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UNDISCOVERED MINERAL RESOURCES OF SOUTHEASTERN ALASKA–REVISED MINERAL-RESOURCE-ASSESSMENT-TRACT DESCRIPTIONS

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INTRODUCTION

This report presents revisions, re-descriptions, and additions to the mineral-resource-assessment-tract information contained in the Tongass National Forest and adjacent areas reports by Brew and others (1991) and Brew and Drinkwater (1991).The changes to some individual tracts are significant, but the overall effect of the changes on the conclusions of those two reports is not that great. This is because the changes are confined to a small proportion of the tracts present in southeastern Alaska. The reexamination and revision was done by the present authors together as a team; it relied especially on the interpretations of additional geochemical data by C.D. Taylor and of additional geophysical data by R.C. Jachens.

The reason for this reexamination and additional interpretation was the national-scale assessment of undiscovered mineral resources undertaken by the Office of Mineral Resources, Geologic Division, U.S. Geological Survey in 1993 (D.P. Cox and S.D. Ludington, written commun., 1993). As part of that national project, the State of Alaska was divided into subregions, of which southeastern Alaska is one, and the undiscovered mineral resources of each subregion were assessed. As just noted, the required assessment of southeastern Alaska followed the earlier comprehensive assessment by Brew and others (1991) and Brew and Drinkwater (1991), which had resulted in the delineation of many separate tracts and the estimation of the numbers of undiscovered deposits of different types in those tracts. Because of this prior assessment, the subsequent one involved mainly reexamination of the previous material, but some additional geochemical and geophysical data were incorporated also. However, with the exception of both the newly defined and the significantly revised tracts noted below, the estimated numbers of deposits within each tract are taken directly from Brew and others (1991).

The information developed for the separate tracts during the reexamination process was contributed to the Alaska statewide assessment, but, because of the greater detail of the southeastern Alaska assessment in comparison to the rest of Alaska, the individual southeastern Alaska tracts were amalgamated into a much smaller number for the purpose of the statewide assessment (T.D. Light, U.S. Geological Survey, written commun., 1995). This present report, then, not only documents the changes made in our detailed tract analysis and thus provides additional information for the users of Brew and others (1991) and Brew and Drinkwater (1991) but it also provides the background information for the tracts that have been amalgamated in the statewide assessment.

The remainder of this report has three main parts: the first follows immediately and consists of noting which tracts were changed and how; the second consists of copies of the individual pages of the FilemakerPro® tract file, and the third is the 1:1,000,000-scale map (plate 1) showing all the assessment tract boundaries, including the changed ones.

The definitions and background information given in Brew and others (1991, especially p. 16-17) apply to this report and are not repeated here. Please note that where a tract has more than one part that are geographically separated, the letters "a" and "A" are used interchangeably on the map and in the tract descriptions. Note also that "T" is the abbreviation for English tons and "mt" is that for metric tonnes.

SPECIFIC CHANGES FROM U.S.G.S. OPEN-FILE REPORT 91-10 (Brew and others, 1991)

Listed in the next paragraph are the significant changes that alter the information in Brew and others (1991). All other items in that prior report, including the catalog of deposits (Brew and others, 1991, table 2), remain the same for the present time. Obviously, the estimated metal content and its inferred value (Brew and others, 1991, tables 5, 7-12) would change for the items noted below, were they to be recalculated.

Tracts 28CR, 09PA, and 10PA are new and are based on new geophysical data and reexamination of geochemical information. Tract 13 SI was split into two tracts based on new field mapping and the reexamination of geochemical data, with the northern one being 09JU and the southern one being 13SI. Boundary changes were made to tracts 05JU, 08KC, 12PE, and 16SK based mainly on reexamination of field mapping information. Some model assignments were changed for tracts 10DE (Nokleberg and others, 1995, p. 115), 03JU, 09CR, 26CR, and 14SI in order to better agree with mineral-deposit models (Cox and Singer, 1986); and all model 17 (porphyry Cu) assignments were changed to the more recently described model 17.1 (British-Columbia-Alaska porphyry Cu; Menzie and Singer, 1993). The reader is referred to the tract descriptions below and those in Brew and others (1991, tables 4 and 5) to make more detailed comparisons.

TRACT DESCRIPTIONS

The FilemakerPro® tract file contains the essential information for each tract, using a format designed by R.D. Koch and revised by D.J. Grybeck. Each of the 120-plus mineral-resource-assessment tracts in southeastern Alaska is represented by a single page. The information on that page is explained as follows.

Southeastern Alaska: The region containing the tract

Tract Name: Based on the general location of the tract

Tract No: The map (plate 1) and tract-sheet numeroalphic designator; the origin of these designators is explained in Brew and others (1991)

Geology: Brief description of the rocks in the tract used in defining the tract boundaries

Geochemistry: Brief description of the geochemical anomalies, if any, used in defining the tract boundaries

Geophysics: Brief description of the geophysical anomalies, if any, used in defining the tract boundaries

Significant Deposits: (w/ Production and Reserves) The alphanumeric designators for specific known mineral deposits as described in table 2 of Brew and others (1991); production and reserve information is included for each deposit for which it is available

Undiscovered Deposit Type: The mineral deposit types expected to be present in the tract are listed, first by their number, then by name, following the descriptive models of Cox and Singer (1986) and Menzie and Singer (1993); other models are briefly described by Nokleberg and others (1988)

Number of Undiscovered Deposits at Probability Percentile 95, 90, 50, 10, 05: Estimates of the maximum number of deposits judged to be present in the tract, using the grade and tonnage models of Cox and Singer (1986) and of Menzie and Singer (1993) for the BC-AK porphyry copper deposits (model 17.1) and a basaltic copper deposit model based on the data of White (1978)

Grade/Tonnage Model?: Availabilty as yes or no, based on the data in Cox and Singer (1986) and in Menzie and Singer (1993)

Tract (km^2): Calculated from 1:250,000-scale maps (Brew and others, 1991)

TRACT DESCRIPTIONS--Continued

Comments: General charaterization of geologic and geochemical mapping, terrain, vegetation, access, and land ownership

Discussion: Other points, if any

REFERENCES CITED

Brew, D.A., Drew, L.J., Schmidt, J.M., Root, D.H., and Huber, D.F., 1991, Undiscovered locatable mineral resources of the Tongass National Forest and adjacent lands, southeastern Alaska: U.S. Geological Survey Open-File Report 91-10, 11 fig., 16 pl. 1:250,000 and 1:500,000-scale, 370 p.

Brew, D.A., and Drinkwater, J.L., 1991, Tongass Timber Reform Act Wilderness Areas supplement to U.S. Geological Survey Open-File Report 91-10 (Undiscovered locatable mineral resources of the Tongass National Forest and adjacent lands, southeastern Alaska): U.S. Geological Survey Open-File Report 91-343: 56 p.

Cox, D.P. and Singer, D.A., 1986, Mineral deposit models: U.S. Geological Survey Bulletin 1693, 379 p.

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Nokleberg, W.J., Bundtzen, T.K., Brew, D.A., Grybeck, D., Robinson, M.S., Smith, T.E., and Yeend, W., 1988, Metallogeny and major mineral deposits of Alaska: U.S. Geological Survey Open-File Report 88-73, 2 pl., 97 p.

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Thomson, L., 1996, Mine [Greens Creek] invests $80 million to reopen: Juneau Empire, March 7, 1996, p. 1, 10.

White, W.S., 1968, The native copper deposits of northern Michigan, *in* Ridge, J.D., ed., Ore deposits of the United States, 1933-1967 (The Graton-Sales Volume): American Institute of Mining Metallurgical, and Petroleum Engineers, Inc., v. 1, p. 303-326.

Tract Name: Lace River **Tract No:** 01AL

Geology: Paleozoic and Late Proterozoic clastic carbonate and volcanic rocks are intruded and metamorphosed by Tertiary plutons.

Geochemistry:

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 14a W skarn	0	0	0	0	1	Yes
2) 18b Cu skarn	0	0	0	0	1	Yes
3) 18c Zn-Pb skarn	0	0	0	0	1	Yes

Tract (km^2): 32

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; essentially unprospected. Small tract. Remote, steep, extensive glacier cover. 100% in Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 01(B)AL and 12JU.

Tract Name: Chilkoot Range ultramafic bodies (A, B, C) **Tract No:** 02AL

Geology: Alpine-type peridotite bodies associated with gabbro, amphibolite, and greenstone intruded by Tertiary granitic bodies.

Geochemistry:

Geophysics: There may be aeromagnetic anomalies associated with these bodies.

Significant Deposits: None

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 8a Podiform chromite (minor)	0	0	0	0	1	Yes

Tract (km^2): 18

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; essentially unprospected. Small tract. Remote, steep, extensive glacier cover. Good exposures. 100% in Tongass National Forest.

Discussion:

Tract Name: Chilkoot Range metabasalts **Tract No:** 03AL

Geology: Low-metamorphic-grade metabasalt flows and tuffs of Triassic age associated with clastic and carbonate rocks. Minor supergene Cu minerals present locally.

Geochemistry:

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 24a Cyprus massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 21

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; essentially unprospected. Small tract. Remote, steep, extensive glacier cover. Good exposures. 100% in Tongass National Forest.

Discussion:

Tract Name: Bradfield Canal Coast Mountains: (A) Elbow Mountain, (B) Mount Whipple, (C) Craig River, (D) Mount Lewis Cass

Tract No: 01BC

Geology: Vein, skarn, and disseminated sulfide deposits occur in schist, gneiss, and marble of original Late Proterozoic(?) to Mesozoic age intruded by Tertiary plutons.

Geochemistry: Stream-sediment and bedrock anomalies: Cu, Pb, Zn, Ag, Mo, Au.

Geophysics:

Significant Deposits: (w/Production and Reserves) (A) None; (B) None; (C) BC006; (D) BC005: 517,000 mt inferred w/ 0.30% Cu, 55.0% Fe (Coldwell, 1990), BC009

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	0	0	1	Yes
3) 18d Fe skarn	0	0	0	1	2	Yes
4) Porphyry Cu-Mo	0	0	0	0	1	Yes

Tract (km^2): 212 total: (A) 14, (B) 28, (C) 52, and (D) 118

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Remote and rugged; significant glacier and permanent snow cover. 7% in USFS Stikine-LeConte Wilderness, 82% in USFS Tongass National Forest, 11% in USFA Misty Fiords Wilderness.

Discussion: Fe-skarn resources in subtract (D) only. Close to active exploration areas in Jurassic volcanic rocks and plutons in nearby British Columbia.

Tract Name: Cone Mountain **Tract No:** 02BC

Geology: Leucocratic biotite-bearing alkalic granite stock in NE part of tract; quartz-porphyry rhyolitic dikes in SW part.

Geochemistry: Stream-sediment anomalies: Pb, Y, Be, Nb, Sn, Mo, Zn, Ag, Cu

Geophysics: Aeroradioactivity anomaly.

Significant Deposits: BC004
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 11d Th-RE veins (AP/THRE)	-	-	-	-	-	No
2) Polymetallic vein	0	0	0	0	1	Yes
3) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes

Tract (km^2): 219

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Moderate amount of private prospecting and some exploration drilling. Remote, rugged, some thick brush and timber locally. 100% in USFS Tongass National Forest.

Discussion: Moderately well explored.

Southeastern Alaska

Tract Name: Glacier Basin-Berg Basin **Tract No:** 04BC

Geology: Deformed and metamorphosed Late Proterozoic(?) to Mesozoic clastic and volcanic rocks are intruded by Late Cretaceous tonalite and granodiorite and by the latest Cretaceous to Paleocene Great tonalite sill; vein deposits present.

Geochemistry: Stream-sediment anomalies: Zn, Cu, Mo, Ag, Pb, Sn. Bedrock anomalies: Zn, Cu, Pb, Mo, Ag, Au.

Geophysics:

Significant Deposits: BC002, 003; PE038, 041, 042
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28c Sierran kuroko massive sulfide	-	-	-	-	-	Yes
2) 22c Polymetallic vein	0	0	1	2	4	Yes

Tract (km^2): 499 total: 425 in BC and 74 in PE

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Moderate amount of private prospecting in North part of tract, less to South. In part close to tidewater, in part remote and rugged; some thick brush and timber locally. 91% in USFS Tongass National Forest; 9% in USFS Stikine-LeConte Wilderness.

Discussion: Includes USGS OFR 91-010 tracts 19PE and 04BC.

Tract Name: Harding River **Tract No:** 05BC

Geology: Deformed and metamorphosed schist, gneiss, and minor marble derived from Late Proterozoic(?) to Mesozoic clastic and volcanic rocks are intruded by Early Tertiary granodiorite plutons on the northeast and by the latest Cretaceous to Paleocene Great tonalite sill on the southwest

Geochemistry: Bedrock anomalies: Mo, Ag, Cu, Pb, Zn.

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes
2) Zn-Pb skarn	No est.	No est.	No est.	No est.	No est.	No

Tract (km^2): 142

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Small amount of private prospecting. In part close to tidewater, in part remote, rugged, steep; very extensive glacier cover locally. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Mount Stoeckl **Tract No:** 06BC

Geology: Eocene porphyritic quartz monzonite intrudes schist, gneiss, and marble of Late Proterozoic(?) to Mesozoic age.

Geochemistry: Bedrock anomalies: U.

Geophysics:

Significant Deposits: BC010

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	-	-	-	-	-	No
2) Th-RE veins	-	-	-	-	-	No

Tract (km^2): 39

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Small amount of private prospecting. Small tract. Remote, rugged, steep; much glacier and permanent snow cover. 100% in USFS Misty Fiords Wilderness.

Discussion:

Tract Name: Eulachon Creek **Tract No:** 07BC

Geology: Schist, gneiss, and minor marble of Late Proterozoic(?) to Mesozoic age.

Geochemistry: Bedrock anomalies: Cu, Ag, Pb, Zn, Mo, Sn.

Geophysics:

Significant Deposits: BC008
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	0	1	Yes
2) 18d Fe skarn	0	0	0	0	1	Yes

Tract (km^2): 76

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Small amount of private prospecting. Not far from tidewater; rugged; heavy timber and brush locally. 100% in USFS Misty Fiords Wilderness.

Discussion:

Tract Name: Gracey Creek Glacier **Tract No:** 08BC

Geology: Schist, gneiss, and minor marble of Late Proterozoic(?) to Mesozoic age.

Geochemistry: Bedrock anomalies: Cu, Zn, Pb, Ag.

Geophysics:

Significant Deposits: BC011
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 60

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Remote; rugged; extensive glacier and permanent snow cover. 100% in USFS Misty Fiords Wilderness.

Discussion:

Tract Name: Burroughs Bay **Tract No:** 10BC

Geology: Quartz-porphyry dikes associated with molybdenite-bearing K-spar porphyritic biotite granite and quartz monzonite of Miocene age.

