DIAMOND DRILLING

TOWNSHIP: HARKER

REPORT NO.: 23

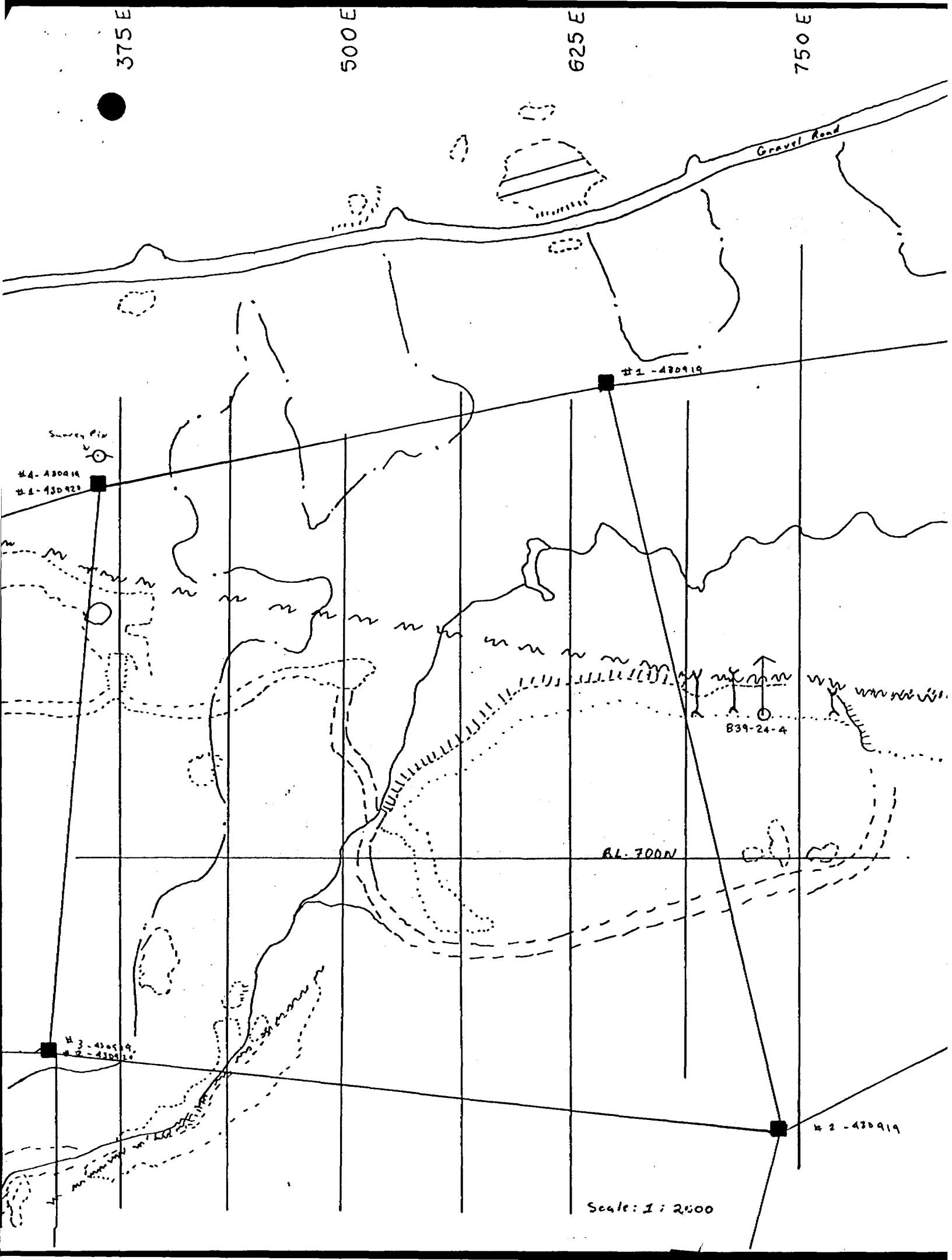
WORK PERFORMED BY: AMAX MINERALS EXPLORATION

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
L 430920	839-24-2	72.0m	June/81	(1)
L 525473	839-24-1	131.65m	June/81	(1)
L 430918	839-24-4	84.0 m	June/81	(2)
L 430920	839-24-5	87.0 m	June/81	(2)
	839-24-6	102.0 m	Aug/81	(2)
L 430191	839-24-7	54.0 m	Aug/81	(2)
L 430920	839-24-8	54.46 m	Aug/81	(3)

8 holes
585.11 m

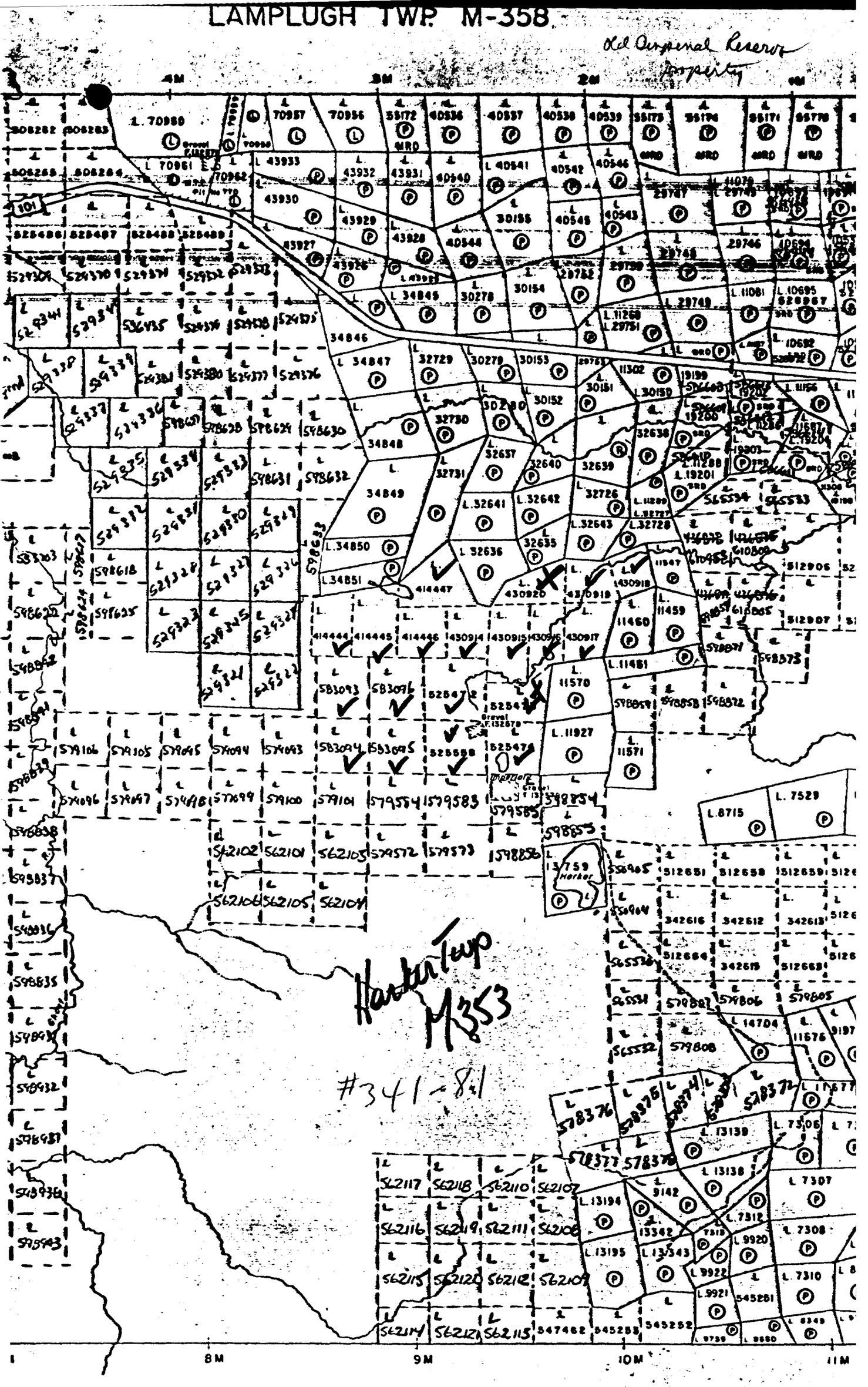
NOTES:

