



52C15SE0009 19 LITTLE TURTLE LAKE

010

DIAMOND DRILLING

AREA: LITTLE TURTLE LAKE

REPORT NO: 19

WORK PERFORMED FOR: Minnova Inc.

RECORDED HOLDER: Same as Above [xx]  
: Other [ ]

<u>Claim No.</u>	<u>Hole No.</u>	<u>Footage</u>	<u>Date</u>	<u>Note</u>
670226	HS-09	282m	June/88	(1)

NOTES: (1) W8901.111, date filed May/89

HOLE NUMBER: HS-09

HINOVA INC.  
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SWELL BAY  
PROJECT NUMBER: PN355  
CLAIM NUMBER: 670226 Little Turtle Lake  
LOCATION: P. A. COPPER ZONE

PLOTTING COORDS GRID: METRIC GRID  
NORTH: 255.00N  
EAST: 24556.00E  
ELEV: 0.01

ALTERNATE COORDS GRID: IMP. GRID  
NORTH: 23+ 0S  
EAST: 30+ 0W  
ELEV: 0.00

COLLAR DIP: -65° 0' 0"  
LENGTH OF THE HOLE: 282.00m  
START DEPTH: 0.00m  
FINAL DEPTH: 282.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 170° 0' 0"

DATE STARTED: June 15, 1988  
DATE COMPLETED: June 20, 1988  
DATE LOGGED: June 17, 1988

COLLAR SURVEY: NO  
MULTISHOT SURVEY: NO  
ROD LOG: NO

PULSE EM SURVEY: NO  
PLUGGED: NO  
HOLE SIZE: BQ

CONTRACTOR: ST. LAMBERT DRILLING LTD.  
CASING: 3.0m  
CORE STORAGE: ROBINSON'S LANDING

PURPOSE: TEST 8 CHANNEL DEEPEM ANOMALY 500m EAST OF P.A. CUZONE AT VERTICAL DEPTH OF 200m.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
25.00	-	-65° 0'	ACID	OK		.	.	.	.	.	
78.00	-	-61° 0'	ACID	OK		.	.	.	.	.	
150.00	-	-59° 0'	ACID	OK		.	.	.	.	.	
212.00	-	-54° 0'	ACID	OK		.	.	.	.	.	
260.00	-	-51° 0'	ACID	OK		.	.	.	.	.	
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ONTARIO GEOLOGICAL SURVEY  
ASSESSMENT FILES  
OFFICE  
APR 25 1989  
RECEIVED