Geochemistry: Bedrock and stream-sediment anomalies: Mo, Cu, Pb, Zn.

Geophysics:

Significant Deposits: KC003
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes

Tract (km^2): 62 total: 42 in BC and 20 in KC

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Moderate amount of private prospecting and some exploration drilling. Close to tidewater; some parts steep and rugged; some thick brush and timber. Relatively small tract. 81% in USFS Misty Fiords Wilderness; 19% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 02KC and 10BC.

Tract Name: Chickamin Glacier

Tract No: 12BC

Geology: Numerous sulfide deposits occur within 300 m above or below the contact of the Early Jurassic Texas Creek granodiorite and the metasedimentary and metavolcanic rocks of the Triassic age Hazelton Group.

Geochemistry: Stream-sediment anomalies: Au, Ag, Cu, Mo, Pb, Zn; bedrock anomalies: Ag, Cu, Mo, Pb, Zn.

Geophysics:

Significant Deposits: (w/Production and Reserves) BC 013-050; small production from BC026-047; these localities are included in an aggregate inferred estimate of 690,000 mt with 4.87 g/mt Au, 79.11 g/mt Ag, 0.13% Cu, 0.01% Mo, 3.48% Pb, 0.03 g/mt WO_3, 0.30% Zn for the whole Hyder subdistrict [Coldwell, 1990].

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18c Zn-Pb skarn	0	1	2	3	5	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes
3) 18b Cu skarn	0	0	0	0	1	Yes
4) Metamorphosed sulfide						

Tract (km^2): 199 total: 190 in BC and 9 in KC.

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS. Large amount of private prospecting and some exploration drilling. Remote, rugged; extensive glacier and permanent snow cover; old trails give acess from tidewater at Hyder. 62% in USFS Misty Fiords Wilderness; 38% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 04KC and 12BC.

Tract Name: Texas Creek-Hyder **Tract No:** 13BC

Geology: Quartz and sulfide veins and shear zones cut Early Jurassic, Texas Creek granodiorite and Hazelton Group metavolcanic rocks.

Geochemistry: Bedrock anomalies: Au, Ag, As, Mo, Sb, Co, Ni.

Geophysics:

Significant Deposits: (w/Production and Reserves) BC052-075; KC101-105; some production from BC033, 059, 062, and 075; these localities are included in an aggregate inferred estimate of 690,000 mt with 4.87 g/mt Au, 79.11 g/mt Ag, 0.13% Cu, 0.01% Mo, 3.48% Pb, 0.03 g/mt WO_3, 0.30% Zn for the whole Hyder subdistrict [Coldwell, 1990].

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	1	2	Yes
2) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes
3) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 68 total: 44 in BC and 24 in KC

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS. Large amount of private prospecting and some exploration drilling. Locally rugged; old trails and road give acess from tidewater at Hyder. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 05KC and 13BC.

Tract Name: Coronation Island **Tract No:** 01CR

Geology: Paleozoic limestone/marble is intruded by Cretaceous felsic pluton; small high-grade Pb-Ag replacement deposits occur locally.

Geochemistry: Stream-sediment anomalies: Pb, Sb.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR001: Small high-grade Pb-Ag replacement deposits in limestone/marble; more than 100 T of Ag-bearing ore produced in early 1900's.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 19a Polymetallic replacement	0	0	0	1	2	Yes

Tract (km^2): 73

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Moderate amount of private prospecting and some exploration drilling in 1970's. Locally rugged and steep; close to tidewater. 100% in USFS Coronation Island Wilderness.

Discussion:

Tract Name: Warren Island **Tract No:** 02CR

Geology: Descon Formation graywacke and minor carbonate rocks intruded by Cretaceous felsic pluton, are permissive for skarn and porphyry deposits.

Geochemistry: Stream-sediment anomalies: Pb, Sb.

Geophysics:

Significant Deposits:
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	-	-	-	-	-	Yes
2) 18c Zn-Pb skarn	-	-	-	-	-	Yes
3) 17.1 B.C.-Ak Porphyry Cu	-	-	-	-	-	Yes
4) 16 Climax Mo	-	-	-	-	-	Yes

Tract (km^2): 44

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Locally rugged and steep; local heavy timber; close to tidewater. 100% in USFS Coronation Island Wilderness.

Discussion: No estimates because of insufficient data.

Tract Name: Sweetwater Lake **Tract No:** 03CR

Geology: Silurian-age turbidites and minor volcanic rocks in a locally heterogeneous section that elsewhere contains some volcanogenic massive sulfide deposits.

Geochemistry: Stream-sediment anomalies: scattered low-level Zn.

Geophysics:

Significant Deposits: CR003
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 24b Besshi massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 649 total: 523 in CR and 126 in PE

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Small amount of prospecting. Moderately rugged and steep; local heavy timber and brush; some logging roads. Large tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 09PE and 03CR.

Tract Name: Lava Creek **Tract No:** 07CR

Geology: Silurian-Ordovician-age andesitic breccia with minor limestone is intruded by large felsic Cretaceous-age pluton; environment permissive for U,Th, or REE..

Geochemistry: Stream-sediment anomalies: scattered Nb, La.

Geophysics:

Significant Deposits:
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	0	1	No
2) 11d Th-RE veins	0	0	0	0	1	Yes

Tract (km^2): 68

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Small amount of prospecting. Moderately rugged and steep; local heavy timber and brush; some logging roads; close to tidewater. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Union Bay **Tract No:** 08CR

Geology: Alaskan-type ultramafic-mafic pluton of mid-Cretaceous age intrudes flysch and volcanic rocks of Gravina overlap assemblage.

Geochemistry: Stream-sediment anomalies: Cr.

Geophysics: There must be a significant aeromagnetic anomaly associated with this pluton.

Significant Deposits: (w/Production and Reserves) CR165: 1,000,000,000 T Ti-bearing, 18-20% Fe ore; 907,1875,000 T w/ 19.0% Fe [Coldwell, 1990].

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	0	0	0	0	1	No

Tract (km^2): 61

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; some detailed mapping by USGS and others. Little prospecting for PGE-group metals. Moderately rugged and steep; local heavy timber and brush; close to tidewater. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Lower Cleveland Peninsula **Tract No:** 09CR

Geology: Au-bearing quartz veins and parallel shear zones cross-cut low-grade metamorphic Mesozoic or Paleozoic pelitic and felsic(?) rocks.

Geochemistry: Stream-sediment anomalies: Au, Sb, Pb.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR166-172; KC004-014. Production uncertain, but several mines in the CR quadrangle produced hundreds to thousands of T Au ore from 1910-1930's; also a few thousand oz Au produced from KC004 in 1898-1917. These localities included in aggregated inferred estimate of 282,000 mt w/ 11.89 g/mt Au [Coldwell, 1990].

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	1	3	7	12	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 145

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Moderate to substantial amount of prospecting. Moderately rugged and steep; local heavy timber and brush; close to tidewater; limited outcrop. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: South-central Prince of Wales Island **Tract No:** 10CR

Geology: Large outcrop area of Ordovician, Devonian, and Mississippian sedimentary and volcanic rocks.

Geochemistry: Stream-sediment anomalies: Cu, numerous; Pb, Zn, Ba, Ag scattered.

Geophysics:

Significant Deposits: CR004-006, 012, 030, 031, 049, 083, 095-099, 127; DE008.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	1	2	3	5	Yes
2) 22c Polymetallic vein	0	3	6	8	10	Yes
3) 17.1 BC-AK Porphyry Cu	0	0	1	2	3	Yes
4) 18b Cu skarn	0	1	2	4	6	Yes

Tract (km^2): 1,608 total: 1,606 in CR, 1 in DE, and 1 in KC.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Moderate amount of prospecting. Moderately rugged and steep; local heavy timber and brush; close to tidewater; some logging roads. Very large tract. 2% in USFS Karta River Wilderness, 40% in Alaska Native lands, 58% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 03DE, 10CR, and 11KC.

Tract Name: Kasaan Bay-Salt Chuck **Tract No:** 11CR

Geology: Multi-phase, Silurian Alaskan-type mafic-ultramafic pluton intrudes Paleozoic rocks; it contains a magmatic Cu-PGE-Au deposit.

Geochemistry: Stream-sediment anomalies: Cu.

Geophysics: There must be an aeromagnetic anomaly associated with this pluton.

Significant Deposits: (w/Production and Reserves) CR064, 066, 069-094; production from CR067 was about 300,000 T w/ 0.9% Cu, 0.02 oz/T Au, 0.1 oz/T Ag, 0.05 oz/T Pd.; CR067 estimated to contain 165,000 mt inferred w/ 0.22 g/mt Au, 3.69 g/mt Ag, 0.02 g/mt Pd, 0.59% Cu [Coldwell, 1990].

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 16

Comments: Detailed geologic mapping and reconnaissance geochemical sampling by USGS. Moderate amount of prospecting. Moderately rugged and steep; local heavy timber and brush; close to tidewater; logging and State roads; limited exposure. Very small tract. 100% in USFS Tongass National Forest.

Discussion: No estimate because of small size of tract.

Tract Name: Kasaan Peninsula **Tract No:** 12CR

Geology: Paleozoic felsic to intermediate plutons intrude Lower Paleozoic calcareous metasedimentary rocks; Fe-Cu skarn deposits present.

Geochemistry: Stream-sediment anomalies: Cu, Pb, Zn; scattered.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR064, 066, 069-094. Production from several mines 1900- 1917 estimated to be about 274,4000 T w/ 12.78 million lbs Cu, 57,800 oz Ag. Resource estimates: 3.02 million T. Coldwell (1990) indicates an aggregate of 11,323,000 mt w/ 0.12 g/mt Au, 0.26 g/mt Ag, 0.09% Cu, and 19.53% Cu for all localities.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	1	2	3	5	Yes
2) 18d Fe skarn	0	1	2	3	5	Yes

Tract (km^2): 196

Comments: Detailed geologic mapping and geochemical sampling by USGS. Moderate amount of prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater; logging roads in W part; limited exposure. 65% in Alaska Native lands, 35% in USFS Tongass National Forest.

Discussion:

Tract Name: Baker Island **Tract No:** 13CR

Geology: Cretaceous pluton intrudes Silurian-Ordovician Descon Formation metasedimentary rocks; Mo-bearing porphyry system and vein deposits present.

Geochemistry: Stream-sediment anomalies: Mo, Ba, Cu, scattered. Au reported in old drill holes.

Geophysics:

Significant Deposits: CR009-011.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 85

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some exploration drilling on CR010. Moderate amount of prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater; logging roads in West part; limited exposure. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: San Juan Bautista Island **Tract No:** 14CR

Geology: Small Cretaceous granitic pluton; some associated sulfide occurrences.

Geochemistry: Stream-sediment anomalies: Pb, Zn, Cu, scattered.

Geophysics:

Significant Deposits: CR013, 014
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 17.1 BC-AK Porphyry Cu	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 21

Comments: Semi-detailed geologic mapping and geochemical sampling of shoreline by USGS; reconnaissance inland. Some exploration drilling on one prospect in 1970's. Moderate amount of prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater. Small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Port Saint Nicholas **Tract No:** 15CR

Geology: Syenitic and(or) granitic plutons intrude Lower and Middle Paleozoic volcanic and sedimentary rocks.

Geochemistry: Stream-sediment anomalies: Nb, Be, Y, La.

Geophysics:

Significant Deposits: CR015
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	0	1	No
2) 11d Th-RE veins	0	0	0	0	1	Yes
3) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes

Tract (km^2): 157

Comments: Reconnaissance and some semi-detailed geologic mapping and geochemical sampling by USGS. Small amount of prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater; some logging roads. 100% in Alaska Native lands.

Discussion:

Tract Name: Black Lake (A)-Lake Saint Nicholas (B) **Tract No:** 16CR

Geology: Lower Paleozoic andesitic breccia and some Middle Paleozoic carbonate rocks are intruded by Cretaceous-age pluton; known Mo minerals.

Geochemistry: Stream-sediment anomalies: Mo.

Geophysics:

Significant Deposits: (a): CR016-020; (B): CR025
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes

Tract (km^2): 233

Comments: Reconnaissance and some semi-detailed geologic mapping and geochemical sampling by USGS. Moderate amount of prospecting, including drilling on one prospect in 1970's. Locally rugged and steep; local heavy timber and brush; close to tidewater; some State and logging roads. Moderate size tract. 50% in Alaska Native lands, 20% in USFS Karta River Wilderness, 30% in USFS Tongass National Forest.

Discussion:

Tract Name: Pin Peak **Tract No:** 17CR

Geology: Lower Paleozoic andesitic breccia and some Middle Paleozoic carbonate rocks are intruded by Cretaceous(?)- or Paleozoic(?) pluton; possible polymetallic veins.

Geochemistry: Stream-sediment anomalies: Mo.

Geophysics:

Significant Deposits: CR016, 017, 021-024.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 60

Comments: Reconnaissance and some semi-detailed geologic mapping and geochemical sampling by USGS. Moderate amount of prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater; some State and logging roads. Small size tract. 25% in Alaska Native lands, 25% in USFS Karta River Wilderness, 50% in USFS Tongass National Forest.

Discussion:

Tract Name: Maybeso Creek

Tract No: 18CR

Geology: Polymetallic veins in Ordovician shale and graywacke.

Geochemistry: Stream-sediment anomalies: Zn, Pb, Mo, Cu, widespread.

Geophysics:

Significant Deposits: CR026-029, 032-048. Production: several thousand oz Au in 1900-1940.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	1	3	6	8	Yes

Tract (km^2): 90

Comments: Reconnaissance and some semi-detailed geologic mapping and geochemical sampling by USGS. Intermittent prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater; some State and logging roads. Small size tract. 15% in Alaska Native lands, 25% in USFS Karta River Wilderness, 60% in USFS Tongass National Forest.

Discussion:

Tract Name: Suemez Island **Tract No:** 19CR

Geology: Mesozoic or Paleozoic pluton intrudes Silurian-Ordovician Descon Formation metasedimentary rocks; Mo-porphyry system and polymetallic vein environment..

Geochemistry: Stream-sediment anomalies: Nb, La.

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes
3) Felsic plutonic U	0	0	0	0	1	No
4) 11d Th-RE veins	0	0	0	0	1	Yes

Tract (km^2): 141

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Intermittent prospecting. Locally rugged and steep; local heavy timber and brush; close to tidewater. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Trocadero Bay-Cholmondeley Sound **Tract No:** 20CR

Geology: Low-grade Late Proterozoic-Early Paleozoic(?) Wales Group metamorphic rocks contain conformable sulfide lenses.

