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GJBX- 80 '80

Airborne Gamma-Ray Spectrometer and Magnetometer Survey

Iditarod Quadrangle
(Alaska)

Final Report Volume II

Prepared For The Department Of Energy

Grand Junction Office

Grand Junction, Colorado 81501

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Grand Junction Operations, Grand Junction, Colorado

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by

Aero Service Division

Western Geophysical Company of America

Houston, Texas 77001

AERO SERVICE

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G E O L O G I C L E G E N D

<u>Aero Symbol</u>	<u>Map Symbol</u>	
QA, QAW	Qal	: Surficial deposits, undifferentiated Quaternary
QM	Qmt	: Mine tailings Quaternary
KK	Kk	: Kuskokwim Group Upper Cretaceous
	Kkh	: Kuskokwim Group hornfels Upper Cretaceous
	Pz	: Metasedimentary rocks Paleozoic
PC	Pc	: Chert, limestone and sandstone Mississippian?
PP	Ppc	: Undifferentiated metamorphic rock PreCambrian/Upper Paleozoic
QT	Qtv	: Basaltic and andesitic flows Tertiary/Quaternary
TR	Tr	: Albite rhyolite Tertiary
TM	Tmi	: Pyroxene diorite, gabbro, pyroxenite, diabase Tertiary
TQ	TKqd	: Granite to quartz diorite Cretaceous to Tertiary
TK	Tkv	: Dacite, rhyolite, basalt sills and dikes Cretaceous to Tertiary
	Kb	: Basaltic agglomerate flow breccia Upper Cretaceous
KBB, KA	Kba	: Basalt to andesite flows, minor gabbro upper Cretaceous
KM	Km	: Monzonite, monzodiorite and tonalite, local quartz monzonite and granodiorite Upper Cretaceous
MZ	Mzv	: Basalt flows underlain by sedimentary breccia Paleozoic and Mesozoic
MP	MzPz	: Siltstone, chert, tuff and pillow flows Paleozoic and Mesozoic
W		: Water

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K FILM IDENTIFIED TRAVERSE/FLY LINE INTERSECTION
K FILM IDENTIFIED GROUND CONTROL
INDEX FIDUCIAL 100 FIDUCIAL INTERVALS
PLANNED 1974

FLIGHT PATH
IDENTARON

DOE/NURE

→ 90°

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 580

→ 90°
0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 660

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 680

→ 90°

0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 700

→

90°

0 1 2 3 4 5 MILES

0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 500

→

90°

0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 540

→ 90°
0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 580

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 660

→ 90°
0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 720

→ 0°
0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 5100

→ 0°

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 5120

→ 0°

0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 8 KILOMETERS

AERO SERVICE
JOB 9608
FLOWN 1979

DOE/NURE
IDITAROD QUAD
LINE 5140

IDITAROD

FORMATION QAW
TOTAL SAMPLES 3895AERO SERVICE
1979

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FLIGHT PATH PLOTTED..... DATA ADEQUATE
FLIGHT PATH BLANK..... DATA INADEQUATE

+..... COUNT RATE GREATER THAN 3,2,1 STANDARD DEVIATION(S)
*..... ABOVE MEAN
-..... COUNT RATE LOWER THAN 3,2,1 STANDARD DEVIATION(S)
..... BELOW MEAN

NEITHER + NOR COUNT RATE WITHIN ONE STANDARD DEVIATION OF MEAN
FLOWN AND COMPILED..... 1979 - 1980

THORIUM / POTASSIUM ANOMALY MAP

IDITAROD

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FLIGHT PATH PLOTTED.....DATA ADEQUATE
FLIGHT PATH BLANK.....DATA INADEQUATE

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-.....COUNT RATE LOWER THAN 3,2,1 STANDARD DEVIATION(S)
-.....BELOW MEAN

NEITHER + NOR -.....COUNT RATE WITHIN ONE STANDARD DEVIATION OF MEAN
FLOWN AND COMPILED.....1979 - 1980

URANIUM ANOMALY MAP

1011AR00

DOE/NURE

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FLIGHT PATH PLOTTED..... DATA ADEQUATE
FLIGHT PATH BLANK..... DATA INADEQUATE

++++..... COUNT RATE GREATER THAN 3.2, 1 STANDARD DEVIATION
+..... ABOVE MEAN
..... COUNT RATE LOWER THAN 3.2, 1 STANDARD DEVIATION
-..... BELOW MEAN

NEITHER + NOR -..... COUNT RATE WITHIN ONE STANDARD DEVIATION OF MEAN
FLOWN AND COMPILED..... 1979 - 1980

THORIUM ANOMALY MAP

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ABOVE MEAN
.....COUNT RATE LOWER THAN 3.2, 1 STANDARD DEVIATION(S)
BELOW MEAN

NEITHER + NORCOUNT RATE WITHIN ONE STANDARD DEVIATION OF MEAN
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POTASSIUM ANOMALY MAP

IDITAROD

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FLIGHT PATH PLOTTED.....DATA ADEQUATE
FLIGHT PATH BLANK.....DATA INADEQUATE

+.....COUNT RATE GREATER THAN 3,2,1 STANDARD DEVIATION(S)
+.....ABOVE MEAN
-.....COUNT RATE LOWER THAN 3,2,1 STANDARD DEVIATION(S)
-.....BELOW MEAN

NEITHER + NOR -.....COUNT RATE WITHIN ONE STANDARD DEVIATION OF MEAN
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URANIUM / THORIUM ANOMALY MAP

IDITAROD

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FLIGHT PATH PLOTTED.....DATA ADEQUATE
FLIGHT PATH BLANK.....DATA INADEQUATE

+.....COUNT RATE GREATER THAN 3,2,1 STANDARD DEVIATION(S)
+.....ABOVE MEAN
-.....COUNT RATE LOWER THAN 3,2,1 STANDARD DEVIATION(S)
-.....BELOW MEAN

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FLOWN AND COMPILED.....1979 - 1980

URANIUM / POTASSIUM ANOMALY MAP

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