CGG Project #: 12084
Archive Date: 3-10-2015
This archive consists of 1 DVD-ROM

GPR 2014_003_ReadMe.PDF

SOUTHERN DISHNA RIVER, FOX HILLS, AND BEAVER CREEK SURVEY AREAS: Project report, interpretation maps, EM anomalies, stacked multi-channel profiles, and other products of the airborne geophysical surveys for parts of the Iditarod, Ophir, and Holy Cross quadrangles, western Alaska

by
CGG and Fugro Geosciences

Prints best landscape view, Courier new font 10, margins 0.7 at the top, 0.5 all other margins

CONTENTS of this ReadMe file:

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PROJECT AND TECHNICAL INFORMATION

Project Name:	Southern Dishna River, Fox Hills, and Beaver Creek Surveys
Informal Project name:	Five Spot Survey
Related Data Release:	GPR2013-1 (linedata, gridded data, geotiffs, vectors et al.)
Contracting Agency:	State of Alaska, Department of Natural Resources, Division of Geological & Geophysical Surveys (DGGS)
DGGS Section:	Minerals Section
Program:	Alaska Airborne Geophysical/Geological Mineral Inventory (AGGMI) Program
Funding Source:	Alaska State Legislature
Contractor:	Fugro GeoServices, Inc.
Survey Flown By:	CGG
CGG Project Number:	12084
DGGS Contract Manager:	Laurel E. Burns
Area Size:	1029 sq miles (2665 sq km)
Data Acquisition: Start Date (YYYY-MM-DD):	2012-09-14
Data Acquisition: End Date (YYYY-MM-DD):	2012-11-02
Data Acquisition:	Digitally acquired
Platform:	Helicopter
Platform: Model:	AS-350-B2 / B3 Squirrel
Survey Altitude Model:	Mean terrain clearance (height above ground)
Nominal Helicopter Height:	200 feet
Nominal Bird Height:	100 feet
Traverse: Line Azimuth:	N20°W (340 degrees)
Traverse: Line Spacing:	1/4 mile (402.3 m)
Tie: Line Azimuth:	N70°E (70 degrees)
Tie: Line Spacing:	approximately 3 miles (approximately 4828 m)
Border lines:	present around all edges
Magnetics: Magnetometer:	Fugro D1344 cesium magnetometer with Scintrex CS3 cesium sensor, mounted in bird
Electromagnetics: Sensor Model:	Dighem(V)
Navigation System: Sensor:	Global Positioning System
Navigation System: Sensor:	Novatel OEM4-GL2

Navigation System: Method: Post-flight differential positioning
Navigation System: Accuracy: better than 10m with respect to the UTM grid
Additional equipment: Radar and laser altimeters, video camera, and 50/60 Hz monitors

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CONTENTS of the DVD:
This publication, GPR2014-3, consists of **1 DVD** with files in the root directory and in 7 main folders:

GEOTIFFS,
KMZs,
MAPS,
METADATA
PROJECT_REPORT,
SM_PROFILES,
VECTORS.

ROOT DIRECTORY FILES:

gpr2014-3ReadMe	General descriptive file for this archive; txt and PDF formats
Five Spot_LocMap_AK.pdf	Location of Five Spot survey in Alaska
Five Spot_LocMap_31680.pdf	Location map of Five Spot survey at 31680 scale
Five Spot_LocMap_63360.pdf	Location map of Five Spot survey at 63360 scale

NOTE: Files labeled ShA through ShD are at 1:63,360-scale; files labeled Sh_a through Sh_h are at 1:31,680-scale. Through time, all file names may eventually be made with only little letters. The underscore ("_") in front of the sheet letter will allow distinction of map scale.

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PROJECT_REPORT (Folder)

GPR2014-3-1_ProjectReport	Final report; PDF format

EMAnoms (subfolder)

EMAnom.i0	Geosoft EM anomaly import template
Five Spot-EMAnom_ReadMe	EM anomalies description file; txt and PDF formats
Dish-EMAnomalies.csv	EM anomalies in ASCII csv format
Dish-EMAnomalies.xyz	EM anomalies in Geosoft .xyz format
Fox-EMAnomalies.csv	EM anomalies in ASCII csv format
Fox-EMAnomalies.xyz	EM anomalies in Geosoft .xyz format
Bvr-EMAnomalies.csv	EM anomalies in ASCII csv format
Bvr-EMAnomalies.xyz	EM anomalies in Geosoft .xyz format

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MAPS (Folder)

GPR2014-3-1A through H	Page-sized images from the Project Report, reproduced at a larger scale, and provided as maps at 1:63,360-scale.
GPR2014-3-2_a through _h	EM anomalies (in subfolder under Project Report) are provided on maps with residual magnetic field (RMI) and topography.

Maps are provided as HPGL/2 (PRN) and PDF files. The HPGL/2 files were created with HP Design jet 5000 printer driver v5.32 and will not work with all plotters, but do plot on the DGGS HP Design Jet 5000. The HPGL/2 files have brighter colors and sharper topography than the Adobe Acrobat files, and should be used or requested if at all possible.

