

## (52) EAST RIVER POINT

U.T.M.G. - N-493643  
E-40781

N.T.S. - 21A/9A (1:50,000)

The fluorite is found in situ in an old quarry approximately 1,200 feet north of Highway 329 at East River Point (Fig. 156 and 157).

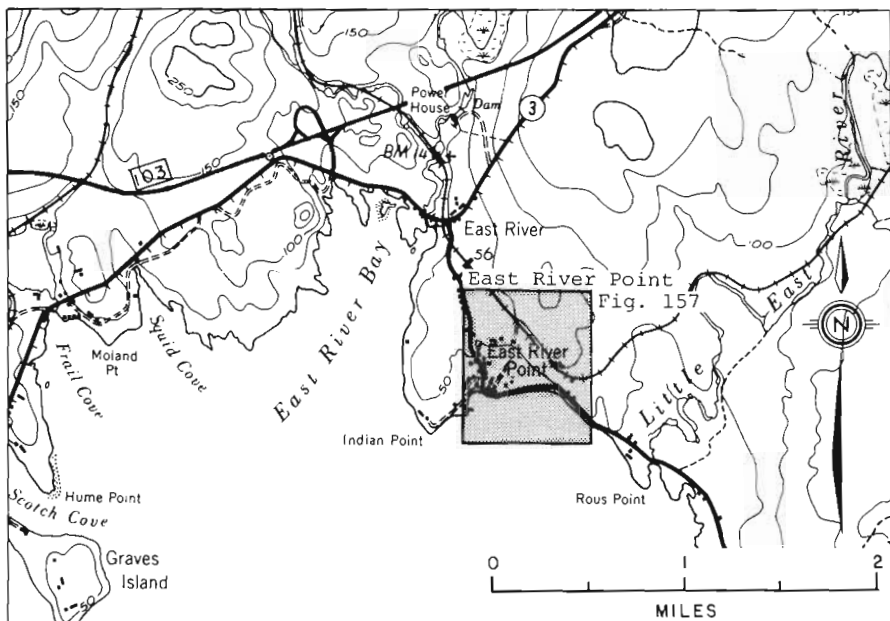


Figure 156

No exploratory work for fluorite has been undertaken in this area. The mineral was first noted by D. A. Murray in 1966 during the course of investigations into the quantity and quality of the limestone.

The host rock is a massive, light to dark grey, fine-grained limestone. A band of dolomite, varying in thickness from five to 17 feet occurs at the base of the limestone horizon. These rocks are believed to be part of