(1) #341-81
(2) #472-81
(3) #5-82

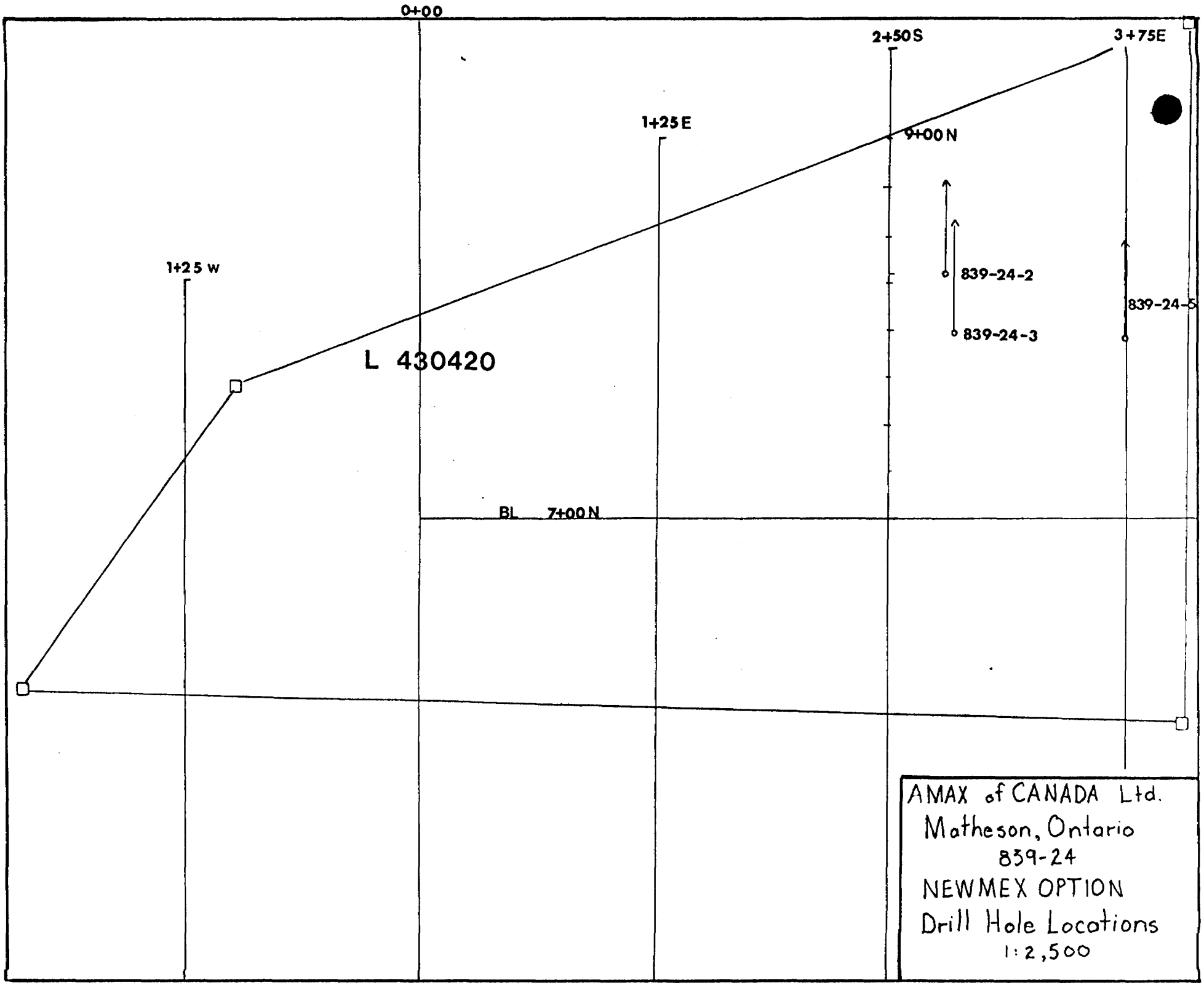

375 E
500 E
625 E
750 E
Gravel Road
#1 - 430919
Survey Pin
#4 - 430919
#4 - 430920
B39-24-4
BL. 700N
#3 - 430919
#3 - 430920
#2 - 430919
Scale: 1 : 2500

LAMPLUGH TWP. M-358

Old Imperial Reserve Property



ELLIOTT TWP M-347


0+00
2+50S
3+75E
1+25E
9+00N
1+25 W
839-24-2
839-24-5
839-24-3
L 430420
BL 7+00N
AMAX of CANADA Ltd.
Matheson, Ontario
839-24
NEWMEX OPTION
Drill Hole Locations
1:2,500

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-1

Hole No. 839-24-1 Sheet 1
Property 839-24; Newmex
Township Harker
Location Line A; 87.5m S

Logged By R. Benoit
Core Location Perry Lake, Ontario

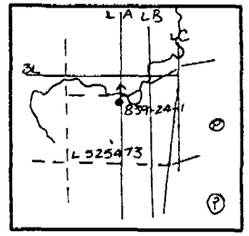
Length 131.85 metres
Bearing Grid North
Dip -50°
Objective To test an H.E.M. target

Commenced June 15, 1981
Completed June 18, 1981
Drilling Co. St. Lambert Drilling
Core Size BQ
Casing Left/Lost in Hole None

Dip: Collar -50°

Etch Test	Depth	Rdg.	True
1	131.85m	64°	60°

Location Sketch



North

Claim No. L-525473

Scale: 1" = ½ mile
1cm = 307m

Remarks Hole is located in centre of large open marsh near south side of creek.

xxxxxmetres

From	To	DESCRIPTION
0	36.80	OVERBURDEN
36.80	75.78	ANDESITE
75.78	78.0	GRAPHITIC TUFF
78.0	96.94	VOLCANIC FLOW ROCK, ANDESITE
96.94	104.70	GRAPHITIC TUFF
104.70	131.65	ANDESITE
	131.65	END OF HOLE

RG Rousseau

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DIAMOND DRILL RECORD

Hole No. 839-24-1
Sheet No. 3

Footage - Metres From	To	DESCRIPTION
0	36.80	OVERBURDEN
		Sand, silt
36.80	75.78	ANDESITE
		Medium to fine grained, dark green to dark grey in colour, hard, slightly magnetic in some areas. The andesite is intruded by many quartz-carbonate veins ranging from 1mm to 6cm wide. The veins cut the core at all angles. Some of the veins cut the core at 62° to the core axis. Many of the quartz-carbonate veins contain K-feldspar and pyrite. The Py seems to have formed at the vein contacts and the centre of the veins. The andesite is also cut by chloritic veinlets; these veins are a medium green and are very soft. They cut the core at all angles. Pyrite is present - 1 to 3%.
		37.89 - 37.94 Quartz-carbonate vein, pyritic
		41.93 - 41.96 Quartz-carbonate vein
		44.73 - 44.78 Quartz-carbonate vein
		49.60 - 49.63 Quartz-carbonate vein, pyritic
		50.07 - 50.09 Quartz-carbonate vein, pyritic
		53.11 - 53.13 Quartz-carbonate vein, pyritic
		54.00 - 54.10 Quartz-carbonate vein, pyritic
		54.42 - 54.51 Quartz-carbonate vein, pyritic
		56.22 - 56.25 Quartz-carbonate vein, pyritic
		57.31 - 57.40 Quartz-carbonate vein, pyritic
		58.28 - 58.29 Quartz-carbonate vein, pyritic
		66.95 - 67.0 Quartz-carbonate vein
		75.0 - 75.78 Andesite, lighter colour, more pyrite 3 - 5%

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DIAMOND DRILL RECORD

Hole No. 839-24-1
Sheet No. 4

Footage - Metres From	To	DESCRIPTION
75.78	78.00	GRAPHITIC TUFF
		Black, greasy, medium soft, fine grained, slightly magnetic where pyrrhotite appears. Very conductive with ohmeter; has scattered quartz-carbonate veins which range from 1mm to 3cm wide. Pyrite is present from 5-10%. The pyrite is found in stringers, swirls and spots or splotches. These stringers cut the core at all angles. The graphitic tuff has very sharp contacts - the foliation is at 40^{0} to core axis.
78.00	96.94	VOLCANIC FLOW ROCK, ANDESITE
		Very fine grained, dark green to dark grey in colour, very hard. Core is intruded by quartz-carbonate veins and by quartz-carbonate breccia. The veins are from 1mm to 2cm wide and cut the core at all angles. Most of the quartz-carbonate veins have a preferance in how htey cut the core. Some of the veins cut the core at 34^{0} to the core axis. Pyrite is present - 1-5%. The pyrite is found chiefly with the quartz-carbonate veins or breccia.
		78.08 - 78.13 Quartz-carbonate vein, pyritic
		80.71 - 80.70 Quartz-carbonate vein, pyritic
		82.00 - 82.12 Quartz-carbonate vein, pyritic
		85.51 - 85.75 Quartz-carbonate breccia, contains angular fragments, 1cm wide to 1mm wide, very pyritic, 5-20%; fragments contain the most pyrite, the country rock contains less pyrite.
		90.84 - 90.86 Quartz-carbonate vein, pyritic

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DIAMOND DRILL RECORD

Hole No. 839-24-1
Sheet No. 5

Footage - Metres From	To	DESCRIPTION
96.94	104.70	GRAPHITIC TUFF
		Black, greasy, fine grained, medium soft, slightly magnetic where pyrrhotite appears. Has a sharp contact, intruded by quartz-carbonate veins which range from 1mm to 6cm in width. These cut the core at all angles. Foliation is 42° to core axis. Very conductive with the ohmeter. Pyrite is present - 5-20%. The Py is in rosettes, swirls and stringers. The Py in the rosettes have a colloidal texture.
104.70	131.65	ANDESITE
		Fine grained, dark green to medium grey in colour, hard, is intruded by quartz-carbonate veins which range from 1mm to 2cm and cut the core at all angles. There are some areas of carbonate breccia. These are white with andesite fragments The core also contains broken pillows. The pillow rims range from 1cm to 2cm in width. They resemble a breccia. The rims sometimes contain py - approximately 1-5%. The core is also speckled with K-feldspar splotches or amygdules. These are a pale pink to whitish colour. The core also contains some epidote. This area is a dull olive green. It has a concentration of pyrite approximately 5-10% in a 1cm wide area. Pyrite is present throughout the core, ranging from 1-10% in some areas. The core also contains little veins or amygdules of Iron carbonates, probably ankerite. It is a rusty brown colour and is very carbonaceous. Pyrite is present around the ankerite.
		104.70 - 107.10 Quartz-carbonate breccia, pyritic with some ankerite
		124.30 - 124.60 Ankerite, amygdules, pyritic
		129.46 - 129.62 Massive epidote, pyritic
	131.65	END OF HOLE

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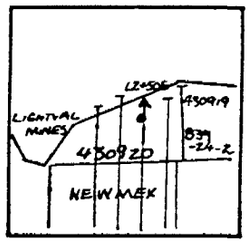
DIAMOND DRILL RECORD

Hole No. 839-24-2

Hole No. 839-24-2 Sheet 1	Length 72 metres	Commenced June 18, 1981	Dip: Collar 45°
Property Newmex Option	Bearing 0° due North	Completed June 20, 1981	
Township Harker Twp.	Dip * 45°	Drilling Co. St. Lambert	
Location 2+80E, 8+29N	Objective To test mineralized zone as per Newmex DDH NX-2	Core Size BQ	
Logged By Gene Kent		Casing Left/ Lost in Hole Nil	
Core Location Perry Lake			

Etch Test	Depth	Rdg.	True
1	72m	45°	46°

Location Sketch



North

Claim No. 430920

Scale: 1" = ½ mile
1cm = 507m

Remarks The target zone was cut as in NX-2. Reddish cherts and pyroelastic breccias are mineralized with py, qtz and carbonate. Sludges were collected.