Geochemistry: Stream-sediment anomalies: Ba, Zn, Pb, Cu; scattered.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR050-058, 100, 102-105, 117, 122, 123, 125, 126, 128-131, 140, 143, 144. Production: None. Reserves: For CR102: 76,000 mt inferred w/ 2.06 g/mt Au, 10.28 g/mt Ag, 1.71% Cu, 0.93% Zn [Coldwell, 1990]; for CR126: 49,000 mt inferred w/ 100% barite.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a Kuroko massive sulfide	0	1	2	3	5	Yes

Tract (km^2): 833 total: 796 in CR and 37 in DE

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some prospecting. Low relief; local heavy timber and brush; close to tidewater; State and logging roads. Large tract. 38% in Alaska Native lands; 0.5% in South prince of Wales Wilderness; 61.5% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 04DE and 20CR.

Tract Name: Copper Mountain **Tract No:** 21CR

Geology: Paleozoic carbonate rocks are intruded by Cretaceous-age granodiorite plutons; numerous Fe and Cu skarn deposits.

Geochemistry: Stream-sediment anomalies: Ba, Zn, Pb, Cu.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR101, 106-121. Production: From 1902-1922, from several mines totaled 10 million lbs Cu, 280,000 oz Ag, 7,000 oz Au. Reserves: For CR112: 65,000T w/ 45% Fe, 0.75% Cu; also for CR112 [Coldwell, 1990]: 590,000 mt w/ 0.34 g/mt Au, 2.70 g/mt Ag, 0.75% Cu, 45.2% Fe.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	1	2	Yes
2) 18d Fe skarn	0	0	0	1	2	Yes

Tract (km^2): 116

Comments: Reconnaissance and detailed geologic mapping and geochemical sampling by USGS. Some prospecting. Locally steep; local heavy timber and brush; close to tidewater. 40% in Alaska Native lands; 60% in USFS Tongass National Forest.

Discussion:

Tract Name: Dora Bay

Tract No: 22CR

Geology: Jurassic-age syenite pluton intrudes Late Proterozoic and Early Paleozoic(?) Wales Group metasedimentary and metavolcanic rocks; REE deposit environment.

Geochemistry: Stream-sediment anomalies: REE.

Geophysics: Aeroradioactivity anomaly.

Significant Deposits: CR132.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	1	2	No
2) 11d Th-RE veins	0	0	0	1	2	Yes

Tract (km^2): 31

Comments: Reconnaissance and detailed geologic mapping and geochemical sampling by USGS. Extensive prospecting. Locally very steep; local heavy timber and brush; close to tidewater. Small tract. 30% in Alaska Native lands; 70% in USFS Tongass National Forest.

Discussion:

Tract Name: Dolomi **Tract No:** 23CR

Geology: Late Proterozic and Early Cambrian(?) Wales Group marble contains veins.

Geochemistry: Stream-sediment anomalies: Mo, Zn, Cu.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR133-137, 139-142,153-163. Production: 1900-1932: 1,000 to 5,000 oz Au, mainly from CR153 (Valparlso)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	1	2	4	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	1	2	5	Yes

Tract (km^2): 92 total: 83 in CR and 9 in KC.

Comments: Reconnaissance and detailed geologic mapping and geochemical sampling by USGS. Some prospecting. Low to moderate relief; local heavy timber and brush; close to tidewater; some logging roads. 27% in Alaska Native lands; 73% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 12KC and 23CR.

Tract Name: Northern Dall Island **Tract No:** 24CR

Geology: Paleozoic sedimentary and volcanic rocks are intruded by Cretaceous-age granitic bodies.

Geochemistry: Stream-sediment anomalies: Mo, Zn, Pb, Sb, Ba.

Geophysics:

Significant Deposits: CR059-062. Only production has been of marble for cement.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	0	0	1	Yes
3) 21b Porphyry Mo (low-F)	0	0	0	0	1	Yes

Tract (km^2): 276 total: 226 in CR and 50 in DE.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some prospecting. Locally very steep; local heavy timber and brush; close to tidewater; some logging roads. 45% in Alaska Native lands; 55% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 02DE and 24CR.

Tract Name: Southeast Sukkwan Island **Tract No:** 25CR

Geology: Lower Paleozoic sedimentary rocks are intruded by Pennsylvanian-age syenite pluton.

Geochemistry: Stream-sediment anomalies: Nb, Be, Y.

Geophysics:

Significant Deposits: CR124
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	0	1	No
2) 11d Th-RE veins (	0	0	0	0	1	Yes

Tract (km^2): 23

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Generally low relief, but locally very steep; local heavy timber and brush; close to tidewater; some State and logging roads. Small tract: 35% in Alaska Native lands; 65% in USFS Tongass National Forest.

Discussion:

Tract Name: Moira Sound **Tract No:** 26CR

Geology: Cretaceous granitic plutons intrude Late Proterozoic and Early Paleozoic(?) Wales Group metasedimentary and metavolcanic rocks; porphyry and vein environment.

Geochemistry: Stream-sediment anomalies: Mo.

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	1	2	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes
3) 18c Zn-Pb skarn	0	0	0	0	1	Yes

Tract (km^2): 275 total: 214 in CR, 52 in DE, 06 in PR, and 03 in KC.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some industry prospecting and drilling. Locally very steep; local heavy timber and brush; close to tidewater. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 07DE, 01PA, 26CR, and 13KC.

Tract Name: Niblack **Tract No:** 27CR

Geology: Felsic volcanic lenses in Late Proteozoic and Early Paleozoic(?) Wales Group contain massive sulfide deposits.

Geochemistry: Stream-sediment anomalies: Ba, Zn, Pb, Cu.

Geophysics:

Significant Deposits: (w/Production and Reserves) CR145-152. Production from CR 149: from 1902-1909, at least 1.4 million lbs Cu, 15,000 oz Ag.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a Kuroko massive sulfide	0	0	1	2	3	Yes

Tract (km^2): 78

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Intense industry prospecting and drilling. Locally very steep; local heavy timber and brush; close to tidewater. Small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Twin Mountain-Staney Cone **Tract No:** 28CR

Geology: Lower and Middle Paleozoic volcanic and clastic sedimentary rocks and some marble are poorly exposed.

Geochemistry:

Geophysics: Prominent aeromagnetic high anomaly surrounded by several low anomalies suggest the existence of a concealed intrusion.

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	-	-	-	-	-	Yes
2) 18b Cu skarn	-	-	-	-	-	Yes
3) 22c Polymetallic vein	-	-	-	-	-	Yes

Tract (km^2): 114

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Minor amount of prospecting. Locally very steep; local heavy timber and brush; close to tidewater. 100% in USFS Tongass National Forest.

Discussion: No estimate because of inadequate data.

Tract Name: Forrester Island **Tract No:** 01DE

Geology: Granodiorite of probable Cretaceous age contains porphyry Mo deposit.

Geochemistry:

Geophysics:

Significant Deposits: DE001, 002.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes

Tract (km^2): 11

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Low amount of prospecting. Locally very steep; local heavy timber and brush; close to open-ocean tidewater. Small tract.100% in USFWS Forrester Island Wildlife Refuge.

Discussion:

Tract Name: Kassa Inlet **Tract No:** 05DE

Geology: Small Paleozoic plutons in Late Proterozoic and Cambrian(?) Wales Group rocks may be permissive for U-Th deposits.

Geochemistry: Stream-sediment anomalies: Nb, Y.

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	0	1	No
2) 11d Th-RE veins	0	0	0	0	1	Yes

Tract (km^2): 26

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS and by ADGGS. Moderate amount of prospecting. Mostly close to tidewater; moderate relief. Small tract. 50% in USFS South Prince of Wales Wilderness, 50% in USFS Tongass National Forest.

Discussion:

Tract Name: Bokan Mountain **Tract No:** 06DE

Geology: Middle Jurassic peralkaline granite has associated veins, dikes, and pegmatites that contain U, Th, and REE minerals.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) DE028, 030-040. Production: DE039: about 110,000 T w/ about 1.3% U_3O_8 from 1955 to 1975. Reserves: All of these localities are included in an inferred estimate of 34,292,000 mt w/ 0.02% U_3O_8, 0.04% ThO_2, 0.18% Y_2O_3, 0.84% ZrO_2, 0.13% CbO_2, 0.32% REE (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	0	1	No
2) 11d Th-RE veins	0	0	1	2	5	Yes

Tract (km^2): 33

Comments: Detailed geologic mapping and some geochemical sampling by USGS; also some samping by USBM. Extensive prospecting. Locally very steep; local heavy timber and brush; road to tidewater from tract. Small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Southern Dall and Long Islands **Tract No:** 08DE

Geology: Minor Cretaceous granitic intrusions cut Late Proterozoic and Early Paleozoic Wales Group rocks; polymetallic veins in the wallrocks.

Geochemistry:

Geophysics:

Significant Deposits: DE003-007.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a Kuroko massive sulfide	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	1	2	4	8	Yes

Tract (km^2): 436

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS. Some prospecting. Locally very steep; local heavy timber and brush; close to tidewater. Large tract. 40% in Alaska Native lands, 60% in USFS Tongass National Forest.

Discussion:

Tract Name: Barrier Islands **Tract No:** 09DE

Geology: Lower Paleozoic, Descon Formation rocks contain scattered massive sulfide occurrences.

Geochemistry:

Geophysics:

Significant Deposits: DE009-015, 017.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a Kuroko massive sulfide	0	0	0	1	2	Yes

Tract (km^2): 117

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS. Some recent prospecting. Generally low relief; local heavy timber and brush; close to tidewater. Moderate-size tract. 90% in USFS Southern Prince of Wales Island Wilderness, 10% in USFS Tongass National Forest.

Discussion:

Tract Name: Southeasternmost Prince of Wales Island **Tract No:** 10DE

Geology: Complex geology with diverse Lower Paleozoic metasedimentary and metavolcanic rocks cut by granitic bodies of different ages.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) DE018-031; PR001, 002; DE023-025 area contains 40 million tonnes hypothetical resources (Nokleberg and others, 1995)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes
2) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes
3) Felsic plutonic U	0	0	0	1	2	No
4) 11d Th-RE veins	0	0	0	1	2	Yes
5) 10 Carbonatite	0	0	0	0	1	Yes

Tract (km^2): 16 total: 131 in DE and 15 in PR.

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS. Some recent prospecting. Generally steep; local heavy timber and brush; close to tidewater. Moderate-size tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 02PR and 10DE.

Tract Name: White Glacier **Tract No:** 01JU

Geology: Complex clastic, carbonate, and volcanic rock section of Permian and Late Triassic(?) age is intruded and metamorphosed by Tertiary and Cretaceous granitic plutons; stratiform massive sulfide deposits present.

Geochemistry: Stream-sediment anomalies: Cu, Mo, Pb, Co, Cr, Ni, Hg.

Geophysics:

Significant Deposits: JU012, 013.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	1	2	Yes

Tract (km^2): 63

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some recent prospecting by USBM. Generally steep and rugged; some glacier cover; local heavy timber and brush; close to tidewater. Relatively small and well-known tract. 100% in USNPS Glacier Bay National Park.

Discussion: Recent investigations (D.A. Brew and others, 1991) indicate that the carbonate and other sedimentary rocks are Permian, and that the amygdaloidal volcanic rocks are probably Late Triassic.

Tract Name: Casement Glacier **Tract No:** 02JU

Geology: Paleozoic clastic and carbonate rocks are intruded by Cretaceous and Tertiary granitic dikes; fracturing and alteration are quite local; Mo-Cu porphyry stockwork and disseminated mineralization in Westpart of tract.

Geochemistry: Stream sediment anomalies: Mo.

Geophysics:

Significant Deposits: JU001-003.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes
2) Porphyry Cu (skarn-related)	0	0	0	0	1	Yes
3) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 576 total: 330 in JU, 104 in MF, and 142 in SK.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some recent prospecting by USBM. Extensive private prospecting of areas deglaciated in 1960's and 1970's. Locally steep and rugged, but generally moderate relief; some glacier cover; local heavy timber and brush; in part close to tidewater. 89% in USNPS Glacier Bay National Park; 11% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 02JU, 08MF, and 06 SK.

Tract Name: Berg Creek **Tract No:** 03JU

Geology: Slightly metamorphosed Paleozoic volcanic and carbonate rocks; minor Cu mineralization in volcanics.

Geochemistry:

Geophysics:

Significant Deposits: JU004, 005, 009, 010.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 132

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Probably essentially unprospected. Remote, steep and rugged; some glacier cover; local heavy timber and brush; in part close to tidewater. 85% in USNPS Glacier Bay National Park; 5% in USFS Tongass National Forest.

Discussion:

Tract Name: Sullivan Mountain **Tract No:** 04JU

Geology: Paleozoic metamorphosed clastic, carbonate, and volcanic rocks of west-dipping structure contain stratiform skarn mineralization.

Geochemistry: Bedrock anomalies: As, Ni, Ag, Cu, Zn.

Geophysics:

Significant Deposits: JU006-008; SK016a,b.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	1	1	2	Yes

Tract (km^2): 335 total: 246 in JU and 89 in SK.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS and by USBM. Moderate to high level of recent prospecting, including some exploration drilling. Locally steep and rugged; local heavy timber and brush; in part close to tidewater. 11% in USFS Endicott River Wilderness; 13% in Alaska State lands; 76% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 08SK and 04JU.

Tract Name: Excursion River **Tract No:** 05JU

Geology: Silurian graywacke and argillite with some carbonate layers are intruded by scattered granodioritic plugs and stocks with possibly associated veins.

Geochemistry: Stream-sediment anomalies: Ag, Be, Co, Hg, Ni, Pb, Zn, Au.

Geophysics:

Significant Deposits: JU018, 022-024.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 524

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS and some by USBM and private industry. In part remote, locally very steep and rugged; some glacier cover; local heavy timber and brush. 70% in USNPS Glacier Bay National Park; 5% in Alaska Native lands; 25% in USFS Tongass National Forest.

Discussion:

Tract Name: Nun Mountain **Tract No:** 06JU

Geology: Silurian graywacke and argillite with some carbonate beds are intruded by a large granodiorite pluton: permissive skarn environment.

Geochemistry:

Geophysics: Aeromagnetic anomaly associated with pluton.

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	0	0	1	Yes

Tract (km^2): 246

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS and some by USBM and private industry. West part locally very steep and rugged; some glacier cover; local heavy timber and brush; in part close to tidewater. 10% in USNPS Glacier Bay National Park; 90% in USFS Tongass National Forest.

Discussion: No known deposits.

Tract Name: Neka Bay **Tract No:** 07JU

Geology: Paleozoic carbonate and clastic rocks are intruded and hornfelsed by Cretaceous granodiorite plutons: permissive skarn environment.

Geochemistry:

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	0	0	1	Yes

Tract (km^2): 50 total: 48 in JU, 02 in SI.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Locally steep and rugged; local heavy timber and brush; in part close to tidewater. 100% in USFS Tongass National Forest.

Discussion: No known deposits. Includes USGS OFR 91-010 tracts 09SI and 07JU.

