Data Set Citation

When using this data, please cite the data package

Carls M.
Analysis of hydrocarbons following the Exxon Valdez oil spill, Gulf of Alaska, 1989 - 2014
df35b.248.3 (https://goa.nceas.ucsb.edu/goa/metacat/df35b.248.3/default)

General Information

Title:	**Analysis of hydrocarbons following the Exxon Valdez oil spill, Gulf of Alaska, 1989 - 2014**
Identifier:	autogen.20170601144817667700.1
Abstract:	This hydrocarbon database was initiated after the Exxon Valdez oil spill in 1989. The first version was as an RBase database, PWSOIL(S migrated to a proprietary structure in 1997, EVTHD (Exxon Valdez Oil Spill Trustee Council Hydrocarbon Database) and contained the c analysis information for environmental samples obtained for the Exxon Valdez National Resource Damage Assessment and Restoration organized into three matrix types, tissues, sediment, and seawater. The analytical results included concentrations of 63 hydrocarbons, su evaluation of the hydrocarbon sources and laboratory quality control data. Features of the database included identification of replicate sa results in dry or wet weight, optional correction for method detection limits (MDL) of the analytes, and easy identification of samples conta Valdez crude oil. This structure, written in Visual Basic, ceased to function well when Windows operating systems were upgraded to XP a to a Microsoft Access format. The 2014 version continues in Access and is described in the included lexicon document. The 2014 versio analysis tool (Excel Office 2007 or greater) that flags recovery problems, provides method detection limit filtration (MDL), and source oil r not be used without understanding these details. Further instructions are in the lexicon document. These data are included here as expo individual tables from the original MS Access database file available at http://portal.aoos.org/gulf-of-alaska.php#metadata/91b73240-b68d-43d8-bd64-aea4ea14e976/project/files. The DataDownload.R script u files is also included here. The data have been manipulated and combined using the R script below (Total_PAH_and_Alkanes_GoA_Hyd output into the Total_Aromatic_Alkanes_PWS.csv file.
Keywords:	○ Exxon Valdez ○ oil spill ○ hydrocarbon ○ oil ○ pah ○ alkane ○ Alaska ○ EVOS

Data Table, Image, and Other Data Details:

Metadata download	Ecological M File

Data Table:

Name:	**Total_Aromatic_Alkanes_PWS.csv**
Description:	Combined dataset from PAH, Alkane and Sample tables documenting samples collected after the Exxon Valdez oil spill in Prin

Physical Structure Description:

Object Name:	Total_Aromatic_Alkanes_PWS.csv
Size:	2801033 byte
Text Format:	

Number of Header Lines:	1
Record Delimiter:	#x0A
Attribute Orientation:	column

	Simple Delimited:	Field Delimeter:

Number Of Records: 12142

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:44108e76-405d-4d58-b1b3-fb4b55e3fff9

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accu Asse
Funding		Funding source for sample collected		nominal	Domain Info			
Sin		Sample Identification Numbers uniquely identify each sample		nominal	**Def** sample ID			
Rep		Rep is sample replicate number and is determined by the analytical laboratory		ratio	**Unit** dimensionless **Type** natural			
LAB		Identifies the laboratory where the analysis was performed (Auke Bay Laboratory)		nominal	Domain Info			
QCbatch		Sample string; structure is either Ammddy, where A = analyst's initial or "R" for restoration, mm = month, dd = day, and yy = year or yyyy-mmddAA, where yyyy = year, mm = month, dd = day, and AA are analyst's initials		nominal	**Def** sample			
strMAT		String matrix. Contains the same basic information as Analysis type - but a single string can have more than one matrix represented.		nominal	**Def** string matrix			
Vol		Sample volume in milliliters (water only)		ratio	**Unit** milliliter **Type** real	**Code** NA **Expl** Not applicable		
Proportion		Proportion of passive sample analyzed (generally 0.5 or 1)		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** Not applicable		
DryWt		Sample dry weight in grams		ratio	**Unit** gram **Type** real			
WetWt		Sample wet weight in grams		ratio	**Unit** gram **Type** real			
AnalysisType		Each matrix is processessed according to a specific method. These methods are PEMD (passive samplers), SPMD (an alternative passive sampler), sediment, tissue, water		nominal	Domain Info			
Catno		Alphanumeric identifier to track groups of samples released by the database manager to an analytical laboratory for analysis		nominal	**Def** sample group			
comment		comment		nominal	**Def** notes	**Code** NA **Expl** Not applicable		
TtlAromatic		Sum of all measured polycyclic aromatic hydrocarbons (PAH) from PAH table (including "DIMETH"", "TRIMETH", and "MEPHEN1"; see "TPAH_adj" for sum excluding these three anlaytes)		ratio	**Unit** nanogramsPerGram **Type** real			
TPAH_adj		Sum of measured polycyclic aromatic hydrocarbons		ratio	**Unit** nanogramsPerGram			