HOLE NUMBER: HS-09

DRILL HOLE RECORD

LOGGED BY: H. DUROSE

PAGE: 1

*H. Durose*  
FELLOW  
APR 18 1989

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
3.00 TO 66.00	SHEARED GABBRO LOCALLY Q.E.D. «GB»	Dark green, white, schistose, fine grained, salt and pepper textured gabbro. 45% mafic minerals (chlorite) 30% plagioclase, 10% magnetite. Locally up to 10% blue mm scale Qtz phenos. X-cutting mm to cm wide carbonate veins form less than 3%. Qtz veins up to 20cm wide containing chlorite, minor pyrite, and stringery black tourmaline (?) form 2%. Schistosity ..... 39  66.5-66.0 Intensely sheared gabbro appears laminated. Sharp contact @ ..... 46		Minor rusty brown ankerite forms up to 10% from 66m to 77m. Rock appears more silicified from 66m to 75m.	Trace Py, Po.	Sheared gabbro contains blue Qtz phenos from 46m on.  30.0-33.0 1668 Litho 33.0-36.0 1669 Litho 66.5-66.0 1670 Litho 72.0-75.0 1671 Litho
66.00 TO 111.00	SCHISTOSE FRAGMENTAL Q.E.D. RHYOLITE «FRAG RHYO»	Grey, white, fine-coarse grained fragmental Q.E.D. Rhyolite, locally amygdaloidal. Frags are mm to cm scale, subrounded, and consist of Qtz, white feldspar. Frags form up to 80% of rock mm scale blue Qtz phenos form up to 10% of rock mm scale white Qtz filled amygdules form up to 10% of rock. X-cutting mm to cm scale milky Qtz veins form 5% of rock. The rock is strongly schistose. Frags show "wing" tipped structures. Schistosity @ ..... 46		The rock is generally fresh but locally, carbonate (rusty orange ankerite) forms up to 30% over 1.5m.  95.0-96.8 Ankerite.	Zones of pyrite forms up to 5% over 0.05m. Generally pyrite is associated with milky white Qtz bands. Generally, Py occurs in trace amounts.  93.9-93.95 5% py, exhalite.	1672 95.0-96.8 Litho.
111.00 TO 113.80	MAFIC DYKE «MA DYKE»	Dark green, very fine grained, schistose mafic dyke. Contact with frag rhy is sharp, and occurs @ Schistosity of the dyke occurs @ ..... 42 X-cutting cm scale milky white Qtz veins form 10% of rock. Stringy black tourmaline occurs within milky Qtz veins. Sharp lower contact @ ..... 36	31 42			This may be a shear zone. 1673 111.0-113.8 Litho.
113.80 TO 129.30	SCHISTOSE FRAGMENTAL Q.E. RHYOLITE «FRAG RHYO»	Similar to interval 3 to 66m. Schistosity @ ..... 44  126.15-126.35 Shear zone, schistosity @ ..... 38 Sharp lower contact @ ..... 39	44 38 39			1674 120-122.1 Litho.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS																									
129.30 TO 133.90	GABBRO DYKE «GB DY»	Green, white, brownish red, fine grained, equigranular salt and pepper textured gabbro dyke. The dyke consists of 60% chlorite, 40% white feldspar. X-cutting milky qtz veins cm's wide contain white feldspar, black tourmaline, reddish to orange carbonate. Pyrite is also present. Schistosity @ .....	40		Trace to 1% Py in milky qtz veins.	1675 129.5-133.9 Litho.																									
133.90 TO 137.00	FRAGMENTAL RHYOLITE «FRAG RHYO»	Green, white, fine to medium grained. White cm scale subangular fragments form up to 40%. Sharp lower contact @ .....	49	Moderate to strong chlorite-magnetite. Magnetite occurs as mm scale subhedral to euhedral grains forming up to 10%.																											
137.00 TO 139.70	Q.F.P. DYKE «Q.F.P. DYKE»	Pink, fine to medium grained, qtz-feldspar dyke. Clear mm scale qtz phenos form 40% of rock. Remainder of rock consists of pinkish feldspar matrix. Schistosity @ .....	48 48			1676 137.0-139.7 Litho.																									
139.70 TO 176.00	SCHISTOSE FRAGMENTAL Q.E. RHYOLITE «FRAG RHYO»	Similar to interval 66.0-111.0 except contains up to 10% subhedral to euhedral magnetite crystals of mm size.  153.6-154.8 Magnetite - chert rich zone - characterized by stringery zones of mm scale black magnetite forming between subangular silicified rhyolite frags. Magnetite forms about 10%.  169.9-176.0 Sulphide - silica rich zone characterized by a strongly schistose/laminated zone (mm scale). 20% white siliceous bands alternate with dark green mm to cm wide chlorite bands which form up to 60% of the rock. Pyrite - sph bands occur between chlorite/silica bands and forms 3% of rock over all. Blue qtz phenos (mm scale) form up to 3%. Mm scale qtz filled amygdules form 2%. Schistosity @ .....	49       50	Silica - magnetite.   