Tract Name: Northern Admiralty Island **Tract No:** 09JU

Geology: Highly deformed and locally metamorphosed Late Triassic mafic and intermediate volcanic rocks, fine-grained clastic rocks, and ultramafic masses host significant massive sulfide, Ni-Cu magmatic segregation, and polymetallic vein deposits. SI090 (Pyrola) is best known deposit in SI quad part.

Geochemistry: Stream-sediment anomalies: very abundant and varied.
Bedrock anomalies: very abundant and varied.

Geophysics:

Significant Deposits: (w/Production and Reserves) JU028-045; SI088-091. Production: JU032, 034, and 037: significant from vein deposits; JU033: significant from Ni-Cu deposit; JU044 (Greens Creek): greater than 6 million oz Ag and 24,000 oz Au. Reserves: JU033 (Mertie): 560,000 T w/ 0.35% Cu, 0.34% Ni, 0.15% Co; USBM inferred estimate is 508,000 mt w/0.35% Cu, 0.34% Ni, 0.15% Co (Coldwell, 1990); JU044 (Greens Creek): As of 1990: 3,500,000 T w/ 3.9% Pb, 9.7% Zn, 23.8 oz/T Ag, 0.18 oz/T Au. As of March 1996: 80 million T w/ 21 oz/mt Ag and 0.011 ox mt Ag (Thompson, 1996).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	1	3	Yes
2) 7a Synorogenic-synvolcanic Ni-Cu	0	0	0	0	1	Yes
3) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 628 total: 409 in JU and 219 in SI.

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; intense private prospecting in past; close to tidewater in part; parts low relief, others steep and rugged; some heavy brush and timber; relatively large tract. About 49% in USFS Admiralty Island Monument and most of that in Kootznoowoo Wilderness, but some is Alaska Native lands; 3% in USFS Young Lake Wilderness; about 48% in USFS Tongass National Forest (but some small part of this is privately owned).

Discussion: Includes USGS OFR 91-010 tract 09JU and part of 13SI. Tract 13SI is geologic continuation to south.

Tract Name: (A) Kensington-Jualin , and (B) Eagle River-Juneau **Tract No:** 11JU

Geology: (A): Au-bearing quartz veins in shear zones in mid-Cretaceous quartz monzonite pluton and in adjacent hornfelsed Late Triassic(?) basalt. (B): Au-bearing quartz veins in phyllite, slate, greenstone, greenschist, and metagabbro of Permian(?) through middle Cretaceous age that are variously deformed and metamorphosed, also in highly altered quartz monzonite sills of mid- or Late Cretaceous age.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves)

A): JU047-055,057-059; at (B): JU060-134, TR006-008. Production: (A): Significant production from deposits JU047,049-051, 055, 058; Kensington (JU051) now close to renewed production; Jualin (JU058) now being explored and reopened. (B): very large production in past from deposits JU072 (Eagle River), JU101 (Alaska-Juneau), JU125 (Treadwell Group); Alaska-Juneau (JU101) now being evaluated for renewed production; also 100 oz Au produced from TR008 (Enterprise). Reserves: (A): JU051 has inferred 20,000,000 T w/ 0.14 oz/T Au; JU058 reported to have 1,190,000 T w/ 0.236 oz/T Au; (B): JU101 has 100,000,000 T w/ 0.047 oz/T Au; TR008 has USBM estimate of 47,600 mt w/ 6.86 g/mt Au (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	1	2	3	5	Yes
2) 28a.1 Sierran kuroko massive sulfide	0	0	1	2	3	Yes

Tract (km^2): 897 total: 801 in JU and 96 in TR; (A) and (B) not recorded separately.

Comments: Reconnaissance and detailed geologic mapping and geochemical sampling by USGS,, USBM, and private industry. Locally steep and rugged; local heavy timber and brush; close to tidewater; large tract. About 33% in USFS Tongass National Forest; 67% in Alaska State lands, Alaska Native lands, Alaska State park, City and Borough of Juneau lands, and private lands.

Discussion: Includes USGS OFR 91-010 tracts 01TR and 11JU.

Tract Name: Juneau Icefield **Tract No:** 13JU

Geology: Late Proterozoic(?), Paleozoic, and younger(?) metamorphosed clastic, carbonate, and volcanic rocks are intruded and homfelsed by Tertiary plutons; permissive skarn environment.

Geochemistry:

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	1	2	Yes
2) 18c Zn-Pb skarn	0	0	0	1	2	Yes

Tract (km^2): 506

Comments: Reconnaissance and detailed geologic mapping and geochemical sampling by USGS. Essentially unprospected. Remote; exensive glacier cover; steep and rugged; large tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Chickamin River

Tract No: 03KC

Geology: Schist, gneiss, and minor marble of original Late Proterozoic(?), Paleozoic, and (or) Mesozoic age.

Geochemistry:

Geophysics:

Significant Deposits: KC084-087.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18c Zn-Pb skarn	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes
3) 18b Cu skarn	0	0	0	0	1	Yes
4) Metamorphosed sulfide	0	0	0	0	1	No

Tract (km^2): 18 total: 130 in KC and 18 in BC.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Essentially unprospected. Remote; some glacier cover; steep and rugged; local heavy timber and brush; large valleys. 100% in USFS Misty Fiords Wilderness.

Discussion: Includes USGS OFR 91-010 tracts 11BC and 03KC.

Tract Name: Chickamin-Rudyerd **Tract No:** 07KC

Geology: Schist, gneiss, and minor marble of Late Proterozoic(?), Paleozoic, and (or) Mesozoic age.

Geochemistry:

Geophysics:

Significant Deposits: KC088, 090-093.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes
2) 18b Cu skarn	0	0	0	1	2	Yes
3) Metamorphosed sulfide	-	-	-	-	-	No

Tract (km^2): 794

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Not heavily prospected. Mostly remote; some glacier cover; steep and rugged; in part close to tidewater; local heavy timber and brush; large tract. 100% in USFS Misty Fiords Wilderness.

Discussion:

Tract Name: Revillagigedo Island **Tract No:** 08KC

Geology: Argillite, phyllite, greenschist, muscovite schist, and marble are intruded by metamorphosed aplite and granodiorite and by unmetamorphosed granodiorite and gabbro.

Geochemistry: Stream-sediment anomalies: Zn.

Geophysics:

Significant Deposits: (w/Production and Reserves) KC015-017, 022-037, 096, 097. Production: 400 to 500 T Pb-Zn-Ag ore produced from KC022 in 1947. Reserves: at KC022: about 2,500 T w/ 6 to 7% Pb, 28% Zn; at KC025: 100,000 T w/ 7.5% Zn, 1.0% Cu, and 100,000 T at lower grade. Both of these localities are included in an aggregated estimate of 93,000 mt w/ 0.05 g/mt Au, 1.01% Cu, 0.15% Pb, 7.96% Zn (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile 95	90	50	10	05	Grade/Tonnage Model?
1) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes
3) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
4) Metamorphosed sulfide	-	-	-	-	-	No

Tract (km^2): 1,709

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some recent prospecting. Part of area is remote; locally steep and rugged; in part close to tidewater; some logging roads; local heavy timber and brush; very large tract. 30% in USFS Misty Fiords Wilderness; 20% in Alaska Native lands; 50% in USFS Tongass National Forest.

Discussion:

Tract Name: Alava Bay **Tract No:** 09KC

Geology: Ti-bearing magnetite occurs in Cretaceous Alaskan-type ultramafic body that intrudes Paleozoic country rocks.

Geochemistry:

Geophysics: Aeromagnetic anomaly associated with ultramafic body.

Significant Deposits: KC038.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 11

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS. Some recent prospecting. In part close to tidewater; local heavy timber and brush; very small tract. 100% in USFS Misty Fiords Wilderness.

Discussion:

Tract Name: Boca de Quadra-Quartz Hill **Tract No:** 10KC

Geology: Gneiss, schist, and minor marble of Late Proterozoic(?), Paleozoic, and (or) Mesozoic age and pegmatite and gneissic quartz diorite are intruded by altered epizonal Miocene granite plutons and quartz porphyry dikes that contain disseminated MoS_2

Geochemistry: Stream-sediment anomalies: Be, Mo, Nb.

Geophysics:

Significant Deposits: (w/Production and Reserves) KC095. Reserves: at KC095: 1,500,000,000 T w/ 0.136% Mo; also an inferred estimate of 1,360,778,000 mt w/ 0.14% MoS2 (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	1	3	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes
3) 18b Cu skarn	0	0	0	1	2	Yes

Tract (km^2): 627

Comments: Reconnaissance and some detailed geologic mapping and geochemical sampling by USGS; intense local prospecting. In part close to tidewater; generally rugged; large tract; local heavy timber and brush. 40% in USFS Misty Fiords Wilderness; 60% in non-Wilderness part of USFS Misty Fiords Wilderness.

Discussion:

Tract Name: (A) Southwestern Gravina Island, and (B) Eastern Annette Island **Tract No:** 14KC

Geology: Upper Triassic Puppets Formation metarhyolite and metadacite flows and tuff host massive, vein, and disseminated sulfide deposits.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) At (A): KC042, 043, 047-062, 064, 067-070; at (B) KC076-081, 083. Production: At KC056: small test shipment in early 1900's.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	1	2	4	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 183 total: 130 in (A) and 53 in (B).

Comments: Reconnaissance and locally detailed geologic and geophysical mapping and geochemical sampling by USGS; some local prospecting. In part close to tidewater; locally steep; local heavy timber and brush. 43% in Metlakatla Indian Reservation; 57% in USFS Tongass National Forest.

Discussion:

Tract Name: Yellow Hill **Tract No:** 15KC

Geology: Ti-bearing magnetite occurs in Cretaceous Alaskan-type ultramafic body that intrudes Paleozoic country rocks.

Geochemistry:

Geophysics: Aeromagnetic anomaly associated with ultramafic body.

Significant Deposits: KC074, 075.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 21

Comments: Reconnaissance and some detailed geologic and geophysical mapping and geochemical sampling by USGS; some past and recent prospecting. Close to tidewater; low relief; poor outcrops; not much timber and brush; very small tract. 100% in Metlakatla Indian Reservation.

Discussion:

Tract Name: Tongass Narrows

Tract No: 16KC

Geology: Phyllite, schist, and greenschist intruded by metamorphosed diorite and by Tertiary leucogabbro host Au-quartz veins in vicinity of Tongass Narrows fault.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) KC18-021, 039-041, 044-046, 063, 066, 071, 072. Production: several thousand oz Au produced before 1917 from all of tract. Reserves: these localities are included in an aggregated inferred estimate of 562,000 mt w/10.47 g/mt Au.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	0	1	2	4	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 224

Comments: Reconnaissance and some detailed geologic and geophysical mapping and geochemical sampling by USGS; much old and some minor recent prospecting. Close to tidewater and, in part, to roads; locally steep; local thick timber and brush. 10% in Metlakatla Indian Reservation; 40% in Ketchikan City and private lands; 30% in Alaska Native lands, 20% in USFS Tongass National Forest.

Discussion:

Tract Name: Boca de Quadra-Sitlan Island **Tract No:** 18KC

Geology: Paleozoic and Mesozoic metasedimentary and some metavolcanic rocks are intruded by Cretaceous granodiorite plutons and Cretaceous or Tertiary trondjhemite sills.

Geochemistry:

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 292 total: 172 in KC and 120 in PR.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; little past or recent prospecting. Close to tidewater in part; moderately rugged; local thick timber and brush. 100% in USFS Misty Fiords Wilderness.

Discussion: An extension of tract 08KC, which is to northwest, but without all of the deposit types expected in that tract. Includes USGS OFR 91-010 tracts 04PR and 18KC.

Tract Name: Marten Arm **Tract No:** 19KC

Geology: Gneiss, schist, and minor marble intruded by pegmatite, gneissic quartz diorite, and granodiorite: schist derived from volcanic rocks is permissive massive sulfide environment.

Geochemistry:

Geophysics:

Significant Deposits: KC098-100.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Metamorphosed sulfide	-	-	-	-	-	No

Tract (km^2): 56

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; little past or recent prospecting. Close to tidewater in part; moderately rugged; local thick timber and brush. 100% in USFS Misty Fiords Wilderness.

Discussion:

Tract Name: Mount Fairweather **Tract No:** 04MF

Geology: Layered cumulus-type gabbro body with some mineralization (known from float) that is similar to that in tract 09MF; intrudes metamorphosed Mesozoic flyschoid and volcanic rocks; many Cu-stained zones.

Geochemistry: Bedrock anomalies not far to West: Co, Cr, Cu, Ni.

Geophysics: Large aeromagnetic anomaly associated with pluton.

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 7a Synorogenic-synvolcanic Ni-Cu	0	0	1	2	3	Yes

Tract (km^2): 81

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS; essentially unprospected. Extremely remote and rugged; extensive glacier cover; no timber and brush. 100% in USNPS Glacier Bay National Park.

Discussion:

Tract Name: Tarr Inlet **Tract No:** 05MF

Geology: Complex clastic, volcanic, and carbonate section of Permian(?) and (or) Triassic(?) age is intruded and metamorphosed by Tertiary and Cretaceous plutons and dikes in the vicinity of the Tarr Inlet suture zone; porphyry and massive sulfide deposit environment.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) MF023-025, 027, 029-031; SK001-003. Reserves: At MF027: USGS/USBM indicated estimate of 270,000 T w/ 2.7% Cu, 5.2% Zn, 0.03 oz/T Au, 1.0 oz/T Ag; and 530,000 T w/ 0.4% Cu, 0.3% Zn, 0.006 oz/T Au, 0.35 oz/T Ag.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 17.1 B.C.-Ak Porphyry Cu	0	0	1	2	2	Yes
2) 28a.1 Sierran Kuroko massive sulfide	0	0	1	2	3	Yes

Tract (km^2): 309 total: 90 in SKand 219 in MF.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS and USBM; extensive prospecting by USBM. Close to tidewater; steep and rugged; extensive glacier cover; little timber and brush. 100% in NPS Glacier Bay National Park.

Discussion: Includes USGS OFR 91-010 tracts 05MF and 03SK.

Tract Name: Reid Inlet **Tract No:** 06MF

Geology: Narrow, discontinuous sulfide-bearing quartz veins in altered Cretaceous-age granitic rocks and hornfelsed Paleozoic clastic rocks in vicinity of Tarr Inlet suture zone.

Geochemistry: Stream-sediment anomalies: Au, Cu.

Geophysics:

Significant Deposits: (w/Production and Reserves) MF032-042, 067. Production: About 7,150 oz Au produced during 1940's, mostly from the Leroy (MF033) and Rainbow (MF034) mines.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	1	2	3	4	Yes

Tract (km^2): 74

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS and USBM; much earlier prospecting. Close to tidewater; locally steep and rugged; extensive glacier cover; little timber and brush. 100% in NPS Glacier Bay National Park.

