TERRITORY OF ALASKA

DEPARTMENT OF MINES

PE-045-01

PE 45-1

PEACE RIVER URANIUM PROSPECT
SEWARD PENINSULA, ALASKA

by

DANIEL A. JONES

ASSAYER-ENGINEER

December 1953

C O N T E N T S

ILLUSTRATIONS

PLATES

TABLES

PEACE RIVER URANIUM PROSPECT SEWARD PENINSULA, ALASKA

After the United States Department of the Interior, Geological Survey had released Trace Elements Memorandum Report 355 for public inspection, the partnership of William Munz and Elmer Straub became interested in the possibilities of finding a uranium lode deposit at the headwaters of the Peace River. The Memorandum Report 355 has since been republished as Geological Survey Circular 250 and should be referred to in the study of this report.

The Peace River uranium prospect was visited at the request of the partnership of Munz and Straub from July 7th through July 17th 1953. During the examination trenching was done with a bulldozer, test pits were dug by hand, float surveys were made in the area, samples were taken from the various trenches and pits, photographs were made and a plane table stadia survey was made. This map is Plate 3.

The prospect is located in the eastern part of the Seward Peninsula at the headwater of the Peace River a tributary of the Koyuk River. The coordinates of it are 65° 26' 22" North Latitude and 161° 5' West Longitude. The specific location of the Seward Peninsula in relation to the rest of Alaska is shown in Plate 1. The general location of the prospect can be seen on Plate 2., The Seward Peninsula Vicinity Map.

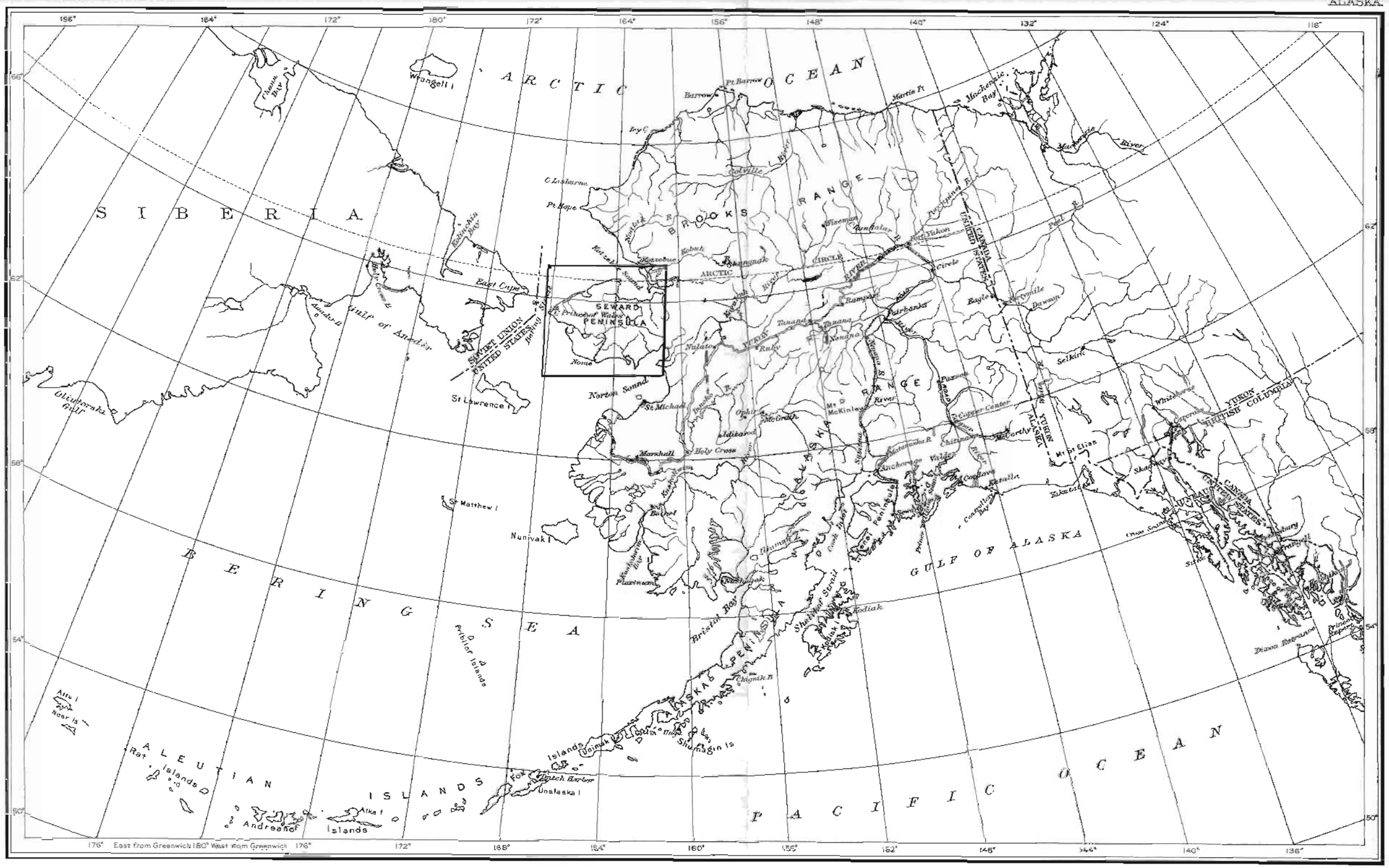
At the time of the examination the property consisted of two full size placer claims which were staked on April 29, 1953 and are recorded in Vol. 228, page 255-6 in the Recording Book at Nome, Alaska. The prospect is located with the Koyuk Mining District.

