

APPENDIX D

DRILL CORE GEOCHEMISTRY

RESULTS FOR AG, AU, W, SN, PB, ZN, AS, S

Part 1  
of 3

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8757**  
NO.











PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

WCDH 19

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

Sample Number	Mg ppm	Xu ppm	BG ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	W ppm	Sn ppm	Pb ppm
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155	
W.C.D.H.19	87	90	111	45			13					5	85	<2	1
	90	93	111	46			12					5	175	2	2
	93	96	111	47			09					5	45	2	2
	96	99	111	48			11					5	60	2	2
	99	102	111	49			15					5	50	<2	2
	102	105	1150	46			12					10	45	4	2
	105	108	1151	24			10					10	185	2	2
	108	111	1152	47			18					10	90	<2	2
	111	114	1153	45			11					5	60	2	2
	114	117	1154	34			12					5	245	<2	2
	117	120	1155	32			13					10	35	<2	1
	120	123	1156	32			13					5	85	2	2
	123	126	1157	36			12					5	100	2	2
	126	129	1158	33			12					10	80	<2	2
	129	132	1159	27			10					5	35	2	2
	132	135	1160	29			13					<5	40	3	2
	135	138	1161	38			14					5	80	2	2
	138	141	1162	30			14					5	50	2	2
	141	144	1163	39			16					5	40	<2	2
	144	147	1164	37			16					5	30	<2	2
	147	150	1165	34			17					10	45	<2	2
	153	156	1167	39			11					10	42	<2	2
	156	159	1168	27			13					10	95	<2	1
	159	162	1169	22			10					15	25	2	1
	162	165	1170	36			13					5	50	2	2
	165	168	1171	42			21					<5	45	<2	2
	168	171	1172	32			10					5	325	<2	2
	171	174	1173	32			12					10	80	3	1
W.C.D.H.19	174	177	1174	29			11					5	85	2	1

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GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No. Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T7  
PHONE: (604) 980-5814

1980.

Sample No.	6 86	10 90	15 95	20 100	25 105	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	70 150	75 155	Pb ppm
Element	As	Cr	Mn	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	W	Sn	Pb	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm	ppm	
WGDH19	21.9	22.2	11.8	7.3			1.4				10		15	5.0	4	2
	22.2	22.5	11.9	6.1			1.9				4		5	2.5	2	3
	22.5	22.8	11.9	6.5			1.9				8		5	2.5	<2	3
	22.8	23.1	11.9	6.6			2.9				8		10	24.5	3	3
	23.1	23.4	11.9	7.1			1.6				8		5	26.5	<2	2
	23.4	23.7	11.9	14.9			1.5				5		10	9.0	10	2
	23.7	24.0	11.9	9.4			2.3				6		5	3.0	2	4
	24.0	24.3	11.9	5.6			2.0				5		10	5.5	<2	2
	24.3	24.6	11.9	13.4			1.4				7		15	1.5	2	4
	24.6	24.9	11.9	3.8			1.4				6		5	1.0	2	2
	24.9	25.2	11.9	6.3			1.4				20		10	19.5	3	1
	25.2	25.5	12.0	5.3			1.3				3		5	13.0	<2	3
	25.5	25.8	12.0	3.9			1.1				6		10	1.0	<2	3
	25.8	26.1	12.0	5.5			1.9				5		5	5	<2	10
	26.1	26.4	12.0	5.2			1.1				8		5	2	2	3
WGDH19	26.4	26.6	12.0	2.2			0.7				10		5	<2	2	1
WGDH20	7.6	10.1	12.0	8.9			1.0				6		10	2	2	2
	10.1	13.1	12.0	14.0			1.8				8		5	5	<2	3
	13.1	16.1	12.0	14.3			1.3				5		5	3	<2	2
	16.1	19.1	12.0	10.5			1.4				16		5	3	2	1
	19.1	22.1	12.0	8.8			1.2				4		5	<2	3	1
	22.1	25.1	12.0	9.2			1.3				13		10	2	<2	1
	25.1	28.1	12.0	5.9			1.3				10		5	5	3	1
	28.1	31.1	12.0	6.5			1.3				8		5	8	2	1
	31.1	34.1	12.0	13.0			0.9				8		5	5	2	1
	34.1	37.1	12.0	6.4			1.0				11		10	<2	2	1
	37.1	40.1	12.0	6.5			1.3				6		5	2	<2	1
	40.1	43.1	12.0	8.0			1.1				4		5	<2	<2	2
	43.1	46.1	12.0	11.6			1.6				3		10	<2	<2	2
WGDH20	46.1	49.1	12.0	21.4			2.6				1		5	<2	<2	4

