(s) in the attached example spreadsheet and provide the requestedmetadata.

Primary Company Contact	**Alternate Company Contact**
Name:	**Name:**
Title:	**Title:**
Company Name:	**Company Name:**
Street Address:	**Street Address:**
City: **State:**	**City:** **State:**
Zip Code:	**Zip Code:**
Phone Number:	**Phone Number:**
Email:	**Email:**

____A. (Company Name and BOEM Qualification Number) used proprietary data, reprocessed speculative data and/or any CSEM, Gravity or Magnetic data to evaluate the following block(s) bid upon in OCS Lease Sale Number _____

AREA/BLOCK: _____

____B. (Company Name and BOEM Qualification Number_____) used speculative data to evaluate the following block(s) bid upon in OCS Lease Sale Number.

AREA/BLOCK: _____

Signature of Company Official

Signature:_____

Name (Print):_____

Title:_____

Date:_____

Company Address

Company Name:_____

Address:_____

City:_____

State/Zip:_____

Definitions in order of appearance:

Primary Company Contact and **Alternate Contact** should be someone: 1) *knowledgeable about the data sets* identified as used in evaluating the block(s); 2) in a position to provide *additional information* about the data upon BOEM request; 3) able to expedite the delivery of the information/data; and 4) available up to 30 days after the sale date. This individual can be contacted for information in regards to data used and any other pertinent questions relating to the evaluation of the Sale block(s) in question. This includes seismic, CSEM (Controlled Source Electro Magnetic Data), gravity & magnetic, AVO data, etc. This is also the person whom BOEM would contact if there is a problem with the submitted GDIS or requested data (e.g., incorrect machine code format, I/O error, etc.).

Alternate Contact would be company representative that would be available should the Primary Contact not be available to answer questions listed above.

Area means the OCS Protraction Area of the block bid upon in the sale.

Block means the OCS block bid upon in the sale

Company Official means an official in accordance with signatory authorization on file in BOEM Gulf of Mexico Region Adjudication Unit.

Company Address means the official mailing street address, city, state, and zip code of the "Company Official" above or the address where the BOEM data requisition should be sent.

Sale	Bidder Company	Joint Bidder Company (s)	Company that will provide Proprietary Data to BOEM	Block Area	Block Number	Owner of Original Data set (WGC, CGG, etc.)	Original Industry Names (E-CAT, IRIS etc.)	BOEM OCS Permit	Is Data a Fast Track (Yes/No)	Is data Proprietary or Speculative	Data type used for sale *(2D/3D PSDM, CSEM, Gravity)*	Migration Algorithm (RTM, KIRCH, Inversion etc.)	Live Survey Coverage (2D miles, 3D Blocks)	Data Size in Giga Bytes	If Data was reprocessed, by whom	Date Final Reprocessing Completed (Mo., Yr.)	If data was sent to BOEM previous to current sale list date	Did you use Proprietary/ Speculative AVO/AVA (PROP/SPEC)	If AVO/AVA is Speculative list Owner and Industry Name	If AVO/AVA was sent to BOEM prior to this lease sale list date	AVO/AVA (PSTM/PSDM)	Angled Stacks (Near, Mid, Far etc.)	Gathers (Yes/No)	VIPs/VOOs (Yes/No)
250	Alpha	-	-	KC	256	WGC	IRIS Merge	L08-008, L08-002, L07-012, T06-011, L05-052	No	PROP	3D PSDM	RTM	10	2.65	CGG	Jun-17	No	PROP	WGC, IRIS	No	PSTM	Near, Far	No	No
250	Alpha	-	-	SM	256	PGS	FlexR III	L95-066	No	PROP	3D PSDM	KIRCH, BEAM	10	3	PGS	15-Jan	LS247 Mar-2017	PROP	FlexR VIII	No	PSTM	Near Mid Far	Yes	No
250	Alpha	Beta, Delta	Beta	EI	300	ION, GXT	GulfSPAN Reimaged		No	PROP	2D PSTM	KIRCH	250	1	GXT	May-16	No	-	-	-	-	-	No	No
250	Alpha	-	-	EI	320	CGG	EI Area 3	L95-020	No	SPEC	3D PSDM	RTM	50	12	-	-	-	-	-	-	-	-	No	No
250	Alpha	Delta	Alpha	GC	112	Alpha, CGG	GC Alpha 1 CGG GC PH A Merge	L16-099 L00-045	No	PROP	3D PSDM	RTM, Inversion	5	1.6	ih-house	Mar-17	WCD GC111 May-2017	PROP	GC Alpha 1	No	PDSM	Near, Mid, Far, Ultra-Far	Yes	Yes
250	Alpha	-	-	GC	222	EMGS	BrandNew	L16-236	Yes	SPEC	CSEM	Bayesian Inversion	10	2	-	-	-	-	-	-	-	-	No	No