During the course of the examination a small airfield was built about one mile from the prospect. The field was approximately 1000 feet long. The nearest town, Haycock, is about 15 miles by air; however, all the material used for the examination had to be hauled from Haycock by tractor a distance of some twenty miles.

The examination lasted for ten days and costed approximately two thousand dollars. The results from the work done did not indicate that there was any nearby source for the placer uranium, instead it appeared that the concentration of uranium occurred as a product of the breakdown of the country rock of the area which is known to be quite radioactive. Tables 1 and 2 show the various characteristics of the samples collected and give a fair picture of the results obtained.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALASKA



ALASKA, MAP C
Printed 1952

Plate 1.

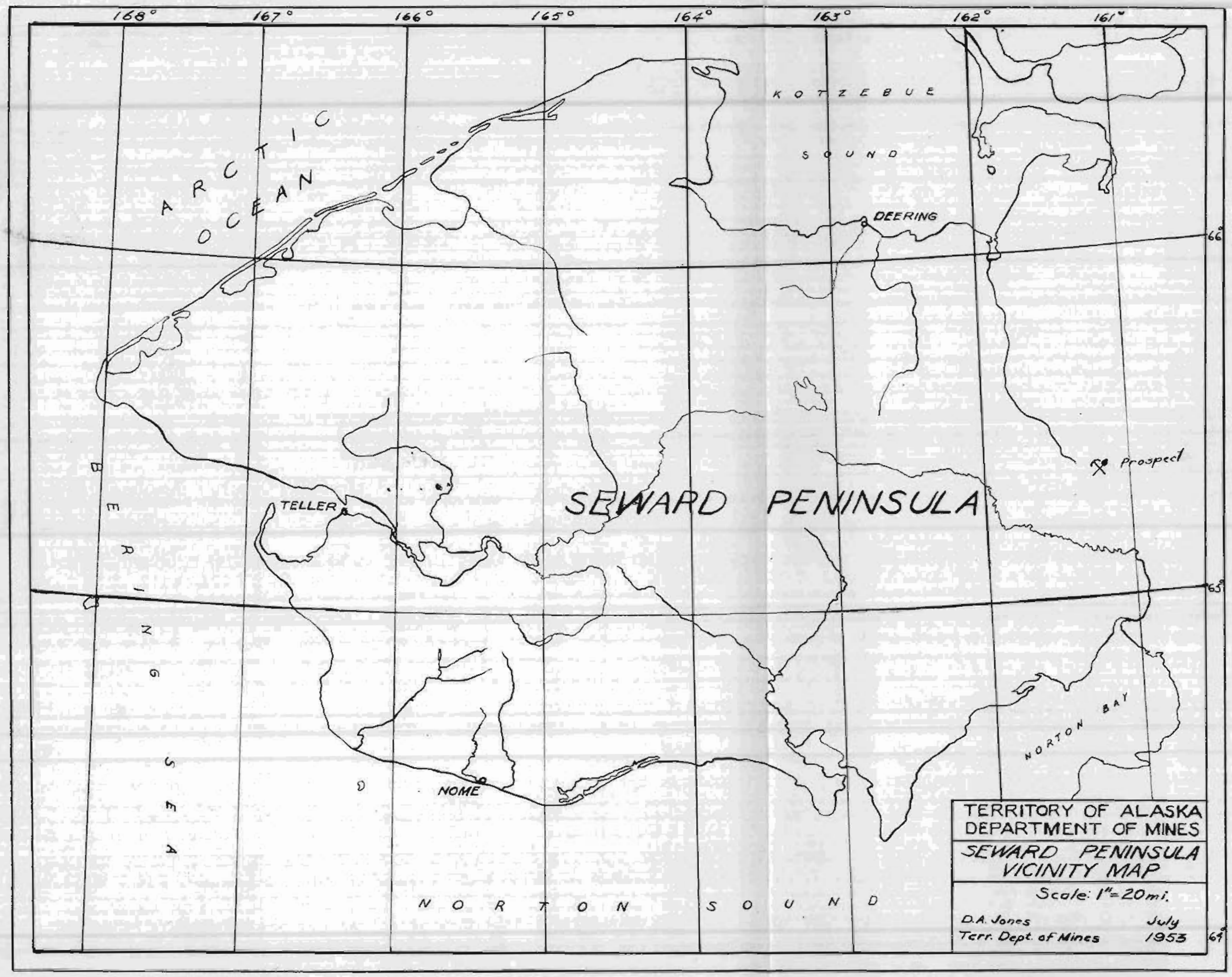

168°
167°
166°
165°
164°
163°
162°
161°
ARCTIC OCEAN
KOTZEBUE SOUND
DEERING
66°
SEWARD PENINSULA
Prospect
TELLER
BERING SEA
NOME
NORTON BAY
NORTON SOUND
65°
64°
TERRITORY OF ALASKA
DEPARTMENT OF MINES
SEWARD PENINSULA
VICINITY MAP
Scale: 1"=20mi.
D.A. Jones
Terr. Dept. of Mines
July
1953

Plate 2.

