A REPORT ON

OVERBURDEN DRILLING

LOWER DETOUR LAKE AREA (M2603)

AND HOPPER LAKE AREA (M2601)

BY

C. ROCKINGHAM

WESTMIN RESOURCES LIMITED

CLAIMS: P.549918-931 incl.
P.553303-483 incl.
P.553503-574 incl.
P.577751-774 incl.
P.577792-810 incl.
P.575672-673 incl.

N.T.S. 32-E-13

July 1981.

C. Rockingham M.Sc.

INTRODUCTION:

During the winter of 1981 a program of overburden drilling was completed by Westmin Resources Limited (formerly Western Mines Limited) on claims held in the Lower Detour Lake area (M2603) and Hopper Lake area (M2601). These claims are north of Detour Lake, north and west of Lower Detour Lake and east of Hopper Lake.

PROPERTY:

The property consists of 312 unpatented mining claims which are located in the Hopper Lake and Lower Detour Lake areas. The claims are as follows:

P549918 - P549931
P553303 - P553483
P553503 - P553574
P577751 - P577774
P577792 - P577810
P575672 - P575673

FIELD PROGRAM:

A field program of overburden and bedrock drilling was carried out under contract to Bradley Bros. for Westmin Resources Limited.

During the period January 20 to February 6, 1981, 61 overburden drill holes were drilled. Total footage drilled was 5,473 feet. All overburden was sampled except the clay sections. The depth of holes varied from 192 feet in hole DO-81-09 to 14 feet in hole DO-81-56.

The location of the holes are as follows:

Drill Hole	Claim
DO-81-01	P553334
-02	P553327
-03	P553312
-04	P553327

Drill Hole	Claim
DO-81-05	P553332
-06	P553332
-07	P553552
-08	P553477
-09	P575672
-10	P553475
-11	P553308
-12	P553306
-13	P553546
-14	P553547
-15	P553533
-16	P553531
-17	P553511
-18	P553506
-19	P553448
-20	P553446
-21	P553444
-22	P553405
-23	P553405
-24	P553370
-25	P553370
-26	P549927
-27	P553365
-28	P553374
-29	P553402

Drill Hole	Claim
DO-81-30	P553419
-31	P553441
-32	P553452
-33	P553453
-34	P553503
-35	P553515
-36	P553515
-37	P553523
-38	P553536
-39	P553543
-40	P553556
-41	P553556
-42	P553303
-43	P553316
-44	P553323
-45	P553323
-46	P553336
-47	P553342
-48	P553338
-49	P553321
-50	P553321
-51	P553318
-52	P553561
-53	P553558

Drill Hole	Claim
DO-81-54	P553558
-55	P553558
-56	P553541
-57	P553538
-58	P553521
-59	P553461
-60	P553467
-93	P553332

The work is being filed under Section 86-18 of the Mining Act. An assessment credit of 14,501.94 days is submitted against these claims.

COST SUMMARY: Jan 30 - Feb 6/81

1) Bradley Bros. as per Invoice Supplies, etc. Feb. 1 to Feb. 28	$ 30,366.70
Minus	
Food for Labelle personnel	1,701.00
Cook tent	1,265.00
Oil stove	609.30
Prefab lavatory	162.00
2 Empty drums	46.00
Cook's wages Feb. 6-28	2,061.84
Cook's assistant Feb. 6-28	1,037.14
Radio rental " "	107.14
Skidoo " "	714.28
Tent rentals " "	1,714.28
	$20,948.72

Drilling Invoice Feb. 1 to Feb. 28	$ 105,712.50
Minus	
Feb. 20 24 man hours	456.00
Move equipment between areas	1,870.00
197.5 hrs. drilling @ $225/hr.	44,437.50
14 hours breakdown @ $170/hr.	2,380.00
15 Tricone bits @ $625	9,375.00
3 Adaptors @ $495	1,485.00
7 Rods @ $475	3,325.00
66 hrs.walking time @ $19	1,254.00
Man hours Feb. 7, 13	912.00
	$40,218.00
Drilling Invoice January	$83,412.00
Materials and Supplies Invoice January	$34,050.59

2) Westmin Resources internal charges and contract geologist*

C. Rockingham	24 days @ $150/day	$ 3,600.00
D. Robinson	17 days @ $175/day	2,975.00
*G. Thomas	22 days @ $175/day	3,850.00
D. Lewis	22 days @ $66.30/day	1,458.60
M. Mahaffy	23 days @ $58.50/day	1,345.50
L. Nutter	22 days @ $58.50/day	1,287.00
Field Administration	24 days @ $122.25	2,934.00
Office Report and administration	3 days @ $272.25	816.75
Project travel (truck rental, airline tickets)		1,082.77
		$19,349.62

3) Overburden Management Ltd. as per Invoice

628 samples - 55 bedrock samples @ $20.00	$ 11,460.00
55 bedrock samples @ $2.00	110.00
Shipping expenses	286.55
" " -$23.10 (X-Ray Assay)	1,446.40
Sample buckets, bags, seives, etc.	1,043.17
	$ 13,302.96

4) Bondar-Clegg and Co. as per Invoices

Analysis of heavy mineral concentrates	$ 5,689.90
Analysis of bedrock samples	557.25
	$ 6,247.15

Credit

Total cost against assessment	$217,529.04
Total footage	5,473.00
Total days credit as per Section 86-18 ($15/day max. 60 days/claim)	14,501.94

Total days credit against claims is 46.48 days per claim

Credit is being applied against the following claims:

P549918 - P549931
P553303 - P553483
P553503 - P553574
P577751 - P577774
P577792 - P577810
P575672 - P575673

DESCRIPTION OF OVERBURDEN AND
BEDROCK DRILLING AND SAMPLING:

The equipment was a Longyear drill converted to dual tube reverse circulation. It is mounted on a Nodwell FN-160 carrier. Power for the drill is taken from the drill engine with aid of hydraulics. The drill string comprised 9 foot sectional dual-tube rods of 2 15/15" size and a standard tri-cone 15/16 bit. Rapid and reliable penetration and recovery of glacial overburden is achieved with a combination of air and water and a 20 foot continuous feed.

Water is pumped down between the outer and inner tubes to exist near the bit cone. The resultant mixture of water and sediment is returned up the centre tube of the drill string and discharges through a 1 foot diameter steel funnel (cyclone) into a $\pm$ 300 gallon water recovery tank, thus allowing for recycling of drill water.

Silt, sand gravel are collected below the discharge cyclone in 5 gallon plastic pails which rest upon a steel grate lying on the top of the recovery tank. The clay size fraction is allowed to overflow the pail into the tank. Figure 1, which is reproduced from G.S.C. Open File #116, 1972, is a schematic version of this sampling system.

A 10 mesh Tyler screen is placed over the bucket to allow the geologist to continuously log the nature of the coarser

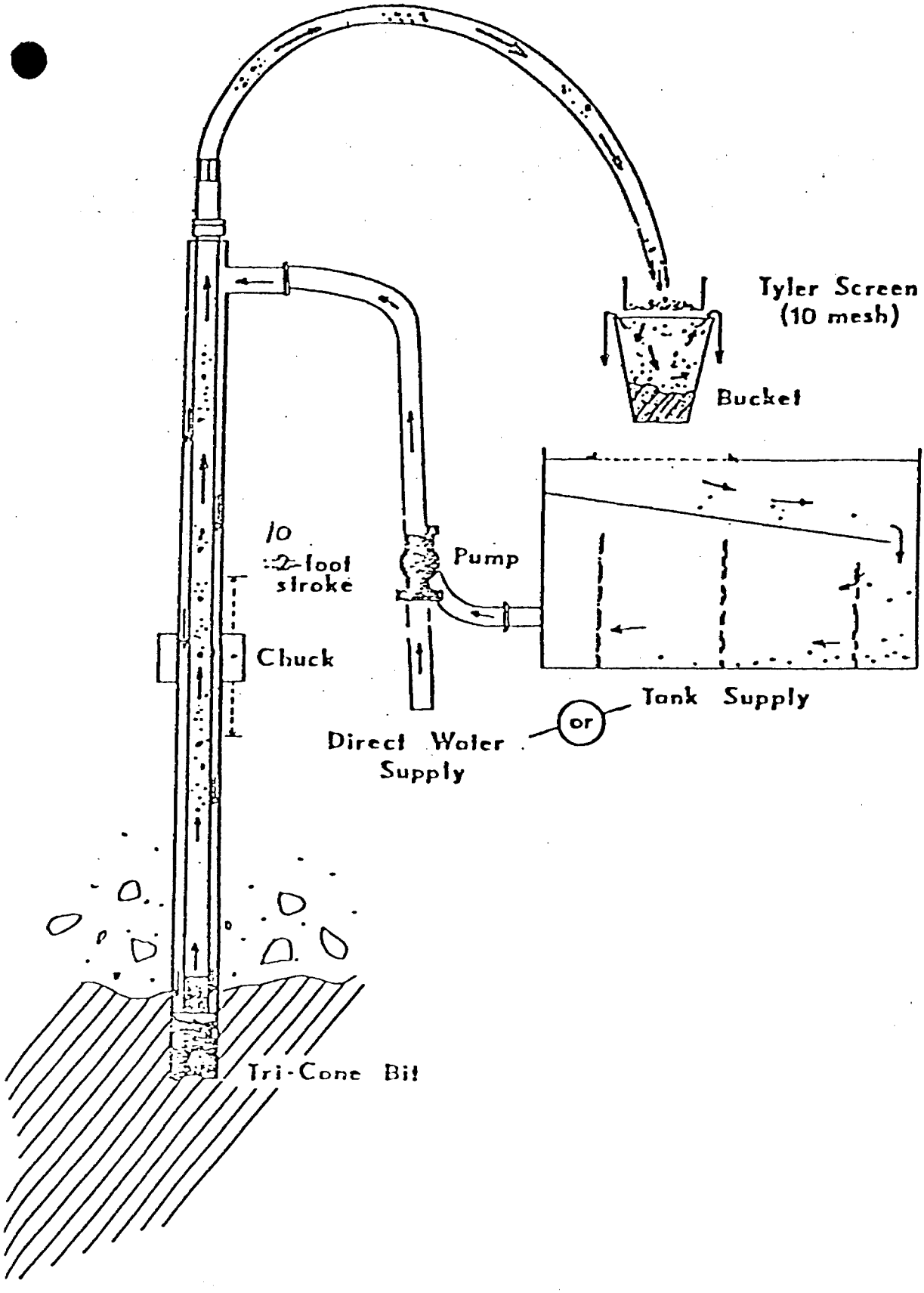


FIGURE 1 Schematic Section of Dual Tube Drilling System

drift particles, i.e. sand, gravel and till chunks, and a portion of the +10 mesh fraction may be temporarily retained for field geological examination. In normal practice, however, the +10 mesh fraction is dumped into the bucket at the end of each run so that all sediment, exclusive of clay fines, are available for laboratory investigation. Samples are bagged from each run at periodic intervals and transported to a central laboratory.

Drilling continues below the glacial drift section into bedrock for depths of 1 ft. to 5 ft. The +10 mesh bedrock chips, which are up to 1/2" in diameter, are collected on the Tyler screen during drilling and kept separately from -10 mesh bedrock fines which pass into the sample bucket.

LABORATORY TEST WORK:

The samples, as received from the drill, are sent to the Overburden Management Ltd., in Ottawa, for heavy metal separation. The samples are passed through a 10 mesh screen and the -10 mesh part (most of the sample) is passed over a shaking table and the heavys and lights are separated. The heavy fraction is dried, mixed with a solution of methylene iodide of 3.35G and the heavy part of the heavys are collected. A 3/4 split of the heavy segment is then sent to Bondar-Clegg Laboratory for analysis of copper, zinc, lead, nickel, silver, and gold.

Bedrock chips from each hole are also collected, examined and analysed.

July 10, 1981.

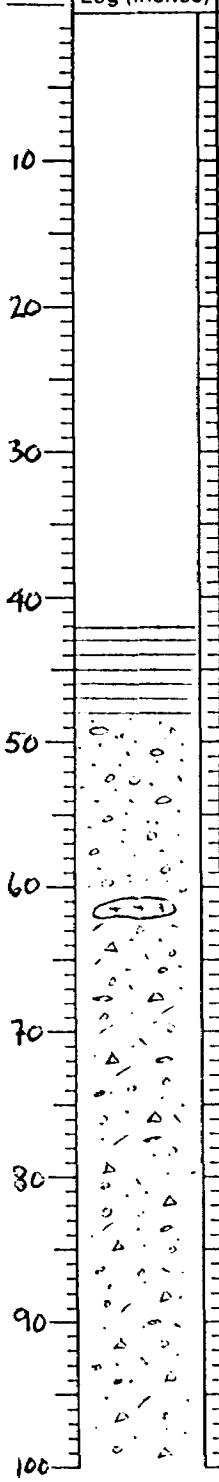
WESTERN MINES LTD.

GEOLOGIST: F. Thompson DATE: January 21,1981 HOLE # DO-81-01

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Gov't. Line Winter Road

BIT NO.: 62316 NTS: 32 E-13



Feet	Sample No.	Overburden Description	Notes & Analyses
		0-30' No Return	
30	01	30-42' Poor return - fine sand	Cu 100 Pb 33 Zn 115 Ni 31 Ag 0.6 Wt I.S. Au -
40	N.S.	At 42' Water swivel packing freed from return hose 42-48' Grey Clay - soft smooth non-gritty.	
50	02	48-61' Gravel - Cobbly with medium grained sand matrix. 50% granite + gneisses; 30% volcanics and sediments: 15% limestone.	113 18 64 35 0.4 6 65
60	03		98 35 57 45 0.2 7 165
	04	61-115.5' Till - Cobbly with gritty grey clay lumps 60-70% volcanics + sediments; 20% granites + gneisses: No limestone. Granites + gneisses content higher 61-66.	77 18 44 28 0.2 5 140
70	05		64 12 29 24 0.1 4.3 60
	06	Gabbro boulder 61-62.5 Abundant clay lumps 61-79 and 92-95'. Two large volcanic cobbles at 79'.	45 13 36 18 0.2 3.6 95
80	07	Only minor clay in matrix 79-84'.	48 22 28 18 0.1 4.9 605 1 grain of v.g. 250μ transported
	08		39 13 32 18 ND 3 65
90	09	Sharply higher argillite content 96-104.	74 141 88 35 0.3 1.45 70
100	10		

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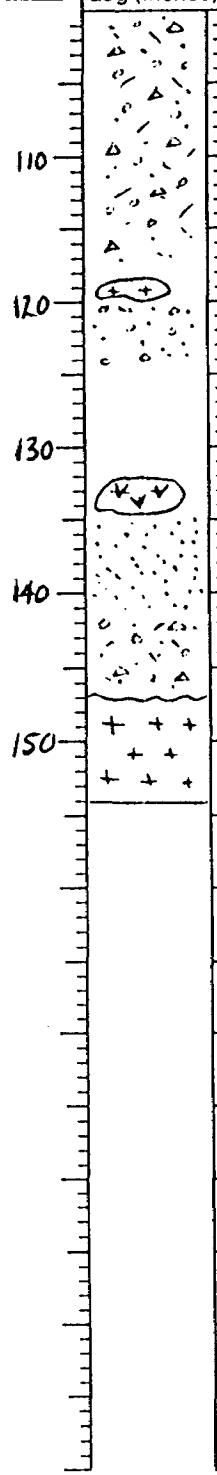
WESTERN MINES LTD.

GEOLOGIST: F. Thompson DATE: January 21,1981 HOLE # DO-81-01

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. line east of Winter Road

BIT NO.: 62316 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
10	Clay content increasing to 115'.	69	23	33	34	0.1	7.8	750
11		73	28	38	30	0.2	5.6	250
12	Pile of cobbles and boulders (primarily volcanics) 115-118' white granite boulder 118-119.5.	186	24	52	52	0.2	2.1	170
13		240	60	140	142	1.2	4.25	530
14	119.5-134' Gravel - Cobbly with medium sand matrix 50% volcanics + sediments, 20-30% granites + gneisses, 15% limestone. Poor return 123-132' - bit blocked.	285	50	102	86	0.7	7.0	835
N S	134-142' Sand - medium grained with thin clay beds.							
15		172	33	76	62	0.4	10.0	130
16	142-147' Till - Cobbly - almost no matrix - primarily volcanics similar to bedrock.	220	51	64	116	1.3	10.0	230
17	147-154' Bedrock - Diorite(?) Mottled light and dark green - soft trace pyrite. Quartz eyes in feldspathic and chloritic matrix.	3	2	27	18	ND	-	5

C. Rodrigues

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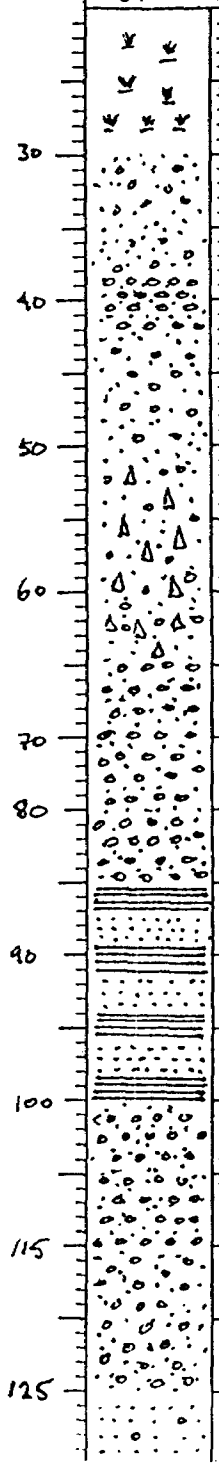
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham/D. Robinson DATE: Jan. 21/81 HOLE # DO-81-02

SAMPLER: D. Lewis CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Winter Road

BIT NO.: _____ NTS: 32E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
		0-32' - Swamp - humus, clay pebbles, very sparse return.								
30	DO-81-02 1	32-38' - Pebbly Sand - fine to medium sand matrix, <50% volcanic & sediment 35% granite, <15% limestone		88	19	50	28	0.2	7.9	45
40	DO-81-02 2	38-42' - Gravel - clast dominant 50% volcanic, sediment, <30% limestone.		120	24	60	36	0.2	3.5	230
	DO-81-02 3	42-50' - Pebbly Sand - fine sand and matrix, volcanic, sedemint, granite, very minor limestone.		76	30	35	24	0.2	9.0	195
50	DO-81-02 4	50-58' - Pebbly Till - fine sand & clay matrix, volcanic, sed. granite & very minor limestone.		80	16	52	25	0.2	9.5	10
60	DO-81-02 5	58-65' - Till - very minor clay, fine sand - silt matrix coarse pebbles.		92	18	38	32	0.3	10.0	210
	DO-81-02 6	65-79' - Gravel - cobbly, no matrix, 60% granite, 5% limestone, no clay, minor fine to medium sand.		300	17	150	37	0.3	8.5	10
70	DO-81-02 7	79-86' - Gravel - very minor return.		128	18	52	30	0.2	6.5	15
80	DO-81-02 8	86-96' - Clay and Sand - alternating beds.		100	16	42	30	0.1	9.0	95
90	DO-81-02 9	96-106' - Clay and Sand - alternating fine sands with clay.		93	16	35	26	0.1	10.0	10
100	DO-81-02 10	106-115' - Sandy Gravel - predominatly volcanic clasts, 60% granite fine quartz - rich sand - grey-white (till balls).		158	50	53	35	0.2	5.4	130
115	DO-81-02 11	115-125' - Gravelly Sand or Pebbly Sand mixed volcanic and sediment pebbles, fine sandy matrix 30% granite.		132	17	45	30	0.2	6.5	25
125	DO-81-02 12	125-140' - Sand 99% sand, 1% volcanic & sed. pebbles, minor + 10.		76	15	36	28	ND	8.5	95

1 grain v.g. 150μ transported

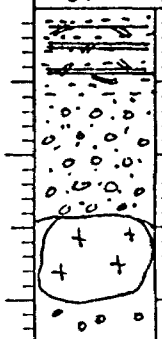
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham/D. Robinson DATE: Jan. 21/81 HOLE #DO-81-02

SAMPLER: D. Lewis CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Winter Road

BIT NO.: NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	DO-81-02 13	140-151' Sand Clay - fine grey sand and grey clay balls, +10-10% 60% mafic volcanic.	Cu 74, Pb 19, Zn 37, Ni 22, Ag ND, Wt 8.0, Au 300
	DO-81-02 14	157-159' Gravelly Sand - grey-white sand matrix, mixed pebbles, 99% + 10, 60% granitic, 40% volcanic, <<1% limestone.	Cu 62, Pb 12, Zn 23, Ni 20, Ag 0.1, Wt 8.5, Au 40
		159' Granitic boulder End of hole.	

C. Rockingham

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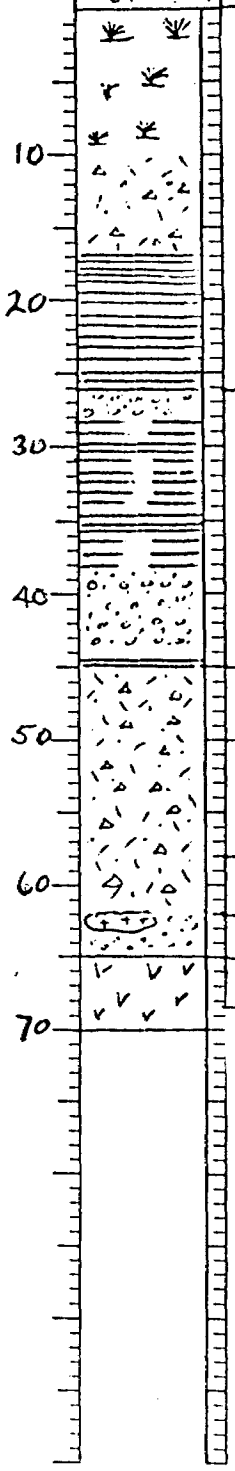
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham/G. Thomas DATE: Jan. 22/81 HOLE # DO-81-03

SAMPLER: L. Nutter/M. Mahaffy CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: Bradley Bros. D. Jodouin/ G. Gagne FIELD LOCATION: Gov 't.line east of Winter Road

BIT NO.: 62136 NTS: 32 E-13



Sample No.	Overburden Description
	0-10 Organic - very little return.
	10- 17 Cochrane Till 98% grey clay, gritty clay balls. 2% limestone pebbles.
	17-38 Clay + Silt Grey clay in rope like strings. Silt - grey with clay interbeds.
01	
	38-45 Gravel 30% limestone 50% granite pebbles minor mafic cobbles.
02	45-65 Till Polymictic pebbles + clay balls, more clay than pebble
03	limestone cobble - clay + gravel may be stratified.
04	- diorite cobble
05	- medium to coarse sand
06	Bedrock - Mafic volcanic.

Notes & Analyses

	Cu	Pb	Zn	Ni	Ag	Wt	Au
01	90	38	105	32	0.4	9.5	55
02	122	43	122	32	0.9	9.0	10
03	156	40	119	36	0.6	7.5	5
04	134	36	139	37	0.4	5.0	20
05	265	26	80	58	0.4	6.0	20
06	91	ND	70	20	ND	-	L5

C. Rockingham

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 22, 1981 HOLE # DO-81-04

SAMPLER: M. Mahaffy CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. line east of Winter Road

BIT NO.: B62318, B62316, B62321 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses
10				
		1	0-70' - Gravel 0-20' - Gravel - Medium sized pebbles. Grey silt and clay matrix. Clay as small balls.	Cu 98, Pb 28, Zn 116, Ni 29, Ag 0.3, Wt 9.0, Au 65
20		2	20-30' - Gravel - medium sized polymictic pebbles; limestone up to 5%. Mafic cobble. Grey silt and clay matrix.	Cu 130, Pb 20, Zn 70, Ni 41, Ag 0.3, Wt 6.9, Au 10
30				
		3	30-50' - Gravel - Cobbles mafic and granitic; minor limestone. Grey silt and clay matrix, fine and medium sand abundant.	Cu 96, Pb 28, Zn 46, Ni 28, Ag 0.2, Wt 10.0, Au 25
40				
50		4	50-60' - Gravel - fine, medium sand matrix, silt; limestone pebbles up to 5%.	Cu 110, Pb 20, Zn 49, Ni 21, Ag 0.3, Wt 9.9, Au 35
60		5	60-70' - As above.	Cu 60, Pb 13, Zn 29, Ni 30, Ag 3.6, Wt 7, Au 185 1 grain v.g. 150μ transported
70		6	70-80' - Till - Grey clay matrix. Mafic cobbles and lesser granitic pebbles. 73-75' - less clay, increase in fine sand.	Cu 115, Pb 25, Zn 38, Ni 28, Ag 0.2, Wt 7, Au 120
		7	75-80 - Mafic cobbles, minor limestone	Cu 88, Pb 13, Zn 36, Ni 28, Ag 0.2, Wt 5, Au 590
80		8	80-105' - Gravel - Fine and medium sand, minor silt matrix. 82' - Mafic cobbles - Contain epidote. Argillite cobbles and boulders; some granitic.	Cu 61, Pb 8, Zn 34, Ni 20, Ag ND, Wt 8, Au 25
90		9	90-100' - Cobbles and boulders, argillaceous, altered. Minor fine sand matrix. Resembles a cobble-rich gravel. 92' - Epidote boulder.	Cu 48, Pb 13, Zn 23, Ni 22, Ag 0.2, Wt 4.05, Au 210
		10	95-96' - Granitic boulder. 96-97' - Argillaceous boulder-contains white vein quartz. Trace pyrite. 97' - Till horizon - clay balls up to 30%.	Cu 100, Pb 14, Zn 33, Ni 37, Ag 0.6, Wt 9.5, Au 15 1 grain v.g. 300μ transported
100				

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 22, 1981 HOLE # DO-81-04

SAMPLER: M. Mahaffy CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. line east of Winter Road

BIT NO.: B62318 B62316 B62321 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses						
				Cu	Pb	Zn	Ni	Ag	Wt	Au
		11	100-105' - Gravel - pebbles and coarse sand matrix.	230	22	62	68	0.4	6.0	100
110			105-109' - Till - Abundant clay balls; mafic pebbles.							
		12	109-114' - Bedrock - Mafic tuff pale green, schistose, chloritic minor quartz veins.	77	2	70	43	ND	-	L5
120			114' - End of Hole.							

C. Rodrigue

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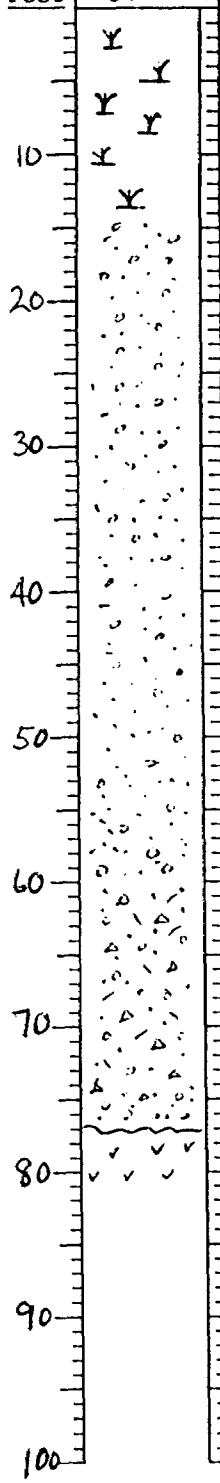
WESTERN MINES LTD.

GEOLOGIST: G.Thomas, F. Thompson D. Robinson
DATE: January 22,1981 HOLE # DO-81-05
SAMPLER: M. Mahaffy
CLAIM GROUP: Detour PROV.: Ontario
CONTRACTOR/ DRILLER: G. Gagne
FIELD LOCATION: Gov't. Line East of Winter Road
BIT NO.: B62321 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-15' - Swamp	
	1	15-60' - Gravel - Fine to medium sand matrix. 17-18' - Granitic boulder	
	2	18-24' - Gravel and boulders - fine sand and silt matrix - grey; granitic, minor limestone and greenstone, altered.	
	3	24-30' - Gravel - Pebbles, cobbles and boulders mainly granitic; minor limestone. Small clay bed at 29.5'.	
	4	30-35' - Gravel up to 50% limestone; fine to medium sand matrix. 34'-narrow gravelly till layer, clay balls;	
	5	limestone, pink granitic cobble. 35-40' - Gravel - Volcanic; quartz, granitic and argillaceous pebbles.	
	6	Fine sand and silt matrix. Return lost at 44'; recovered at 48'. 48-54' - Gravel - Fine sand and silt matrix, minor clay. 48' - Clay matrix - coarse mafic sand component. 53' - Coarse grey - brown sand.	
	7	54-60' - Gravel - Minor limestone, medium and coarse sand matrix.	
	8	60-75' - Till - 50% Grey clay balls for first 2 ft. Sandy and gravelly; mafic pebbles, minor limestone.	
	9	70-75' - Till - Boulders in clay - up to 5% clay balls; granitic. Medium sand matrix.	
	10	75-77' - Gravel - Polymictic pebbles; medium to coarse sand matrix.	
	11	76-77' - Sand bed. 77-81' - Bedrock - Intermediate volcanic massive, angular chips, black to purplish, very hard and siliceous 5% calcite veins.	

Sample No.	Cu 145	Pb 28	Zn 81	Ni 126	Ag 0.2	Wt 3.1	Au 15
2	102	16	64	50	0.2	8.0	545
3	100	20	63	32	0.3	2.5	20
4	100	20	66	29	0.3	5.25	1570
5	85	19	36	28	0.2	2.75	35
6	80	25	32	26	0.2	7	55
7	95	21	27	29	0.2	9	815
8	85	12	24	21	0.2	4.3	865
9	45	55	28	23	0.3	3.85	60
10	48	12	21	20	0.5	10	14975

1 grain v.g. 200μ transported

5 grains v.g. 1-600μ
1-250μ all irregular
3-150μ in shape

C. Rodrigues

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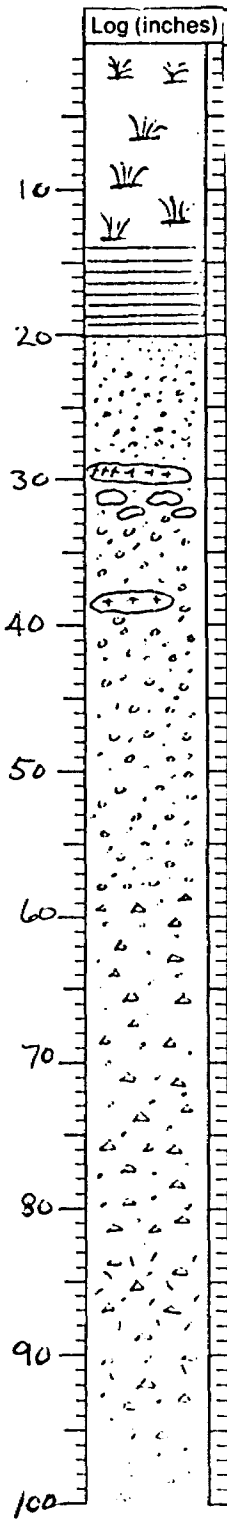
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 22/81 HOLE #: DO-81-06

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/DRILLER: D. Jodouin FIELD LOCATION: Gov't. line east of Winter Road @ creek

BIT NO.: 62320 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	Organic							
	Clay - grey, rope-like.							
	Sandy Gravel							
01	Intrusive, gneiss and limestone pebbles. Fine grey-white sand matrix	124	50	150	40	0.6	10.0	60
	1 grain v.g. 100μ transported							
02	Intrusive cobbles.	185	26	84	44	0.4	10.0	145
	Gabbro boulder. Limestone pebbles 1%							
03		152	24	63	34	0.4	8.5	10
04		124	23	76	34	0.3	10.0	15
	Till							
05	Clay balls - grey, gritty variable content in the section	78	23	50	33	0.7	1.9	80
06	Sandy silt matrix - fine grain	63	10	34	22	0.2	5	70
	Pebbles - 75% mafic volcanic + sediments, possibly local							
07	25% intrusive + gneiss - no limestone.	57	16	30	27	0.2	3.65	125
08		69	14	40	29	0.3	2.2	2525
09	clay balls	146	31	80	60	0.4	2.05	50
10		78	20	36	36	0.2	6	25
	grey clay adhering to pebbles							
11		182	57	58	73	0.6	10	435
12		204	50	72	86	0.8	10.0	60
13		186	30	91	62	0.4	9.0	15

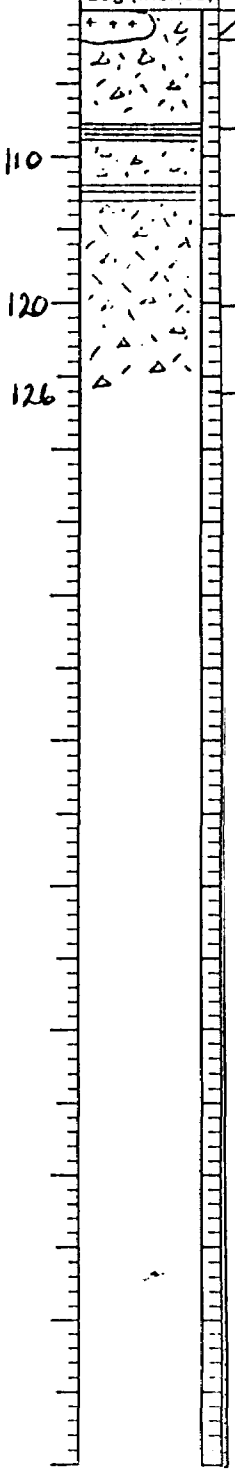
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 22/81 HOLE # DO-81-06

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: Gov't.line east of Winter Road @ creek

BIT NO.: 62320 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	Grey clay balls 50-80% of sample							
14	Pebbles volcanic sediment gabbro Sand poor matrix Minor limestone.	162	26	84	53	0.3	10.0	75
15	Sandy matrix.	157	36	76	65	0.4	10.0	95
16	Clay coating on many pebbles Fine sand silt matrix.	159	22	68	60	0.2	10.0	30
17		125	56	62	51	0.2	5.0	60

Hole stopped.
Pit plugged with pebbles.
12 hours on hole.