Discussion:

Tract Name: Muir Inlet

Tract No: 07MF

Geology: Paleozoic clastic and carbonate rocks are intruded by Cretaceous and Tertiary granitic dikes; fracturing and alteration are widespread; Mo-Cu porphyry stockwork and disseminated deposits are known.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) MF074, 076-080; SK 006, 012. Reserves: At MF079: USGS/USBM indicated estimated of 8,200,000 T w/ 0.06% Mo, 0.02% Cu; and 137,000,000 T w/ 0.04% Mo, 0.02% Cu; also inferred estimate of 9,100,000 T w/ 0.06% Mo, 0.02% Cu.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	0	0	1	2	2	Yes
2) 18a Porphyry Cu (skarn-related)	0	0	0	1	2	Yes
3) 22c Polymetallic vein	0	0	0	0	1	Yes
4) 19a Polymetallic replacement	0	0	0	0	1	Yes

Tract (km^2): 368 total: 243 in MFand 25 in SK.

Comments: Reconnaissance geologic mapping and geochemical sampling by USGS and USBM; some prospecting by USBM; much earlier prospecting of areas deglaciated in 1960's and 1970's. In part close to tidewater; locally steep and rugged, but generally moderate relief; some glacier cover. 100% in USNPS Glacier Bay National Park.

Discussion: Includes USGS OFR 91-010 tracts 05SK and 07MF.

Tract Name: Crillon-La Perouse **Tract No:** 09MF

Geology: *Layered cumulus-type Tertiary gabbro body intrudes metamorphosed Mesozoic flyschoid and volcanic rocks; known magmatic segregation Ni-Cu deposit in peridotite at base of gabbro.*

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) MF005-007, 012-015. Reserves: At MF079: USGS/USBM indicated estimate of 90,000,000 T w/ 0.93% Ni, 0.33% Cu, unspecified amount of PGE; also inferred estimate of 90,000,000 T w/ 0.93% Ni, 0.33% Cu, unspecified amount of PGE.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 11d Th-RE veins (AP/THRE)	0	0	1	2	3	Yes

Tract (km^2): 290

Comments: Reconnaissance geologic mapping and some geochemical sampling by USGS; minor prospecting of areas deglaciated in 1950's. Very remote, very steep and rugged; very extensive glacier cover. 100% in USNPS Glacier Bay National Park, but patented claims cover part of deposit.

Discussion:

Tract Name: Cape Spencer North **Tract No:** 10MF

Geology: Biotite schist and gneiss derived from Mesozoic flyschoid and volcanic rocks are intruded by Tertiary and Tertiary and (or) Cretaceous granitic and layered gabbroic stocks. The gabbro is mineralized.

Geochemistry: Stream-sediment anomalies: Ba, Cr, Co, Cu, Ni, Zn, Hg, Pb.

Geophysics:

Significant Deposits: MF018, 020.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	1	2	3	Yes
2) 7a Synorogenic-synvolcanic Ni-Cu	0	0	0	0	1	Yes

Tract (km^2): 437

Comments: Reconnaissance geologic mapping and some geochemical sampling by USGS; minor prospecting. In part close to tidewater; somewhat remote, somewhat rugged; steep brush- and timber-covered slopes. 100% in NPS Glacier Bay National Park.

Discussion:

Tract Name: Dundas River **Tract No:** 11MF

Geology: Paleozoic carbonate, clastic, and minor volcanic rocks are intruded by voluminous Tertiary and Cretaceous granitic rocks; some skarn deposits near intrusions.

Geochemistry: Stream-sediment anomalies: Cu, Zn, Pb, Sn, W.

Geophysics:

Significant Deposits: (w/Production and Reserves) MF050b, 052-055, 057-061. Reserves: At MF064: USGS/USBM indicated estimate of 27,000 T w/ 1.0% Cu, 0.1 oz/T Au, 2.0 oz/T Ag.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	1	2	3	Yes
2) 22c Polymetallic vein	0	0	1	2	3	Yes
3) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes

Tract (km^2): 413

Comments: Reconnaissance geologic mapping and some geochemical sampling by USGS; minor recent prospecting. In part close to tidewater; somewhat remote, somewhat rugged; steep brush- and timber-covered slopes. 85% in NPS Glacier Bay National Park; 15% in USFS Pleasant-Lemesurier Islands Wilderness.

Discussion:

Tract Name: Central Baranof (A), Red Bluff Bay (B) **Tract No:** 04PA

Geology: A): elongate lenses of serpentinite occur as tectonic slivers in phyllite and slate and contain minor chromite pods and disseminations. (B): magmatic segregations of chromite in serpentinized dunite of uncertain origin.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) (A) PA006-013; (B) PA016. Reserves: at PA016: 8 separate deposits contain a total of 30,000 T with 18 to 40% Cr_2O_3.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 8a Podiform chromite (minor)	0	0	1	2	3	Yes

Tract (km^2): 32 total: 28 in (A) and 4 in (B)

Comments: Known Deposits; permissive geology; both (A) and (B) are small tracts. Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; at (B) detailed geologic mapping and sampling by USGS. (A) is rugged and remote; (B) is close to tidewater with brush cover. 56% in USFS South Baranof Wilderness; 44% in USFS Tongass National Forest.

Discussion:

Tract Name: Security Bay **Tract No:** 05PA

Geology: Dominantly middle Paleozoic graywacke, conglomerate, and some carbonate rocks; significant faults.

Geochemistry: Stream-sediment anomalies: Mo, Ba. Bedrock anomalies: Pb, Zn, Mo, Cr, Ni, and Co

Geophysics: Centered on aeromagnetic low between two highs.

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein(?)	0	0	0	1	2	Yes

Tract (km^2): 239

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; minor exploration. Timber- and brush-covered; some logging roads. 100% in USFS Tongass National Forest. Permissive geology; prominent faults.

Discussion:

Tract Name: Saginaw Bay-Cornwallis Peninsula **Tract No:** 06PA

Geology: Dominantly middle Paleozoic graywacke, conglomerate, and some carbonate rocks in SW one-third of tract; mixed volcanic, carbonate, and clastic Mesozoic rocks to northeast; barite masses and veins in north part of tract.

Geochemistry: Stream-sediment anomalies: Pb, Ba, Zn, Nb, Cu, Zn, Pb, La, Nb. Bedrock anomalies: Mo, Cr, and Ni.

Geophysics: Large aeromagnetic high with a deep source.

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
2) 32a SE Missouri Pb-Zn (?)	0	0	0	0	1	Yes

Tract (km^2): 153 total: 145 in PA and 8 in PE

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; local intense exploration. Timber- and brush-covered; some logging roads. 84% in USFS Tongass National Forest; about 15% in Alaska Native lands; 1% in proposed USFS Rocky Pass Wilderness. Permissive geology, prominent faults.

Discussion:

Tract Name: Southwest Kuiu **Tract No:** 08PA

Geology: Cretaceous granodiorite plutons and dikes intrude middle Paleozoic graywacke, carbonate, and minor conglomerate; some large altered zones.

Geochemistry: Stream sediment anomalies: Mo, W, and Zn in north part of tract; Y and Nb anomalies to south. Bedrock anomalies: weak Mo, Zn, Cu, and Co in north part of tract; As, Ag, Au, Pb, Cu in southwest part; Ag, As, Sb, Zn, Cu, Pb in southeast part.

Geophysics:

Significant Deposits: None
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 277 total: 263 in PA and 14 in PE

Comments: Permissive geology. Timber- and brush-covered; locally steep; in part close to tidewater. 100% in proposed USFS South Kuiu Wilderness. Includes tracts 04PE and 08PA.

Discussion:

Tract Name: Southern Baranof **Tract No:** 09PA

Geology: Foliated, lineated, and hornfelsed Jurassic--Cretaceous graywacke and argillite are exposed over buried Tertiary pluton.

Geochemistry: NURE Stream-sediment anomalies: Cu, As, Au, Pb, Zn.

Geophysics:

Significant Deposits: PA017.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 594

Comments: Reconnaissance and some detailed geologic mapping by USGS. NURE geochemical sampling. Very little prospecting. Mostly close to tidewater; most is steep and rugged. Large tract. About 40% in USFS South Baranof Wilderness, 60% in USFS Tongass National Forest.

Discussion:

Tract Name: (A) Falls Lake, and (B) Lords Pocket **Tract No:** 10PA

Geology: Mesozoic greenstone and metabasalt are variably metamorphosed; amphibolite facies in (A), lower greenschist facies in (B).

Geochemistry: Stream-sediment anomalies: Cu, Zn, As, Pb.

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 80 total: 48 in (A) and 32 in (B).

Comments: Reconnaissance geologic mapping by USGS. NURE geochemical sampling. Very little prospecting. Mostly close to tidewater; most is steep and rugged. Moderate-size tract. 100% in USFS South Baranof Wilderness.

Discussion:

Tract Name: Kake-Gunnuck and Sitkum Creeks. **Tract No:** 01PE

Geology: Deformed and slightly metamorphosed Mesozoic and Paleozoic clastic and volcanic rocks may contain massive sulfide deposits.

Geochemistry: Bedrock anomalies: Cu, Zn in north and west parts of tract; Cu, Pb, Ni, Cr, Mo in central and east parts.
Stream-sediment anomalies: Co, Ni.

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 100 total: 75 in PE and 25 in SD.

Comments: Reconnaissance geologic and geochemical mapping by USGS. Very little prospecting. Mostly close to tidewater; most is moderately steep; some is steep and rugged; local heavy timber and brush; logging roads. Moderate-size tract. 100% in Alaska Native lands.

Discussion: Includes USGS OFR 91-010 tracts 01PE and 08SD.

Tract Name: Port Camden **Tract No:** 03PE

Geology: Tertiary intermediate and mafic volcanic rocks cover Early Tertiary sandstone and conglomerate with possible U-Th resources.

Geochemistry: Bedrock anomalies: U.

Geophysics: Localized radiometric anomalies.

Significant Deposits: PE002, 003.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 30c Sandstone U	0	0	0	0	1	No

Tract (km^2): 837 total: 744 in PE and 93 in PA.

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS. Locally intense prospecting. Mostly close to tidewater; most is moderate relief. Some is steep and rugged; local heavy timber and brush; some logging roads. Large tract; 4% in USFS Tebenkof Bay Wilderness, 96% in USFS Tongass National Forest, some of which is proposed Research Natural Area.

Discussion: Includes USGS OFR 91-010 tracts 07PA and 03PE.

Tract Name: Southwest Kupreanof **Tract No:** 05PE

Geology: Middle Tertiary felsic and intermediate volcanic rocks occur in a possible eruptive center and in close association with granitic rocks of tract 06PE; some areas of intense alteration. Most of tract inferred to be underlain by Tertiary sandstone and conglomerate of the Kootznahoo Formation (see tract 03PE).

Geochemistry:

Geophysics:

Significant Deposits: PE004, 030.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 25b Creede epithermal vein	0	0	0	1	2	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes
3) 30c Sandstone U	0	0	0	0	1	No

Tract (km^2): 640

Comments: Reconnaissance and some detailed geologic and geochemical mapping by USGS; moderate amount of prospecting, including some drilling. Most is close to tidewater; local heavy timber and brush; large tract. 100% in USFS Tongass National Forest.

Discussion: U resources in deposit type 3) are included with those estimated for tract 03PE.

Tract Name: (A): Tunehean Creek-Castle River, (B): Southeast Zarembo, (C): Central Etolin, (D): Niblack and Deer Islands **Tract No:** 06PE

Geology: Middle Tertiary alkalic and subalkalic granitic rocks intrude Cretaceous and other Mesozoic turbidites, other metasedimentary rocks, metavolcanic rocks, Cretaceous granitic rocks, and Tertiary sedimentary and volcanic rocks; closely associated with Tertiary volcanic rocks of tract 05PE to northwest , but more deeply eroded to the southeast.

Geochemistry: Stream-sediment anomalies: La, Nb, Y, Pb.
Bedrock anomalies: Be, Nb, Y, Sn, Cu, Mo, La, Co, Cr.

Geophysics: Strong, local aeroradioactivity anomalies.

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) Felsic plutonic U	0	0	0	0	1	No
2) 11d Th-RE veins	0	0	0	0	1	Yes

Tract (km^2): 330 total: 28 in (A), 80 in (B), 213 in (C), and 9 in (D).

Comments: Reconnaissance and some detailed geologic and geochemical mapping by USGS; moderate amount of prospecting locally. Most is close to tidewater; some parts steep and rugged; local heavy timber and brush; some logging roads in (B) and (C). Large tract: 8% in USFS South Etolin Wilderness; 92% in USFS Tongass National Forest.

Discussion:

Tract Name: Kosciusko-Northern Prince of Wales Islands **Tract No:** 07PE

Geology: Contact metamorphosed hornfels and marble of Paleozoic age in aureole of early Late Cretaceous granodiorite pluton are a classic skarn environment.

Geochemistry: Stream-sediment anomalies: W, Mo.
Bedrock anomalies: Mo, Cu, Bi.

Geophysics:

Significant Deposits: PE005 (marble), 006-012. Reserves at PE007: 10,000 to 20,000 T w/ 1.5% MoS2.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes
2) 18b Cu skarn	0	0	0	1	2	Yes
3) 22c Polymetallic vein	0	0	1	2	3	Yes

Tract (km^2): 287

Comments: Reconnaissance and some detailed geologic and geochemical mapping by USGS; moderate amount of prospecting locally. In part close to tidewater; some parts steep and rugged; local heavy timber and brush; some logging roads; moderate-size tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Salmon Bay **Tract No:** 08PE

Geology: Silurian turbidites and volcanic rocks are intruded by carbonatite and felsic dikes.

Geochemistry: Stream-sediment anomalies: Mo, La, Nb.
Bedrock anomalies: Mo, Zn, Au, Ag, Cu, Be, La, Nb, Ba.

Geophysics:

Significant Deposits: PE013-015.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 10 Carbonatite	0	0	0	0	1	Yes
2) Felsic plutonic U	0	0	0	0	1	No
3) 11d Th-RE veins	0	0	0	0	1	Yes

Tract (km^2): 16

Comments: Reconnaissance geologic and geochemical mapping by USGS; moderate amount of prospecting locally. In part close to tidewater; heavy timber and brush; small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: (A) Blashke Islands, and (B) and Kane Peak **Tract No:** 10PE

Geology: Alaskan-type mafic-ultramafic bodies of mid-Cretaceous age intrude Silurian turbidites and minor volcanic rocks at (A) and Cretaceous turbidites at (B).

Geochemistry: Stream-sediment anomalies: (A) Ni, Cr, Co; (B) Co, Ni, Cu
Bedrock anomalies: (A) Ni, Cr, Cu, Co, Pb; (B) Ni, Cr, Cu, Co, Pb, Zn, Mo

Geophysics: Aeromagnetic anomalies: strong and steep-sided at (A) and (B).

