



52P04NE0510 52P04NE0011A1 ACHAPI LAKE

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THE ALGOMA STEEL CORPORATION, LIMITED

GEOPHYSICAL REPORT  
MISEHKOW RIVER (ACHAPI LAKE AREA)  
PATRICIA MINING DIVISION

TO ACCOMPANY TECHNICAL DATA STATEMENT  
TO THE ONTARIO DEPARTMENT OF MINES

J. E. GRAY  
GEOLOGICAL TECHNICIAN  
EXPLORATION

JULY 11, 1978

GEOPHYSICAL REPORT  
MISEHKOW RIVER (ACHAPI LAKE AREA)  
PATRICIA MINING DIVISION

Location and Access

The claims are located approximately 36 miles southeast of Pickle Lake, Ontario. The claims are accessible by aircraft.

Claim Status

The claims are held by The Algoma Steel Corporation, Limited, 503 Queen Street East, Sault Ste. Marie, Ontario P6A 5P2. They were acquired in March 1975 (8) and August 1978 (1).

Reason for Survey

To investigate area for magnetic horizons.  
Check airborne anomaly on the ground.  
The entire claim block was surveyed.

Previous Work Done

Evidence of old cross sectional lines, claim lines were noted.

Topography

Sharp inclines of rock formation are located north of Mischkow River. South side of the river consists mainly of Jackpine, ridges with Cedar and Alder swails.

Geology

Considerable amounts of outcrops were recorded north of Mischkow river and along the north shore of the river. Few outcrops are located on the south shore in the vicinity of cross sections 80+00W, 76+00W and 72+00W. A small outcrop of iron formation is located on cross section 16+00W, 4+00S.  
No detailed geological survey was carried out.

Results of Survey

A magnetic horizon measuring approximately 8,000 feet in length and averaging 300 feet in width was outlined (see accompanying plans).

JULY 11, 1978

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GEOLOGICAL TECHNICIAN  
EXPLORATION

Method of Survey

A line grid was laid out (see accompanying plans). The grid totalled approximately 10.6 miles of cross sectional and base line.

Cross sectional lines were turned off 90° from an established base line.

Cross sectional lines were at 400 foot intervals.

Chainage pickets were established at 100 foot intervals along cross sectional lines.

Magnetometer readings were taken at 20 foot intervals along the cross lines and portion of the base line.

A total of 2,166 readings were recorded.

Personnel

Engineering and supervision was carried out by  
E. O. Hillman, P. O. Box 895, Hearst, Ontario POL 1N0

Magnetometer surveying was carried out by  
J. E. Gray, 39 Pageant Drive, Sault Ste. Marie, Ontario  
P6B 5J7

Type of Instrument Used

McPhar M-700 1965 Vertical Force Fluxgate Magnetometer.  
Sensitivity of the instrument 10 gammas per scale division  
on the 1K range.

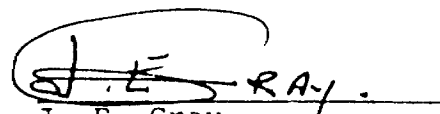
Dates

Survey dates were as follows:

Line cutting and chaining	- March 16 - 26, 1978
Magnetometer surveying	- April 3 & 4, 1978
Draughting	June 27, 28, 29, 1978
	July 4, 5, 6, 1978

I certify the information contained herein is true and correct.

July 11, 1978

  
J. E. Gray,  
Geological Technician.



Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

### GEOPHYSICAL TECHNICAL DATA

#### GROUND SURVEYS

Number of Stations 2,166 Number of Readings 2,166  
Station interval 25 feet  
Line spacing 400 feet  
Profile scale or Contour intervals 15,20,40,60,80,100 gamma contour lines  
(specify for each type of survey)

#### MAGNETIC

Instrument McPhar M-700 Fluxgate Magnetometer 1965 Model  
Accuracy - Scale constant 10 gammas per scale div. on the 1K Range  
Diurnal correction method Not used  
Base station location campyard

#### ELECTROMAGNETIC

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)

Parameters measured \_\_\_\_\_

#### GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_  
Elevation accuracy \_\_\_\_\_

#### INDUCED POLARIZATION -- RESISTIVITY

Instrument \_\_\_\_\_  
Time domain \_\_\_\_\_ Frequency domain \_\_\_\_\_  
Frequency \_\_\_\_\_ Range \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_



Ontario

2.2751

Ministry of  
Natural  
Resources

Notification of recording  
of assessment work credits

Lands Administration Branch  
Mining Lands Section  
Ministry of Natural Resources  
Room 1617, Whitney Block  
Queen's Park, Toronto  
M7A 1W3

RECEIVED  
AUG 02 1978  
MINING LANDS SECTION

Date of recording of work: July 20, 1978

Recorded holder: The Algoma Steel Corporation, Limited

Address: Sault Ste. Marie, Ontario

Township or Area: Achapi Lake M-2484

Type of survey and number of Assessment days credit per claim	Mining claims
Geophysical	Pa. 396085-92 incl. Pa. 466735
Electromagnetic _____ days	
Magnetometer <u>40</u> _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Section 86 (18) _____ days	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/>	

Notice to recorded holder:

Survey reports and maps in duplicate be submitted to the Lands Administration Branch, Toronto within 60 days from the date of recording of this work.