Footage Metres From	Footage Metres To	DESCRIPTION
0	3.80	OVERBURDEN
3.80	6.21	DIABASIC BASALT (or Greenstone)
6.21	6.35	SYENITOID DYKE
6.35	10.36	DIABASIC BASALT
10.36	25.70	PINK CHERT
25.70	26.57	ANDESITE
26.57	28.51	TUFF BRECCIA (Acid)
28.51	30.00	TUFF BRECCIA (Mafic)
30.00	39.50	WELDED TUFF
39.50	55.88	TUFF BRECCIA
55.88	72.00	WELDED CHLORITE TUFF
	72.0	END OF HOLE

P.G. Racsan

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-2
Sheet No. 3

Footage - Metres From	To	DESCRIPTION
0	3.80	OVERBURDEN
3.80	6.21	DIABASIC BASALT (or Greenstone)
		Blackish green, medium grained with macroscopic plagioclase set in a dark aphanitic matrix. Matrix is a pyroxene-chlorite-magnetite assemblage.
		The rock is moderately to strongly magnetic.
		3.80 - 4.44 - shattered
		Regolith zone - narrow (1-3mm) syenitic veins cut the rock at approximately 35° to core axis.
		Disseminated pyrite <<1%, Pyrite-carbonate veins criss-cross the core.
6.21	6.35	SYENITOID DYKE (Pink Felsite-Newmex)
		30° to core axis. Medium to coarse grained crystalline rock. Red-pink colour with alkali feldspar + minor mafics. Limonite stain is seen on contacts. Shearing occurs at 30° to core axis. This unit occurred lower down in the basalt in NX-2 crosscutting.
6.35	10.36	DIABASIC BASALT
		Becomes coarser grained near flow bases 8.34.
		9.7-10.36 - Brecciation of basaltic rock with extreme carbonization and 1-2% pyrite mineralization. The contact with the underlying unit is black and chilled looking.
		i.e. Target zone #1 of NX-2.
10.36	25.7	PINK CHERT (Rhyolite)
		Light gray to red in part with disseminated pyrite +1% and abundant carbonate narrow 1-3mm veins carry pyrite and quartz. Brecciation is common with felsic fragments set in a chloritic matrix.
		The rock is aphanitic. Hematite exsolution in the matrix minerals may impart the colour.
		This unit is non-magnetic and extremely hard.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-2
Sheet No. 4

Footage - Metres From	To	DESCRIPTION
		12.77 - 12.88: Brecciated-felsic (white) fragments in chloritic matrix
		13.65 - 13.79: Pyrite bands (1mm each) at 45° to core axis. Pyrite stringer disseminations lie up hole from the bands. Possible indication of syngenetic mineralization.
		16.10 - 20-80: Finely disseminated pyrite 1-2%. Less red, more gray in the rock. Pyrite stringers carry a magnetic mineral, possibly magnetite. Increased fracturing of the rock with fractures coated in chlorite and unusually magnetic.
		20.80 - 24.50: Red-gray chert, nonmagnetic 1-2% disseminated pyrite and pyrite veinlets
		24.50 - 25.70: Breccia: 5% Pyrrhotite and Pyrite - sulphide aggregates are highly magnetic. Quartz carbonite forms the matrix. Fragments are brick red chert. The entire zone shows increased sulphide and hematite.
25.70	26.57	ANDESITE
		Massive andesite flow rock. Strongly magnetic with ubiquitous carbonate veins at 50° to core axis. Upper contact is sharp but a leached zone extends in to the breccia for 3cm. Disseminated pyrite <1%. Upper contact is 30° to core axis. Lower contact is 25° to core axis. The lower contact is brecciated.
26.57	28.51	TUFF BRECCIA (Acid)
		Blackish-gray at the top and hematitic towards the base. Layering at 45° to core axis as determined from fragments. Pyrite <2% disseminated.

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DIAMOND DRILL RECORD

Hole No. 839-24-2
Sheet No. 5

Footage - Metres From	To	DESCRIPTION
28.51	30.00	TUFF BRECCIA: (Mafic) Contacts at 45° -conformable to acid tuff above. Criss-crossed by chlorite and quartz veins <2mm in width. 5% sulphide within 20cm of the contact. Strongly magnetic and grading into.
30.00	39.50	WELDING TUFF Similar gray colour and strongly magnetic as with contact zone above (breccia). Whitish fiammes or lapilli are elongated in the plane of bedding and average 4cm in length. They lie at 80° to core axis. Carbonate and quartz veining is at 45° to core axis. Pyrite occurs in the quartzo-feldspathic fragments, but the average in the core is <<1%. Fragments are softer than the matrix. Matrix is gray (light) and consists of ash sized material. 35.55 - 35-79: Brecciated Po + Pyrite → 10% magnetic.
39.50	55.88	TUFF BRECCIA Up to 5% Pyrite Fragmental unit. Coarse angular fragments of varied size and lithology constitute this unit. This unit is slightly to moderately magnetic. The fragments are either mafic chlorite rich material 90%, or Quartzo-feldspathic material carring up to 90% pyrite in the fragments. Pyrite occurs as discrete crystals in the fragments. Matrix material is <5% and is whitish quartz+feldspar. 39.50 - 40.60: Lapilli Tuff with feldspar lapilli and 15-20% sulphide within 10cm of the upper contact 40.60 - 55.00: Coarser Tuff Breccia: Fragments generally exceed 4cm. Pyrite <2% and occurs interstically 55.00 - 55.88: Tuffite.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-2
Sheet No. 6

Footage - Metres From	To	DESCRIPTION
55.88	72.00	WELDED CHLORITE TUFF
		Foliation is perpendicular to core axis. Extremely soft dark-green rock with whitish bands and pyroclasts.
		56.51 - 57.64: White and pink quartz carbonate veins. Carbonate occurs as veins up to 1cm in width and constitutes 10% of the rock.
		The rock is non-magnetic and contains only traces of sulphides.
		Folding of the laminae is common. This high order folding may indicate that the major rock units are similarly folded.
		57.00 - 57.45: Possible fault zone.
	72.00	END OF HOLE

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-

Hole No. 839-24-5 Sheet 1
Property Newmex Option
Township Harker
Location 3+75E, 7+95N

Logged By Gene Kent
Core Location Perry Lake

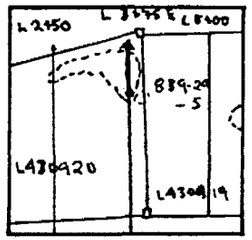
Length 87 metres
Bearing North - True
Dip 45°
Objective Test chert felsite horizon on the strike extension from DDH 2 and 3.

Commenced June 24, 1981
Completed June 26, 1981
Drilling Co. St. Lambert
Core Size BQ
Casing Left/ Lost in Hole None

