

#19097

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ASSESSMENT REPORT

ROCK SAMPLING HAND TRENCHING

ON THE

PEREGRINE AND FALCON A MINERAL CLAIMS

FILMED

TOODOGGONE RIVER AREA

OMINECA MINING DIVISION, B.C.

NTS 94E/6E

57 27 N ; 127 06 W

FOR

MULTINATIONAL RESOURCES INC

795-885 DUNSMUIR ST.

VANCOUVER, B.C., V6C 1N8

BY

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GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,097

DATE: Sept.12,1989

WORK DONE: JULY 18-24,1989

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## SUMMARY

Multinational's Peregrine and Falcon A claims were rock sampled and trenched by a 3-man crew from July 18 to 24, 1989. The target was precious metal epithermal veins similar to those at the Cheni Mine located 12 km to the southwest, and to the formerly producing Baker Mine.

The claims are underlain by Toodoggone volcanic rocks in contact with a granitic stock. Altered, pyritic, volcanic rocks occur near the intrusive contacts.

Several new showings typified by local quartz veinlets or breccia, with chalcopyrite, were discovered by prospecting. Trenches were blasted and hand dug on Zone B (Falcon Claim) where previous work had outlined an area of float boulders containing base metal mineralization.

Fifty-seven rock samples containing quartz veining and/or sulphides were submitted for analyses. Results were somewhat disappointing in that several samples with base metal mineralization had only background gold and silver values. Other samples which have anomalous gold and silver values are from local quartz veins which do not appear to have significant size potential.

INTRODUCTION

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A rock sampling and trenching program was carried out on the Peregrine and Falcon A Claims from July 18 to 24, 1989. The work was carried out by P. DeLancey ( P. Eng.), F. Renaudat and C.Thorson. Fifty-seven rock samples were collected during the prospecting / trenching program and analysed for Au,Ag,Pb,Zn,Cu,As,Sb.

LOCATION, ACCESS & PHYSIOGRAPHY

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The claims are located in the Toodoggone River area, approximately 300 km. north of Smithers, B.C. Access is by the Cheni road ( restricted) or by aircraft from Smithers to the Sturdee River airstrip.

The area is moderately rugged with the elevation ranging from 1350 m.in McClair Creek valley to 2000 m on the higher mountain tops.

CLAIM STATUS

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The Peregrine and Falcon A modified grid claims, comprising 38 units, are owned by Multinational Resources Inc. The claim data is as follows:

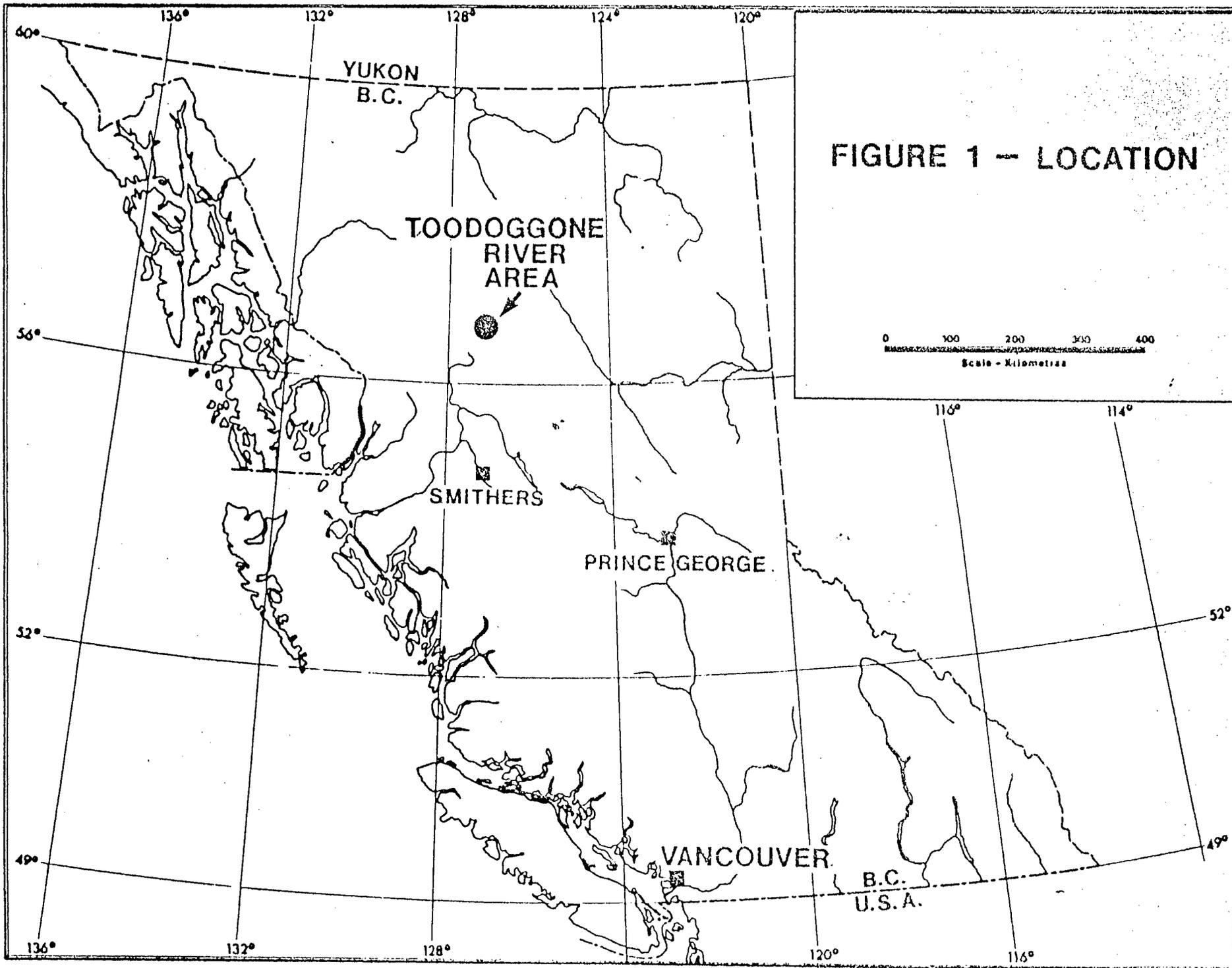
Claim Name Units Record # Anniversary

Claim Name	Units	Record #	Anniversary
Peregrine	20	7311	Sept.17,1989
Falcon A	18	7312	Sept.17,1989

HISTORY

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Subsequent to staking the claims in 1985, a 5-man crew from HiTec completed contour soil sampling and limited stream sediment sampling. A 1986 rock and soil sampling program under the supervision of N. Carter was successful in locating significant base metal and precious metal values in Areas "A" and "B". Expenditures to date are in the order of \$28,000.