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PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	Pb
	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	ppm
	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	ppm
WCDH20	4.9	5.2	5.2	1.9	16.5			2.1			1.5		1.0	2.2	<2	
	5.2	5.5	5.5	2.0	10.8			1.2			3		1.5	1.0	2	
	5.5	5.8	5.8	2.1	11.1			1.3			1.2		2.0	1.2	2	
	5.8	6.1	6.1	2.2	14.1			1.4			1.8		5	5	<2	
	6.1	6.4	6.4	2.3	18.9			2.3			8		1.5	20.5	<2	
	6.4	6.7	6.7	2.4	8.2			1.6			5		1.0	4.0	2	
	6.7	7.0	7.0	2.5	9.0			1.3			1.3		2.0	21.5	2	
	7.0	7.3	7.3	2.6	20.9			10.7			4.1		7.5	5.0	2	
	7.3	7.6	7.6	2.7	9.6			1.2			8		2.5	3	1.2	
	7.6	7.9	7.9	2.8	5.8			1.2			9		6.5	5	2	
	7.9	8.2	8.2	2.9	1.34			1.7			<1		2.5	2	<2	
	8.2	8.5	8.5	3.0	3.04			1.9			5		1.0	2.1	<2	
	8.5	8.8	8.8	3.1	20.0			2.1			10		1.0	7	<2	
	8.8	9.1	9.1	3.2	1.30			1.6			6		2.0	1.5	2.2	
	9.1	9.4	9.4	3.3	110.0			1.7			8		1.0	3.5	<2	
	9.4	9.7	9.7	3.4	7.6			1.2			3		1.0	8	<2	
	9.7	10.0	10.0	2.35	9.5			1.2			6		5	6	<2	
	10.0	10.3	10.3	2.36	7.6			1.0			6		<5	5	2	
	10.3	10.6	10.6	2.37	12.3			2.5			4		5	4.5	2	
	10.6	10.9	10.9	2.38	10.0			1.6			6		1.0	3	<2	
	10.9	11.2	11.2	2.39	8.9			2.1			7		1.0	2	<2	
	11.2	11.5	11.5	2.40	7.1			1.6			1.4		1.0	1.5	2	
	11.5	11.8	11.8	2.41	8.7			1.5			2		5	4.5	<2	
	11.8	12.1	12.1	2.42	6.1			1.7			1.6		2.0	3.5	2	
	12.1	12.4	12.4	2.43	5.0			1.4			8		<5	10.5	5	
	12.4	12.7	12.7	2.44	3.8			1.4			2		5	5.0	2	
	12.7	13.0	13.0	2.45	4.9			1.0			9		<5	3	<2	
	13.0	13.3	13.3	2.46	6.6			1.8			6		<5	4.0	2	
	13.3	13.6	13.6	2.47	9.1			1.8			4		1.0	1.80	4	
WCDH20	13.6	13.9	13.9	2.48	6.8			1.4			8		1.0	8	<2	

*R. Cann*



Sample Number	6 10 Mg ppm	15 Fe ppm	20 Ca ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 Sn ppm	75 W ppm	Pb ppm
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCDH20	-14.8	-15.1	125.2	11.2			1.6			<1		5	4	55	2
	15.1	-15.4	125.3	12.3			1.6			14		10	2	12	2
	15.4	-15.7	125.4	9.1			1.0			4		10	2	65	2
	15.7	-16.0	125.5	6.0			1.1			2		20	2	10	2
	16.0	-16.3	125.6	7.6			1.2			33		10	<2	7	2
	16.3	-16.6	125.7	9.6			2.5			7		35	<2	7	2
	16.6	-16.9	125.8	6.7			1.3			4		5	2	5	2
	16.9	-17.2	125.9	8.0			1.4			4		5	2	3	2
	17.2	-17.5	126.0	19.3			1.1			<1		5	<2	3	2
	17.5	-17.8	126.1	11.5			1.4			6		15	<2	4	2
	17.8	-18.1	126.2	11.0			1.5			3		20	6	12	2
	18.1	-18.4	126.3	16.5			1.5			3		5	4	3	2
	18.4	-18.7	126.4	7.10			1.7			<1		10	2	14	2
	18.7	-19.0	126.5	13.5			1.4			2		15	<2	10	2
	19.0	-19.3	126.6	8.3			1.4			<1		10	<2	8	2
	19.3	-19.6	126.7	13.5			1.7			8		5	2	6	2
	19.6	-19.9	126.8	13.4			2.2			<1		5	2	16	2
	19.9	-20.2	126.9	13.8			1.6			6		10	<2	30	2
	20.2	-20.5	127.0	14.0			1.8			5		15	2	22	2
	20.5	-20.8	127.1	8.2			1.4			<1		10	2	4	2
	20.8	-21.1	127.2	18.0			1.7			<1		5	7	4	2
	21.1	-21.4	127.3	18.7			1.3			<1		10	2	2	2
	21.4	-21.7	127.4	9.7			1.6			<1		10	3	8	2
	21.7	-22.0	127.5	5.6			1.7			<1		20	2	3	2
	22.0	-22.3	127.6	9.8			1.2			<1		5	10	2	2
	22.3	-22.6	127.7	10.1			1.4			<1		5	2	8	2
	22.6	-22.9	127.8	9.1			1.4			1.1		20	2	1.5	2
	22.9	-23.2	127.9	7.4			1.3			<1		10	<2	1.1	2
	23.2	-23.5	128.0	8.1			1.4			3		15	<2	7	2
WCDH20	-23.5	-23.8	128.1	8.7			1.8			<1		5	2	5	2

