KEYWORD	DEFINITION
A_P	Actual or planned deployment
ACOUST_RELEASE_CODE	Acoustic release code.
BIT_DEPTH	Number of bits per sample.
CLIENT_OPERATOR	Client or organization that operates recorder.
DATE_TIME_AUTORELEASE_LOC	Local date and time instrument is automatically released from seafloor.
DATE_TIME_DEPLOY_LOC	Local date and time instrument was deployed.
DATE_TIME_REC_STOP_LOC	Local date and time recording stopped.
DATE_TIME_RECOVER_LOC	Local date and time buoy was recovered.
DEPLOYMENT	Repeat deployment information
DEPTH_M	Water depth in meters.
DUTY_CYCLE_ON	Duty cycle on time in minutes
DUTY_CYCLE_PCT	Duty cycle fraction of time on in percent
DYR_LOWER_LIM	Lower limit of broadband (10 Hz to Nyquist) dynamic range (dB re 1 uPa)
DYR_UPPER_LIM	Upper limit of broadband (10 Hz to Nyquist) dynamic range (dB re 1 uPa)
LATITUDE	Latitude of recorder in decimal degrees WGS84.
LATITUDE_ANCHOR	Latitude of buoy anchor (on seafloor), in decimal degrees, WGS84.
LOCATION	General vicinity of buoy
LONGITUDE_ANCHOR	Longitude of buoy anchor (on seafloor), in decimal degrees, WGS84.
PROGRAM_NAME	Name of study program
RECORDER_ID	Recorder name. Alpha refers to location and number refers to miles from shore. B = Barrow, BG = Burger Study Area, CL = Cape Lisburne, CLN = Northern Cape Lisburne, KL = Klondike Study Area, PL = Point Lay, PLN = Northern Point Lay, SO = Statoil Study Area, W = Wainwright, WN = Northern Wainwright.
RECORDER_MODEL	Brand and model of recorder.
RECORDER_SERIAL_NUM	Serial number of recorder.
RECORDER_TYPE	Type of recorder.
SAMPLE_RATE_HZ	Sampling rate in Hz
STUDY_YEAR	Year data was collected or buoy deployed.
DATE_TIME_REC_STRT_LOC	Local date and time recording started.
DESCRIPTION	Description of Spectra Plot.
SPECTRA_PLOT	Spectra plot file name.
DATE_FIRST_LOC	First date of marine mammal presence detected
DATE_LAST_LOC	Last date of marine mammal presence detected.
DETECTION_GRAPH	Graph file name showing detection presence over time
SPECIES	Species of marine mammal detected
STUDY_YEAR	Year data was collected or buoy deployed.
DATE_TIME_REC_LOC	Local date and time sound was recorded.
DESCRIPTION	Description of sound clip
SOUND_CLIP	Sound clip filename for given recorder_id in wav or
SOUND_SOURCE	Source of sound
STUDY_YEAR	Year data was collected.
BIVALVE_TYPE	The scientific name of the bivalves collected
CRUISE	Cruise identification code made up of the ship name code, followed by the two digit year and then the sequential cruise number for the season for a given ship. The cruise number includes a padded zero if less than ten.

GEARCODE	Type of gear used.
LENGTH_MM	The length in millimeters of the organisms collected
REPLICATE	Replication at the station level.
SHIP	Vessel used for data collection.
STATION	Code for a sampling location. A two letter prefix designates area and sample type followed by a sequential number padded with zeros if less than one hundred. Fixed, Random, and Historic Drill Site locations were determined before the cruise. Near and Other station locations were assigned in the field.
WIDTH_MM	The width in millimeters of the organisms collected
CAL_G	The caloric content of the organisms in grams
D_WEIGHT_G	The dry weight of the organisms in grams
TAXON	The scientific name of the organisms collected
W_WEIGHT_G	The wet weight of the organisms in grams
CHLA_MG_CM3	Concentration of Chlorophyll per unit volume
CHLA_MG_M2	Concentration of Chlorophyll a in mg/m^2
CONC_C_PCT	Organic carbon. This is different from TOC because some inorganic carbon may remain in the sample after analysis. (%)
CONC_N_PCT	Organic nitrogen. (%)
DEL13C	Negative number. Ratio of isotopic C to standard C as compared to a standard (PDB)
DEL15N	Ratio of isotopic N to standard N as compared to a standard (air)
GRAVEL_PCT	Percentage of gravel in the sample.