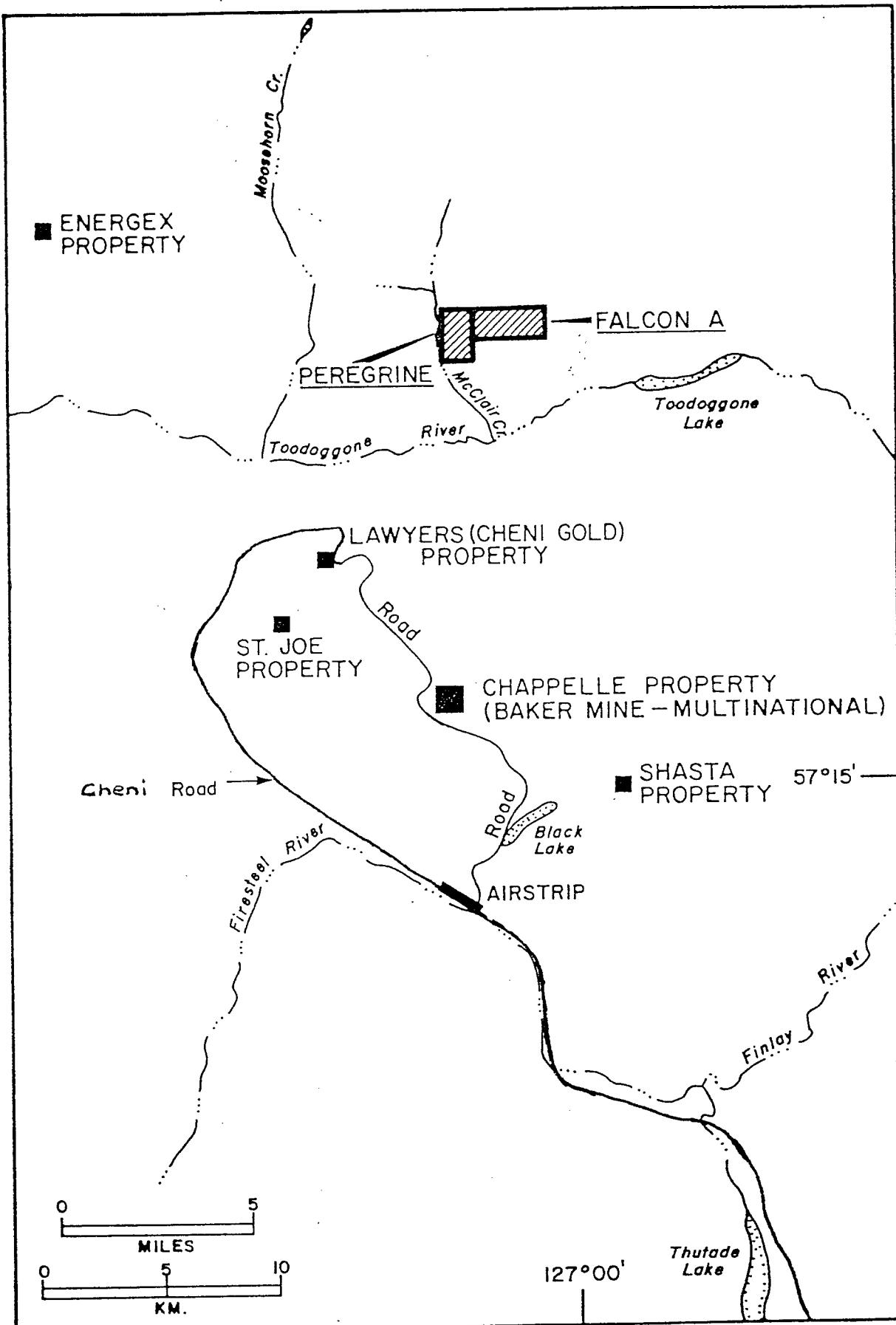


FIGURE 2 — LOCATION — PEREGRINE , FALCON A