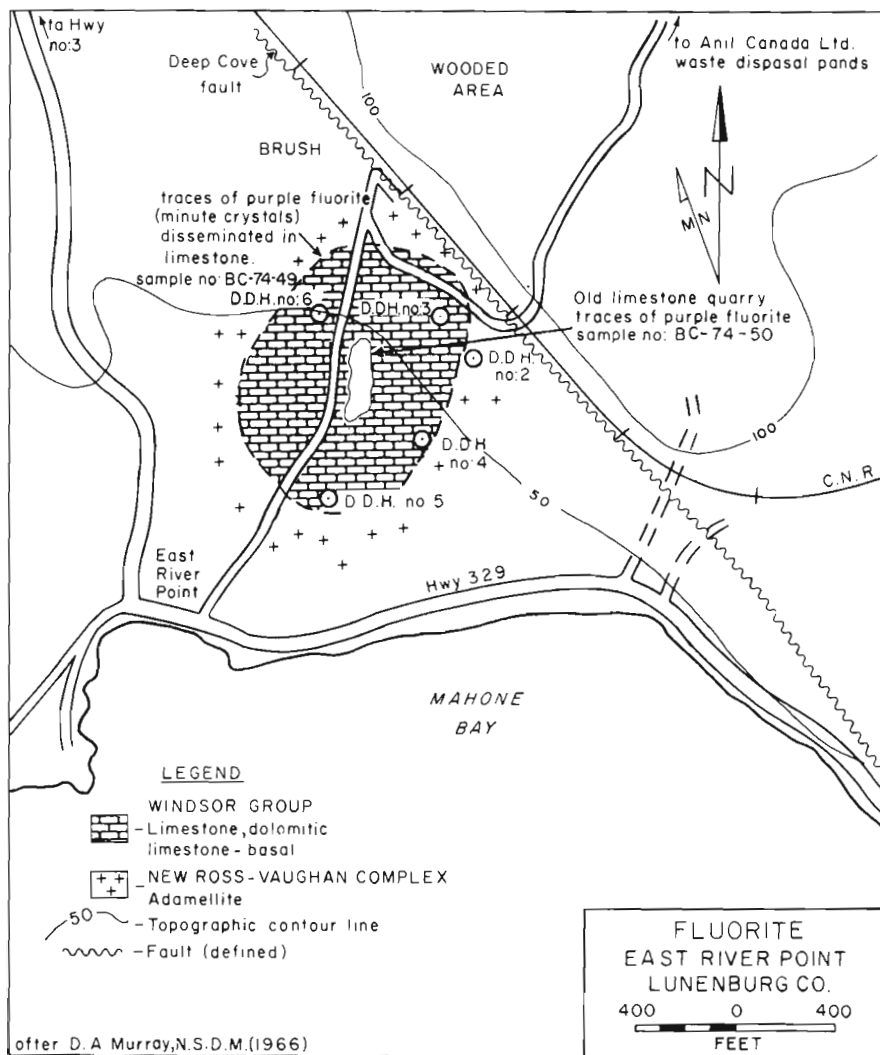


Figure 157

the B-subzone of the Windsor Group which rest unconformably on granitic rocks of the New Ross-Vaughan Complex (Devonian age).

The fluorite is deep purple in colour, and is fine to medium grained in texture. It is found only as sparse disseminations throughout the limestone. The only other minerals observed in this quarry are small quantities of white calcite filling hairline fractures. Pyrite is reported to occur in very small quantities on joint planes (Murray, personal communication, 1974).

Small splashes of cream-pink, coarsely crystalline (with a bladed habit) barite are reported to line small, irregular fractures in limestone cropping out in the immediate vicinity of the East River Point Wharf (Giles, personal communication, 1976). This occurrence was not examined by the writer, nor was a sample submitted for chemical analysis.

Two grab samples collected from zones containing the fluorite were submitted for chemical analysis. The locations sampled are shown on Figure 157, and the results of the chemical analyses are found below and in appendix III.

Rock Type	Sample No.	Per cent			ppm			
		BaSO <sub>4</sub>	SrSO <sub>4</sub>	F	Cu	Pb	Zn	
Limestone, minor fluorite	BC-74-49	.17	.19	.63	16	64	22	
Limestone, minor fluorite	BC-74-50	.10	.20	.57	48	65	40	

The fluorite here is not believed to be of any economic significance as it is common to find such sparse disseminations in the Windsor Group carbonates.

### Bibliography

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- 1954: The stratigraphy of the Windsor Group in the Antigonish quadrangles and the Mahone Bay-St. Margaret Bay area, N. S.; N. S. Dept. Mines, Mem. 3, p. 27-31.

## (53) FORTIES SETTLEMENT (REEVES TIN PROSPECT)

U.T.M.G. - N-495387

E-37960

N.T.S. - 21A/10D (1:50,000)

This fluorite showing is located on the "Reeves" farm, 0.3 mile south of the highway at Forties Settlement. The prospect can be reached by walking 340 feet south from the barn and then 400 feet along a wood trail (bearing 245° azimuth). The prospect will appear as an open area in the bush and shows a water filled pit with a number of small piles of rubble alongside (Fig. 158).

No reported exploratory work for fluorite has been conducted here.

The host rock is a light coloured quartz monzonite similar to that hosting the Lower Canoe Lake Showing. This rock forms part of the South Mountain Batholith, which is a differentiated igneous intrusion emplaced during lower - Middle Devonian time.

The fluorite was not observed in situ, only as insignificant quantities lining fracture or joint planes on some of the rubble samples. The fluorite veins noted were less than 1/8 inch thick. A few low profile outcrops of the host rock are exposed in the immediate vicinity of the prospect. The only other rock type encountered is a pegmatite, which was found to contain well developed quartz crystals up to three inches in width. No minerals were visible in the pegmatite though it is reported to contain cassiterite and wolframite.

The fluorite is purple in colour and medium crystalline in texture. No other minerals were noted associated with the fluorite.

