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 <u>all_blocks</u> 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 requested metadata.

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:					
B. (Company Name and BOEM Qualic evaluate the following block(s) bid up AREA/BLOCK:						
Signature of Company Official	Company Address					
Signature:	Company Name:					
Name (Print):	Address:					
Title:	City:					
Date:	State/7in:					

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 the 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 <u>street address</u>, city, state, and zip code of the "Company Official" above or the address where the BOEM data requisition should be sent.

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

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)	ls data Proprietary or Speculative		Migration Algorithm (RTM, KIRCH, Inversion etc.)	Live Survey Coverage (2D miles, 3D Blocks)	Data Size in Giga Bytes	If Data was reprocessed, by whom
								L08-008,							
								L08-002,							
								L07-012,							
								T06-011,							
250	Alpha	-	-	KC	256	WGC	IRIS Merge	L05-052	No	PROP	3D PSDM	RTM	10	2.65	CGG
250	Alpha	-	-	SM	256	PGS	FlexR III	L95-066	No	PROP	3D PSDM	KIRCH, BEAM	10	3	PGS
250	Alpha	Beta, Delta	Beta	El	300	ION, GXT	GulfSPAN Reimaged		No	PROP	2D PSTM	KIRCH	250	1	GXT
250	Alpha	-	-	El	320	CGG	El Area 3	L95-020	No	SPEC	3D PSDM	RTM	50	12	-
250	Alpha	Delta	Alpha	GC	112	-	GC Alpha 1 CGG GC PH A Merge	L16-099 L00-045	No	PROP	3D PSDM	RTM, Inversion	5	1.6	ih-house
												Bayesian			
250	Alpha	-	-	GC	222	EMGS	BrandNew	L16-236	Yes	SPEC	CSEM	Inversion	10	2	-

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.

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)
Jun-17	No	PROP	WGC, IRIS	No	PSTM	Near, Far	No	No
	LS247							
15-Jan	Mar-2017	PROP	FlexR VIII	No	PSTM	Near Mid Far	Yes	No
May-16	No	-	-	-	-	-	No	No
-	-	-	-	-	-	-	No	No
	WCD					Near, Mid,		
	GC111					Far, Ultra-		
Mar-17	May-2017	PROP	GC Alpha 1	No	PDSM	Far	Yes	Yes
-	-	-	-	-	-	-	No	No

Question and Answer section for the GDIS (Geophysical Data Information Sheet)

- 1. Q. Does my company still have to fill out a GDIS if we did not use any seismic data to evaluate the OCS Lease Block we are bidding on?
 - A. Yes, all bidders have to fill out a GDIS. Your company may type a response that no seismic was used on the GDIS for with your company's primary and secondary contact. Be prepared to answer any question about how your company made its decision to bid on the Lease Block.
- 2. Q. I'm not sure that the data that our company used it Proprietary.
 - A. Contact D. Smith at 504-736-2706 or J. Johnson at 504-736-2455 for help on this matter.
- 3. Q. I'm not sure what the OCS Permit Number is for the Seismic Survey that our company used to evaluate the current OCS Lease Sale Block.
 - A. Contact D. Smith at 504-736-2706 or J. Johnson at 504-736-2455 for help on this matter.
- 4. Q. Our company has a merged seismic survey that has three different owners and three different surveys merged into one. How should we fill this out on the excel spreadsheet?
 - A. List the owners of the merged seismic survey and list all the names and permit numbers to the best of your knowledge on the same line for this OCS Lease Sale Block.
- 5. Q. Our company has three different Proprietary Seismic Surveys that were used to evaluate several OCS Lease Blocks. How should we fill out the GDIS excel spreadsheet?
 - A. Your company should put each Seismic Survey and the accompanying information on separate lines for each OCS Lease Block. Data should not be clipped or cropped. BOEM will be requesting the entire reprocessed survey. If your company has additional questions contact D. Smith at 504-736-2706 or J. Johnson at 504-736-2455 for help on this matter.
- 6. Q. Our Company only used Speculative Seismic Data to evaluate the Lease Blocks that we bid on. Does our company have to fill out any more than the GDIS form?
 - A. Fill out the GDIS form and place all the block numbers in the correct location. You may if you choose put the Speculative Data sets on the excel spreadsheet. If you don't fill in the spreadsheet be prepared for additional inquiry via email or phone call. BOEM may wish to know which Speculative surveys your company used. Remember if the Speculative data set is altered from the original survey in any way it is considered Proprietary in nature; you must fill in the excel sheet and send in the shapefiles and survey live trace data map.
- 7. Q. I have a fast track data set. Do I have to do anything besides completing GDIS form and the GDIS excel spreadsheet?
 - A. Since the fast track data is exclusive to your company at the time of the Lease Sale and BOEM does not have access to it, it is considered Proprietary in nature. Your fast track survey should

be treated as Proprietary. Send the Surveys Live Trace outline and shape file with the digital files for the GDIS.

- 8. Q. Our company wants to change the bid amount on a variety of OCS Lease Blocks, not adding or subtracting any blocks. Do we have to fill out another GDIS Form or the GDIS excel spreadsheet.
 - A. Changing your company's bid without dropping or adding blocks will not affect the GDIS Form nor does it affect the GDIS excel sheet. No further action in needed, unless otherwise instructed by Leasing.
- 9. Q. Our company wants to change the bid by adding several blocks. Do we have to fill out another GDIS Form or the GDIS excel spreadsheet.
 - A. If your company adds additional OCS Lease Sale Blocks to your bid, your company should update the GDIS form and update the GDIS Excel sheet if there are Proprietary or Fast Track Seismic Surveys that were used for those new blocks. If you do change your GDIS form or the Excel spreadsheet make sure that Leasing knows which is the final version of the GDIS. It can be very confusing if BOEM receives more than one GDIS form per block or more than one Excel sheet for your company.

If you have any questions about the GDIS form or excel sheet don't hesitate to contact D. Smith at 504-736-2706 or J. Johnson at 504-736-2455.