C. Rockingham

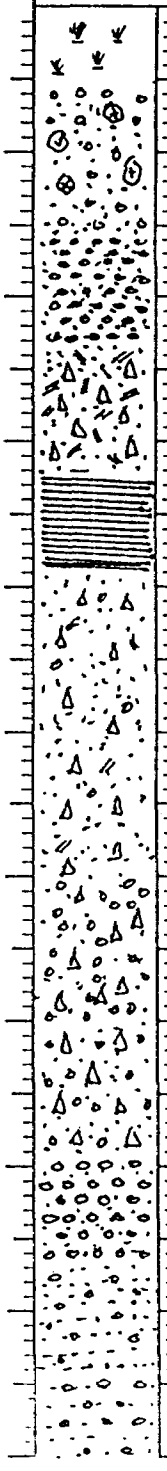
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 23/81 HOLE # DO-81-07

SAMPLER: D. Lewis CLAIM GROUP: Detour ~~Block~~ PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't.Base line East of Winter Road

BIT NO.: 62317 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	0-12' Swamp							
DO-81-07 1	12-19'- Boulders & Gravel - minor matrix, sandy, minor limestone <5-10%, mafic volcanic, granite.	260	19	60	50	0.2	10.0	35
DO-81-07 2	19-26'- Gravel - fine to coarse. Sandy matrix, 5-10% limestone. Mafic volcanic, granite, sandy clay coating on pebbles.	118	17	48	16	0.2	10.0	5
DO-81-07 3	26-34'- Till-abundant till balls silt-sand matrix, 10% limestone - volcanic and granite pebbles.	78	18	50	25	0.2	10.0	20
DO-81-07 4	34-42'- Clay - green-grey clay, minor pebble component 1% limestone, granite - volcanic.	135	18	96	30	0.2	2.9	570
DO-81-07 5	42-48'- Sandy Till - fine silt to sand matrix, few pebbles. Limestone, granite, volcanic sediment, very sandy @ 47'.	84	40	55	30	0.2	6.5	L5
DO-81-07 6	48-58'- Sandy Till - sandy - silt matrix, scattered cobbles, pebbles, limestone, granite, volcanic, sediment becomes gravelly @ 58'.	84	22	47	35	0.2	6	175
DO-81-07 7	58-64'- Gravel - Till - decreased matrix, limestone, granite, volcanic & sediment, pebbles, clay bed @ 62'.	155	27	55	30	0.3	5	60
DO-81-07 8	64-72'- Pebbly Till - fine sand matrix, till balls, pebbles- limestone, granite, volcanic, sediment.	86	18	45	28	0.2	2.75	L20
DO-81-07 9	72-79'- Gravel - boulders and cobbles, sandy matrix, white gneiss boulders.	74	10	38	38	0.2	5	L10
DO-81-07 10	79-84'- Pebbly sand - minor limestone component, sand dominant. Granite, mafic, volcanic - sedimentary.	98	14	42	38	0.3	4.9	305
DO-81-07 11	84-90'- Pebbly Sand - Gravel - fine- medium sand matrix sedimentary pebbles predominant. <5% limestone.	79	14	32	35	0.3	6	290

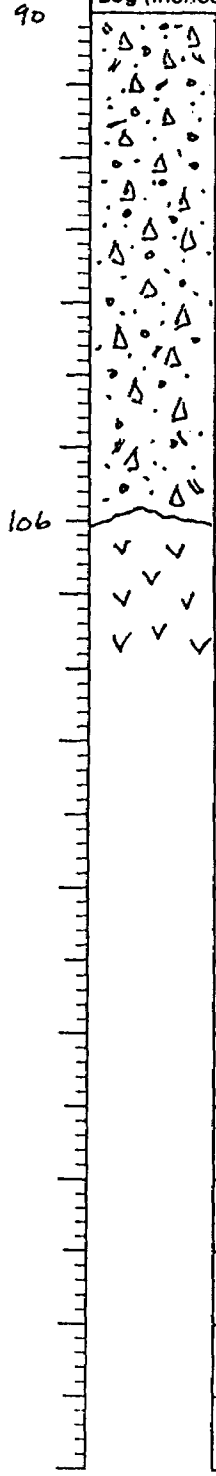
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 23/81 HOLE # DO-81-07

SAMPLER: D. Lewis CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Base Line East of Winter Road

BIT NO.: 62317 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	DO-81-07 12	90-95' - Pebble - Clay Till - very minor limestone, fine silt sand - clay matrix.		89	16	36	34	0.2	7	100
	DO-81-07 13	95-100 - Pebbly - Sand - Clay Till - abundant clay balls, 75% volcanic & sediments. 20% granite. <5% limestone.		80	18	29	46	0.2	4.5	L10
	DO-81-07 14	100-105'- Pebbly - Sand - Till - 75-80% volcanic & sedimentary pebbles. <15% granite, 5% limestone. Numerous clay balls, increase in pebble size.		88	16	31	27	0.2	7	5
	DO-81-07 15	105-106'- As above.		530	20	75	65	0.4	I.S.	-
	DO-81-07 16	106-111'- Bedrock - Mafic Tuff Abundant quartz veins. Highly chloritized.		86	2	112	38	ND	-	L5

C. Robinson

Hole No. [illegible]

07 2 of 2

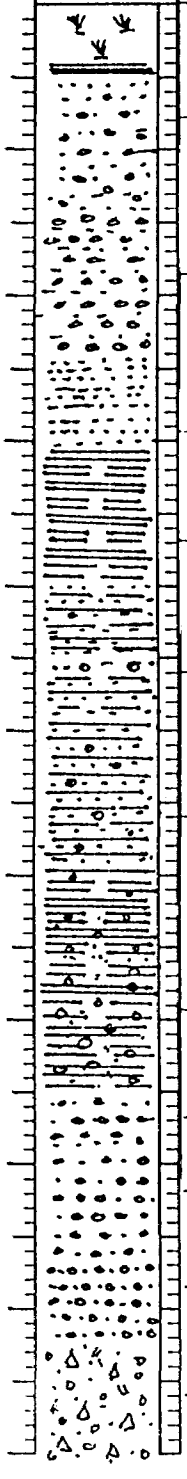
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 23/81 HOLE # DO-81-08

SAMPLER: D. Lewis CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Base Line - East of Winter Road

BIT NO.: 62320 NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
DO-81-08 1	0-2' - Swamp. 2-4' - Brown clay. 4-10' - Pebbly - sandy - Gravel 50% volcanics & sediments, 30% granite, 15-20% limestone.		57	19	42	21	0.4	1.6	L50
DO-81-08 2	10-18' Pebbly - sandy Gravel Brown sandy - clay matrix Minor clay balls, 50% granite. 30% limestone. 20% volcanics and sediments.		43	14	28	17	0.1	5	L10
DO-81-08 3	18-25' Sand - fine brown sand with minor clay.		23	12	21	11	0.2	4.55	L10
DO-82-08 4	25-35' Clay & Silt - green clay No pebbles.		212	30	137	89	0.7	I.S.	-
DO-81-08 5	35-50' Clay & Silty - Sand Very fine matrix, rare granitic pebbles, matrix dominant.		90	22	64	29	0.2	10	5
DO-81-08 6	50-60' Clay & Sand - ribbon -ropey clay - green, <5% pebbles, limestone, granite, volcanic, sediment.	Very fast drilling through "recessional' sediments.	112	26	76	32	0.2	2.85	65
DO-81-08 7	60-69' Silt and Clays - minor pebble content.		105	28	80	32	0.2	1.7	L50
DO-81-08 8	69-75' Silt - Pebbly - Clay Matrix dominant, 50% volcanic sedimentary pebbles, 20% limestone, 20% granite.		93	28	69	28	0.2	6	5
DO-81-08 9	75-80' Sandy - Gravel - fine medium silt and sand. Matrix, minor clay, 30% pebbles, 30% limestone, 30% volcanics & sediments, 20% granite.		105	16	56	28	0.2	10	50
DO-81-08 10	80-87' Sandy Gravel - as above with cobbles.		75	17	46	25	0.3	10	20
DO-81-08 11	87-92' Gravelly Till - clay balls mixed with pebbles, 60% volcanic sediments, 20% granite, white gneiss. No visible limestone.		69	12	37	20	0.4	6	100

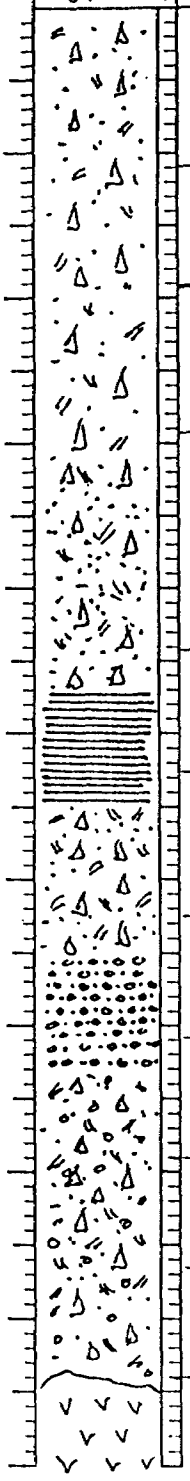
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 23/81 HOLE # DO-81-08

SAMPLER: D. Lewis CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't.Base Line

BIT NO.: 62320 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
DO-81-08 12	92-97' Silty-Clay Till Very few pebbles, 90% volcanic & sediments, abundant clay & silt till balls. <1% limestone. <5% granite.	78	15	32	27	0.3	3.2	95
DO-81-08 13	97-102' Silty - Clay Till Hard packed till, 98-99' pebble bed, as above.	77	17	39	30	0.2	5	300
DO-81-08 14	102-105' Silty-Clay Till Scattared pebbles, silt-clay, matrix dominant, <1% limestone, <10% granite.	58	20	40	30	0.2	1.25	L50
DO-81-08 15	105-108' Sandy-Clay Till Increase in grey-green clay balls; alternating clay & pebbly till, till balls, petrified wood chips, no limestone. <10% granite. Local clast component.	30	10	35	18	0.3	4.15	L10
DO-81-08 16	108-114' Clay - ropey-clay. Massive, no pebbles, hard.							
DO-81-08 17	114-120' Silty-Clay Till Till balls, gravel bed @ 118-119'. Minor pebbles. <1% granite. No limestone.	59	12	25	20	0.2	10	40
DO-81-08 18	120-125' Sandy Gravels - 70% volcanic & sediments, 30% granite, no limestone. Massive pyritization @ 124', sandy matrix.	205	95	44	73	1.4	6	110
DO-81-08 19	125-130' Pebbly-Silty-Clay Till Silty-clay matrix, till balls, as above.	155	28	44	80	0.6	6	45
DO-81-08 20	130-135' Silty-Clay Till <30%-40% pebbles, matrix dominant, 20% pink granite, <5% limestone, cobble @ 132'.	160	24	62	65	0.6	5	L10
DO-81-08 21	135.5-140' Bedrock Mafic tuff - chloritized pyritization - 1-2%, quartz veins.	46	1	200	34	0.2	-	L5

C. Rodrigues

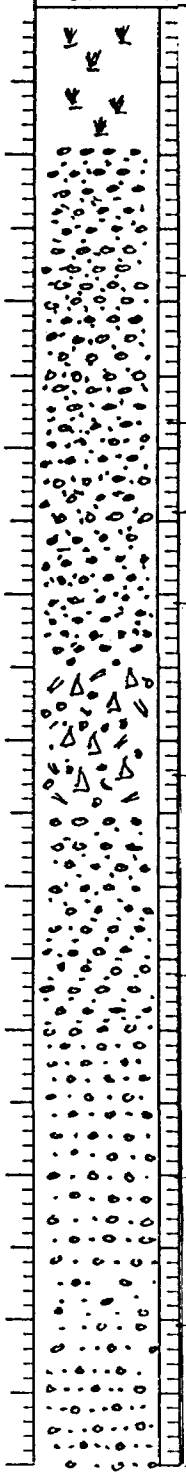
WESTERN MINES LTD.

GEOLOGIST: D. Robinson/C. Rockingham DATE: Jan. 23/81 HOLE # DO-81-09

SAMPLER: M. Mahaffy/L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't.Base Line - East of Winter Rd.

BIT NO.: 62314 NTS: 32 E-13



Sample No.		Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	0-10'	No return. Minor humus. Sand and pebbles.							
DO-81-09 1	10-18'	Gravel - sand-silt matrix, gritty till balls @17', 50% volcanic and sediment, 30% granite + gneiss. <20% limestone pebbles.	130	38	240	42	0.8	6	10
DO-81-09 2	18-28'	Gravel - 80% pebbles, 50% volcanic + sediment, 30% granite + gneiss, 20% limestone, large 1-2 cm green minor clay lumps, silt-sand matrix, mafic cobble @24'.	100	24	60	35	0.5	0.65	L75
DO-81-09 3	28-38'	Gravel - fine sandy matrix, clast dominant.	98	30	61	36	0.5	10	1245
	38-48'		42-48 - poor return. 1 grain v.g. 300μ transported						
DO-81-09 4		>50% pebbles, 50% mafic, volcanic + sedimentary, 30% granite + gneiss. 20% limestone.	110	24	71	32	0.5	10	5
DO-81-09 5	48-56'	Pebbly-Sandy Till Gritty clay balls, fine sandy matrix, pebble dominant, 80%, 50% volcanic + sediment, 30% granite + gneiss, 20% limestone.	80	13	39	20	0.3	10	165
			Very minor till component!						
DO-81-09 6	56-62'	Gravel - coarse, unsorted, pebble dominant, 50% volcanic + sediment, 30% granite + gneiss, <20% limestone, <2% gritty clay balls, fine to medium sand matrix, mafic intermediate cobble @60'.	210	16	28	53	0.3	10	35
DO-81-09 7	62-70'	Pebbly Sand - Gravel Very minor gritty clay balls, minor coating on pebbles, 90% pebbles + sand, 70% volcanic + sediment, 20-25% granite + gneiss, <10% limestone.	80	14	32	23	0.2	10	10
DO-81-09 8	70-80'	Pebbly Sand to Gravel Fine to medium sand matrix, pebbles - 50% volcanic + sediment, granite + gneiss, <5% limestone.	52	12	30	18	0.4	10	445
No sample	80-90'	Poor return. Clay balls, fine grit mixed with sand & pebbles.							

Hole No.	Page No.
09	1 of 3

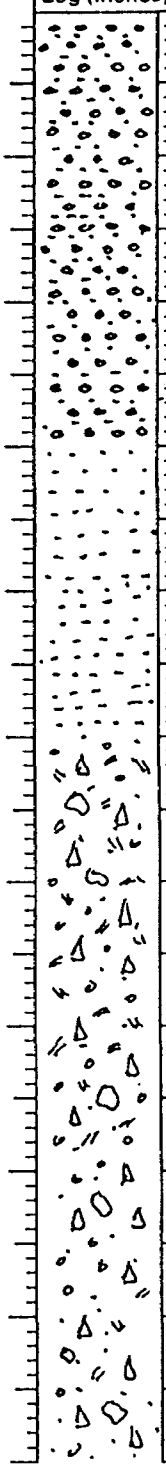
WESTERN MINES LTD.

GEOLOGIST: D. Robinson/C. Rockingham DATE: Jan. 23/81 HOLE # DO-81-09

SAMPLER: M. Mahaffy/L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne/D. Jodouin FIELD LOCATION: Gov't.Base Line - East of Winter Rd.

BIT NO.: 62314 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	DO-81-09 9	90-100' Gravel - medium fo coarse grey-white sand matrix, 50-75% sedimensts that are coarser than the intrusive & gneiss pebbles; granite pebble component increases down section. % matrix variable.		90	20	44	36	0.4	8	80
	DO-81-09 10	100-110' 103-106' sand bed- fine to medium, grey-white. Granite, gneiss cobble, limestone cobble.		80	17	37	28	0.4	6	15
	DO-81-09 11	110-120' Sand Medium, grey, clay balls with gravel, sandy matrix as above, mafic volcanic cobble.		80	11	35	26	0.3	10	275
	DO-81-09 12	120-124' Minor clay balls @120'. Gneiss cobble @124'.	1 grain v.g. <100μ transported	119	20	53	42	0.4	-	410
	DO-81-09 13	124-130' Till Clay balls, gritty, grey, 50-60% pebbles, boulders, 75% sediments & volcanics, minor sand.		250	16	80	47	0.4	-	240
	DO-81-09 14	130-135' Con't. Granite cobble @131', 90% volcanic & sedimentary pebbles, <5% limestone, <10% gneiss. Clay ball content variable 30% maximum, 10% minimum.		134	19	55	55	0.4	-	205
	DO-81-09 15	136-142' As above.		121	18	72	53	0.2	-	35
	DO-81-09 16	142-148' Very few clay balls. 80% of pebbles are sedimentary or volcanic. Sandy matrix and clay balls.		80	15	38	31	0.3	-	520
	DO-81-09 17	148-154' Clay balls 80% of material in No. 12 screen, granite cobble @153'.		130	22	54	50	0.4	-	1095
	DO-81-09 18	154-160' Higher % of gneissic + intrusive pebbles.		175	97	61	92	0.9	-	205

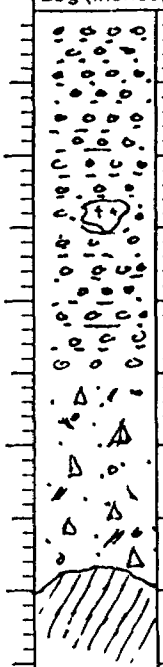
WESTERN MINES LTD.

GEOLOGIST: D. Robinson/ C. Rockingham DATE: Jan. 23/81 HOLE # DO-81-09

SAMPLER: M. Mahaffy/L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne/D. Jodouin FIELD LOCATION: Gov't.Base Line - East of Winter Rd.

BIT NO.: 62314 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	DO-81-09 19	160-174' Gravel - 60% local + volcanic + sedimentary pebbles, 40% intrusive + gneiss, coarse sandy matrix.		174	31	60	78	0.4	-	175
				138	19	53	45	0.2	-	145
	DO-81-09 20	174-180' Blue-white quartz eye. Gabbro boulder, clay balls, gravel as above, medium to coarse sandy matrix.		167	33	100	68	0.4	-	30
	DO-81-09 21	180-185' Till - clay balls at 180', clay adhering to pebbles, 70% sedimentary + volcanic pebbles, fine sand matrix with clay balls.		169	26	76	55	0.5	-	90
	DO-81-09 22	185-187' As above.		760	210	1040	650	1.2	-	60
	DO-81-09 23	187-182' Bedrock - Sediment Light grey to white, very soft, bedding difficult to determine, very fine grained, minor quartz veins.		37	3	320	62	ND	-	L5

C. Rockingham

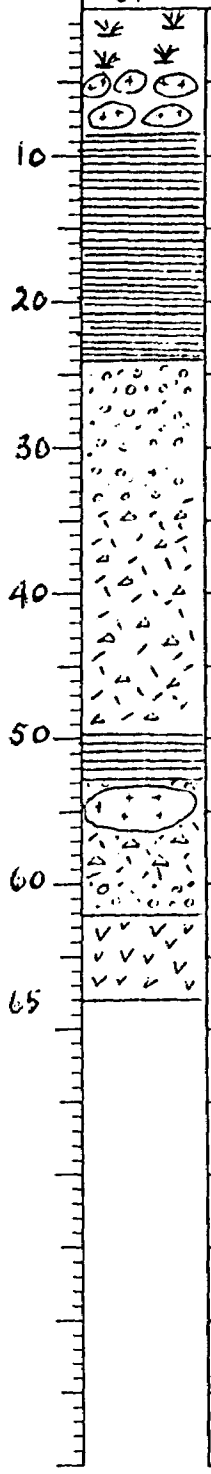
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham | DATE: Jan. 24/81 | HOLE #: DO-81-10

SAMPLER: L. Nutter | CLAIM GROUP: Detour | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: N.W. Corner of Lower Detour Lake

BIT NO.: 62314 | NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		Organic	
		Gneiss Boulders and Cobbles Lakeshore ice push.	
		Clay - clay balls, calcareous, non-gritty, almost no pebbles or sand.	
		Gravel 80% intrusive + gneiss pebbles. 20% limestone, possibly a till.	Cu 118, Pb 50, Zn 114, Ni 39, Ag 0.5, Wt -, Au L5
	1		
		Cochrane Till 85% clay balls - grey, calcareous, non-gritty pebbles are intrusive, gneissic + limestone 30%.	
	No sample		
		Clay - grey-brown, calcareous, non-gritty.	
		Gneiss Boulder Till - 10-30% clay balls, calcareous, pebbles 50-70% intrusive, coarse sand matrix.	Cu 126, Pb 31, Zn 84, Ni 40, Ag 0.4, Wt -, Au 15
	2		
	3		Cu 150, Pb 37, Zn 83, Ni 37, Ag 0.5, Wt -, Au 30
		Bedrock Mafic tuff, soft, fine-grained, green-grey with vague foliation.	Cu 49, Pb 18, Zn 90, Ni 62, Ag ND, Wt -, Au 5
	4		

C. Rockingham

Hole No	Page No.
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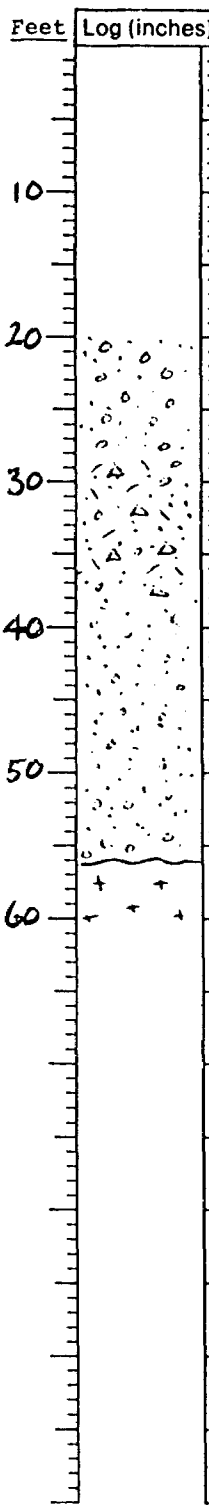
WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 24, 1981 HOLE # DO-81-11

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Winter Road 0.7 km. North of Gov't.Line.

BIT NO.: B62314 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	1	0-20' - No Return 20-28' - Gravel - Grey medium and sand matrix. Polymictic pebbles (small) including limestone.	
	2	28-38' - Till - Grey clay balls. Small limestone pebbles, increasing clay component from 30 - 34'; grey clay unit 32-34'. 34' - Pink granite boulder followed by subordinate mafic pebbles. 36-38' - white granitic boulder. The section is notably unsorted.	Cu 152 Pb 65 Zn 121 Ni 63 Ag 0.6 Wt - Au 170
	3	38-56' - Gravel - Medium and coarse sand matrix. 40% mafic/40% granitic/20% limestone. 50' - decrease in granitic pebbles, increase in gneissic. Minor limestone.	Cu 105 Pb 24 Zn 71 Ni 38 Ag 0.3 Wt - Au 5
	4	56-60' - Bedrock - Gabbro, coarse grained feldspar and amphiboles, minor quartz.	Cu 115 Pb 24 Zn 57 Ni 36 Ag 0.4 Wt - Au 185 1 grain v.g. 150μ transported
	5	60' - End of hole.	Cu 44 Pb 2 Zn 62 Ni 53 Ag 0.1 Wt - Au 10

C. Rodrigues

Hole No.	Page No.
DO-81 11	1 of 1

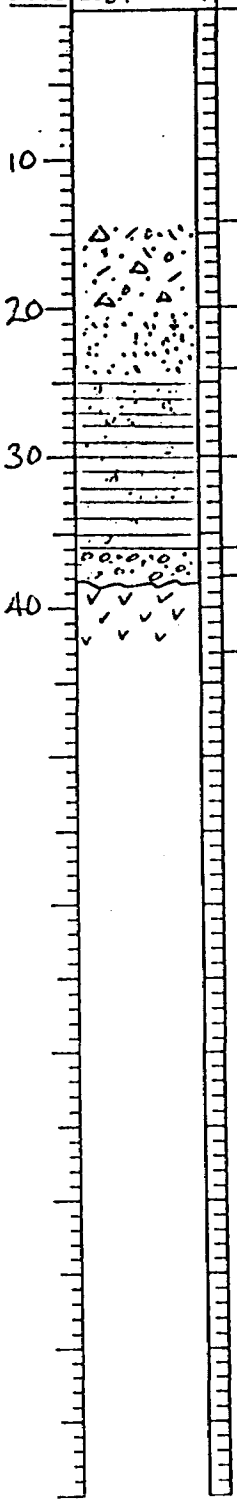
WESTERN MINES LTD.

GEOLOGIST: G. Thomas. F. Thompson DATE: January 24, 1981 HOLE # DO-81-12

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Gov't. Line West of Winter Road

BIT NO.: 62312 NTS: 32 E-13



Feet	Sample No.	Overburden Description	Notes & Analyses
10		0-14' - Limited Return - 10-14' - some grey, iron-stained clay with limestone pebbles. 14-20' - Gravelly Till - Granitic - Mafic pebbles - small 60:30; approximately 10% limestone. Coarse and medium sand matrix; minor clay. Increase of coarse and medium sand with depth.	
20	1	20-24' - Sand bed - brown-grey, medium and coarse sand.	
	2	24-36' - Clay Balls - Gritty; medium to coarse sand matrix; minor small pebbles.	
30	3	30-36' - Clay balls - minor coarse sand. Mafic and granitic boulders at 36'.	
	N.S.	36-38' - Gravel - Mafic cobbles; granitic pebbles (small) 50:50. Up to 5% limestone. Medium to coarse sand matrix.	
	4	38-43' - Bedrock - Greenstone - dark green, soft, massive. No sulfides quartz or carbonate.	
40	5	43' - End of hole.	

Sample No.	Cu	Pb	Zn	Ni	Ag	Wt	Au
1	130	34	92	37	0.5	-	L5
2	153	67	145	50	1.0	-	L10
3	110	25	97	31	0.4	-	60
4	145	23	84	48	0.4	-	L50
5	44	2	62	53	0.1	-	10

C. Rodrigues

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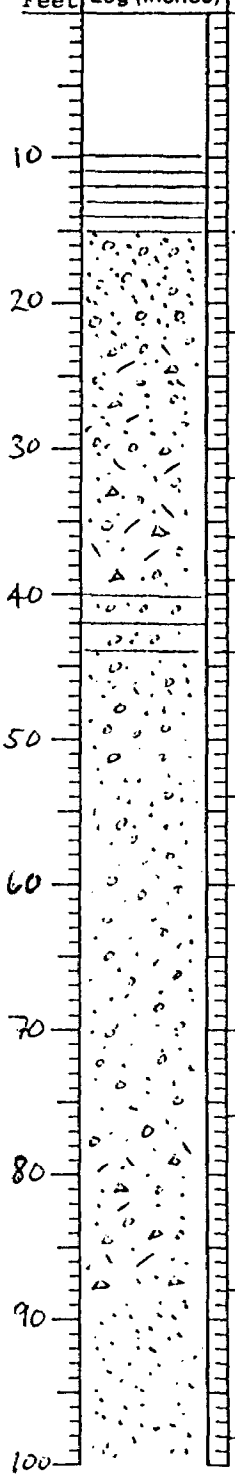
WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 24, 1981 HOLE # DO-81-13

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Gov't. Line North of Beaver Swamp

BIT NO.: 62312 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-10' - No return 0-15' - Grey clay - large balls.	
	1	15-22' - Gravel - 50% granitic/30% mafic/20% limestone - small pebbles only. Medium to coarse sand matrix.	
	2	22-44' - Till - Clay balls and granitic/gneissic (mafic) pebbles. Gritty silty clay matrix. Minor limestone increases between 27 and 36'. Increasing clay to framework component at≈35'.	
	3		
	4	39-44' - Clay curds - grey, stiff.	
	N.S.		
	5	44-78' - Gravel - polymictic - small pebbles including limestone. Medium and coarse sand matrix. Increase in pebble size and mafic-gneiss component 45-50'.	
	6	54' - Granitic boulder - small. Trace muscovite - platy - 3mm. diameter. Increasingly mafic from 57 to 60'.	
	7	60-64' - Sand in bed, predominantly coarse and medium. 70-74' - increase in silt /clay in matrix to an estimated 10% - as coatings and balls. Fine sand 20%/ set 10%/clay 5%. Medium and coarse sand abundant.	
	8		
	9	78-88' - Till - coarse sand and small pebbles up to 25% by volume. Clay balls. Polymictic plus limestone, up to 5%. Increasing clay after 80'.	
	10	88-106' - Sand - Polymictic. Medium and coarse. Finer fraction. Mainly quartz. Minor clay bed at 90'.	

Cu	Pb	Zn	Ni	Ag	Wt	Au
95	20	54	32	0.3	-	L5
117	25	102	40	0.4	-	10
140	20	115	42	0.3	-	85
165	18	81	53	0.4	-	105

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F.Thompson DATE: January 24, 1981 HOLE # DO-81-13

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Gov't. Line North of Beaver Swamp

BIT NO.: 62312 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses						
				Cu	Pb	Zn	Ni	Ag	Wt	Au
		11	92' - Boulder - Granite gneiss. 94-106' - Sand - Grey, fine.	195	22	91	68	0.4	-	35
110		12	106-111' - Bedrock - Greywacke - distinct cleavage. Platy pyrite along shear surfaces. Medium green, fine-grained scratches with difficulty minor quartz veins.	32	16	72	45	0.2	-	L5

C. Rodrigue

Hole No.	Page No.
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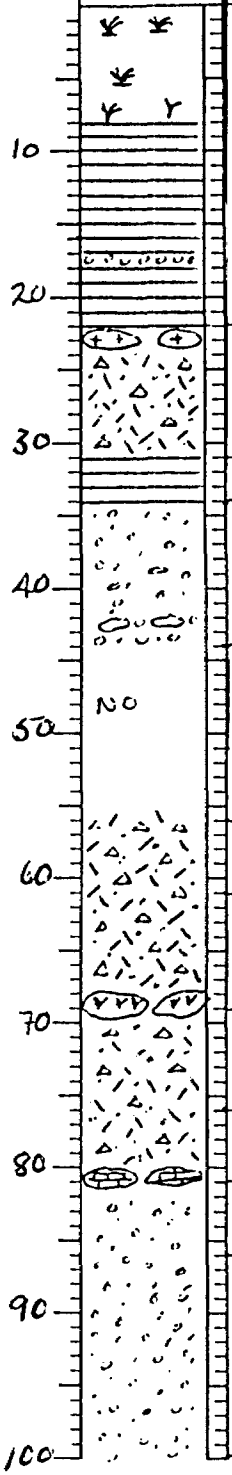
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 24/81 HOLE # D-81-14

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: S. of Gov't. Line, N. of Beaver Swamp

BIT NO.: 62312 NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
	Organic - no return.	
	Clay - grey, rope-like.	
1	Cochrane Till Clay balls, fine sand + silt matrix. Pebbles intrusive gneiss 70% limestone 30% Clay: pebbles 80:20 Clay	
2	Gravel (Till?) Matrix coarse to fine sand + silt, pebbles intrusive, gneiss 95%, limestone 5%.	
Return		
3	Till 10-50% clay balls, grey, gritty medium to fine sand matrix pebbles intrusive, gneiss 95% limestone 5%.	Cu Pb Zn Ni Ag Wt Au 108 22 59 42 0.3 - 150
4		220 20 61 35 0.4 - 15
5	Mafic volcanic boulder Till clay balls 40-60% of pebbles local clay adheres to some pebbles.	98 13 33 32 0.4 - 6000 3 grains v.g. 1 of 800μ all are delicate in form
6		124 26 38 33 0.4 - 310
7	Gravel + Sand Fine, medium sandy matrix. 1-1½ cm pebbles volcanic + sedimentary <5% limestone. <5% granite + gneiss.	80 14 34 24 0.5 - L5
8 + 9		162 66 53 34 0.4 - L10 110 18 53 34 0.5 - 445 64 13 30 24 0.2 - 315

WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 25/81 HOLE # DO-81-14

SAMPLER: M. Mahaffy CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: S. of Gov't. Line, N. of Beaver Swamp

BIT NO.: 62312 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
110	10	Sand - Pebbly Sand Fine, medium beach sand with minor pebble component.	Cu 140, Pb 24, Zn 77, Ni 36, Ag 0.5, Wt -, Au 10
120	11	Down section More pebble component Volcanic + sedimentary pebbles >5% Gneiss+ granite. <30% Limestone <10% End of hole. Sand blocking bit.	Cu 68, Pb 12, Zn 28, Ni 29, Ag 0.2, Wt -, Au 40

C. Robinson

Hole No	Page No.
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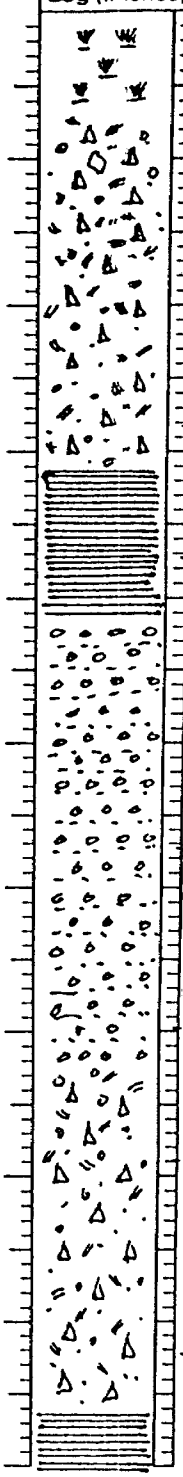
WESTERN MINES LTD.

GEOLOGIST: D. Robbinson | DATE: Jan. 25/81 | HOLE # DO-81-15

SAMPLER: M. Mathaffy | CLAIM GROUP: Detour Block | PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne : Bradley Bros. | FIELD LOCATION: Gov't. Base Line - W. of Winter Rd.

BIT NO.: 62313 | NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
No sample	0-1-' Swamp - humus, brown clays, brown 1-2 cm pebbles.	Poor return.
DO-81-15 1	10-20' Cochrane pebble Till Sand-silt matrix, gritty till balls, 70% volcanic + sedimentary pebbles, 20% granite + gneiss, <10% limestone. Sand horizon 18-19'.	
DO-81-15 2	20-27' Till Sandy-silt matrix, <30% granite + gneiss, 10-15% limestone. Green clay bed @25'.	
No sample	27-36' Clay - rope-like, green-grey minor grit, <1% pebbles.	
DO-81-15 3	36-46' Gravel + Sand Minor clay till for ½' at top with minor pebbles; medium to coarse sandy matrix, pink granite cobble @38', abundant + 10 fraction 50% volcanic + sedimentary, 30% granite + gneiss, <20% limestone. 1-2 cm pebble size. Limestone boulder @45'.	40-44' - poor return.
DO-81-15 4	46-54' Sandy-pebbly gravel. 20% limestone pebbles.	
DO-81-15 5	54-60' Clay-Pebble-Silt Till Silty-clay balls 1 cm size.	
DO-81-15 6	60-66' Clay Till Gritty clay till balls <5%. pebbles, local derivation, volcanic + sedimentary, <10 mm size, minor limestone & pink granite, silty-clay matrix, clay-coated pebbles.	
No sample	66-72' Clay - soft, grey, rope-like, no pebbles.	

	Cu	Pb	Zn	Ni	Ag	Wt	Au
	110	35	102	34	0.6	-	45
	112	32	81	34	0.5	-	10

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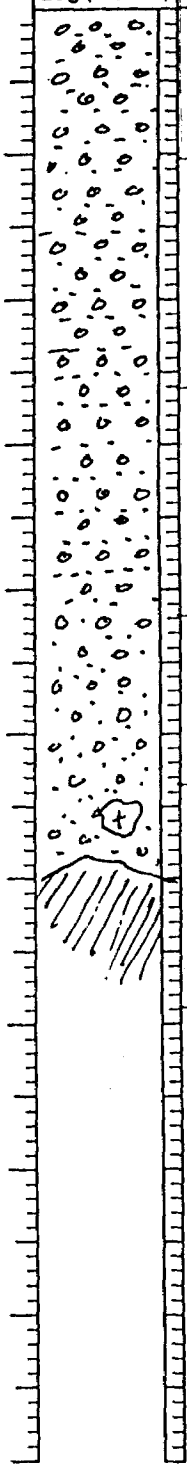
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 25/81 HOLE # DO-81-15

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Base Line - W. of Winter Rd.

BIT NO.: 62313 NTS: 32 E-13



Sample No.		Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
DO-81-15 7	72-80'	Sandy Gravel 90% + 10 pebbles, 50% volcanic + sediment, 30% granite, 20% limestone. Fine to coarse sand matrix.	113	28	56	36	0.4	-	15
DO-81-15 8	80-92'	Alternating beds of clast dominant and matrix dominant; pebbles >60% volcanic + sediment, 30% granite + gneiss + quartz. 10% limestone, fine to medium. Sandy units & as matrix.	85	39	66	34	0.5	-	5
DO-81-15 9	92-100'	Fine to medium sand matrix, 50% pebbles, >50% volcanic + sediment, 30% granite + quartz, <20% limestone. Alternating sand & pebble-rich horizons.	105	25	84	45	0.4	-	15
DO-81-15 10	100-105'	As above. White biotite gneiss boulder at 104'.	123	30	72	55	0.5	-	35
		New brass valves installed on water pump.							
DO-81-15 11	105-111'	Bedrock Intermediate volcanic or argillite. Grey-green, very fine grained, massive, to slightly schistose, quartz veining.	39	12	64	50	ND	-	35

C. Robinson

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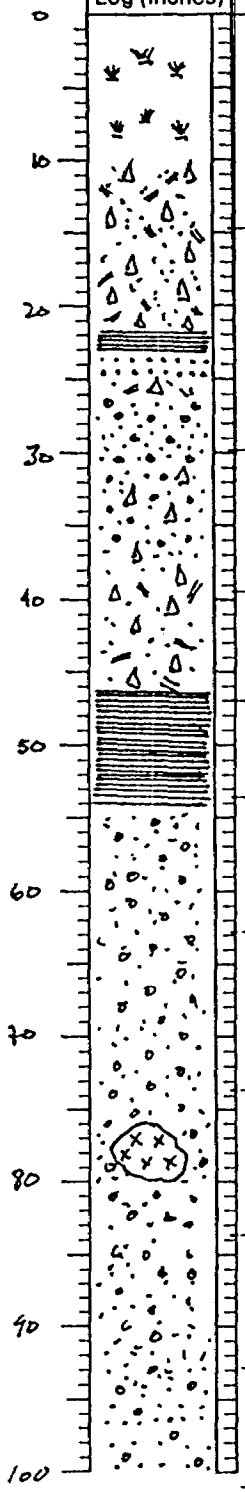
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 25/81 HOLE # DO-81-16

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne : Bradley Bros. FIELD LOCATION: Small Pond North of Gov't. Base Line W. of Winter Rd.

BIT NO.: 62311 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
0	No sample	0-10' Swamp - humus.	
10	DO-81-16 1	10-20' Cochrane Clay-Sand Till Abundant gritty till balls. Sandy matrix, < 5% pebbles. Limestone, volcanic + sediment.	
20	DO-81-16 2	20-30' Pebbly Till→Gravel Top section is till, grey clay bed @22'. Subangular mixed pebbles assortment, 35% limestone + granite.	
30	DO-81-16 3	30-40' Gravelly Till to Pebble-Silt-Clay Till - 25-35% gritty till balls; 50% pebbles, fine sand matrix, calcareous, increase in till balls, decrease in pebbles, limestone > 2 cm pebble.	
40	DO-81-16 4	40-46' Clay Till >50% gritty clay till balls, clay-silt matrix, <10% pebbles. Quartz, limestone, granite.	
50	No sample	46-54' Clay - grey, soft, no pebbles.	
60	DO-81-16 5	54-64' Gravel & Sand - unsorted, fine to medium sand matrix, 1-2 cm size pebbles, assorted limestone, granite, gneiss, volcanic, sediment.	
70	DO-81-16 6	64-74' Sandy Gravel Fine to medium silty sand matrix. Assorted pebble size 1-2 cm to 1-2 mm, limestone, granite, gneiss, volcanic, sediment.	Cu 105 Pb 22 Zn 70 Ni 29 Ag 0.4 Wt - Au 1030
80	DO-81-16 7	74-84' Sandy Gravel - no till or clay; fine to medium sand, silt matrix, abundant pebbles, tuff or argillite boulder 76.5 to 79'.	Cu 133 Pb 15 Zn 62 Ni 85 Ag 0.2 Wt - Au 5
90	DO-81-16 8	84-94' Sandy Gravel Fine sand matrix, 30% limestone, 30% granite + gneiss, 30% volcanic + sediment. Matrix dominant, no clay.	Cu 92 Pb 18 Zn 54 Ni 23 Ag 0.3 Wt - Au 10
100	DO-81-16 9	94-104' Pebbly Sand Fine to medium sand, ¼-1 cm pebbles, limestone, granite, gneiss, volcanic, matrix dominant.	Cu 115 Pb 25 Zn 60 Ni 28 Ag 0.3 Wt - Au 40

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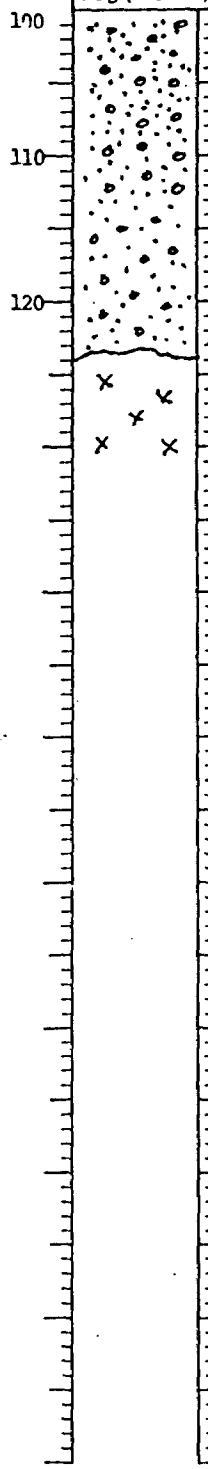
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 25/81 HOLE # DO-81-16

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne : Bradley Bros. FIELD LOCATION: Gov't. Base Line: near small pond

BIT NO.: 62311 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
DO-81-16 10	104-113' Pebbly Sand - fine to medium sand matrix, 5 mm to 1 cm pebbles, 50% volcanic + sediment, 30% granite + white gneiss, <20% limestone, matrix dominant.	120	21	57	27	0.4	-	5
DO-81-16 11	113-119' Sandy Gravel - medium to coarse sand matrix, included in pebble content, white gneiss, granite, limestone, alternating sand & pebble-rich beds.	125	23	56	36	0.3	-	10
DO-81-16 12	119-124' Bedrock - Gabbro Medium grained, massive, salt and pepper texture, 2 mm white feldspar phenocryst within fine mafic matrix.	94	3	20	85	ND	-	L5

C. Robinson

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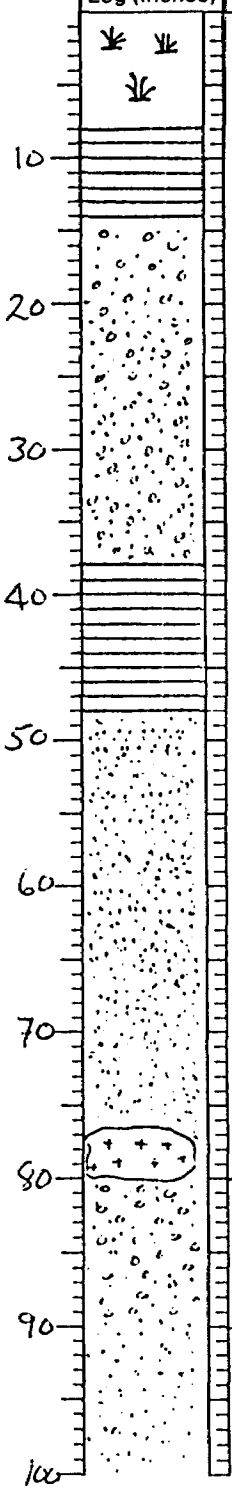
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 25/81 HOLE # DO-81-17

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: S. of Gov't. Line

BIT NO.: 62311 / 62315 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		Organic - no return.	
10		Clay - grey, non-calcareous, non-gritty.	
20		Gravel Limestone 25%. Granite, gneiss 75%. Fine, grey, sandy matrix. Very poor return.	
30			
40		Clay - grey, rope-like, calcareous, non-gritty.	
50		Sand - fine, medium grained, grey-white.	
60			
70			
80		Boulder metapyroxenite. Gravel Matrix, medium-coarse sand. Pebbles intrusive, gneiss 99% limestone 1% Poor return.	
	1		
90		Coarse Sand 99% passes through No. 12 screen - 1.70 mm. Pebbles ½ cm, well rounded.	
	2		
100			

Hole No.	Page No.
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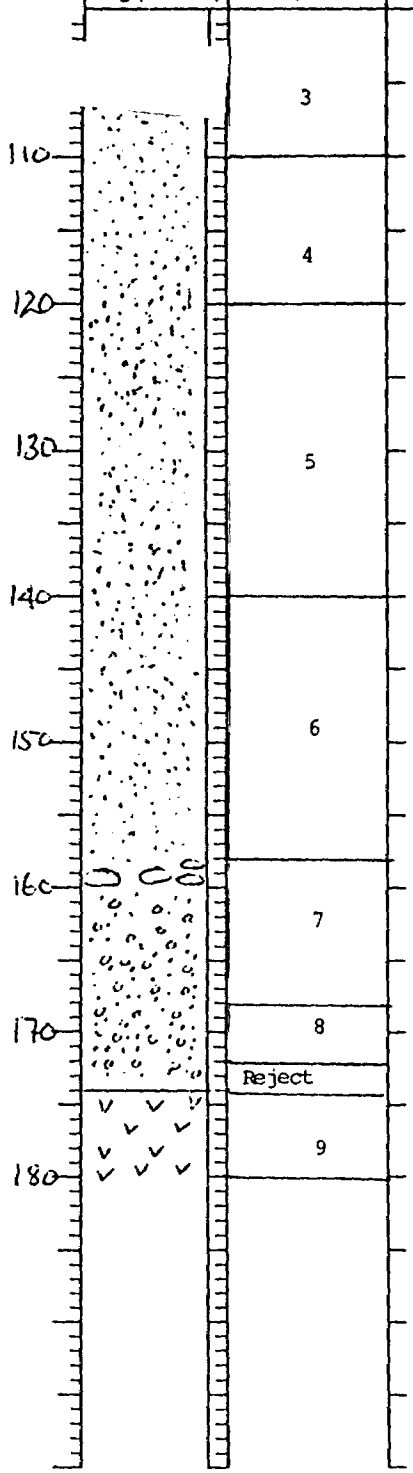
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham | DATE: Jan. 25/81 | HOLE # DO-81-17

SAMPLER: L. Nutter | CLAIM GROUP: Detour | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: S. of Gov't.Line

BIT NO.: 62311 / 62315 | NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
	Coarse Sand	
3		
	Sand - almost no pebbles >1.70 mm.	
4		
	Poor return.	
5		
6		
	Gravel Pebble + cobble sized stones. Sand matrix. Pebbles predominantly small to medium. Mafic volcanics.	
7		
8		
Reject	Boulders - argillite, gneiss.	
	Bedrock - Greenstone	
9	Grey-green clay, highly altered, rock fragments 30-40% by volume. About 5% quartz. Trace py, po.	