		(PAH) from PAH table, excluding "DIMETH"", "TRIMETH", and "MEPHEN1"			**Type** real		
TOTALKANES		Total alkane concentration, including both calibrated and uncalibrated compounds		ratio	**Unit** nanogramsPerGram **Type** real		
depth		Optional sample depth in meters, measured from mean lower low water (MLLW) as measured or estimated by the sample collector		ratio	**Unit** meter **Type** integer		
Project		Abbreviated names for Exxon Valdez Trustee Natural Resource Damage Assessment and Restoration projects		nominal	**Def** project		
projectCode		Provides the project number assigned by the funding agency (required for EVOSTC projects). For further project detail, use projectCode with the EVOSTC website search engine (http://www.evostc.state.ak.us/Projects/SearchStart.cfm)		nominal	**Def** evostc project code		
invest		Alphanumeric identifier assigned to the sample by field personnel or the principal investigator.		nominal	**Def** invest		
CollectMethod		Method used to collect the sample. See table Collection Methods for further detail.		nominal	**Domain Info**		
matrix		Identifies sample type. Valid sample types (as of 2013) are agarose, blank, coal, creosote, oil, suspended particulate matter (PARTICLT), peat, PEMD, sediment, SPMD, tissue, rinse, and water.		nominal	**Domain Info**		
SubMatrix		Specific additional information about matrix [such as WHOLE (whole specimen), egg, stomach, tarball and asphalt].		nominal	**Def** matrix detail		
species		Species used for tissue samples. See table species for further explanation		nominal	**Def** species code		
DateCollected		Date sample was collected (required).		dateTime			
Year		Year sample was collected (required)		dateTime			
location		General sample collection area (required); see table LOCATION for abbreviations. Location refers to general areas, not specific latitudes and longitudes. Lat and Long also provided.		nominal	**Def** locations		
sampler		Last name of individual responsible for the collecting, handling, and security of field samples.		nominal	**Def** sampler name		
agency		Organization responsible for sample collection		nominal	**Domain Info**		
LAT		Latitude in decimal degrees		ratio	**Unit** degree **Type** real		
LONG		Longitude in decimal degrees		ratio	**Unit** degree **Type** real		
SampleType		Identifies the type of sample: ENV = environmental, EXP = experimental, blank = blank sample for quality assurance purposes, spike = spiked blank, OTHR = other type of sample (e.g., samples collected to test municipal water supply).		nominal	**Domain Info**	**Code** NA **Expl** Not applicable	
QCERROR		Identifier of reliability of the analytical results for individual samples. Good = no problems, BIAS = probable problems with the analytical data (Short et al. 1996b)		nominal	**Domain Info**		

Data Table:

Name:	**CollectionMethods.csv**

Description:	Collection method codes

Physical Structure Description:

Object Name:	CollectionMethods.csv
Size:	793 byte
Text Format:	Number of Header Lines: 0 Record Delimiter: #x0A Attribute Orientation: column Simple Delimited: Field Delimeter:

Number Of Records:	38

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:66c416af-84e6-4c7e-92a9-4413cf8acd7b

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accuracy Assessm
methodCode		Collection method abbreviation as designated in data tables		nominal	Def Collection method abbreviation			
Description		Description of collection method		nominal	Def collection method description			

Data Table:

Name:	**Non-EVOS_SINs.csv**
Description:	Sample ID numbers that are not funded by EVOSTC, used in R script to isolate EVOS samples

Physical Structure Description:

Object Name:	Non-EVOS_SINs.csv
Size:	3545 byte
Text Format:	Number of Header Lines: 1 Record Delimiter: #x0A Attribute Orientation: column Simple Delimited: Field Delimeter:

Number Of Records:	392

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:ae595730-172a-43d0-91f8-3173663d7dce

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accu Asse
Sin		Sample Identification Numbers uniquely identify each sample. This set represents samples that were funded by sources other than the Exxon Valdez Oil Spill Trustee Council (EVOSTC)		nominal	Def sin			

Data Table:

Name:	**PAH.csv**

Physical Structure Description:

Object Name:	PAH.csv
Text Format:	

Number of Header Lines:	1
Record Delimiter:	#x0A
Attribute Orientation:	column
Simple Delimited:	Field Delimeter:

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:5cde46ff-2e8e-4f40-97a1-eb4c4851f22f

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accu Asse
SIN	Sample Identification Number	A number that unique identifies each sample.		nominal	**Def** 4 digit codes in the format 9999	**Code** NA **Expl** No data for this observation		
type		The type of the sample		nominal	**Def** The type of the sample	**Code** NA **Expl** No data for this observation		
Rep		Rep is sample replicate number and is determined by the analytical laboratory		nominal	**Def** Rep is sample replicate number and is determined by the analytical laboratory	**Code** NA **Expl** No data for this observation		
LAB		Identifies the laboratory where the analysis was performed		nominal	**Def** Identifies the laboratory where the analysis was performed	**Code** NA **Expl** No data for this observation		
QCbatch2010		Sample string, structure is either AMMDDYY, where A = initial of analyst or "R" for restoration, or YYYYMMDDAA		nominal	**Def** Sample string, structure is either AMMDDYY, where A = initial of analyst or "R" for restoration, or YYYYMMDDAA	**Code** NA **Expl** No data for this observation		
DateExtracted		The date the sample was extracted.		dateTime		**Code** NA **Expl** No data for this observation		
strMat		String matrix. Contains the same basic information as analysis type but a single string can have more than one matrix represented		nominal	**Def** String matrix. Contains the same basic information as analysis type but a single string can have more than one matrix represented	**Code** NA **Expl** No data for this observation		
LabSam		Lab sample		nominal	**Def** Lab sample	**Code** NA **Expl** No data for this observation		
Vol		The volume of the sample		ratio	**Unit** milliliter	**Code** NA		

					Type real	**Expl** No data for this observation	
Proportion		Proportion of passive sample analyzed		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
DryWt		Sample dry weight		ratio	**Unit** gram **Type** real	**Code** NA **Expl** No data for this observation	
WetWt		Sample wet weight		ratio	**Unit** gram **Type** real	**Code** NA **Expl** No data for this observation	
AnalysisType		Each matrix is processed according to a specific model. These methods are PEMD (passive samplers), SPMD (an alternative passive sampler), sediment, tissue, water		nominal	**Def** Each matrix is processed according to a specific model. These methods are PEMD (passive samplers), SPMD (an alternative passive sampler), sediment, tissue, water	**Code** NA **Expl** No data for this observation	
Catno		Alphanumeric identifier to track groups of samples released by the database manager to an analytical laboratory for analysis		nominal	**Def** Alphanumeric identifier to track groups of samples released by the database manager to an analytical laboratory for analysis	**Code** NA **Expl** No data for this observation	
NaphD8		The percent of naphthalene-D8 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Acend10		The percent of acenaphthene-d10 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Phend10		The percent of phenanthrene-d10 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Anthra10		The amount of anthracene-d10 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Banth12		The percent of benzo(a)anthracene-d12 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Chryd12		The percent of chrysene-d12 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Benad12		The percent of benzo(a)pyrene-d12 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
Peryd12		The percent of perylene-d12 in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	