The general conclusion drawn from the work and the examination is that further prospecting at this time by private capital would be futile. Since no indications were found of a lode source and since the government has withdrawn the 90% participation in the exploration loan for uranium prospecting it is recommended that no further prospecting work be done until a clearer understanding of the Federal Government's position in uranium exploration is known.

Figure 1. View, facing northeast, of the airfield constructed during the examination. A small bush-plane is located at the North end of the field.

Figure 2. The Campsite located near the prospect. The welder at the front end of the Go-devil was used as a starter for the "Cat".

Figure 3. Trench No. 1 showing the Campsite at the head of the trench. Facing north.

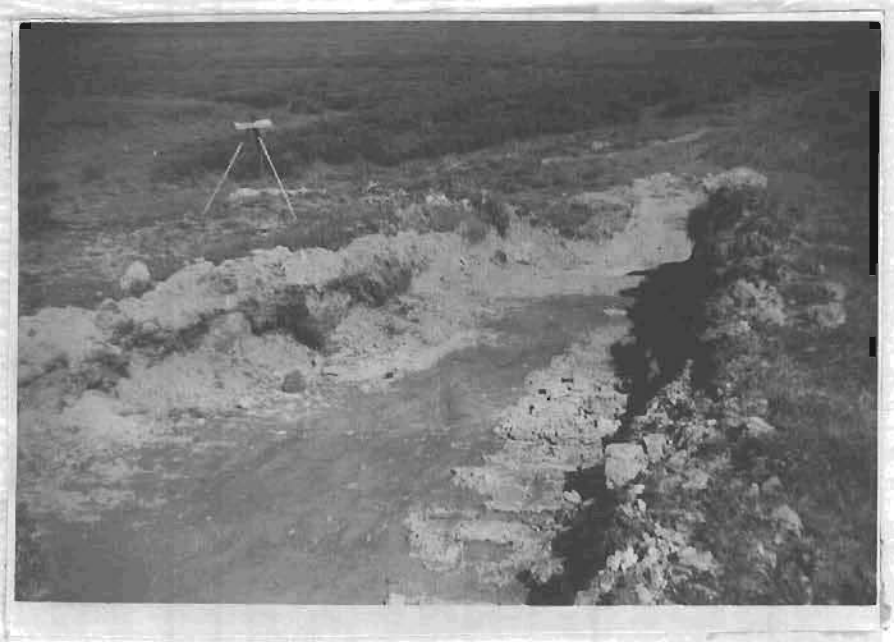


Figure 4. Another view of trench No. 1, facing down the Left Headwater Branch of the Peace River. The plane table used in the survey is in the left background.

Figure 1. View, facing northeast, of the airfield constructed during the examination. A small bush-plane is located at the North end of the field.

Figure 2. The Campsite located near the prospect. The welder at the front end of the Go-devil was used as a starter for the "Cat".