INSTR_CHL	Instrument used to determine chlorophyll and phaeopigment concentrations.
MUD_PCT	Percentage of mud in the sample.
PHAEO_MG_CM3	Amount of pigment per unit volume.
PHAEO_MG_M2	Phaeopigment (mg/m^2) is a non-photosynthetic pigment which is the degradation product of algal chlorophyll pigments and is commonly formed during and after marine phytoplankton blooms.
SAMPLE_WT_MG	Amount of sampled analyzed for SI signatures (mg)
SAND_PCT	Percentage of sand in the sample.
TOTAL_ORG_C_PCT	Total organic carbon in percent.
WATER_PCT	The water content (percent) of benthic sediments. This provides information about the fluidity of benthic sediments as well as information about grain size in a broader context.
CHLA	Concentration of Chlorophyll per unit volume.
DEPTH_CHLR_CM	A number or range in cm giving the depth of the section of the core used.
INSTR_CHL	Instrument used to determine chlorophyll and phaeo pigment concentrations. EX
PHAEO_MG_M2	Phaeopigment (mg/m^2)
CLASS	Class of the individual, e.g. Maxillopoda
DATE_TIME_LOC	Local date and time of sample collection in mm/dd/yyyy hh ss
FAMILY	Family of the individual, e.g. Calanidae
GEAR	Gear used
ID_LOC	Location where the organism was identified.
ORDER_	Order of the individual, e.g. Calanoida
PHYLUM	Phylum of the individual, e.g. Arthropoda
ABUNDANCE_1000M2	Number of individuals per unit area.
BIOMASS_G_1000M2	Weight of organisms per unit area.
COUNT_CORRECTED	Number of individuals per unit area (per 1000 square meters). Number per 1000 m^2.
COUNT_RAW	Number of individuals counted in the whole sample (i.e., split counts were back calculated to 100% of the sample).
DATA_QUALITY	Quality of data in either CPUE, Poor, PA (Presence/Absence), or Opportunistic

FRAGMENT	<attrdefs>CSESP</attrdefs>
GEAR_SWATH_M	The width (in meters) of the area swept by the net during the tow.
HAUL	Sequential deployment of gear type during cruise.
INVESTIGATOR	Original investigator
SPLIT_RATIO	Decimal representation of the sample if it was split in the field. 1 = 100%, 0.25 = 1/4 or 25% split, etc.
TOW_AREA_M2	Total area covered by the tow in meters squared.
TOW_DISTANCE_KM	Distance trawled in kilometers.
TOW_QUALITY	Quality of tow determined as either Catch Per Unit Effort (CPUE) or Poor
WEIGHT_CORRECTED	Weight of organism per unit area (per 1000 square meters). Grams per 1000 m^2.
WEIGHT_G_RAW	Weight (g) of individuals in the whole sample (i.e., split weights were back calculated to 100% of the sample).
CODE	National Oceanographic Data Center taxonomic code
COUNT_PER_M2	Counts of individuals per square meters.
DEPTH_HAPS_CM	Depth below seafloor at which core was collected (in centimeters).
FRAGMENT	Fragment.
SIEVE_SIZE_MM	Size of sieve (mm) over which samples were rinsed.
WEIGHT_G	Weight in grams of individuals per square meter.
FRAGMENT	<attrdefs>CSESP</attrdefs>
INVESTIGATOR	Original investigator/data collector.
WEIGHT_G	Weight in grams of individuals per square meter
DEL13C	Ratio of isotopic carbon to standard carbon as compared to a standard (PDB).
DEL15N	Ratio of isotopic nitrogen to standard nitrogen as compared to a standard (air)
DEPTH_SAMPLE_M	Depth in water column at which sample was collected (meters)
FILTER_FRACTION	Decimal fraction of the portion of the filter analyzed for stable isotope signatures.
LAB_DUPLICATE	Indicates which samples were analyzed as duplicates
MASS_C_UG	Percent of carbon measured in known mass (micrograms) of sample.
MASS_N_UG	Percent of nitrogen measured in known mass (micrograms) of sample.
CONC_C_PCT	Percent of carbon measured in known mass of sample.
CONC_N_PCT	Percent of nitrogen measured in known mass of sample.
DEL15N	Ratio of isotopic nitrogen to standard nitrogen as compared to a standard (air)
HAUL	<attrdefs>CSESP</attrdefs>
LAB_DUPLICATE	Indicates which samples were analyzed as duplicates
LIPID_EXTRACT	Indicates whether the sample lipid was extracted.