Dip: Collar 45°

Etch Test	Depth	Rdg.	True
N/A			

Location Sketch



North

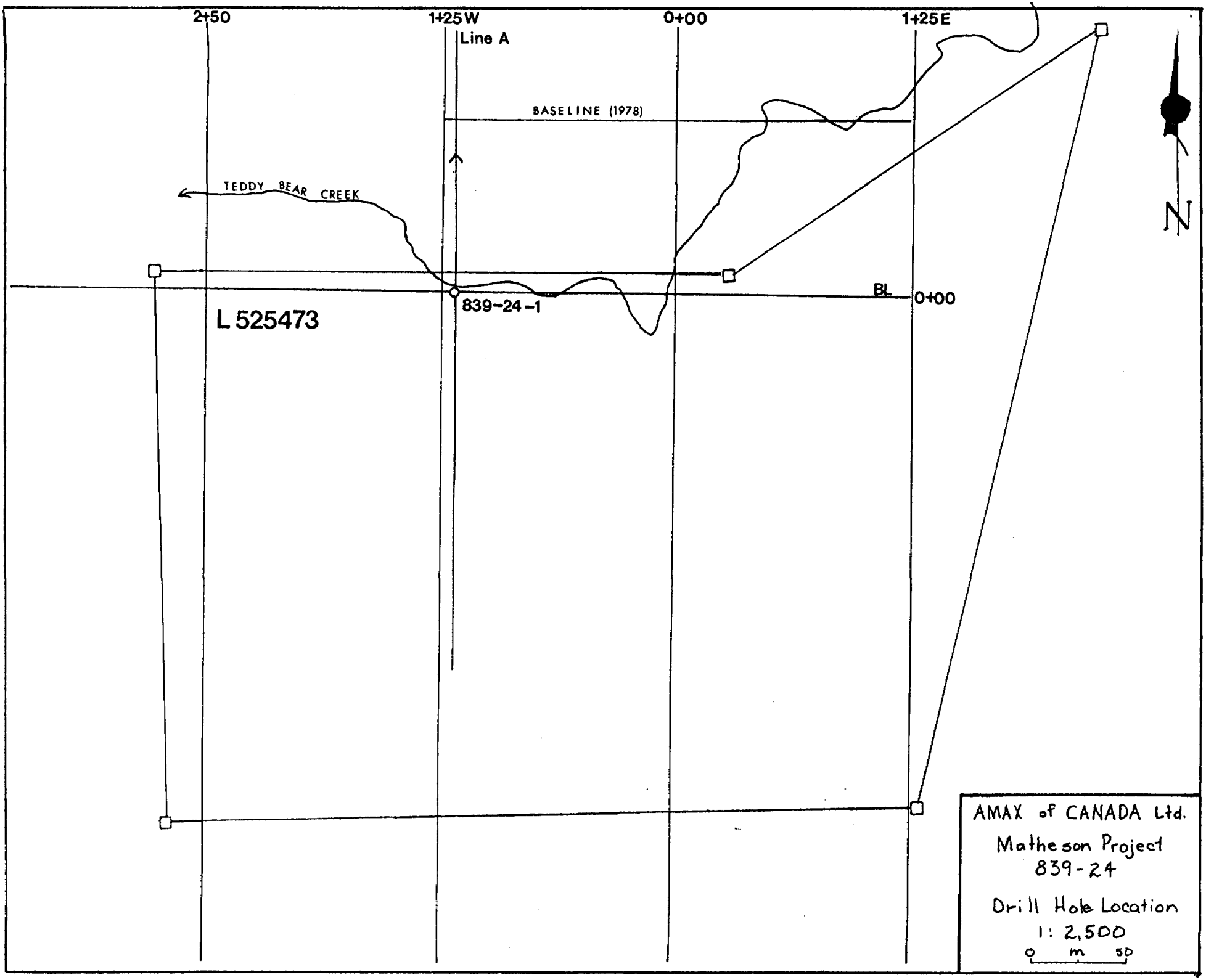
Claim No. 430920

Scale: 1:1200

Remarks Step back (south) hole and or stripping recommended.

Footage/ Metres From	To	DESCRIPTION
0	3.20	OVERBURDEN
3.20	6.05	BRECCIATED BASALT (MINERALIZED)
6.05	11.50	FELDSPAR PORPHYRY (RED)
11.50	12.36	DIABASIC FLOW ROCK
12.36	37.14	BASALT
37.14	37.18	QUARTZ - CARBONATE - PYRITE VEIN
37.18	39.82	CHERT
39.82	43.38	MAFIC BRECCIA
43.38	65.68	BRECCIATED ANDESITE
65.68	69.59	TUFF AND TUFF BRECCIA
69.59	81.15	CHLORITE - CARBONATE SCHIST
81.15	87.00	ANDESITE
	87.00	END OF HOLE

Rosemary Pettey


2+50
1+25W
Line A
0+00
1+25E
BASELINE (1978)
TEDDY BEAR CREEK
N
BL
0+00
839-24-1
L 525473
AMAX of CANADA Ltd.
Matheson Project
839-24
Drill Hole Location
1: 2,500
0 m 50

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-[redacted]

Hole No. 839-24-6 Sheet 1
Property Newmex Option 839-24
Township Harker
Location 1+85E
8+09N
Logged By Gene Kent
Core Location Perry Lake

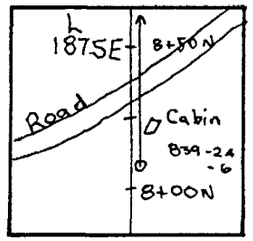
Length 102m
Bearing Grid North
Dip 45°
Objective To test Zone A - chert horizon

Commenced August 7, 1981
Completed August 14, 1981
Drilling Co. St. Lambert
Core Size BQ
Casing Left/Lost in Hole None

Dip: Collar 45°

Etch Test	Depth	Rdg.	True
1	102m	51m	44°

Location Sketch



North

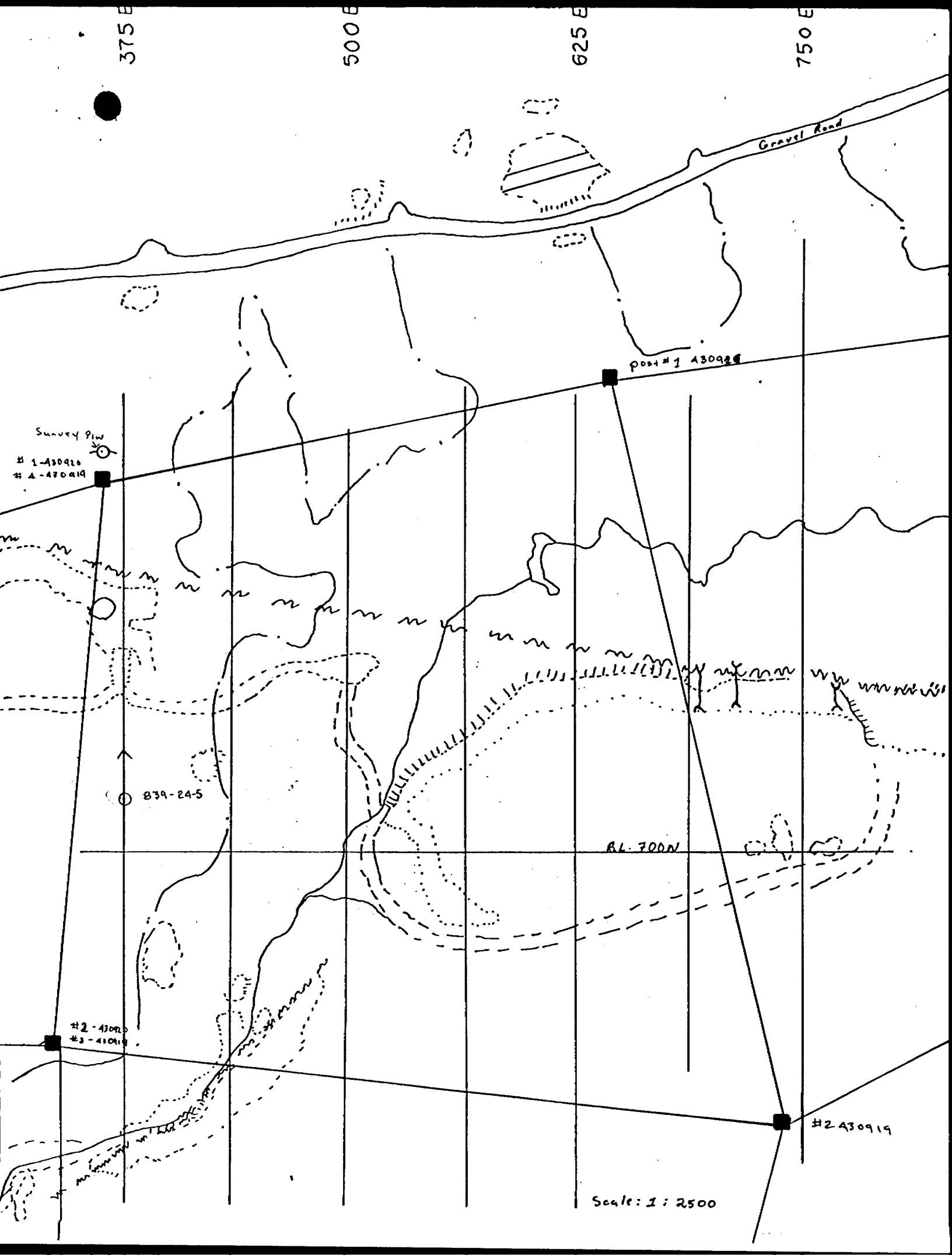
Claim No. 430920

Scale: 1:2500

Remarks See L187.5E Magnetics profile. Mineralized zone intersected 62.4 to 66.48. Multiple chert bands intersected.

Footage/Metres From	To	DESCRIPTION
0	10.24	OVERBURDEN
10.24	11.15	RED CHERT
11.15	40.42	BASALT
40.42	43.32	CHLORITE TUFFITE
43.32	62.40	ANDESITE AND INTERFLOW TUFFS
62.40	66.48	CHERT
66.49	91.01	BRECCIATED TUFF
91.01	102.00	GRADATIONAL CONTACT TO CHLORITE CARBONATE SCHIST
	102.00	END OF HOLE

Rosemary


375 E
500 E
625 E
750 E
Gravel Road
post #1 430928
Survey Pin
1-430928
4-430919
B39-24-S
RL 700N
#2 - 430920
#3 - 430919
#2 430919
Scale: 1 : 2500

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-4

Hole No. 839-24-4 Sheet 1
Property Newmex Option
Township Harker
Location 7+33E
7+80N
Logged By Gene Kent
Core Location Perry Lake

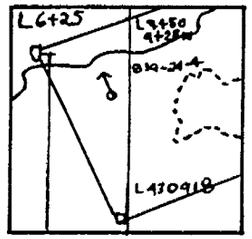
Length 84 metres
Bearing 340°
Dip 55°
Objective To test felsite and fault position and mineralization

Commenced June 23, 1981
Completed June 24, 1981
Drilling Co. St. Lambert
Core Size BQ
Casing Left/Lost in Hole None

Dip: Collar 55°

Etch Test	Depth	Rdg.	True
1	84m		55°

Location Sketch



North

Claim No. 430918

Scale: 1:1200

Remarks Eastward extension of red Feldspar porphyry. Possible intercept of the Imperial Fault.