	Cu	Pb	Zn	Ni	Ag	Wt	Au
	225	55	91	120	1.0	-	105
	385	86	245	131	1.1	-	115
	450	175	540	230	1.6	-	195
	124	12	405	87	0.1	-	L5

C. Rockingham

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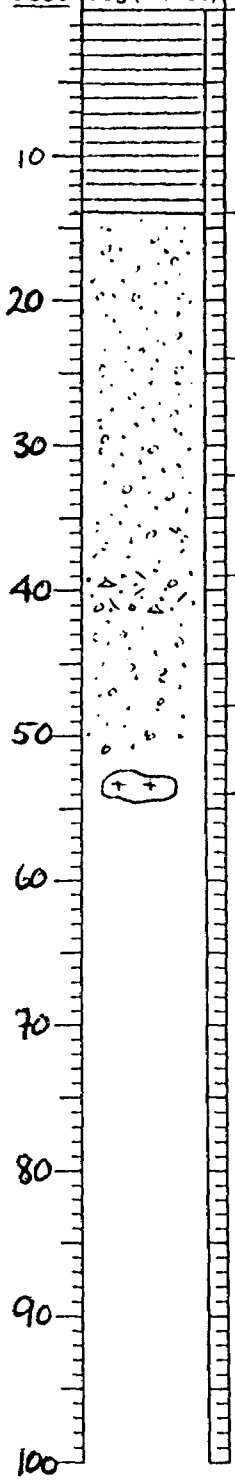
WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 26,1981 HOLE # DO-81-18

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Line West of Winter Road

BIT NO.: 62315 / 62322 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-14' - Grey Clay - Rejected. 14'39' - Gravel - Volcanic sediment 40%/Gneissic 30%/Granitic 30%. Limestone up to 10%. Medium and coarse sand matrix. Pebbles medium to small. Acid test on carbonate would indicate dolomite.	
	1	32' - Small granite-gneiss boulder.	Cu 92, Pb 19, Zn 69, Ni 32, Ag 0.3, Wt -, Au 35
	2	39-42' - Till - Clay balls, primarily mafic small pebbles, also some granitic. No apparent limestone. Clay unit only from 39 to ≈42'. Increase in coarse sand, minor gravel at 42'. Fine and medium sand matrix.	Cu 106, Pb 20, Zn 56, Ni 33, Ag 0.3, Wt -, Au 5
	3	42'- Sandy Gravel - increase in pebble to coarse sand from 42-50'. Mafic sediments dominates granitic component. Sand is primarily granitic.	Cu 84, Pb 32, Zn 46, Ni 21, Ag 0.1, Wt -, Au 1.5
	4	52' - Some clay balls for 6". 54' - Boulder granite gneiss.	Cu 56, Pb 9, Zn 27, Ni 13, Ag 0.2, Wt -, Au 20
		55' - Hole lost in boulders - Bit undersized and binding.	Cu 46, Pb 8, Zn 21, Ni 16, Ag 0.1, Wt -, Au 10
		55' - TD.	

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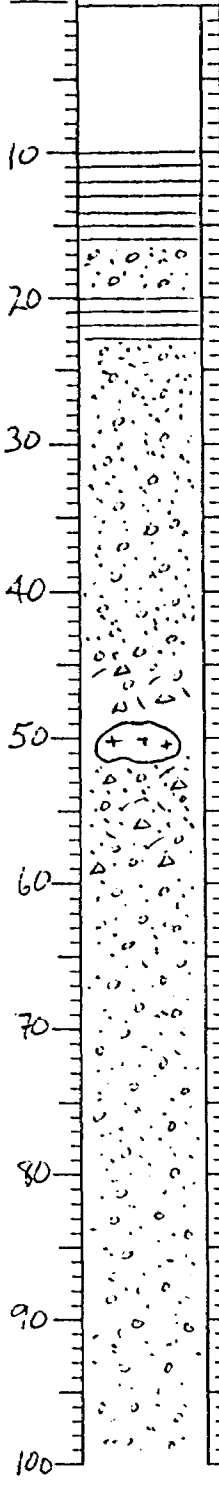
WESTERN MINES LTD.

GEOLOGIST: G.Thomas, F. Thompson DATE: January 26,1981. HOLE # DO-81-19

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: North of Gov't. Line East Side of Lake

BIT NO.: 62324 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-10' - No return.	
		10-16' - Clay Bed - Grey clay curds, clean. Positive HCl. Rejected.	
		16-45' - Gravel - 60% gneissic and granitic/up to 20% mafic, up to 10% limestone. Medium and coarse sand matrix.	
		20-21' - Clay bed - grey clay balls	
	1	22-23' - Grey clay curds.	
		26-30' - Small pebbles. Mafics predominate, lessor granitic.	
	2	30-32' - No return.	
		Medium and fine sand matrix - Grey-brown.	
	3	39-41' - Granitic boulder, Rejected.	
		41-44' - Granitic and mafic boulders and cobbles. Medium and coarse sand matric.	
		44' - minor clay seam.	
	4	45-60' - Till - Small mafic pebbles predominate, lessor granitic and gneissic. Medium to fine sand matrix with up to 5% gritty clay balls. Minor limestone.	
	5	46' - Argillaceous pebbles - good foliation; minor slate or shale.	Cu 79, Pb 10, Zn 34, Ni 27, Ag 0.3, Wt -, Au 795
	N.S.	49-51' - Granite gneiss boulder - rejected.	
	6	51-56' - Primarily mafic sediment as small pebbles, lessor granitic, minor limestone. Medium to coarse matrix. More like a gravel than a till.	Cu 64, Pb 13, Zn 35, Ni 34, Ag 0.1, Wt -, Au 40
	7	56-57' - Minor gritty clay balls.	Cu 61, Pb 21, Zn 36, Ni 24, Ag 0.2, Wt -, Au 45
		60-102' - Gravel - Mafic/granitic medium sized pebbles; coarse sand matrix, grades into coarse poly-mictic sand from 62-66'.	
	8	66' - Mafic gneiss pebbles predominate; also phyllitic/slate pebbles. Trace limestone; medium to coarse sand matrix.	Cu 104, Pb 12, Zn 33, Ni 32, Ag 0.2, Wt -, Au 105
	9	20-30% granite and gneiss as small pebbles. Increase in granite gneiss pebbles after 66'. Clast size generally increases - cobbles > pebbles.	Cu 114, Pb 12, Zn 40, Ni 31, Ag 0.1, Wt -, Au 110
	10		Cu 118, Pb 18, Zn 40, Ni 30, Ag 0.2, Wt -, Au 185
	11	79' - Large cobble - olive green felsic volcanic.	Cu 108, Pb 16, Zn 48, Ni 31, Ag 0.2, Wt -, Au 55
		88' - White, slightly smokey quartz cobble. Trace pyrite.	
	12		

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 26,1981 HOLE # DO-81-19

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: North of Gov't.Line East Side of Lake

BIT NO.: 62324 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses						
				Cu	Pb	Zn	Ni	Ag	Wt	Au
		12	89' - Pink granite cobble, phyllitic cobbles. 98' - 100' - Loss of return.	104	58	46	37	ND	-	50
110		13	102-112' - Till - Clay balls medium sized. Minor mafic sediment pebbles, small. Minor limestone. 102-106' - Limited return. Section becomes increasingly granitic from 108 to 110'.	86	2	18	58	ND	-	5
120			112 - 116' - Bedrock Gabbro - typical gabbro, medium grained feldspathic matrix - minor quartz amphibole phenocrysts.							

C. Rodrigues

Hole No.	Page No.
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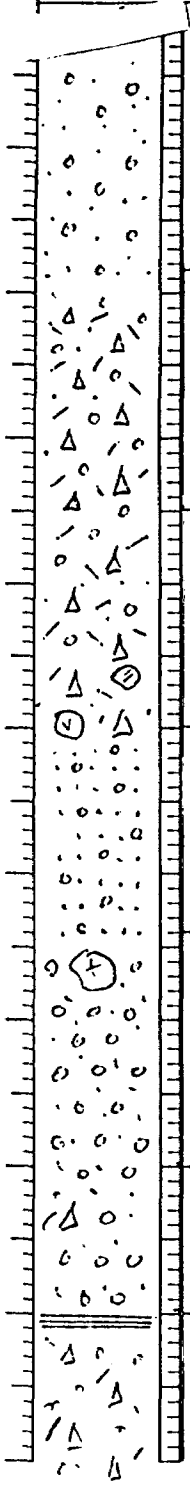
WESTERN MINES LTD.

GEOLOGIST: Don Robinson DATE: Jan. 26/81 HOLE # DO-81-20

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: Gov't. Base Line W. of Winter Rd.

BIT NO.: 62325 NTS: 32 E-13



Log (inches)	Sample No.		Overburden Description	Notes & Analyses
	NS.	0-14'	Swamp - humus, minor sand.	
	DO-81-20 1	14-24'	Pebbly Sand - fine to medium sand, 50% pebbles, 60% volcanic + sediment, 40% granite gneiss, pebbles <1 cm size, minor clay coating on pebbles.	
	DO-81-20 2	24-32'	Pebbly-Clay Till - abundant gritty clay balls, 30% pebbles <1 cm size, 75% mafic volcanic + grey sediment; 25% white gneiss, pink granite + limestone; fine silt-sand matrix.	Cu 62, Pb 11, Zn 30, Ni 31, Ag ND, Wt -, Au 40
	DO-81-20 3	32-42'	Gravelly-Pebbly Till Variable in pebble size & abundance <10% clay till balls, 50% volcanic + sedimentary pebbles, 50% gneiss + limestone, abundant local volcanic + sedimentary cobbles.	Cu 86, Pb 12, Zn 30, Ni 31, Ag ND, Wt -, Au 95
	DO-81-20 4	42-52'	Sand Scattered pebbles.	
	DO-81-20 5	52-60'	Gravel 75% grey sediment + volcanic pebbles 2 cm to 2 mm, 25% white gneiss + limestone, fine to medium sand matrix, clast dominant.	Cu 40, Pb 5, Zn 46, Ni 14, Ag ND, Wt -, Au 30
	DO-81-20 6	60-64'	Gravel continued with few minor clay balls @60'.	Cu 60, Pb 15, Zn 31, Ni 31, Ag 0.1, Wt -, Au 15
	DO-81-20 7	64-73'	Clay-Pebble Till <25% clay till balls, very pebbly, 75% sediment, 25% gneiss + limestone, fine to medium sand matrix. Alternating clay- +pebble-rich beds	Cu 65, Pb 13, Zn 31, Ni 26, Ag 0.2, Wt -, Au 5

WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 26/81 HOLE # DO-81-20

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: Gov't. Base Line - W. of Winter Rd.

BIT NO.: 62325 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	DO-81-20 8	73-80' Gravel 75% granite + gneiss, <10% limestone, 25% local sediment + volcanic, fine to coarse sand matrix.		98	12	32	29	0.3	-	75
	DO-81-20 9	80-86' Clay Till (basal) Few scattered cobbles at top. Abundant gritty clay till balls. Pebbly lower section. Pebbles - 60% sediment + Gabbro, 30% white gneiss + granite <10% limestone.		173	11	38	40	0.2	-	50
	DO-81-20 10	86-91' Bedrock - Gabbro Medium grained, massive, feldspathic.		35	4	18	45	ND	-	5

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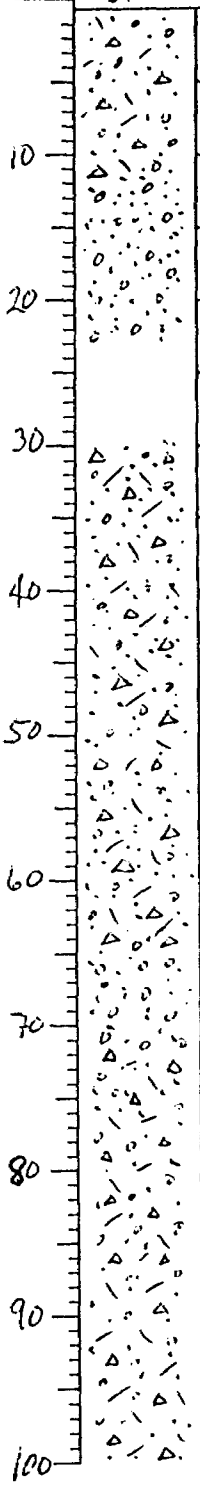
WESTERN MINES LTD.

GEOLOGIST: D. Robinson, G. Thomas DATE: January 27, 1981. HOLE # DO-81-21

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Line 3.9 km. West of Winter Road

BIT NO.: 62325 NTS: 32 E-13



Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		1	Brown clay - 1 - 3' (Top) 0-12' - Pebbly Clay Till -Fine to medium sand matrix -Abundant clay balls -60% greenstone volcanic - sedimentary pebbles	
10		2	12-23' - Gravel -Fine to medium sand matrix; few greenstone sedimentary or volcanic cobbles. -No clay material. -60% sedimentary and volcanic -30% granite gneiss. -10% limestone - 1cm. size.	
20		3		
		No Return	-23' - clay till balls - 5 mm. in size. 27-30' - No return	
30		4	30-65' - Till - Clay balls up to 40% fine, medium and coarse sand, probably high in silt. Minor mafic pebbles, limestone. Clay bed - 37-46'; interbedded sand at 38'.	
40		No Sample	46-60' - Sandy till - polymictic pebbles - predominantly granitic and gneissic; medium and coarse sand matrix. No clay balls, however silty and apparently clay rich. 54' - More gravelly - argillite cobbles, minor limestone.	
50		5		
		6	60' - Clay balls with medium to fine sand matrix. Argillite pebbles and cobbles predominate. Clay balls up to 75%. 10-20% pebble framework.	
60		8		
		9	65-70' - Gravel - Mafic pebble component increases from previous section > 75%.	
70		10	67' - Decrease in greenstone/increase in granitic gneiss. Medium and coarse sand matrix.	
		11	70-101' - Till 70' - 10-30% Small clay balls; granitic, small pebbles and coarse sand.	
80		12	73-74' - Granite and mafic granite gneiss boulders.	
		13		
		14	74' - Gabbroic vs. Gneissic cobbles/ argillite cobbles 60:40 medium sand matrix.	
90		15	76' - Granite - greenstone pebbles 50:50. Fine to medium sand matrix. Minor limestone. Clay balls up to 15%.	
		16	82-84' - Gravel bed, light green, siliceous medium grained cobble or small boulder. Granitic-greenstone pebbles 50:50.	
100				

1 grain v.g. 200μ transported

Cu	Pb	Zn	Ni	Ag	Wt	Au
139	9	34	37	0.3	-	1190
124	11	54	40	0.4	-	50
122	13	37	38	0.3	-	25
115	10	48	37	0.2	-	30
146	11	43	46	0.2	-	60
154	14	56	66	0.2	-	35
560	12	184	260	0.4	-	85

NOTE: SAMPLE (7) WAS BAGGED INTERVAL ?

Hole No.	Page No.
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WESTERN MINES LTD.

GEOLOGIST: D. Robinson, G. Thomas DATE: January 27, 1981 HOLE # DO-81-21

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Line 3.9 km. West of Winter Road

BIT NO.: 62325 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		17	Argillite cobbles larger than granitic medium sand matrix. 84-85' - Clay bed. Polymictic. Clay balls up to 10%. Medium and fine sand matrix. 86' - Granitic boulder. Boulder felsic volcanic. Clay balls with 10 - 15% greenstone pebbles, very dark, soft and friable. No sand. 91' - Clay balls - Minor and mafic gneiss boulder. Increase of clay balls with depth of 75%. i.e. at 92'. Primarily mafic volcanic and sedimentary pebbles - sone grey felsic apparently bedded. Fine sand and silt in matrix. Trace limestone. 96' - Gritty clay balls up to 80-90% greenstone pebbles. 98' - Elongate, thin mafic sediments. 100-101' - Dark greenish grey clay balls; dark green boulder. 101-107' - Bedrock - Graphitic metasediment black, soft, graphitic, friable 5 - 10% pyrite probably banded. 107' - End of Hole.	Cu Pb Zn Ni Ag Wt Au 285 1 280 73 ND - 5

C. Robinson

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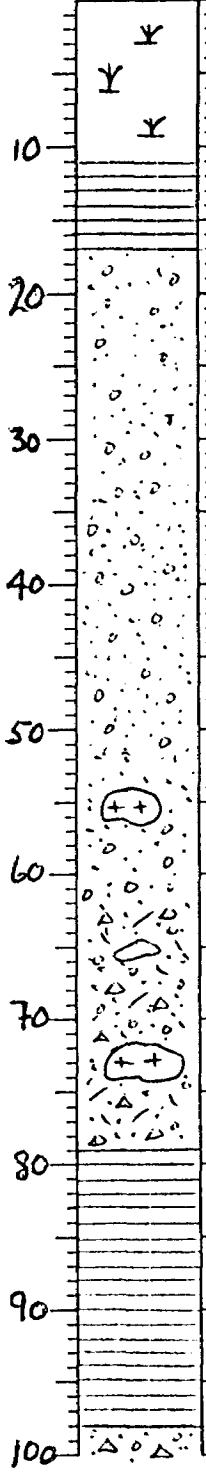
WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 27,1981. HOLE # DO-81-22

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Line at Stream 5 km. West of Winter Road

BIT NO.: 090160 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-10' - Swamp	
		10-17' - Clay curds. Cream and gray.	
		17-62' - Gravel - Up to 80% pebbles. Very high in limestone; no appreciable mafics. Primarily medium quartz sand matrix.	
	1	32' - Increase in mafic. 36' - Decrease in limestone <10-15%. Minor clay bed. Predominantly medium sand matrix.	
		40-44' - Medium sand, minor pebbles.	
		44-46' - Minor small pebbles; coarse sand framework; medium to fine sand matrix.	
	2	54-56' - Mafic boulder - pyroxenite?	
		56-60' - Small, polymictic pebbles up to 25%, coarse sand matrix. Fossiliferous limestone. Lessor gravel from 60-62' - mainly fine and medium sand.	
	3		
	4	62-78' - Till - up to 50% gritty clay balls with fine sand. Greenstone pebbles and coarse granitic sand component.	
	5	64' - Pink granite boulder followed by gritty clay balls to 90% containing 10% greenstone pebbles.	
	NS		
	6	72-74' - Clay bed - grey, as curds. 74-78' - Clay rich, minor mafic pebbles. 78' - Acid test positive on clay.	
	7		
		78-98' - Clay - Clean, grey and hard.	
	8	98-118' - Till - Greenstone pebbles in greyish-green clay up to 50% pebbles. Primarily phyllitic minor limestone - + HCl. test. Also granite gneiss, mainly gneiss pebble fraction.	
	NS		
	8		
	No Sample	104-114' - Fine sand. Some sedimentary pebbles; minor gritty clay balls.	
		114' - Cobbles - granitic and greenstone sediment. Any containing trace disseminated pyrite.	
	9	118-148'- Gravel - Greenstone sediment and gneissic pebbles. Medium to coarse sand matrix. Some quartz pebbles, white and pure, clear.	

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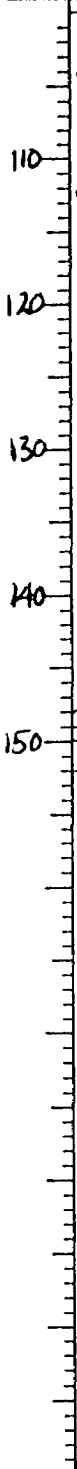
WESTERN MINES LTD.

GEOLOGIST: G. Thomas, F. Thompson DATE: January 27,1981 HOLE # DO-81-22

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Gov't. Line at Stream 5 km. West of Winter Road

BIT NO.: 090160 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	9	Greenstones argillaceous and phyllitic.	152	46	112	124	0.4	-	490
	10	119' - Section becomes more rich in coarse mafic sand. 120-122' - Coarse quartz and sand matrix. 124' - Granite-gneiss boulder.	130	19	72	70	0.3	-	60
	11	128' - Granitic and gneissic component increasing, sediments decreasing - pyritic. Minor limestone.	455	114	460	200	1.6	-	270
	12	130' - Glassy, white pebbles of vein quartz.	415	104	445	185	1.5	-	155
	13	Medium and coarse sand matrix more predominant than pebble framework.	310	74	420	175	1.2	-	130
	14	140' - Small pebbles. Coarse sand 50:50. 141' - Boulder - gabbroic. 143' - Boulder - light grey - felsic intrusive?	355	84	415	195	1.2	-	790
	15	144' - Sediment and volcanic pebbles predominate. Coarse sand matrix. Detrital pyrite and pyrrhotite?	235	92	410	220	1.2	-	150
	16		390	94	440	215	1.3	-	290
	17	148' - 153' Bedrock - Siltstone-argillite. Very fine-grained. Laminated slaty cleavage. Pyrite coatings on fracture planes;	395	120	465	195	1.8	-	220
	18	trace pyrite chips. Sample looks graphitic.	255	22	94	55	0.4	-	L5
		153' - End of Hole.							

Sample 16 1 grain v.g. 250μ transported

C. Rodrigue

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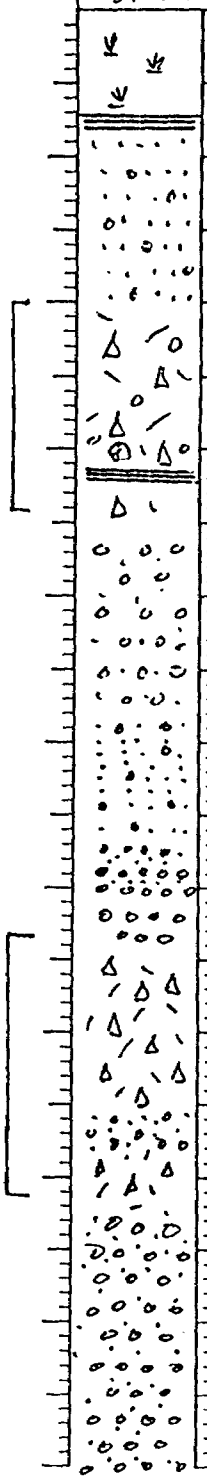
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 27/81 HOLE # DO-81-23

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: Gov't. Base Line - W. of Winter Rd.

BIT NO.: 090160 NTS: 32 E-13



Log (inches)	Sample No.		Overburden Description	Notes & Analyses						
	NS.	0-4'	Humus - minor brown clay.							
	DO-81-23 1	4-17'	Sand & Pebbly Sand Grey, fine clay top. Fine to medium sand matrix. Increase in % of pebbles near base.	Moderate to low return.						
				Cu	Pb	Zn	Ni	Ag	Wt	Au
				112	32	104	38	0.5	-	L5
	DO-81-23 2	17-28'	Clay Till 50% 1 cm - 2 mm gritty clay till balls, 50-60% white gneiss pebbles, 10-20% limestone, clay bed @25'. Clay till to 29'.	230	54	168	72	0.8	-	L5
	DO-81-23 3	28-32'	Gravel Sandy matrix, 60% granite + gneiss, 10-15% limestone clast dominant.	58	35	60	25	0.3	-	360
	DO-81-23 4	32-42'	Sand & Gravel Few clay balls @32'. Gabbro boulder 35 to 37½. Brown fine to medium sand. Coarse gravel base.	156	22	66	50	0.4	-	10
	DO-81-23 5	42-50'	Gravel to Pebbly Till Few gritty clay balls @43'. 25-50% till balls @45'. Assorted pebbles, granite + gneiss dominant, abundant limestone, local sediments, limestone cobble @48'. Very sandy matrix, alternating between gravel & pebbly till	104	20	62	40	0.4	-	L5
	DO-81-23 6	50-60'	Gravel Fine to medium sand matrix. No clay till balls, granite cobble @55', predominantly biotite gneiss, abundant limestone & sediment, assorted clast size & composition	110	12	36	23	0.5	-	L5

Hole No	Page No
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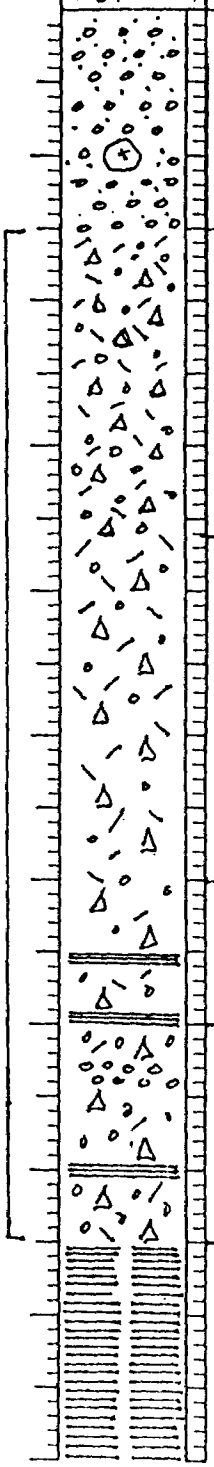
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 27/81 HOLE # DO-81-23

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: Gov't. Base Line W. of Winter Rd.

BIT NO.: 090160 NTS: 32 E-13



Sample No.		Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
		Notes & Analyses							
DO-81-23 7	60-70'	Gravel Fine to medium sand matrix, biotite gneiss cobble @65', assorted pebbles. Minor clay @68' till & clay coated pebbles.	138	16	31	28	0.3	-	105
DO-81-23 8	70-80'	Clay-Pebble-Till 50% gritty clay till balls, pebbles - 50% biotite gneiss + granite, 40% siltstone/ argillite, 10-20% limestone. 2 cm - 2 mm pebble content especially siltstone inc. down section.	210	16	32	48	0.4	-	L5
DO-81-23 9	80-90'	Abundant till balls + pebbles, 50% gneiss, 50% siltstone, minor limestone. Very sandy matrix. Inc. in pebble-size. & abundant down section.	146	17	64	48	0.4	-	145
DO-81-23 10	90-97'	@90' - 90% till balls. 92' - grey clay bed. Assorted pebble content.	133	12	39	28	0.3	10	310
DO-81-23 11	97-103'	Gravelly Till Alternating pebble & clay-rich sections. Pebbles are predominantly gneiss and granite.	285	42	123	98	0.6	10	55
DO-81-23 12 N.S.	103-120'	Silt Very fast drilling. Scattered pebbles.	225	40	117	105	0.5	10	985

WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: January 28,1981. HOLE # DO-81-23

SAMPLER: D/ Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: S. of Gov't. Line 5 km. West of Winter Road

BIT NO.: 090166 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
120		13	120-155' Gravel - Primarily sedimentary greenstone. Up to 1% pyrite as pebbles and spheres. 5-10% granitic or gneissic; some limestone. Quartz pebbles 1-2%. Coarse sand matrix.		385	90	500	150	1.5	10	355
130		14	132' - Increase in fine matrix up to 30-40% by volume - fine sand and silt. Could be a till horizon. 134' - Coarse matrix subordinate to fine.		395	97	475	193	1.9	10	315
140		15	135' - Increase in mafic component - gabbroic? 138' - Boulder-Gabbro?		700	103	1600	127	2.5	10	100
		16	Matrix of fine and medium sand containing pyrite. Also pyrite plates argillaceous pebbles.		945	135	675	93	3.8	10	160
150		17	142' - Massive pyrite pebbles up to 20%. Matrix medium and coarse sand. All framework volcanic and sedimentary.		400	85	250	188	1.6	10	95
		18	148' - Boulder-Gabbro - perhaps diorite. 150' - Boulder-Gabbro. Gravel between boulders (above and below) up to 10% pyrite as pebbles and nodules. Predominantly small volcanic sediment pebbles. Minor granitic/gneiss. 154' - Pyrite pebbles .5 - 1%. Little or no matrix. Limestone minor.		116	1	46	65	ND	-	L5
160			155-160' - Bedrock Mafic volcanic - green, fine grained, massive, minor calcite, no sulfides. 160' - End of hole								

C. Rodrigues

Hole No.	Page No.
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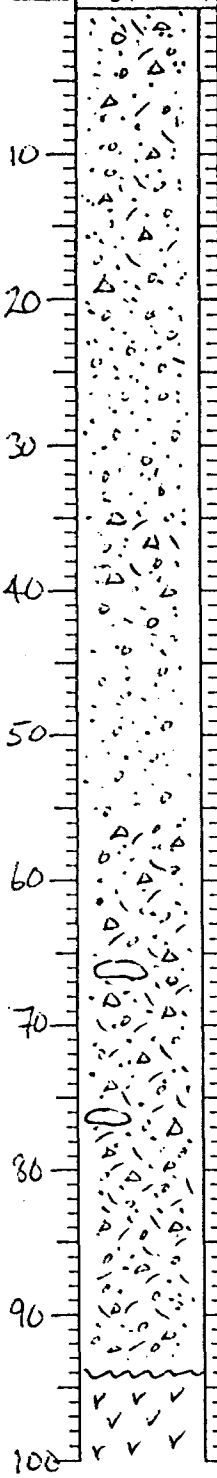
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: January 28,1981. HOLE # DO-81-24

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Gov't. Line 6.2 km. West of Winter Road

BIT NO.: 080116 NTS: 32 E-13



Feet	Sample No.	Overburden Description	Notes & Analyses
		0-10' - Good return - no sample	
10		10-20' - Till - clay balls up to 60%. Gritty. Small mafic and granitic pebbles. Minor medium grained sand matrix, silt.	
	1	15' - increase in mafic sediment component, lessor granitic pebbles, + HCl. test on clay.	
20		20-34' - Sandy Gravel - Coarse sand fine sand and silt 10:90. Coarse and medium sand fraction increases with depth. Small pebbles are mainly granitic and gneissic. Minor limestone.	
	2	20-26' - limited return.	
30		34-40' - Till - Clay balls up to 40%. Granitoid pebbles, minor limestone.	
	3	35-36' - Decrease in clay, increase in fine and medium sand. 37' - Greenstone sediment cobble. 38' - Quartz-rich gneiss cobble.	
40		40-56' - Gravel - Decrease in clay to 10%. Medium to coarse sand matrix. Granitoid cobbles increase.	
	4	41' - Quartz cobble. Return grades into a gravel.	
50		42-44' - Medium grained sand - as a bed. Polymictic composition.	
	5	46' - mafic sediment cobble. 48' - Greenstone sediment pebbles and cobbles; medium sand matrix.	
	6	54' - Granitic boulder followed by mafic gneiss boulder (small).	
60		56-94' - Till - Clay balls. Greenstone sediment pebbles with subordinate granitic, minor limestone.	
	7		
	8	59' - small granite boulder. 62-66' - Predominantly clay. Minor sediment pebbles. Positive HCl.test on clay.	
70			
	9	66' - Boulder-gabbro. 71' - Cobble-gabbro. 73-74' - Boulder-gabbro.	
80		74' - Cobbles and small boulders quartz diorite, granite gneiss. -Increase in boulders and cobbles after 66' - decrease in clay. Granodiorite Boulder 75-76' - + 10 rejected.	
	10		
90		76-78' - Gravel - greenstone sediments (slate?) with lessor granitic pebbles. Granitic component smaller in size. Medium to coarse sand matrix. Minor limestone.	
	11		
	12		
100			

	Cu	Pb	Zn	Ni	Ag	Wt	Au
	170	12	41	39	0.2	-	15
	118	11	40	42	0.2	-	45
	140	18	42	60	0.3	-	110
	355	10	27	54	0.2	-	50
	46	9	32	24	0.1	-	20
	185	12	45	30	0.2	-	310
	10	1	30	55	ND	-	L5

Hole No.	Page No
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WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: January 28,1981 HOLE # DO-81-24

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Gov't. Line 6.2 km. West of Winter Road

BIT NO.: 080116 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		80-82' - Limited sample - some fine sand and silt.	
		86' - Clay balls - minor, clay as coatings.	
		88-90' - Gravel - greenstone pebbles; medium sand matrix.	
		90-92' - Clay balls - grey, soft. Sediment pebbles.	
		94' - Predominantly medium to fine sand matrix, less clay. Cobble-grey, felsic volcanic.	
		94-100' - Bedrock - Mafic volcanic - green, fine-grained massive 5% calcite veins.	

C. Rodrigues

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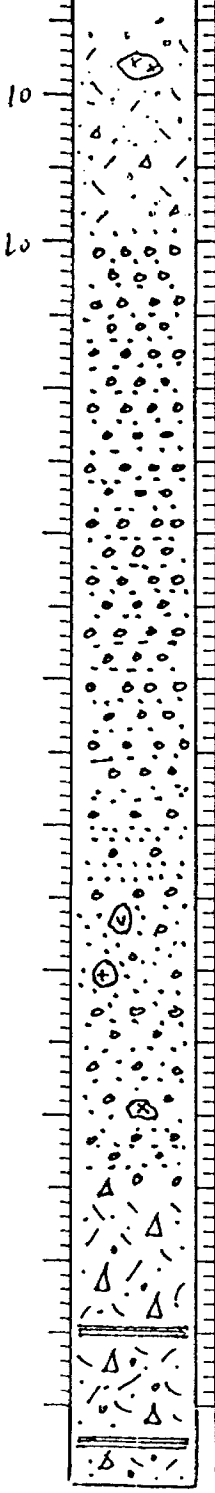
WESTERN MINES LTD.

GEOLOGIST: J. Thomas/D. Robinson DATE: Jan. 28/81 HOLE # DO-81-25

SAMPLER: D. Lewis/M. Mahaffy CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne : Bradley FIELD LOCATION: Gov't. Line, 6.5 km W. of Winter Rd.

BIT NO.: _____ NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
		0-6' Limited return.								
10	~~DO-81-25~~ 1	6-12' Till - tan and gray clay balls. Minor pebbles - mainly limestone. 8' - granitic boulder rejected. Grey clay balls become silty, gritty.		325	25	83	34	0.4	10	5
	DO-81-25 2	12-20' Granitic pebbles increase. Pebble to matrix 1:4. Pebbles greenstone and granitic. 19'- above section appears to grade into gritty grey clay - as small balls.		149	24	66	123	0.7	10	20
10	DO-81-25 3	20-30' Gravel Assorted pebbles; 50% pink granite + white gneiss, 50% sediment + mafic volcanic, minor limestone - 1-2 cm size, subangular. Fine sand matrix.		215	26	62	37	0.4	10	15
	DO-81-25 4	30-40' Predominantly foreign pebbles, 60% biotite gneiss, 40% sediments + volcanics. Abundant limestone, few scattered cobbles.		162	16	49	30	0.2	10	L5
	DO-81-25 5	40-50' Sandy gravel. 43' - mafic cobble. Predominately local volcanic + sedimentary pebbles. 46' - pink feldspar-gabbro boulder. 49' - 25% milky-white quartz chips.		360	20	50	46	0.3	10	230
	NS.	50-53' Gravel 51' - feldspar-gabbro cobble. 53' - clay till balls.								
	DO-81-25 6	53-59' Clay Till (local?) Abundant 1 cm clay till balls. 54' - 90% argillite pebbles. <25% total pebble component. Fine silt-sand matrix. No limestone. 56'-pink granite pebbles. 56½, 58½ - grey clay balls.		200	20	57	43	0.4	5	15

Hole No.	Page No.
DO-81-25	1 of 2

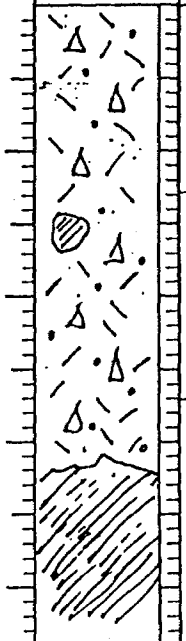
WESTERN MINES LTD.

GEOLOGIST: D. Robinson | DATE: Jan. 28/81 | HOLE # DO-81-25

SAMPLER: M. Mahaffy | CLAIM GROUP: Detour Block | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: North E - W Line; Gov't Line

BIT NO.: | NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	DO-81-25 7	59-65' Clay Till Predominantly gritty clay till balls, <25% pebbles, predominantly local argillite. Very hard unit.		350	30	80	48	0.3	8	35
	DO-81-25 8	65-59' Local till. 65' - argillite cobble. >50% matrix, clay till balls. 25% pebbles, 90% grey argillite, 1 cm - 2 mm size.		137	14	38	35	0.4	7	105
	DO-81-25 9	69-73½' Bedrock - Argillite Blue-grey-green, very fine grained, schistose/laminated. Minor sulphide coating on fracture surfaces.		38	1	23	12	ND	-	L5

C. Robinson

Hole No.	Page No.
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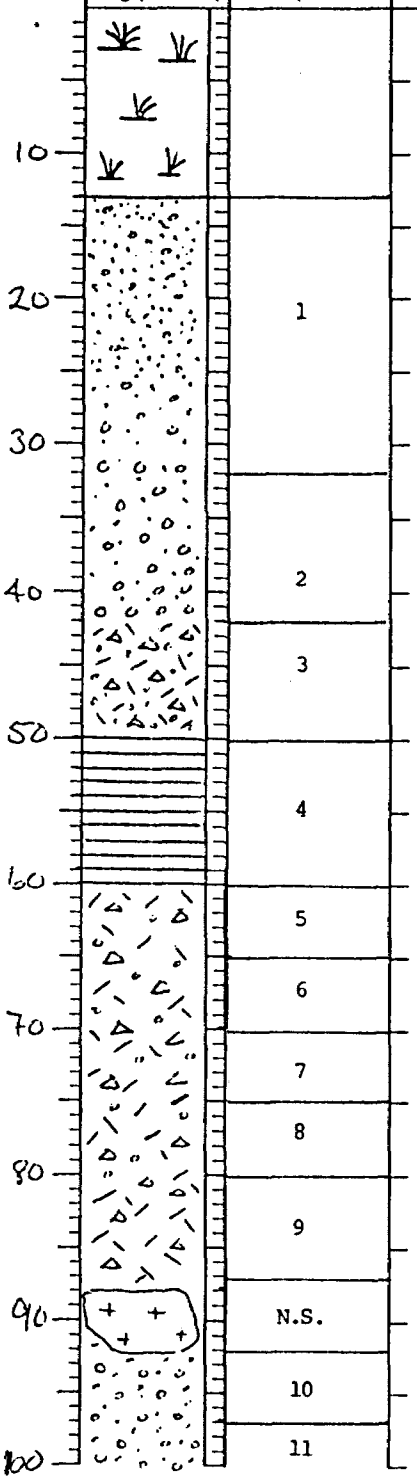
WESTERN MINES LTD.