Freeware software 'printfile', available currently at (http://www.lerup.com/printfile) prints HPGL/2 files easily on compatible printers. The Adobe Acrobat format files were created with Adobe Acrobat Distiller v7.0 (PDF 1.5) from postscript files created from the HPGL/2 files.

Abbreviations used below: RMI = residual magnetic intensity (field); EM = electromagnetic, and topo = topography

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Map No	Area	Type Map	Scale
GPR2014-3-1A	Dishna-North	Interpretation map	1:63,360
GPR2014-3-1B	Dishna-South	Interpretation map	1:63,360
GPR2014-3-1C	Fox	Interpretation map	1:63,360
GPR2014-3-1D	Beaver	Interpretation map	1:63,360
GPR2014-3-1E	Dishna-North	Interpretation map on RMI	1:63,360
GPR2014-3-1F	Dishna-South	Interpretation map on RMI	1:63,360
GPR2014-3-1G	Fox	Interpretation map on RMI	1:63,360
GPR2014-3-1H	Beaver	Interpretation map on RMI	1:63,360
GPR2014-3-2a	Dishna-NW	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2b	Dishna-NE	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2c	Dishna-SW	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2d	Dishna-SE	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2e	Fox-W	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2f	Fox-E	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2g	Beaver-W	Detailed EM anomalies, RMI, and topo	1:31,680
GPR2014-3-2h	Beaver-E	Detailed EM anomalies, RMI, and topo	1:31,680

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GEOTIFFS (Folder)

Geotiff files automatically register correctly as NAD 27, UTM Zone 4N in GIS programs. Geotiff files can be opened in any graphics program, and as long as the file is not saved the registration information will still be valid.

File Name	Area	Type Map	Sheet	Scale
Dish_Interp_ShA.tif	Dishna-North	Interpretation	A	1:63,360
Dish_Interp_ShB.tif	Dishna-South	Interpretation	B	1:63,360
Fox_Interp_ShC.tif	Fox	Interpretation	C	1:63,360
Bvr_Interp_ShD.tif	Beaver	Interpretation	D	1:63,360
Dish_Interp_Legend.jpg	Dishna	Interpretation legend		
Fox_Interp_Legend.jpg	Fox	Interpretation legend		
Bvr_Interp_Legend.jpg	Beaver	Interpretation legend		

File Name	Area	Type Map	Sheet	Scale
Dish_EManom_Sh_a.tif	Dishna-NW	Detailed EM anomalies	a	1:31,680
Dish_EManom_Sh_b.tif	Dishna-NE	Detailed EM anomalies	b	1:31,680
Dish_EManom_Sh_c.tif	Dishna-SW	Detailed EM anomalies	c	1:31,680
Dish_EManom_Sh_d.tif	Dishna-SE	Detailed EM anomalies	d	1:31,680
Fox_EManom_Sh_e.tif	Fox-W	Detailed EM anomalies	e	1:31,680
Fox_EManom_Sh_f.tif	Fox-E	Detailed EM anomalies	f	1:31,680
Bvr_EManom_Sh_g.tif	Beaver-W	Detailed EM anomalies	g	1:31,680
Bvr_EManom_Sh_h.tif	Beaver-E	Detailed EM anomalies	h	1:31,680
EManom_Legend.jpg	All areas	EM anomaly legend		

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KMZs (Folder)

All files in the KMZs folder have the extension '.kmz' (Google Earth zip format). One may drag and drop the KMZ files into 'My Places" in the free downloadable Google Earth program (http://earth.google.com/download-earth.html); data will be automatically

registered with the locational information used by Google Earth, i.e. WGS84 datum and CGS projection.

File Name	Area	Type Map	Sheet	Scale
Dish_Interp_ShA.kmz	Dishna-North	Interpretation	A	1:63,360
Dish_Interp_ShB.kmz	Dishna-South	Interpretation	B	1:63,360
Fox_Interp_ShC.kmz	Fox	Interpretation	C	1:63,360
Bvr_Interp_ShD.kmz	Beaver	Interpretation	D	1:63,360
Dish_Interp_Legend.jpg	Dishna	Interpretation legend		
Fox_Interp_Legend.jpg	Fox	Interpretation legend		
Bvr_Interp_Legend.jpg	Beaver	Interpretation legend		

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SM PROFILES (Folder)
Stacked multi-channel profiles (GPR 2014-3-3) were produced at a scale of 1:31,680 (inch to one-half mile) in Adobe Acrobat format (*.pdf) v1.3 There are 110 sheets total; up to four lines per sheet. Southern Dishna River is designated as GPR2014-3-3a, Fox Hill as GPR2014-3-3b, and Beaver Creek as GPR2014-3-3c. The first line number is added as a suffix to the filename.