Footage/Metres From	Footage/Metres To	DESCRIPTION
0	0.75	OVERBURDEN
0.75	14.54	PORPHYRITIC ANDESITE
14.54	24.33	CHLORITE - CARBONATE SCHIST (TUFFITE)
24.33	30.28	TUFF BRECCIA
30.28	32.26	FELDSPAR PORPHYRY
32.26	32.62	CHLORITE CARBONATE SCHIST
32.62	32.77	FELDSPAR PORPHYRY
32.77	32.81	IMPERIAL FAULT
32.77	40.71	FAULT ZONE
32.81	42.88	CHLORITE - CARBONATE SCHIST
42.88	43.99	RED TUFFITE
43.99	54.40	CHLORITE - CARBONATE SCHIST
54.40	84.00	ANDESITE
	84.00	END OF HOLE

Rosemary Totley

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-4
Sheet No. 3

Footage - Metres From	To	DESCRIPTION
0	0.75	OVERBURDEN
0.75	14.54	PORPHYRITIC ANDESITE Massive andesitic rock gray colored and containing phenocrysts of feldspar up to 2cm in diameter. The Phenocryst are white and show well formed octahedral shape. Possibly spherulitic The unit is non magnetic and shows only traces of sulphide. Epidote veining is common. Grading into....
14.54	24.33	CHLORITE - CARBONATE SCHIST (TUFFITE) Marker horizon in 24 -2 and 24 -3 Diamond Drill holes. Soft, green and white unit with 75% chlorite, 25% carbonate. Schistosity or lamination is at 30° to core axis, with some folding present. Traces of pyrite, usually in the carbonate bands. Grading into....
24.33	30.28	TUFF BRECCIA Slightly harder unit, somewhat brecciated and intercalated with chlorite-carbonate schist. Upper contact shows veins of pink carbonate, noted in previous holes. 28.45 - 28.67 disseminated pyrite adjacent to pink carbonate 4%.
30.28	32.26	FELDSPAR PORPHYRY Fault Slice In sharp tectonic contact with surrounding units. Upper contact 45° to core axis. Lower contact at 70° to core axis. Brick Red unit with tabular white to pink colored phenocrysts of feldspar up to 3mm in size. Minor brecciation at the upper contact with increasing brecciation and fracturing towards the lower contact.
32.26	32.62	CHLORITE CARBONATE SCHIST As described previously upper + lower contacts at 62° to core axis.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-4
Sheet No. 4

Footage - Metres From	To	DESCRIPTION
32.62	32.77	FELDSPAR PORPHYRY
		Brecciated and in faulted contact with underlying rocks.
32.77	32.81	IMPERIAL FAULT
		60° to core axis - chloritic mud light green in colour.
32.77	40.71	FAULT ZONE
		Many narrow fault gouges averaging 10cm in width occur in this zone.
32.81	42.88	CHLORITE - CARBONATE SCHIST
		Schistosity averages 60° to core axis. Carbonate up to 30% of the rock. Pink-white carbonate veins are common and carry up to 2% pyrite over narrow widths.
42.88	43.99	RED TUFFITE
		Highly altered rock with a reddish-brown colour. Upper contact 60° to core axis. Lower contact at 40° to core axis. Reddish lappilli of feldspar up to 2mm wide occur in a chloritic matrix. Pink carbonate veins the rock Traces of py and cp. This unit is moderately hard and slightly magnetic.
43.99	54.40	CHLORITE - CARBONATE SCHIST
		As described previously grades progressively into massive andesite bands of ankerite up to 10cm wide.
54.40	84.00	ANDESITE
		Black-green colour fine to medium grained. Carbonate veining decreases down in the unit, epidote veining increases.
		54.40 - 66.40 Fine grained with up to 5% Carbonate lensing, traces of cp, py highly cloritized in part.

AMAX MINERALS EXPLORATION
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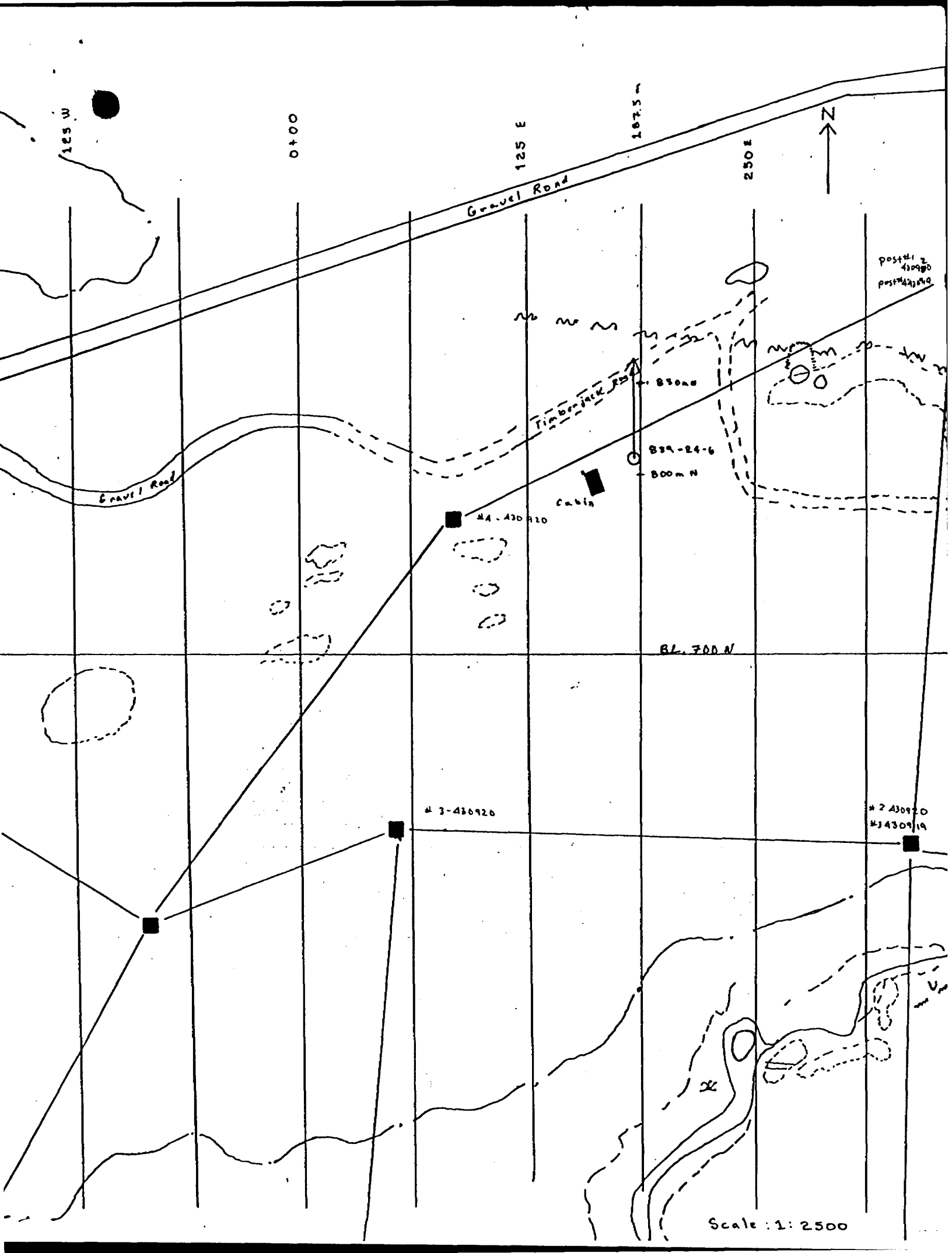
DIAMOND DRILL RECORD

Hole No. 839-24-4
Sheet No. 5

Footage - Metres From	To	DESCRIPTION
		71.32 - 80.64 Extensive epidote and quartz carbonate lensing. Carbonate veins have deep rust colored hematite stains. The host rock is slightly coarser grained and displays diabasic texture. Spotty, weak magnetism occurs throughout the unit.
	84.00	END OF HOLE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0+00
125 E
187.5 m
250 E
N
Gravel Road
Timberjack Rd
Gravel Road
post #1 430980
post #2 430979
+ 830 m N
B39-24-6
800 m N
Cabin
#4 - 430920
BL. 700 N
3-430920
2 430920
#1 430919
Scale : 1: 2500

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24[redacted]

Hole No. 839-24-7 Sheet 1
Property 839-24 Newmex Option
Township Harker
Location 4+70E
7+90N
Logged By Gene Kent
Core Location Perry Lake

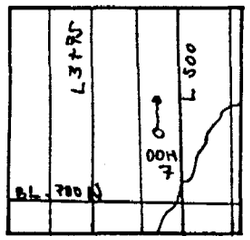
Length 54 metres
Bearing North
Dip 45°
Objective To test strike extension of chert + fault zone.