Figure 5. Trench No. 2 showing Pit No. 2. Facing east.

Figure 6. Trench No. 3 showing Pit No. 3. Facing east. It was from this pit that the best concentrates were recovered.

Figure 7. Trench No. 4, facing east. Pit No. 4 in this trench did not encounter bedrock.

Figure 8. Trench No. 5, facing east. It was in this trench that the "Cat" threw its left track.

Figure 9. Trench No. 6, facing east, showing Pit No. 6. This Pit encountered bedrock; however, its radioactivity was nil.

Figure 10. View, facing north, looking down the valley of the Right Tributary of the Left Headwater Branch of the Peace River.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Box 1004
College, Alaska

August 25, 1953

Mr. Dan Jones, Assayer-Engineer
Territorial Department of Mines
Box 657
Nome, Alaska

Dear Dan:

Enclosed are some results on the samples you sent us from the Straub-Munz trenching on the headwaters of the Peace River, and also some samples from Bear Creek.

The cause of the radioactivity has not been definitely determined. Some of the radioactivity is very likely due to uranium and thorium in the zircon, sphene and goethite. Alpha plates have been exposed to help determine the radioactive minerals, but these plates have not yet been studied. I will give you more information on the radioactive minerals as soon as possible.

Sorry I sent the GBL too late for your use. You can destroy the GBL if not already done. The number in the right hand corner must be reported to Washington since the GBL's are in sequence and are filed that way in the Accounts Branch. I have recorded that particular GBL as cancelled.

The bottle you recently sent was composed of a uranium glass mixture, as reported to you by wire. The fluorescence is typical of that type of glass, and radioactivity is about .04 percent equivalent uranium.

Please feel free to send any samples here for radioactivity determinations. We will try to get results out with a minimum of delay.

Sincerely,

John J. Matzko

John J. Matzko
Geologist

EQUIVALENT URANIUM ANALYSES

OF RAW AND CONCENTRATED SAMPLES (iodide heavy, g 3.3)

SAMPLE NO.	LOCATION	CONCENTRATION RATIO	e. U
1	Trench 1, Pit 1	Raw	.004
	" "	1000:1	-.001
2	Trench 3, Pit 3, Top 16" Pit	Raw	.003
	" " "	25:1	.033
3	Trench 3, Pit 3,	Raw	.002
	" "	33:1	.080
4	Trench 3, Pit 3, Bedrock	Raw	.002
	" " "	190:1	.008
5	Pit 7	Raw	.003
	"	20:1	.027
7	Float from divide between Peace River and Cub Creek	Raw	.007
	" "	7:1	.018
8	Granitic dike near airfield on Bear Cr.	Raw	.020
	" (-100 size)	10:1	.043
	" "	47:1	.10
	Near Trench 1, Iron stained rock	Raw	.005
	" "	200:1	.009

TABLE 1

PEACE RIVER URANIUM PROSPECT

EQUIVALENT URANIUM ANALYSES

ON RAW AND CONCENTRATED SAMPLES (Iodide heavy, g 3.3)

SAMPLE NO.	LOCATION	CONCENTRATION RATIO	e.U
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	" "	33:1	.080
4	Trench 3, Pit 3, Bedrock	Raw	.002
	" " "	190:1	.008
5	Pit 7	Raw	.003
	"	20:1	.027
7	Float from divide between Peace River and Cub Creek	Raw	.007
	" "	7:1	.018