The following description of the prospect is given by Douglas and Campbell (1941, p. 111):

"The King pit is a twenty foot pit sunk on a pegmatite located on the farm of Robert Reeves, Lake Ramsay. The pegmatite is 10 feet wide and strikes 50° magnetic and dips northwest at an angle varying from 60 to 75 degrees. The pegmatite consists of

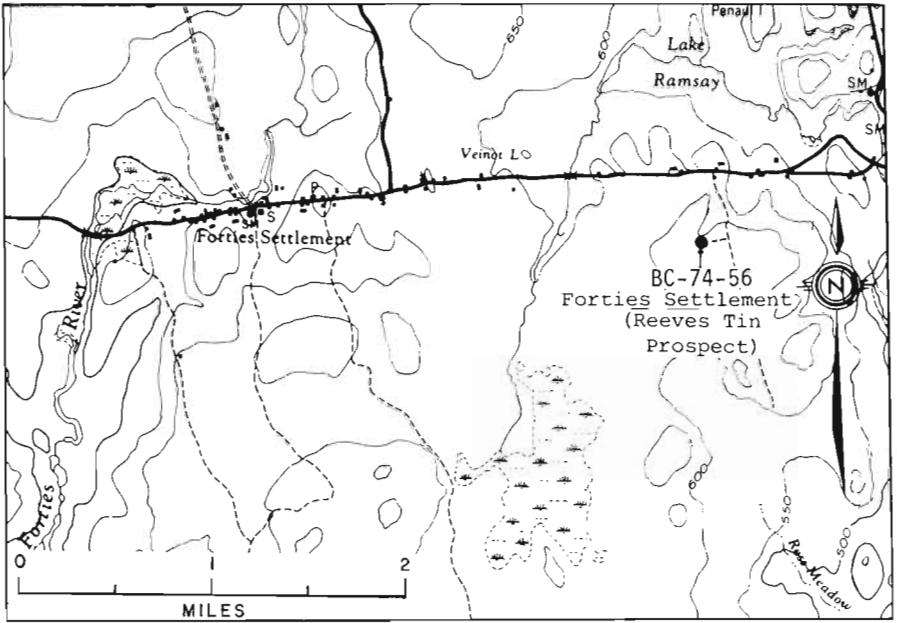


Figure 158

large quartz crystals (some of which are over three feet in length) and feldspar, with white mica, fluorite, sodalite, and other minerals characteristic of these pegmatites in the muscovite granite. Cassiterite together with silver and tungsten is said to occur in the central part of the pegmatite."

A grab sample was collected from the mineralized boulder and chemically analysed. The sample location is shown in Figure 158, and the analytical results are found below and in appendix III.

Rock Type	Sample No.	Per cent				ppm		
		BaSO <sub>4</sub>	SrSO <sub>4</sub>	F	Cu	Pb	Zn	
Quartz monzonite, minor fluorite	BC-74-56	.08	.31	2.81	26	13	171	

The fluorite at this showing is of too minor a nature to be considered a potential prospect at the present time.

#### Bibliography

- Douglas, G. V., and Campbell, C. O.  
 1941: New Ross area; N. S. Dept. Mines, Annual Report, p. 101-112.

## (54) LOWER CANOE LAKE

U.T.M.G.- N-496210  
E-39508

N.T.S. - 21A/16B (1:50,000)

The fluorite showings occur sporadically in a road cut on the north side of the road, beginning at the stream that connects Lower Canoe Lake with Upper Canoe Lake, and continuing for approximately 1,000 feet towards the west (Fig. 120).

No reported exploratory work for fluorite has been undertaken here.

The host rock is a light coloured, coarse to very coarse grained quartz monzonite which is part of the New Ross-Vaughan Complex of the South Mountain Batholith. The weathered surface of this outcrop displays a pale white colour, and the joint planes are oriented in such a manner as to give the outcrop a blocky appearance.

The fluorite is structurally controlled, occurring in very minor quantities lining joint planes and fractures and never exceeding 1/8 inch in thickness. No significant alteration of the wall rock was observed.

The fluorite here is deep purple to pale purple in colour and has a medium to coarsely crystalline texture. No other minerals are associated with the fluorite.

Grab samples collected from the mineralized zone and the host rock adjacent to it were chemically analysed. The sample locations are indicated on Figure 120, and the results of the chemical analyses are listed below and in appendix III.

Rock Type	Sample No.	Per cent				ppm	
		BaSO <sub>4</sub>	SrSO <sub>4</sub>	F	Cu	Pb	Zn
Quartz monzonite, minor fluorite	BC-74-31	.10	.03	1.56	10	20	10

Quartz monzonite, minor fluorite	BC-74-32	.06	.08	.42	10	20	30
Quartz monzonite	A16-5003	.43	.01	.07	60	20	60

The fluorite probably represents a part of the hydrothermal phase of the batholith's emplacement history.

The fluorite occurs here in insufficient quantities to be of commercial interest at the present time.