Commenced August 17, 1981
Completed August 19, 1981
Drilling Co. St. Lambert
Core Size BQ
Casing Left/ Lost in Hole

Dip: Collar 45°

Etch Test | Depth | Rdg. | True

Location Sketch



North

Claim No. 430919

Scale: 1:10000

Remarks

Footage/ Metres From	To	DESCRIPTION
0	5.70	OVERBURDEN
5.70	6.43	RED TUFF
6.43	39.07	BRECCIATED CHERT AND FELSIC TUFF
39.07	45.00	CARBONATE-CHLORITE BRECCIA
45.00	54.00	CHLORITE-CARBONATE SCHIST
	54.00	END OF HOLE

Rosemary Hobbs

AMAX MINERALS EXPLORATION
(A Division of Amax of Canada Limited)

DIAMOND DRILL RECORD

Hole No. 839-24-6
Sheet No. 3

Footage - Metres From	To	DESCRIPTION
0	3.20	OVERBURDEN
3.20	6.05	BRECCIATED BASALT (MINERALIZED)
		Massive black-green colored rock. Hard and showing moderate to strong magnetism.
		White carbonate, ankerite, epidote and pyrite are observed as fracture fillings. py 1% 2% and is found essentially as vein fillings. Mineralization becomes weaker towards the lower contact.
		Limonite stain is also seen in fractures.
6.05	11.50	FELDSPAR PORPHYRY (RED)
		Red with white or pink phenocrysts of feldspar. Feldspars are square to tabular and constitute 20 - 30% of the rock. Pyrite is disseminated in trace amounts. Phenocrysts occur up to 8mm in size. An apparent intrusive rock, upper contact shows signs of chilling 34° to core axis.
		Lower contact 34° to core axis, sharp contact but without any apparent chilled margin.
		10.84 - 11.50
		Increasing hematite content and more shearing. Fractures are filled with chlorite or calcite.
11.50	12.36	DIABASIC FLOW ROCK
		Massive flow rock green-black in colour displaying pink feldspars in a diabase texture. The unit is moderately magnetic and displays sharp contacts.
		Lower contact occurs at 70° to core axis. Minor pyrite mineralization.
12.36	37.14	BASALT
		Mafic flow rock. Aphanitic with dark gray to black colour. Pistachio green epidote veins cross the rock at angles nearly perpendicular (80°) to the core axis. Ankerite, calcite, epidote and pyrite are associated and occur in veins up to 13cm wide (ie. 22.88 - 22.99); 5% py.
		(18.15 - 18.32) Specularite - calcite veins occur as narrow <2mm veinlets and at variable orientations indicating a seperate mineralising event. The rock is highly magnetic. Epidote pyrite veins show faint conductivity. Small graphitic lenses 18.52 - 18.57 are conductive; and carry 4 - 5% py.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-5
Sheet No. 4

Footage - Metres From	To	DESCRIPTION
		22.99 - 26.50
		Medium grained with less veining and brecciation - possible flow base. Pyrite 2-3%.
		Unit shows extremely high magnetism at this point, caused by disseminated magnetite.
		26.50 - 28.64
		Finer grained with minor sulphides and veining.
		28.64 - 37.14
		Brecciated with quartz carbonate veins between fragments of mafic volcanics. Epidote ankerite speculanite and minor pyrite occurs in veins which make up 5% of the rock.
		Strong magnetism is still noted.
37.14	37.18	QUARTZ - CARBONATE - PYRITE VEIN
		25% pyrite in vein. An apparent contact occurs along the vein at 53° to core axis.
37.18	39.82	CHERT
		Pale gray colored chert. The contact with overlying volcanics is altered with chlorite bands running at 65° to core axis.
		Disseminated pyrite occurs 3-%. Minor brecciation and quartz veining is seen. Moderately magnetic.
		Tuff Breccia (Acid)
		39 - 39.82
		Gray-white and pink, non magnetic and very siliceous.
		Upper contact is sharp, and strikes 30° to core axis.
		Quartz and pink calcite occur as vein fillings around the fragments.
		Disseminated pyrite occurs in chlorite fracture fillings and in quartz-carbonate veins, 1%.
		Contact 37° to core axis.
38.82	43.38	MAFIC BRECCIA
		Extreme brecciation with 50% clasts 50% fracture filling. Traces of pyrite appear (<1%) in the rock, no magnetism is noted.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-5
Sheet No. 5

Footage - Metres From	To	DESCRIPTION
		The clast sizes averages 1-2cm and the rock is intermediate in composition with fragments of mafic and felsic rocks.
		Chlorite occurs as bands 0^{0} - 45^{0} to core axis and as fracture fillings.
		Brecciated areas are silicified and quite hard. Massive or less brecciated segments are soft and chloritic.
		The original rock may have been an andesite.
		39.82 - 43.36 50:50 clast to matrix
		39.82 - 41.48 Mafic breccia with occasional fragments of red chert. White carbonate - quartz veins. 4% py.
		41.48 - 42.80 Siliceous to intermediate breccia pink-white quartz-carbonate veins are up to 2cm wide. Pink carbonate also occurs as clasts. Finely disseminated pyrite <1%.
		Contacts 46^{0} to core axis.
		42.80 - 43.38 Finely brecciated rock with quartz veins and mafic fragments. Red cherty fragments are noted <3% of fragments average 5 - 10%mm and 1% pyrite.
43.38	65.68	BRECCIATED ANDESITE
		Rock appears similar to overlying breccia unit in colour and grain size. Breccia accounts for less of the rock.
		Multiple flow units with distinctive flow top breccias occur with flows averaging 2m in width.
		Breccia tops contain quartz carbonate-pyrite is disseminated, averaging 1% with breccias containing 1 - 2%.
		Flow centres are massive gray-black rock with chloritic fractures and minor quartz-carbonate veins.
		Non magnetic.
65.68	69.59	TUFF AND TUFF BRECCIA
		Lappilli tuff containing fragments of various origins, including sulphide fragments.
		Lowering determined by clast orientation is 40^{0} to core axis.
		The contact is gradational at the top.
		Fragments consists of mafic volcanics pyrite fragments and red cherty fragments which display magnetism, in order of abundance.
		The rock is fairly hard and contains a great deal of carbonate.
		68.05 - 68.72 Pyrite= 2 - 5%

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-5
Sheet No. 6

Footage - Metres From	To	DESCRIPTION
69.59	81.15	CHLORITE - CARBONATE SCHIST
		Sharp contact at 85° to core axis. Schistosity averages 85° to core axis with alternating green and white bands and minor folding.
		Carbonate content decreases down the unit.
		70.27 - 70.34 Fault-chloritic mud, see also 72.15.
		68.59 - 73.65 30% carbonate
		73.65 - 81.15 averages 15 - 20% carbonate grades into ....
81.15	87.00	ANDESITE
		Meta-andesite; chloritic with large 1 - 2mm flakes of chlorite scattered through the rock. Fine to medium grained grey-green rock. Pyrite <1%, minor carbonate veins.
	87.00	END OF HOLE

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-8

Hole No. DDH8 Sheet 1
Property 839-24, Newmex
Township Harker
Location L62.5W, 6+90N

Logged By Gene Kent
Core Location Perry Lake

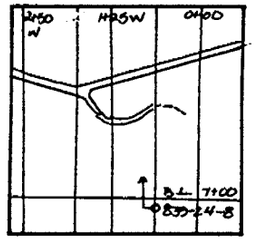
Length 54.46 metre
Bearing Grid North
Dip -45°
Objective To test interflow chert horizon for gold potential.

Commenced August 15, 1981
Completed August 17, 1981
Drilling Co. St. Lambert
Core Size BQ
Casing Left/ Lost in Hole

