EXAMPLE OF PREFERRED FORMAT

GEOPHYSICAL DATA AND INFORMATION STATEMENT (GDIS)

- 1. If you have any questions concerning the GDIS, please contact Dee Smith at (504)-736-2706 or John Johnson at (504)-736-2455.
- 2. Complete the GDIS form by:
 - a. Providing contact information;
 - b. Checking Option A and/or Option B;
 - c. Identifying the Area/Block(s) for the Option chosen;
 - d. Having a company official sign the document; and
 - e. Submitting the document to the Bureau of Ocean Energy Management (BOEM).
- 3. For <u>all</u> 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 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 Qualif following block(s) bid upon in OCS Le	Fication Number) used speculative data to evaluate the ease Sale Number							
AREA/BLOCK:								
Signature of Company Official	Company Address							
Signature:	Company Name:							
Name (Print):	Address:							
Title:								
Date:	State/Zip:							

GDIS Data And Information Statement Definitions In Order Of Appearance:

Primary Company Contact should be:

- 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 may be contacted for information in regards to data used and any other pertinent information 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 individual may be contacted by BOEM if there is a problem with the submitted GDIS or requested data (e.g., incorrect machine code format, I/O error, etc.).

Alternate Company Contact may be contacted if the Primary Company Contact is not available. The Alternate Company Contact should meet the criteria listed in the definition of the Primary Company Contact.

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 individual with signatory authorization on file in the BOEM Gulf of Mexico Region Adjudication Unit qualification records.

Company Address means the official physical mailing address including <u>street address</u>, city, state, and zip code of the "Company Official" defined above, or the address where the BOEM data requisition should be sent.

Example of GDIS Table (Spreadsheet)

- 1. The spreadsheet should be filled out with as much information as you know about each survey being listed. If any information is not known, place a dash in that space.
- 2. The following table <u>must be submitted digitally</u>, preferably as an Excel worksheet on a CD or DVD. While formatting is generally not critical, ALL columns shown below must be included and in the same order.

NOTE: A blank example GDIS Table in Excel format is available at the following link: http://www.boem.gov/Sale-249/

Sale	Bidder	Block	Block	Owner	Original	BOEM	Is	Is data	Data type	Migration	Live	Data	If Data was	Date Final	If data	Did
	Company	Area	Number	of	Industry	Permit	Data a	Proprietary	used for	Algorithm	Survey	Size in	reprocessed,	Reprocessing	was sent	you
				Original	Names		Fast	or	sale		Coverage	Giga	by whom	Completed	to BOEM	use
				Data set	(Crystal		Track	Speculative	(2D/3D		(2D miles,	Bytes		(Mo., Yr.)	previous	AVO
				(WGC,	Wats)				PSDM,		3D Blocks)				to current	Data
				cgg,					CSEM,						sale	
				etc.)					Gravity)						list date	
229	Company	GC	400	Western	E-Octopus	L07-012	No	Prop	3D PSDM	RTM	10	4	CGGVeritas	2010	6/2012	No
	Name				III											
229	Company Name	ST	170	IGC	Louisiana Shelf	N/A	No	Spec	Gravity	=	GOM	N/A	-	-	No	No
229	Company Name	WR	200	cgg	Phase I WAZ	L07-006	Yes	Spec	3D PSDM	KIRCH	5	2	-	-	No	No
229	Company Name	EI	100	Fairfield	Fairfield	N/A	No	Prop	3D PSDM	AVO (Near –Far)	5	2	In-House from Spec Gathers	2012	5/2013	Yes

GDIS Table Definitions in Order of Appearance

Sale means the current sale number.

Bidder Company is the name of your company.

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 the original survey.

Permit Number 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 solely 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; 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.

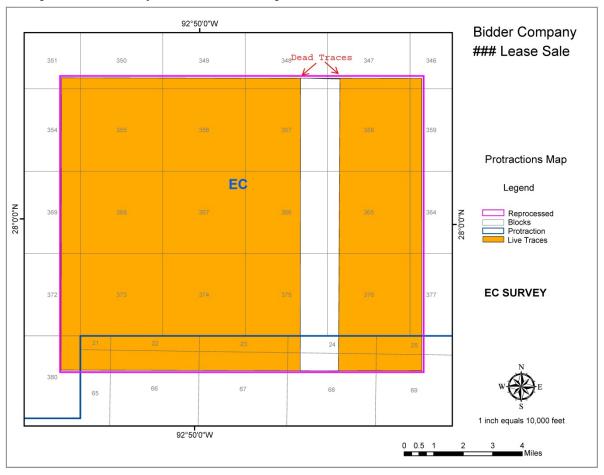
Live Survey Coverage means the number of line miles of 2D or the number of blocks of 3D data that comprise the data set identified.

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 Reprocessing Completed** (MO, YR) this means the month and year that the reprocessing was completed. If the month is not known list the year.
- **Data Sent to BOEM** means BOEM has an identical copy 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.
- **Did you use AVO data means** did you use Amplitude Versus Offset stacks during the evaluation of the blocks bid upon. AVO is the seismic reflection amplitude as a function of incidence angle.

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 SEGY 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>."

GDIS Envelope

Geophysical Data and Information Statement for Oil and Gas Lease Sale 249

Company Name

GOM Company Qualification Number #####

Proprietary Data