LONGITUDE	Longitude at sample collection location in decimal degrees WGS84
SAMPLE_WT_MG	Amount of sample analyzed for SI signatures (mg)
TAXON_TYPE	Category of taxa.
FRAGMENT	Fragment.
GEARSIZE_M2	Surface area sampled with gear.
C_UG	Mass of carbon in micrograms.
STUDY_AREA	Study area from which organisms were collected.
STUDY_YEAR	Year sample was collected.
TAXON_COUNT	Count of taxon.
DEPTH_REDOX_CM	Depth at which redox was measured in the sediment core.

REDOX_MV	Redox measurement (mV). Redox is useful in understanding how carbon is subducted in sediments. The measurements are electron potentials based on biological-chemical reactions from biological activities.
DATE_TIME_DEPLOY_LOC	Local date and time trap was deployed.
DATE_TIME_RETRIEVED_LOC	Local date and time trap was retrieved.
SAMPLE_TYPE	Type of sample collected.
SAMPLING_METHOD	Method that was used to collect sample.
SAMPLING_METHOD	Method that was used to collect sample.
DATE_COLLECTED	Local date surficial sediment sample was collected
SAMPLE_ID	Unique Surficial Sediment Sample identifier value.
SECTION_CM	Sectioning interval in centimeters
CLAY_PCT	Percentage of clay in the surficial grain sample.
GRAVEL_PCT	Percentage of gravel in the surficial grain sample.
INTERVAL_CM	Size of the core metal sample in centimeters
SAND_PCT	Percentage of sand in the surficial grain sample.
SILT_PCT	Percentage of silt in the surficial grain sample.
SURF_CORE_FLAG	Indicates a superficial sample (S) or a core sample (C).
TOTAL_PCT	Total Gravel, Sand, Silt, and Clay in the sample. The percentage can go over 100.
ANALYTICAL_INSTR	Instrument used for analysis.
ANALYTICAL_METH	Method of analysis
DATE_ANALYZED	Date sample was analyzed.
DATE_COLLECTED	Local date sample was collected.
DETECT_LIMIT	Detection limit
DETECT_LIMIT_CODE	Method of detection limit or method of reporting of detection limit.
LAB_ID	Unique ID by laboratory.
LAB_SAMPLE_TYPE	High level description of the lab sample type
LIPID_PCT	Percentage of lipids in the sample.
MATRIX	Kind of sample
MOISTURE_PCT	Percentage of moisture in the sample.
PARAM_CODE	The CAS, Chemical Abstracts Service, number assigned to the chemical compound in the parameter field.
PARAMETER	The name of the chemical compound or element
QUAL	Data qualifier.
RECOVERY_PCT	Percent of surrogate or target analyte recovered.
RECOVERY_PCT_QUAL	Recovery percent qualifier, used as a data qualifier.
RPD_PCT	Relative percent difference.
RPD_QUAL	Recovery percent difference qualifier.
SAMPLE_SIZE	Size of the sample
SDG	Sample Delivery Group
SIZE_UNIT_BASIS	How the data is being reported
TARGET	Target
UNITS	Measured Units, in percent (PCT) or micrograms per gram (UG/G)
VALUE	Concentration of the target analyte
DATE_COLLECTED	Local date surficial sediment sample was collected.

DATE_ANALYZED	Date sample was analyzed.
DATE_COLLECTED	Local date sample was collected.
DATE_EXTRACTED	Date sample was extracted.
LAB_SAMPLE_TYPE	High level description of the lab sample type
LIPID_PCT	Percentage of lipids in the sample.
MOISTURE_PCT	Percentage of moisture in the sample.
QUAL	Data qualifier.
RECOVERY_PCT_QUAL	Recovery percent qualifier, used as a data qualifier.
SDG	Sample Delivery Group. Can be used to link the quality control samples with the authentic field samples.
TARGET	Target
AMMONIUM_UMOL	Ammonium concentration in micromolar.
CHLA_UG_L	Chlorophyll a concentration in micrograms per liter.
DIN_UMOL	Dissolved Inorganic Nitrogen, in micromolar.
NITRATE_UMOL	Nitrate concentration in micromolar.
NITRITE_UMOL	Nitrite concentration in micromolar.
PHOSPHATE_UMOL	Phosphate concentration in micromolar.
SILICATE_UMOL	Silicate concentration in micromolar.
TOTAL_N_UMOL	Total nitrogen in micromolar.