Significant Deposits: (A): PE016.
(w/Production and Reserves) (B): PE032.
Reserves: Large tonnage w/ 1 to 2% sulfides.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	0	0	0	0	1	No

Tract (km^2): 34 total: 10 in (A); 22 in PE and 2 in SD in (B).

Comments: Reconnaissance geologic and geochemical mapping by USGS; moderate amount of prospecting locally. (A) at tidewater, (B) close to tidewater. No relief at (A), moderate to steep at (B); local heavy timber and brush; small tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 10SD and 10PE.

Tract Name: Coffman Cove **Tract No:** 11PE

Geology: Silurian turbidites and minor volcanic rocks are intruded by mid-Cretaceous granodiorite.

Geochemistry: Stream-sediment anomalies: Cr, Ni, Cu.
Bedrock anomalies: Cu, Pb, Zn, Cr, Ni, Co, in north part.

Geophysics:

Significant Deposits:
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	-	-	-	-	-	Yes

Tract (km^2): 15 total: 8 in CR and 7 in PE.

Comments: Reconnaissance geologic and geochemical mapping by USGS; minor amount of prospecting. Close to tidewater; moderate relief; local heavy timber and brush; some logging roads; small tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 04CR and 11PE.

Tract Name: Duncan Canal-Zarembo Island **Tract No:** 12PE

Geology: Deformed and slightly metamorphosed Mesozoic and Paleozoic clastic and volcanic rocks in Duncan Canal fault zone; large blocks of Devonian carbonate suggest that the major unit present before the youngest faulting was a melange; bedded barite and massive sulfide deposits present.

Geochemistry: Stream-sediment anomalies: Scattered W, Mo, Cu, Ba, Pb
Bedrock anomalies: Strong Ba, Zn, Pb, Cu; some Mo, Cr, Co

Geophysics:

Significant Deposits: (w/Production and Reserves) PE018-022, 027, 029, 031. Production from PE022: 750,000 T barite mined 1965-1980. The other localities are included in an aggregated USBM estimate of 1,363,000 mt w/ 0.18 g/mt Au, 72.96 g/mt Ag, 0.04% Cu, 0.34% Pb, 0.01% Zn (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	1	2	3	4	Yes
2) 31b Bedded barite	0	0	0	1	2	Yes

Tract (km^2): 722 total: 717 in PE and 5 in SD.

Comments: Reconnaissance geologic and geochemical mapping by USGS; locally intensely prospected. Close to tidewater; moderate relief; local heavy timber and brush; some logging roads; large tract. 5% in Petersburg Creek- Duncan Salt Chuck Wilderness; 95% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 09SD and 12PE.

Tract Name: Kupreanof Mountain **Tract No:** 13PE

Geology: Mesozoic low-grade metavolcanic and minor metasedimentary rocks in the Duncan Canal fault zone; enigmatic deposit present.

Geochemistry: Bedrock anomalies: Zn, Pb, Cu, Co, Ag.

Geophysics:

Significant Deposits: PE017
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 24a Cyprus massive sulfide(?)	0	0	0	0	1	Yes
2) 18b Cu skarn(?)	0	0	0	0	1	Yes

Tract (km^2): 28

Comments: Reconnaissance geologic and geochemical mapping by USGS; locally intensely prospected and drilled at PE017. Close to tidewater; moderate relief; local heavy timber and brush; small tract. 10% in Petersburg Creek- Duncan Salt Chuck Wilderness; 90% in USFS Tongass National Forest.

Discussion:

Tract Name: Woewodski Island **Tract No:** 14PE

Geology: Triassic and other Mesozoic low-grade metavolcanic and metasedimentary rocks in the Duncan Canal fault zone are intruded by a Cretaceous-age pluton; Au mines present.

Geochemistry: Stream-sediment anomalies: Au.
Bedrock Anomalies: Au, Ag, Cu, Pb, Zn, Co, Cr, Ni, Mo.

Geophysics: Aeromagnetic anomaly: small and sharp-sided; may indicate a concealed pluton.

Significant Deposits: PE023-026. Production from PE025: more than 100 oz Au and 100 oz Ag.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	0	1	2	3	Yes
2) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 30

Comments: Reconnaissance geologic and geochemical mapping by USGS; locally intensely prospected and drilled at several localities. Close to tidewater; moderate relief; local heavy timber and brush; small, well explored tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Outer Etolin **Tract No:** 15PE

Geology: Mesozoic turbidites, other metasedimentary and metavolcanic rocks, and Cretaceous granitic rocks are intruded by Middle Tertiary alkalic and subalkalic rocks, producing vein and skarn environments. Intrusive rocks elsewhere (in tract 05PE) have a close relation to the volcanic rocks.

Geochemistry: Stream-sediment anomalies: Cr, Ni, Mo, W, Pb, Nb.
Bedrock anomalies: Cu,Pb, Au, Mo, Zn, Cr, Ni.

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	0	0	0	0	1	Yes
2) 15a W vein	0	0	0	0	1	Yes

Tract (km^2): 461 total: 316 in PE, 25 in BC, 70 in CR, and 50 in KC.

Comments: Reconnaissance geologic and geochemical mapping by USGS; low level of prospecting. Close to tidewater; some parts steep and rugged; local heavy timber and brush; some logging roads; large tract. 20% in USFS South Etolin wilderness; 80% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 09BC, 01KC, 05CR, and 15PE.

Tract Name: Canoe Passage **Tract No:** 16PE

Geology: Fault cuts Cretaceous turbidites that were intruded by Late Cretaceous tonalite and Middle Tertiary granite.

Geochemistry: Bedrock anomalies: Cu, Mo, Ni.

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 22c Polymetallic vein	-	-	-	-	-	Yes

Tract (km²): 20 total: 16 in PE, 4 in CR.

Comments: Reconnaissance geologic and geochemical mapping by USGS; low level of prospecting. Close to tidewater; local heavy timber and brush; some logging roads; small tract. 100% in USFS South Etolin Wilderness.

Discussion: Includes USGS OFR 91-010 tracts 06CR and 16PE.

Tract Name: (A) Sukoi Islets, and (B) Northeast Mitkof Island **Tract No:** 17PE

Geology: Cretaceous turbidites and minor volcanic rocks are intruded locally by layered mid-Cretaceous (or Paleozoic?) hornblende gabbro and hornblendite plutons that contain magnetite.

Geochemistry: bedrock anomalies: Cu, Co, Ni, Cr.

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 12

Comments: Reconnaissance geologic and geochemical mapping by USGS; low level of prospecting. At or close to tidewater; local heavy timber and brush; very small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Groundhog Basin

Tract No: 20PE

Geology: Amphibolite and upper greenschist grade metapelitic, metacarbonate, and metavolcanic rocks of original mesozoic and Paleozoic age near the Great Tonalite Sill were intruded by evolved Late Tertiary Sn-bearing granite and related rhyolite sills more or less along the Coast Range megalineament; stratiform Sn-base metal replacement deposits are present.

Geochemistry: Stream-sediment anomalies: Sn,Mo, W; strong.
Bedrock anomalies: Sn, Cu, Pb, Zn, Mo, Ni, Cr, Co.

Geophysics:

Significant Deposits: (w/Production and Reserves) PE039, 040. Reserves at PE039: "several hundred thousand T" w/ 8.0% Zn, 1.5% Pb, 1.5 oz/T Ag in massive sulfide deposits" and "several hundred thousand T" w/ 2.5% Zn, 1.0% Pb in disseminated deposits; at PE040: "many hundred thousand T" w/ 1.6% Zn, 0.1% Pb in disseminated deposits and "several million T" w/ 0.14% Zn, 0.09% Pb in quartz-fluorite vein deposits. These localities are included in a USBM aggregated inferred estimate of 9,830,000 mt w/ 2.14 g/mt Ag, 0.58% Pb, 1.78% Zn (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile 95	90	50	10	05	Grade/Tonnage Model?
1) 14c Replacement Sn	0	0	1	2	3	Yes
2) 28a.1 Sierran kuroko massive sulfide	-	-	-	-	-	Yes
3) 36a Low-sulfide Au-quartz vein	-	-	-	-	-	Yes

Tract (km^2): 43 total: 36 in PE and 07 in BC.

Comments: Reconnaissance geologic and geochemical mapping by USGS; older USGS detailed mapping; moderate to high level of prospecting, with some deep drilling. Remote and steep; extensive snow and glacier cover; small tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 03BC and 20PE.

Tract Name: Duke Island **Tract No:** 03PR

Geology: Ti-bearing magnetite occurs in Cretaceous zoned ultramafic body that intrudes Paleozoic metamorphic and Triassic gabbroic country rocks.

Geochemistry: Nonspecific geochem anomalies reported.

Geophysics: Aeromagnetic anomaly.

Significant Deposits: PR003-019.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 165 total: 162 in PR, 03 in KC.

Comments: Reconnaissance geologic and geochemical mapping by USGS; detailed geologic mapping by others; moderate to high level of prospecting. Close to tidewater; low relief; limited outcrop; moderate-size tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 17KC and 03PR.

Tract Name: Snettisham **Tract No:** 02SD

Geology: Au-bearing quartz veins occur in and close to mid-Cretaceous magnetite-rich pyroxenite and diorite.

Geochemistry:

Geophysics: Aeromagnetic anomaly: large and steep-sided.

Significant Deposits: (w/Production and Reserves) SD003-005. Production from SD004 and 005: At least 2,000 oz Au mined in early 1900's. Reserves for these two deposits are in a USBM aggregated inferred estimate of181,000 mT w/ 10.28 g/mt Au (Coldwell, 1990). Reserves for SD003: 500,00T w/ 18.9% Fe, 2.6% Ti, 0.7% V; also a USBM inferred estimate of 454,000 mt w/ 15.0% Fe, 0.09 g/mt Pt, 0.75% V (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes
2) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 23

Comments: Reconnaissance geologic and geochemical mapping by USGS; detailed sampling by USBM; moderate to high level of prospecting and extensive drilling. In part close to tidewater; locally heavy timber; steep in part; small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Tracy Arm-Stikine River **Tract No:** 04SD

Geology: Deformed and metamorphosed Paleozoic and Mesozoic clastic and volcanic rocks are intruded by latest Cretaceous Great Tonalite Sill; known sulfide deposits are in metamorphic rocks close to the sill and have been metamorphosed.

Geochemistry: Significant anomalies reported.

Geophysics: Aeromagnetic gradient: distinct, large, and steep.

Significant Deposits: (w/Production and Reserves) SD006, 008, 009-011, 015-017, 021, 025, 036; PE 034. Production: From SD036: 50 oz Au in early 1900's. Reserves: At SD009: 7,300 T w/ 0.23 oz/T Au, 0.31 oz/T Ag, 0.7% Cu; at SD011: 187,000 T w/ 3.42% Zn, 1.42% Cu, 0.43 oz/T Ag, 0.008 oz/T Au; at SD016-017: 26,700,000 T w/ 0.57% Cu, 0.37% Zn, 0.3 oz/T Ag; all of these localities are included in a USBM inferred estimate of 25, 041,000 mt w/ 0.01 g/mt Au,10.10 g/mt Ag, 0.57% Cu, 0.39% Zn (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	1	2	4	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes

Tract (km^2): 1,112 total: 705 in SD and 407 in PE.

Comments: Reconnaissance geologic and geochemical mapping by USGS in north half of tract, less in south; moderate to high level of prospecting in north half and extensive drilling at SD009, 011, 016, 917. In part close to tidewater; locally heavy timber; in part remote and steep; extensive glacier and snow cover; very large tract. 38% in USFS Tracy Arm-Fords Terror Wilderness; 3% in USFS Chuck River Wilderness; 18% in USFS Stikine-LeConte Wilderness; 41% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 18PE and 04SD.

Tract Name: Endicott Peninsula

Tract No: 05SD

Geology: Au-quartz and polymetallic vein and possible metamorphosed Sierran-type massive sulfide deposits occur in highly deformed and variably metamorphosed Paleozoic and Mesozoic clastic, volcanic, and carbonate rocks that are intruded by Late Cretaceous granodiorite and tonalite plutons.

Geochemistry: Significant anomalies reported.

Geophysics:

Significant Deposits: (w/Production and Reserves) SD019, 022-024, 026-035, 037-040. Production from SD022: 24,000 oz Au and 24,000 oz Ag in early 1900's. Several Au-quartz veins in the Windham Bay area each produced a few thousand oz Au at about the same time, w/ average Au content of about 0.25 oz/T. Reserves: Localities SD019, 021, and 025 are contained in a USBM aggregated inferred estimate of 390,000 mt w/ 4.69 g/mt Au, 7.10 g/mt Ag, 0.09% Cu, 0.28% Pb, 1.36% Zn; localities SD024, 026-027, 029-030, 034-035, 037, and probably 031-033 are contained in a USBM aggregated inferred estimate of 164,000 mt w/ 7.73 g/mt Au.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	1	2	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes

Tract (km^2): 537

Comments: Reconnaissance geologic and geochemical mapping by USGS; moderate to high level of prospecting in early 1900's. In part close to tidewater; in part remote and steep; locally heavy timber; extensive glacier and snow cover; large tract. 50% in USFS Chuck River Wilderness; 50% in USFS Tongass National Forest.

Discussion:

Tract Name: Dawes Glacier-Buddington Range **Tract No:** 06SD

Geology: Tertiary granodiorite crops out over a large area and contains several occurrences of Cu minerals in thin veinlets.

Geochemistry: Some anomalies reported.

Geophysics:

Significant Deposits: SD042, 043, 045, 046.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 17.1 BC-AK Porphyry Cu	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	1	2	Yes

Tract (km^2): 320

Comments: Reconnaissance geologic and geochemical mapping by USGS; low level of prospecting. Remote; very rugged; extensive snow and ice cover; moderate-size tract tract. 5% in USFS Tracy Arm-Fords Terror Wilderness; 95% in USFS Tongass National Forest.

Discussion:

Tract Name: Turn Mountain **Tract No:** 07SD

Geology: Cretaceous magnetite-bearing gabbro intrudes Paleozoic and Mesozoic clastic and volcanic rocks; gabbro is interpreted to be the outer envelope of an Alaskan-type mafic-ultramafic body.

Geochemistry: Anomalies: Co, Cr, Cu, Mo, Pb, Zn.

Geophysics: Aeromagnetic anomaly: distinct, large, and steep-sided.

Significant Deposits:
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	0	0	0	0	1	No

Tract (km^2): 58

Comments: Reconnaissance geologic and geochemical mapping by USGS; close to tidewater and logging roads; some heavy timber; small tract. 100% in Alaska Native lands.

Discussion:

Tract Name: Yakobi-Mirror Harbor **Tract No:** 01SI

Geology: Cretaceous graywacke and Triassic(?) and Cretaceous greenstone are intrude by Tertiary gabbroic rocks that locally contain magmatic sulfide concentrations.

Geochemistry: . Anomalies: Ag, As, Au, Co, Cr, Cu, Ni, W, Zn.