Chlorite - silica strong. {169.9-176.0} «chl + silica»	144.0-147.0 1114ppm Zn   Overall 3% Py, sph laminations   Locally up to Py - Sph 10% over 10cm.  169.9-172.1 1995 ppm Zn	<table border="1"> <tr> <td></td> <td></td> <td>SiO2</td> <td>TiO2</td> <td>Na2O</td> </tr> <tr> <td>1677</td> <td>144.0-147.0</td> <td>47.5</td> <td>1.11</td> <td>1.27</td> </tr> <tr> <td>1678</td> <td>165.0-168.0</td> <td>72.3</td> <td>0.48</td> <td>3.72</td> </tr> </table> <p>This unit may be a very fine grained sediment containing blue qtz xetals.</p> <table border="1"> <tr> <td>1682</td> <td>171.0-174.0</td> <td>SiO2</td> <td>TiO2</td> <td>Na2O</td> </tr> <tr> <td></td> <td></td> <td>68.6</td> <td>0.51</td> <td>0.90</td> </tr> </table>			SiO2	TiO2	Na2O	1677	144.0-147.0	47.5	1.11	1.27	1678	165.0-168.0	72.3	0.48	3.72	1682	171.0-174.0	SiO2	TiO2	Na2O			68.6	0.51	0.90
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
176.00 TO 179.80	GABBRO DYKE «GB»	Green, white, fine grained, equigranular, salt and pepper texture. Moderate schistosity @ ..... Moderately sharp upper contact @ ..... Moderately sharp lower contact @ .....	44 46 43			
179.80 TO 181.00	Q.F.P. DYKE «Q.F.P. DYKE»	Similar to interval 137.0-139.7. Sharp lower contact @ .....	44			
181.00 TO 181.60	GABBRO DYKE «GB»	Similar to interval 176.0-179.8. Sharp lower contact @ .....	45			
181.60 TO 185.70	Q.F.P. DYKE «Q.F.P. DYKE»	Similar to interval 176.0-179.8m. Sharp lower contact @ .....	39			1679 181.6-185.7 Litho.
185.70 TO 192.50	CHERT MAGNETITE Q.E.D. FRAGMENTAL RHYOLITE «FRAG QE'D RHYO»	Green, black, white fine grained, schistose rock containing 15-20% mm to cm scale subangular to subrounded chert fragments. Mm scale rounded blue qtz phenos form 20%. Black mm to cm wide magnetite forms 15% of the rock and alternates with white siliceous bands (10%), or green chlorite (30%). Local mm scale white qtz-carbonate amygdules form 5-10%. Schistosity @ ..... Sharp lower contact @ .....	38 47	Strong silica - chlorite qtz throughout.	2-3% pyrite occurs in thin cm wide bands.	Possibly a good gold zone. Check assays. Not assayed!
192.50 TO 199.10	QUARTZ FELDSPAR PORPHYRY DYKE «Q.F.P. DYKE»	Similar to interval 137.0-139.7. Weak schistosity @ ..... Moderately sharp lower contact @ .....	50 43			
199.10 TO 200.20	CHERT MAGNETITE FRAGMENTAL Q.E. RHYOLITE «FRAG QE'D RHYO»	Grey, some green and black patches. Fine grained fragmental rock containing up to 50% subangular cherty frags (cm to mm scale). Frags contain 15% blue, mm scale, rounded qtz phenos 30% fine grained chlorite and ankerite occur between frags. Very fine grained black threads of magnetite forms up to 5% of the rock.		Silica, magnetite - chlorite strong.	5% Magnetite.	Test for Au.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Schistosity @ ..... Sharp lower contact @ .....	45 50			
200.20 TO 204.00	QUARTZ FELDSPAR PORPHYRY DYKE «Q.F.P. DYKE»	Similar to interval 137.0-139.7. Schistosity @ ..... Sharp lower contact @ .....	50 45			
204.00 TO 236.20	Q.E.D. RHYOLITE LOCALLY FRAGMENTAL «Q.E. RHYO»	Grey, black, white, fine grained, schistose rock containing 30% mm scale rounded blue qtz phenos. Angular to subangular mm to cm scale white frags form up to 3% stringy black magnetite forms up to 5%. Remainder of rock is a fine grained, greyish matrix. Schistosity @ ..... 212.2-213.4 Fragmental Q.E.'d rhyolite containing 85% angular to subangular qtz frags. Schistosity @ ..... Sharp lower contact @ .....	43 43 56	X-cutting mm to cm wide milky Qtz veins form up to 5%.		Fragments decreasing. 1680 213.0-216.0 Litho.
236.20 TO 236.60	SED EXHALITE «TUFF EXH»	Brown, black, green, aphanitic to very fine grained, finely laminated sediment. Micro faulting locally displaces laminations. Laminations defined by alternating bands of Magnetite, Sphalerite ? , chlorite, silica, +/- sulphides subrounded to subangular cherty frags locally present laminations @ ..... Diffuse lower contact @ .....	49 45	Strong Chlorite - Magnetite.	1% py, 5% mgt occur as mm scale laminations.	
236.60 TO 238.50	FRAGMENTAL Q.E. RHYOLITE «Q.E. RHYO»	Grey, orange, green, fine grained, fragmental. Rhyolite, locally q.e.d. 40% frags. Schistosity @ .....	48	Incipient Carbonate (Ankerite).	Trace disseminated sphalerite.	
238.50 TO 242.60	FRAGMENTAL AMYGDAL- OIDAL Q.E. RHYOLITE «AMYG QE'D RHYO»	Grey, white, fine grained, fragmental, amygdaloidal q.e.d. rhyolite. Mm scale amygdules are qtz filled and form up to 10%. Fragments are subangular and generally form 45% of rock. Locally, fragments form up to 90% of rock.		Relatively fresh rock.		