ACAR_BCAR_NG_L	Alpha and beta carotene in nanograms per liter.
ALX_NG_L	Alloxanthin in nanograms per liter.
BUT19_NG_L	19'-butanyloxyfucoxanthin in nanograms per liter.
CASTNO	Sequential cast number from the cruise.
CHLA_NG_L	Chlorophyll A in nanograms per liter
CHLB_NG_L	Chlorophyll B in nanograms per liter
CHLC2_NG_L	Chlorophyll c2 in nanograms per liter.
CHLC3_NG_L	Chlorophyll c3 in nanograms per liter.
DDX_NG_L	Diadinoxanthin in nanograms per liter.
DEPTH_RANGE_M	Range of depth of composite samples in meters.
DEPTH_SAMPLE_FLAG	Flag to indicate whether the sample was taken at a specific depth or if it is a composite of sample depths.
DTX_NG_L	Diatoxanthin in nanograms per liter.
FUX19_NG_L	Fucoxanthin in nanograms per liter.
HEX_NG_L	19'-hexanyloxyfucoxanthin in nanograms per liter.
LUT_NG_L	Lutein in nanograms per liter.
PER_NG_L	Peridinin in nanograms per liter.
PRX_NG_L	Prasinoxanthin in nanograms per liter.
SECT_ID	Secondary cruise indicator, in this case month of the year.
TCHL_NG_L	Total chlorophyll in nanograms per liter.
TPHAEO_NG_L	Phaeophytin in nanograms per liter.
VIX_NG_L	Violaxanthin in nanograms per liter.
ZEX_NG_L	Zeaxanthin in nanograms per liter.
BTLNBR	Nisken bottle number that the sample was taken from
DIC	Dissolved inorganic carbon

DIC_FLAG_W	Data quality indicator for dissolved inorganic carbon.
OMEGA_AR	Saturation state of aragonite.
OMEGA_AR_FLAG_W	Data quality indicator of the saturation state of aragonite.
OMEGA_CA	Saturation state of calcite. Omega calcite greater than 1 calcium carbonate precipitates. Omega equal to 1 calcium carbonate in equilibrium. Omega less than 1 calcium carbonate dissolves.
OMEGA_CA_FLAG_W	Data quality indicator of the saturation state of calcite.
PCO2	Partial pressure of CO2.
PCO2_FLAG_W	Data quality indicator of partial pressure of CO2.
PH	pH of Seawater, seawater scale.
PH_FLAG_W	Data quality indicator of seawater pH.
SAMPNO	Sequential sample number of DIC/TA(dissolved inorganic carbon/total alkalinity) bottle taken.
SECT_ID	Secondary cruise indicator, in this case month of the year.
TA	Total alkalinity.
TA_FLAG_W	Data quality indicator for total alkalinity.
Acid_CalcArag	Indicates whether samples were taken at station for ocean acidification analysis.
Acid_HPLC	Indicates whether samples were taken at station for High Performance Liquid Chromatography phytoplankton pigment analysis.
Benthic_Camera	Indicates whether benthic drop camera photos were taken at station.
Benthic_VanVeen	Indicates whether a benthic VanVeen grab was taken at station.
CTD	Indicates whether CTD samples were taken at station.
Fisheries	Indicates whether fishery samples were taken at station.
Microplankton	Indicates whether microplanklton samples were taken at station.
Nutrients	Indicates whether nutrient samples were taken at station.
STUDY_TYPE	Indicates the name of the study program.
STUDY_YEAR	Study year station was sampled.
Used	Indicates whether the station was sampled.
Zooplankton	Indicates whether zooplankton samples were taken at station.
Benthic	Indicates whether benthic samples were taken at station.
CTD	Indicates whether CTD samples were taken at station.
Fisheries	Indicates whether fishery samples were taken at station.
LATITUDE	Latitude of station location in WGS84.
OceanAcidification	Indicates whether ocean acidification samples were taken at station.
PRIMARY_SECONDARY	Indicates primary or secondary station.
STUDY_YEAR	Study year that random station could be used.
USED	Indicates whether the random station was sampled.
ZoopNutrients	Indicates whether zooplankton or nutrient samples were take at station.
Area_NM	Area of polygon in nautical miles.
NAME	Name of area.
Vertex_Lat_WGS84	Latitude in WGS84 of vertex (point). Vertices make up study area outline.
Vertex_Long_WGS84	Longitude in WGS84 of vertex (point). Vertices make up study area outline.
