

1-10

Normin/Boise Cascade

International Falls

Secretariat

Folder: 1

Doc #: 10

Diamond Drill Log

S-2



DIAMOND DRILL HOLE LOG

Page 1 of 1

Company Normin Mining Inc.

LEGEND

Rdc-dac tuff		fragments - lapilli	
dac-and tuff		subides	
mass Rdc		gr vein	
chert beds mag			

SURVEY

Footage Bearing Inclination

100' 45°

740' 38°

Property <u>Secretariat</u>	Hole No. <u>5-2</u>
Location _____	Bearing at Collar <u>160°</u>
_____	Inclination at Collar <u>-45°</u>
Coord. - Collar N <u>64005</u>	Length <u>452'</u>
E <u>60400E</u>	Core Size <u>NØ</u>
Elev. - Collar _____	Date started _____
Completed _____	Logged by _____

LITHOLOGY, ALTERATION, MISC.

FT.

GRAPHIC LOG

MINERALIZATION

RECOVERY

ANALYTICAL

BOX

Run Run length Core % Sample Interval Au ppb Ni ppm Cu ppm Zn ppm Pb ppm

0-4' overburden

1m → Tab pyritic rdc-dac tuff. Commonly banding, with abundant chert beds. Locally chloritic. Siliceous, sericitic. Light gray-green. Locally finely fragmental.

1-2% disscom py throughout unit. 7% 10% locally, to mag, and

chloritic, sericitic, mag-bearing rdc-dac tuff. Local thin, Ran tuff. Banding.

to 17% mag throughout to py, local tuff

Reddish chert, py, mag, to cp

4% py, 2% po, 2% mag, to cp

Siliceous M.B. rdc-dac tuff, gray, with abundant chert beds. Reddish chert, py, mag.

5% po, 1% py, local reman

Chlorite - altered rdc-dac tuff, patchy chl-alter - stubby chl xts - mass. v. grad. chl, few salts. Local mass. apophytic, apophytic, gray fel-int intrus. or flow

to py

Interbedded chloritic - siliceous rdc-dac tuffs. M.B., very little salt, local mass. apophytic, apophytic fel-int intrus. or flow. locally finely fragmental

to disscom py

some + chl increase downhole

thin matrix tuff interbeds met. comp. incr. downhole

452' ECH



DIAMOND DRILL HOLE LOG

Page 1 of 1

Company Norman Mining Inc.

LEGEND

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

SURVEY

Footage	Bearing	Inclination
100'		45°
440'		35°

Property <u>Secretariat</u>	Hole No. <u>5-2</u>
Location _____	Bearing at Collar <u>160°</u>
	Inclination at Collar <u>-45°</u>
Coord. - Collar N <u>6+005</u>	
E <u>6+005</u>	Length <u>452'</u>
Elev. - Collar _____	Core Size <u>N9</u>
Date started <u>2-17-86</u>	
Completed _____	Logged by _____

LITHOLOGY, ALTERATION, MISC.	FT.	GRAPHIC LOG	MINERALIZATION	RECOVERY				ANALYTICAL						BOX
				Run	Run length	Core	%	Sample	Interval	Am ppb	Ni ppm	Zn ppm	Pb ppm	
0-4' overburden	0													
lam to B rds - dal ff. chert beds or flattened frags common, locally ch. lentic, locally bedding. chert lenses are commonly bedding. Min. dissem. py common throughout. Siliceified, light gray-green	10	45°	Dissem mag & 190 thrust unit Dissem py & 190 thrust unit Carb. beds + veins - weather brown - thrust					DO/4320	45	44	125	103	11	
Fine lapilli tuff - teptire lap. - 150' cal. bed in	20							321	45	36	72	157	2	
vt. grad. lam. rds - cherty beds alternate w/ seric. beds	30							322	45	39	26	136	42	
bedded py, dissem mag, seric., bi.	40		270 mag					323	10	45	44	120	2	
Qz pods - beds?	50		270 py, 190 mag					324	10	42	52	87	2	
1" th bx zone, lam - lam lith. frags w/ ben - silice	60		190 py					325	10	26	34	52	42	
Dissem. mag, sericitic, w/ grad. light green-gray, mass	70		1 am th py bed 1-3% mag					326	20	87	68	12	3	
1" qz in seric. mag decreasing siliceified	80		370 py					327	50	36	54	71	42	
well bedded - sericitic + silice beds alt - biotitic rusty stain - brown carb + py	90		6" qz on 270 py, 190 ank 42 py, 190 mag					328	45	58	80	78	4	