GEOLOGIST: D. Robinson/C. Rockingham DATE: Jan. 28/81 HOLE # DO-81-26

SAMPLER: M. Mahaffy/L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin/G. Gagne FIELD LOCATION: N.W. Corner of Property

BIT NO.: 090162 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	Swamp Very minor return.							
	Pebbly sand							
1								
	Gravel							
2								
3	Cochrane Till 60% 2 cm - 2 mm biotite gneiss pebbles. 25-35% local volcanic + argillite Limestone fragments. Abundant sand.	110	13	54	23	0.2	10	85
4	Clay Grey clay, very few pebbles.							
5	Pebbly Till Pebble-rich, predominantly argillite, minor granite, no limestone visible. 10% clay balls (<5 mm).	120	10	31	26	0.2	10	15
6	Larger pebbles are local.	90	9	27	27	0.1	6	5
7		77	12	115	22	0.1	5	5
8	Limestone cobble.	137	15	60	24	0.1	10	L10
9		400	43	100	75	0.7	10	740
N.S.	Gabbro boulder.							
10	Local Gravel 75-85% pebbles are local gabbro, volcanic + sediment. Medium sand matrix.	365	123	250	170	2.0	10	85
11		375	140	275	175	2.3	10	80

Hole No.	Page No.
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WESTERN MINES LTD.

GEOLOGIST: D. Robinson/C. Rockingham DATE: Jan. 29/81 HOLE # DO-81-26

SAMPLER: M. Mahaffy/L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin/G. Gagne FIELD LOCATION: N.W. Corner of Property

BIT NO.: 090162 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
				375	140	275	175	2.3	10	80
	11	Local Gravel								
	12	1% graphite + pyrite nodules throughout. 1% pyrite + quartz pebbles (angular).		315	115	270	165	1.9	10	160
110	13			265	70	290	158	0.9	10	130
	14	5% clay balls.		285	75	290	180	1.0	10	70
120	15	Bedrock-Gabbro In part typical of local gabbro. In part sheared or foliated resembling mafic tuff.		26	ND	23	55	ND	-	L5
130										
140										

C. Rockingham

Hole No.	Page No.
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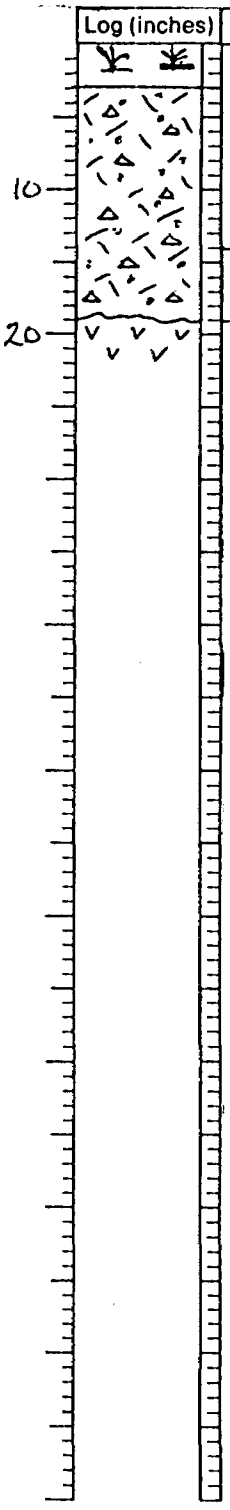
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 29/81 HOLE # DO-81-27

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Central Line W. End of Property

BIT NO.: 090162 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	1	Organic Cochrane Till Calcareous clay balls -80%, 10% granite, 10% limestone. Minor local content. Abundant medium coarse sand.	Cu 115, Pb 28, Zn 80, Ni 32, Ag 0.3, Wt 5, Au L10
	2		Cu 545, Pb 55, Zn 134, Ni 88, Ag 1.2, Wt 10, Au 20
	3	Bedrock - Mafic Volcanic Minor quartz veins + sulfides, massive fine-grained, dark-green basalt.	Cu 48, Pb ND, Zn 24, Ni 38, Ag ND, Wt -, Au 5

C. Rockingham

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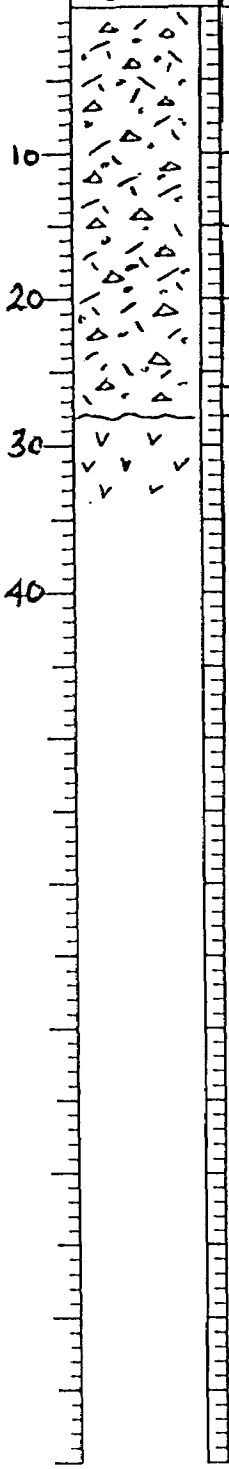
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 29/81 HOLE # DO-81-28

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagné FIELD LOCATION: 2nd Hole from W. End on Central Line

BIT NO.: 090162 / 090163 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	Cochrane Till + Organic							
1	Cochrane Till Granite + gneiss pebbles - 80%. Local mafic volcanics - 20%. Minor limestone.	300	20	53	40	0.4	8	45
2	Abundant medium to coarse sand. Variable clay ball content.	250	23	50	64	0.3	9	15
3		74	13	73	26	0.1	10	L5
4	Bedrock + Till	560	3	54	115	0.5	10	5
5+6	Mafic Volcanic Flow Massive, dark-green, fine-grained.	100	ND	34	56	ND	-	L5

C. Rockingham

Hole No.	Page No.
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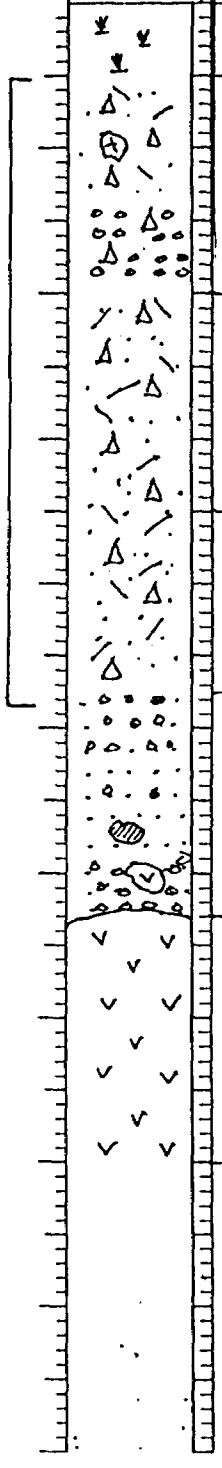
WESTERN MINES LTD.

GEOLOGIST: D. Robinson | DATE: Jan. 29/81 | HOLE # DO-81-29

SAMPLER: M. Mahaffy | CLAIM GROUP: Detour Block | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: 2nd E-W Line, on Creek, W. End.

BIT NO.: 090162 | NTS: 32 E-13



Log (inche	Sample No.	Overburden Description	Notes & Analyses
	NS.	0-6' Humus	
	DO-81-29 1	6-26' Cochrane Clay Till Few pebbles, abundant limestone. Biotite gneiss boulder @10'. Fine to medium sand matrix. Gravelly @10' with no clay, foreign clasts, biotite gneiss + granite.	Cu 110 Pb 30 Zn 80 Ni 32 Ag 0.3 Wt 6 Au 5
	DO-81-29 2	26-36' Sandy-Clay Till Minor gritty till balls. Very sandy.	Cu 184 Pb 22 Zn 75 Ni 43 Ag 0.3 Wt 10 Au L5
	DO-81-29 3	36-48' Sporadic return; 40' large, soft grey clay balls - 2-1 cm.	Cu 315 Pb 34 Zn 135 Ni 88 Ag 0.6 Wt 10 Au 130
	DO-81-29 4	48-51½' Sand & Gravel Abundant biotite gneiss, 50% Limestone 10%, argillite, cobble at 50', mafic volcanic boulder @51'.	Cu 173 Pb 24 Zn 64 Ni 42 Ag 0.4 Wt 10 Au L5
	DO-81-29 5	51½-56' Bedrock Argillite or intermediate mafic tuff, grey, very fine grained, minor quartz veins, trace sulphide coating on fracture surfaces.	Cu 95 Pb ND Zn 56 Ni 79 Ag ND Wt - Au 10

C. Rodrigue

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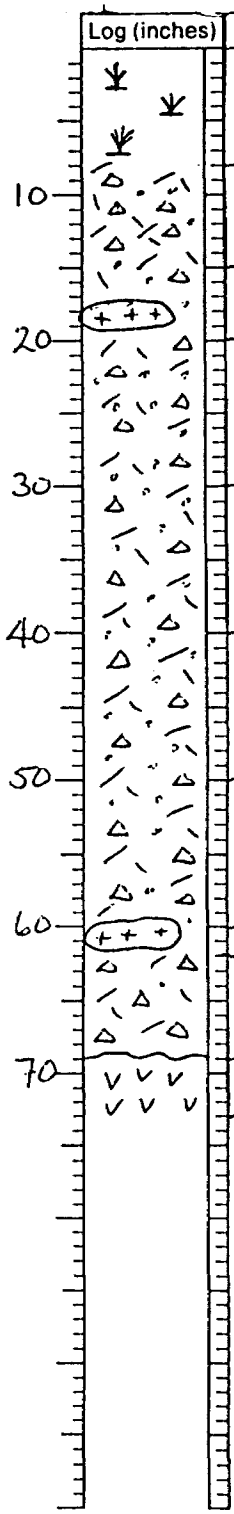
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 30/81 HOLE # DO-81-30

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 600 m E. of #29 @ Creek

BIT NO.: 090160 (used) 59251 (new) NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
		Organic								
	1	Cochrane Till 80% grey, calcareous, gritty clay balls. 20% pebbles. 60% granite + gneiss. 10-20% limestone. 5-20% local volcanic + sediment. High content of medium-grained sand in matrix.		144	29	91	35	0.4	-	110
	2			118	24	64	35	0.4	-	L5
	3			94	18	58	29	0.2	-	L5
	4	Local pebble content is variable (up to 30%).		96	18	66	31	0.2	-	L5
	5			72	16	38	24	0.2	-	25
	6	High clay content.		88	21	58	32	0.3	-	90
	7			230	28	92	66	0.4	-	L10
	8	Bedrock - Mafic Volcanic Minor quartz veins with sulfides. Massive fine-grained dark-green. Difficult drilling.		94	1	44	105	ND	-	L5

C. Rockingham

Hole No.	Page No.
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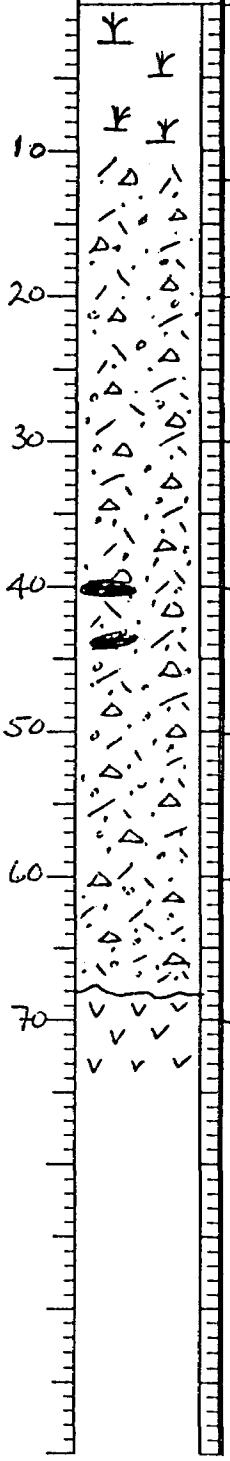
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham DATE: Jan. 30/81 HOLE # DO-81-31

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: W. Edge of Swamp @ 40 E.

BIT NO.: 59251 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	Organic							
1	Cochrane Till Clay ball content variable up to 80%. Local volcanic + sedimentary pebble content also variable but increases down section. Limestone content 0-10%. High content of medium-coarse, white sand in matrix.	123	38	260	44	0.3	3.3	L15
2		113	37	98	38	0.6	10	15
3		93	20	75	28	0.3	10	L5
	Gneiss cobble.							
4	Limestone cobble.	83	30	70	26	0.3	10	L5
5	High clay content.	95	22	78	27	0.3	10	155
6		375	27	77	40	0.4	4.2	30
	Bedrock - Mafic Volcanics Minor quartz veining + pyrite. Massive, fine-grained, dark-green.							
7		58	1	21	106	ND	-	L5

C. Rockingham

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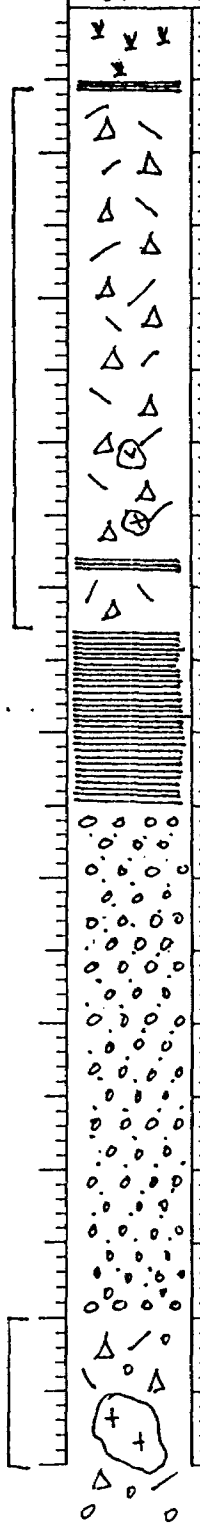
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 30/81 HOLE # DO-81-32

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line; Road Junction

BIT NO.: 090160 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	NS.	0-10' Humus - brown clay.	
	DO-81-32 1	10-20' Cochrane Till Fine, grey, gritty clay till balls, matrix dominant. Very few pebbles, abundant limestone, secondary sediment + gneiss, fine, sandy matrix.	Cu 93, Pb 22, Zn 80, Ni 30, Ag ND, Wt 1.45, Au L50
		20-30' No return.	
	DO-81-32 2	30-40' Clay Till Matrix, dominant, <10% pebbles, abundant limestone, 38' grey clay bed, 2 cm - 5 mm clay till balls.	Cu 172, Pb 44, Zn 85, Ni 40, Ag 0.5, Wt 8, Au 5
	NS.	40-44' Clay Grey, very soft, ropey, massive, no pebbles.	
	DO-81-32 3	44-50' Gravel Coarse, unsorted 2 cm - 1 mm, assorted pebbles, abundant limestone, gneiss + argillite 48' - 60% granite sediment or mafic volcanic pebbles 1-2 cm size.	Cu 185, Pb 48, Zn 94, Ni 49, Ag 0.5, Wt 8, Au 255
	DO-81-32 4	50-60' As above, abundant local sediment + mafic volcanic, gneiss + limestone. Fine to medium sand matrix.	Cu 120, Pb 26, Zn 75, Ni 40, Ag 0.4, Wt 6, Au L5
	DO-81-32 5	60-7-' Clay Till Few clay till balls. Granitic boulder 61-63'. Hard packed granitic clay @63'. 45% pebbles, down section.	Cu 120, Pb 28, Zn 75, Ni 38, Ag 0.2, Wt 4.7, Au L10

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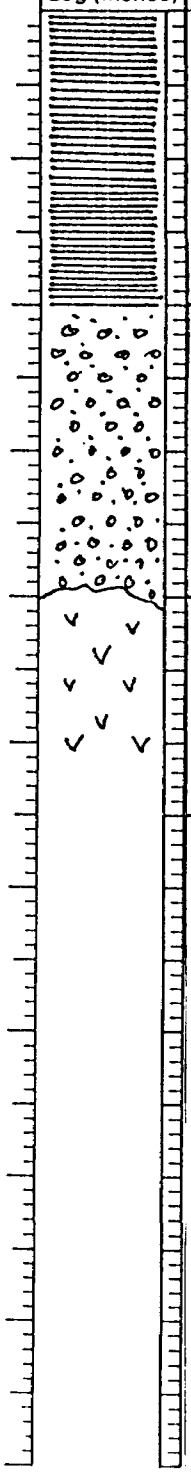
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Jan. 31/81 HOLE # DO-81-32

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line; Road Junction

BIT NO.: 090160 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	NS.	70-100' Clay Green-grey, no pebbles, very fine-grained, massive. Very fast drilling. Moderate to low return.	
	DO-81-32 6	100-105' Gravel 90% granitic, mafic volcanic pebbles (local), minor limestone, quartz, red jasper. Coarse matrix.	Cu Pb Zn Ni Ag Wt Au 210 32 52 80 1.0 10 380 1 grain v.g. 100μ transported
	DO-81-32 7	105-108' Bedrock - Mafic tuff. Chlorite, schist, very fine-grained, chloritic, dark-green.	Water problems. ∞ change holes after 3' of bedrock.

C Rodrigue

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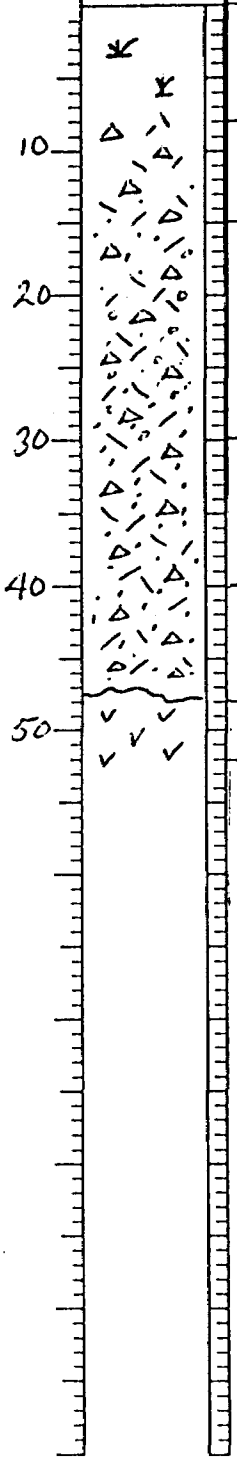
WESTERN MINES LTD.

GEOLOGIST: D. Robinson/C. Rockingham DATE: Jan. 31/81 HOLE # DO-81-33

SAMPLER: M. Mahaffy/L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: Jodouin/Gagne FIELD LOCATION: S. of DO-81-32 (400m)

BIT NO.: 090155 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses						
		Humus - very minor return.							
	1	Cochrane Till Calcareous clay balls. Very few pebbles - granite and lime-stone.	Cu	Pb	Zn	Ni	Ag	Wt	Au
			58	20	42	25	0.2	-	15
	2	15-20% gritty clay balls, pebble dominant, 10% local volcanic clasts. Abundant medium sand matrix.	116	16	56	44	0.2	-	65
	3	60% clay balls. 30% local pebbles.	96	11	33	37	0.3	-	125
	4	Dominantly local volcanic + gabbro pebbles.	130	14	38	40	0.3	-	100
	5	Bedrock Mafic Volcanic Massive, fine-grained, dark-green.	17	6	635	45	ND	-	L5

C. Rockingham

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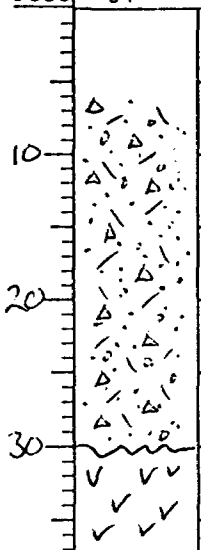
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: January 31,1981 HOLE # DO-81-34

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 45 + 00E, 11+00N

BIT NO.: 090155 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-6' - No return	
	1	6-30' Till - Greenish-grey clay balls; minor granitic pebbles. Some limestone.	Cu 130, Pb 30, Zn 30, Ni 37, Ag 0.5, Wt -, Au 10
	2	9' - Granitic cobbles and pebbles; minor clay balls up to 15%. 10-12' - Increase in greenstone pebbles; clay balls up to 75%. 12-14' - Limestone up to 15-20%. 14-16' - Clay balls >75%.	Cu 255, Pb 35, Zn 108, Ni 52, Ag 0.6, Wt -, Au 15
	3	20' - Boulder-sheared greenstone sediment.	Cu 1900, Pb 28, Zn 46, Ni 39, Ag 0.7, Wt -, Au 55
	4	20-24' - Increase in sheared sediment cobbles and small boulders. 24-26' - Boulder-greenstone-gabbroic, soft - rejected.	Cu 740, Pb 31, Zn 62, Ni 37, Ag 0.4, Wt -, Au 70
	5	26-28' - Mainly sheared sediment boulders; minor clay balls, limestone; granite gneiss boulder.	Cu 65, Pb 2, Zn 71, Ni 93, Ag 0.1, Wt -, Au L5
		28-30' - Section becomes more pebbly - small sized. Granitic component increases.	
		Mafic volcanic - dark green, massive fine-grained, soft, chloritic 1% coarse pyrite.	
		36' - End of Hole.	

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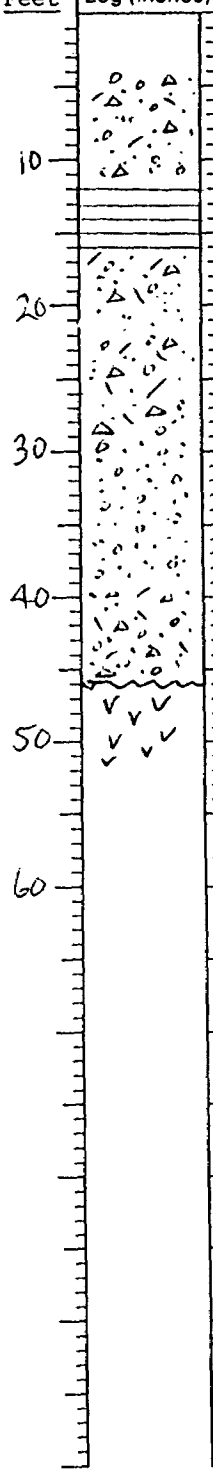
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: January 31,1981. HOLE # DO-81-35

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 49+50E

BIT NO.: _____ NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-4' - Good return; limited sample.	
	1	4-28' - Till - greenish-grey clay balls, gritty. Limestone present - minor mafic gneiss pebbles, quartz, sediments, granitic.	Cu 68, Pb 25, Zn 54, Ni 24, Ag 0.2, Wt -, Au L5
		10-12' - Grey clay balls, minor granitic pebbles.	
	N.S.	12-16' - Clay bed - Grey clay as balls and curds, clean - rejected.	
	2	17' - Grey felsic cobble.	Cu 114, Pb 32, Zn 80, Ni 38, Ag 0.5, Wt -, Au L5
		21' - Cobble - medium brown, fine-grained felsic volcanic.	
	3	22' - Mafic gneiss and granitic pebble bed; some sand.	Cu 36, Pb 12, Zn 22, Ni 17, Ag 0.1, Wt -, Au 140
	4	23' - Clay balls become slightly yellowish as well as being grey.	Cu 30, Pb 17, Zn 21, Ni 14, Ag 0.2, Wt -, Au 175
		26-28' - Sand bed - yellowish brown, medium.	
	5	28-38' - Gravel - Greenstone slate pebbles and cobbles, lessor granitoid. Coarse and medium sand matrix. Grey in colour. Minor limestone.	Cu 132, Pb 20, Zn 53, Ni 40, Ag 0.2, Wt -, Au 70
	6		Cu 210, Pb 48, Zn 72, Ni 54, Ag 1.0, Wt -, Au 25
		32' - Mainly small pebbles.	
	7	34-37' - Polymictic - up to 5% limestone.	Cu 132, Pb 20, Zn 82, Ni 32, Ag 0.3, Wt -, Au 45
		37' - Coarse and granular, small pebbles.	
	8	Small boulder olive-green, fine-grained felsic volcanic-weathered.	Cu 48, Pb 1, Zn 88, Ni 58, Ag ND, Wt -, Au L5
		38-46' Till - Clay balls. Lithology remains comparable to gravel section except for clay matrix - up to 15% cobbles limestone, mafic gneiss; volcanic pebbles.	
		40' - Boulder granite gneiss.	
		42' - Small pebbles - mainly granitoid; medium sand matrix.	
		43' - Minor <1% clay balls.	
		46-51' Bedrock - Mafic volcanic massive to moderate foliation, dark green soft chloritic.	
		51' - End of hole.	

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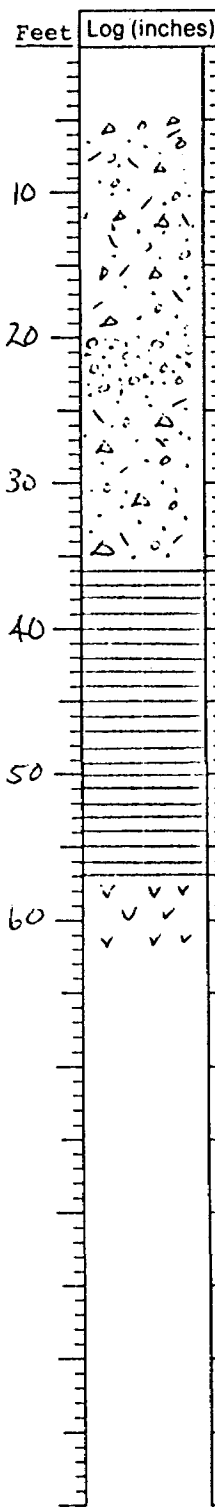
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: January 31,1981. HOLE # DO-81-36

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 52+25E

BIT NO.: _____ NTS: 32 E-13



Sample No.	Overburden Description
	0-4' - Good return. Limited clay balls and wood.
1	4-20' - Till - Clay balls up to 25%. Limestone up to 25% as cobbles and pebbles. Granitoid pebbles. Minor greenstone as pebbles. 4-14' - Clay balls grey; minor limestone and granitoid pebbles.
2	18' - Clay balls become gritty.
	20-24' - Gravel - coarse and medium sand matrix.
3	21' - Mafic gneiss cobbles and pebbles. Coarse and medium sand.
4	Mafic sand - appears to be hornblende. Minor limestone pebbles.
	24-36' - Till - Clay balls vary from minor to >75%. Limestone cobble, granitic pebbles. Minor greenstone. Clay balls gritty.
5	28' - Boulder granite gneiss. Limestone up to 30%. 30' - Nearly all clay balls; minor granitoid and limestone as small pebbles. Minor greenstone. 32' - Cobble greenstone.
No Sample	36-57' - Clay Bed - Large grey curds and strings; soft and clean. Rejected.
	57-62' - Bedrock Quartz eye intermediate tuff, blue quartz eyes ~1mm. brown-purple siliceous fine-grained matrix, hard to scratch. Minor quartz veins.

C. Rodrigue

Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	158	20	60	22	0.2	-	5
	102	35	118	38	0.6	-	20
	2200	37	96	70	0.9	-	125
	132	45	103	32	0.6	8	10
	132	43	105	36	0.7	6	L5
	18	2	73	8	0.1	-	L5

Hole No.	Page No.
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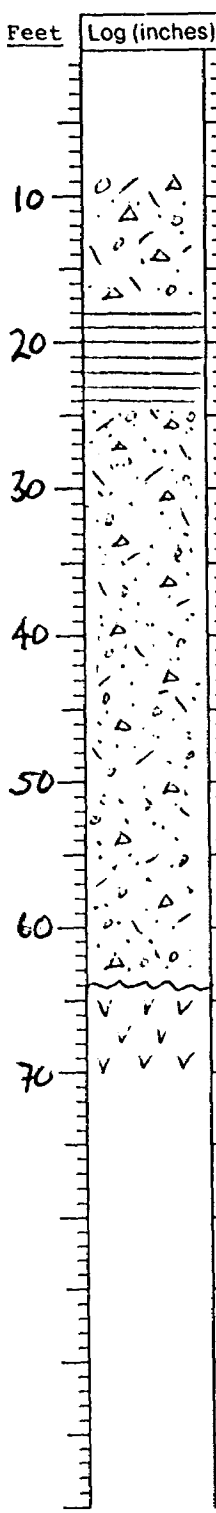
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 1,1981 HOLE # DO-81-37

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 55+50E

BIT NO.: 090159 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-8' - Good return - limited sample - wood, minor clay.	Cu 144, Pb 50, Zn 150, Ni 43, Ag 0.7, Wt 3.5, Au L15
	1	8-64' - Till - Clay balls, grey. Minor mafic sediments as pebbles, limestone. Clay somewhat gritty. Limited sample from 12-16'. 18-24' - Clay bed - grey, clean, soft - as strings. Rejected. 24-34' - Clay balls gritty and soft. Minor pebbles - limestone, gneissic and granitic, greenstone. Fine to medium sand plus silt in matrix.	
	NO SAMPLE		
	2	34' - Fine to medium sand matrix. Small gneissic pebbles predominant. 35' - Greenstone cobbles, granitic cobble; medium and coarse sand matrix.	145, 42, 133, 44, 0.8, 8, 20
	3	36' - Small quartz-rich gneiss boulder, pink granite boulder. Clay balls (gritty) up to 30%. Greenstone, limestone and gneissic pebbles. Fine sand and silt in matrix.	125, 37, 54, 45, 0.5, 8, 20
	4		155, 20, 66, 53, 0.8, 7, 845
	5	40' - Hard, grey, gritty clay balls - some appear brittle. Minor fossile sediment pebbles, gneissic, lime-stone.	87, 20, 68, 30, 0.1, 10, 10
	6	42' - Granite cobble; ultramafic cobble. Greyish-green felsic volcanic pebbles. Up to 60% gritty clay balls. Fine sand and silt in matrix.	177, 38, 65, 98, 0.5, 8, 25
	7		170, 39, 73, 98, 0.4, 8, 190
	8	44' - Small granite gneiss boulder - rejected. 46' - No granitoid component. Up to 20% greenstone sediments as pebbles. Minor limestone.	220, 30, 55, 75, 0.5, 7, 75
	9	49' - Cobble-grey felsic volcanic.	345, 30, 62, 77, 0.8, 8, 105
	10	63' - Boulder - granite. Rejected.	78, ND, 92, 25, ND, -, 5
		64-69' - Bedrock - Mafic volcanic, fine-grained, dark green, moderate foliation chloritic, minor py and calcite.	

Sample 4 1 grain v.g. 150μ
Sample 8 1 grain v.g. 500μ
Both are transported

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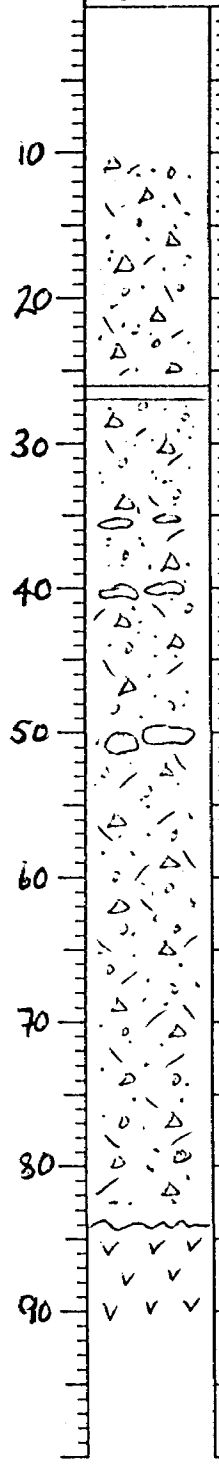
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 1,1981. HOLE # DO-81-38

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 58+50E

BIT NO.: 090119 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
		0-6' - Poor return, no sample. 6-10' - Good return, poor sample - some grey clay and wood. 10-84' Till - Grey clay balls with fine sand and silt. Up to 20% pebbles.								
	1	Limestone and greenstone sediments, primarily. 26-27' - Clay bed - soft and smooth grey clay - rejected. 27' - Pebbles - primarily greenstone, granitic and gneissic. Limestone up to 5%. Medium and fine sand, silt		150	40	137	49	0.6	2.4	L25
	2	matrix. Small pebbles, granular in part. Section becomes increasingly like a gravel - coarser matrix from 34'.		147	44	95	45	0.6	3.05	70
	3	36' - Greenstone cobbles, granite cobble. 37' - Clay balls - section as described from 10 - 26'.		150	27	54	60	0.4	10	30
	4	42' - Greenstone sediment cobble.		197	28	42	32	0.4	5	15
	5	45-50' - Gritty clay balls; very minor pebble.		115	18	45	32	0.2	8	130
	6	52' - Quartz cobble, small sediment boulder. 53' - Small mafic gneiss boulder.		103	17	74	42	0.3	7	15
	7	53-54' - Increasing granitic pebble. Pebble framework > matrix. 54-60' - Matrix becomes more gritty.	1 grain v.g. 250μ transported	180	43	65	80	0.7	9	15
	8	66-72' - Clay Till -90% clay till balls		147	33	87	78	0.6	6	35
	9	-10% pebbles-predominantly volcanic plus sediment, minor granite and limestone. -very soupy samples clay matrix dominant.		205	33	102	95	0.6	2.8	130
	10	72-78' - as above. -minor quartz + red jasper pebbles. <10% pebbles <.5 cm.size.		185	35	64	83	0.6	7	60
	11	78-84' - Clay Till -matrix dominant -<10% pebbles, local.		180	45	85	85	0.5	5	25
	12	84-90' - Bedrock - Mafic Schist -very fine-grained. -dark green. -chloritic and sericitic -50% quartz chips.		225	34	68	77	0.5	4.9	800
	13			9	ND	20	12	ND	-	30

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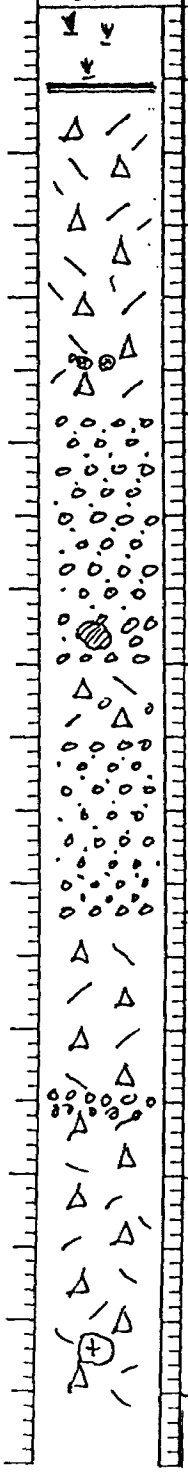
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 1/81 HOLE # DO-81-39

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line 7+00N 61+50E

BIT NO.: 090119 NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
N.S.	0-3' Humus	
DO-81-39 1	3-14' Clay Till ½' brown clay, 25% pebbles. Assorted, granitic limestone sediment, volcanic, oxidized.	
DO-81-39 2	14-18' Clay Till 17' - abundant pink granite chips. Limestone chips 1-2 cm size.	
DO-81-39 3	18-23' Gravel Coarse, 1-2 cm assorted pebbles, granite, gneiss, limestone. No clay till balls. Medium to coarse sandy matrix; 22' greywacke cobble.	
DO-81-39 4	23-30' Pebbly Till & Gravel 23-25' - 35% clay till balls mixed with pebbles, coarse limestone, granite, gneiss, distal clasts, @25' gravel, no clay, 60% sand matrix.	Cu Pb Zn Ni Ag Wt Au 120 24 54 55 0.4 10 15
DO-81-39 5	30-36' Clay Till 40% clay till balls with abundant pebbles. 90% granite, volcanic + sediment, 10% granite + limestone.	177 63 107 145 0.7 9 100
DO-81-39 6	36-42' Clay matrix dominant with local pebbles. 38' - mafic gneiss boulder.	135 30 130 70 0.3 10 350

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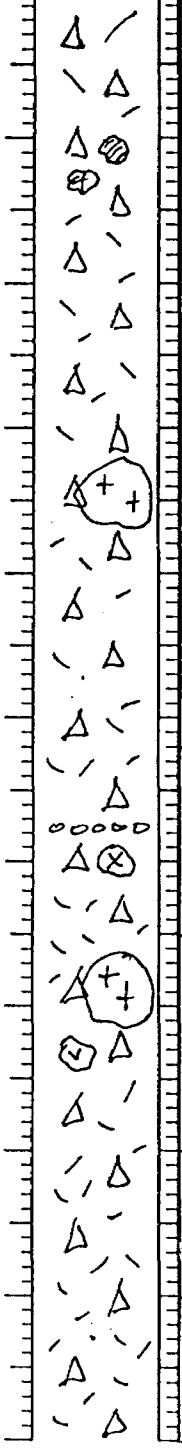
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 1/81 HOLE # DO-81-39

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line

BIT NO.: 090119 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
DO-81-39 7	42-48' Clay Till. Clay matrix dominant. <10% pebbles, local granite, volcanic or sediment, 46' - grey greywacke boulder, 48' - biotite gneiss cobble, 10-25% total pebbles.	137	42	84	74	0.7	10	1390
DO-81-39 8	48-54' Matrix dominant. <10% pebbles, mostly local. Minor granite, gneiss + limestone.	172	26	75	73	1.6	5	G15000
DO-81-39 9	54-60' Matrix dominant. Biotite gneiss boulder at 54.5 to 57', <5-10% pebbles.	150	25	67	65	0.4	10	20
DO-81-39 10	60-66' Clay till, 5 mm size, green pebbles, local sediment + volcanic.	135	24	68	55	0.3	10	360
DO-81-39 11	66-72' Same as above. 68' - pebble-rich grey greywacke. 64' - Gabbro - medium-grained, massive, lime-green - feldspathic.	103	25	67	60	0.4	10	200
DO-81-39 12	72-78' Predominantly clay matrix. 72.5 to 73.5 - pink granitic boulder. 75' - volcanic cobble. <10% total pebbles - local.	112	21	45	78	0.3	7.5	520
DO-81-39 13	78-84' 90% clay till balls.	107	23	45	75	0.3	7	295
DO-81-39 14	84-90' @88' - 20% pebbles grey greywacke & limestone.	166	27	72	87	0.4	6	115

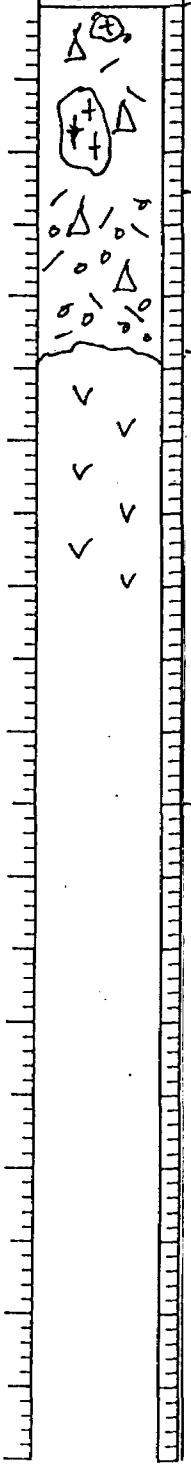
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 1/81 HOLE # DO-81-39

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line

BIT NO.: 090119 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
DO-81-39 15	90-96' Clay Till Matrix dominant. Granite boulder @91' and 94 to 96'.	134	30	55	95	0.3	10	65
DO-81-39 16	96-99' Clay-Pebble-Till Abundant angular, green volcanic chips with clay.	137	28	40	80	0.4	9	205
DO-81-39 17	99-104' Bedrock - Mafic tuff, chloritic, green, very fine-grained. 5-10% fine disseminated pyrite in quartz - calcium veins, small scale banding of quartz & volcanic. Excellent Au host rock.	94	ND	76	75	0.3	-	L5
		(Assayers Ltd.)				1.7		48

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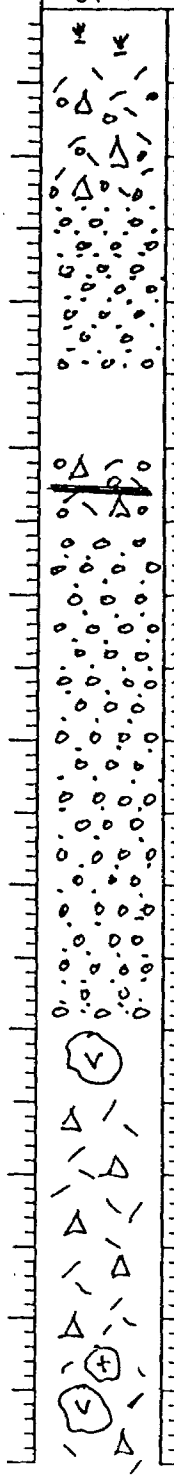
WESTERN MINES LTD.