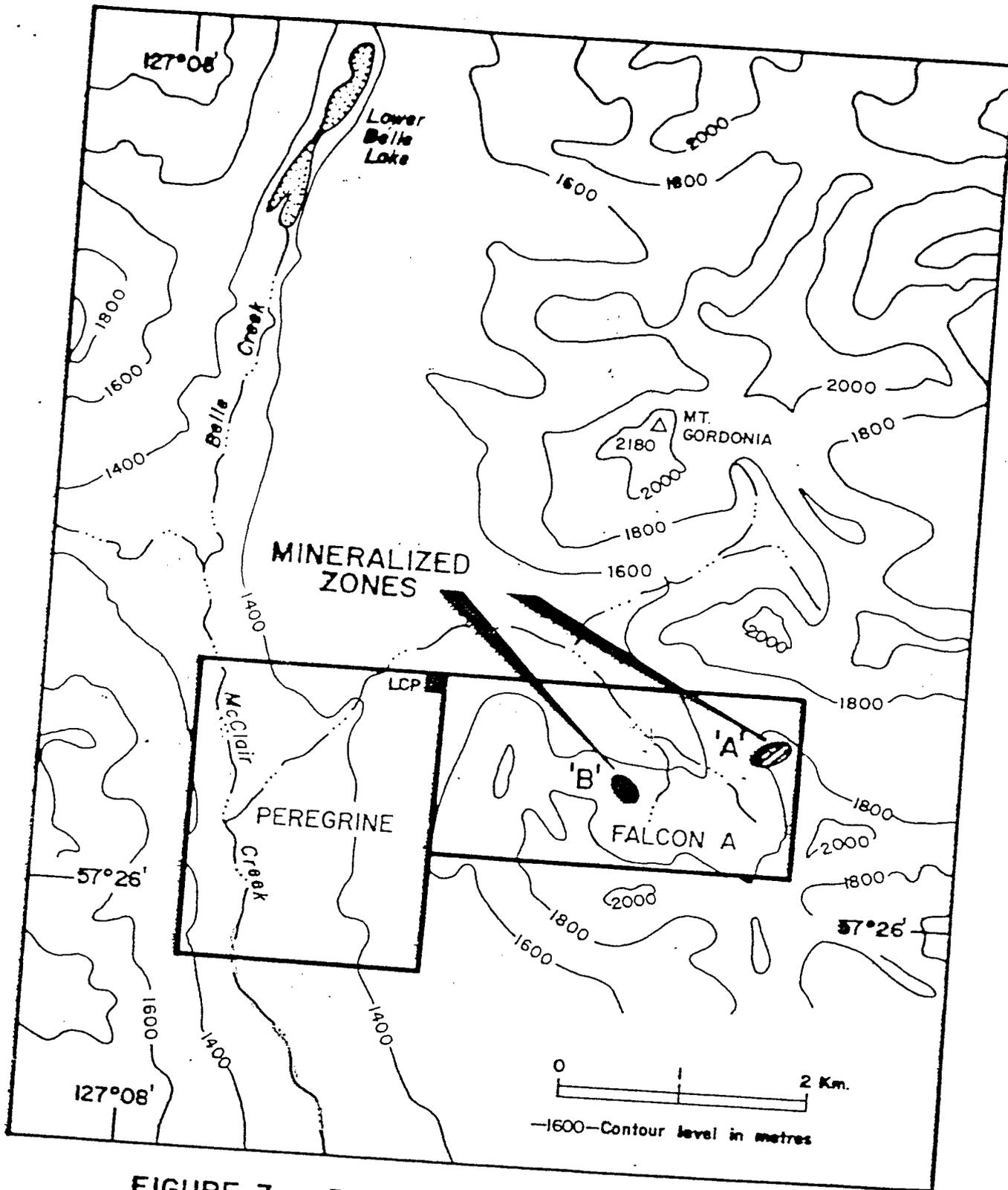
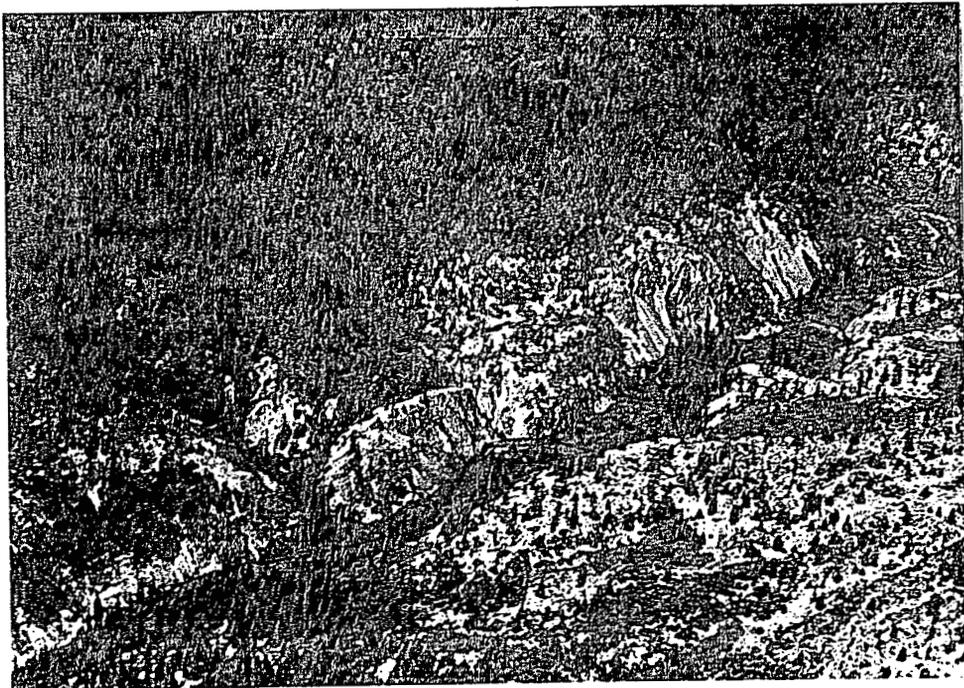