Updated: 05/18/2017

The above spreadsheet is ficticious. It is only susposed to serve as an example.

Please do not:

Do Not Place more than one survey per Line. This does not include Merged Seismic Surveys.
Do Not Merge Columns using the Merge & Center Button
Do Not Merge Rows using the Merge & Center Button
Do Not Add Spacer Rows
Do Not Add Extra Columns of Data
Do Not Add Formating such as **Hard Returns** before or after data.
Do Not Password Protect Your GDIS

If you have any questions about the GDIS and how to fill it out properly contact D. Smith at 504-736-2706 or J. Johnson at 504-736-2455.

GDIS Table Definitions

Sale means the current lease sale number.

Bidder Company means the name of the company handing in the GDIS.

Joint Bidder Company list the name of the company's joint bidding with your company on current lease block.

Block Area means the OCS Protraction Area of the block bid upon in the sale.

Block Number means the OCS block bid upon in the sale.

Owner of Original Data means the company that acquired and processed the original data set. Indicate if the original data is proprietary to your company or if it is a speculative survey purchased from the company who originally acquired and processed the data.

Original Industry Survey Name means the name of original survey.

BOEM OCS Permit means the OCS permit number assigned by BOEM when the original survey was first acquired. *This number can be obtained from the data owner.*

Data Fast Track means the vendor sent your company a copy of the data before the processing is completed so that you can use the data for the sale.

Proprietary Data Type is any data that was soli acquired by an E&P Company or Speculative Data that has become proprietary through reprocessing. Any Speculative data such as 2-D or 3-D, pre-stack or post-stack, time or depth, amplitude with offset (AVO), inversion, CSEM, gravity and magnetic data that has been modified or changed from its original processing would be considered proprietary due to the proprietary processing.

Speculative Data Type is data that is available for purchase from a vendor for anyone; the original data "right out of the box".

Data Type used for sale means the data description: 2-D or 3-D, pre-stack or post-stack, time or depth, amplitude with offset (AVO), inversion, CSEM (Controlled Source Electro Magnetic Data), gravity, etc. that was used for the sale.

Migration Algorithm Used for sale means the type of migration (e.g., Kirchhoff, beam, wave equation, reverse time migration, etc.) used for the sale.

Live Survey Coverage means the number of line miles of 2D or the number of blocks of 3D data that comprise the data set identified.

Dataset Size in Giga Bytes refers to the SEG-Y file size in Gigabytes for 32 bit data.

If Data was reprocessed, by whom (Reprocessing Company) means the party who reprocessed the data set identified under Data Type. *If the data was reprocessed internally, please answer "In-House". If the data was reprocessed by an outside*

vendor, please name the company that reprocessed the data. Additionally, **Reprocessing** is the alteration of the original seismic data to suppress noise, enhance signal and migrate seismic events to the appropriate location in space. Other types of data may also be reprocessed including gravity, magnetics, CSEM (Controlled Source Electro Magnetic Data), etc., to improve the data quality. **Reprocessed Data** refers to the final version of the reprocessed data used in evaluation for OCS block(s) bid upon.