GEOLOGIST: D. Robinson | DATE: Feb. 1/81 | HOLE # DO-81-40

SAMPLER: L. Nutter | CLAIM GROUP: Detour Block | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: 2nd E-W Line 7+00N 64+50E

BIT NO.: 090119 | NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
NS.	0-3' Humus - brown clay.							
DO-81-40 1	3-6' Pebble - Clay - Till 40% pebbles, abundant limestone. Medium-coarse sandy matrix.	5	10	14	8	ND	7	205
DO-81-40 2	6-16' Gravel + Sand Coarse assorted pebbles. 1-2 cm limestone chips, medium-coarse sand, no clay till balls.	16	9	14	9	ND	8	25
	16-20' No return.							
DO-81-40 3	20-24' Pebble - Clay - Till Grey clay bed @22'. 24-30' Gravel + Sand Assorted pebbles. Granite, gneiss, sediment + volcanic. Sandy matrix.	90	18	55	40	0.3	10	25
DO-81-40 4	30-40' Assorted pebbles, clast dominant, very sandy, no clay.	137	17	48	40	0.4	10	65
DO-81-40 5	40-46' As above. 46' - minor clay till balls.	121	19	102	40	0.4	9	195
DO-81-40 6	46-52' Clay Till Abundant clay till balls. 46' - grey-green Mafic volcanic boulder. 90% of pebbles are local.	169	34	83	105	0.6	7	480
DO-81-40 7	52-58' Matrix dominant. $\leq$25% pebbles, 90% grey-green sediment + volcanic (local). 55' - pink granite cobble. 56-57' - intermediate volcanic boulder.	192	27	125	160	0.4	8	100

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WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 1/81 HOLE # DO-81-40

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line

BIT NO.: 090119 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	DO-81-40	58-64' Bedrock	
	8	Mafic volcanic tuff - schistose, chloritic. Quartz - calcareous - pyritic chips, small-scale banding. Very sulphidic sections & cherty same as #39. Excellent potential as host rock.	

	Cu	Pb	Zn	Ni	Ag	Wt	Au
	98	3	88	78	0.3	-	20
(Assayers Ltd.)					2.6	-	55

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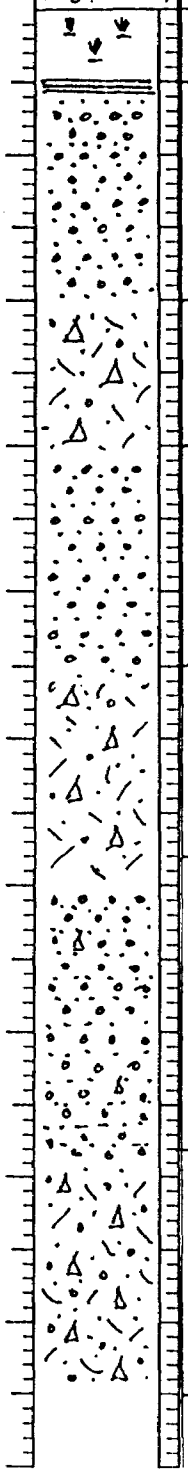
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 1/81 HOLE # DO-81-41

SAMPLER: M. Mahaffy CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 2nd E-W Line; 300 m E. of 40 7+00N 67+50E

BIT NO.: 090157 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
NS.	0-5' Humus							
DO-81-41 1	5-10' Gravel and Sand 6' - grey clay bed (½). Assorted pebble component. Medium-coarse sand matrix.	18	11	19	9	ND	10	5
DO-81-41 2	10-14' Clay Till 99% clay till balls, 1% pebbles, granite + limestone ½ cm size.	118	30	116	36	0.6	5	10
DO-81-41 3	14-18' Gravel and Sand Coarse limestone chips, granite, volcanic - assorted. Medium-coarse sand matrix. No clay.	100	39	118	34	0.6	6	5
DO-81-41 4	18-24' Clay Till >80% clay till balls, no sand matrix; limestone, granite, volcanic, sediment pebbles.	120	25	60	36	0.4	7	45
DO-81-41 5	24-34' Gravel (Till?) No clay till balls. Pebble dominant, assorted. Limestone - granite - volcanic. Abundant medium sand matrix. 29' - 5% clay till balls.	82	14	50	28	0.2	8	20
DO-81-41 6	34-40' Pebbly Clay Till Clay till balls. Abundant assorted pebbles with clay coating.	82	12	32	27	0.2	6	95

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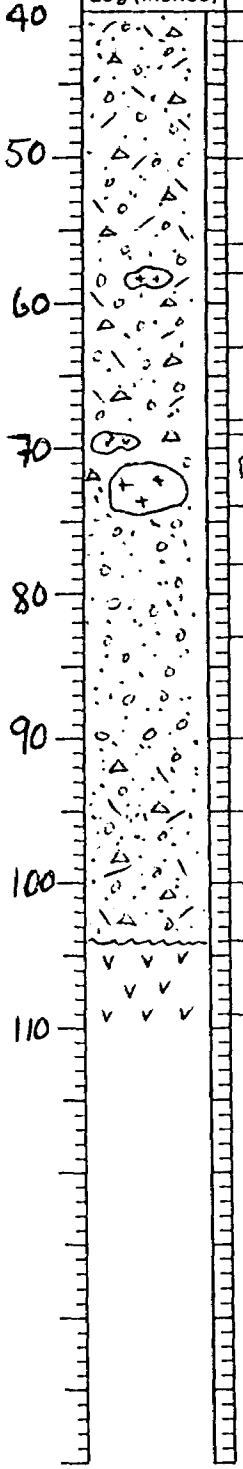
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 1,1981 HOLE # DO-81-41

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 67+50E

BIT NO.: 090157 NTS: 32 E-13



Feet	Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
40	7	40-74' - Till - Gritty clay balls. Mainly mafic gneiss and granitoid - subordinate greenstone, minor limestone. Coarse and medium sand in matrix. 41-42' - Gravelly.	230	17	43	17	0.2	7	75
	8	44' - cobbles - granite gneiss, granite; minor clay balls.	29	7	17	16	ND	5	L10
50	9	50-56' - Greyish-green clay balls - greenstone cobbles and pebbles. Decreasing greenstone sediment to <10% with depth.	31	9	23	25	0.1	2.5	L20
	10	56' - Dark greenish gray clay balls, hard, somewhat gritty. <2% small pebbles including limestone.	33	7	23	40	ND	3	L15
60	11	58' - Greenstone boulder - small. Dark greenish-black clay - looks like licorice - up to 100% from 58 to 63'.	280	18	40	58	ND	4	L10
	12	63-68' - Greenish-grey clay balls, gritty -minor greenstone, limestone. 68' - Greenstone pebbles increase. Cobble-highly altered.	6	7	17	28	ND	10	20
70	13 REJECTED	69' - Greenstone sediment boulder - rejected.	30	8	16	14	ND	10	280
	14	71-74' - Granitic boulder - rejected.	48	7	28	26	ND	8	35
80	15	74-90' - Gravel - Predominantly greenstone pebbles. Coarse and medium sand up to 75% granular and coarse sand framework component.	32	8	23	26	0.2	10	35
	16	76' - Mafic gneiss and greenstone pebbles predominant.	120	24	54	70	0.4	9	250
90	17	76-78' - volcanic pebbles predominant, also limestone present. Coarse sand matrix.	153	26	68	65	0.4	3.5	40
	18	78' - Mafic gneiss cobbles, quartz pebbles.	157	17	32	60	0.5	8	55
100	19	78' - Clay bed - narrow followed by clay balls up to 75% over 1'.	190	15	28	50	0.5	7	4425
	20	79' - Intermediate intrusive? cobbles and small boulders - grandioritic.	66	ND	84	72	ND	-	L5
110		80-82' - Mainly sediment pebbles; medium sand and silt. Minor limestone. 83-86' - Mainly sediment pebbles with granular - coarse sand. Coarse and medium sand matrix. Limestone up to 5%. 90-104' - Till - Grey, gritty clay balls. Silt and medium sand matrix. Sediment pebbles up to 25%. Some granitoid and limestone. 95-98' - increasing pebble-cobble component, decrease in clay. 98-104' - Sea-green clay balls with framework as above. 104-109' - Mafic tuff - dark green, fine-grained, well developed foliation.							

Notes & Analyses

1 grain v.g. 100/ transported

1 grain v.g. 300/ transported

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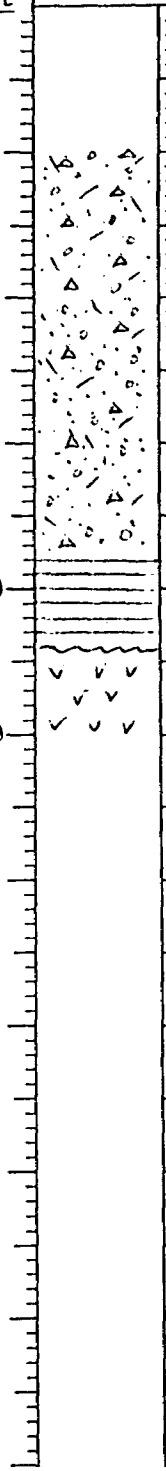
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 2,1981 HOLE # DO-81-42

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 70+75E

BIT NO.: NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-10' - Bad return - minor clay.	
		10-44' Till - Clay balls; small pebbles. Polymictic, granular.	
		20' - Silt and medium sand matrix.	
		25' - Limestone increases. Section becomes more clay-rich after 25'. Clay as balls both gritty and smooth.	
	1	38-43' - Clay bed clean, grey, smooth - as strings.	Cu Pb Zn Ni Ag Wt Au 108 32 190 34 0.6 10 20
	2	44-49' - Bedrock - Mafic volcanic - dark green, fine-grained, massive, minor epidote.	118 34 80 36 0.6 10 10
	3		181 89 90 58 0.8 6.66 15
	4		98 53 99 34 0.9 3 35
	REJECTED		
	5		268 13 38 16 0.3 3.5 55
	6		58 ND 44 20 ND - L5
			Sample 5 2 grains of v.c. 400μ 100μ both transported

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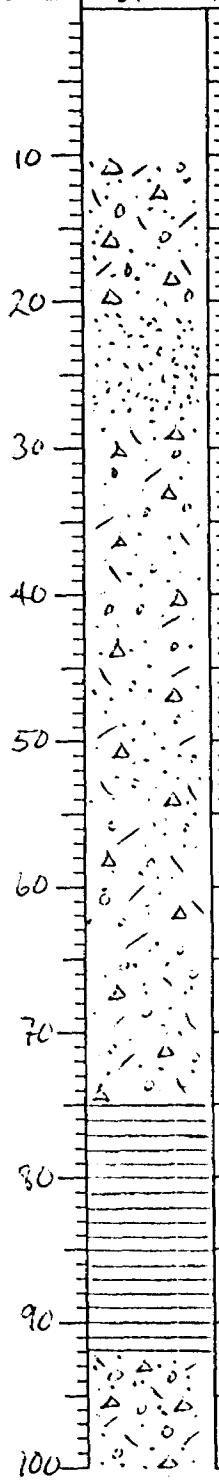
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 2,1981 HOLE # DO-81-43

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 73+75E

BIT NO.: NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
		0-10' - No sample. 10-20' - Till - Clay balls and pebbles. 20-28' - Sand bed - brown and coarse; granular. Grades into medium and coarse, few pebbles.								
	1	28-75' - Till - Grey, gritty clay balls, few pebbles, limestone present. Framework 15%. 52' - Quartz cobble. Some fine sand in matrix. Uniform till layer from 28-62'.		74	52	120	20	0.4	3.5	L15
	2	Clay balls become less gritty after 64' - then about the same again at 68'. 75-92' - Clay bed - Soft and smooth; as curds rejected.		73	25	170	25	0.4	6.5	L15
	3	92-109' - Till - Fine sand matrix; primarily quartzitic. Pebbly sand. 93' - Gravelly - mostly greenstone pebbles/granitoid. Minor limestone.		132	52	102	34	0.8	5	10
	4	97' - Mafic gneiss boulder - 6". Fine and medium sand plus silt matrix. 98' - Boulder-granite. 99' - Clay balls up to 20%, gritty; limestone present.		125	54	99	38	0.9	6	L5
	5	100' - Small boulder-granite. 102' - Cobble limestone. 104' - Clay balls with greenstone sediment pebbles and cobbles. Also granitic pebbles and limestone.		192	52	112	38	0.9	4	L10
	6	105' - Boulder-gabbro - 1'. Rejected. 106' - Clay balls up to 10%. Greenstone sediments. Approximately half framework component is granitoid. Minor limestone.		124	40	99	34	0.9	6	165
	7			114	45	103	34	0.9	4.5	L10
	8			138	49	146	40	0.8	4.5	L10
	9			135	70	100	42	0.7	2.5	L20
	REJECTED									
	10			102	16	36	34	ND	10	340
	11			110	25	32	60	0.5	7	65

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 2,1981 HOLE # DO-81-43

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 7+00N, 73+75E

BIT NO.: _____ NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses						
			Cu	Pb	Zn	Ni	Ag	Wt	Au
	12		425	26	52	65	0.5		35
	13		142	23	53	60	0.7	4	610
	REJECT	109-114' - Bedrock. Mafic volcanic massive dark green, fine-grained soft chloritic.							
	14		145	46	55	70	0.7	5	50
110	15		94	ND	80	73	0.1	-	L5
120									

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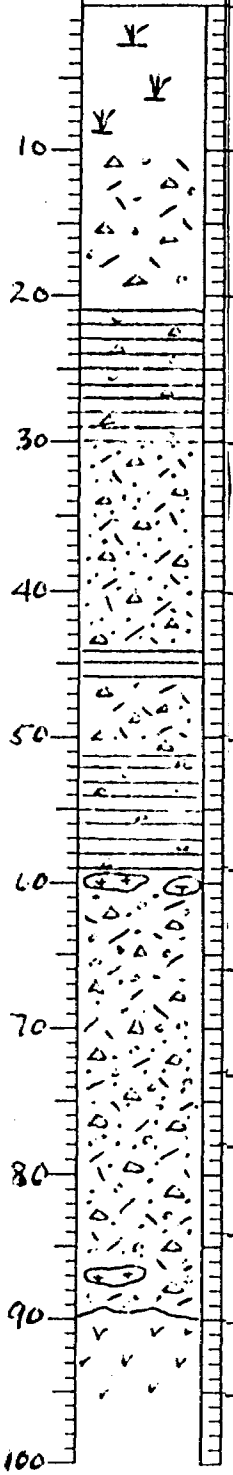
WESTERN MINES LTD.

GEOLOGIST: C. Rockingham | DATE: Feb. 2/81 | HOLE # DO-81-44

SAMPLER: L. Nutter | CLAIM GROUP: Detour | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: Centre Line 7N @ Creek 7+00N 76+75E

BIT NO.: | NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	Organic + clay. Very little return.							
1	Cochrane Till 85% clay balls, gritty, calcareous. 5% limestone pebbles. 10% granite + gneiss pebbles.	115	45	200	36	0.5	5	870
NS.	99% clay balls (about). 1% pebbles.							
2	70% medium-fine white sand. 20-30% clay balls. 10% pebbles. Pebbles 70:30 - granite: limestone.	125	52	199	38	0.7	2.35	L20
3	Minor local pebble content.	108	37	89	34	0.7	7	10
4	95% clay balls. 5% pebbles.	190	30	57	30	0.3	3.5	20
5	Gravelly Till 5-1-% clay balls. 40% medium, white sand. 50% pebbles: 10-20% local volcanic 5% limestone 75% granitoid.	87	22	55	26	0.2	9	30
6	Clay adheres to some pebbles.	128	23	73	24	0.3	8	195
7	60-70% local pebbles. Abundant sand in matrix. 1-15% clay balls.	97	19	37	34	0.3	7	20
8		38	10	21	20	0.2	10	230
9	Bedrock - Mafic Volcanic Dark-green, fine-grained, massive, slow-drilling. No sulfides or quartz veins.	69	10	13	18	0.2	8	30
10		110	ND	49	60	ND	-	L5

C. Rockingham

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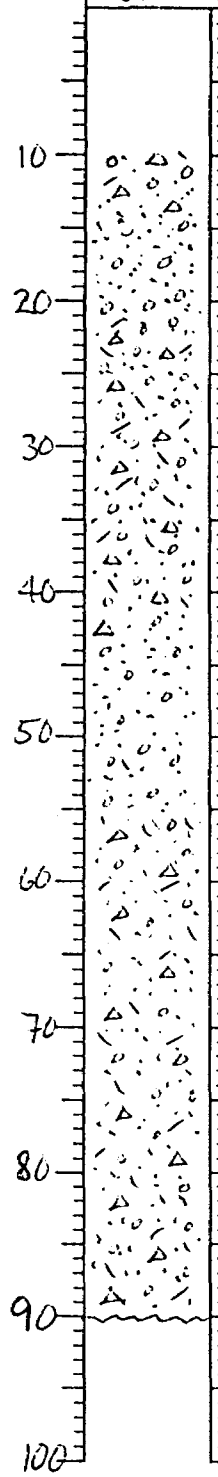
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 2,1981 HOLE # DO-81-45

SAMPLER: D. Lewis CLAIM GROUP: _____ PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: South of Line 7+00N North side of Creek ~~300 m. SE of 44~~

BIT NO.: 080115 NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	0-10' - Poor return - Minor clay, wood. 10-14' - Till - Gritty, grey clay balls; minor pebbles.							
1	14-21' - Gravel - Very granular with small pebbles. Coarse sand matrix. Polymictic with up to 5% limestone.	120	92	170	55	1.4	10	.5
2	19' - Small pink granite boulder. 20' - Very dark green and purplish black boulder plus cobbles of same. Ultramafic in appearance. Some sediment. Greenstone pebbles - slaty cleavage.	64	20	35	22	0.2	10	L5
3	21-43' - Till - Clay balls; minor black pebbles, quartzitic pebbles. Framework up to 20%. Fair return.	70	22	30	16	0.3	7	L5
4	28-36' - Light and medium grey clay balls. Medium grey balls tend to be more gritty - could be a varved clay or reworked till. Up to 10% greenstone pebbles.	43	19	30	15	ND	5	20
5	40' - Fine to medium sand matrix, clay balls.	58	11	25	17	0.2	10	630
6	43-55' - Gravel - Medium and coarse sand. About equal greenstone and granitoid rock units. Some limestone, clear and glassy quartz pebbles. 54' - Increasing sand - medium. Clay balls, silt after 54' with less pebbles.	57	11	25	16	0.2	10	10
7	55-90' - Till - Appears to have been reworked. 62' - Clay balls; minor pebble. Limited recovery.	54	17	33	16	0.1	10	L5
8	68-77' - Gravelly. Only minor sample from return. Typical pebble assemblage.	68	16	22	12	ND	3.25	L15
9	77-90' - Grey clay balls - small with minor pebbles. Limited recovery. 90-95' - Bedrock - Mafic volcanic massive, dark green fine-grained, soft, chloritic no sulfides or carbonate.	84	12	45	24	0.1	5	L10
10		315	18	49	68	0.5	3.4	L15
11		90	2	94	53	0.2	-	L5

C. Rodrigue

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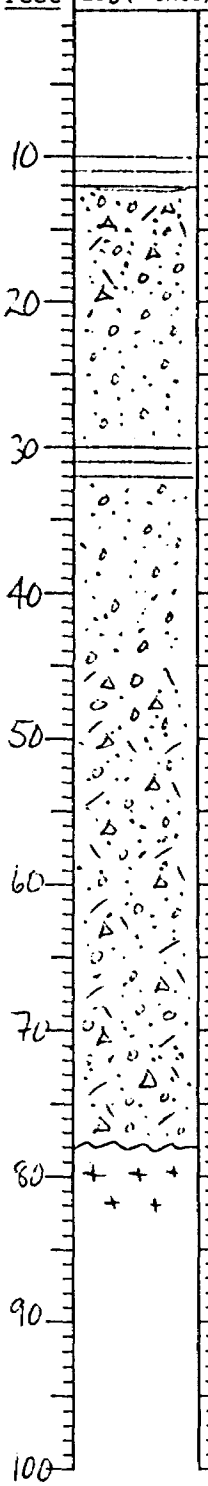
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 2,1981 HOLE # DO-81-46

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: North side of Creek 600m. NW of Winter Road

BIT NO.: 080115 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
		0-10' - Good return - no sample 10-12' - Clean, grey, smooth clay. Rejected. 12-20' - Till - Clay balls, up to 20% pebbles. 14-18' - Good return; no recovery.							
	1	18' - fine and medium sand and pebbles with clay balls. 20-45' - Gravel - Sandy; limestone present. Medium and coarse sand	95	45	86	34	0.8	7	L5
	2	matrix. Granular. Matrix to framework 50:50. 27' - Limestone cobble. 28-30' - Minor pebbles; clay balls. Clay gritty. Reworked material?	84	39	100	34	0.5	10	L5
	3	30-32' - Clean, grey clay bed. Rejected. 32'-Medium and coarse sand matrix. Granular and small pebble framework-polymictic. Increase in greenstone	105	20	80	36	0.4	9	10
	4	pebbles with depth.	165	22	50	48	0.4	10	15
	5	45-78' - Till? - Clay balls; pebbles up to 25%. Mafic boulder at 45' - gabbroic, altered. Minor (up to 5%) silty clay balls after 50'. Section becomes more cobbly with depth. Gneissic rocks increase with depth.	118	17	35	32	0.3	9	10
	6	Limestone still prevalent. 60' - Minor silty clay balls;medium and coarse sand present.	98	14	31	30	0.1	10	70
	7	63' - Small granite boulder - rejected. 65' - Gritty clay balls increase up to 25%. Minor pebbles.	58	11	24	20	0.2	10	L5
	8	25% Minor Pebbles.	84	15	34	24	0.2	10	15
	9	78-83' - Bedrock - Quartz-eye gabbro (?) 1 mm blue white quartz eyes feldspathic matrix streaky mafic minerals 1-2% pyrite.	102	15	27	24	0.4	10	L5
	10		82	23	27	26	0.3	9	L5
	11		925	17	25	140	1.2	10	35
	12		138	3	31	20	0.2	-	L5

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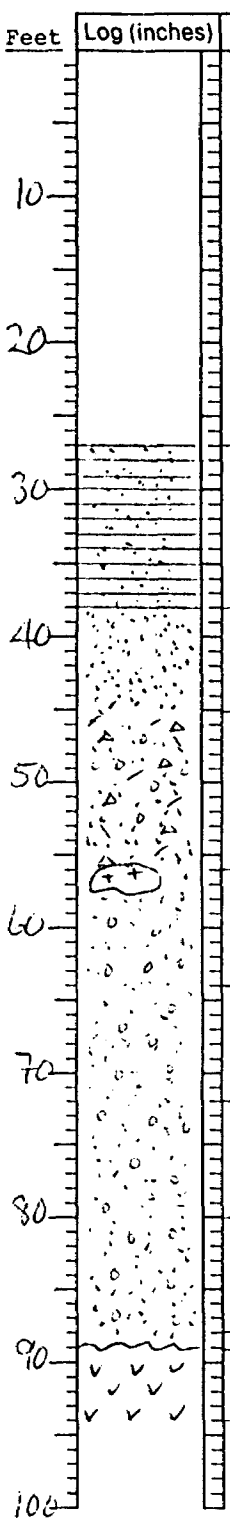
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 3,1981 HOLE # DO-81-47

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: N. side of Creek ~~300m NW of Winter~~ Road at Creek.

BIT NO.: 080115 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-27' - No return 27-38' - Clay 27-28' Clay balls, medium and fine sand; limited recovery. 38'45' - Sand - Medium grained. Coarse granular framework. Pebbles come in at 42' - Polymictic limestone up to 10%. 44' - Clay balls, gritty - up to 10%. 45-56' - Till - Gritty clay balls >75%. Pebbles up to 10%. 46-52' - Clay bed - rejected.	
	1	52' - Cobble mafic gneiss; fine sand and silt followed by another boulder at 54'. 56'- 89' - Gravel - Heavy in granitic pebbles. Some limestone. Medium and fine sand. Coarse sand as part of framework. Greenstones up to 20% tend to increase in depth.	Cu 109, Pb 29, Zn 87, Ni 30, Ag 0.3, Wt 4.1, Au 25
	2		Cu 125, Pb 53, Zn 125, Ni 42, Ag 1.0, Wt 5, Au L10
	3	78' - Section becomes sandier - brown, medium as matrix. 89-94' - Bedrock - Mafic volcanic dark green, fine-grained massive, soft, chloritic quartz and carbonate ~5%.	Cu 95, Pb 14, Zn 37, Ni 28, Ag 0.2, Wt 10, Au L5
	4		Cu 83, Pb 16, Zn 44, Ni 25, Ag 0.2, Wt 8, Au L5
	5		Cu 85, Pb 17, Zn 58, Ni 30, Ag 0.2, Wt 10, Au L5
	6		Cu 64, Pb 17, Zn 50, Ni 24, Ag 0.1, Wt 8, Au 40
	7		Cu 138, Pb 29, Zn 90, Ni 48, Ag 0.4, Wt 9, Au 40
	8		Cu 290, Pb 22, Zn 50, Ni 60, Ag 0.6, Wt 2.9, Au 55
	9		Cu 58, Pb ND, Zn 63, Ni 143, Ag 0.1, Wt -, Au 15

C. Rodrigues

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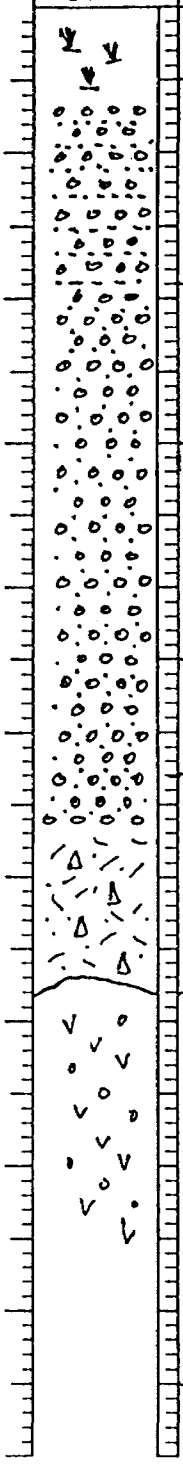
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 3/81 HOLE # DE-81-48

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: South E-W Line BL. 82+75E

BIT NO.: 080108 NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
NS.	0-12' Humus	
DO-81-48 1	12-20' Sand and Gravel Minor clay @12', assorted pebbles - greenstone, granite, minor limestone, medium to coarse sand matrix.	Cu 139, Pb 27, Zn 68, Ni 38, Ag 0.4, Wt 9, Au L5
DO-81-48 2	20-25' Gravel Coarse assorted pebbbles. Predominantly Mafic Volcanic. No clay.	Cu 187, Pb 15, Zn 38, Ni 36, Ag 0.4, Wt 10, Au L5
DO-81-48 3	25-35' 25-26' - mafic volcanic boulder. Minor limestone, granite, gneiss. 31' - brown quartzite sediment pebble. Very sandy matrix.	Cu 65, Pb 26, Zn 36, Ni 26, Ag 0.2, Wt 10, Au 5
DO-81-48 4	35-39' As above.	Cu 94, Pb 14, Zn 49, Ni 22, Ag 0.3, Wt 8, Au 215
DO-81-48 5	39-45' Clay Till (Basal) > 90% green clay till balls ½-2 mm size. Very few pebbles.	Cu 228, Pb 14, Zn 47, Ni 45, Ag 0.2, Wt 3.5, Au 85
DO-81-48 6	45-50' Bedrock Porphyritic Volcanic intermediate, dark-grey, massive matrix, very fine-grained. 5 mm pink feldspar, phenocrysts, euhedral, 10-15% mode.	Cu 24, Pb ND, Zn 20, Ni 34, Ag ND, Wt -, Au L5

C. Robinson

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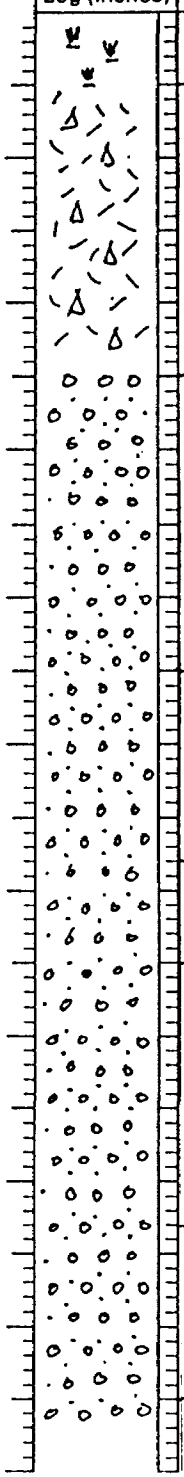
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 3/81 HOLE # DO-81-49

SAMPLER: L. Nutter CLAIM GROUP: Detour ~~Block~~ PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: South E-W Line BL 79+75E

BIT NO.: 080108 NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
NS.	0-8' Humus								
DO-81-49 1	8-20' Clay Till Cochrane Pebbly top rich in limestone chips. >90% clay till balls. 18-19' - green-grey clay bed		63	21	38	24	0.4	4	L10
DO-81-49 2	20-30' Gravel Assorted pebbles - predominantly mafic volcanic - granite - gneiss - limestone. Abundant medium to coarse sand matrix. No clay.		90	17	43	28	0.3	10	20
DO-81-49 3	30-40' Coarse mafic volcanic pebbles in very sandy matrix.		99	28	58	34	0.4	10	L5
DO-81-49 4	40-46' As above. 46' - abundant pink granite chips.		93	24	47	36	0.4	10	5
DO-81-49 5	46-56' Sandy gravel. 52' - few scattered clay balls, abundant granite pebbles, 10-15% limestone.		100	21	48	27	0.4	10	55
DO-81-49 6	56-61' Very sandy gravel with assorted pebbles.		100	23	39	50	0.4	5	50

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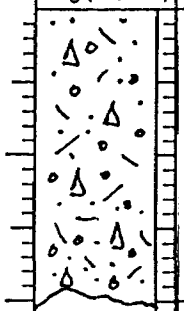
WESTERN MINES LTD.

GEOLOGIST: D. Robinson | DATE: Feb . 3/81 | HOLE # DO-81-49

SAMPLER: L. Nutter | CLAIM GROUP: Detour Block | PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin | FIELD LOCATION: South Block E-W Line B.L. 79+75E

BIT NO.: 080108 | NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	DO-81-49 7	61-69' Pebble - Clay Till - Basal 50-60% pink granite, biotite gneiss pebbles, 10% limestone. 40% 5 mm clay till balls.	Cu 148 Pb 27 Zn 45 Ni 40 Ag 0.4 Wt 10 Au L10
	DO-81-49 8	69.5-74' Bedrock Basalt flow, very fine-grained, massive, not tuffaceous or schistose. 5% quartz veining with fine pyrite dusting.	Cu 1400 Pb 50 Zn 115 Ni 160 Ag 1.4 Wt 10 Au 30 NO Chalcopyrite noted in laboratory sample preparation Reference sample not available for binocular examination.

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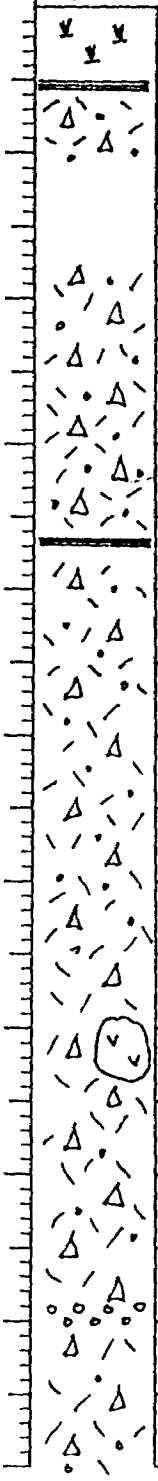
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 4/81 HOLE # DO-81-50

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: South E-W Line; Detour Block B.L. 76+70E

BIT NO.: 080108 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	NS.	1-5' Humus - no return.	
	DO-81-50 1	5-25' Cochrane Clay Till Grey clay top. 40-50% clay till balls. <5% pebbles - abundant limestone & granite chips. 8 to 23' - no return.	Cu 132, Pb 47, Zn 180, Ni 30, Ag 0.4, Wt -, Au I.S.
	DO-81-50 2	25-35' Clay till & gravel Very limited return. Pebble-rich, abundant limestone, gneiss & local volcanic + sediment 33-34' - grey clay bed.	Cu 96, Pb 35, Zn 50, Ni 28, Ag 0.4, Wt 4, Au L10
	DO-81-50 3	35-45' Clay till, limited return. Abundant 5 mm clay balls. Assorted pebble component. Mixed foreign - limestone + granite and local volcanic + sediment pebbles.	Cu 94, Pb 13, Zn 34, Ni 30, Ag 1.3, Wt 2, Au L25
	DO-81-50 4	45-50' Abundant 5 mm mafic volcanic pebbles mixed with small clay till balls.	Cu 125, Pb 16, Zn 42, Ni 40, Ag 0.3, Wt 7, Au 10
	DO-81-50 5	50-60' Clay till. 50-51' - mafic basalt boulder. 75-80% clay till balls. 10-25% mafic volcanic pebbles <5 mm size, rare limestone + granite + quartz.	Cu 196, Pb 18, Zn 40, Ni 50, Ag 0.3, Wt 5, Au 65
	DO-81-50 6	60-65' 75-90% clay till balls. 60-62' - 25% mafic volcanic pebbles. Scattered limestone, + gneiss.	Cu 290, Pb 13, Zn 34, Ni 40, Ag 0.4, Wt 3.5, Au 400

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WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 4/81 HOLE # DO-81-50

SAMPLER: L. Nutter CLAIM GROUP: Detour / Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: Southern E-W Line B.L. 72+70E

BIT NO.: 080108 NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	DO-81-50 7	65-70' Bedrock Mafic tuff - basaltic tuff + quartz chips. Very fine-grained. Schistose, very chloritic. 65-67' - 20% milky-white quartz chips in return.	Cu Pb Zn Ni Ag Wt Au 76 ND 35 77 ND - L5

C. Robinson

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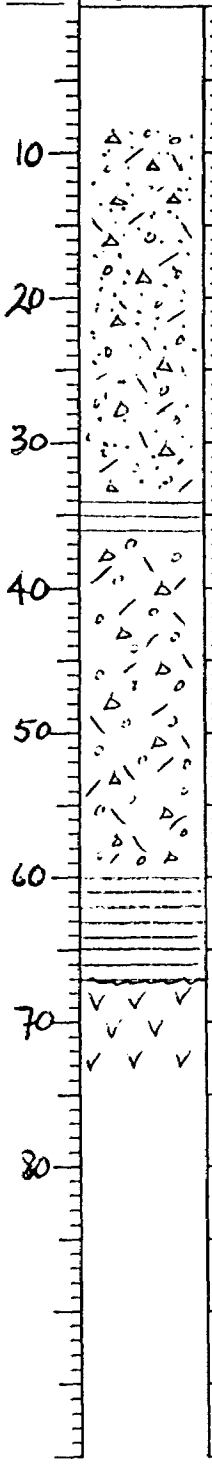
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 4,1981 HOLE # DO-81-51

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: B.L. 73+70E

BIT NO.: _____ NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	0-8' - Humus							
1	8-14' - Clay Till - Pebbly. 40 - 50% clay till balls; 50% pebbles assorted. Predominantly mafic volcanic with limestone and granite gneiss. Very sandy matrix.	106	55	90	34	0.6	1.5	L50
2	14-67' - Clay till - 80% 5 mm size clay till balls; <70% pebbles. Assorted.	124	42	88	36	0.7	6	135
3	20-22' - Clay balls up to 75%. Limestone cobble; cobble altered reddish-brown granitic rock. Minor granitoid (granular) and greenstone pebbles.	84	30	80	30	0.6	8	50
4	34-36' - Clay bed - minor pebbles.	98	35	90	35	0.6	6	10
5	36' - Greenstone pebble increasing up to 10%. Clay balls (gritty) matrix. Framework tends to be granular.	118	44	152	40	1.0	2.5	L20
6	50' - ≃5% framework only. Gritty clay balls predominate. Limestone prevalent throughout the section.	116	55	112	45	0.9	2	L25
7	60-67' - Clean, grey clay - smooth as knots and ropes - rejected.	118	43	132	40	0.9	2.5	1380
8	67-72' - Bedrock - Basalt - up to 1-2% calcite, massive, fine-grained, dark green, soft.	119	50	120	40	0.9	2.5	60
9		136	55	100	I.S.	1.0	3	45
REJECTED								
10		72	ND	95	26	0.2	-	10

C. Rodrigues

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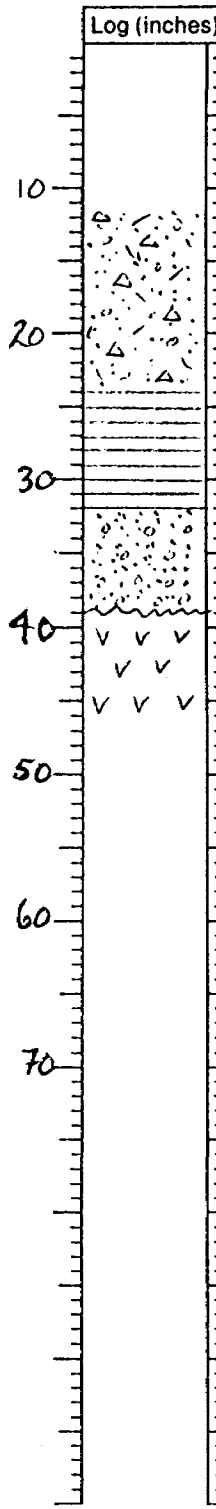
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 4,1981 HOLE # DO-81-52

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: B.L. 70+50E

BIT NO.: _____ NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
	0-12' - Wood, minor clay - Fine return - rejected.	
	12-22' - Till - Return off and on - poor recovery.	
	22-24' - Grey clay balls, <5% granular mafic and granitoid material.	
1	24-32' - Smooth grey clay bed - rejected.	Cu Pb Zn Ni Ag Wt Au 87 33 98 65 0.8 5 L10
	32-39' - Gravel - Polymictic, medium and coarse sand matrix. Quite uniform granular pebble framework - 50% greenstone/50% granite-gneiss. Limestone present in minor amounts. Sand matrix up to 35 - 40% by volume. Primarily quartz.	
REJECTED		
2	39-43' - Bedrock - Basalt - massive, dark green fine-grained, soft, minor epidote patches.	270 23 55 55 0.9 5 6190
3		112 ND 50 72 ND - 5

C. Rodrigue

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 4,1981 HOLE # DO-81-52

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: B.L. 70+50E

BIT NO.: _____ NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
10		0-12' - Wood, minor clay - Fine return - rejected. 12-22' - Till - Return off and on - poor recovery. 22-24' - Grey clay balls, <5% granular mafic and granitoid material.	
20	1	24-32' - Smooth grey clay bed - rejected. 32-39' - Gravel - Polymictic, medium and coarse sand matrix. Quite uniform granular pebble framework - 50% greenstone/50% granite-gneiss. Limestone present in minor amounts. Sand matrix up to 35 - 40% by volume. Primarily quartz.	Cu 87, Pb 33, Zn 98, Ni 65, Ag 0.8, Wt 5, Au Ll0
30	REJECTED		
40	2	39-43' - Bedrock - Basalt - massive, dark green fine-grained, soft, minor epidote patches.	Cu 270, Pb 23, Zn 55, Ni 55, Ag 0.9, Wt 5, Au 6190
50	3		Cu 112, Pb ND, Zn 50, Ni 72, Ag ND, Wt -, Au 5
60			
70			