NAME	Name of study area.
Size	Size of study area in nautical miles.
Type	Indicates whether a core area or study area.

Interval_	Survey line interval.
LAT_END	Latitude of the end of transect line in WGS84.
LAT_START	Latitude of the beginning of transect line in WGS84.
LINE_TYPE	Indicates line type.
LON_END	Longitude of the end of transect line in WGS84.
LON_START	Longitude of the beginning of transect line in WGS84.
PRIORITY_2008	Indicates priority level of line for study year 2008.
PRIORITY_2009	Indicates priority level of line for study year 2009.
PRIORITY_2010	Indicates priority level of line for study year 2010.
PRIORITY_2011	Indicates priority level of line for study year 2011.
Priority_2012	Indicates priority level of line for study year 2012.
Priority_2013	Indicates priority level of line for study year 2013.
STUDY_AREA	Chukchi Region - Regional study area that includes Klondike, Burger, Statoil areas of interest as well as Hanna Shoal to the northeast.
STUDY_TYPE	The name of the study program.
SURVEY_LINE	Identifies the fixed survey line by study area and type.
CATCH_VOL_GAL	Catch volume in gallons
CPUE_FACTOR	Factor to multiply Count and Weight to calculate catch-per-unit-effort per 1000m^2 for bottom trawls or 1000m^3 for midwater trawls
DEPTH_M_GEAR_MAX	Maximum depth of haul in meters
GEAR	Gear type used.
HAUL_NOTE	Haul notes.
LATITUDE_END	Latitude at end of haul in decimal degrees NAD83.
LATITUDE_START	Latitude at start of haul in decimal degrees NAD83.
LONGITUDE_END	Longitude at end of haul in decimal degrees NAD83.
LONGITUDE_START	Longitude at start of haul location in decimal degrees NAD83.
OBJECTID	Internal feature number.
SHAPE	Feature geometry.
TOW_DIST_M	Tow distance in meters.
TOW_DUR_MIN	Tow duration in minutes
TOW_QUALITY	Tow quality. Catch per unit effort or animal presence.
COUNT_	Count of fish per haul
CPUE_FACTOR	Factor to multiply Count and Weight to calculate catch-per-unit-effort per 1000m^2 for bottom trawls or 1000m^3 for midwater trawls
FAMILY_COM	Common name of family
FAMILY_SCI	Scientific name of family.
NAME_COM	Common name.
NAME_SCI	Scientific name
WEIGHT_G	Weight of fish per haul in grams
AGE	Age of fish.
DIET	Indicates if the diet was examined or not.
LENGTH_MM	Fish length in millimeters
LENGTH_TYPE	Total length or fork length.
SEX	Sex of fish
SI_13C	Stable isotope data of fish muscle after lipid

SI_15N	Stable isotope data of fish muscle before lipid extraction - del
SPECIMEN_NUM	Assigned after fieldwork as specimen number when tissues were sampled (######) or LW# (LW-######) when only length and weight were measured.
WEIGHT_G	Weight of fish per haul in grams
AREASWEPT_HA	Area swept in hectares for bottom trawls only.
COUNT_SAMPLED	Number of specimens sampled.
COUNT_TOTAL	Count of samples multiplied by the subsampled factor.
NAME_COMMON	Common name of species. Some items are not to species level or are unidentified.
NAME_SCIENTIFIC	Genus and species for item identified to this level.
NUMBER_CPUE	Number per hectare of total count divided by area swept; for bottom trawls only.
SUBSAMPLED	Indicates whether subsampled (S) or whole-haul sampled (W)./
SUBSAMPLED_FACTOR	Numerical factor to multiply the sampled amounts by, which is less than one for some pelagic tows that were standardized by duration.
WEIGHT_CPUE	Kilograms per hectare of total weight divided by area swept; for bottom trawls only.
WEIGHT_SAMPLED_KG	Weight in kilograms of the sample.
WEIGHT_TOTAL_KG	Weight sampled in kilograms multiplied by the subsampled factor.
AREASWEPT_HA	Area swept by bottom trawl tows in hectares.
DATE_TIME_LOC	Local date and time of haul
DEPTH_M	Average bottom depth from vessel sounder over tow in meters.
LATITUDE_END	Decimal degrees North latitude position of vessel GPS at end of tow (WGS84 datum).
LATITUDE_MIDTOW	Decimal degrees North latitude position of vessel GPS at midpoint of tow (WGS84 datum).