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Fragment sizes are more uniform generally 5mm long, some are up to 4cm long. Mm scale q.e.s. form up to 40%. Schistosity @ .....	52			
242.60 TO 276.30	SPHERULITIC RHYOLITE LOCALLY AMYGDULOIDAL «AMYG SPHER RHYO»	Grey, white, fine grained, schistose "rice-crispy" textured spherulitic rhyolite containing mm scale spherulites. Spherulites form up to 70-80% of rock and float in a greyish-green aphanitic matrix (looks like chlorite and silica). Irregularly shaped milky qtz rich fragments form 1-2% of rock and occur throughout interval. Locally, mm wide qtz-carb veins x-cut interval forming 1-2%. From 264m on, the rock appears more chlorite rich. Strong schistosity @ .....	45	Strong chlorite from 264 on.		Some of the spherules look like altered, stretched feldspars. Maybe this rock is a feldspar x'stals tuff. Not sure though.  1681 246.0-249.0 Litho.
276.30 TO 282.00	GABBRO «GB»  E.O.H.	Green, white, fine grained, salt and pepper textured gabbro. 50% mafic minerals, 50% feldspar.  Moderately Schistose @ .....	49			End of Hole.



Ontario *LITTLE TURTLE LK 26215/2*  
*MINNOVA INC M2081 BLISE LAKE*  
The Min  
Name and Postal Address of Recorded Holder

MINNOVA Inc.,

T-556

SUITE 3970, P. O. BOX 91, COMMERCE COURT WEST, TORONTO, ONTARIO M5L 1C7

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed 4325 DAYS	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.
	Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.	
for Performance of the following work. (Check one only)  <input type="checkbox"/> Manual Work  <input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work.  <input type="checkbox"/> Compressed Air, other Power driven or mechanical equip.  <input type="checkbox"/> Power Stripping  <input checked="" type="checkbox"/> Diamond or other Core drilling BQ  <input type="checkbox"/> Land Survey	K	835126	100	LK	835134	100	K	862220	99			
		127	100		135	100		221	99			
		128	100		136	100		222	99			
		129	100		137	100		223	99			
		835130	100		835138	100		224	99			
		131	100					225	99			
		132	100		846551	100		862226	99			
		835133	100					see attached page				

All the work was performed on Mining Claim(s): K 670226; K 777338; K 830403; K 830404; K 873627 additional claims

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

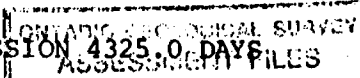
WORK PERFORMED BY: AMITY DRILLING LIMITED, 9002 QUARTZ ROAD, WHITEHORSE, YUKON Y1A 2Z5  
D.D.H. ML-08 MARCH 10th - 21st, 1988

WORK PERFORMED BY: ST. LAMBERT DRILLING CO. LTD., P.O. BOX 473, VALLEYFIELD, QUEBEC J6S 4V7  
D.D.H.'s ML-09, ML-10, HS-09, APRIL 26th - JUNE 20th, 1988

HOLE NUMBER	CLAIM NUMBER(S)	DRILLING DATES	METERS
ML-08	K 777338 201.6 M K 873627 230.0 M	MARCH 10th - 21st, 1988	431.6
ML-09	K 830404 113.0 M K 830403 298.1 M	APRIL 26th - MAY 6th, 1988	411.1
ML-10	K 830404 187.0 M K 830403 71.0 M	MAY 6th - 12th, 1988	258.0
HS-09	K 670226	JUNE 15th - 20th, 1988	282.0
			1,382.7 Meters

TO BE USED FOR THIS SUBMISSION 4325.0 DAYS 1382.7 x 3.28 = 4535.25 DAYS/FEET

RETAINED FOR FUTURE SUBMISSION 210.25 DAYS



670221

Date of Report: APRIL 18th, 1989  
Recorded Holder or Agent (Signature):