FIGURE 3 — PEREGRINE AND FALCON A  
MINERAL CLAIMS



Falcon Claim, Zone B, Hand Trenching



Peregrine Claim, McClair Creek

## REGIONAL GEOLOGY & MINERALIZATION

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The Toodoggone River precious metal district lies along the eastern margin of the Intermontane Belt. This 20 km. wide belt extends 100 km. northwesterly from McConnel Creek to the Stikine River. The oldest rocks are Permian limestones which have been thrust on Takla basic volcanic rocks of Upper Triassic age. Unconformably overlying these rocks are the Toodoggone volcanics. This package of predominantly subaerial felsic rocks, is part of the Jurassic Hazelton Group. Granitic stocks of Jurassic age intrude these rocks. Northwesterly trending faults cut through the area. Prominent quartz-sericite-chlorite-pyrite alteration zones occur throughout the area. Several precious metal epithermal vein deposits have been discovered in the Toodoggone during the last decade. The Baker quartz vein deposit, hosted in Takla basic volcanics, was mined by Dupont from 1980-1983. Multinational Inc. outlined an additional 50,000 tons on a strike extension. The Cheni Mine is currently producing at the rate of 550 tons per day. Their ore is characterized by electrum and argentite in chalcedony/ quartz breccia zones. The Shasta Deposit is currently being explored by Homestake and a high-grade zone is being readied for open-pit mining by International Shasta. Ore will be processed at the Baker Mill. Many other showings occur in the Toodoggone area .

## PROPERTY GEOLOGY

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The claims are underlain by Toodoggone intermediate to felsic volcanic rocks . Granitic rocks of the McClair Creek stock are exposed along the southern portion of the claims. The volcanic rocks are gently dipping to the south and are largely composed of dacitic porphyritic flows and crystal/lapilli tuffs. Intensely altered and sheared, pyritic rocks exposed along McVclair Creek are evidence of major northwesterly trending faults which transect the area.

MINERALIZATION  
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Several large gossanous areas characterized by altered pyritic volcanics occur on the property. These rocks generally do not contain any base or precious metal mineralization, unless cut by quartz veining. Previous exploration was focused on Areas "A" and "B" on the Falcon claim. Area "B" is located in a cirque. Quartz veinlets with base metal mineralization occurs in angular float and limited outcrop, over 150 m distance. Local concentrations of sphalerite, galena, chalcopryrite and pyrite are found along a southeasterly trending system of quartz veinlets and silicification. Analyses of samples from trenches, outcrop, and float confirmed the presence of significant quantities of copper, lead and zinc but unfortunately precious metal values are low. Two samples from a relatively unaltered outcrop of basic volcanic outcrop near a small lake are anomalous in silver, copper and gold, however the pocket of mineralization is too small to have economic potential. Area "A" is a prominent gossan located along the eastern boundary of the claim. Some samples collected from talus had anomalous gold values. Analitical results from local "in place" quartz veins with chalcopryrite, above the talus was discouraging. Other local occurrences of quartz veining with minor copper mineralization were discovered, however results from sampling showed only background gold values. Most of the mineral showings lie close to the intrusive contact or aplite dykes.

PROSPECTING and ROCK SAMPLING  
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Relatively detailed prospecting was carried out in the "A" and "B" areas; recce prospecting was carried out in the remaining areas of the claims. Prospecting traverses and sample locations are plotted on 1:5,000 topographic base maps. Orophoto maps (1:5,000) were also used for location. While rock exposure on the Falcon claim is good, the Peregrine claim is largely covered by vegetation. Highly sheared, altered and pyritic rocks outcropping along McClair Creek (Peregrine Claim) were sampled; only background values are reported.

TRENCHING  
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All trenching was done in Area "B". The main objective was to expose and sample the source of mineralized float emminating from knoll at the north end of the cirque. Five pits were blasted and hand-dug across the trend of the zone. The pits are in the order of 2 m deep. Bedrock was encountered in the most easterly and westerly trenches but not in the central trenches. Limited blasting was carried out on a system of quartz veinlets and silification exposed on the north face of the knoll.

## DISCUSSION OF RESULTS

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Results from analyses of rock samples was largely disappointing. Although samples from Area "A" have base metal mineralization, accompanying precious metal values are low. Samples which did have anomalous precious metal values were from mineralized zones with only limited size potential. It would appear that the mineralized base and precious metal structures on the adjacent JD property do not occur on the Peregrine/Falcon claims.