LATITUDE_START	Decimal degrees North latitude position of vessel GPS at start of tow (WGS84 datum).
LONGITUDE_END	Decimal degrees West longitude position of vessel GPS at end of tow (WGS84 datum).
LONGITUDE_MIDTOW	Decimal degrees West longitude position of vessel GPS at midpoint of tow (WGS84 datum).
LONGITUDE_START	Decimal degrees West longitude position of vessel GPS at start of tow (WGS84 datum).
SALINITY_PSU	Bottom salinity in Practical Salinity Units taken from ADFG Seabird 19 CTD.
SHIP	Full name of ship.
TEMP_BOTTOM_C	Bottom temperature in Celsius taken from ADFG Seabird 19 CTD.
TEMP_SURFACE_C	Surface temperature in Celsius taken from vessel hull sensor.
TOW_DURATION_MIN	Tow duration in hh
TOW_SPEED_AVG_KTS	Average tow speed in knots during period of tow with winches locked.
CHELA_HEIGHT_MM	Height of male crab chela (claw) in millimeters. Follows National Marine Fisheries Service Bering Sea bottom trawl survey methods.
COUNT_	Count of specimens measured at that size.
EGG_CLUTCH_FULLNESS	Follows National Marine Fisheries Service Bering Sea bottom trawl survey codes for female egg clutch fullness.
EGG_COLOR	Follows National Marine Fisheries Service Bering Sea bottom trawl survey codes for egg color.
EGG_CONDITION	Follows National Marine Fisheries Service Bering Sea bottom trawl survey codes for egg condition.
HAUL	Haul number in 01B, 02B, 01P, 02P etc. where B is for bottom trawl and P is for pelagic trawl.
LENGTH_MM	Length of specimen in millimeters, some records are to nearest whole millimeter.
NAME_COMMON	Common name of species.
SEX	Indicates whther the observed fish was Male (1) or Female (2)
SHELL_CONDITION	Follows National Marine Fisheries Service Bering Sea bottom trawl survey codes for shell condition.
CENTRIC_CELL_ML	Centric diatom abundance in cells per milliliter of seawater.
CILIATE_CELL_ML	Ciliate abundance in cells per milliliter of seawater.
COCCO_CELL_ML	Coccolithophorid abundance in cells per milliliter of seawater.

CONTRACTOR	Contractor responsible for data.
CRYPTO_CELL_ML	Cryptophyte abundance in cells per milliliter of seawater.
CYLINDRO_CELL_ML	Cylindrotheca closterium abundance in cells per milliliter of seawater.
DEPTH_AVG	Depth of the water at the station.
HDINO_CELL_ML	Heterotrophic dinoflagellate abundance in cells per milliliter of seawater.
LATITUDE	Latitude at sample collection location in decimal degrees, WGS84.
MISC_DINO_CELL_ML	Miscellaneous dinoflagellate abundance in cells per milliliter of seawater.
PDINO_CELL_ML	Phototrophic dinoflagellate abundance in cells per milliliter of seawater.
PN_CELL_ML	Pseudo-nitzschia spp. abundance in cells per milliliter of seawater.
SILICO_CELL_ML	Silicoflagellate abundance in cells per milliliter of seawater.
TOT_PENNATE_CELL_ML	Total pennate diatom abundance in cells per milliliter of seawater.
UNIDENT_SM_CELL_CELL_ML	Unidentified small flagellate abundance in cells per milliliter of seawater.
CENTRIC_UG_C_L	Centric diatom biomass in micrograms C per liter of seawater.
CILIATE_UG_C_L	Ciliate biomass in micrograms C per liter of seawater.
COCCO_UG_C_L	Coccolithophorid biomass in micrograms C per liter of seawater.
CONTRACTOR	Company contracted to collect and/or analyze data.
CRYPTO_UG_C_L	Cryptophyte biomass in micrograms C per liter of seawater.
CYLINDRO_UG_C_L	Cylindrotheca closterium biomass in micrograms C per liter of seawater.
HDINO_UG_C_L	Heterotrophic dinoflagellate biomass in micrograms C per liter of seawater.
MISC_DINO_UG_C_L	Miscellaneous dinoflagellate biomass in micrograms C per liter of seawater.
PDINO_UG_C_L	Phototrophic dinoflagellate biomass in micrograms C per liter of seawater.
PN_UG_C_L	Pseudo-nitzschia spp. biomass in micrograms C per liter of seawater.