## (55) NEW RUSSEL (WALKER PROSPECT)

U.T.M.G. - N-495848

E-38803

N.T.S. - 21A/16B (1:50,000)

The prospect is situated on the south side of the gravel road, four miles northeast of Highway 12 at New Ross (Fig. 159, 160, and 161).

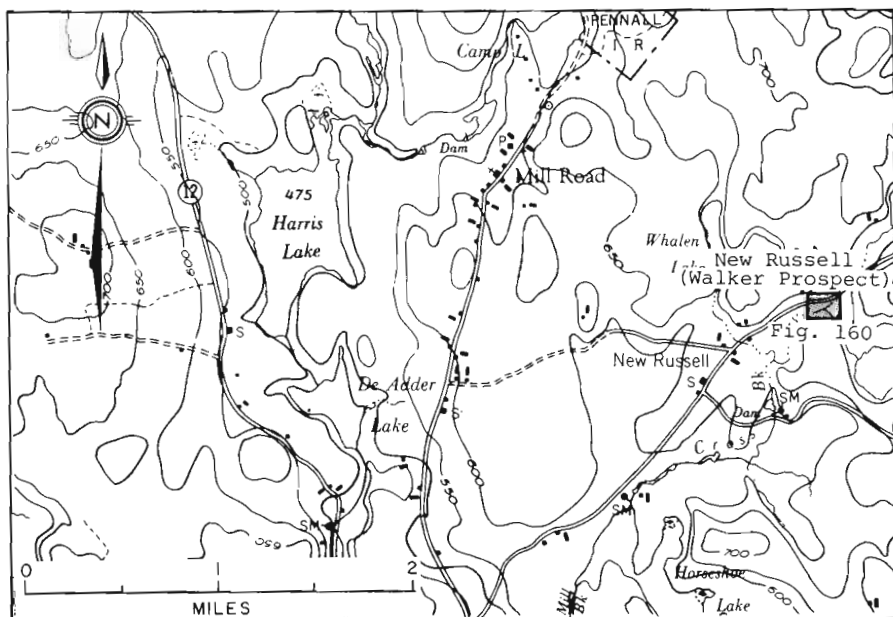


Figure 159

No exploratory work for fluorite has been undertaken here though investigations into the molybdenite showings date back to before the turn of the century, having first been noted by Henry How (1869, p. 61). The most serious attempt to bring this prospect to a production stage was in 1917 when a shaft was sunk and some bulk sampling undertaken. The following excerpt is taken from a report by Douglas and Campbell (1941, p. 109):