Geophysics: Gravity anomaly: NW-trending high to W.

Significant Deposits: (w/Production and Reserves) SI001, 002, 016-020, 021. Reserves: At SI002 (Bohemia Basin): 20,100,000 T w/ 0.31% Ni, 0.18% Cu, 0.04% Co; the USBM inferred estimate is 18,144, 000 mt w/ 0.21% Cu, 0.35% Ni, 0.02% Co (Coldwell, 1990); at Mirror Harbor: one deposit contains 8,000 T w/ 1.57% Ni, 0.88% Cu; it has a USBM inferred estimate of 907,000 mt w/ 0.13% Cu, 0.33% Ni (Coldwell, 1990); another deposit has several million T w/ 0.2% Ni, 0.1% Cu.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 7a Synorogenic-synvolcanic Ni-Cu	0	0	0	1	2	Yes

Tract (km^2): 117 total: 105 in SI and 12 in MF.

Comments: Detailed geologic and geochemical mapping by USGS; also geochemical sampling by USBM; intense local prospecting and drilling; close to tidewater; locally steep and rugged; some heavy timber; moderate-size tract. 50% in USFS West Chichagof Wilderness; 50% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 13MF and 01SI.

Tract Name: Yakobi-Chichagof **Tract No:** 02SI

Geology: Cretaceous graywacke and Triassic(?) and Cretaceous greenstone are intruded byTertiary granitic and gabbroic rocks (to north); local swarms of Au-bearing quartz veins parallel large linear shear zones; east side of tract includes greenstone, carbonate, and detrital clastic rocks that are in part older than other parts of tract.

Geochemistry: Anomalies associated with Cretaceous graywacke: Ag, As, Au, Cu, Mo, Pb, W, Zn. Anomalies associated with Triassic(?) and Cretaceous greenstones: Ag, Cu, Pb, Zn.

Geophysics: Gravity anomaly: NW-trending high to W.

Significant Deposits: (w/Production and Reserves) SI006, 021, 023-050, 052, 054, 061-068; PA001-005. Production: From SI030 (Hirst-Chichagof): about 87,980 oz Au, 20,000 oz Ag; from SI036 (Chichagoff): about 700,000 oz Au, 200,000 oz Ag. Reserves: Chichagoff Mine indicated: 80,000 T w/ 0.025 oz/T Au, 0.08 oz/T Ag; inferred: 463,000 T w/ 0.3 oz/T Au, 0.09 oz/T Ag; Chichagoff tailings indicated: 485,000 T w/ 0.11 oz/T Au, 0.03 oz/T Ag; other inferred: 13,500 T w/ 0.11 oz/T Au, 0.04 oz/T Ag; 300,000 T w/ 0.04 oz/T Au, 0.012 oz/T Ag; Hirst-Chichagof Mine inferred: 80,000 T w/ 1.0 oz/T Au, 0.25 oz/T Ag; 70,000 T w/ 0.25 oz/T Au, 0.06 oz/T Ag; Hirst-Chichagof tailings inferred: 70,000 T w/ 0.14 oz/T Au, 0.03 oz/T Ag. Both of these localities are contained in a USBM aggregated inferred estimate of 1,173,000 mt w/ 17.12 g/m Au, 4.96 g/mt Ag (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile 95	90	50	10	05	Grade/Tonnage Model?
1) 36a Low-sulfide Au-quartz vein	0	0	1	2	3	Yes
2) 24a Cyprus massive sulfide	0	0	0	0	1	Yes
3) 23 Basaltic Cu	0	0	0	0	1	Yes

Tract (km^2): 836 total: 680 in SI, 17 in MF, and 139 in PA.

Comments: Semi-detailed geologic and geochemical mapping by USGS; also geochemical sampling by USBM; intense local prospecting and drilling; close to tidewater; locally steep and rugged; some heavy timber. Large tract: about 50% in USFS West Chichagof Wilderness; 40% in USFS Tongass National Forest; 10% in Alaska State land, City and Borough of Sitka land, and private holdings.

Discussion: Includes USGS OFR 91-010 tracts 12MF, 02SI, and 02PA.

Tract Name: Lisianski Inlet **Tract No:** 03SI

Geology: Cretaceous and older greenstone, clastic, and carbonate rocks are intruded by locally foliated, generally sheared and altered, Jurassic and Cretaceous granitic rocks that contain Au-quartz veins.

Geochemistry: Anomalies: Ag, Au, As, Ba, Cu, Mo, Pb, W, Zn along major shear zone.

Geophysics: Gravity anomaly: NW-trending high to W.

Significant Deposits: (w/Production and Reserves) SI003-005, 007--12, 015, MF020, 021. Production: SI 005 (Apex-El Nido): >17,000 oz. Au, 2,400 oz Ag. Reserves: For same deposit: USBM has an inferred esimate of 24,100 mt w/ 32.91 g/mt Au.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	0	0	1	2	Yes

Tract (km^2): 342 total: 292 in SI and 50 in MF.

Comments: Semi-detailed geologic and geochemical mapping by USGS; also geochemical sampling by USBM; intense local prospecting and drilling; in part close to tidewater; locally steep and rugged; some heavy timber; moderate-size tract. 68% in USFS West Chichagof Wilderness; 32% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 14MF and 03SI.

Tract Name: Chichagof and Baranof Tertiary plutons: includes (A) Lake Elfindahl , (B) Rust Mountain, (C) Granite Islands, (D) Deep Bay, (E) Kruzof Island, (F) Takatz Bay, (G) Trap Bay , (H) Crawfish Bay-Gut Bay, and (I) Redfish Bay

Tract No: 04SI

Geology: Leucocratic Tertiary and Cretaceous(?) granodiorites intrude a variety of Cretaceous, older Mesozoic, and Paleozoic rocks; permissive for vein and porphyry deposits. (See tract 09PA.)

Geochemistry: Anomalies in (A), (B), (C), and (D): Ag, As, Au, Cu, Mo, Sn, W.

Geophysics:

Significant Deposits: (w/Production and Reserves) (A) None; (B) None; (C) None; (D) None; (E) None; (F) SI076; (G) SI082, 083; (H) PA014, 015; (I) PA018.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 1,351 total: see Discussion for breakdown.

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; little prospecting; in part close to tidewater; locally steep and rugged; some heavy brush and timber; some glacier cover; very large tract. 6% in USFS West Chichagof Wilderness; 46% in South Baranof Wilderness; 47% in USFS Tongass National Forest.

Discussion: Includes the following USGS OFR 91-010 tracts: all of 04SI; sub-tract (F) includes 03(A)PA; sub-tracts (H) and (I) are 03(B)PA and 03(C)PA, respectively.

Tract Name: Mount Fritz-Lake Sulola **Tract No:** 05SI

Geology: Upper Triassic(?) basalt flows and breccia are permissive for massive sulfide deposits.

Geochemistry: Anomalies: Ag, Cu, Pb, Zn, Au.

Geophysics: Gravity anomaly: NW-trending linear high.

Significant Deposits: SI013, 014, 051, 053, 055, 056.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 23 Basaltic Cu	0	0	0	1	2	No

Tract (km^2): 238

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; little prospecting; relatively distant from tidewater; locally steep and rugged; some heavy brush and timber; moderate-size tract. 100% in USFS West Chichagof Wilderness.

Discussion:

Tract Name: (A) Tarn Mountain, and (B) Moore Mountains **Tract No:** 07SI

Geology: Paleozoic carbonate layers in clastic rock section are hornfelsed by Cretaceous intrusions; defines a permissive skarn environment.

Geochemistry:

Geophysics: Aeromagnetic anomaly: low in (A).

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18c Zn-Pb skarn	0	0	0	0	1	Yes
2) 18b Cu skarn	0	0	0	0	1	Yes
3) 19a Polymetallic replacement	0	0	0	0	1	Yes
4) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 77 total: (A) 28 in SI and 09 in MF; (B) 40.

Comments: Reconnaissance geologic mapping by USGS; little prospecting; in part close to tidewater; locally steep and rugged; some heavy brush and timber; small tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 07SI and 16MF.

Tract Name: Tenakee Inlet, South of head of **Tract No:** 08SI

Geology: Tertiary(?) leucogabbros intrude Paleozoic clastic rocks; gabbros may be related to the magmatic-sulfide-bearing gabbros in tract 01SI.

Geochemistry:

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 7a Synorogenic-synvolcanic Ni-Cu	0	0	0	0	1	Yes

Tract (km^2): 61

Comments: Reconnaissance geologic mapping by USGS; little prospecting; in part close to tidewater; locally steep and rugged; some heavy brush and timber; small tract. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Seal Creek

Tract No: 10SI

Geology: Paleozoic carbonate rocks are intruded and hornfelsed by Cretaceous quartz monzonite pluton; Mississippian section may contain evaporite deposits or contact-metamorphic gypsum.

Geochemistry: --

Geophysics: --

Significant Deposits: (w/Production and Reserves) SI085-087. Production: From SI086 and 087: 500,000 T gypsum (Flint and Cobb, 1952).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	0	0	1	Yes
3) Gypsum	0	0	0	0	1	No

Tract (km^2): 123 total: 93 in SI and 30 in JU.

Comments: Some detailed, but mostly reconnaissance geologic and geochemical mapping by USGS; little prospecting; in part close to tidewater; locally steep and rugged; some heavy brush and timber. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 10SI and 08JU.

Tract Name: Tenakee-Sitkoh Bay **Tract No:** 11SI

Geology: Silurian and Jurassic syenitic rock suites intrude Paleozoic clastic and carbonate rocks; alkalic rocks may host vein deposits of U,Th, and REE.

Geochemistry:

Geophysics:

Significant Deposits: SI078.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 11d Th-REE veins	0	0	0	0	1	Yes

Tract (km^2): 187

Comments: Reconnaissance geologic mapping by USGS; some private and USBM prospecting; in part close to tidewater; locally steep and rugged; some heavy brush and timber. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Kootznahoo Inlet **Tract No:** 12SI

Geology: Non-marine sandstone, shale, conglomerate , and coal of the Tertiary Kootznahoo Formation underlie a limited portion of the tract.

Geochemistry: High U/Th ratio for most samples.

Geophysics:

Significant Deposits: (w/Production and Reserves) SI104; other small coal mines and prospects. Production: Small amount of coal for local and steam vessel use.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 30c Sandstone U	0	0	0	0	1	No
2) Coal	-	-	-	-	-	No

Tract (km^2): 67

Comments: Semi-detailed and reconnaissance geologic and geochemical mapping for U and Th by USGS; some private prospecting; close to tidewater; low relief; some heavy brush and timber; relatively small tract. 100% in USFS Admiralty Island Monument and Kootznoowoo Wilderness; but about 20% of the above is also covered by Alaska Native village lands.

Discussion:

Tract Name: Southern Admiralty Island **Tract No:** 13SI

Geology: Highly deformed and locally metamorphosed Late Triassic mafic and intermediate volcanic rocks, fine-grained clastic rocks, and ultramafic masses host significant massive sulfide, Ni-Cu magmatic segregation, and polymetallic vein deposits to the north in Tract 09JU.

Geochemistry: Stream-sediment anomalies: abundant and varied.

Geophysics:

Significant Deposits: SI093, 094, 097, 100-103, 105-112.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 1,339 total: 1,327 in SI and 12 in SD.

Comments: Reconnaissance and some semi-detailed geologic and geochemical mapping by USGS; some private prospecting in past; close to tidewater in part; most is steep and rugged; some heavy brush and timber; relatively large tract. About 95% in USFS Admiralty Island Monument and Kootznoowoo Wilderness; 5% in Alaska Native lands.

Discussion: Includes USGS OFR 91-010 tracts 13SI and 12SD. Tract 09JU is geologic continuation to north.

Tract Name: King Salmon Bay **Tract No:** 14SI

Geology: Slightly metamorphosed Late(?) Triassic intermediate and mafic volcanic rocks are permissive for massive sulfide deposits.

Geochemistry:

Geophysics:

Significant Deposits: SI092.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes

Tract (km^2): 30 total: 26 in SI and 04 in JU.

Comments: Reconnaissance geologic and geochemical mapping by USGS; some private prospecting in past; close to tidewater; some heavy brush and timber; small tract. 100% in USFS Admiralty Island Monument and Kootznoowoo Wilderness.

Discussion: Includes USGS FR 91-010 tracts 14SI and 10JU.

Tract Name: Rendu Inlet **Tract No:** 04SK

Geology: Discontinuous carbonate lenses in Silurian and (or) Devonian clastic rocks are intruded by Cretaceous granitic rocks and skarn deposits are present.

Geochemistry: Bedrock anomalies: float below suggests that more deposits may be present.

Geophysics:

Significant Deposits: (w/Production and Reserves) SK004. Reserves: At SK004: 4,300 T inferred w/ 0.5% W, 5.0% Cu, 7.0 oz/T Ag, 0.15 oz/T Au; or 3,900 mt inferred w/ 5.14 g/mt Au, 239.97 g/mt Ag, 0.5% Cu, 0.66 g/mt WO3 (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 14a W skarn	-	-	-	-	-	Yes
2) 18b Cu skarn	-	-	-	-	-	Yes
3) 18c Zn-Pb skarn	-	-	-	-	-	Yes

Tract (km^2): 36

Comments: Reconnaissance geologic and geochemical mapping by USGS and USBM; intense prospecting by USBM; moderately remote; steep and rugged; very small tract. 100% in USNPS Glacier Bay National Park.

Discussion: Tract is too small for probabilistic quantitative estimate.

Tract Name: Takhinsha Mountains **Tract No:** 07SK

Geology: Paleozoic clastic and carbonate rocks are intruded and metamorphosed by Cretaceous and Tertiary granodiorite dikes and plutons.

Geochemistry: Bedrock anomalies: Ag, Au, Cu, Zn.

Geophysics:

Significant Deposits: SK007, 008, 010, 011.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes

Tract (km^2): 799

Comments: Reconnaissance geologic and geochemical mapping by USGS and ADGGS; remote; steep and rugged; large tract. 65% in USNPS Glacier Bay National Park; 35% in Alaska State lands.

Discussion:

Tract Name: Mount Henry Clay **Tract No:** 09SK

Geology: Paleozoic and Mesozoic(?) volcanic and fine-grained clastic rocks are intruded by Tertiary granitic plutons; Ba-bearing massive sulfides present; also one locality with abundant large massive sulfide boulders.

Geochemistry: Stream-sediment and bedrock anomalies present.

Geophysics:

Significant Deposits: (w/Production and Reserves) SK017-025. Reserves: At SK021: USBM inferred estimate of 750,000 T w/ 1.8 oz/T Ag, 1.7% Zn, 60.0% Brt; or 680,000 mt inferred w/ 60 g/mt Ag, 1.73 g/mt Zn, 60.0% Brt (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	1	2	3	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	0	1	2	Yes

Tract (km^2): 84

Comments: Reconnaissance and detailed geologic and geochemical mapping by USGS, USBM, and ADGGS; moderate to high level of prospecting and some drilling; close to major road and trails; steep and rugged; extensive glacier cover; small tract. 100% in Alaska State lands.