SILICO_UG_C_L	Silicoflagellate biomass in micrograms C per liter of seawater.
TOT_PENNATE_UG_C_L	Total pennate diatom biomass in micrograms C per liter of seawater.
UNIDENT_SM_CELL_UG_C_L	Unidentified small flagellate biomass in micrograms C per liter of seawater.
BEAUFORT	Beaufort wind scale
CRUISE_EFFORT_ID	Unique identifier that allows effort observation information to be coupled to effort information.
DIRECTION	Compass direction between start and end of effort
DURATION	Duration of observation effort, HH
EFFORT_ID	Associated Effort Identifier. Duplicate entries made during the same cruise are indicated with the letter "D" at the start of the number.
END_DATE_TIME_LOC	The local date and time at the end of the effort.
END_LATITUDE	Latitude at end time of effort in decimal degrees WGS84.
END_LONGITUDE	Longitude at end time of effort in decimal degrees WGS84.
GLARE_AMT	The amount of glare present during the effort.
GLARE_FROM	Clockface position (1200 being at the bow of the vessel) where glare begins.
GLARE_TO	Clockface position (1200 being at the bow of the vessel) where glare ends.
ICE_COVER_PCT	The percent of ice cover within two kilometers of the vessel, recorded in ten percent increments.
ID_LOCAL	Unique ID from TigerNav
ID_SERVER	Additional ID from TigerNav
LENGTH_KM	Effort line length in km
LINE_ID	Identifies the survey line by study area and type.
LINE_REP	Indicates if line was resurveyed.

OBSERVER_CENTER	Initials of marine mammal observer or number of observers at the center of the vessel.
OBSERVER_LOC	Location of marine mammal observer onboard vessel.
OBSERVER_NO	Number of marine mammal observers on watch conducting dedicated observations.
OBSERVER_PORT	Initials of marine mammal observer or number of observers on the port side of vessel.
OBSERVER_STARBRD	Initials of marine mammal observer or number of observers on the starboard side of vessel.
ON_OFF_TRANSECT	Whether effort is on established transect lines
PACK_ICE_DIST_KM	Distance in kilometers from the vessel to pack ice edge, if visible.
PRESSURE_BAR	Atmospheric pressure in bars.
RECORDED_BY	Initials of marine mammal observer who recorded the effort information.
SALINITY_PSU	Salinity of seawater in PSU, Practical Salinity Units scale.
SHIP	Vessel used for data collection.
START_DATE_TIME_LOC	The local date and time at the start of the effort.
START_LATITUDE	Latitude at start time of effort in decimal degrees WGS84.
START_LONGITUDE	Longitude at start time of effort in decimal degrees WGS84.
SURVEY_AREA	Area associated with effort
TEMP_AIR_C	Air temperature in degrees centigrade.
VISIBILITY	Visibility in kilometers at time of observation.
WATCH	Record of effort used in 2008 and 2009.
WIND_HDG	Wind heading by azimuth to true north.
WIND_SPEED_M_SEC	Wind speed in meters per second.
BEHAVIOR_1	Primary observed animal behavior.
BEHAVIOR_2	Secondary observed animal behavior.
CRUISE_EFFORT_ID	Unique identifier that allows effort observation information to be coupled to effort information.
DATE_TIME_LOC	The local date and time of the observation.
ID_KEY	Unique ID number for each entry, consistent through various data changes
ID_RELIABILITY	Reliability of identification.
INDIVIDUALS	Total number of animals observed in the group.
JUVENILES	Number of juveniles within the group (subset of Individuals).
LOC_ORIGIN	Flag to indicate if MAM_LATITUDE and MAM_LONGITUDE were calculated.
MAM_LATITUDE	Either calculated latitude of mammal position or recorded latitude of vessel position in decimal degrees WGS84, see LOC_ORIGIN to determine calculated versus recorded.
MAM_LONGITUDE	Either calculated longitude of mammal position or recorded longitude of vessel position in decimal degrees WGS84, see LOC_ORIGIN to determine calculated versus recorded.
MOVEMENT	Observed animal movement.
OBSERVER	Initial of person that observed animal(s) if not first seen by Marine Mammal Observer.
PACE	Animal travel speed.
PRESSURE_BAR	Atmospheric pressure in bars.
REACTION	Animal reaction to the vessel.
RECORDED_BY	Initials of marine mammal observer who recorded the observation information.