Radium Gulch

80752, E. C. Straub

No. 1 above Discovery

Quay Location Notice

April 29, 1953

Vol. 228, 255-6

Page

William Munz - Discovery Claim

April 29, 1953, 228, 255

TABLE 2

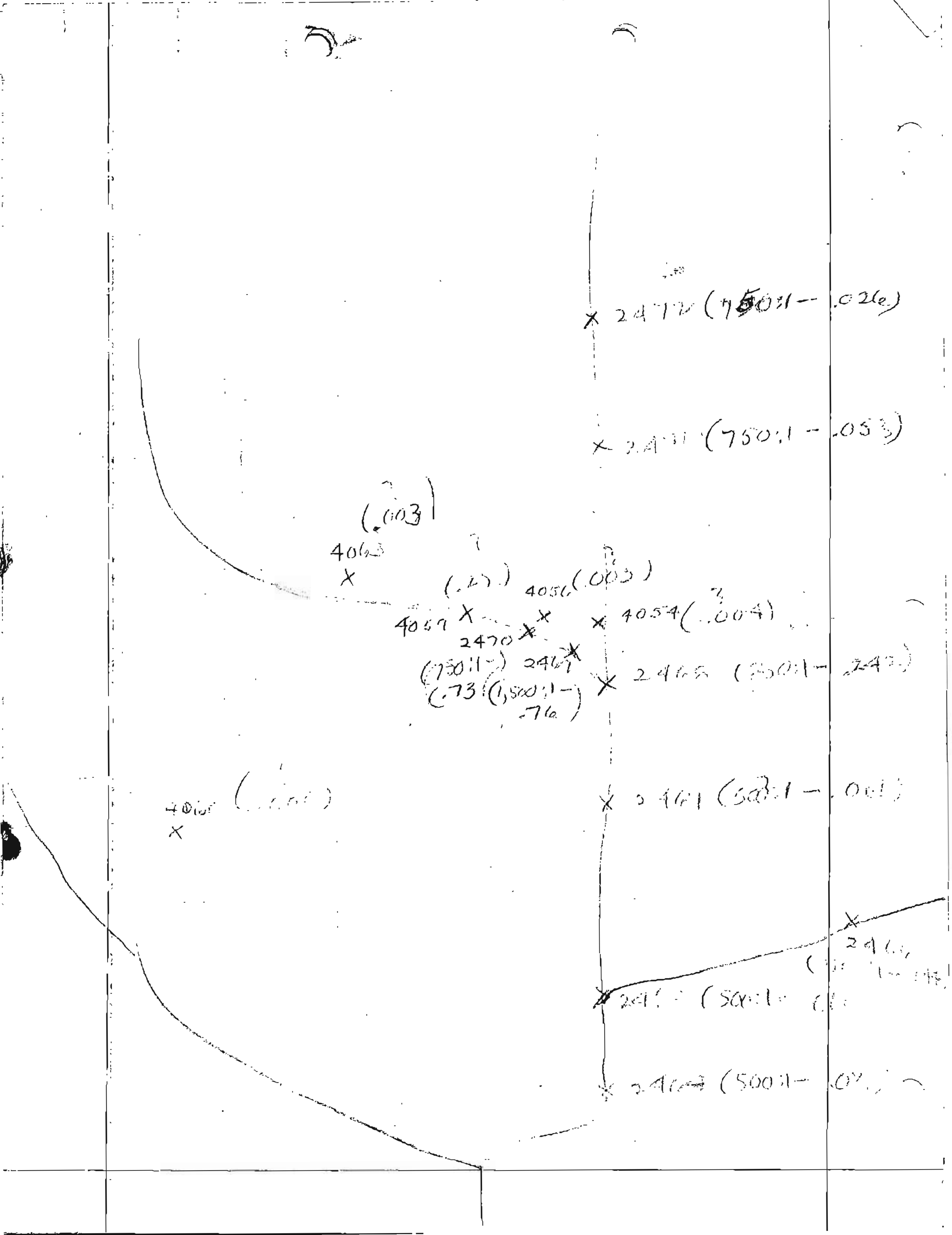
PEACE RIVER URANIUM PROSPECT

ESTIMATED VOLUME PERCENT OF MINERALS PRESENT
IN IODIDE HEAVY FRACTION

MINERALS	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 7
Magnetite	1	1	2	5	2	5
Ilmenite		2	3	2	1	5
Scheelite		Tr	Tr	Tr		
Pyrite	13	1		1		
Limonite	15					
Goethite	70	5		5	4	
Sphalerite	Tr					
Chalcopyrite	1					
Hematite			Tr	2		
Epidote		1	1			
Biotite						10
Hornblende	Tr	2	2	2	5	60
Spinel		77	86	75	85	10
Zircon		1	1	1	1	5
Sphene		10	5	5	2	3
Garnet	Tr	Tr	Tr	2	Tr	2

Daniel H. Jones

January 25, 1864



(.003)
4063
4056 (.003)
4057
4054 (.004)
2470
2469
(1,500:1 –
.76)
(500:1 –

Longitude = 161° 5' W

Latitude = 65° 26' 22" N

$\frac{12}{14.5} = \frac{x}{30'}$

593.5 - 600

993.5 - 1000

$x = 25$

993.5

Longitude 161° 5' W

latitude 65° 3' 38" N

29' 60"

~~30'~~

3' 38"

26' ~~32~~

$\frac{2.12}{0.75} = \frac{x}{15}$

$x = \frac{15(2.12)}{0.75}$

$x = 3.63$

$\frac{63}{100} = \frac{38}{60}$