Units		The units of the sample		nominal	**Def** The units of the sample	**Code** NA **Expl** No data for this observation		
Naph		The amount of naphthalene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
Menap2		The amount of 2-methylnaphthalene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
MENAP1		The amount of 1-methylnaphthalene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
DIMETH		The amount of dimethylnaphthalene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
TRIMETH		The amount of trimethylnaphthalene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C3NAPH		The amount of C3 naphthalene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
BIPHENYL		The amount of biphenyl in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
ACENTHY		The amount of acenaphthylene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
ACENTHE		The amount of acenaphthene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
Fluorene		The amount of fluorene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C1FLUOR		The amount of C1-fluorene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C2FLUOR		The amount of C2-fluorene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C3FLUOR		The amount of C3-fluorene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		

C4FLUOR		The amount of C4-fluorene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
DITHIO		The amount of dibenzothiuophene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C1DITHIO		The amount of C1-dibenzothiophene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C2DITHIO		The amount of C2-dibenzothiophene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C3DITHIO		The amount of C3-dibenzothiophene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C4DITHIO		The amount of C4-dibenzothiophene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
PHENANTH		The amount of phenanthrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
MEPHEN1		The amount of 1-methylphenanthrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C1PHENAN		The amount of C1-phenanthrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C2PHENAN		The amount of C2-phenanthrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C3PHENAN		The amount of C3-phenanthrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C4PHENAN		The amount of C4-phenanthrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
ANTHRA		The percent of benzo(a)anthracene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
FLUORANT		The amount of benzo(b)fluoranthene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		

PYRENE		The amount of ideno(1,2,3-cd)pyrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C1FLUORA		The amount of C1-fluoranthene/pyrenes in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C2FLUORA		The amount of C2-fluoranthene/pyrenes in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C3FLUORA		The amount of C3-fluoranthene/pyrenes in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C4FLUORA		The amount of C4-fluoranthene/pyrenes in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
BENANTH		The amount of benz[a]anthracene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
CHRYSENE		The amount of chrysene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C1CHRYS		The amount of C1-chrysene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C2CHRYS		The amount of C2-chrysene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C3CHRYS		The amount of C3-chrysene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C4CHRYS		The amount of C4-chrysene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
BENZOBFL		The amount of benzo[b]fluoranthene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
BENZOKFL		The amount of benzo[k]fluoranthene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
BENEPY		The amount of benzo[e]pyrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		

PERYLENE		The amount of perylene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
INDENO		The amount of indeno[1,2,3-c,d]pyrene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
DIBENZ		The amount of dibenz[ah]anthracene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
BENZOP		The amount of benzo[ghi]perylene in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
comment		Comment on the observation, if any		nominal	**Def** Comment on the observation, if any	**Code** NA **Expl** No data for this observation		

Data Table:

Name:	**Alkane.csv**

Physical Structure Description:

Object Name:	Alkane.csv
Text Format:	Number of Header Lines: 1 Record Delimiter: #x0A Attribute Orientation: column Simple Delimited: Field Delimeter:

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:d31ea97c-e061-43f8-af06-62664671f166