RETICLES	Number of reticles in Fujinon Binoculars, or 'E' for estimate by eye if MMO unable to use reticles.
SALINITY_PSU	Salinity of seawater in PSU, Practical Salinity Units scale.
SHIP_LATITUDE	Latitude of ship at time of observation in decimal degrees WGS84.
SHIP_LONGITUDE	Longitude of ship at time of observation in decimal degrees WGS84.

SIGHTING_CUE	Part of the animal or animal action that lead to observation.
SIGHTING_DISTANCE_M	Distance in meters to animal(s) using reticle conversion, or estimated by eye.
SIGHTING_ID	Consecutive number (starting at 1 for each vessel in each season) for each marine mammal sighting.
SIGHTING_REC_NO	The original Sighting ID is populated in this field when the same animal or group of animals has been resighted.
SPECIES	The species of animal observed.
SST_C	Sea surface temperature in degrees centigrade.
WATER_ICE	Where animal was observed.
WHERE_AT	Clockface position where the marine mammal was first observed (1200 being at the bow of the vessel). -999 = unknown (only possible in case of multiple sightings for which observer was not able to keep records of all inital positions.
WHERE_TO	Animal's direction of movement, in clock face position relative to the vessel (1200 being at the bow of the vessel). -999 = unknown or not applicable
WIND_HDG	Wind heading by azimuth to true north.
WIND_SPEED_M_SEC	Wind speed in meters per second.
AGE_CLASS	Age class of seabird based on plumage.
BEHAVIOR	Behavior of the observed seabird(s).
DATE_TIME_LOC	Local date and time of observation in mm/dd/yyyy hh
DISTANCE_CATEGORY	Distance category used to estimate seabird(s) distance from observer. Category values are equal to a range in meters.
HABITAT	Habitat of the observed seabird(s).
LATITUDE	Latitude at observation location in decimal degrees WGS84.
OBS_ANGLE_DEGREE	Radial angle of seabird observation from the bow of the ship (0 deg) to the beam (90 deg), to the nearest five degrees.
OBSERVATION_ID	Unique sequential observation identification. Primary key.
REPORT	Title of annual report that data supports. Reports can be found on the CSESP website www.chukchiscience.org
SPECIES	American Ornithologists' Union four letter species codes adapted by ABR, Inc.
TOTAL_COUNT	Total number of adult and young seabirds observed.
TRANSECT_ID	Unique transect identification of cruise identification code and sequential transect number with padded zeros under 1000. Foreign key to Seabirds Transects feature class.
DATE_TIME_END_LOC	Local date and time of end of transect in mm/dd/yyyy hh
DATE_TIME_START_LOC	Local date and time of start of transect in mm/dd/yyyy hh
ICE_COVER_PCT	Ice cover percent. Record in increments of 5 percent; Values are entered as max within that range.
LINE_ID	Identifies the fixed survey line by study area and type.
LINE_REP	Replicate of line. Only increases if the entire line has been surveyed more than once in the same cruise.
OBSERVER	Initials of observers, with addition of a number in case of duplicate initials.
OBSERVER_CONDITIONS	Subjective rating of weather and sea state conditions at time of observation.
REPORT	Title of annual report that data supports.
TRANSECT_END_LATITUDE	Latitude at end time of transect in decimal degrees WGS84.
TRANSECT_END_LONGITUDE	Longitude at end time of transect in decimal degrees WGS84.
TRANSECT_ID	Unique transect identification of cruise identification code and sequential transect number with padded zeros under 1000. Foreign key to Seabirds Observations feature class.
TRANSECT_START_LATITUDE	Latitude at start time of transect in decimal degrees WGS84.
TRANSECT_START_LONGITUDE	Longitude at start time of transect in decimal degrees WGS84.
TRANSWIDTH_M	Width of sampling zone to the nearest 50 meters with a range from 100m to 300m.
VISIBILITY_KM	Visibility in kilometers to the nearest 0.1 km up to 1 km, then to the nearest 1 km.
ABUNDANCE_M3	Number of individuals per cubic meter of the given taxon.
BIOMASS_MG_M3	Biomass of the given taxon in the sample, milligrams dry weight per cubic meter.
DATE_TIME_LOC	Local date and time of sample collection in mm/dd/yyyy hh

GEAR_TYPE	Type of gear used.
LATITUDE	Latitude at sample collection location in decimal degrees WGS84.
LIFE_STAGE	Life stage of the individual.
SCIENTIFIC_NAME	Scientific name of the individual.