



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

# MINFILE

GEOLOGICAL SURVEY BRANCH

U16  
000758

## MINFILE

### X IDENTIFICATION

MINFILE NO. 082ENW005 073 NATIONAL MINERAL INVENTORY NO. \_\_\_\_\_

NAMES  
PRAIRIE FLATS  
Dale Meadows (✓)

CLAIMS  
OWNER  
OPERATOR  
STATUS  SHOWing  PROSpect  DEVELOPED PROSpect  PRODUCer  UPAsT PRODUCer

LOCATION  
NTS 082E12E MINING DIVISION 050Y  
LATITUDE 49° 35' 30" LONGITUDE 119° 42' 20" ELEVATION 500 metres  
UTM ZONE \_\_\_\_\_ NORTHING \_\_\_\_\_ EASTING \_\_\_\_\_  
LOCATION CERTAINTY  WITHIN 500m  WITHIN 1km  WITHIN 5km

✓ COMMENT ON IDENTITY Prairie Flats deposit, figure 1 (CJES 1984); within Summerland town limits

### X MINERAL OCCURRENCE

COMMODITIES UR listed according to economic importance  
RESERVES TYPE \_\_\_\_\_ TONNES \_\_\_\_\_ GRADES \_\_\_\_\_  
OR BEST ASSAY DATA \_\_\_\_\_  
COMMENTS \_\_\_\_\_

PRODUCTION YEARS \_\_\_\_\_ TONNES MINED \_\_\_\_\_  
METALS RECOVERED \_\_\_\_\_

MINERALOGY ECONOMIC MINERALS UNKN \*\*\*\*\*  
COMMENTS \_\_\_\_\_  
GANGUE MINERALS \_\_\_\_\_  
COMMENTS \_\_\_\_\_  
ALTERATION MINERALS \_\_\_\_\_  
COMMENTS \_\_\_\_\_

AGE OF MINERALIZATION 100 ISOTOPIC AGE \_\_\_\_\_  
DATING METHOD \_\_\_\_\_ MATERIAL DATED \_\_\_\_\_

DEPOSIT TYPE	<input type="checkbox"/> 01 VEIN	<input type="checkbox"/> 09 STRATIFORM	GENETIC TYPE	<input type="checkbox"/> 1 REPLACEMENT	<input type="checkbox"/> 6 EPIGENETIC
	<input type="checkbox"/> 02 STOCKWORK	<input type="checkbox"/> 10 CONCORDANT		<input type="checkbox"/> 2 MAGMATIC	<input type="checkbox"/> 7 HYDROTHERMAL
	<input type="checkbox"/> 03 PORPHYRY	<input type="checkbox"/> 11 PLACER		<input type="checkbox"/> 3 VOLCANOGENIC	<input type="checkbox"/> 8 RESIDUAL
	<input type="checkbox"/> 04 PIPE	<input type="checkbox"/> 12 PRECIPITATE		<input checked="" type="checkbox"/> 4 SEDIMENTARY	<input type="checkbox"/> 9 UNKNOWN (UNCLASSIFIED)
	<input type="checkbox"/> 05 IGNEOUS	<input type="checkbox"/> 13 DISSEMINATED		<input checked="" type="checkbox"/> 5 SYNGENETIC	
	<input type="checkbox"/> 06 SKARN	<input type="checkbox"/> 14 MASSIVE			
	<input type="checkbox"/> 07 PEGMATITE	<input type="checkbox"/> 15 UNKNOWN <u>05</u>			
	<input type="checkbox"/> 08 STRATABOUND	<input checked="" type="checkbox"/> UNCLASSIFIED <u>unconsolid.</u>			

SHAPE OF DEPOSIT  1 REGULAR  2 TABULAR  3 CYLINDRICAL  4 BLADED  5 IRREGULAR  
MODIFIER  1 FOLDED  2 FAULTED  3 FRACTURED  4 SHEARED  5 OTHER \_\_\_\_\_  
DIMENSION \_\_\_\_\_  
ATTITUDE \_\_\_\_\_  1 STRIKE/DIP  2 TREND/PLUNGE  
COMMENT ON STRUCTURE \_\_\_\_\_

**X** HOST ROCKS

A. DOMINANT ROCK TYPE  SEDIMENTARY  VOLCANIC  METAPLUTONIC  METAMORPHIC  
 PLUTONIC  METASEDIMENTARY  METAVOLCANIC

B. SUPERGROUP \_\_\_\_\_ GROUP \_\_\_\_\_  
FORMATION 412 Glacial/Fluvial gravels MEMBER \_\_\_\_\_  
AGE 100 ISOTOPIC AGE \_\_\_\_\_  
DATING METHOD \_\_\_\_\_ MATERIAL DATED \_\_\_\_\_  
ROCK TYPE SOIL GCSSM \_\_\_\_\_  
LITHOLOGY GLLC-SOIL \_\_\_\_\_