LITHOLOGY, ALTERATION, MISC.	FT.	GRAPHIC LOG	MINERALIZATION	RECOVERY				ANALYTICAL						BOX
				Run	Run length	Core	%	Sample	Interval	Al ppm	Ni ppm	Cu ppm	Zn ppm	
cherty, siliceous 270 mag, v. f. grad. rdc qz + musc + py along fractures pyritic, to 570, locally - dissem. bedded in v. f. gray, cherty rdc th 6" 370 mag - sericitic pyritic v. f. py in qz vein brown carb in vein dissem mag in seric rdc - due th siliceous - pyritic sericitic - py + mag + py top alt 1.5-1 mm 370 rdc th sparse qz + top alt little mag or py, siliceous sericitic, pyritic, biotitic qz vein w/ py, bio, chl qz - musc vein siliceous, sericitic siliceous, thin chert beds seric - dissem mag pyritic lam. rdc th - little seric.	50 60 70 80 90	450° 450°	270 py 3-570 py 2-1070 py 370 mag 2-370 py - bedded 270 py 570 py 370 mag, 170 py 270 py bed 370 py + py + mag 270 mag 7- py + py 470 py 2-1070 py 2-370 py 270 mag 1-270 py 170 mag 4" 570 mag py in lensa tetra lean tetra					Dave 329 330 331 332 333 334 335 336 337 338 339 340 341 342		45 45 10 45 25 5 45 25 45 45 25 45				

[illegible]

LITHOLOGY, ALTERATION, MISC.	FT.	GRAPHIC LOG	MINERALIZATION	RECOVERY				ANALYTICAL						BOX
				Run	Run length	Core	%	Sample	Interval	Au ppb	Ni ppm	Zn ppm	Pb ppm	
rdc - dac ff. - strongly silic. - willy seric. abund. chert beds wk horn	190							357		75	44	90	75	2
cherty - siliceous mass rdc - aphanitic, aphyric, gray. White carb. - loose blks - 1 cm diam. + needle white marl - amorph?	200							358		105	49	77	70	7
silic. rdc ff. - lam, chert beds, locally band-naged, gray, v. hy.								359		45	70	60	107	17
bedding - qz + musc			tr. dissem py					360		<5	23	88	87	18
bedding - qz, musc, py, chl														
4" 37% mag sericitic	210		37% mag											
po - rich chert - In B white - 1 gray chert + po + py + mag. band. chert beds		450°	49% po - bdd 57% po					361		45	45	182	347	5
chert frags in bedded silic. tuff thin chert beds			po + py; dissem -> bdd - local round into vults dissem py 27% po vein or frag 1" bedded. po 47%					362		45	39	156	407	5
siliceous rdc ff. - lam, gray, hard	220							363		45	19	70	119	3
chlorite - altered rdc ff. - patchy chl. altered, stubby, chl. sils + local v. hy. mag. chl. chl. 2-50% of v. hy. few salts								364		10	23	107	119	2
sericitic - 17% mag chloritic	230		17% mag					365		20	31	72	100	2
								366		25	65	40	77	4
rdc flow or intrus - mass, gray, aphanitic, aphyric qz und. 1.6 m	240							367		45	58	30	58	42
4" qz in								368		5	57	116	80	4
peg. on - pink top - qz + musc		460°						369						
chl - altered rdc ff. - v. hy. lam - In B 1/2" biotite bc inter - interlam.	250							370		45	25	104	90	3
tr. dissem mag - v. hy.														
mass - dac - and - light green chloritic - seric. - w. but, w/ 19" - 19" carb. vnt. scuttling	260		2-37% mag							45	22	110	107	3

5

[illegible]