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

MICHAEL FLANAGAN c/o MINNOVA Inc. 2606 VICTORIA AVENUE, EAST, THUNDER BAY,

ONTARIO P7C 1E7

Date Certified: APRIL 18th, 1989  
Certified by (Signature):

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	APR 19 1989 AM Nil 9:15 PM 789101112123456	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	Names and addresses of owner or operator together with dates when drilling/mining	
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		



# MINNOVA

DOCUMENT No.  
W8901-111

APRIL 18th, 1988

DIAMOND DRILLING ASSESSMENT - LICENCE T-556

ADDITIONAL CLAIMS

• • • • •  
Minnova Inc.  
Mining Innovation  
2606 Victoria Avenue East  
Thunder Bay, Ontario  
P7C 1E7  
Telephone (807) 623-1511  
Telecopier (807) 623-7019

<u>CLAIM NUMBER</u>	<u>DAYS</u>
K 939128	58
129	58
939130	58
K 939131	58
and	
K 939783	100
784	100
K 939785	100
and	
K 939787	100
788	100
789	100
K 939790	100
791	100
792	100
793	100
794	100
K 939795	100
and	
K 939798	100
939799	100
and	
K 965521	100
522	100
523	100
524	100
525	100
K 965526	100

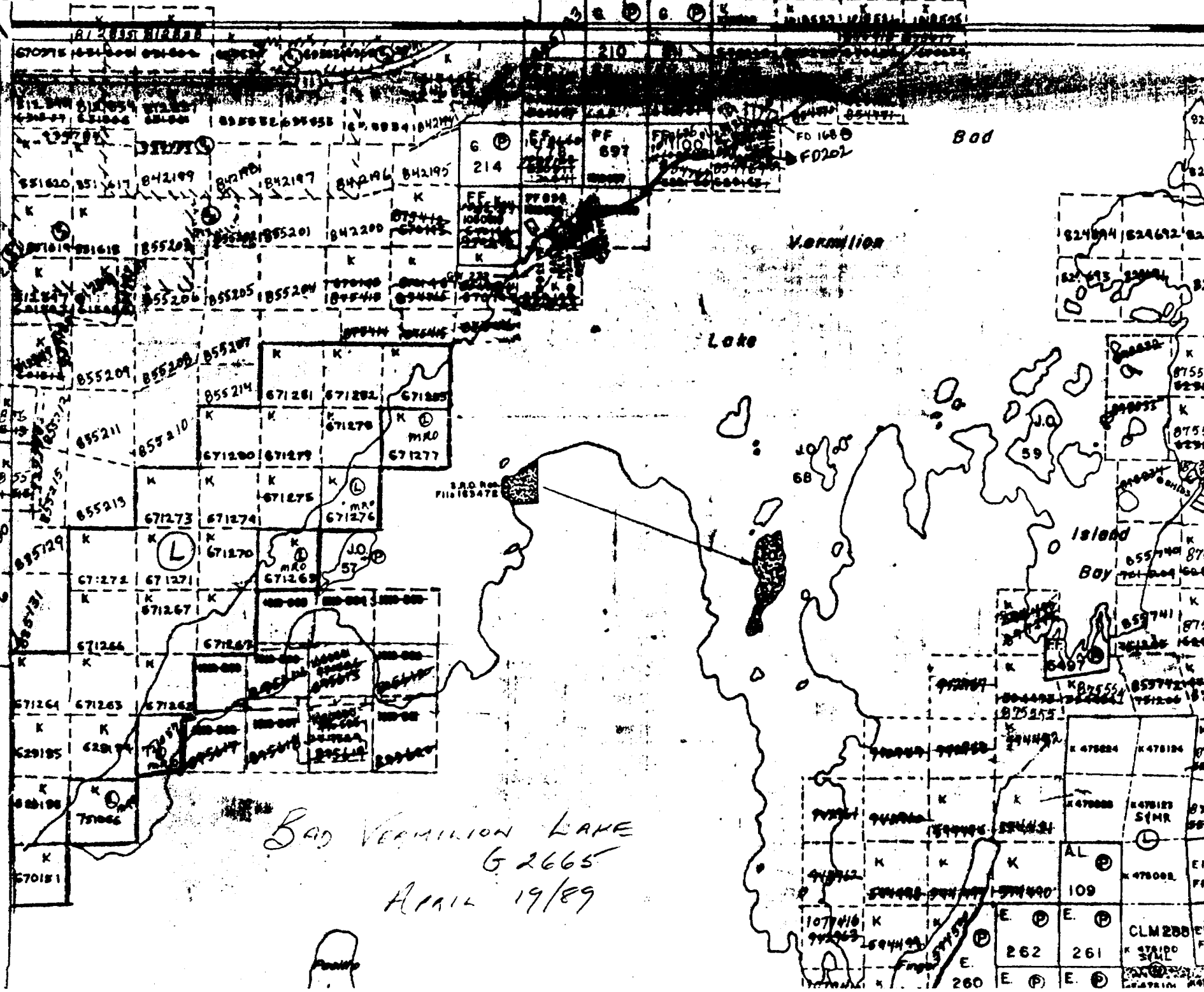
Total 45 Claims

4,325 Days used for this  
submission

KENORA  
MINING INC.  
RECEIVED  
APR 19 1989  
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

92°45'

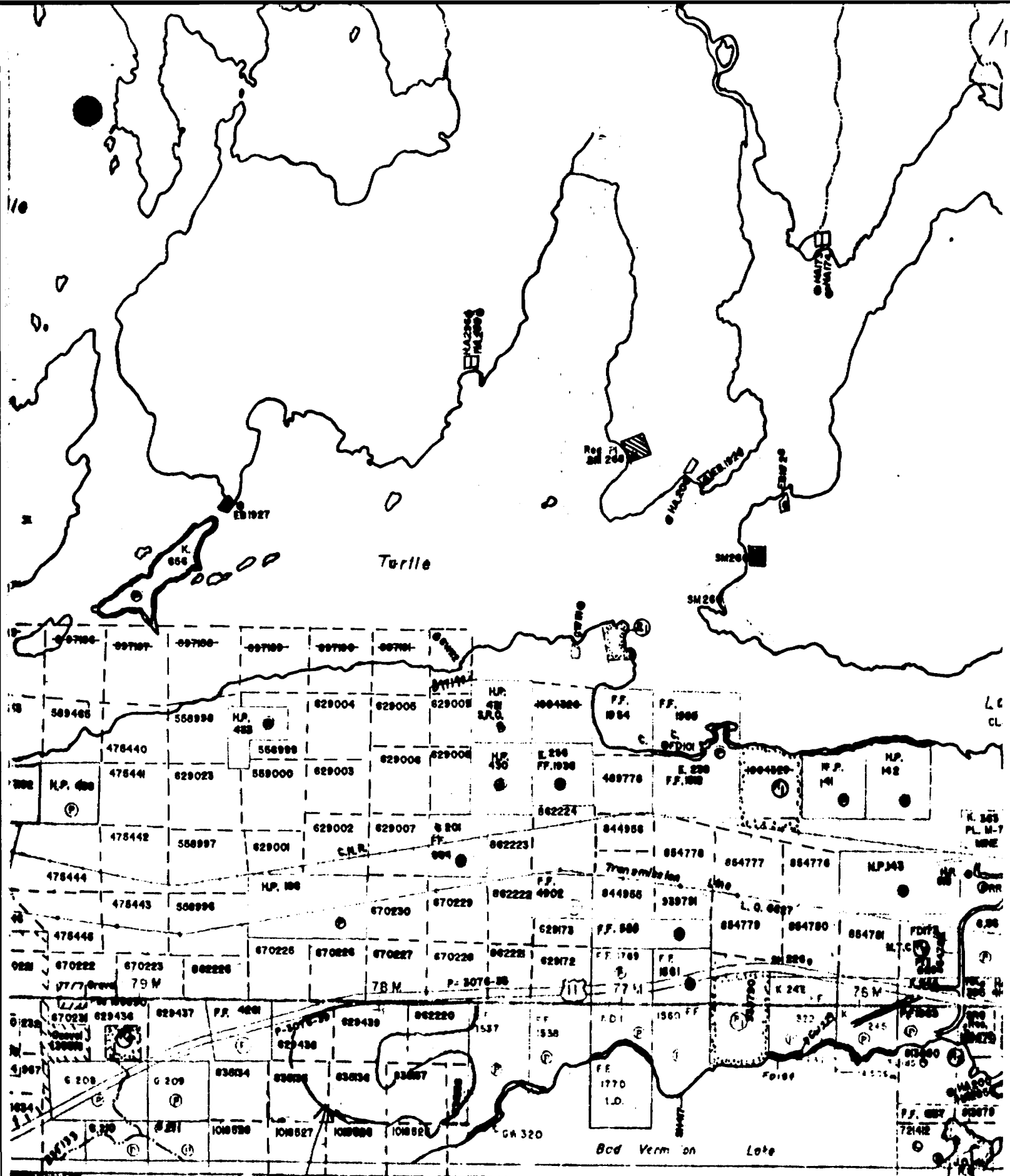
48°45'