Date Processing Completed (MO, YR) this means the month and year that the processing was completed. If the data has been reprocessed the date should be that for reprocessing the data. If the month is not known list the year.

Data Sent to BOEM means BOEM has an identical copies of data used in the geophysical evaluation of the current lease block. Please indicate the date of transfer to BOEM and the associated sale number. Data may also have been sent to BOEM for a WCD or for the express purpose of re-evaluating reserves calculations, Conservation Information Document (CID), or if it was sent to BSEE for a Unitization.

Did your company use Proprietary or Speculative AVO/AVA did you use Amplitude Versus Offset stacks during the evaluation of the bid blocks that is Proprietary or Speculative in nature. AVO is the seismic reflection amplitude as a function of incidence angle.

If AVO is Speculative in nature list the owner and industry survey name.
Has AVO/AVA data been sent to BOEM prior to this lease sale? List date sent.

AVO (PSTM/PSDM) means is AVO used to evaluate the current lease block in time or Depth.

Angled Stacks means list all stacks that were used to evaluate the current lease block (near, mid, far, ultra-far etc.)

Did your company use **Gathers**? List Yes or No.

Did your company use **VIPs** or **VOOs** to evaluate the current lease block? **VIPs** (WGC/Schlumberger) is a Vector Image Partitioning used for image enhancements. **VOOs** (CGG) is Vector Offset Output uses optimized VOO stacks combining only the illuminating outputs to improve the seismic image quality.

If you have any questions, please contact Dee Smith at (504)-736-2706 or John Johnson at (504)-736-2455.

GDIS Envelope:

Geophysical Data and Information Statement for Oil and Gas Lease Sale

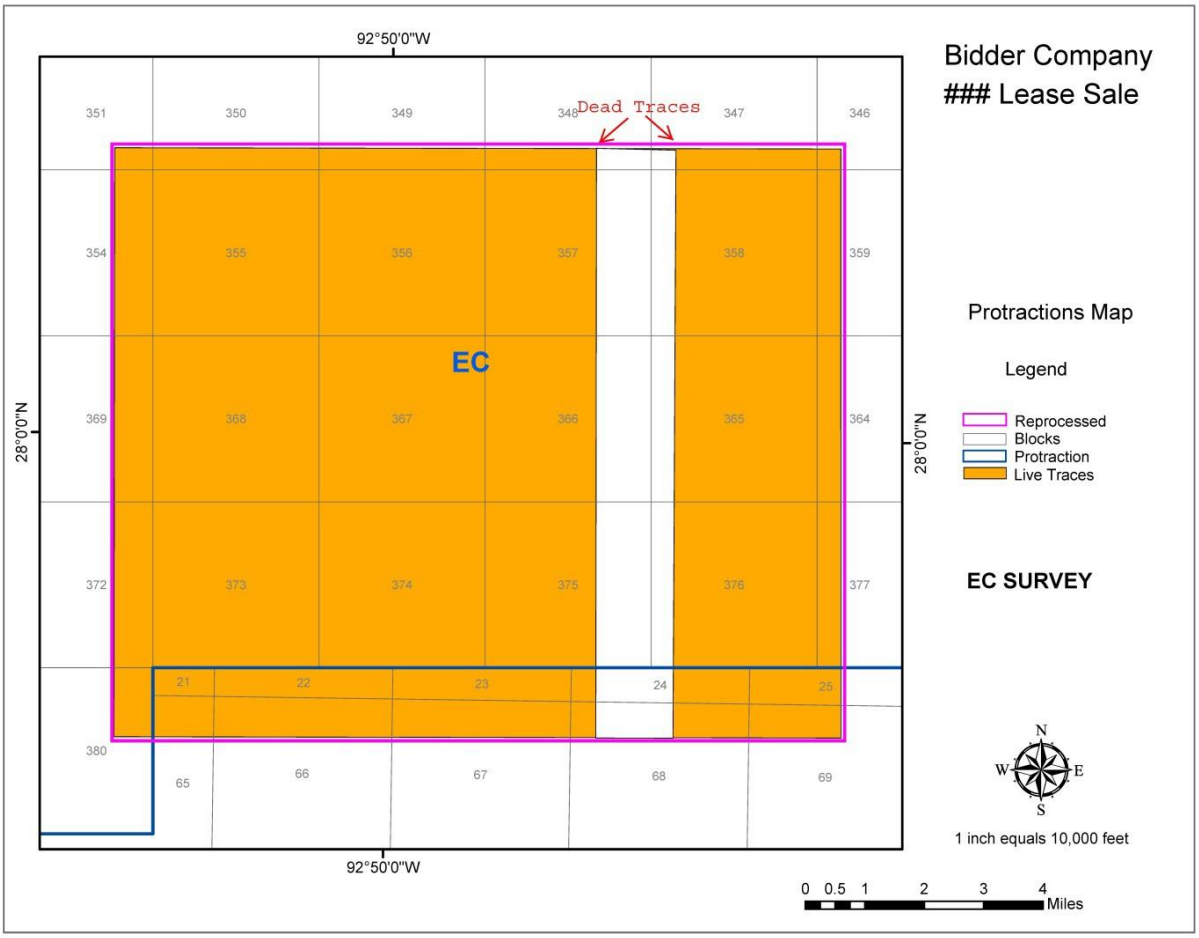
Company Name

GOM Company Qualification Number

Proprietary Data

Submittal of Reprocessed Data Survey Map

Example Seismic Survey PDF Live Trace Map:



1. The reprocessed seismic data survey map should be submitted in the two preferred formats listed below:
    a. PDF format: The map should be of such a scale that the protraction areas, blocks and block numbers are visible
    b. ArcGIS Shape File: The shape file should only include the live trace information. You do not need to include cultural information. The datum should be NAD1927. The map should not be projected; use latitudes and longitudes.

Submittal of Reprocessed Seismic Data

1) When submitting seismic data to BOEM, the following deliverables and formats are expected for 3D seismic data:
   a) Three-dimensional final processed and migrated seismic volume(s) recorded on USB External Hard Drive (formats: Linux ext2, ext3 or NTFS), or DVD media in SEG-Y standard exchange format.
   b) Digital bin-centered data of final locations associated with the survey(s) (first and last bin-centered points for each line) recorded on CD-ROM(s) and displayed in UK00A format (NAD 27 projection).
   c) A digital copy of the processing sequences that were applied to the data, along with a digital basemap image of the seismic coverage on a CD or DVD.
   d) Digital copies of SEG-Y byte positions for the three-dimensional digital data. Listings of the seismic lines on each data tape. Digital copies of workstations loading parameters for the data set, including survey azimuth, in-line spacing, trace or CDP spacing, sample rate, record length and the latitude, longitude (both in NAD 27 projection), line number, trace number for each corner position, (upper left, lower left, upper right, and lower right) recorded on CD- ROM.
   e) The velocity model(s) used to generate the above depth-migrated data set(s) recorded on USB External Hard Drive (formats: Linux ext2, ext3 or NTFS), or DVD media in SEG-Y standard exchange format.

2) As stated in the NOS:
   a) The data should be submitted to BOEM at the following address:
      Bureau of Ocean Energy Management
      Resource Studies, GM 881A
      1201 Elmwood Park Blvd.
      New Orleans, LA 70123-2304
   b) BOEM recommends that you mark the submission's external envelope as "Deliver Immediately to DASPU."
   c) BOEM also recommends than the data be submitted in an internal envelope, or otherwise marked, with the following designation "Proprietary Geophysical Data Submitted Pursuant to Lease Sale <Sale Number> and used during <Bidder Name's> evaluation of Block <Block Number>."