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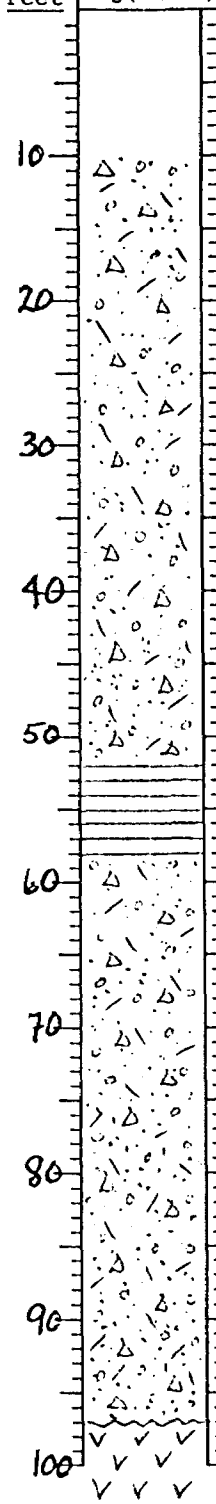
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 5,1981. HOLE # DO-81-53

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: B.L. 67+40E

BIT NO.: NTS: 32 E-13



Feet	Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
		0-10' - Organics - Good return - Rotted wood balls.							
10		10-97' - Till - Clay balls up to 75% - pebbles polymictic up to 25%.							
	1	20' - clay bed - thin, smooth, grey. 22' - limestone cobble. 28' - Clay balls and fine sand up to 20% by volume.	110	25	70	25	0.4	1	L50
20	2	36' - Clay balls up to 95% - gritty. Silt disappears. Minor greenstone pebbles.	92	30	90	50	0.6	8	5
	3	41' - Limestone boulder - large. 52-58' - Clay bed - clean, smooth grey clay - as ropes. Rejected.	126	35	100	37	0.7	10	5
30		58' - Fine and medium sand matrix. Polymictic pebbles - high granitoid content. No clay balls. 40% greenstone/30%, Granite/25%, Gneiss/ 5% Limestone.							
	4	66' - Minor clay coatings on greenstone pebbles.	108	33	85	32	0.6	6	5
40		68' - Mafic granite boulder - biotite/hornblende.							
	5	70' - Clay balls, gritty. Pebbles up to 50% - mainly greenstone. Minor limestone.	148	120	93	55	2.4	3.5	L15
50		74' - Pink granite cobble; clay ball matrix. Clay balls and greenstone framework become smaller in size after 74 feet - possibly due to hardness as a function of compactness.							
	REJECTED								
60	6	76-77' - Silt and fine sand matrix. Predominantly gneissic cobbles.	114	20	65	55	0.6	10	335
	7	77-78' - Small greenstone pebbles up to 1 cm. - in clay.	93	15	95	49	0.6	10	25
70		79' - Cobble granite gneiss, cobble greenstone along with clay balls.							
	8	79-80' - Large granite boulder - rejected. 80' - Clay balls up to 90%. Grey and gritty. Some small granitoid	106	18	50	33	0.5	10	55
	9	pebbles. Minor limestone. Greenstone sedimentary pebbles up to	112	25	40	80	0.3	5	L10
80		5 - 10% - small.							
	10	87' - Cobble - olive-green, fine-grained, felsic.	154	25	55	60	0.4	5	25
	11	88' - Increase in sedimentary cobbles and pebbles up to 50-75% by volume - all green. Clay balls up	134	20	68	60	0.4	4	40
90		to 25%. Silt in matrix.							
	12	90' - Minor limestone.	126	18	44	60	0.3	6	2170
		95' - Greenstone volcanic cobbles prevalent.							
	13		330	22	62	90	0.6	3.5	1585
		96' - Greenstone sedimentary cobbles- shearing distinctive.							
100	14		54	2	52	82	ND	-	5
		97 - 102' - Bedrock - Basalt 10% white calcite in veins with quartz - massive, dark green, fine-grained. 102' - End of hole							

Hole No.	Page No.
DO-81 53	1 of 1

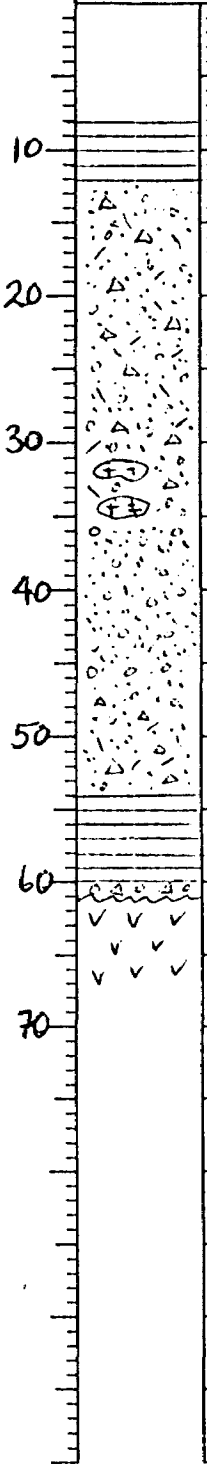
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 5,1981. HOLE # DO-81-54

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: B.L. 64+35E

BIT NO.: _____ NTS: 32 E-13



Sample No.	Overburden Description	Cu	Pb	Zn	Ni	Ag	Wt	Au
	0-8' - No Return 8-12' - Clay Bed - clean, grey. 12-36' - Till - Clay balls, very minor pebble component. Thin pebble layer at 14'. 22' - Thin granular pebble layer with clay balls.							
1	Pebbles average 5-10% up to 25%. Minor limestone. Apparently more granitic types than greenstone. 31' - greenstone sediment cobble.	198	45	225	50	0.5	-	I.S.
2	More pebble coming into section - especially greenstone. Some fine sand and tilt in matrix. 32' - Small pink granite boulder. 34' - Granular with limestone.	108	70	105	45	0.8	7	L5
3	After 30' - Decreasing clay as balls increasing silt and fine sand.	120	33	98	35	0.6	8	30
4	36 - 46' - Gravel till - Very minor clay balls. Fine sand matrix polymictic.	118	35	90	35	0.8	8	5
5	38' - Limestone up to 20% about equal proportion granitoid to greenstone. Some pebbles grey felsic extrusive at 42'.	98	35	108	34	0.8	7	L5
6	44' - Minor clay coatings on greenstone pebbles.	124	57	125	40	0.8	4	625
REJECTED	46 - 61' - Till Clay balls up to 50%. Limestone present. 52' - Clay curds - gritty. Very minor granular framework - rejected. 54-60' - Clay bed - smooth and clean. 60' - Clay balls and greenstone cobbles.							
7		240	15	60	70	0.5	1.5	L50
8	61-66' - Bedrock - Basalt with minor quartz veins. Very fine-grained. Massive; hard. Dark green, very chloritic.	65	2	26	88	ND	-	5
	66' - End of Hole.							

C. Rodrigues

Hole No.	Page No.
DO-81 54	1 of 1

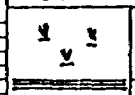
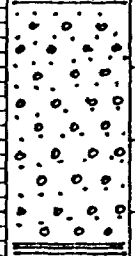
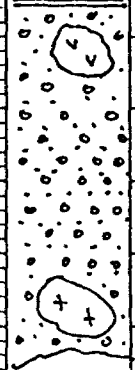
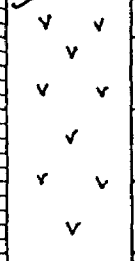
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 5/81 HOLE # DO-81-55

SAMPLER: L. Nutter CLAIM GROUP: Detour Block PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 200 m south of 54

BIT NO.: _____ NTS: 32 E-13

Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	NS.	0-5' Humus	
	DO-81-55 1	5-10' Gravel Grey massive clay top. Very sandy matrix. >50% pebbles - abundant limestone, sediment & green volcanic.	Cu 81 Pb 13 Zn 23 Ni 20 Ag 0.2 Wt 6 Au L5
	DO-81-55 2	10-13' 10-11' - grey clay bed. <5% clay till balls. 11' - green mafic volcanic cobble. 13' - pink granite cobble. Predominantly sand matrix Assorted pebbles.	300 12 50 50 0.3 10 10
	DO-81-55 3	13-16' Basalt - bedrock Massive. Very fine-grained. Very minor quartz veins. Chloritized.	62 ND 35 37 0.2 - 50

Hole No.	Page No.
DO-81-55	1 of 1

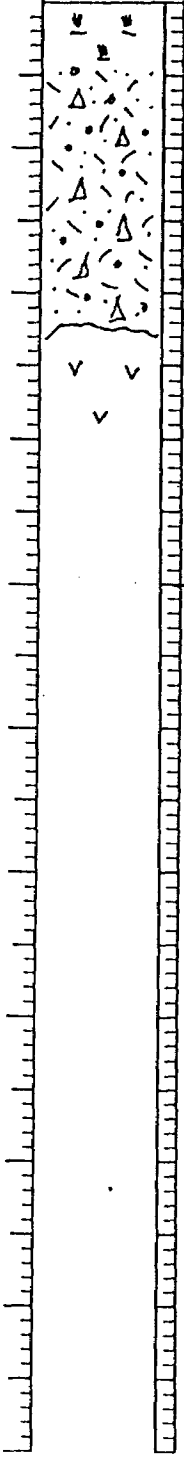
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 5/81 HOLE # DO-81-56

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: 300 m West of 54; Southern E-W Line B.L. 60+25E

BIT NO.: 080109 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	NS.	0-6 Humus - swamp.	
	DO-81-56 1	6-13' Clay Till Few scattered pebbles. 50-60% clay till balls. Pebbles, - limestone, quartz, mafic volcanic.	Cu 80 Pb 13 Zn 28 Ni 20 Ag 0.3 Wt 1 Au L5
	DO-81-56 2	13-14' Bedrock - Basalt Very fine -grained. Massive, chloritic. Minor quartz veins. Near % change holes.	Cu 47 Pb ND Zn 25 Ni 64 Ag 0.1 Wt - Au 5

Hole No.	Page No.
DO-81-56	1 of 1

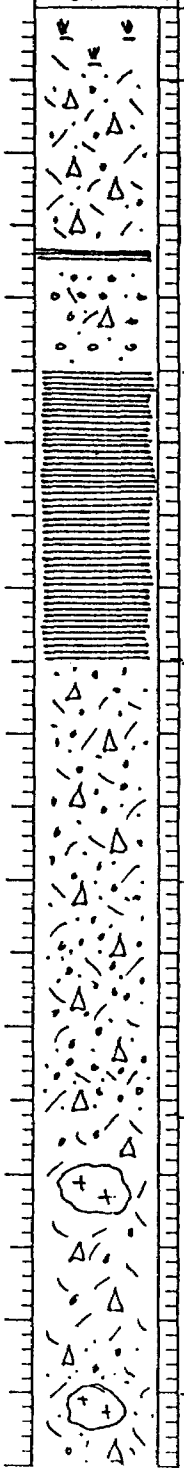
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 5/81 HOLE # DO-81-57

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: South E-W Line B.L. 57+25E

BIT NO.: 080109 NTS: 32 E-13



Sample No.	Overburden Description	Notes & Analyses
NS.	0-4' Humus	
DO-81-57 1	4-14' Cochrane Pebble-Clay Till 4-8' - pebble-clay till to gravel. 10% clay till balls. 9' - green-grey clay bed. 10' - no clay till balls - sandy gravel. Pebbles with mafic volcanic + abundant limestone.	Cu 60, Pb 20, Zn 142, Ni 30, Ag 0.4, Wt 3, Au 95
NS.	14-31' Clay Grey, massive, very soft. Ropey return.	
DO-81-57 2	31-38' Pebbly-Clay Till 25% clay till balls. Abundant pebbles - 75% mafic volcanic. Minor limestone, 25% gneiss + very sandy matrix.	Cu 96, Pb 20, Zn 72, Ni 50, Ag 0.5, Wt 10, Au 35
DO-81-57 3	38-44' 50-60% assorted pebbles - mafic volcanic, pink granite, biotite gneiss, limestone. Very sandy→gravelly.	Cu 88, Pb 14, Zn 34, Ni 25, Ag 0.3, Wt 9, Au 5
DO-81-57 4	44-50' Biotite gneiss cobble @46'. 40-50% pebbles - mafic volcanic, 25% granite, gneiss, quartz, minor limestone. Abundant clay till.	Cu 88, Pb 18, Zn 38, Ni 27, Ag 0.4, Wt 10, Au 70
DO-81-57 5	50-56' Biotite gneiss boulder. Abundant clay-coated pebbles. Very sandy matrix.	Cu I.S., Pb I.S., Zn I.S., Ni I.S., Ag I.S., Wt 9, Au 10

Hole No.	Page No.
DO-81-57	1 of 2

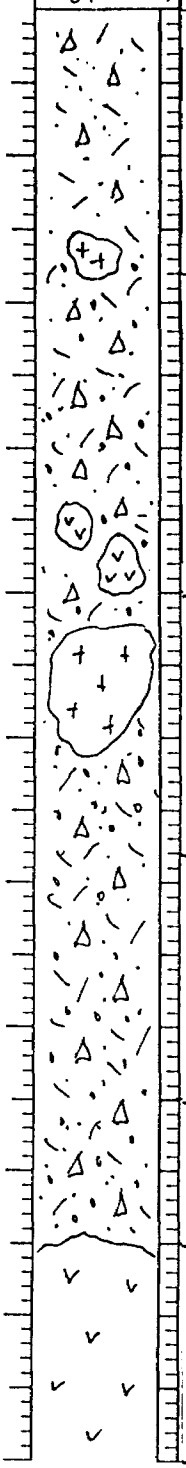
WESTERN MINES LTD.

GEOLOGIST: D. Robinson DATE: Feb. 5/81 HOLE # DO-81-57

SAMPLER: L. Nutter CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: D. Jodouin FIELD LOCATION: South E-W Line B.L. 57+25E

BIT NO.: 080109 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses	Cu	Pb	Zn	Ni	Ag	Wt	Au
	DO-81-57 6	56-62' Clay Till Decrease in pebble content. 50-75% clay till balls. Very sandy matrix. 62' - biotite-feldspar, granite boulder.		82	16	33	25	0.4	8	45
	DO-81-57 7	62-66' Pebble-Clay Till (local) 40% pebbles - predominantly local mafic volcanic - 1-2 cm size, lesser granite, gneiss, sediment, limestone. 64' - mafic volcanic boulder. 66' - mafic volcanic boulder.		114	30	42	30	0.4	8	Cl5000
	DO-81-57 8	66-72' 67-70' - Quartz - biotite - granite boulder. Abundant pebbles predominantly mafic volcanic, lesser pink granite. 72' - 10% white quartz chips.		134	22	34	70	0.8	9	365
	DO-81-57 9	72-78' Local till. 73' - 10-15% limestone chips. Pink intermediate intrusive pebbles - granite 20%. Predominantly local mafic volcanic pebbles + green clay till balls.		134	14	40	60	0.4	10	165
	DO-81-57 10	78-81' As above.		140	18	36	65	0.4	5	110
	DO-81-57 11	81-86' Bedrock - Mafic Volcanic Grey-green, very fine-grained, massive to tuffaceous. Minor quartz veins.		92	22	230	70	0.2	-	5

Hole No.	Page No.
DO-81-57	2 of 2

WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 5,1981. HOLE # DO-81-58

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: B.L. 54+25E

BIT NO.: 080109 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses
			0-3' - Humus	
		1	3-10' - Clay. Grey, ropey and soft	Cu 200, Pb 150, Zn 110, Ni 68, Ag 0.7, Wt 7, Au 20
10		2	10-14' - Pebble-Clay-Till - Cochrane 50% Clay; assorted pebbles <1 cm. size. Limestone, gneiss, etc.	Cu 96, Pb 2, Zn 39, Ni 68, Ag 0.2, Wt -, Au 5
		3	14' - Increase in pebbles - 90% local basalt.	
20			14.5' - Bedrock - Basalt - Dark green, massive, very fine grained.	
			16-17' - sulphide chips with quartz prominant.	
30			18-20' - Medium to dark grey return colour could be due to sulphide content of bedrock.	
			20' - End of Hole.	

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WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 5,1981. HOLE # DO-81-59

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: 300m. NW of DO-81-58

BIT NO.: 080109 NTS: 32 E-13

Feet	Log (inches)	Sample No.	Overburden Description	Notes & Analyses
			0-6' - Wood rot and brown clay.	
10		1	6-18' Till - Tan brown clay and limestone cobbles. Minor granitoid Clay balls up to 75%.	Cu 66 / Pb 30 / Zn 50 / Ni 40 / Ag 0.4 / Wt 6 / Au 270
		2	12' - Grey clay balls up to 90%. Increase in granitoid, less limestone, minor greenstone (pebbles).	107 27 75 45 0.8 4 45
20		3	18-23' - Bedrock - Basalt 5% carbonate. Moderate clay alteration. No visible sulphide. Dark green, fine-grained, massive.	104 ND 54 31 0.1 - 5
			23' - End of hole.	
30				

Hole No.	Page No.
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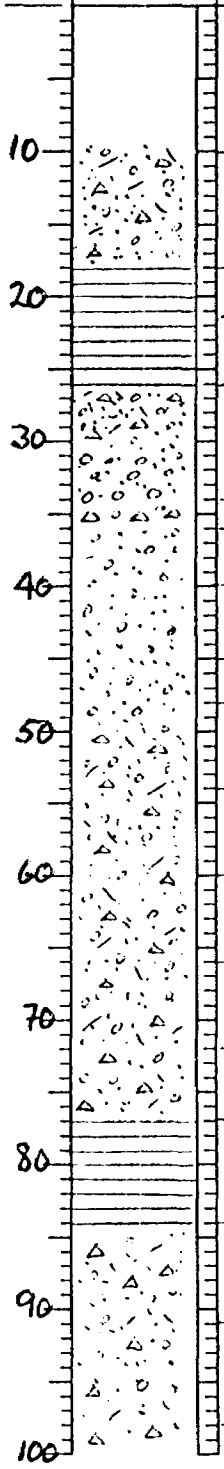
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 5,1981 · HOLE # DO-81-60

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Winter Road at Creek ~~North of Camp~~

BIT NO.: 080113 NTS: 32 E-13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
		0-10' - No return 10-31' - Till - 10-11' - Clean grey clay knots. Clay balls; up to 40% polymictic pebbles including limestone.	
	1	17' - Narrow clay bed. 18' - Minor greenstone pebbles only with gritty clay balls. 18' - Granite-gneiss boulder - rejected.	Cu 150 Pb 47 Zn 280 Ni 50 Ag 0.9 Wt 6 Au 180
	REJECTED	19-26' - Clay bed - clean, grey and smooth - rejected. 26-31' - Good return, no recovery.	
	2	31-34' - Gravel - Medium and coarse sand matrix pebbles. Limestone up to 10%. High in granitoids. About 25% grey felsic rock, fine-grained.	94 34 73 33 0.6 9 210
	3	34-36' - Till - Clay balls - gritty, up to 25%. Granitic cobbles. 3:1 granitoids/greenstones. Limestone up to 5%. Granitic types tend to be smaller in sizd, more granular than greenstone component.	144 27 68 30 0.6 5 L10
	4		21 17 22 10 0.2 8 L5
	5	36-48' Gravel - Limestone rich. Medium and coarse sand matrix.	48 16 27 13 0.4 5 L10
	6	37' - Extremely granular.	145 150 90 60 3.2 8 20
	7	37-38' - Coarse sand matrix. Granular and small pebble framework. Polymictic but mainly granitoid. 40' - Matrix > framework by 2:1.	112 50 80 35 1.0 7 30
	8	41-43' - Bed of brown, medium sand; some coarse sand - all granitic. 43' - Greenstone pebbles minor.	88 28 78 30 0.4 7 40 1 grain v.g. 150μ transported
	9	Primarily mafic gneiss cobbles and pebbles. Medium and coarse sand matrix. Limestone present. 47' - Greenstone pebbles tend to be more abundant. Limestone prevalent up to 10%	116 42 90 35 0.6 4 L10
	10	48' - Minor clay balls followed by a mafic gneiss (light green cobble).	128 42 85 33 0.6 4 L10
	11	48-77' - Till - Clay balls up to 50%. Greenstone cobbles up to 50% ± granitoid pebbles. After 50' clay balls increase >75% by volume. Limestone still present.	142 47 90 36 0.8 6 5
	REJECTED	54' - Almost no granitic component; approximately 5% greenstone pebble.	112 20 62 25 0.4 9 160
	12	58' - Limestone cobble - only greenstone pebbles about 5% at this depth along with clay balls. 77-84' - Clay bed - grey and smooth as ropes.	112 20 62 25 0.4 9 160
	13	84-134' - Sandy Till - Boulders prevalent. 84' - Pebble layer followed by poor recovery on silt.	118 14 52 30 0.2 10 10

Hole No.	Page No.
DO-81 60	1 of 2

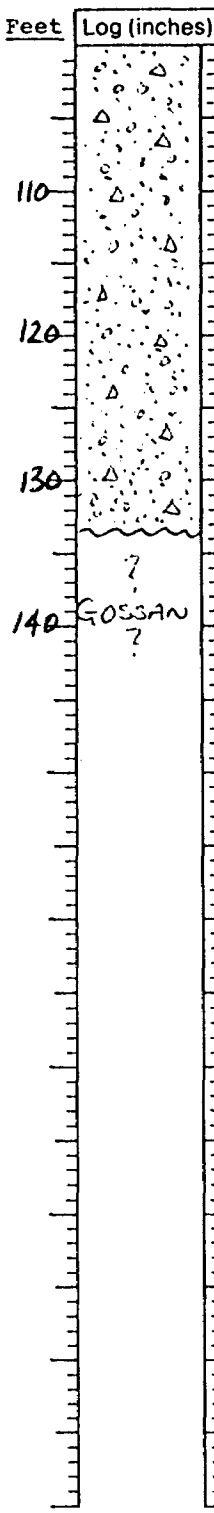
WESTERN MINES LTD.

GEOLOGIST: G. Thomas DATE: February 5,1981. HOLE # DO-81-60

SAMPLER: D. Lewis CLAIM GROUP: Detour PROV.: Ontario

CONTRACTOR/ DRILLER: G. Gagne FIELD LOCATION: Winter Road at Creek North of Camp

BIT NO.: 080113 NTS: 32 E-13



Sample No.	Overburden Description	Cu 240	Pb 18	Zn 60	Ni 40	Ag 0.4	Wt 9	Au 45
14	85-90' - Good return, silt only? - Limited sample.							
15	90' - Gravel. Fine sand and silt matrix. Limestone up to 25%. Greenstone and granitic pebbles prevalent.	74	16	48	20	0.3	10	5
16	91' - Boulder granite gneiss. Minor sand - silt matrix. Mainly pebble. 101' - Boulder - mafic granite gneiss. 104' - Fine sand and silt matrix. Granular framework 50:50 matrix/ framework. Up to 25% small pebbles.	100	15	100	25	0.2	9	5
17	110' - Minor clay and silt. Clay as balls with pebbles. Limestone prevalent.	78	18	105	25	0.5	10	5
18	115' - Granite-gneiss cobbles, limestone cobble. 118' - Medium sand matrix with pebbles. (Sandy Gravel).	176	13	35	65	0.7	8	G15000
19	119' - Pink granite boulder - rejected. 122' - Fine and medium sand; granular framework.	18	11	24	14	0.2	3.5	455
20	124' - Medium and coarse sand and pebbles - predominantly greenstone (gravel). 126' - Pebbles - up to 25% gneissic and 50% greenstone by volume. 132' - Orange-yellow clay balls up to 20% with greenstone pebbles. 134'140' - Bedrock - orange-yellow iron stained clay after bedrock. Relict rock fragments up to 1 cm. in size at 136-140'. Crumbly, soft and friable, yellowish brown in colour. 140' - End of hole.	148	ND	55	112	0.1	-	35

Sample 14 1 grain v.g. 250μ transported

Hole No.	Page No.
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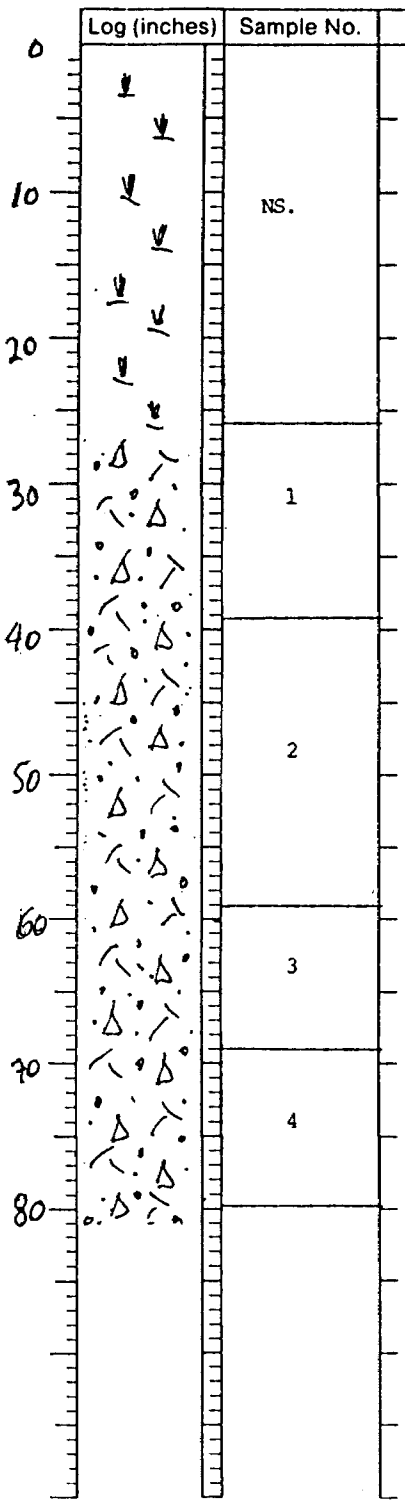
WESTERN MINES LTD.

GEOLOGIST: Don Robinson DATE: February 23,1981. HOLE # DO-81-93

SAMPLER: M. Mahaffy CLAIM GROUP: Detour Lake PROV.: Ontario

CONTRACTOR/ DRILLER: Don Jodouin FIELD LOCATION: Gov't. BL: Old DO-81-6 site.

BIT NO.: 080119 NTS: 32E13



Log (inches)	Sample No.	Overburden Description	Notes & Analyses
	NS.	0-26' - Humus - no return.	No analyses for this hole as it is a repeat of hole Do-81-6
	1	26-40' - Cochrane-Pebble-Clay till 20-30% pebbles - polymictic 10% limestone, 10-20% clay till balls. fine-medium sand matrix.	
	2	40-60' 20% pebbles volcanic plus sed. 40% clay till balls. fine silt matrix. poor return 40-54'.	
	3	60-70' - Pebbly till 30-40% pebbles, 60% basalt sed. -clay till balls. -fine silt matrix.	
	4	70-80' - Cochrane Pebble-Clay till 40% pebbles, 1 cm. size, 50% granite + gneiss, 50% basalt + sediment, 5% limestone. fine-silt-sand matrix. 5-10% clay till.	
		80' - hole terminated. as a result of warm weather and the deterioration of the Winter Road.	

Hole No.	Page No.
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2.4285

September 13 1982

Mr. W. L. Good
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Mr. Good:

Re: Assaying submitted under Section 77(19) of the Mining Act RSO 1980, as on List "B"

The enclosed statement of assessment work credits for assaying expenditures has 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,

E. F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Telephone: (416) 965-1316

/dj

Encl.

cc: Westmin Resources Limited

cc: Resident Geologist/Timmins, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.4285

Recorded Holder
WESTMIN RESOURCES LIMITED

Township or Area
Hopper Lake & Lower Detour Lake Areas

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	$217,529.04 spent on overburden drilling on the claims listed on List "B" (Attached).
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Section 79(19) See across days	14502 assessment work days are allowed which may be grouped in accordance with Section 76(6) of the Mining Act RSO 1980.
Geological _____ days	
Geochemical _____ days	
Man days ☐ Airborne ☐	For Mining Recorder's use:
Special provision ☐ Ground ☒	The work assignment for each of the above listed 51 claims is 284 days per claim.
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 86 (15a) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ Insufficient technical data filed

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; Section 86(18)-60:

828

LIST "B"

All the work was performed on the following Mining Claims:

Drill Hole	Claim
DO-81-01	P553334
-02	P553327
-03	P553312
-04	P553327
-05	P553332
-06	P553332
-07	P553552
-08	P553477
-09	P575672
-10	P553475
-11	P553308
-12	P553306
-13	P553546
-14	P553547
-15	P553533
-16	P553531
-17	P553511
-18	P553506
-19	P553448
-20	P553446
-21	P553444
-22	~~P553405~~

19

Drill Hole	Claim
DO-81-23	P553405 •
-24	P553370 •
-25	P553370
-26	P549927 •
-27	P553365 •
-28	P553374 •
-29	P553402 •
-30	P553419 •
-31	P553441 •
-32	P553452 •
-33	P553453 •
-34	P553503 •
-35	P553515 •
-36	P553515
-37	P553523 •
-38	P553536 •
-39	P553543 •
-40	P553556
-41	P553556 •
-42	P553303 •
-43	P553316 •
-44	P553323 •
-45	P553323
-46	P553336 •
-47	P553342 •
-48	P553338 •
-49	P553321
-50	P553321 •

23

Drill Hole	Claim
DO-81-51	P553318 •
-52	P553561 •
-53	P553558 •
-54	P553558
-55	P553558
-56	P553541 •
-57	P553538 •
-58	P553521 •
-59	P553461 •
-60	P553467 •
-93	P553332 •

9.

51 claims

Ontario Resources

Report Approval

2.4285

L.D

Mining Lands Comments

☐ To: Geophysics

Comments

☐ Approved ☐ Wish to see again with corrections	Date	Signature

☒ To: Geology - Expenditures Mr. Kustra.

Comments

☒ Approved ☐ Wish to see again with corrections	Date Mar 8/82	Signature

☐ To: Geochemistry

Comments

☐ Approved ☐ Wish to see again with corrections	Date	Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1393 (81/10)

Ontario

P.S 49918

RECEIVED

NOV 2 01981

MINING LANDS SECTION

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

Date of recording of work: November 16, 1981.

Recorded holder: Westmin Resources Limited

Address: 390 Bay Street
Suite 1414, Toronto, Ontario M5H 2Y2

Township or Area: HOPPER LAKE & LOWER DETOUR LAKE AREAS

Type of survey and number of Assessment days credit per claim	Mining claims
Geophysical	See attached list.
Electromagnetic ____ days	
Magnetometer ____ days	
Radiometric ____ days	
Induced polarization ____ days	
Section 77 19 (~~77~~) 46.48 days	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☐ Ground ☐	

Notice to recorded holder:

[X] 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.

Mining recorder

c.c.

792 (6/77)

LA. 065

List "A"

	Claim No.	Days		Claim No.	Days
1.	P.549918	46.48	31.	P.553319	46.48
2.	P.549919	46.48	32.	P.553320	46.48
3.	P.549920	46.48	33.	P.553321	46.48
4.	P.549921	46.48	34.	P.553322	46.48
5.	P.549922	46.48	35.	P.553323	46.48
6.	P.549923	46.48	36.	P.553324	46.48
7.	P.549924	46.48	37.	P.553325	46.48
8.	P.549925	46.48	38.	P.553326	46.48
9.	P.549926	46.48	39.	P.553327	46.48
10.	P.549927	46.48	40.	P.553328	46.48
11.	P.549928	46.48	41.	P.553329	46.48
12.	P.549929	46.48	42.	P.553330	46.48
13.	P.549930	46.48	43.	P.553331	46.48
14.	P.549931	46.48	44.	P.553332	46.48
15.	P.553303	46.48	45.	P.553333	46.48
16.	P.553304	46.48	46.	P.553334	46.48
17.	P.553305	46.48	47.	P.553335	46.48
18.	P.553306	46.48	48.	P.553336	46.48
19.	P.553307	46.48	49.	P.553337	46.48
20.	P.553308	46.48	50.	P.553338	46.48
21.	P.553309	46.48	51.	P.553339	46.48
22.	P.553310	46.48	52.	P.553340	46.48
23.	P.553311	46.48	53.	P.553341	46.48
24.	P.553312	46.48	54.	P.553342	46.48
25.	P.553313	46.48	55.	P.553343	46.48
26.	P.553314	46.48	56.	P.553344	46.48
27.	P.553315	46.48	57.	P.553345	46.48
28.	P.553316	46.48	58.	P.553346	46.48
29.	P.553317	46.48	59.	P.553347	46.48
30.	P.553318	46.48	60.	P.553348	46.48

Claim No.	Days	Claim No.	Days
61. P.553349	46.48	91. P.553379	46.48
62. P.553350	46.48	92. P.553380	46.48
63. P.553351	46.48	93. P.553381	46.48
64. P.553352	46.48	94. P.553382	46.48
65. P.553353	46.48	95. P.553383	46.48
66. P.553354	46.48	96. P.553384	46.48
67. P.553355	46.48	97. P.553385	46.48
68. P.553356	46.48	98. P.553386	46.48
69. P.553357	46.48	99. P.553387	46.48
70. P.553358	46.48	100. P.553388	46.48
71. P.553359	46.48	101. P.553389	46.48
72. P.553360	46.48	102. P.553390	46.48
73. P.553361	46.48	103. P.553391	46.48
74. P.553362	46.48	104. P.553392	46.48
75. P.553363	46.48	105. P.553393	46.48
76. P.553364	46.48	106. P.553394	46.48
77. P.553365	46.48	107. P.553395	46.48
78. P.553366	46.48	108. P.553396	46.48
79. P.553367	46.48	109. P.553397	46.48
80. P.553368	46.48	110. P.553398	46.48
81. P.553369	46.48	111. P.553399	46.48
82. P.553370	46.48	112. P.553400	46.48
83. P.553371	46.48	113. P.553401	46.48
84. P.553372	46.48	114. P.553402	46.48
85. P.553373	46.48	115. P.553403	46.48
86. P.553374	46.48	116. P.553404	46.48
87. P.553375	46.48	117. P.553405	46.48
88. P.553376	46.48	118. P.553406	46.48
89. P.553377	46.48	119. P.553407	46.48
90. P.553378	46.48	120. P.553408	46.48

	Claim No.	Days		Claim No.	Days
121.	P.553409	46.48	151.	P.553439	46.48
122.	P.553410	46.48	152.	P.553440	46.48
123.	P.553411	46.48	153.	P.553441	46.48
124.	P.553412	46.48	154.	P.553442	46.48
125.	P.553413	46.48	155.	P.553443	46.48
126.	P.553414	46.48	156.	P.553444	46.48
127.	P.553415	46.48	157.	P.553445	46.48
128.	P.553416	46.48	158.	P.553446	46.48
129.	P.553417	46.48	159.	P.553447	46.48
130.	P.553418	46.48	160.	P.553448	46.48
131.	P.553419	46.48	161.	P.553449	46.48
132.	P.553420	46.48	162.	P.553450	46.48
133.	P.553421	46.48	163.	P.553451	46.48
134.	P.553422	46.48	164.	P.553452	46.48
135.	P.553423	46.48	165.	P.553453	46.48
136.	P.553424	46.48	166.	P.553454	46.48
137.	P.553425	46.48	167.	P.553455	46.48
138.	P.553426	46.48	168.	P.553456	46.48
139.	P.553427	46.48	169.	P.553457	46.48
140.	P.553428	46.48	170.	P.553458	46.48
141.	P.553429	46.48	171.	P.553459	46.48
142.	P.553430	46.48	172.	P.553460	46.48
143.	P.553431	46.48	173.	P.553461	46.48
144.	P.553432	46.48	174.	P.553462	46.48
145.	P.553433	46.48	175.	P.553463	46.48
146.	P.553434	46.48	176.	P.553464	46.48
147.	P.553435	46.48	177.	P.553465	46.48
148.	P.553436	46.48	178.	P.553466	46.48
149.	P.553437	46.48	179.	P.553467	46.48
150.	P.553438	46.48	180.	P.553468	46.48

	Claim No.	Days		Claim No.	Days
181.	P.553469	46.48	211.	P.553518	46.48
182.	P.553470	46.48	212.	P.553519	46.48
183.	P.553471	46.48	213.	P.553520	46.48
184.	P.553472	46.48	214.	P.553521	46.48
185.	P.553473	46.48	215.	P.553522	46.48
186.	P.553474	46.48	216.	P.553523	46.48
187.	P.553475	46.48	217.	P.553524	46.48
188.	P.553476	46.48	218.	P.553525	46.48
189.	P.553477	46.48	219.	P.553526	46.48
190.	P.553478	46.48	220.	P.553527	46.48
191.	P.553479	46.48	221.	P.553528	46.48
192.	P.553480	46.48	222.	P.553529	46.48
193.	P.553481	46.48	223.	P.553530	46.48
194.	P.553482	46.48	224.	P.553531	46.48
195.	P.553483	46.48	225.	P.553532	46.48
196.	P.553503	46.48	226.	P.553533	46.48
197.	P.553504	46.48	227.	P.553534	46.48
198.	P.553505	46.48	228.	P.553535	46.48
199.	P.553506	46.48	229.	P.553536	46.48
200.	P.553507	46.48	230.	P.553537	46.48
201.	P.553508	46.48	231.	P.553538	46.48
202.	P.553509	46.48	232.	P.553539	46.48
203.	P.553510	46.48	233.	P.553540	46.48
204.	P.553511	46.48	234.	P.553541	46.48
205.	P.553512	46.48	235.	P.553542	46.48
206.	P.553513	46.48	236.	P.553543	46.48
207.	P.553514	46.48	237.	P.553544	46.48
208.	P.553515	46.48	238.	P.553545	46.48
209.	P.553516	46.48	239.	P.553546	46.48
210.	P.553517	46.48	240.	P.553547	46.48

Claim No.	Days	Claim No.	Days
241. P.553548	46.48	271. P.577754	46.48
242. P.553549	46.48	272. P.577755	46.48
243. P.553550	46.48	273. P.577756	46.48
244. P.553551	46.48	274. P.577757	46.48
245. P.553552	46.48	275. P.577758	46.48
246. P.553553	46.48	276. P.577759	46.48
247. P.553554	46.48	277. P.577760	46.48
248. P.553555	46.48	278. P.577761	46.48
249. P.553556	46.48	279. P.577762	46.49
250. P.553557	46.48	280. P.577763	46.48
251. P.553558	46.48	281. P.577764	46.48
252. P.553559	46.48	282. P.577765	46.48
253. P.553560	46.48	283. P.577766	46.48
254. P.553561	46.48	284. P.577767	46.48
255. P.553562	46.48	285. P.577768	46.48
256. P.553563	46.48	286. P.577769	46.48
257. P.553564	46.48	287. P.577770	46.48
258. P.553565	46.48	288. P.577771	46.48
259. P.553566	46.48	289. P.577772	46.48
260. P.553567	46.48	290. P.577773	46.48
261. P.553568	46.48	291. P.577774	46.48
262. P.553569	46.48	292. P.577792	46.48
263. P.553570	46.48	293. P.577793	46.48
264. P.553571	46.48	294. P.577794	46.48
265. P.553572	46.48	295. P.577795	46.48
266. P.553573	46.48	296. P.577796	46.48
267. P.553574	46.48	297. P.577797	46.48
268. P.577751	46.48	298. P.577798	46.48
269. P.577752	46.48	299. P.577799	46.48
270. P.577753	46.48	300. P.577800	46.48

Claim No.	Days
301. P.577801	46.48
302. P.577802	46.48
303. P.577803	46.48
304. P.577804	46.48
305. P.577805	46.48
306. P.577806	46.48
307. P.577807	46.48
308. P.577808	46.48
309. P.577809	46.48
310. P.577810	46.48
311. P.575672	46.48
312. P.575673	46.48

1981 11 17 2.4285

Mining Recorder's Office
Ministry of Natural Resources
60 Wilson Avenue,
Timmins, Ontario
P4N 2S7

Dear Sir;

We have received data for Overburden Drilling submitted on mining claims P 553334 et al in the Areas of DetourDetour and Hopper Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone 416/965-1380

J. Skura

cc: Westmin Resources Limited
Toronto, Ontario

WESTMIN RESOURCES LIMITED
(formerly Western Mines Limited)

EASTERN CANADA EXPLORATION OFFICE
SUITE 1414
390 BAY STREET
TORONTO, ONTARIO, CANADA M5H 2Y2
TELEPHONE: (416) 364-8116
TELEX: 06-22072

November 12, 1981

Lands Admin. Branch,
Ministy of Natural Resources,
Whitney Block, Room 6450,
Queen's Park,
Toronto, Ontario.
M7A 1X1.