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accu Asse
SIN	Sample Identification Number	A number that unique identifies each sample.		nominal	**Def** 4 digit codes in the format 9999	**Code** NA **Expl** No data for this observation		
type		The type of the sample		nominal	**Def** The type of the sample	**Code** NA **Expl** No data for this observation		
Rep		Rep is sample replicate number and is determined by the analytical laboratory		nominal	**Def** Rep is sample replicate number and is determined by the analytical laboratory	**Code** NA **Expl** No data for this observation		
LAB		Identifies the laboratory where the		nominal	**Def** Identifies the laboratory where the	**Code** NA		

		analysis was performed			analysis was performed	**Expl** No data for this observation	
QCbatch2010		Sample string, structure is either AMMDDYY, where A = initial of analyst or "R" for restoration, or YYYYMMDDAA		nominal	**Def** Sample string, structure is either AMMDDYY, where A = initial of analyst or "R" for restoration, or YYYYMMDDAA	**Code** NA **Expl** No data for this observation	
DateExtracted		The date the sample was extracted.		dateTime		**Code** NA **Expl** No data for this observation	
strMat		String matrix. Contains the same basic information as analysis type but a single string can have more than one matrix represented		nominal	**Def** String matrix. Contains the same basic information as analysis type but a single string can have more than one matrix represented	**Code** NA **Expl** No data for this observation	
LabSam		Lab sample		nominal	**Def** Lab sample	**Code** NA **Expl** No data for this observation	
Vol		The volume of the sample		ratio	**Unit** milliliter **Type** real	**Code** NA **Expl** No data for this observation	
Proportion		Proportion of passive sample analyzed		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
DryWt		Sample dry weight		ratio	**Unit** gram **Type** real	**Code** NA **Expl** No data for this observation	
WetWt		Sample wet weight		ratio	**Unit** gram **Type** real	**Code** NA **Expl** No data for this observation	
AnalysisType		Each matrix is processed according to a specific model. These methods are PEMD (passive samplers), SPMD (an alternative passive sampler), sediment, tissue, water		nominal	**Def** Each matrix is processed according to a specific model. These methods are PEMD (passive samplers), SPMD (an alternative passive sampler), sediment, tissue, water	**Code** NA **Expl** No data for this observation	
Catno		Alphanumeric identifier to track groups of samples released by the database manager to an analytical laboratory for analysis		nominal	**Def** Alphanumeric identifier to track groups of samples released by the database manager to an analytical laboratory for analysis	**Code** NA **Expl** No data for this observation	
C12d26		The percent of deuterated Dodecane in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
C16d34		The percent of deuterated Hexadecane in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	
C20d42		The percent of deuterated Eicosane in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation	

C24d50		The percent of deuterated hexacosane in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation		
C30d64		The percent of deuterated triacontane in the sample. Deuterated samples are used to determine percent recovery.		ratio	**Unit** dimensionless **Type** real	**Code** NA **Expl** No data for this observation		
Units		Sample reporting units		nominal	**Def** Sample reporting units	**Code** NA **Expl** No data for this observation		
C9ALK		Concentration of n-nonane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C10ALK		Concentration of n-decane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C11ALK		Concentration of n-undecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C12ALK		Concentration of n-dodecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C13ALK		Concentration of n-tridecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C14ALK		Concentration of n-tetradecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C15ALK		Concentration of n-pentadecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C16ALK		Concentration of n-hexadecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C17ALK		Concentration of n-heptadecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
PRISTANE		Concentration of n-pristane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C18ALK		Concentration of n-octadecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		

Phytane		Concentration of n-phytane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C19ALK		Concentration of n-nonadecane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C20ALK		Concentration of n-icosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C21ALK		Concentration of n-heneicosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C22ALK		Concentration of n-docosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C23ALK		Concentration of n-tricosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C24ALK		Concentration of n-tetracosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C25ALK		Concentration of n-pentacosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C26ALK		Concentration of n-methylpentaicosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C27ALK		Concentration of n-heptacosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C28ALK		Concentration of n-octacosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C29ALK		Concentration of n-nonacosane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C30ALK		Concentration of n-triacontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C31ALK		Concentration of n-hentriacontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		