## CONCLUSIONS & RECOMMENDATIONS

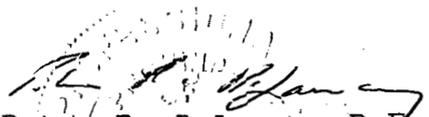
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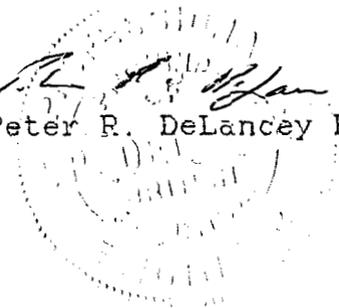
Mineralization found to date is of local extent. Further exploration of the property should await future developments in the area.

## REFERENCES

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- Bell, M., 1985: Assessment report, Prospecting and Geochemical Survey on the Peregrine and Falcon A Mineral Claims, Omenica M.D., B.C., 8pp.
- Carter, N.C., 1986; Assessment Report, Peregrine and Falcon A Property, Toodoggone River Area, B.C.
- Marsden, H., Moore, J.M., 1988, Geological Fieldwork, Paper 1989-1.

  
Peter R. DeLancey P.Eng.



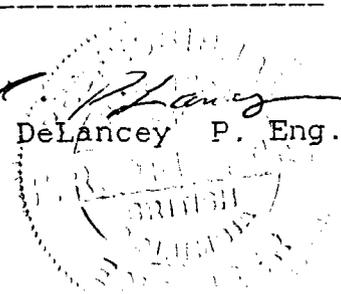
STATEMENT OF EXPENDITURES  
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Work Dates: July 18-24, 1989  
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Wages: P.DeLancey-7days@250/d--\$1750	
F.Renaudat-7days@175/d--\$1225	
C.Thorson -7days@130/d--\$ 910	\$3885
Transportation: Helicopter-3.3hrs@700/hr--	\$2475
Truck support--7days@50/d--	\$350
Board & Room:--21 man-days@\$50/d--	\$1050
Dynamite Supplies:--	\$406
Plugger Rental:--	\$500
Maps,Compilation and Prep:---	\$300
Communications:--	\$200
Equipment Rental & Purcsase:--	\$400
Expediting:--	\$100
Fixed Wing Support:--	\$200
Mob & Demob:-	\$1000
Geochemical Analyses:--57 samples@16--	\$911
Overhead:--	\$500
Report Preparation and Drafting--	\$400

TOTAL \$12,667.00  
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Peter R. DeLancey P. Eng.

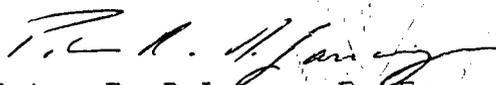


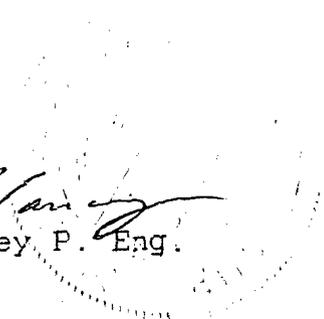
APPENDIX 2

CERTIFICATE

I, Peter Ross DeLancey of 1748 Dunbar St., Vancouver, B.C. do here certify that:

- 1) I have been practicing as a professional geologist for a period of approximately 23 years for mining exploration companies.
  
- 2) I obtained a Masters Degree in geology from The University of Manitoba in 1967 and qualified for registration with the Association of Professional Engineers of B.C. in 1976.

  
Peter R. DeLancey P. Eng.



## APPENDIX 3

### SAMPLING PROCEDURE

#### ROCK SAMPLING

Fifty-seven rock samples (including trench samples ) were collected for analyses. The type of samples could best be described as select grab samples. With the exception of the trench samples ,see below, most samples were collected on reconnaissance prospecting traverses.

#### TRENCH SAMPLING

Sampling of the 5 blasted and hand-dug pit across Area "B" was difficult because few of the pits reached bedrock and it was poorly exposed. The samples collected were "grab" samples; see sample descriptions.

## APPENDIX 4

### ROCK SAMPLE DESCRIPTIONS

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Fifty-seven rock samples were collected on the property. Sample descriptions are as follows:

CT-89-10 Sample of talus, altered andesite, local quartz veining and limonite.

CT-89-11 Altered andesite with quartz veining, limonite staining, galena noted.

CT-89-12 Float sample, andesite with quartz veining and pyrite.

CT-89-13 Float, andesite with quartz veining, malachite and chalcopryrite.