Dear Sirs:

Re: Assessment Report Overburden Drilling Lower Detour Area and Hopper Lake Area

Please find in duplicate a Report on Overburden Drilling, Lower Detour Area and Hopper Lake Area, by C. Rockingham. A form "Report of Work" has been forwarded to the Mining Recorder Office in Timmins.

Thank you, and I hope you will find everything in order.

Yours truly,

WESTMIN RESOURCES LIMITED

S. Kuprejanov

(Mrs.) S. Kuprejanov,
Administrative Geologist.

SK/hmc
Encl.

List "A"

	Claim No.	Days		Claim No.	Days
1.	P.549918	46.48	31.	P.553319	46.48
2.	P.549919	46.48	32.	P.553320	46.48
3.	P.549920	46.48	33.	P.553321	46.48
4.	P.549921	46.48	34.	P.553322	46.48
5.	P.549922	46.48	35.	P.553323	46.48
6.	P.549923	46.48	36.	P.553324	46.48
7.	P.549924	46.48	37.	P.553325	46.48
8.	P.549925	46.48	38.	P.553326	46.48
9.	P.549926	46.48	39.	P.553327	46.48
10.	P.549927	46.48	40.	P.553328	46.48
11.	P.549928	46.48	41.	P.553329	46.48
12.	P.549929	46.48	42.	P.553330	46.48
13.	P.549930	46.48	43.	P.553331	46.48
14.	P.549931	46.48	44.	P.553332	46.48
15.	P.553303	46.48	45.	P.553333	46.48
16.	P.553304	46.48	46.	P.553334	46.48
17.	P.553305	46.48	47.	P.553335	46.48
18.	P.553306	46.48	48.	P.553336	46.48
19.	P.553307	46.48	49.	P.553337	46.48
20.	P.553308	46.48	50.	P.553338	46.48
21.	P.553309	46.48	51.	P.553339	46.48
22.	P.553310	46.48	52.	P.553340	46.48
23.	P.553311	46.48	53.	P.553341	46.48
24.	P.553312	46.48	54.	P.553342	46.48
25.	P.553313	46.48	55.	P.553343	46.48
26.	P.553314	46.48	56.	P.553344	46.48
27.	P.553315	46.48	57.	P.553345	46.48
28.	P.553316	46.48	58.	P.553346	46.48
29.	P.553317	46.48	59.	P.553347	46.48
30.	P.553318	46.48	60.	P.553348	46.48

Claim No.	Days	Claim No.	Days
61. P.553349	46.48	91. P.553379	46.48
62. P.553350	46.48	92. P.553380	46.48
63. P.553351	46.48	93. P.553381	46.48
64. P.553352	46.48	94. P.553382	46.48
65. P.553353	46.48	95. P.553383	46.48
66. P.553354	46.48	96. P.553384	46.48
67. P.553355	46.48	97. P.553385	46.48
68. P.553356	46.48	98. P.553386	46.48
69. P.553357	46.48	99. P.553387	46.48
70. P.553358	46.48	100. P.553388	46.48
71. P.553359	46.48	101. P.553389	46.48
72. P.553360	46.48	102. P.553390	46.48
73. P.553361	46.48	103. P.553391	46.48
74. P.553362	46.48	104. P.553392	46.48
75. P.553363	46.48	105. P.553393	46.48
76. P.553364	46.48	106. P.553394	46.48
77. P.553365	46.48	107. P.553395	46.48
78. P.553366	46.48	108. P.553396	46.48
79. P.553367	46.48	109. P.553397	46.48
80. P.553368	46.48	110. P.553398	46.48
81. P.553369	46.48	111. P.553399	46.48
82. P.553370	46.48	112. P.553400	46.48
83. P.553371	46.48	113. P.553401	46.48
84. P.553372	46.48	114. P.553402	46.48
85. P.553373	46.48	115. P.553403	46.48
86. P.553374	46.48	116. P.553404	46.48
87. P.553375	46.48	117. P.553405	46.48
88. P.553376	46.48	118. P.553406	46.48
89. P.553377	46.48	119. P.553407	46.48
90. P.553378	46.48	120. P.553408	46.48

Claim No.	Days	Claim No.	Days
121. P.553409	46.48	151. P.553439	46.48
122. P.553410	46.48	152. P.553440	46.48
123. P.553411	46.48	153. P.553441	46.48
124. P.553412	46.48	154. P.553442	46.48
125. P.553413	46.48	155. P.553443	46.48
126. P.553414	46.48	156. P.553444	46.48
127. P.553415	46.48	157. P.553445	46.48
128. P.553416	46.48	158. P.553446	46.48
129. P.553417	46.48	159. P.553447	46.48
130. P.553418	46.48	160. P.553448	46.48
131. P.553419	46.48	161. P.553449	46.48
132. P.553420	46.48	162. P.553450	46.48
133. P.553421	46.48	163. P.553451	46.48
134. P.553422	46.48	164. P.553452	46.48
135. P.553423	46.48	165. P.553453	46.48
136. P.553424	46.48	166. P.553454	46.48
137. P.553425	46.48	167. P.553455	46.48
138. P.553426	46.48	168. P.553456	46.48
139. P.553427	46.48	169. P.553457	46.48
140. P.553428	46.48	170. P.553458	46.48
141. P.553429	46.48	171. P.553459	46.48
142. P.553430	46.48	172. P.553460	46.48
143. P.553431	46.48	173. P.553461	46.48
144. P.553432	46.48	174. P.553462	46.48
145. P.553433	46.48	175. P.553463	46.48
146. P.553434	46.48	176. P.553464	46.48
147. P.553435	46.48	177. P.553465	46.48
148. P.553436	46.48	178. P.553466	46.48
149. P.553437	46.48	179. P.553467	46.48
150. P.553438	46.48	180. P.553468	46.48

	Claim No.	Days		Claim No.	Days
181.	P.553469	46.48	211.	P.553518	46.48
182.	P.553470	46.48	212.	P.553519	46.48
183.	P.553471	46.48	213.	P.553520	46.48
184.	P.553472	46.48	214.	P.553521	46.48
185.	P.553473	46.48	215.	P.553522	46.48
186.	P.553474	46.48	216.	P.553523	46.48
187.	P.553475	46.48	217.	P.553524	46.48
188.	P.553476	46.48	218.	P.553525	46.48
189.	P.553477	46.48	219.	P.553526	46.48
190.	P.553478	46.48	220.	P.553527	46.48
191.	P.553470	46.48	221.	P.553528	46.48
192.	P.553480	46.48	222.	P.553529	46.48
193.	P.553481	46.48	223.	P.553530	46.48
194.	P.553482	46.48	224.	P.553531	46.48
195.	P.553483	46.48	225.	P.553532	46.48
196.	P.553503	46.48	226.	P.553533	46.48
197.	P.553504	46.48	227.	P.553534	46.48
198.	P.553505	46.48	228.	P.553535	46.48
199.	P.553506	46.48	229.	P.553536	46.48
200.	P.553507	46.48	230.	P.553537	46.48
201.	P.553508	46.48	231.	P.553538	46.48
202.	P.553509	46.48	232.	P.553539	46.48
203.	P.553510	46.48	233.	P.553540	46.48
204.	P.553511	46.48	234.	P.553541	46.48
205.	P.553512	46.48	235.	P.553542	46.48
206.	P.553513	46.48	236.	P.553543	46.48
207.	P.553514	46.48	237.	P.553544	46.48
208.	P.553515	46.48	238.	P.553545	46.48
209.	P.553516	46.48	239.	P.553546	46.48
210.	P.553517	46.48	240.	P.553547	46.48

Claim No.	Days	Claim No.	Days
241. P.553548	46.48	271. P.577754	46.48
242. P.553549	46.48	272. P.577755	46.48
243. P.553550	46.48	273. P.577756	46.48
244. P.553551	46.48	274. P.577757	46.48
245. P.553552	46.48	275. P.577758	46.48
246. P.553553	46.48	276. P.577759	46.48
247. P.553554	46.48	277. P.577760	46.48
248. P.553555	46.48	278. P.577761	46.48
249. P.553556	46.48	279. P.577762	46.49
250. P.553557	46.48	280. P.577763	46.48
251. P.553558	46.48	281. P.577764	46.48
252. P.553559	46.48	282. P.577765	46.48
253. P.553560	46.48	283. P.577766	46.48
254. P.553561	46.48	284. P.577767	46.48
255. P.553562	46.48	285. P.577768	46.48
256. P.553563	46.48	286. P.577769	46.48
257. P.553564	46.48	287. P.577770	46.48
258. P.553565	46.48	288. P.577771	46.48
259. P.553566	46.48	289. P.577772	46.48
260. P.553567	46.48	290. P.577773	46.48
261. P.553568	46.48	291. P.577774	46.48
262. P.553569	46.48	292. P.577792	46.48
263. P.553570	46.48	293. P.577793	46.48
264. P.553571	46.48	294. P.577794	46.48
265. P.553572	46.48	295. P.577795	46.48
266. P.553573	46.48	296. P.577796	46.48
267. P.553574	46.48	297. P.577797	46.48
268. P.577751	46.48	298. P.577798	46.48
269. P.577752	46.48	299. P.577799	46.48
270. P.577753	46.48	300. P.577800	46.48

Claim No.	Days
301. P.577801	46.48
302. P.577802	46.48
303. P.577803	46.48
304. P.577804	46.48
305. P.577805	46.48
306. P.577806	46.48
307. P.577807	46.48
308. P.577808	46.48
309. P.577809	46.48
310. P.577810	46.48
311. P.575672	46.48
312. P.575673	46.48

17

LIST "B"

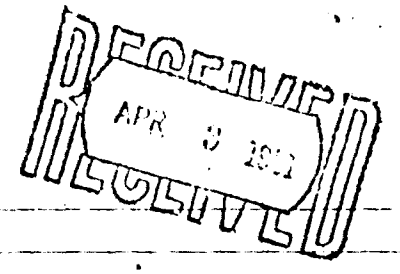
All the work was performed on the following Mining Claims:

Drill Hole	Claim
DO-81-01	P553334
-02	P553327
-03	P553312
-04	~~P553327~~
-05	~~P553332~~
-06	P553332
-07	P553552
-08	P553477
-09	P575672
-10	P553475
-11	P553308
-12	P553306
-13	P553546
-14	P553547
-15	P553533
-16	P553531
-17	P553511
-18	P553506
-19	P553448
-20	P553446
-21	P553444
-22	~~P553405~~

Drill Hole	Claim
DO-81-23	P553405
-24	P553370
-25	~~P553370~~
-26	P549927
-27	P553365
-28	P553374
-29	P553402
-30	P553419
-31	P553441
-32	P553452
-33	P553453
-34	P553503
-35	P553515
-36	P553515
-37	P553523
-38	P553536
-39	P553543
-40	P553556
-41	P553556
-42	P553303
-43	P553316
-44	P553323
-45	~~P553323~~
-46	P553336
-47	P553342
-48	P553338
-49	~~P553321~~
-50	P553321

Drill Hole	Claim
DO-81-51	P553318
-52	P553561
-53	P553558
-54	~~P553558~~
-55	~~P553558~~
-56	P553541
-57	P553538
-58	P553521
-59	P553461
-60	P553467
-93	P553332

BRADLEY BROS. LIMITED



February 28, 1981

CONTRACT DIAMOND DRILLING

Western Mines Limited
Eastern Canada Exploration Office,
Suite 1414 - 390 Bay St.
Toronto, Ontario
M5H 2Y2

HOLE NO.

TO COVER DIAMOND DRILLING FOR Feb. 1 to 28, 1981

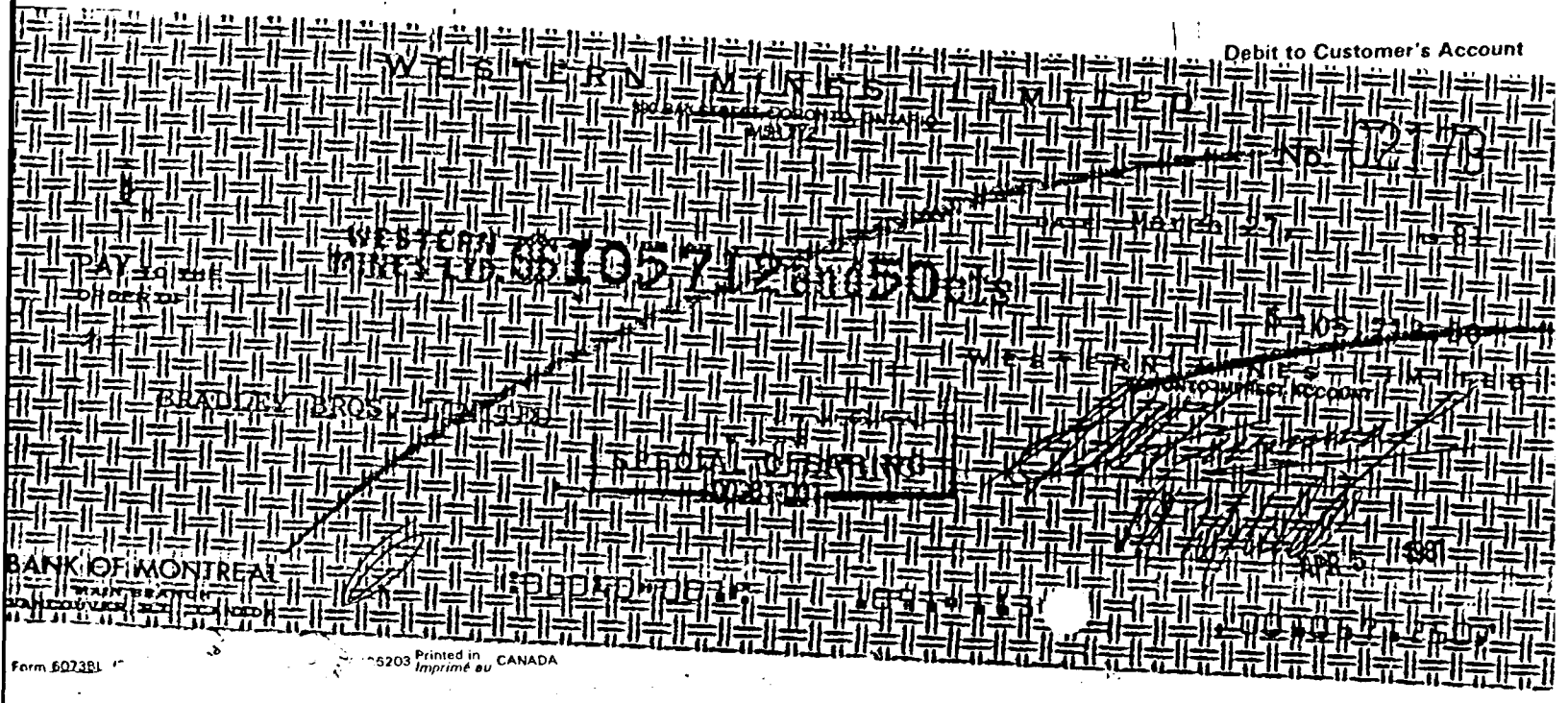
FROM	TO	FOOTAGE COMPLETED			
Man hours - Feb. 20 (no snow)					
✓ 24 man hours		@	$19.00	$456	00 ✓✓
Move equipment between areas:					
✓ 11 hours		@	170.00	1,870	00 ✓✓
Move out equipment:					
✓ 13 hours		@	170.00	2,210	00 ✓✓
Moving out camps & Supplies:					
✓ 270 man hours		@	19.00	5,130	00 ✓
✓ 10 ton truck rental - 53 hrs		@	35.00	1,855	00 ✓
✓ 1 ton truck rental - 27 hrs.		@	15.00	405	00 ✓
Servicing -					
✓ 54 man hours		@	19.00	1,026	00 ✓
✓ 49 - 1 ton truck		@	15.00	735	00 ✓
				$105,712	50 ✓

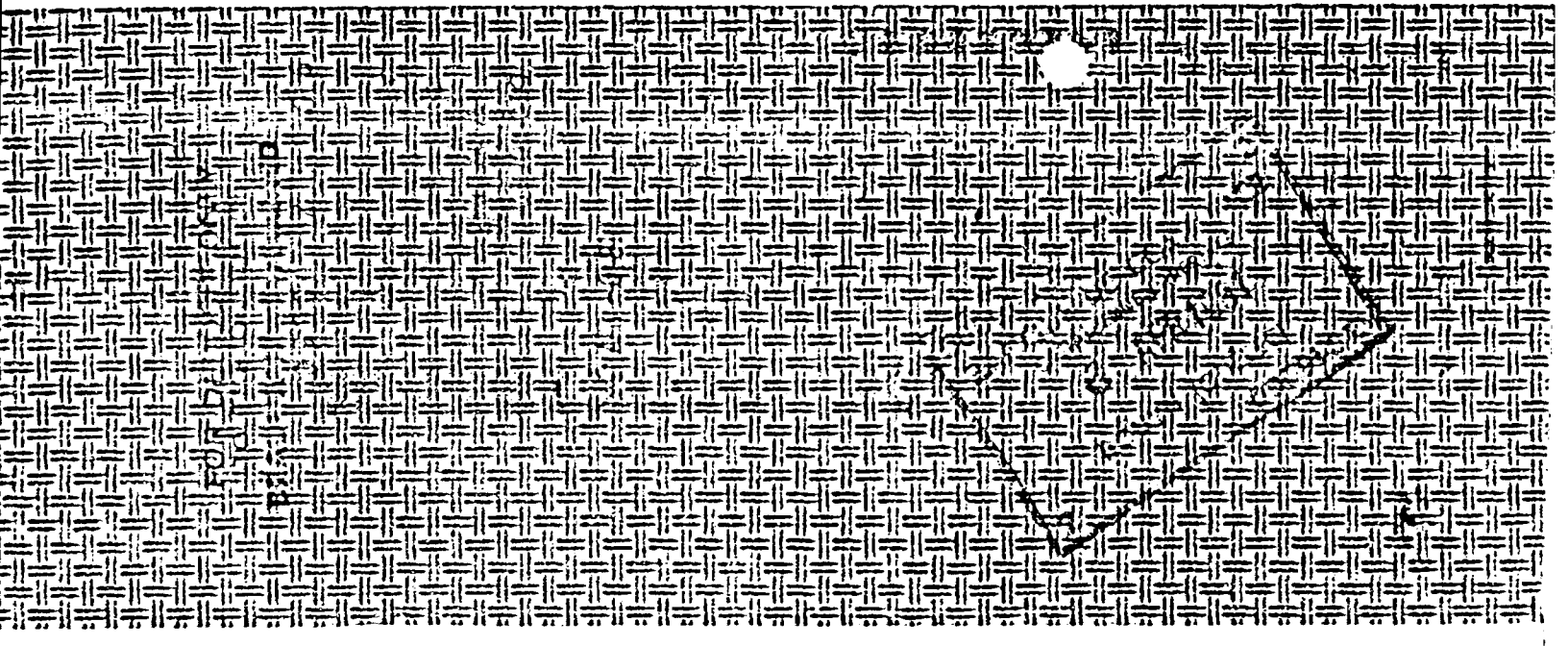
DETOUR
PRECIOUS METALS

50271 320 105,712 50

PAID 105,712 50

98, 14TH STREET • P.O. BOX 367 NORANDA, QUE. J9X 5A9 • TEL. 819-762-0755


Debit to Customer's Account
WESTERN MINES LTD.
BRADLEY BROS.
BANK OF MONTREAL
Printed in CANADA



BRADLEY BROS. LIMITED

January 31, 1981

CONTRACT DIAMOND DRILLING

Western Mines Limited
Eastern Canada Exploration Office,
Suite 1414 - 390 Bay Street,
Toronto, Ontario M5H 2Y2

HOLE NO.

TO COVER DIAMOND DRILLING FOR

FROM	TO	FOOTAGE COMPLETED		
Stove oil: attached			$1,176	52
Propane gas - 100 lbs (gas only)			562	47
Groceries - attached			7,295	70
4 Safety hats	@	$23.00	92	00
M.J. Labelle & Co. - attached		$17,118.50		
Plus 15%		2,567.75	19,686	25
			$34,050	59

23-

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO M5H 2Y2

No. 02133

DATE March 13, 1981

PAY TO THE ORDER OF

BRADLEY BROS. LIMITED

$117,462.59

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF:- WESTERN MINES LIMITED

Invoice dated January 31, 1981	..	$ 83,412.00
" " "	"	34,050.59
		$117,462.59

CB118

OVERBURDEN DRILLING MANAGEMENT LIMITED

192 POWELL AVENUE, OTTAWA, ONTARIO K1S 2A5 – (613) 822-0202

March 02, 1981

To: Western Mines Limited
1414 - 390 Bay Street
Toronto, Ontario
M5H 2Y2

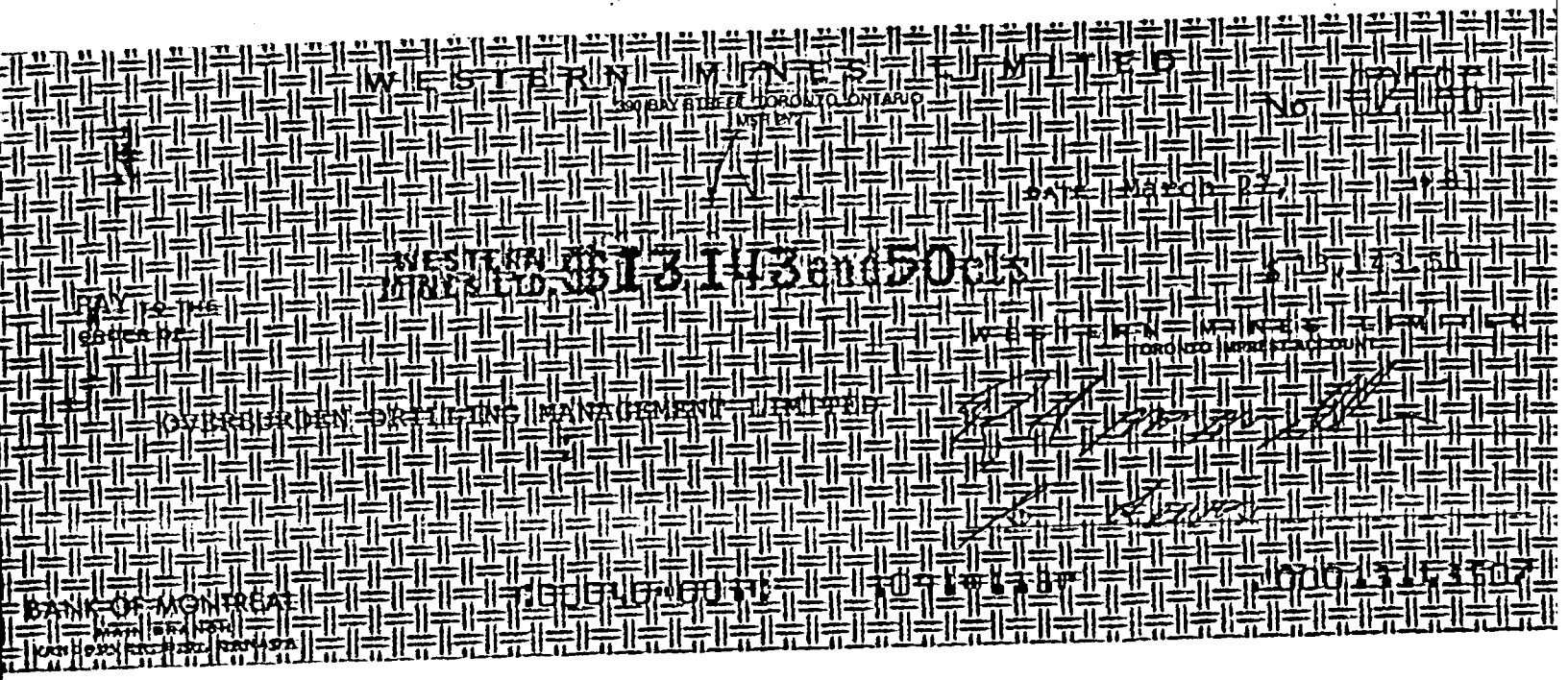
Re: February Invoice - Overburden Drilling Program
Detour Lake, P. Q.

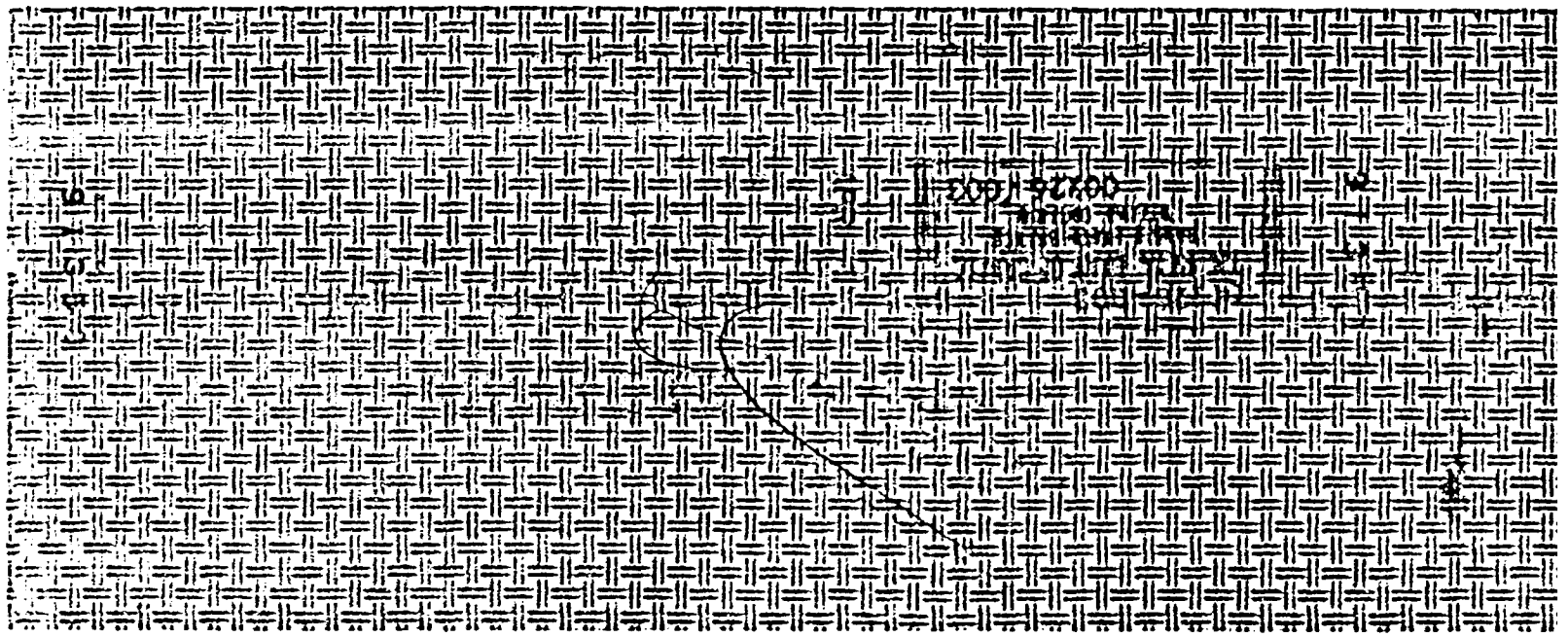
Laboratory Services:

Overburden samples: 01-01 to 64-12 560 samples @ 20.00	11,200.00 ✓
Basal overburden +10 split (in vials) sample numbers: 01-16 to 66-05 66 @ 1.00	66.00 ✓
Bedrock samples: 01-17 to 66-06 60 samples @ 2.00	120.00 ✓
Extra +10 split (in vials and kraft bags) 60 @1.00	60.00 ✓
Storage and handling: 57 samples @ 4.00	228.00 ✓
	11,674.00
Expenses: as per attached summary and receipts	1,469.50 ✓
TOTAL:	$13,143.50 ✓

Yours truly,

S. A. Averill
President


WESTERN MINES LIMITED
PAY TO THE
OVERBURDEN DRILLING MANAGEMENT LIMITED
BANK OF MONTREAL



WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name C. ROCKINGHAM Month FEBRUARY 19 81

Day	Project/Location	AFE No.	Day	Project/Location	AFE No.
1	DETOUR / DETOUR LAKE	1 SUN	16	DETOUR / DETOUR LAKE	
2			17		
3			18		
4	NORANDA		19		
5	DETOUR LAKE		20		
6			21		
7		SAT	22		SAT 1.5 SUN
8		1.5 SUN	23		
9			24		
10			25		
11			26	NORANDA	
12	LA SARRE		27	"	
13	DETOUR LAKE		28		SAT.
14		SAT	29		
15		1.5 SUN	30		
			31		

Bonus days earned*	5½
Cumulative bonus days previous month	5
Bonus days taken	—
Cumulative bonus days this month	10.5

* The basic work week is 5½ days per week

Vacation days taken	—
Sick days taken	—

Distribution: Project	Total Days	%
DETOUR	27	100

APPROVED: R. Allan Mullen

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name C. ROCKINGHAM Month JANUARY 19 81

Day	Project/Location	AFE No.	Day	Project/Location	AFE No.
	P		16	DETOUR / DETOUR	
	P		17	" "	SAT
	P	SAT	18	" "	1.5 SUN
	P	SUN	19	" "	
	DETOUR / TORONTO		20	" "	
	"		21	" "	
	"		22	" "	
	" "		23	" "	
	" LA SARRE		24	" "	SAT
	" LA SARRE	SAT	25	" "	1.5 SUN
	" LA SARRE	1.5 SUN	26	" "	
	" TORONTO		27	" "	
	" LA SARRE		28	" "	
	" LA SARRE		29	" "	
	" DETOUR		30	" "	
			31	" "	SAT

Bonus days earned*	5
Cumulative bonus days previous month	—
Bonus days taken	—
Cumulative bonus days this month	5

* The basic work week is 5½ days per week

Vacation days taken	—
Sick days taken	—

Distribution: Project	Total Days	%
DETOUR	27	100

APPROVED: [signature]

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

me D. ROBINSON Month FEBRUARY 19 81

Day	Project/Location	AFE No.	Day	Project/Location	AFE No
	DETOUR / DETOUR LAKE	1. SUN	16	DETOUR / DETOUR LAKE	
			17		
			18		
			19		
			20		
			21		SAT
		SAT	22		1.5 SUN
		1.5 SUN	23		
			24		
			25		
			26		
			27		
			28	↓ ↓	.5 SAT
		SAT	29	LAID OFF	
	↓	1.5 SUN	30		
			31		

Bonus days earned* ..... ~~NA~~ 6

Cumulative bonus days previous month ..... NA 2

Bonus days taken ..... NA ~~6~~

Cumulative bonus days this month ..... NA. 8

Distribution: Project	Total Days	%
DETOUR	28	100

* The basic work week is 5½ days per week

Vacation days taken ..... —

Sick days taken ..... —

APPROVED: R. [signature]

SPECIAL CODE

P — Public holiday; *V — Paid vacation;* S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name D. ROBINSON Month JANUARY 19 81

y	Project/Location	AFE No.	Day	Project/Location	AFE No.
			16		
			17		
			18		SUN
			19	DETOUR TORONTO	
			20	" DETOUR	
			21	" "	
			22	" "	
			23	" "	
			24	" "	SAT
			25	" "	15 SUN
			26	" "	
			27	" "	
			28	" "	
			29	" "	
			30	" "	
			31	" "	5 SAT

Bonus days earned* 2

Cumulative bonus days previous month .....

Bonus days taken .....

Cumulative bonus days this month 2

* The basic work week is 5½ days per week

Vacation days taken .....

Sick days taken .....

Distribution: Project	Total Days	%
DETOUR	13	100

APPROVED: K.A. [illegible]

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO
M5H 2Y2

No. 02169

WARRANTED

DATE March 20, 19 81

Western Mines Ltn. $6,384 and 32 cts

PAY TO THE ORDER OF

$6,384.32

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

G.M. THOMAS

R.A. Mitchell

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF:- WESTERN MINES LIMITED

Invoice dated March 4, 1981 Re: Detour Project	..	$4,725.00
Expense Statement dated March 5, 1981	..	1,659.32
		$6,384.32

CB 119

PLEASE DETACH BEFORE DEPOSITING

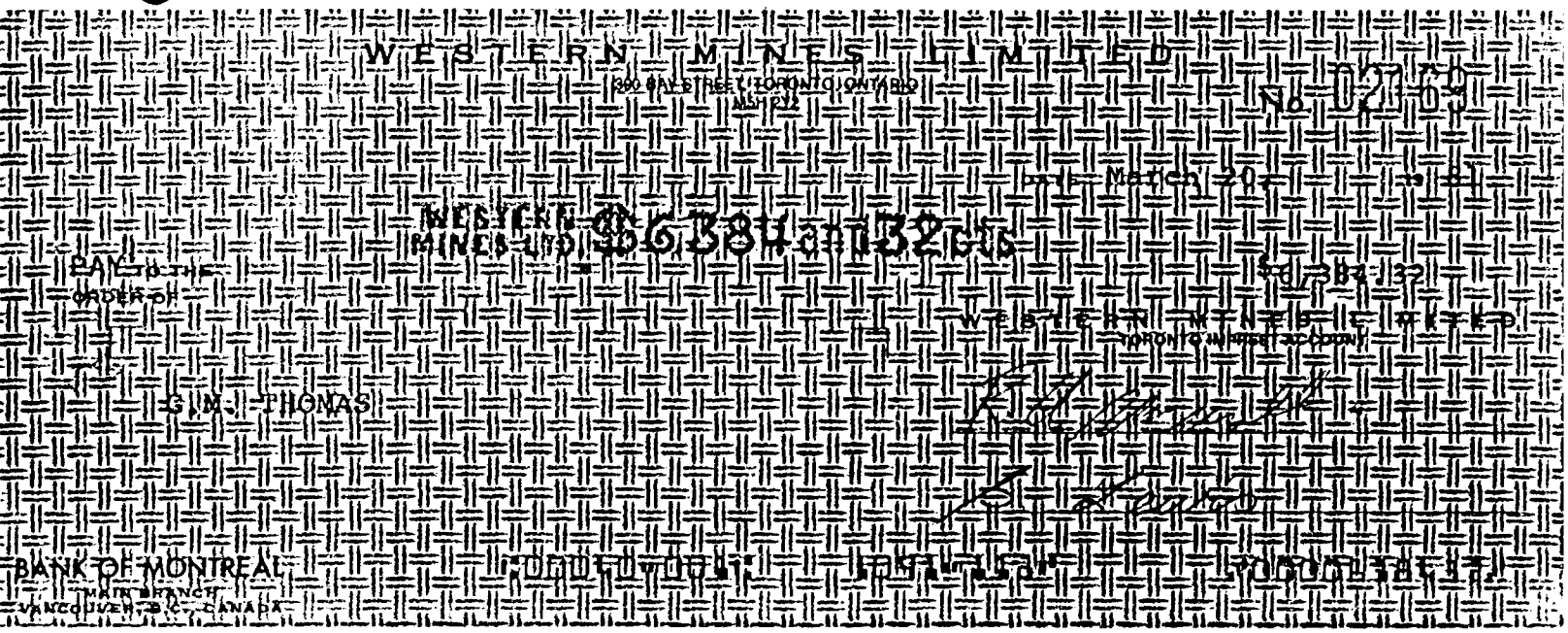
DISTRIBUTION

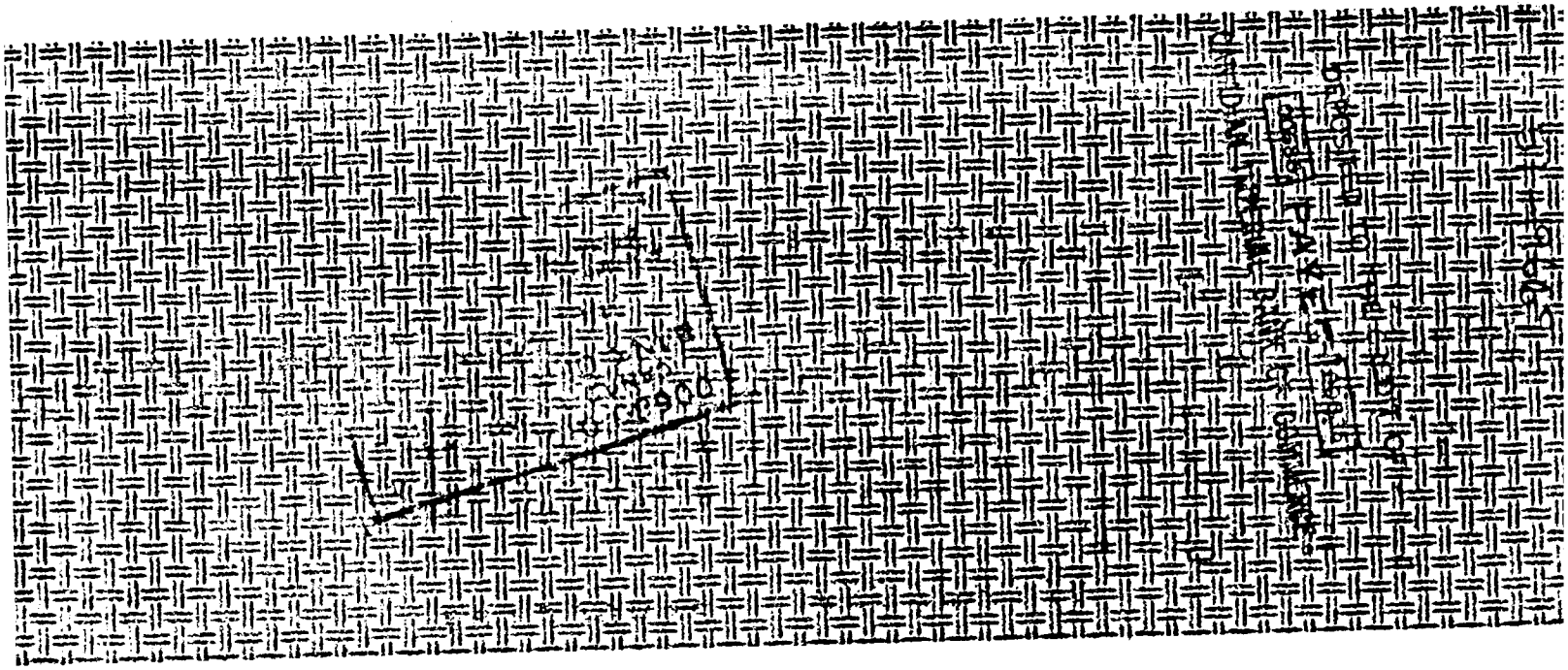
DEBIT ACC. NO.	DEBIT PARTICULARS	DEBIT AMOUNT	CREDIT ACC. NO.	CREDIT PARTICULARS	CREDIT AMOUNT

APPROVED FOR PAYMENT _____ MANAGER

CERTIFIED CORRECT _____ ACCOUNTANT

KEYSTONE BUSINESS FORMS


WESTERN MINES LIMITED
390 BAY STREET, TORONTO, ONTARIO
M5H 2Y2
No. 07703
Date March 20
WESTERN MINES LTD.
PAY TO THE ORDER OF
G.M. THOMAS
WESTERN MINES LIMITED
TORONTO, ONTARIO
BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA



WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO
M5H 2Y2

WARRANTED

No. 02108

DATE February 18, 19 81

WESTERN MINES LTD. $3,925 and 84 cts

PAY TO THE ORDER OF

$3,925.84

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

G. M. THOMAS

R. A. Hamilton

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF: WESTERN MINES LIMITED

Professional Engineering Fees.