C32ALK		Concentration of n-dotriacontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C33ALK		Concentration of n-tritriacontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C34ALK		Concentration of n-tetratriacontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C35ALK		Concentration of n-pentatracontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
C36ALK		Concentration of n-hexatriacontane in the sample		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
TOTALKANES		Total alkane concentration, including both calibrated and uncalibrated compounds		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
UCM		Unresolved complex mixture		ratio	**Unit** nanogramsPerGram **Type** real	**Code** NA **Expl** No data for this observation		
comment		Any comment about the observation, if any.		nominal	**Def** Any comment about the observation, if any.	**Code** NA **Expl** No data for this observation		

Data Table:

Name:	**Sample.csv**

Physical Structure Description:

Object Name:	Sample.csv
Text Format:	Number of Header Lines: 1 Record Delimiter: #x0A Attribute Orientation: column Simple Delimited: Field Delimeter:

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:5f57c5d3-65f2-4d46-83f5-67f8104c62dd

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accu Asse
SIN	Sample	A number that unique identifies each sample.		ordinal	**Def** 4 digit codes in	**Code** NA		

	Identification Number				the format 9999	**Expl** No data for this observation	
depth		Optional sample depth in meters, measured from mean lower low water (MLLW) as measured or estimated by the sample collector		interval	**Unit** meter **Type** real	**Code** NA **Expl** No data for this observation	
Project		The name of the project.		nominal	**Def** The name of the project	**Code** NA **Expl** No data for this observation	
FundingSource		The name of the funding source for the particular data observation.		nominal	**Domain Info**	**Code** NA **Expl** No data for this observation	
projectCode		The code for the project. Can be numeric or alphanumeric.		nominal	**Def** The code for the project	**Code** NA **Expl** No data for this observation	
invest		Extra information regarding the data.		nominal	**Def** Extra information regarding the data	**Code** NA **Expl** No data for this observation	
CollectMethod		The method of collection.		nominal	**Def** The method of collection.	**Code** NA **Expl** No data for this observation	
matrix		What the sample was drawn from.		nominal	**Def** What the sample was drawn from.	**Code** NA **Expl** No data for this observation	
SubMatrix		From where in the matrix the sample is drawn		nominal	**Def** From where in the matrix the sample is drawn	**Code** NA **Expl** No data for this observation	
species		The species of the observation.		nominal	**Def** The species of the observation.	**Code** NA **Expl** No data for this observation	
DateCollected		The date of collection		dateTime		**Code** NA **Expl** No data for this observation	
year		The year of the observation		dateTime		**Code** NA **Expl** No data for this observation	
location		The location of the sample.		nominal	**Def** The location of the sample.	**Code** NA **Expl** No data for this observation	
sampler		The surname of the person who sampled the data.		nominal	**Def** The surname of the person who sampled the data.	**Code** NA **Expl** No data for this observation	
agency		The code for the agency.		nominal			

					Domain Info	**Code** NA **Expl** No data for this observation	
LAT		The latitude of the observation.		interval	**Unit** degree **Type** real	**Code** NA **Expl** No data for this observation	
LONG		The longitude of the observation.		interval	**Unit** degree **Type** real	**Code** NA **Expl** No data for this observation	
SUBID		The ID of the sub		nominal	**Def** The ID of the sub	**Code** NA **Expl** No data for this observation	
DATEVER		The date		dateTime		**Code** NA **Expl** No data for this observation	
SampleType		The type of the sample.		nominal	**Def** The type of the sample.	**Code** NA **Expl** No data for this observation	
QCERROR		The error of the observation.		nominal	**Def** The error of the observation.	**Code** NA **Expl** No data for this observation	
comment		Column for comments		nominal	**Def** Column for comments	**Code** NA **Expl** No data for this observation	

Other Entity:

Name:	**Data merging R script**
Data Object Type:	Other
Description:	R script used to combine PAH.csv, alkane.csv and samples.csv datasets into one datatable. Formatting and cleaning were also done using this script and the Non-EVOS_SINs.csv file included in this data package.