Discussion:

Tract Name: (A) Surgeon Mountain, and (B) upper Tsirku River **Tract No:** 10SK

Geology: Paleozoic clastic, carbonate, and volcanic rocks intruded by Tertiary plutons; several small skarn deposits in Canada close to (A); some stratiform disseminated and massive sulfides in (B).

Geochemistry:

Geophysics:

Significant Deposits: None in (A) or (B).
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes
3) 18b Cu skarn	0	0	0	1	2	Yes

Tract (km^2): 98

Comments: Reconnaissance and detailed geologic and geochemical mapping by USGS, USBM, and ADGGS; moderate level of prospecting; close to major road and trails; steep and rugged; some glacier cover; small tract. 100% in Alaska State lands.

Discussion:

Tract Name: (A) Porcupine, (B) lower Tsirku River , and (C) Takhin River **Tract No:** 11SK

Geology: Paleozoic fine-grained clastic, carbonate, and volcanic rocks are intruded by Cretaceous and Tertiary granitic plutons.

Geochemistry: Stream-sediment and bedrock anomalies present.

Geophysics:

Significant Deposits: (w/Production and Reserves) (A): SK026-039, 051, 052; (B): SK009, 040-045, 047, 048; (C): SK050. Production: (A) Placer in early 1900's. Reserves: (A): For the area centered at SK035 aggregated inferred estimates: Dredge: 3,396,000 mt w/ 0.22 g/mt Au; Alluvial: 308,600 mt w/ 0.73 g/mt Au.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes
3) 39a Placer Au-PGE	0	0	0	0	1	Yes

Tract (km^2): 498

Comments: Reconnaissance and detailed geologic and geochemical mapping by USBM and ADGGS; moderate to high level of private prospecting; close to major road and trails; moderately steep and rugged; some glacier cover; large tract. 100% in Alaska State lands.

Discussion:

Tract Name: Chilkat River and W side Chilkat Inlet **Tract No:** 12SK

Geology: Paleozoic fine-grained clastic, carbonate, and volcanic rocks, some of which were metamorphosed in Late Paleozoic, are intruded by Cretaceous and Tertiary plutons; sulfide-bearing quartz veins, altered zones, and some stratiform massive and disseminated sulfides are present.

Geochemistry: Bedrock anomalies: Ag, Ba, Co, Cu, Zn.

Geophysics:

Significant Deposits: SK016, 046, 053-064.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes
3) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 423

Comments: Reconnaissance and detailed geologic and geochemical mapping by USBM and ADGGS; moderate to high level of private prospecting; close to major road, trails, and tidewater; moderately steep and rugged; some glacier cover; large tract. 100% in Alaska State lands.

Discussion:

Tract Name: Klukwan **Tract No:** 13SK

Geology: Upper Triassic metabasalts are intruded by magnetite-rich ultramafic body; fan below consists of broken rock from that body.

Geochemistry:

Geophysics: An aeromagnetic anomaly must exist with this large ultramafic body.

Significant Deposits: (w/Production and Reserves) SK066, 067. Reserves: At SK066: lode: USBM estimate of 3,500,000,000 T inferred w/ 16.8 Fe, 2.0% Ti, and 50,000,000 T w/ 0.03 oz/T Au, 0.1% Cu, 0.03 oz/T Pt, 0.03 oz/T Pd; at SK067: fan: 980,000,000 T inferred w/ 10.8% Fe, 2.0% Ti. Also for the lode: a USBM estimate of 3,175,148,000 mt inferred w/ 16.8% Fe; 45,359,000 mt inferred w/ 0.01 g/mt Au, 0.10% Cu, 0.01 g/mt Pt, 0.01 g/mt Pd; and for the fan, 898,789,600 mt w/ 10.8% Fe (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 21

Comments: Reconnaissance and detailed geologic and geochemical mapping by USGS, USBM and ADGGS; moderate to high level of private prospecting; close to major road and tidewater; in part very steep and rugged, but fan is easily accessible; small tract. About 5% in Alaska Native lands; 95% in Alaska State lands.

Discussion:

Tract Name: (A) Chilkat River, and (B) east side of Chilkat Inlet, **Tract No:** 14SK

Geology: Upper Triassic basalts are locally magnetite- and sulfide-bearing.

Geochemistry: Anomalies reported.

Geophysics:

Significant Deposits: (w/Production and Reserves) (A): SK071-073; (B): SK078-081. Reserves: At (B): USBM indicated estimateof 700 T w/ 0.09 oz/T Au, 0.17 oz/T Ag, 0.8% Cu; also USBM inferred estimate: 2,722,200 mt w/ 0.27 g/mt Au (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 23 Basaltic Cu	0	0	0	0	1	No
2) 6a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes

Tract (km^2): 80

Comments: Reconnaissance and detailed geologic and geochemical mapping by USGS, USBM and ADGGS; prospecting and drilling by USBM; moderate to high level of private prospecting; close to major road and tidewater; (A) is in part steep and rugged, but (B) is low relief; relatively small tract. 100% in Alaska State lands, including a State Park.

Discussion:

Tract Name: Haines **Tract No:** 15SK

Geology: Upper Triassic metabasalts are intruded by a magnetite-rich ultramafic body.

Geochemistry: Some anomalies reported.

Geophysics: Gravity and aeromagnetic anomalies: large.

Significant Deposits: (w/Production and Reserves) SK075-077. Reserves: At SK077: USBM estimate of "several million T" inferred w/ <10% magnetite, about 1.0% Ti.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 9 Alaskan PGE	-	-	-	-	-	No

Tract (km^2): 26

Comments: Some detailed geologic and geochemical mapping by USGS, USBM and ADGGS; minor private prospecting; close to major road and tidewater; low relief; relatively small tract under the town of Haines. 100% in Alaska State lands, including a State Park.

Discussion:

Tract Name: Skagway River **Tract No:** 16SK

Geology: Paleozoic and older(?) metamorphosed clastic, carbonate, and volcanic rocks are intruded by mid-Tertiary plutons.

Geochemistry: NURE stream-sediment anomalies: Pb.

Geophysics:

Significant Deposits: (w/Production and Reserves) SK082, 084-086. reserves: At SK084: USBM estimate of 10,000 T inferred w/ 0.04 oz/T Au, 3.4% Pb, 2.3% Zn; also an estimate of 9,000 mt w/ 13.71 g/mt Au, 3.4% Pb, 2.3% Zn (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 14a W skarn	-	-	-	-	-	Yes
2) 18b Cu skarn	-	-	-	-	-	Yes
3) 18c Zn-Pb skarn	0	0	0	0	1	Yes
4) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes

Tract (km^2): 547

Comments: Some detailed geologic and some geochemical mapping by USGS, USBM and ADGGS; prospecting by USBM; close to railroad, major road, and tidewater; near the town of Skagway. Fairly steep. Relatively large tract: 60% in Alaska State lands; 40% in USFS Tongass National Forest-- and parts of both in Trail of '98 NPS National Historical Park.

Discussion:

Tract Name: Meade Glacier **Tract No:** 17SK

Geology: Paleozoic and older metamorphosed clastic, carbonate, and volcanic rocks are intruded by mid-Tertiary plutons.

Geochemistry:

Geophysics:

Significant Deposits: None.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 14a W skarn	-	-	-	-	-	Yes
2) 18b Cu skarn	-	-	-	-	-	Yes
3) 18c Zn-Pb skarn	0	0	0	0	1	Yes

Tract (km^2): 135 total: 83 in SK and 52 in AL.

Comments: Reconnaissance geologic and some geochemical mapping by USGS; essentially unprospected; remote, rugged, extensive glacier cover; relatively small tract. 100% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 17SK and 01(A)AL.

Tract Name: (A) Bacon Glacier, and (B) and Mount Ogden **Tract No:** 02TR

Geology: (A): Tertiary granodiorite or granite contains minor occurrences of disseminated molybdenite and some molybdenite-bearing quartz veins. (B): Late Tertiary rhyolite dike swarm associated with felsic plug intrudes metamorphosed Paleozoic and older(?) clastic, carbonate, and volcanic rocks.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) (A): TR001, 002; (B): TR004. Reserves: At TR002: USBM estimate of 907,000 mt w/ 0.10% Mo (Coldwell, 1990).

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 21b Porphyry Mo (low F)	0	0	0	0	1	Yes
2) 18b Cu skarn	0	0	0	0	1	Yes
3) 18c Zn-Pb skarn	0	0	0	0	1	Yes

Tract (km^2): 225

Comments: Reconnaissance geologic and some geochemical mapping by USGS; both parts essentially unprospected in US, but (B) is well prospected across the Boundary in Canada; remote, rugged, extensive glacier cover; moderate-size tract, but tract (A) is small. 100% in USFS Tongass National Forest.

Discussion:

Tract Name: Kluchman Mountain **Tract No:** 03TR

Geology: Complexly deformed and metamorphosed Paleozoic and older(?) clastic, volcanic, and minor carbonate rocks with scattered ultramafic masses are intruded by Tertiary granodiorite and granite; ultramafic masses probably contain chromite.

Geochemistry:

Geophysics:

Significant Deposits: TR003.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 8a Podiform chromite (minor)	0	0	0	0	1	Yes
2) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 156

Comments: Reconnaissance geologic and geochemical mapping by USGS; essentially unprospected; remote, rugged, extensive glacier cover; close to major river valley; relatively small tract. 100% in USFS Tongass National Forest (except for some Alaska State land and private homesites along river).

Discussion:

Tract Name: Snow Tower-Sawyer Glacier **Tract No:** 04TR

Geology: Paleozoic and older metamorphosed clastic, volcanic, and carbonate rocks are intruded by Tertiry plutons; an environment permissive for skarn deposits.

Geochemistry:

Geophysics:

Significant Deposits: TR005, 009.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 18b Cu skarn	0	0	0	0	1	Yes
2) 18c Zn-Pb skarn	0	0	0	0	1	Yes
3) 22c Polymetallic vein	0	0	0	0	1	Yes

Tract (km^2): 536 total: 436 in TR and 100 in SD.

Comments: Reconnaissance geologic and geochemical mapping by USGS; little prospected; remote, rugged, very extensive glacier cover; relatively large tract. 59% in USFS Tracy Arm-Fords Terror Wilderness; 41% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 03SD and 04TR.

Tract Name: Fairweather Range **Tract No:** 01YA

Geology: Altered zones and disseminated sulfides occur in Mesozoic and older(?) metamorphic rocks intruded by Jurassic, Cretaceous, and Tertiary granitic plutons.

Geochemistry: Anomalies: Mo, Ag, Au, Cu, Zn.

Geophysics:

Significant Deposits: YA009-011.
(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 28a.1 Sierran kuroko massive sulfide	0	0	0	0	1	Yes
2) 36a Low-sulfide Au-quartz vein	0	0	0	0	1	Yes
3) 21a Porphyry Cu-Mo	0	0	0	0	1	Yes

Tract (km^2): 3,008 total: 1,802, in YA, 948 in SK, 88 in ME, and 170 in MF.

Comments: Reconnaissance geologic and geochemical mapping by USGS; essentially unprospected; remote, rugged, very extensive glacier cover; extrmely large tract. 52% in USNPS Glacier Bay National Park; 9% in USFS Russell Fiord Wilderness; 3% in USNPS Wrangell-Saint Elias National Park and Preserve; 36% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 01YA, 01SK, 01MF, and newly designated tract 01ME in Mt. Saint Elias quadrangle to northwest.

Tract Name: Yakutat Range

Tract No: 02YA

Geology: Thin Au-bearing quartz veins occur in greenschist or lower-grade flyschoid rocks; veins are spatially and genetically related to Tertiary plutons.

Geochemistry:

Geophysics:

Significant Deposits: YA008.

(w/Production and Reserves)

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 36a Low-sulfide Au-quartz vein	0	0	1	3	5	Yes

Tract (km^2): 3,603 total: 2,768 in YA, 598 in ME, 214 in MF, and 23 in SK.

Comments: Reconnaissance geologic and geochemical mapping by USGS; essentially unprospected; remote, rugged, extensive glacier cover; extremely large tract. 14% in USNPS Glacier Bay National Park; 36% in USFS Russell Fiord Wilderness; 4% in USNPS Glacier Bay National Preserve; 22% in USNPS Wrangell-Saint Elias National Park and Preserve; 24% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 02YA, 02SK, 02MF, and newly designated tract 02ME in Mt. Saint Elias quad to northwest.

Tract Name: Yakutat to Cape Spencer beach placers **Tract No:** 03YA

Geology: Iron- and titanium-bearing beach and (locally) stream placers border the Gulf of Alaska; they include both modern beaches and older upraised marine terrace placers; iron- and titanium-bearing black sands occur in lenses up to 3-m thick of limited lateral extent.

Geochemistry:

Geophysics:

Significant Deposits: (w/Production and Reserves) YA001-007, 012, 013; MF002, 011, 019. Production: In YA: During early 1900's about 6 kg Au was produced from small deposits; in MF: about 4,000 oz Au produced from sands between 1890 and 1917 by small-scale operations. Reserves: In YA: Large, low-grade Fe and Ti tonnages present w/ an estimated 20.8 kg/m3 Fe, 12.2 kg/m3 Ti; some higher grade zones present; in MF: USBM inferred estimates calculated for 12 blocks covering a total area of 2.6 square km (two areas within those blocks contain resources w/ higher grades than present overall): 4,600,000 m3 w/ 1.0% ilmenite, minor Au (for 1977 value of $1.11/m3; this includes (a) 153,000 m3 w/ 3.4% ilmenite at one locality w/ 1977 value of $3.83/m3, and (b) 102,000 m3 w/ 4.2% ilmenite w/ 1977 value of $5.22/m3.

Undiscovered Deposit Type	Number of Undiscovered Deposits at Probability Percentile					Grade/Tonnage Model?
	95	90	50	10	05	
1) 39c Shoreline placer Ti	0	1	2	3	4	Yes

Tract (km^2): 894 total: 767 in YA and 27 in MF.

Comments: In YA: Reconnaissance and some detailed sampling by USBM, including auger-hole sampling; small amount of prospecting; local aeromagnetic survey by USGS; in MF reconnaissance and some detailed sampling by USBM; moderate amount of prospecting. Modern, bare beaches are easy to sample and explore, dense vegetation hinders exploration of back-beachdeposits, which are poorly known. Very large tract. 31% in USNPS Glacier Bay National Park; 9% in USFS Russell Fiord Wilderness; 4% in USNPS Glacier Bay National Preserve; 17% in USFS Tongass National Forest.

Discussion: Includes USGS OFR 91-010 tracts 03YA and 03MF.