*Bad Vermilion Lake  
G 2665  
April 19/89*

2668





38/39  
Cont

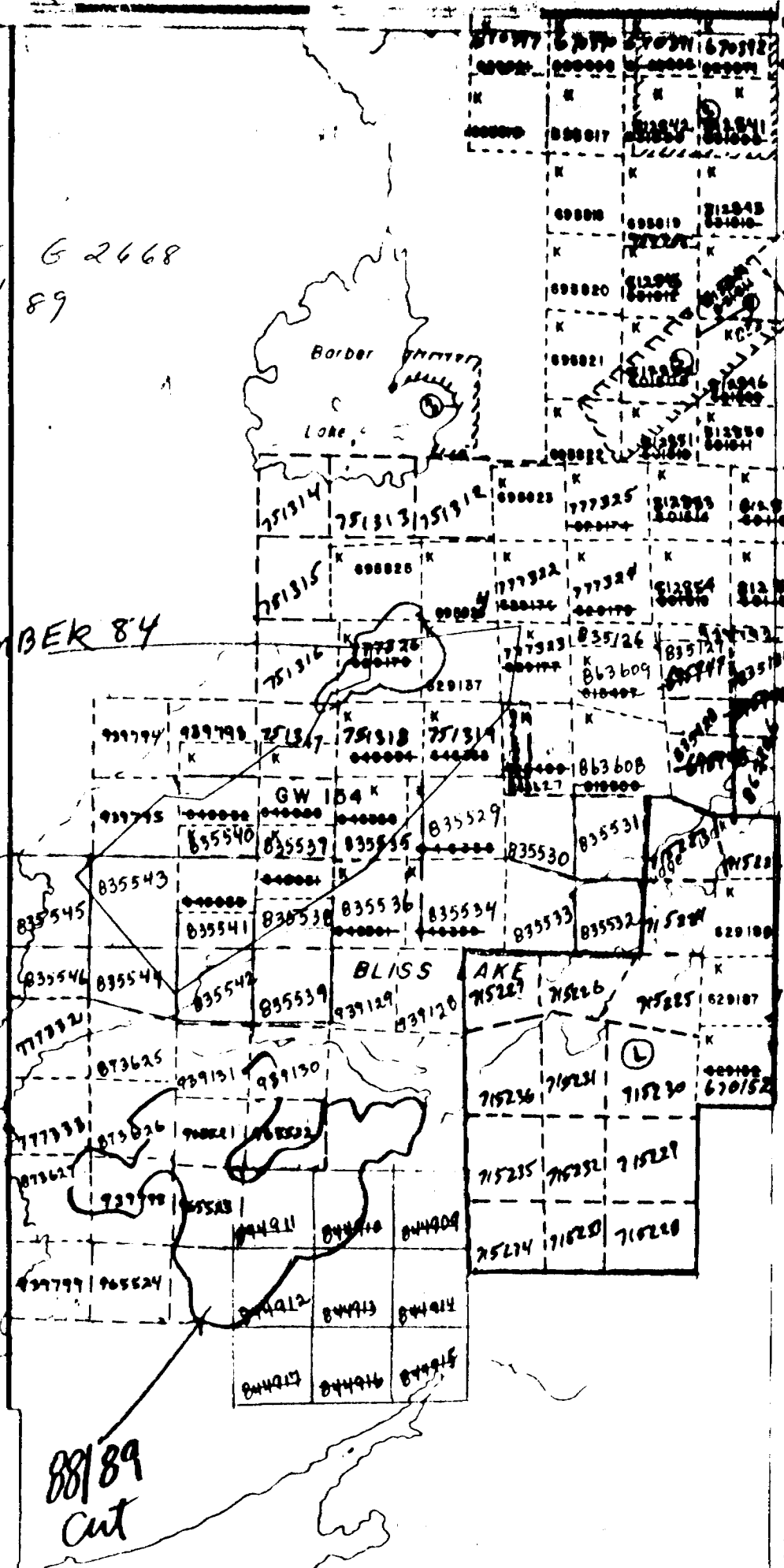
GRASSY LAKE (

Little Turtle Lake G 2682 April 19/89