Dip: Collar -45°

Etch Test	Depth	Rdg.	True
none			

Location Sketch



North

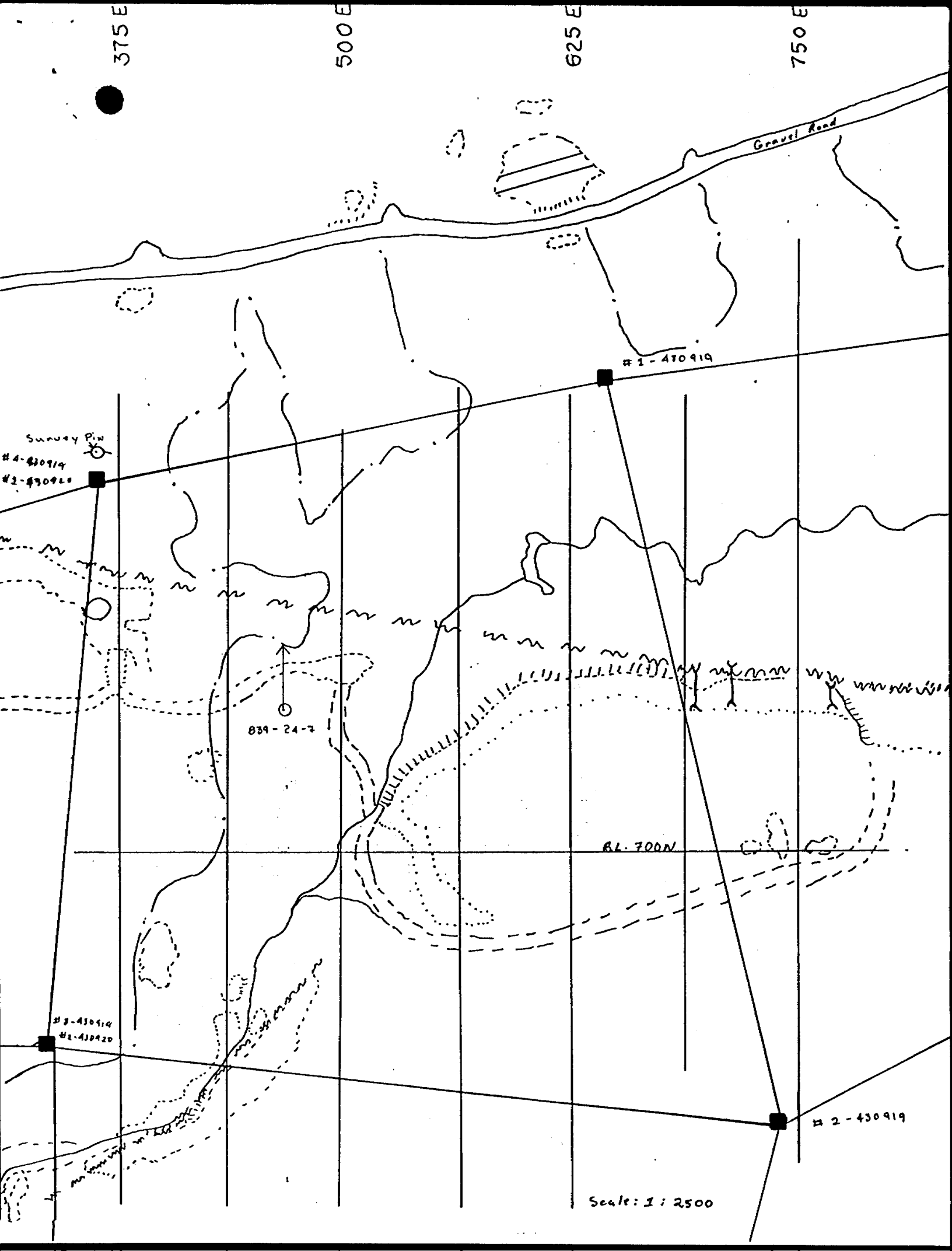
Claim No. L-430920

Scale: 1:10,000

Remarks The chert is mineralized with sulphide but lacks the intense brecciation of the target horizon.

Footage / Metres From	To	DESCRIPTION
0	3.00	OVERBURDEN
3.00	10.02	DIABASIC BASALT
10.02	11.38	CHERT BRECCIA
11.38	19.96	CHERT
19.96	35.56	ANDESITE
35.56	44.44	CHERT
44.44	48.69	MAFIC LAPILLI TUFF
48.69	54.46	BASALT/ANDESITE

R G Carson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500 E
625 E
750 E
Gravel Road
#1 - 430919
Survey Pin
#4-430919
#3-430920
839 - 24 - 7
BL. 700N
#3-430919
#2-430920
#2 - 430919
Scale: 1 : 2500

AMAX MINERALS EXPLORATION
(A Division of Amax of Canada Limited)

DIAMOND DRILL RECORD

Hole No. 839-24-6
Sheet No. 4

Footage - Metres From	To	DESCRIPTION
0	10.24	OVERBUREN
		sand, clay, boulders
10.24	11.15	RED CHERT
		Deep red aphanitic, chert, non magnetic unit with disseminated pyrite 1% or less.
		The rock is extremely hard and appears identical to cherts in DDH 2 and 3.
		True width unknown. Lower Contact 40° to core axis.
11.15	40.42	BASALT
		Massive basalt black-green in color and highly chloritized. This rock is strongly magnetic.
		17.7 - 17.9 Flow top ≈50° to core axis.
		9.16
		Chloritized Mafic Flow rocks (basalt)
		Large blades of chlorite are seen in the core at random orientations. The rock is gray-green. 21.46 - 21.60 vesicular flow top with quartz-feldspar fillings
		The flows are highly magnetic except along their margins.
		Carbonate-pyrite veins cross the rock at random orientations. The veins are narrow (<5mm) and widely spaced.
		29.9 - 30.10
		Fault
		Core is broken up and weathered.
		38.8 - 39.0 epidote alteration
		37.00 - 40.42 Basalt is more massive, it lacks the chlorite alteration, and appears to be amphibolitized.
		Fault 40.42 20° to core axis.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-6
Sheet No. 5

Footage - Metres From	To	DESCRIPTION
40.42	43.32	CHLORITE TUFFITE
		tectonic slice → or alteration unit associated with faulting. Medium green color fairly soft. The rock is vesicular, containing minute <½mm inclusions aligned at 32° to core axis.
		The rock contains breccia fillings of quartz.
		42.75 - 43.32 Chlorite - quartz breccia
		43.32 Fault:
43.32	62.40	ANDESITE AND INTERFLOW TUFFS
		Light grey colored rock with minor carbonate veining and disseminated pyrite. Inclusions up to 5cm long are orientated at 15° to core axis.
		Bands and fracture fillings of chlorite are common, and form ≃10% of the rock.
		50.60 - 51.26 Tuff with lapilli sized fragments and pyrite 2 - 5% in a carbonate matrix.
		Fragments aligned at 40° to core axis.
		50.80 - 51.00 15% pyrite.
		53.30 - 54.10 5% disseminated pyrite
		53.30 - 53.50 possible fault
		59.45 - 62.4 Layered tuff
		Finely laminated tuff with alternate mafic and felsic laminae. Foliation and contact orientations are 45 - 50° to core axis.
		Fragments are lapilli sized and range up to 5cm. The unit is weakly magnetic. Pyrite is finely disseminated 1 - 2%. The rock is highly carbonatized and many of the light colored laminae are carbonate. The rock grades into a fragmental tuff towards the base:
		Younging to the top of the hole i.e. south.
		Lower contact at 25° to core axis.
		Start mineralized zone
62.40	66.4	CHERT
		Pinkish grey to red in color. This rock is extremely hard and has been extensively brecciated and fractured. Pyrite occurs 5 - 10% as fracture fillings and disseminations.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-6
Sheet No. 6

Footage - Metres From	To	DESCRIPTION
		Variation in core angle indicates folding.
		63.00 - 64.60 highly shattered, 10% pyrite
		Abundant carbonate.
66.49	91.01	BRECCIATED TUFF
		Layered tuff grading from felsic at the top to mafic at the base. Upper contact is sharp at 60° to core axis. Lower contact is gradational. Lapilli fragments of carbonate and feldspars and set in a grey colored matrix. The rock is hard and moderately to strongly magnetic. Sulphides are pyrite and pyrrhotite.
		66.49 - 67.32 cut by quartz + pink calcite 5% sulphides py, po. Lapilli orientated 45° to core axis.
		67.90 - 70.40 intermediate to mafic tuff cut by quartz carbonate veins and stringers of pyrrhotite + pyrite 3-5%.
		72.35 - 73.28 Quartz-carbonate breccia. Fragments of red chert and mafic rock in quartz-carbonate matrix disseminated pyrite + pyrrhotite 5-10% and in sulphide laminae. Finely brecciated. The core is faintly conductive across the width but non conductive along core axis.
		74.00 - 75.28 Coarsely brecciated with mafic fragments up to 5cm. Sulphides are 1-2% in disseminations and narrow stringer veins
		76.69 - 76.91 Brecciated + quartz veined 10% py
		81.62 - 83.62 Intermediate lapilli tuff. Finely disseminated pyrite 2-3% felspar lapilli in a chloritic matrix. Carbonate veining + fragments. Foliation 50° to core axis.
		85.62 - 86.60 Finely brecciated tuff, splotches of pyrite in quartz-carbonate matrix material. Highly siliceous tuff 2% pyrite
		88.65 - 89.40 Lapilli tuff with disseminated pyrite 2-3%. Non magnetic. Fragments 55° to core axis.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-6
Sheet No. 7

Footage - Metres From	Footage - Metres To	DESCRIPTION
91.01	102.00	GRADATIONAL CONTACT TO CHLORITE CARBONATE SCHIST
		Unit above coarsens with carbonate clasts up to 6cm. Clasts are stretched in the plane of foliation and shearing. Grades into a schist with alternate carbonate and chlorite bands. A distinctive unit easily used as a marker in previous drill holes.
		The rock is extremely soft and carries traces of pyrite.
		Fault 92.40 - 92.48 chlorite mud
		Imperial fault 62° to core axis.
		95.83 - 96.20 chlorite mud
		Carbonate constitutes 20% of the unit, decreasing down the hole.
	102.00	END OF HOLE

AMAX MINERALS EXPLORATION
(A Division of Amax of Canada Limited)

DIAMOND DRILL RECORD

Hole No. 839-24-7
Sheet No. 3

Footage - Metres From	To	DESCRIPTION
0	5.70	OVERBURDEN
		clay + boulder
5.70	6.43	RED TUFF
		Siliceous, brick red tuff; this unit is weakly magnetic and extremely hard. (6). Layering is at 30° to core axis.
		The rock has been highly shattered and many narrow (1mm) quartz veins are present both in the foliation plane and cross cutting it.
		The rock appears to be in fault contact with underlying units, as suggested by a zone of broken and weathered rock at 6.38 - 6.48 metres.
		6.07 - 6.44 ≤5% pyrite finely disseminated.
6.43	39.07	BRECCIATED CHERT AND FELSIC TUFF
		Upper contact-broken
		Lower contact-sharp at 55° to core axis.
		Brick red to grey in color with ubiquitous shattering and quartz veining in the rock.
		The rock is very hard with a great deal of free quartz. A distinct foliation due to fragment orientation or lamination is prominent. This foliation varies down the section from 35° to core axis near the top (10.5m) to 10° to core axis at 30.4m. Folding is thus indicated.
		The rock varies from intermediate to felsic in composition, and carries up to 10% sulphide in breccia sections. Fragments of red chert are the most common type in the breccia.
		Mafic fragments have been altered to chlorite and many blasts of chlorite are seen growing within the foliation planes.
		The unit is non-magnetic over most of its length, however the more mafic and intermediate sections show weak magnetism, and an occasional *lithic fragment shows magnetism (*Iron Formation).
		Quartz veins are narrow, but have a great density; ≈5/1cm. Microfaulting is evident in the offset of these veins
		6.56 - 9.08 red tuff breccia, siliceous with 2-5% finely disseminated pyrite contact or foliation at 35° to core axis.
		9.08 - 16.42 red tuff breccia, as above 1-2% pyrite lower contact at 55° to core axis.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-7
Sheet No. 4