CT-89-14 Float, andesite with quartz vugs, local pyrite.

CT-89-15 Float, andesite with + pyrite and chalcopryrite?.

CT-89-16 Talus sample, altered andesite with local malachite.

FR-89-36 Float, andsite with minor malachite.

FR-89-37 Talus, andesite with quartz veining, oxidized pyrite.

FR-89-38 Talus, altered andesite with quartz, epidote and pyrite.

FR-89-39 Altered rock, epidote, quartz veinlets.

FR-89-40 Altered andesite with quartz veining, minor chalcopryrite in veins.

FR-89-42 Float, andesite with iron oxides, quartz veining.

FR-89-43 Altered andesite, epidote, pyrite in quartz veins.

FR-89-44 Quartz vein, 2 m. wide, 3 m. long, local malachite and chalcopryrite.

FR-89-45 2 m. chip sample across above vein.

FR-89-46 20 m. wide basic dyke, quartz vugs, local epidote and hematite.

FR-89-47 Large angular float in place with 1 m. by 1 m. quartz vein containing minor malachite and chalcopryrite.

FR-89-48 Quartz vein striking Az.350.

- FR-89-49 Angular quartz float, local iron oxide.
- FR-89-50 Andesite with quartz veining and vugs.
- FR-89-51 Angular float, andesite with pyrite disseminations and minor quartz veinlets.
- FR-89-52 Quartz breccia in andesite, local pyrite.
- FR-89-53 Trench sample, bedrock? at 1.2 m. to 1.4 m. depth, silicified andesite with quartz veining, K-spar alteration, minor chalcopyrite.
- FR-89-54 Trench sample at 2 m. depth, probably float material, altered andesite with minor galena and chalcopyrite.
- FR-89-55 Trench sample, did not reach bedrock, altered andesite float with minor galena.
- FR-89-53A Trench sample, bedrock? at 1.7 m. depth, altered andesite with epidote, quartz and minor galena.
- FR-89-53B Trench sample, possible bedrock at 2 m., altered andesite with quartz veinlets, pyrite and epidote.
- FR-89-53C Trench sample, float at 40 cm. depth, altered andesite with rusty quartz veining, minor pyrite.
- FR-89-53D Trench sample, possible bedrock, altered andesite with quartz, epidote, minor pyrite.
- FR-89-56 Trench sample, quartz veins cutting aplite dyke?, minor chalcopyrite along vein contact.
- FR-89-57 Trench sample, quartz vein 1 to 3 cm. wide, striking Az. 135, dip 25 NE., local chalcopyrite.
- PD-89-23 Large angular float from area "B". Massive concentrations of sphalerite and galena in altered pyritic andesite.
- PD-89-24 Center of "B" grid, silicified andesite with quartz veining containing disseminated pyrite and galena.
- PD-89-25 "B" grid, altered andesite with local quartz veining and limonite, local galena with minor chalcopyrite.
- PD-89-26 Float on "B" grid base line, altered andesite with quartz veinlets and minor chalcopyrite.
- PD-89-27 Aplite dyke, striking Az. 165, with network of quartz veinlets containing minor chalcopyrite.

- PD-89-28 Siliceous beds? within andesitic unit, no visible sulphides.
- PD-89-29 As above, collected 100 m. east.
- PD-89-30 Aplite with quartz veinlets containing minor chalcopyrite.
- PD-89-31 Talus, pyritic silicified andesite.
- PD-89-32 Talus, altered andesite with epidote and minor chalcopyrite along fractures.
- PD-89-33 Talus, intensely silicified andesite with disseminated pyrite, minor quartz vugs.
- PD-89-34 Angular talus, quartz cemented andesite breccia with local chalcopyrite.
- PD-89-35 As above, with quartz crystals in vugs.
- PD-89-37 Rusted altered andesite with disseminated pyrite.
- PD-89-38 As above.
- PD-89-39 Altered andesite, pyritic.
- PD-89-40 Float, breccia characterized by green andesitic angular fragments in a green/maroon chalcedony matrix, no visible sulphides.
- PD-89-41 Outcrop adjacent McClair Cr., completely silicified feldspar porphyry, disseminated pyrite is leached out.
- PD-89-42 0.5 m. wide crushed and intensely altered zone in a porphyritic dacite.
- PD-89-43 Probably altered intrusive (granite), local iron oxide after pyrite.
- PD-89-44 Large crushed and intensely altered zone in silicified and pyritized feldspar porphyry. Locally very pyritic with red hematite along fractures.
- PD-89-45 Large composite sample of crushed and clay zone from above.
- PD-89-46 "B" zone area, near small lake. Relatively unaltered andesite with local malachite and chalcocite concentrate in fractures.
- PD-89-47 Same area as above, local concentration of copper oxides in fractured andesite.