Physical Structure Description:

Object Name:	Total_PAH_and_Alkanes_GoA_Hydrocarbons_Clean.R
Size:	5080 byte
Externally Defined Format:	Format Name: application/R

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:a8ed4776-1e17-426f-9f54-98073ae35b5f

Other Entity:

Name:	**Locations map R script**
Data Object Type:	Other

Description:	R script used to plot sample locations in the Gulf of Alaska and Northern Gulf of Alaska with sample type represented in colors

Physical Structure Description:

Object Name:	hcdbSites.R
Size:	3005 byte
Externally Defined Format:	Format Name: application/R

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:9490ce50-b7bc-4fe8-89d1-5b00736df835

Other Entity:

Name:	**Map of sampling locations in the Northern Gulf of Alaska**
Data Object Type:	Other
Description:	Map of where hydrocarbon samples were collected in the Northern Gulf of Alaska with sample type designated by color.

Physical Structure Description:

Object Name:	hcdbSampleLocs.png
Size:	101868 byte
Externally Defined Format:	Format Name: image/png

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:b4b3cc45-4953-43d3-910a-847528577531

Other Entity:

Name:	**Map of sampling locations in the Gulf of Alaska**
Data Object Type:	Other
Description:	Map of where hydrocarbon samples were collected in the broader Gulf of Alaska with sample type designated by color.

Physical Structure Description:

Object Name:	hcdbSamplesGOA.png
Size:	58073 byte
Externally Defined Format:	Format Name: image/png

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:780a5cff-6071-47d1-a52f-8f7a60c24625

Other Entity:

Name:	**DataDownload.R**
Data Object Type:	Other

Description:	R script used to download PAH.csv, Alkane.csv, Sample.csv, and CollectionMethods.csv from the original MS Access database.

Physical Structure Description:

Object Name:	DataDownload.R
Size:	1846 byte
Externally Defined Format:	Format Name: application/R

Online Distribution Info:

https://cn.dataone.org/cn/v2/resolve/urn:uuid:c2f47e88-cc2b-47db-a105-101b80e80334

Involved Parties

Data Set Creators

Individual:	**Mark Carls**
Organization:	**National Oceanic and Atmospheric Administration (NOAA) Alaska Fisheries Science Center (AFSC) Auke Bay Laboratories (ABL)**
Address:	17109 Point Lena Loop Road, Juneau, AK 99801
Email Address:	mark.carls@noaa.gov

Data Set Contacts

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Associated Parties

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Data Set Characteristics

Geographic Region:

Geographic Description:	Gulf of Alaska, Alaksa
Bounding Coordinates:	West: -159.8752 degrees East: -121.65 degrees North: 61.77312 degrees South: 43.83333 degrees

Time Period:

Begin:	1989
End:	2014

Sampling, Processing and Quality Control Methods

Data Set Usage Rights

Access Control:

Auth System:	knb	
Order:	allowFirst	
Allow:	[all]	cn=evos,o=NCEAS,dc=ecoinformatics,dc=org

Additional Metadata

```
additionalMetadata
        |___text '\n    '
        |___element 'metadata'
        |     |___text '\n      '
        |     |___element 'unitList'
        |     |     |___text '\n        '
        |     |     |___element 'unit'
        |     |     |     |  \___attribute 'id' = 'nanogramsPerGram'
        |     |     |     |  \___attribute 'multiplierToSI' = '0.000000001'
        |     |     |     |  \___attribute 'name' = 'nanogramsPerGram'
        |     |     |     |  \___attribute 'parentSI' = 'gramsPerGram'
        |     |     |     |  \___attribute 'unitType' = 'massPerMass'
        |     |     |     |___text '\n          '
        |     |     |     |___element 'description'
        |     |     |     |     |___text 'nanogramsPerGram'
        |     |     |     |___text '\n        '
        |     |     |___text '\n      '
```

```
|     |___text '\n    '
|___text '\n  '
```