*R. Cann*



COMP/

Sask. Mining Dev.

## GEOCHEMICAL ANALYSIS DATA SHEET

FILE No. 0-1

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

WCDH 20/21

DATE: Oct.

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

Composites

1980

ATTENTION: R. Cann

Sample Number	6 86	10 90	15 95	20 100	25 105	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	70 150	75 155
	As	As	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	W	Sn	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm	
1285,1	286	287	30	140			20			3		10	18	<2	
1288,1	289	290	21	96			13			<1		5	13	2	
1291,1	292	293	20	116			17			6		5	10	2	
1294,1	295	296	21	146			17			6		5	3	<2	
1297,1	298	299	20	97			15			<1		10	12	<2	End c
1300,1	301	302	22	104			18			<1		10	21	<2	DH 2
1303,1	304	305	23	99			24			6		10	3	2	WCDH
1306,1	307	308	24	110			23			4		25	15	<2	
1309,1	310	311	21	143			22			2		10	10	<2	
1312,1	313	314	22	120			17			<1		10	<2	3	
1315,1	316	317	20	111			16			<1		5	3	2	
1318,1	319	320	25	111			18			1		15	4	2	
1321,1	322	323	24	115			16			4		10	2	<2	
1324,1	325	326	17	105			16			<1		10	4	<2	
1327,1	328	329	15	68			15			2		10	<2	5	
1330,1	331	332	20	100			20			5		15	5	2	
1333,1	334	335	12	52			12			3		10	2	3	
1336,1	337	338	11	43			12			<1		10	2	<2	
1339,1	340	341	13	43			11			5		15	4	3	
1342,1	343	344	12	48			13			5		15	3	<2	
1345,1	346	347	6	14			05			1		10	<2	2	
1348,1	349	350	10	16			07			2		10	<2	2	
1351,1	352	353	11	97			08			20		15	2	<2	
1354,1	355	356	15	61			09			4		5	3	<2	
1357,1	358	359	20	67			13			<1		10	7	3	
1360,1	361	362	16	77			09			<1		5	4	5	
1363,1	364	365	13	48			11			4		15	5	2	
1366,1	367	368	17	36			09			<1		10	7	5	
1369,1	370	371	14	40			10			<1		10	5	2	
1372,1	373	374	18	35			14			2		5	4	<2	







PROJEC. No. Whiting Ck.

MIN-EN Laboratories Ltd.

WCDH 22/23

DATE: NOV.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

Composite

1980.

Sample Number	Mg ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	W ppm	Sn ppm		
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
1412	1413	1414	15	13			12			1		60	2	<2	DH 22
1415	1416	1417	19	33			09			4		10	2	2	
1418	1419	1420	13	32			08			<1		5	<2	2	
1421	1422	1423	9	58			07			<1		20	2	<2	
1424	1425	1426	10	14			13			<1		15	2	<2	
1427	1428	1429	7	26			08			3		30	2	2	
1430	1431	1432	8	39			09			1		25	<2	<2	
1433	1434	1435	7	36			08			<1		50	<2	2	
1436	1437	1438	6	86			10			7		55	<2	2	
1439	1440	1441	11	174			12			11		20	3	4	
1442	1443	1444	10	32			09			<1		25	2	3	
1445	1446	1447	8	15			06			1		30	<2	2	
1448	1449	1450	10	30			08			<1		40	<2	<2	
1451	1452	1453	6	24			07			<1		10	2	<2	
1454	1455	1456	9	21			08			3		5	3	2	
1457	1458	1459	9	41			06			9		5	2	<2	
1460	1461	1462	8	116			07			<1		50	2	<2	
1463	1464	1465	6	15			05			5		25	2	2	
1466	1467	1468	7	12			06			11		15	<2	2	
1469	1470	1471	7	54			08			18		10	<2	<2	
1472	1473	1474	6	27			08			<1		5	<2	<2	
1475	1476	1477	9	24			06			<1		40	2	<2	
1478	1479	1480	9	22			07			<1		30	<2	3	
1481	1482	1483	8	23			07			<1		10	<2	2	End o
1484	1485	1486	10	25			09			<1		30	2	2	DH 2
1487	1488	1489	10	29			09			3		15	<2	<2	DDH 2
1490	1491	1492	10	45			08			<1		40	2	3	
1493	1494	1495	6	27			06			5		20	2	2	
1496	1497	1498	7	25			07			2		35	2	2	
1499	1500	1501	9	44			09			10		70	2	2	