APPENDIX 5

ANALYTICAL RESULTS

**PEREGRINE and FALCON CLAIMS - ANALYTICAL RESULTS**

COMP: MULTINATIONAL RESOURCES  
 PROJ: TOODOGGONE  
 ATTN: MR.CLANCEY/MR.DELANCEY

**MIN-EN LABS — ICP REPORT**  
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2  
 (604)980-5814 OR (604)988-4524

FILE NO: 9S-0088-RJ1+2  
 DATE: JUL-31-89  
 \* TYPE ROCK GEOCHEM \* (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB	
CT8910	1.8	364	712	2499	7	3276	71	
CT8911	1.0	58	176	2343	3	1465	19	
CT8912	.2	21	12	22	1	35	17	
CT8913	5.9	61	6126	77	12	158	31	
CT8914	1.1	38	72	33	2	102	10	
CT8915	42.9	83	25890	91	33	139	416	- Zone "A" float
CT8916	3.9	40	4052	95	7	203	16	
FR1936	1.9	44	173	54	8	95	10	
FR1937	1.8	5	214	72	1	12	110	} - Ridge S.E of camp
FR1938	.5	35	20	35	2	139	121	
FR1939	2.0	77	13	37	2	75	18	
FR1940	.1	4	116	8	1	14	7	
FR1941	.8	9	1749	7	1	7	32	
FR1942	2.2	29	18	103	1	89	9	
FR1943	.8	22	33	97	1	138	10	
FR1944	7.2	32	3199	98	6	116	24	Zone A
FR1945	5.9	27	5084	45	6	52	14	
FR1946	.3	4	37	15	1	44	9	
FR1947	.5	12	692	21	1	101	31	
FR1948	22.4	4	20	8	1	10	65	
FR1949	1.1	6	39	24	1	25	23	
FR1950	1.2	15	94	46	3	308	8	
FR1951	.9	29	8	37	2	121	3	
FR1952	.5	6	8	33	1	85	19	
FR1953	.9	15	433	31	2	197	66	
FR1953A	.9	18	66	1916	4	3323	11	
FR1953B	.3	25	18	39	2	143	8	
FR1953C	.1	11	14	25	1	179	3	
FR1953D	.3	19	8	34	2	96	2	
FR1954	1.4	20	702	4376	6	596	16	
FR8955	3.6	26	328	4895	10	5549	40	ZONE "B"
FR8956	.8	3	1195	21	1	24	2	
FR8957	1.7	3	4454	30	3	26	10	
PD8923	8.1	31	349	16834	32	68391	63	
PD8924	1.9	23	80	8620	10	2546	7	Zone B ↓
PD8925	6.8	23	1197	15976	22	11369	18	
PD8926	.7	6	56	99	1	119	1	
PD8927	.5	1	1054	78	1	79	2	
PD8928	.5	1	8	26	1	28	2	
PD8929	2.3	4	12	18	1	33	9	
PD8930	.4	1	49	12	1	30	1	
PD8931	1.6	18	11	24	1	28	3	
PD8932	3.9	19	2507	69	5	134	1	
PD8933	.4	14	33	10	1	15	1	
PD8934	1.5	17	431	76	1	103	59	
PD8935	.5	12	211	13	1	25	11	
PD8937	.9	16	12	51	1	163	18	
PD8938	1.7	29	13	43	1	92	42	
PD8939	2.7	26	60	30	1	47	12	
PD8940	.5	24	10	30	1	132	1	
PD8941	.8	6	11	8	1	10	10	
PD8942	.3	1	8	12	1	14	19	
PD8943	.4	13	10	30	1	14	2	
PD8944	.5	16	18	14	1	26	20	
PD8945	1.1	22	11	36	1	41	40	
PD8946	30.7	33	6149	55	14	216	309	} Zone "B" near small pond
PD8947	55.5	26	10801	60	17	177	828	