Reports and maps are being forwarded to the Lands Administration Branch with this letter.

Doris H. Caseo  
Acting Mining recorder  
c.c. The Algoma Steel Corporation Limited

Sept. 8/78



Ministry of  
Natural  
Resources

Ontario

Lands  
Administration  
Branch

Projects  
Unit

Technical Assessment  
Work Credits

File  
2.2751

Recorded Holder:	The Algoma Steel Corporation, Limited
Township or Area:	Achapi Lake

Type of survey and number of Assessment days credit per claim	Mining Claims
<b>Geophysical</b> Electromagnetic _____ days Magnetometer: <u>40</u> days Radiometric _____ days Induced polarization _____ days Section 85 (18) _____ days <b>Geological</b> _____ days <b>Geochemical</b> _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	Pa. 396085 to 92 inclusive 466735
<b>Notice of Intent to be issued:</b> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant. <input type="checkbox"/> No credits have been allowed for the following mining claims as they were not sufficiently covered by the survey: _____ _____ _____ _____ _____	

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40;



Ministry of  
Natural  
Resources

Ontario

Your file:

1978 12 18

Our file: 2,2751

Mr. Albert Hanson  
Mining Recorder  
Ministry of Natural Resources  
P.O. Box 669, Court House  
Sioux Lookout, Ontario  
POV 2T0

Dear Sir:

Re: Mining Claims Pa. 396085 et al. Aclapi Lake  
File 2.2751

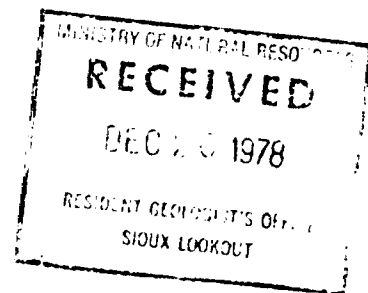
The Geophysical (Magnetometer) assessment work credits as shown on the attached statement have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours very truly,

J.R. Morton  
Acting Director  
Lands Administration Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-6918



DN:ie

cc: The Algoma Steel Corporation, Limited  
Sault Ste. Marie, Ontario  
Attn: Mr. J.E. Gray

Resident Geologist  
Sioux Lookout, Ontario



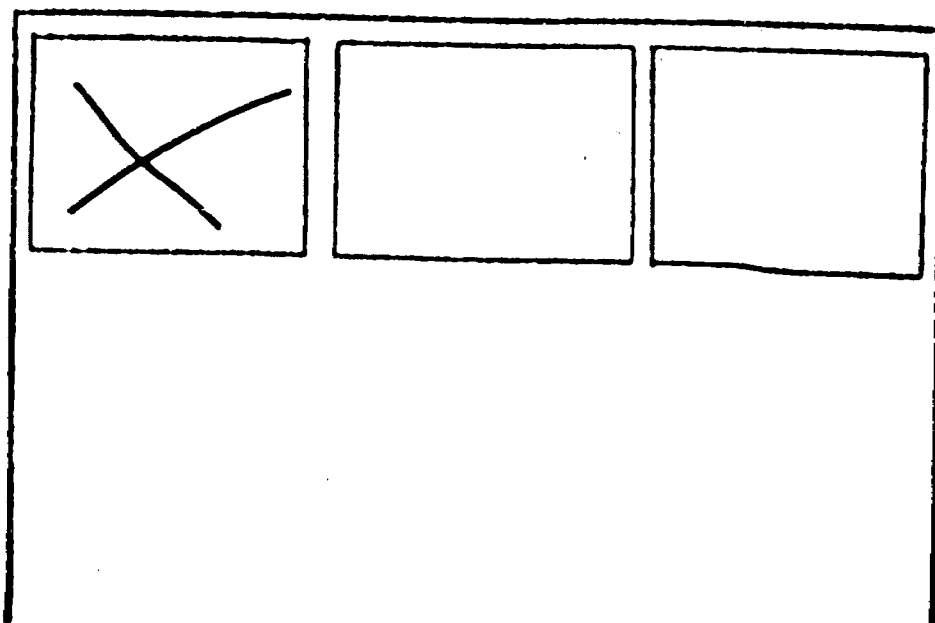
SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