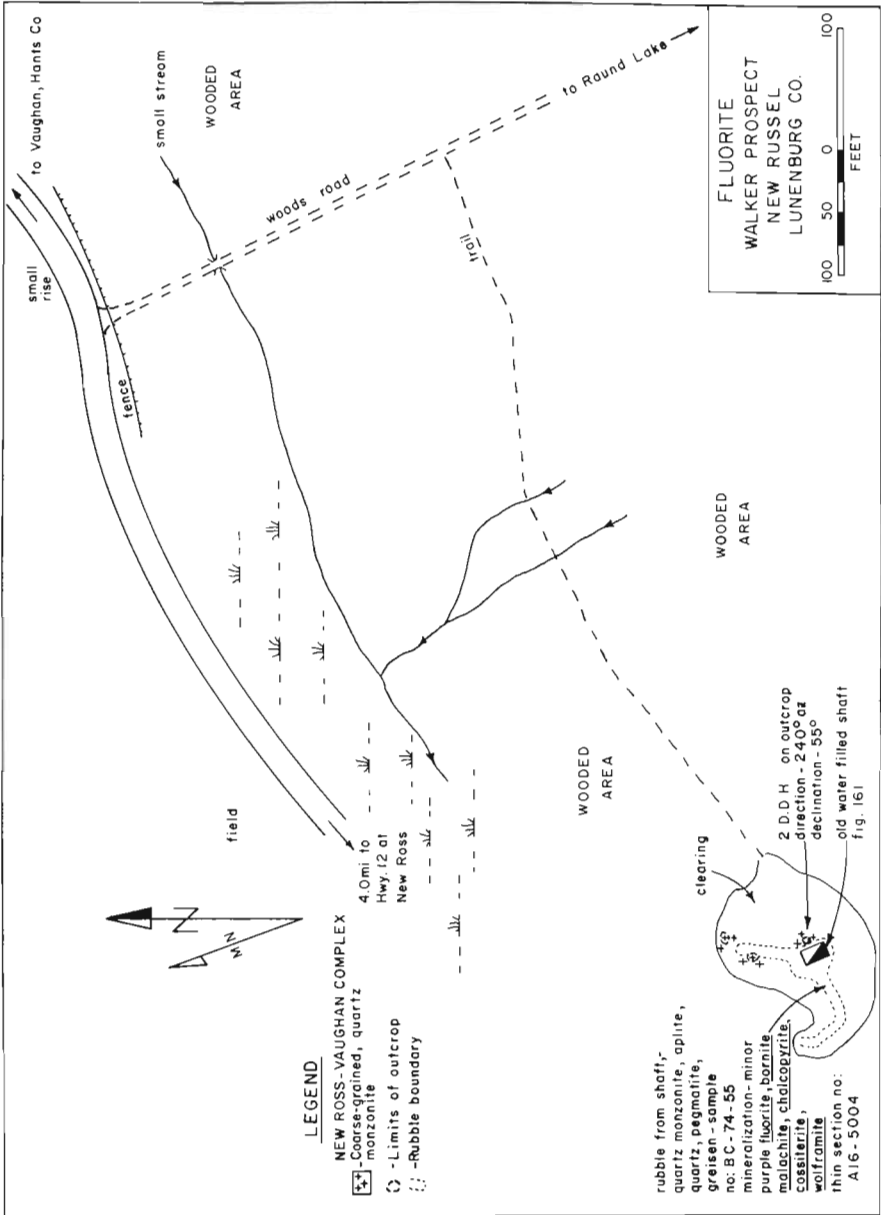


Figure 160



Figure 161 - Walker Prospect, New Russel. Remains of old shaft and dumps.

"The shaft is vertical, two compartment, and strikes  $183^{\circ}$  magnetic which is quite probably the strike of the pegmatite on which the shaft is sunk.

"Regarding the shaft Eardley-Wilmot says; 'This shaft was sunk in 1917 by the Nova Scotia Molybdenum Company .... At the time of closing operations in March, 1918, the shaft had reached a depth of 52 feet, at which point drifting was extended for 13 feet east and west. Ore was encountered in the east drift. About 36 feet from the top of the shaft ore was again struck, dipping in a northwest direction, and a 38 foot crosscut driven in a northerly direction near the top of the shaft encountered this ore-body. According to Mr. Burchill, the thickness of the lower ore-body is 9 feet, and of the upper one 6 feet ....'."

A surface plan of the prospect done by Cameron, (1949, p. 122) also shows the locations and directions of

17 diamond-drill holes, but core logs for these holes could not be located.

This prospect is situated in the New Ross - Vaughan Complex of granites of the South Mountain Batholith (Devonian Age).

The only outcrop occurring here is found in the immediate vicinity of the shaft and is composed of a coarse-grained quartz monzonite. The aplite specimens obtained from the dump are petrologically similar to that found at the Leminster fluorite showing and at the Leminster-Vaughan road fluorite showing.

Fluorite was not observed in situ, only in hand specimens taken from the dumps surrounding the shaft. Rock types found in the dumps include aplite, pegmatite, quartz monzonite, vein quartz and greisen. Minerals are found to be most abundant in the greisen, except for the molybdenite which occurs most commonly in the pegmatite. The fluorite was only found in very small quantities, as isolated blebs disseminated in the greisen and as small veinlets which never attained a thickness greater than 1/16 inch.

The fluorite is deep to pale purple in colour, and is fine to medium crystalline in texture. Other minerals noted to be associated with the fluorite include chalcopyrite, bornite, malachite, pyrrhotite, wolframite, cassiterite, molybdenite and pyrite.

A grab sample taken from the dumps was chemically analysed. The sample location is shown on Figure 160, and the analytical results are found below and in appendix III.

Rock Type	Sample No.	Per cent		F	Cu	ppm	
		BaSO <sub>4</sub>	SrSO <sub>4</sub>			Pb	Zn
Greisen, chalcopyrite, minor fluorite	BC-74-55	.25	.04	1.06	20428	32	207

The minerals noted at the showing are common accessories to rock types such as greisen and pegmatite, which in this area represent late stage igneous intrusive activity of the South Mountain batholith.

The presence of these mineralized rocks indicate that this portion of the batholith may be a focal point of the hydrothermal phase of the South Mountain Batholith. Thus, it is believed that the Walker Prospect and the surrounding area is worth more exploratory work to determine whether additional mineralized greisen and pegmatite exist.

### Bibliography

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1974: Petrology of the South Mountain batholith, western Nova Scotia; M.Sc. thesis, Dalhousie University, Halifax, N. S.