Footage - Metres From	Footage - Metres To	DESCRIPTION
		16.42 - 18.82 Intermediate tuff felsic section. Grey color, pyrite $\leq$1%.
		18.82 - 26.05 Brick red chert, brecciated in part, with magnetite - quartz stringer veins. Large fragment of dark intermediate rock at 24.88 - 25.26. Irregular contact with alteration along the rim. pyrite <1%
		26.05 - 26.66 Mafic/Intermediate tuff Lapilli tuff containing fragments up to 5mm in size. Traces of pyrite are present.
		26.66 - 30.09 Red tuff - breccia Siliceous tuff hard and showing erratic magnetism. Pyrite ≈1%
		30.09 - 30.89 Intermediate lapilli tuff Lapilli average 10-15mm in size and are elongate. Alignment at 10° to core axis. Contacts are brecciated and contain chert fragments in a sulphide matrix 80° to core axis. Pyrite ≈1-2%
		30.89 - 39.07 Brecciated tuff Polymictic tuff containing fragments of many rock types. Mafic fragments are highly magnetic and occur up to 5cm in size. Sulphides are locally up to 5% in small breccia
		zones. ie = 30.12 - 30.16 32.76 - 33.00 34.32 - 34.57
		37.20 - 37.61; 4-5% disseminated pyrite in quartz-carbonate veins. Finely brecciated rock showing extreme carbonatization
		37.61 - 39.07 1-2% pyrite Contacts at 55° to core axis.

AMAX MINERALS EXPLORATION
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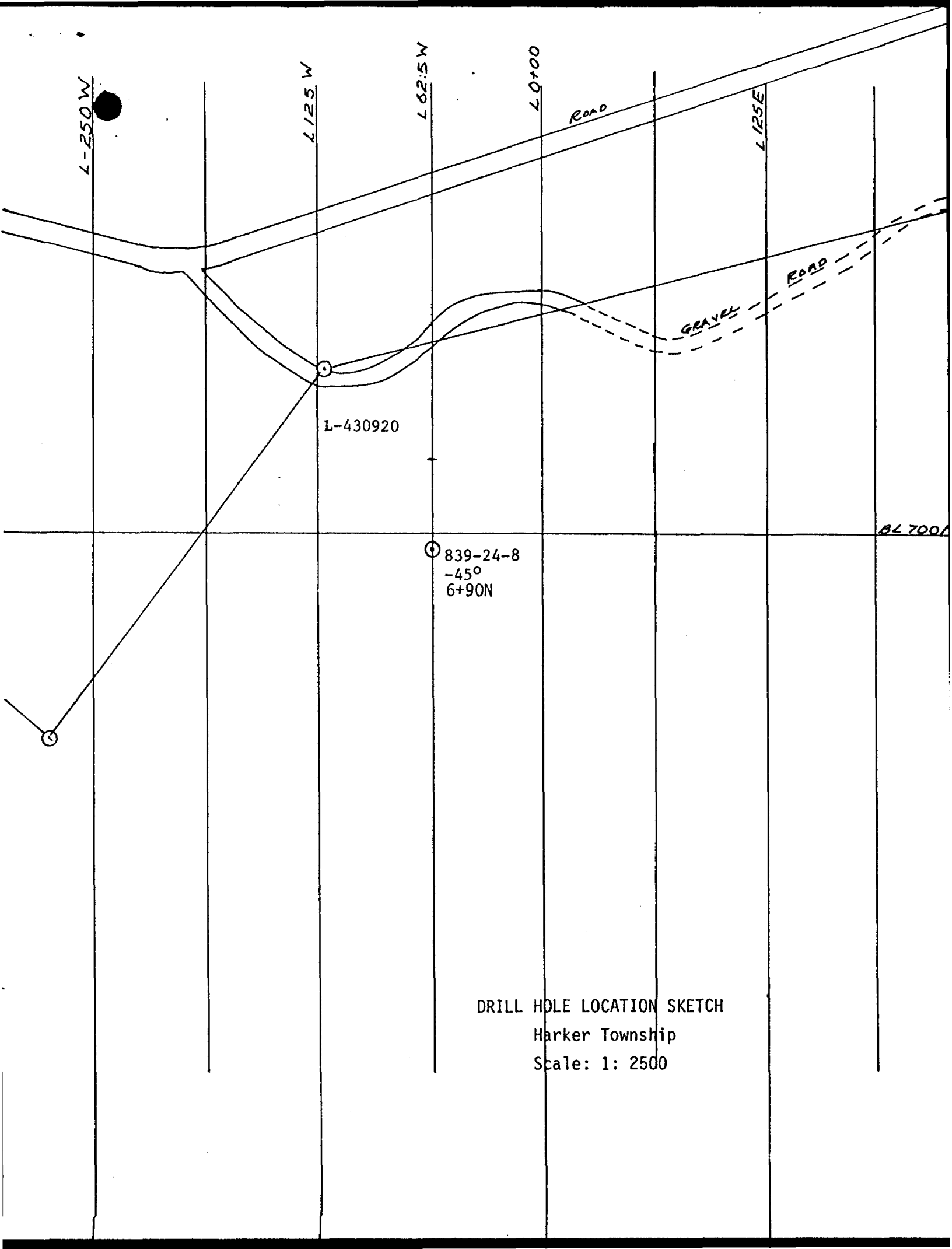
DIAMOND DRILL RECORD

Hole No. 839-24-7
Sheet No. 5

Footage - Metres From	To	DESCRIPTION
39.07	45.00	CARBONATE - CHLORITE BRECCIA
		Fragments of carbonate 1-5cm is size in a chlorite matrix. Cb:Cl = 2:3
		Fragments become stretched and gradually the unit becomes banded.
		Disseminated pyrite <1%.
45.00	54.00	CHLORITE - CARBONATE SCHIST
		As described in previous drill holes.
		Alternate bands of chlorite and carbonate.
		A very soft non magnetic rock. Foliation is at 55-60° to core axis.
		Small scale Folding is apparent in the carbonate layers
		Fold axis are at 90° to core axis.
		48.05 - 48.11 Fault - trace of the Imperial Fault. Gouge contains chlorite mud.
	54.00	END OF HOLE



DRILL HOLE LOCATION SKETCH
Harker Township
Scale: 1: 2500

AMAX MINERALS EXPLORATION
(A Division of Amax of Canada Limited)

DIAMOND DRILL RECORD

Hole No. 839-24-8
Sheet No. 2

Footage - Metres From	To	DESCRIPTION
0	3.00	OVERBURDEN sand + boulders
3.00	10.02	DIABASIC BASALT Coarse grained and strongly magnetic unit with grey-green mottled colour. The rock contains disseminated pyrite with concentrations on chlorite filled fractures. The unit is chilled towards the base. Sulphide content increases towards the contact. Strongly magnetic rock representing the peak seen on L62W magnetic profile.
10.02	11.38	CHERT BRECCIA Contact breccia with upper contact sharp at 84°. Quartz carbonate and pyrite occur as breccia fillings, with pyrite averaging 5-10% over the length. The rock is light grey, with an occasional pink tinge. The rock is extremely hard and is non-magnetic. 10.85 - 11.10 - Visible gold - coated on pyrite surface along with pyrite oxide. Vuggy quartz vein material with 10-15% pyrite.
11.38	19.96	CHERT The upper contact is gradational and the lower contact is sharp at 37° to core axis. Aphanitic rock, extremely hard and non magnetic. The rock is brecciated and gash veined in part. Brecciated sections contain up to 3% pyrite. Quartz and carbonate are the vein fillings. Foliation (laminae) occur at 45° to core axis. 11.38 - 12.63 brecciated 18.38 - 19.96 brecciated
19.96	35.56	ANDESITE Medium grey, fine grained rock. This rock is weakly magnetic and becomes fine grained towards the margins.

AMAX MINERALS EXPLORATION
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DIAMOND DRILL RECORD

Hole No. 839-24-8
Sheet No. 3

Footage - Metres From	To	DESCRIPTION
		The lower contact is at 35° to core axis. Veining is uncommon but narrow quartz - carbonate sphalerite veins are seen. Disseminated pyrite occurs in trace amounts.
35.56	44.44	CHERT
		Grey to pink in colour, extremely hard and non-magnetic. Fractured sections contain disseminated pyrite <1%. Fractures are chlorite coated. Bending occurs in the rock at 45-50° to core axis. Lower contact at 35° to core axis.
44.44	48.69	MAFIC LAPILLI TUFF
		Grey coloured rock with small lapilli of feldspar or other leucocratic minerals. Foliation is at 35° to core axis. The rock is extremely hard (6 - 6.5). This unit does not appear to be mineralized. The lower contact is brecciated and at 65° to core axis. Chlorite pyrite and carbonate occur on the contact in 1cm wide margin.
48.69	54.46	BASALT/ANDESITE
		Fine to medium grained grey - black rock chilled at the top and becoming progressively coarser grained. The rock contains prismatic crystals of amphibole or pyroxene. Weak magnetism is noted in the rock.
	54.46	END OF HOLE