SEAM Phase I Well Log Data
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Well logs come from SEAM Phase I RPSEA Project Model. Logs are provided in ascii format for five wells for which simulation data were collected during TTI and/or elastic simulations. Please refer to the SEAM Phase I RPSEA project report for details on the acquisition. A pdf version of the report is included in this data distribution.

Well Log Data format:
Ascii log data are provided as one file per well per property. Two columns are provided in each file. The first column is well depth in meters and the second column contains log information. Data are provided in two ascii formats. One uses e-format for all log data and provides the most precision in the parameter specifications. The other uses F format where the formatting varies with data type.
File naming convention is as follows:
Parameter.Well.?.E for E-format data
Parameter.Well.? for F-format data
where Parameter tells which log parameter is contained in the file and Well.? refers to the well number. Well locations within the model are given as follows. Please refer to the SEAM Phase I RPSEA report to RPSEA for more details.
All logs have 1501 points representing depths from the surface (sea level) to 15,000 m at increments of 10 m.

Well Locations

Well 1.	East	10075 m	North	23900 m
Well 2.	East	12025 m	North	23900 m
Well 3.	East	15025 m	North	23900 m
Well 4.	East	27025 m	North	23900 m
Well 5.	East	15025 m	North	22900 m

Note that the East coordinate of the log positions do not fall on East-West grid locations of the SEAM Phase I model, which is gridded at an interval of 20 m in East -West and North-South coordinates. The log data were taken from the nearest grid point. Thus, log information is taken at positions as follows:

Positions Where Well Logs Are Provided

Well 1.	East	10080 m	North	23900 m
Well 2.	East	12020 m	North	23900 m
Well 3.	East	15020 m	North	23900 m
Well 4.	East	27020 m	North	23900 m
Well 5.	East	15020 m	North	22900 m

Parameter names are as follows

File name (e.g. parameter)	Parameter Description
BedDipX	X bed dip*
BedDipY	Y bed dip*
Delta	TTI Thomsen parameter Delta
Density	Model density in Kg/m^3 or g/cm^3
Epsilon	TTI Thomsen parameter Epsilon
Gamma	TTI Thomsen parameter Gamma
GeoIndexRes	Geological indicator value including reservoirs**
GeoSaltIndex	Geological indicator value not including reservoirs**
LayerGeoIndex	Geological indicator value before salt inserted**
PorosityEffective	Effective (sand) porosity (0 = no porosity; 1 = 100% porosity)
PorosityTotal	Total porosity (sand plus shale)
ResistivityHorizontal	Rotated horizontal resistivity in Ohm-m
ResistivityNormal	Bed normal resistivity in Ohm-m
ResistivityParallel	Bed parallel resistivity in Ohm-m
ResistivityVertical	Rotated vertical resistivity in Ohm-m
TTIDipX	X dip of TTI model (scaled from bed dips)*
TTIDipY	Y dip of TTI model (scaled from bed dips)*
Vp	P-velocity in m/s
VsElasticOriginal	S-velocity in m/s in model as built (min 120 m/s)
VsElasticSim	S-velocity in m/s in simulation model (min 600 m/s)
Vshale	Fractional volume that is shale (0 = no shale;1 = 100% shale)

* procedure for converting bed dip information into direction cosines of bed normals is described in the SEAM report to RPSEA. See section titled *Relation of dips to axis of symmetry and direction angles.*

** Coding for geological indicator data is described in Fehler, M. and P. J. Keliher, SEG 'SEAM Phase I: Challenges of Subsalt Imaging in Tertiary Basins, with Emphasis on Deepwater Gulf of Mexico, SEG, online ISBN 978-1-56080-294-5, 2011.

F-format Log data are contained in directory called Logs_In_Ascii
E-format Log data are contained in directory called Logs_In_Ascii_E