C. IGNEOUS/METAMORPHIC/OTHER Okanagan Batholith 573  
AGE 224 ISOTOPIC AGE \_\_\_\_\_  
DATING METHOD \_\_\_\_\_ MATERIAL DATED \_\_\_\_\_  
ROCK TYPE GRNT \_\_\_\_\_  
LITHOLOGY \_\_\_\_\_

COMMENT ON HOST ROCK deposit occurs in organic-rich soils

GEOLOGICAL SETTING

**X** TECTONIC BELT  INSular  OMineca  TERRANE CPC  
 Coast Crystalline  EAstern  
 InterMontane

PHYSIOGRAPHIC AREA THPT

METAMORPHISM: TYPE  CONTACT RELATIONSHIP  PRE-MINERALIZATION  
 REGIONAL  SYN-MINERALIZATION  
 POST-MINERALIZATION  
GRADE  Hornfels  BlueSchist  AMphibolite  EClogite  SubBituminous  
 ZeoLite  GreenSchist  GranuLite  LIgnite  Low Vol. bituminous  
 Med. Vol. bituminous  Hi Vol. bituminous  SemiAnthracite  ANthracite

COMMENT ON GEOLOGICAL SETTING \_\_\_\_\_

**X** CAPSULE GEOLOGY The area is underlain by highly fractured and altered granitic rocks of the Middle Jurassic Okanagan Batholith. These are unconformably overlain by a succession of Eocene clastic sediments, ash flows, and alkaline lavas of the White Lake and Maroon Formations.

Prairie Flats is a <sup>postglacial</sup> fluvial type of deposit where uranium occurs in a collector basin composed of organic-rich valley fill deposited by Prairie Creek. Upwelling of groundwater into organic-rich soils, topographic control, and concentration of uranium by evaporitic discharge and ion adsorption-reduction are the principal depositional controls.

Ore reserves to a depth of approximately 2 metres are about 210 tonnes of U<sub>3</sub>O<sub>8</sub> and it is estimated that since the glacial retreat uranium has accumulated at a rate of about 23 kilograms a year (CJES).

**X** BIBLIOGRAPHY (place 'best' or most recent source first)

- \* CJES Vol 21, 1984 pp 559-566
- EMPR FIELDWORK 1979, pp 11-15
- CIM BULL 1978, Vol 71 No 783 pp 107-110
- Bates, D.V., J.W. Murray, and V. Randssepp (1980): Royal Commission of Inquiry, Health and Environmental Protection, Uranium Mining; Commissioners' Report October 30, 1980, Volume 1, pp 35-36, 183-184

CODED BY L DJ initials FIELD CHECKED: YES  NO  DATE CODED 1987 yr 03 mo 20 day  
REVISED BY \_\_\_\_\_ initials FIELD CHECKED: YES  NO  DATE CODED \_\_\_\_\_ yr \_\_\_\_\_ mo \_\_\_\_\_ day



MINFILE RESERVES

MINFILE NUMBER <sup>NW</sup> 082 E 24 073

NAME PRAIRIE FLATS

ORE ZONE NAME

CATEGORY: MR  MG IN IF UN BA

If BA, sample type =

CONFID. FACTOR	YEAR	QUANTITY (TONNES)	COMMODITY/GRADE	(PRECIOUS METALS IN GRAMS, ALL OTHERS PER CENT)
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A 1 ② 3	1979	210 10500	UR <sub>1</sub>	0.02
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COMMENTS

~~Uranium oxide.~~  
 superficial deposit forming at a rate of 23 kilograms a year.  
 The deposit averages <sup>about</sup> 0.02% uranium and contains 210 tonnes of uranium oxide

REFERENCE

CJES Vol 21, 1984 p 561

B 1 2 3				
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COMMENTS

REFERENCE

CODED BY LDJ (initials)

DATE CODED 1987 yr 03 mo 20 day

CONFIDENCE FACTOR:  
 1 Probably reliable  
 2 Possibly reliable  
 3 Unknown

SAMPLE TYPES:  
 GRAB Grab  
 CHIP Chip  
 CHNL Channel  
 BULK Bulk Sample  
 ROCK Rock Geochemistry  
 DIAD Drill

NOTE: For any given reserve category only two figures for any given year per ore zone may exist.