Invoice dated Feb. 12, 1981 .. $3,150.00
Re: Detour Project

Expense Statement dated Feb. 12/81 .. 775.84

$3,925.84

CB117

PLEASE DETACH BEFORE DEPOSITING

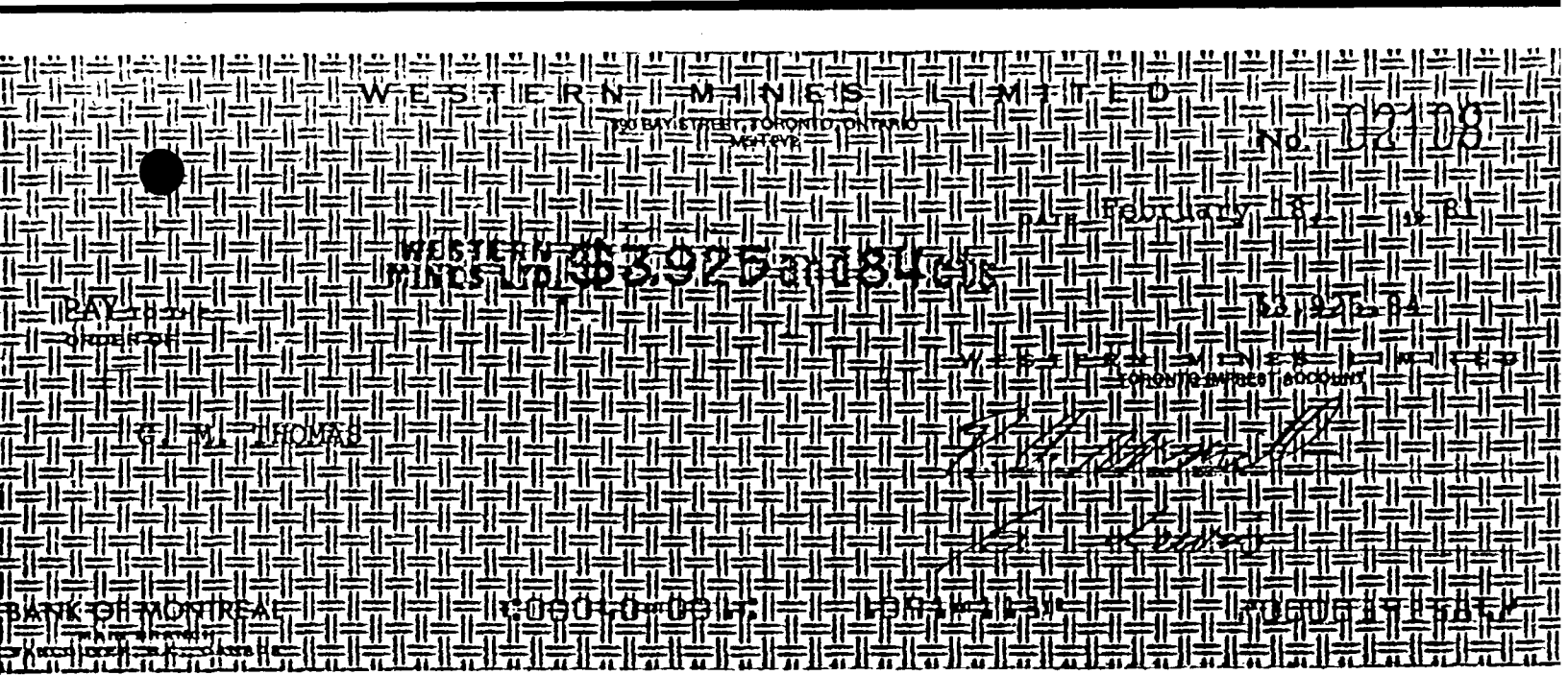
DISTRIBUTION

DEBIT			CREDIT		
ACC. NO.	PARTICULARS	AMOUNT	ACC. NO.	PARTICULARS	AMOUNT

APPROVED FOR PAYMENT _____ MANAGER

CERTIFIED CORRECT _____ ACCOUNTANT

KEYSTONE BUSINESS FORMS


WESTERN MINES LIMITED
120 BAY STREET, TORONTO, ONTARIO
M5H 2V8
No. 12108
February 8 19 81
PAY
G. M. THOMAS
BANK OF MONTREAL

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name D. LEWIS Month FEBRUARY 19 81

ay	Project/Location	AFE No.	Day	Project/Location	AFE N
1	DETOUR / DETOUR LAKE		16	DETOUR / DETOUR LAKE	
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name D. LEWIS Month FEBRUARY 19 81

ay	Project/Location	AFE No.	Day	Project/Location	AFE N
1	DETOUR / DETOUR LAKE		16	DETOUR / DETOUR LAKE	
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29	LAID OFF	
15			30		
			31		

Bonus days earned* ..... NA

Cumulative bonus days previous month ..... NA

Bonus days taken ..... NA

Cumulative bonus days this month ..... NA

* The basic work week is 5½ days per week

Vacation days taken ..... —

Sick days taken ..... —

Distribution: Project	Total Days	%
DETOUR	28	100

APPROVED: R. [illegible]

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name DAN LEWIS Month JANUARY 19 81

Day	Project/Location	AFE No.	Day	Project/Location	AFE
1			16	DETOUR DETOUR	
2			17	" "	
3			18	" "	
4			19	" "	
5			20	" "	
6			21	" "	
7			22	" "	
8			23	" "	
9			24	" "	
10			25	" "	
11			26	" "	
12			27	" "	
13			28	" "	
14	DETOUR OTTAWA / LA SARRE		29	" "	
15	" "		30	" "	
			31	" "	

Bonus days earned* ..... NA

Cumulative bonus days previous month .....

Bonus days taken .....

Cumulative bonus days this month .....

* The basic work week is 5½ days per week

Vacation days taken .....

Sick days taken .....

Distribution: Project	Total Days	%
DETOUR	18	100

APPROVED: R. H. [illegible]

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name M. MAHAFFY Month FEBRUARY 19 81

Day	Project/Location	AFE No.	Day	Project/Location	AFE N
1	DETOUR / DETOUR LAKE		16	DETOUR / DETOUR LAKE	
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29	LAID OFF	
15			30		
			31		

Bonus days earned* ..... N A

Cumulative bonus days previous month ..... N A

Bonus days taken ..... N A

Cumulative bonus days this month ..... —

* The basic work week is 5½ days per week

Vacation days taken ..... —

Sick days taken ..... —

Distribution: Project	Total Days	%
DETOUR	28	100

APPROVED: R. A. Smith

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name M. MAHAFFY Month JANUARY 19 81

Day	Project/Location	AFE No.	Day	Project/Location	AFE N
1			16	DETOUR DETOUR	
2			17	" "	
3			18	" "	
4			19	" "	
5			20	" "	
6			21	" "	
7			22	" "	
8			23	" "	
9			24	" "	
10			25	" "	
11			26	" "	
12			27	" "	
13	DETOUR SUDBURY-NORANDA		28	" "	
14	LA SARRE		29	" "	
15	DETOUR		30	" "	
			31	" "	

Bonus days earned* ..... NA

Cumulative bonus days previous month .....

Bonus days taken .....

Cumulative bonus days this month .....

* The basic work week is 5½ days per week

Vacation days taken .....

Sick days taken .....

Distribution: Project	Total Days	%
DETOUR	19	100

APPROVED: A. H. Bingham

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name L. NUTTER Month FEBRUARY 19 8

Day	Project/Location	AFE No.	Day	Project/Location	AFE
1	DETOUR / DETOUR LAKE		16	DETOUR / DETOUR LAKE	
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
0			25		
1			26		
2			27		
3			28		
4			29	LAID OFF	
5			30		
			31		

Bonus days earned* ..... NA

Cumulative bonus days previous month ..... NA

Bonus days taken ..... NA

Cumulative bonus days this month ..... NA

* The basic work week is 5½ days per week

Vacation days taken ..... —

Sick days taken ..... —

Distribution: Project	Total Days	%
DETOUR	28	100

APPROVED: R. McMillan

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

DIVISION EXPLORATION

SALARY DISTRIBUTION — EXPLORATION

Name L. NUTTER Month JANUARY 19 8

Day	Project/Location		AFE No.	Day	Project/Location		AFE
1				16	DETOUR	DETOUR	
2				17	"	"	
3				18	"	"	
4				19	"	"	
5				20	"	"	
6				21	"	"	
7				22	"	"	
8				23	"	"	
9				24	"	"	
10				25	"	"	
11				26	"	"	
12				27	"	"	
13				28	"	"	
14	DETOUR	LA SARRE		29	"	"	
15	"	DETOUR		30	"	"	
				31	"	"	

Bonus days earned* ..... NA

Cumulative bonus days previous month .....

Bonus days taken .....

Cumulative bonus days this month .....

* The basic work week is 5½ days per week

Vacation days taken .....

Sick days taken .....

Distribution: Project	Total Days	%
DETOUR	18	10

APPROVED: [signature]

SPECIAL CODE

P — Public holiday; V — Paid vacation; S — Sick; B.D. — Bonus days taken.

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO M5H 2Y2

No. 02132

WARRANTED

DATE March 13, 19 81

WESTERN MINES LTD. $635 and 70cts

PAY TO THE ORDER OF

$635.70

BONDAR-CLEGG & COMPANY LTD.

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

R. G. McMillan

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF:- WESTERN MINES LIMITED

Invoice No.	E2965	dated Feb. 11, 1981	..	$ 34.80
"	E2998	" Feb. 13, 1981	..	32.70
"	E3001	" Feb. 16, 1981	..	542.70
"	E3002	" Feb. 16, 1981	..	25.50
				$635.70

CB118

PLEASE DETACH BEFORE DEPOSITING

DISTRIBUTION

DEBIT ACC. NO.	DEBIT PARTICULARS	DEBIT AMOUNT	CREDIT ACC. NO.	CREDIT PARTICULARS	CREDIT AMOUNT

APPROVED FOR PAYMENT _____ MANAGER

CERTIFIED CORRECT _____ ACCOUNTANT

KEYSTONE BUSINESS FORMS

WESTERN MINES LIMITED
890 BAY STREET, TORONTO, ONTARIO
M5H 2Y8

No. 02132

DATE March 13, 19 81

WESTERN MINES LTD. $635 and 70 cts

PAY TO THE ORDER OF

BONDAR CLEGG & COMPANY LTD.

$635.70

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

BANK OF MONTREAL
MAIN BRANCH

⑆00010⑈001⑆ 1391⑈214⑈ ⑈0000063570⑈

FOR DEPOSIT ONLY
TO THE CREDIT OF
BONDAR CLEGG & CO. LIMITED
106 637 12

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO
M5H 2Y2

No. 02178

WARRANTED

DATE March 27, 19 81

PAY TO THE ORDER OF

WESTERN MINES LTD. $1,808 and 15cts $ 1,808.15

BONDAR-CLEGG & COMPANY LTD.

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

R. A. Macmillan.

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF:- WESTERN MINES LIMITED

Invoice No.	E 3045	dated Feb. 19, 1981	..	$ 297.25
Credit No.	E 3320	" Mar. 5, 1981	..	(22.50)
Invoice No.	E 3051	" Feb. 20, 1981	..	603.00
Credit No.	E 3058	" Feb. 20, 1981	..	(2.55)
Invoice No.	E 3060	" Feb. 20, 1981	..	353.30
" "	E 3067	" Feb. 23, 1981	..	388.70
" "	E 3069	" Feb. 23, 1981	..	190.95
				$1, 808.15

CB120

PLEASE DETACH BEFORE DEPOSITING

DISTRIBUTION

DEBIT ACC. NO.	PARTICULARS	AMOUNT		CREDIT ACC. NO.	PARTICULARS	AMOUNT	

APPROVED FOR

CERTIFIED CORRECT

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO

No. 02170

DATE March 27, 19 81

WESTERN MINES LTD. $1,808 and 15 cts

PAY TO THE ORDER OF

$ 1,808.15

BONDAR-CLEGG & COMPANY LTD.

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

FOR DEPOSIT ONLY
TO THE CREDIT OF
BONDAR - CLEGG & CO. LIMITED
1062-837-2

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO
M5H 2Y2

No. 0223

WARRANTED

DATE April 29, 19 8

PAY TO THE ORDER OF WESTERN MINES LIMITED One Thousand Fifty Three and 75 cts $1,053.75

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

BONDAR-CLEGG & COMPANY LTD.

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF:- WESTERN MINES LIMITED

Invoice No.	E 3463	dated	March 23, 1981 ..	$ 52.50
"	E 3474	"	March 24, 1981 ..	911.25
"	E 3524	"	March 30, 1981 ..	90.00
				$1,053.75

CB 122

PLEASE DETACH BEFORE DEPOSITING

DISTRIBUTION

DEBIT ACC. NO.	DEBIT PARTICULARS	DEBIT AMOUNT	CREDIT ACC. NO.	CREDIT PARTICULARS	CREDIT AMOUNT

APPROVED FOR PAYMENT _____ MANAGER

CERTIFIED CORRECT _____ ACCOUNTANT

KEYSTONE BUSINESS FORMS

WESTERN MINES LIMITED

900 BAY STREET, TORONTO, ONTARIO
M5H 2Y2

No. 02235

DATE April 29 1981

PAY TO THE ORDER OF

WESTERN MINES LTD. $1,053 and 75 cts — $1,053.75

BONDAR-CLEGG & COMPANY LTD.

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

BANK OF MONTREAL

FOR DEPOSIT ONLY
TO THE CREDIT OF
BONDAR-CLEGG & CO. LIMITED
106-637-2

WESTERN MINES LIMITED

390 BAY STREET, TORONTO, ONTARIO
M5H 2Y2

No. 02208

WARRANTED

DATE April 15, 19 81

WESTERN MINES LTD. $4,531.00 and 90 Cts

PAY TO THE ORDER OF

$4,531.90

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

BONDAR-CLEGG & COMPANY LTD.

R.A. [illegible]

NOT NEGOTIABLE

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C., CANADA

IN PAYMENT OF:- WESTERN MINES LIMITED

Invoice	E3301	dated	March 3, 1981	..	$ 284.75
"	E3331	"	March 6, 1981	..	160.80
"	E3336	"	March 9, 1981	..	180.00
"	E3347	"	March 10, 1981	..	1,025.10
"	E3348	"	March 10, 1981	..	804.00
"	E3359	"	March 10, 1981	..	957.50
"	E3387	"	March 13, 1981	..	996.00
"	E3417	"	March 16, 1981	..	123.75
					$4,531.90

CB 121

PLEASE DETACH BEFORE DEPOSITING

DISTRIBUTION

DEBIT ACC. NO.	PARTICULARS	AMOUNT		CREDIT ACC. NO.	PARTICULARS	AMOUNT	

APPROVED FOR PAYMENT _____ MANAGER

CERTIFIED CORRECT _____ ACCOUNTANT

WESTERN MINES LIMITED
100 BAY STREET, TORONTO, ONTARIO M5J 2Z2

No. 001060

DATE April 15, 87

PAY TO THE ORDER OF BONDAR-CLEGG & COMPANY LTD.

$4,531.90

WESTERN MINES LIMITED
TORONTO IMPREST ACCOUNT

BANK OF MONTREAL
MAIN BRANCH
VANCOUVER, B.C. CANADA

⑈001060⑈ ⑆00005⑆810⑈

WESTERN MINES LTD. $4,531.90 CR

FOR DEPOSIT ONLY
BONDAR-CLEGG & CO. LTD.

BONDAR-CLEGG & COMPANY LTD.

7A BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED MAY 26 1981

INVOICE: E 5951

DATE: May 21, 1981

REPORT NO: 111-0596

PROJECT:

Westmin Resources Limited,
Suite 1414- 390 Bay Street,
Toronto, Ontario.
M5H 2Y2

Attention: Mr. C. Rockingham

4	Analyses of Copper	@ $1.75	$7.00
4	Analyses of Lead	@ 0.75	3.00
4	Analyses of Zinc	@ 0.75	3.00
4	Analyses of Nickel	@ 0.75	3.00
4	Analyses of Silver	@ 0.75	3.00
4	Analyses of Gold	@ 5.25	21.00
4	Sample Preparation	@ 1.25	5.00
4	transferred from poly-bags	@ 0.10	0.40
		TOTAL	$45.40 ✓

PRECIOUS METALS

50271 301 45 40

P91 R 45 40 to CR

CR Datum

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

84 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED APR 6 1981

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: R. McMillan

INVOICE: E 3556

DATE: April 1, 1981

REPORT NO: 318-81

PROJECT:

61	Analyses of Copper	@$1.75	$106.75
61	Analyses of Lead	@ .75	45.75
61	Analyses of Zinc	@ .75	45.75
61	Analyses of Nickel	@ .75	45.75
61	Analyses of Silver	@ .75	45.75
61	Analyses of Gold	@ 5.25	320.25
61	Sample Preparations	@ 1.25	76.25
			$686.25 ✓

CHARGE TO PRECIOUS METALS

ACCOUNT	SUB-SUMMARY LEDGER	SUB-ACCOUNT	P.E.	AMOUNT
	50271	301		686 25
086	CR			686 25

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited
1414, 390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: R. McMillan

RECEIVED
APR 2 1981

INVOICE: E 3524

DATE: March 30, 1981

REPORT NO: 319-81

PROJECT:

8	Analyses of Copper	@$1.75	$ 14.00
8	Analyses of Lead	@ .75	6.00
8	Analyses of Zinc	@ .75	6.00
8	Analyses of Nickel	@ .75	6.00
8	Analyses of Silver	@ .75	6.00
8	Analyses of Gold	@ 5.25	42.00
8	Sample Preparations	@ 1.25	10.00
			$90.00 ✓

CHARGE TO PRECIOUS METALS

ACCOUNT	SUBSIDIARY LEDGER	SUB FEATURE	AFE.	AMOUNT	
	50271	304		90	00

REC'D P83 | CK'D CR | AUTH FOR | 90 00

Rec'd & CR

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

64 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
MAR 26 1981

INVOICE: E 3474

DATE: March 24, 1981

REPORT NO: 299-81

PROJECT:

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: R. McMillan

81	Analyses of Copper	@ $ 1.75	$141.75
81	Analyses of Lead	@ .75	60.75
81	Analyses of Zinc	@ .75	60.75
81	Analyses of Nickel	@ .75	60.75
81	Analyses of Silver	@ .75	60.75
81	Analyses of Gold	@ 5.25	425.25
81	Sample Preparations	@ 1.25	101.25
			$911.25 ✓

CHARGE TO PRECIOUS METALS

ACCOUNT	SUBSIDIARY LEDGER	SUB FEATURE		AMOUNT	
	50271	301		911	25
RECD BY P83	CHKD BY CR			911	25

mk

R Rec to CR.

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

INVOICE: E 3463

DATE: March 23, 1981

REPORT NO: 300-81

PROJECT:

Western Mines Limited
1414, 390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: R. McMillan

RECEIVED MAR 26 1981

5	Analyses of Copper	@ $ 1.75	$8.75 ✓
5	Analyses of Lead	@ .75	3.75 ✓
5	Analyses of Zinc	@ .75	3.75 ✓
5	Analyses of Nickel	@ .75	3.75 ✓
5	Analyses of Gold	@ 5.25	26.25 ✓
5	Sample Preparations	@ 1.25	6.25 ✓
			~~$56.25~~ $10 52.50

phoned 4/3/81

CHARGE TO PRECIOUS METALS

ACCOUNT	SUBSIDIARY LEDGER	SUB FEATURE	AFE	AMOUNT	
	50271	301		52	50

P83 CR 52 50

to C.R. R

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

INVOICE: E 3417

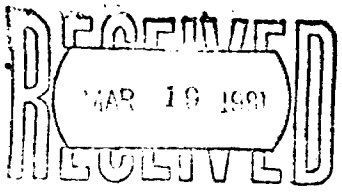
DATE: March 16, 1981

REPORT NO: 273-81

PROJECT:

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan.



11	Analyses of Copper	@ $1.75	$19.25
11	Analyses of Lead	@ 0.75	8.25
11	Analyses of Zinc	@ 0.75	8.25
11	Analyses of Nickel	@ 0.75	8.25
11	Analyses of Silver	@ 0.75	8.25
11	Analyses of Gold	@ 5.25	57.75
11	Sample Preparation	@ 1.25	13.75
		TOTAL	$123.75 ✓

CHARGE TO PRECIOUS METALS

ACCOUNT	SUBSIDIARY LEDGER	SUB FEATURE	AFE.	AMOUNT	
	50271	301		123	75
RECD. BY PB3	CHKD. BY CR	APPD. FOR PAY		123	75

to CR, RM

Wm.

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan.

RECEIVED
MAR 18 1981

INVOICE: E 3387

DATE: March 13, 1981

REPORT NO: 272-81

PROJECT:

89	Analyses of Copper	@ $1.75	$155.75
89	Analyses of Lead	@ 0.75	66.75
89	Analyses of Zinc	@ 0.75	66.75
89	Analyses of Nickel	@ 0.75	66.75
89	Analyses of Silver	@ 0.75	66.75
88	Analyses of Gold	@ 5.25	462.00
89	Sample Preparation	@ 1.25	111.25
		TOTAL	$996.00 ✓

TO PRECIOUS METALS

ACCT. UNIT	SUBSIDIARY LEDGER	SUB FEATURE	AFE.	AMOUNT	
	50271	301		996	00
REC'D BY PB2	CK'D. BY CR	APPROVED FOR PAYMENT		996	00

Ref to CR

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

64 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R.McMillan

INVOICE: E 3359

DATE: March 10, 1981

REPORT NO: 256-81

PROJECT:

86	Analyses of Copper	@ $1.75	$150.50
86	Analyses of Lead	@ 0.75	64.50
86	Analyses of Zinc	@ 0.75	64.50
85	Analyses of Nickel	@ 0.75	63.75
86	Analyses of Silver	@ 0.75	64.50
84	Analyses of Gold	@ 5.25	441.00
87	Sample Preparation	@ 1.25	108.75
		TOTAL	$957.50 ✓

PRECIOUS METALS

50271 301 957 50

P82 CR 957 50

R.M. to CR -

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
MAR 12 1981

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan.

INVOICE: E 3348

DATE: March 10, 1981

REPORT NO: 233-81

PROJECT:

80	Analyses of Copper	@ $1.65	$132.00
80	Analyses of Lead	@ 0.75	60.00
80	Analyses of Zinc	@ 0.75	60.00
80	Analyses of Nickel	@ 0.75	60.00
80	Analyses of Silver	@ 0.75	60.00
80	Analyses of Gold	@ 4.25	340.00
80	Sample Preparation	@ 1.15	92.00
		TOTAL	$ 804.00 ✓

PRECIOUS METALS

50271 | 301 | 804 | 00

P82 CR [signature] 804 00

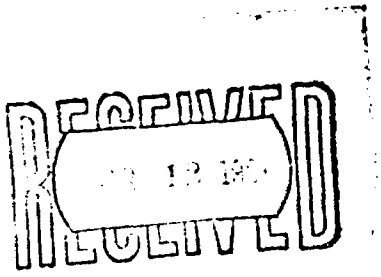
11 to CR

[signature]

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455



Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan.

INVOICE: E 3347

DATE: March 10, 1981

REPORT NO: 243-81

PROJECT:

102	Analyses of Copper	@ $1.65	$168.30
102	Analyses of Lead	@ 0.75	76.50
102	Analyses of Zinc	@ 0.75	76.50
102	Analyses of Nickel	@ 0.75	76.50
102	Analyses of Silver	@ 0.75	76.50
102	Analyses of Gold	@ 4.25	433.50
102	Sample Preparation	@ 1.15	117.30
		TOTAL	$1,025.10 ✓

PRECIOUS METALS

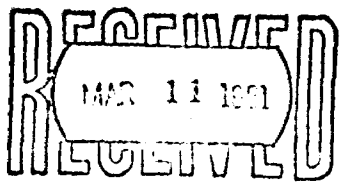
50271 301 1,025 10

P82 CR 1,025 10

RM to CR

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455



Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan

INVOICE: E 3336

DATE: March 9, 1981

REPORT NO: 257-81

PROJECT:

16	Analyses of Copper	@ $1.75	$28.00
16	Analyses of Lead	@ 0.75	12.00
16	Analyses of Zinc	@ 0.75	12.00
16	Analyses of Nickel	@ 0.75	12.00
16	Analyses of Silver	@ 0.75	12.00
16	Analyses of Gold	@ 5.25	84.00
16	Sample Preparation	@ 1.25	20.00
		TOTAL	$180.00 ✓

PRECIOUS METALS

50271 : 301 180 00

P82 : CR 180 00

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
MAR 10 1981

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.

Attention: Mr. McMillan

INVOICE: E 3331

DATE: March 6, 1981

REPORT NO: 244-81

PROJECT:

16	Analyses of Copper	@ $1.65	$26.40
16	Analyses of Lead	@ 0.75	12.00
16	Analyses of Zinc	@ 0.75	12.00
16	Analyses of Nickel	@ 0.75	12.00
16	Analyses of Silver	@ 0.75	12.00
16	Analyses of Gold	@ 4.25	68.00
16	Sample Preparation	@ 1.15	18.40
		TOTAL	$160.80 ✓

PRECIOUS METALS

50271 301 160 80

P82 CR 160 80

CR

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited
1414-390 Bay Street

Toronto, Ontario

Attention: Mr. R. McMillan

INVOICE: E 3301

DATE: March 3, 1981

REPORT NO: 218-81

PROJECT:

67	Analyses of Gold	@$4.25	$284.75 ✓

PRECIOUS METALS

50271 30 284 75

P82 CR 284 75

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited,
1414, 390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan

RECEIVED
FEB 25 1981

INVOICE: E 3069

DATE: February 23, 1981

REPORT NO: 219-81

PROJECT:

19	Analyses of Copper	@ $1.65	$31.35
19	Analyses of Lead	@ 0.75	14.25
19	Analyses of Zinc	@ 0.75	14.25
19	Analyses of Nickel	@ 0.75	14.25
19	Analyses of Silver	@ 0.75	14.25
19	Analyses of Gold	@ 4.25	80.75
19	Sample Preparation	@ 1.15	21.85
		TOTAL	$190.95 ✓

PRECIOUS METALS

50271	301	190	95
P80 CR		190	95

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

K/W to CR.

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited,
1414-390 Bay Street,
Toronto, Ontario.

Attention: Mr. R. McMillan.

RECEIVED
FEB 25 1981

INVOICE: E 3067

DATE: February 23, 1981

REPORT NO: 218-81

PROJECT:

67	Analyses of Copper	@ $1.65	$110.65
67	Analyses of Lead	@ 0.75	50.25
67	Analyses of Zinc	@ 0.75	50.25
67	Analyses of Nickel	@ 0.75	50.25
67	Analyses of Silver	@ 0.75	50.25
67	Sample Preparation	@ 1.15	77.05
		TOTAL	$388.70 ✓

PRECIOUS METALS

50271 301 388 70

P80 CR

388 70

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

to CR.

BONDAR-CLEGG & COMPANY LTD.

BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

INVOICE: E 3060

DATE: February 20, 1981

REPORT NO: 173-81

PROJECT:

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: Mr. R. McMillan

RECEIVED
FEB 23 1981

36	Analyses of Copper	@ $ 1.65	$59.40
36	Analyses of Lead	@ .75	27.00
36	Analyses of Zinc	@ .75	27.00
36	Analyses of Nickel	@ .75	27.00
36	Analyses of Silver	@ .75	27.00
34	Analyses of Gold	@ 4.25	144.50
36	Sample Preparations	@ 1.15	41.40
			$353.30 ✓

PRECIOUS METALS

50271 301 353 30

P80 CR 353 30

R
to CR.

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
FEB 23 1981

INVOICE: E 3058

DATE: February 20, 1981

REPORT NO: 175-81

PROJECT:

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: Mr. R. McMillan

CREDIT NOTE

To credit Invoice E 2998 Report 175-81 dated February 13, 1981
Sample Preparation charges at 2.00/sample should be 1.15/sample

Credit Amount ------ $2.55

PRECIOUS METALS

DETOUR 301 (2.55)

P79 (2.55)

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.
M5H 2Y2

RECEIVED
FEB 23 1981

Attention: Mr. R. McMillan

INVOICE: E 3051

DATE: February 20, 1981

REPORT NO: 200-81

PROJECT:

60	Analyses of Copper	@ $1.65	$99.00
60	Analyses of Lead	@ 0.75	45.00
60	Analyses of Zinc	@ 0.75	45.00
60	Analyses of Nickel	@ 0.75	45.00
60	Analyses of Silver	@ 0.75	45.00
60	Analyses of Gold	@ 4.25	255.00
60	Sample Preparation	@ 1.15	69.00
		TOTAL	$603.00 ✓

PRECIOUS METALS

50271 301 603 00

P20 CR 603 00

to C.R.

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

INVOICE: E 3045

DATE: February 19, 1981

REPORT NO: 174-81

PROJECT:

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

30	Analyses of Copper	@ $ 1.65	$49.50
30	Analyses of Lead	@ .75	22.50
30	Analyses of Zinc	@ .75	22.50
30	Analyses of Nickel	@ .75	22.50
29	Analyses of Gold	@ 4.25	123.25
30	Sample Preparations	@ 1.15	34.50
			$297.25

PRECIOUS METALS

50271 301 297 25

CR 297 25

En to follow
for $22.50

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

to C R.

BONDAR-CLEGG & COMPANY LTD.

64. BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
FEB 20 1981

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: Mr. R. McMillan

INVOICE: E 3002

DATE: February 16, 1981

REPORT NO: 142-81

PROJECT:

6	Analyses of Gold	@ $ 4.25	$25.50 ✓

PRECIOUS METALS

50271 301 25 50

P80 CR 25 50

mk

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ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

64 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

INVOICE: E 3001

DATE: February 16, 1981.

REPORT NO: 141-81

PROJECT:

Western Mines Limited,
1414- 390 Bay Street,
Toronto, Ontario.
M5H 2Y2

RECEIVED
FEB 19 1981

Attention: Mr. R. McMillan.

54	Analysesof Copper	@ $1.65	$89.10
54	Analysesof Lead	@ 0.75	40.50
54	Analyses of Zinc	@ 0.75	40.50
54	Analyses of Nickel	@ 0.75	40.50
54	Analyses of Silver	@ 0.75	40.50
54	Analyses of Gold	@ 4.25	229.50
54	Sample Preparation	@ 1.15	62.10
		TOTAL	$542.70 ✓

PRECIOUS METALS

DETOUR 301 542 70

P80 CR 542 70

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
FEB 16 1981

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: Mr. R. McMillan

INVOICE: E 2998

DATE: February 13, 1981

REPORT NO: 175-81

PROJECT:

3	Analyses of Copper	@ $ 1.65	$4.95
3	Analyses of Lead	@ .75	2.25
3	Analyses of Zinc	@ .75	2.25
3	Analyses of Nickel	@ .75	2.25
3	Analyses of Silver	@ .75	2.25
3	Analyses of Gold	@ 4.25	12.75
3	Sample preparations	@ 2.00	6.00
			$32.70

PRECIOUS METALS

DETOUR 301 32 70

P80 CR 32 70.0 C.R.

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

BONDAR-CLEGG & COMPANY LTD.

64 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

RECEIVED
FEB 16 1981

INVOICE: E 2965

DATE: February 11, 1981

REPORT NO: 142-81

PROJECT:

Western Mines Limited
1414-390 Bay Street
Toronto, Ontario
M5H 2Y2

Attention: Mr. R. McMillan

6	Analyses of Copper	@ $ 1.65	$9.90
6	Analyses of Lead	@ .75	4.50
6	Analyses of Zinc	@ .75	4.50
6	Analyses of Nickel	@ .75	4.50
6	Analyses of Silver	@ .75	4.50
6	Sample Preparations	@ 1.15	6.90
			$34.80 ✓

PRECIOUS METALS

DETOUR 301

34.80

Detour

Approved for Payment

34.80

P79-1

mk

THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED

Ministry of Natural Resources
Ontario

W8106 · 4991 S

A separate form is required for each type of work to be recorded.

THE MINING ACT REPORT OF WORK

To the Recorder of Porcupine Mining Division

I, Westmin Resources Limited T778
name of Recorded Holder Prospector's Licence

390 Bay Street, Suite 1414, Toronto, Ontario. M5H 2Y2.
Post Office Address

do hereby report the performance of 14,501.94 days of Overburden Drilling
type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
P.549918-931 incl.	46.48/each	P.575672-673 incl.	46.48/each		
P.553303-483 incl.	46.48/each				
P.553503-574 incl.	46.48/each				
		For details see attached list "A"			
P.577751-774 incl.	46.48.each				
P.577792-810 incl.	46.48/each				

All the work was performed on Mining Claim (s) See attached list "B".
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geophysical, Geological, Geochemical Surveys and Expenditure Credits - the name of author of report. Covering dates of survey (linecutting & office). Type of instrument used. Total amount of expenditure. Technical reports, maps, expenditure breakdown, receipts must be filed in duplicate with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

Footage: 5,473 feet

Operator: Bradley Bros. Ltd., 98, 14th Street, Noranda, Quebec. J9X 5A9.

Cost: $217,529.04

Work was carried out between January 20 to February 6, 1981.

Date 9 November, 1981.

Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, C. J. Rockingham

390 Bay Street, Suite 1414, Toronto, Ontario. M5H 2Y2.
(Post Office Address)

hereby certify:

1. 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.

2. That the annexed report is true.

Dated 9 November 1981

Signature

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

LA 041

M-3004

80°00'

79°45'

50°00'

49°52'30"

M-2606

M-2603

M-2667

48M. 49M. 50M. 51M. 52M. BASE LINE 53M. 54M. 55M. 56M. 57M. 58M.

1 MILE

1 MILE

℄ PROPOSED HWY.

Hopper Lake

Survey by Chas. Traver

58' 57' 56' 55' 54' 53' 52' 51' 50' 49' 48' 47' 46'

59' 58' 57' 56' 55' 54' 53'

AREA OF

HOPPER LAKE

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

400' Reserve around all Lakes and Rivers to Dept. of Lands & Forests.

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition
(R) NR. W. 1/81	18851	15/1/81	S.R.O.

DATE OF ISSUE
FEB 25 1982
Ministry of Natural Resources
TORONTO

14285

PLAN NO. - M.2601

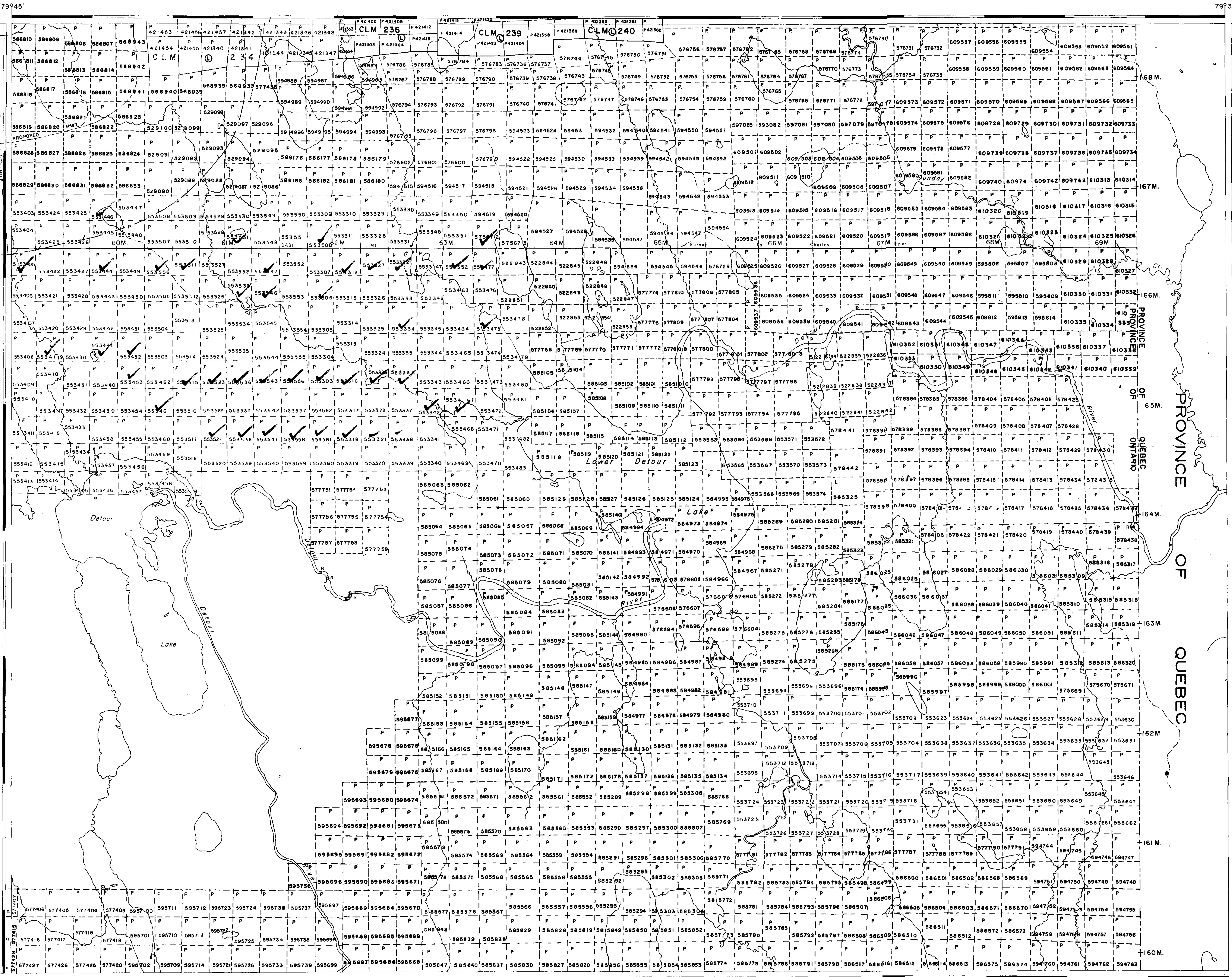
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

32E13NE0086 2.4285 HOPPER LAKE

200

498794

SUNDAY LAKE M-3003



AREA OF

LOWER DETOUR LAKE

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C

NOTES

400' Surface rights reservation around all lakes and rivers

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition
Ⓐ NR.W.1/81	188511	15/1/81	S.R.O.

DATE OF ISSUE
FEB 25 1982
Ministry of Natural Resources
TORONTO

2.4285

NATIONAL TOPOGRAPHIC SERIES 32 E13

PLAN NO.-M.2603

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

498793

32E13NE0086 2.4285 HOPPER LAKE

210

WEST OF SUNDAY LAKE AREA (M. 3004)

HOPPER LAKE AREA (M. 2601)

SUNDAY LAKE AREA (M. 3003)

LOWER DETOUR LAKE AREA (M. 2603)

79°45'

50°00'

Sunday

Detour River

LOWER DETOUR LAKE

DETOUR LAKE

Detour River

Detour

PROVINCE OF QUEBEC

PROVINCE OF ONTARIO

INDEX MAP

JAMES BAY

ONTARIO

QUEBEC

DETOUR PROPERTY

Kenogami R.

Nipigon

Port Arthur

Cochrane

Timmins

Kirkland Lake

Abitibi Lake

LAKE SUPERIOR

Sault Ste. Marie

Sudbury

Nipissing Lake

U.S.A.

LAKE MICHIGAN

LAKE HURON

U.S.A.

SCALE: 1" = 100 Miles

● OVERBURDEN DRILL HOLE

WESTERN MINES LIMITED

DETOUR PROPERTY

CLAIM MAP

ONTARIO

32-E-13
32-L-4

DATE: JANUARY, 1980

SCALE: 1:31,680

2.4285