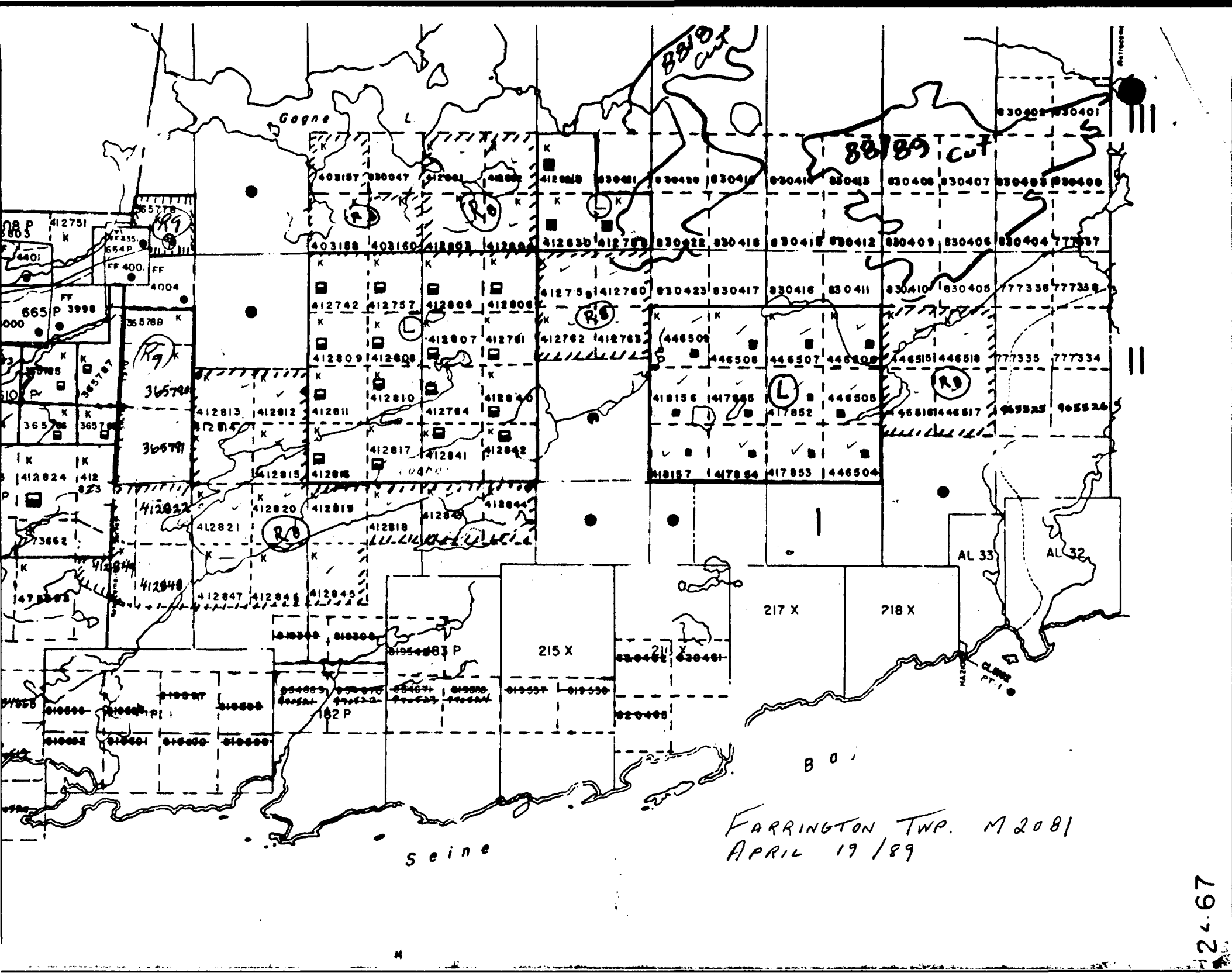
Bliss Lake G 2668  
April 19/89

TIMBER 84

88/89  
Cut



ERMILION LAKE 6-2665



FARRINGTON TWP. M 2081  
 APRIL 19 1891