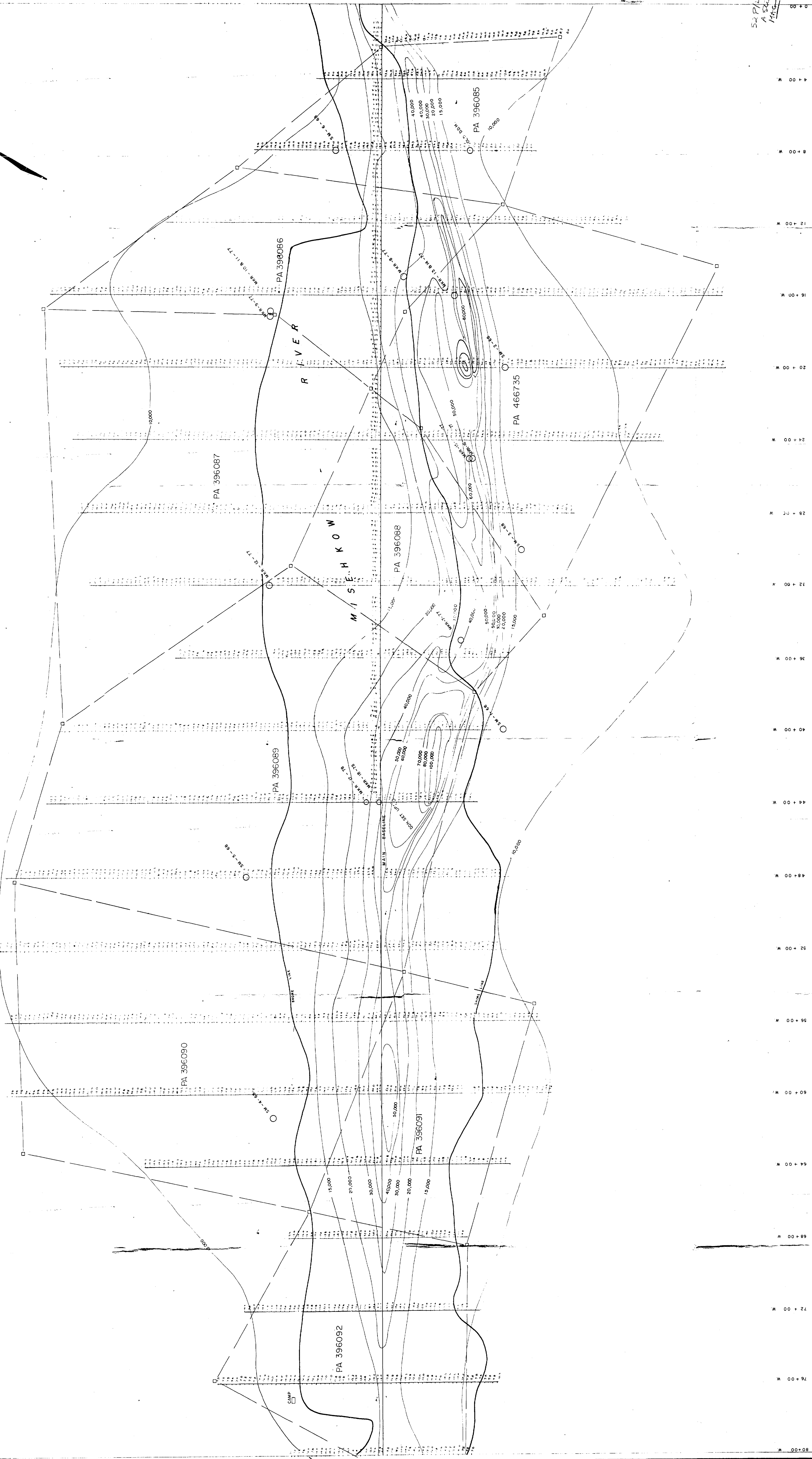
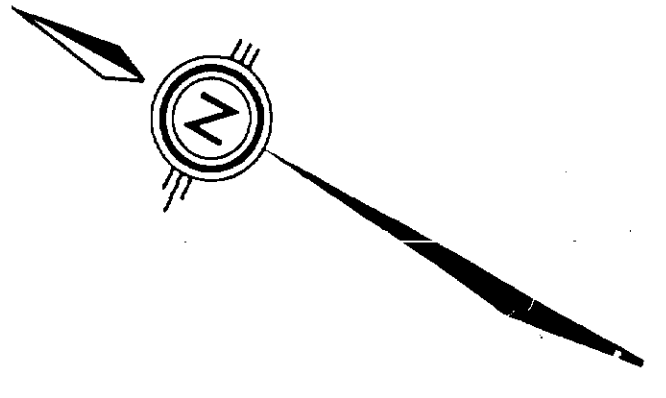
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LOCATED IN THE MAP  
CHANNEL IN THE FOLLOWING  
SEQUENCE (X)





**MAGNETOMETER SURVEY LEGEND**  
 10000 TO 20000 GAUSS ..... YELLOW  
 20000 TO 40000 GAUSS ..... GREEN  
 40000 TO 60000 GAUSS ..... CYAN  
 60000 TO 80000 GAUSS ..... BLUE  
 80000 OR OVER ..... PURPLE  
 MAGNETOMETER MODEL: M-700 SERIES  
 MAGNETOMETER OPERATOR: J. G. GAY  
 DRAWN BY: D. J. GAY

*Geological Section*  
 S2 PLOYNE - 0011-A-1  
 1/13-78

DRAWN BY: J. G. GAY CHECKED BY: APPROVED:	THE ALGOMA STEEL CORPORATION, LIMITED EXPLORATION AND PROJECT DEVELOPMENT DEPARTMENT	MISEHKOW RIVER IRON FORMATION MAGNETOMETER SURVEY	SCALE: 1" = 200' DATE: JUNE, 1978 DWG. NO.
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