GPR2011-4-3*-Sh##_#####.pdf 110 Stacked multi-channel profile sheets

Five Spot-SMProfiles_Readme Parameters, EM anomaly characteristics and line number sheet index; in .txt and PDF formats

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VECTORS (Folder)
Vectors are provided in both ESRI shape file (SHP) format and AutoCAD drawing exchange (DXF) format. See EMAnom_legend and an interpretation legend for each area in the Geotiff directory.

INTERPRETATION and EM ANOMALY MAPS:

File Name	Area	Type Map	Sheet	Scale
Dish_Anom_All	S. Dishna River	EM anomaly symbols	ALL	1:63,360
Dish_Anom_Sh_a	Dishna-NW	EM anomaly symbols	a	1:31,680
Dish_Anom_Sh_b	Dishna-NE	EM anomaly symbols	b	1:31,680
Dish_Anom_Sh_c	Dishna-SW	EM anomaly symbols	c	1:31,680
Dish_Anom_Sh_d	Dishna-SE	EM anomaly symbols	d	1:31,680
Fox_Anom_All	Fox	EM anomaly symbols	ALL	1:63,360
Fox_Anom_Sh_e	Fox-W	EM anomaly symbols	e	1:31,680
Fox_Anom_Sh_f	Fox-E	EM anomaly symbols	f	1:31,680
Bvr_Anom_All	Beaver	EM anomaly symbols	ALL	1:63,360
Bvr_Anom_Sh_g	Beaver-W	EM anomaly symbols	g	1:31,680
Bvr_Anom_Sh_h	Beaver-E	EM anomaly symbols	h	1:31,680
Dish_Interp_All	S. Dishna River	Interpretation	ALL	1:63,360
Dish_Interp_ShA	Dishna-N	Interpretation	A	1:63,360
Dish_Interp_ShB	Dishna-S	Interpretation	B	1:63,360
Fox_Interp_ShC	Fox	Interpretation	C	1:63,360
Bvr_Interp_ShD	Beaver Creek	Interpretation	D	1:63,360

ACCESSORY VECTORS: (* represents Dish, Fox, and Bvr)
*_SecGrid Alaska PLSS Section Grid for the map sheets; with township and range labels.
*_UTMGrid Alaska UTM Grid for the map sheets; includes UTM labels on edges.
*_FP Flight path (made up with Idi_FP_1, _2, _3, and _4 files)

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METADATA (Folder)
Metadata is provided in three formats.

GPR2014-3.faq.html	Hypertext Markup Language format (Question and Answer)
GPR2014-3.txt	ASCII text
GPR2014-3.xml	Extensible Markup Language format

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PROJECTION INFORMATION:

Geotiffs, Vectors, and EM Anomaly channels Easting & Northing

DATUM:	NAD27 Spheroid, Clarke 1866
PROJECTION:	UTM Zone 4N
CENTRAL MERIDIAN:	-159 deg
FALSE EASTING:	500000
FALSE NORTHING:	0
SCALE FACTOR:	0.9996
NORTHERN PARALLEL:	N/A
BASE PARALLEL:	N/A
WGS84 to LOCAL:	Molodensky conversion method
DELTA X SHIFT:	+5
DELTA Y SHIFT:	-135
DELTA z SHIFT:	-172

KMZ files

DATUM:	WGS84
PROJECTION:	CGS

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AVAILABILITY and TECHNICAL REQUIREMENTS:

DVD-ROM: Purchased by mail, e-mail (mailto:dggspubs@alaska.gov), or in person from DGGS, 3354 College Road, Fairbanks, Alaska, 99709-3707 for $10 plus postage; 1 DVD-ROM.

ON-LINE: All parts of this publication can be downloaded from the DGGS Web link http://www.dggs.alaska.gov/pubs/id/27326 in data groups, e.g. MapsAsPDFS. The downloadable groups are near the bottom of the web page. Note that the 'Read Me' file available for each link is not the same file as this document.

MAPS: The PDF version of the maps may be viewed, downloaded, or printed individually from the same link as the downloads: http://www.dggs.alaska.gov/pubs/id/37236 which will contain related geophysical or geological data that are produced in the future. Maps are also available on paper or Mylar through the DGGS office for $13/sheet plus mail costs. Please ask for the maps to be printed from HPGL/2 files to ensure the best quality image.

Technical requirements for the data on this publication includes software with ability to use, import, or convert Geosoft float GRD, Geosoft binary GDB or ASCII XYZ files, ESRI Shape files, Adobe Acrobat PDF, Google Earth files, and text files. Free downloadable interfaces to view or convert the gridded and shape files are available at the Geosoft Web site (http://www.geosoft.com; Oasis Montaj viewer). The KMZ files can be dragged and dropped into the 'My Places' folder of the free downloadable 'Google Earth' software. Freeware software 'printfile' (http://www.lerup.com/printfile) prints HPGL/2 files easily on compatible printers. The HPGL/2 files have brighter colors and sharper topography than the PDF maps and should be used for printing when possible. The PDF format maps are the only maps digitally viewable in this publication.

If you have any problems with this archive please contact Laurel Burns or the current geophysicist at the DGGS office.

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