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PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

WCDH 23/24

DATE: NOV.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

Composites

1980

Sample Number	6 70 ppm	10 80 ppm	15 90 ppm	20 100 ppm	25 105 ppm	30 110 ppm	35 115 ppm	40 120 ppm	45 125 ppm	50 130 ppb	55 135 ppm	60 140 ppm	65 145 ppb	70 150 ppm	75 155 ppm	8
1533,1	534	1535	46	135				05			40		5	<2	<2	DH 23
1536,1	537	1538	57	188				09			75		15	2	2	
1539,1	540	1541	18	63				05			14		5	2	2	
1542,1	543	1544	4	13				05			3		15	<2	<2	
1545,1	546	1547	10	52				12			<1		15	<2	<2	
1548,1	549	1550	4	16				04			7		15	<2	<2	
1551,1	552	1553	5	14				04			<1		20	2	<2	
1554,1	555	1556	6	13				06			9		15	2	2	
1557,1	558	1559	4	22				04			<1		5	<2	2	
1560,1	561	1562	6	14				04			<1		5	<2	2	
1563,1	564	1565	4	12				02			2		15	2	3	
1566,1	567	1568	2	8				03			11		5	<2	2	
1569,1	570	1571	4	13				03			2		15	<2	2	
1572,1	573	1574	4	17				02			4		10	<2	3	
1575,1	576	1577	6	13				03			1		15	2	<2	
1578,1	579	1580	9	25				08			<1		10	<2	2	
1581,1	582	1583	9	23				09			6		15	<2	<2	End c
1584,1	585	1586	9	26				10			5		15	2	<2	DH 23
1587,1	588	1589	15	23				09			11		10	2	2	DDH 2
1590,1	591	1592	9	6				06			3		10	<2	<2	
1593,1	594	1595	5	5				06			<1		10	5	<2	
1596,1	597	1598	3	6				05			1		20	3	2	
1599,1	600	1601	149	12				07			19		45	2	11	
1602,1	603	1604	3	11				04			<1		5	2	2	
1605,1	606	1607	1	13				03			<1		10	<2	2	
1608,1	609	1610	6	14				05			<1		5	2	<2	
1611,1	612	1613	7	17				06			6		5	2	2	
1614,1	615	1616	5	16				05			<1		10	<2	<2	
1617,1	618	1619	6	22				05			3		10	<2	2	
1620,1	621	1622	4	15				08			4		15			

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PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

WCDH 24/25

DATE: NOV.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5014

Composites

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	W ppm	Sn ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
1623	1624	1625	5	21			11			<1		20	2	2	DDH
1626	1627	1628	9	17			05			3		25	<2	<2	
1629	1630	1631	3	9			03			3		15	<2	2	
1632	1633	1634	4	11			03			<1		5	<2	<2	
1635	1636	1637	2	13			04			<1		20	2	<2	
1638	1639	1640	12	17			10			<1		20	<2	<2	
1641	1642	1643	7	30			24			18		30	2	<2	
1644	1645	1646	6	29			14			6		25	2	2	
1647	1648	1649	12	47			18			20		25	<2	<2	
1650	1651	1652	7	25			10			5		10	3	2	
1653	1654	1655	8	24			13			<1		20	2	2	
1656	1657	1658	10	20			07			2		15	2	<2	
1659	1660	1661	8	18			06			<1		15	<2	<2	
1662	1663	1664	9	20			04			3		10	<2	3	
1665	1666	1667	7	14			03			1		10	2	2	
1668	1669	1670	6	15			08			7		15	2	<2	
1671	1672	1673	2	11			02			<1		5	2	<2	
1674	1675	1676	3	11			03			<1		5	<2	<2	End
1677	1678	1679	6	14			02			<1		5	<2	2	DDH
1680	1681	1682	9	15			07			10		5	5	2	DDH
1683	1684	1685	10	14			06			6		5	20	2	
1686	1687	1688	10	24			08			6		<5	32	2	
1689	1690	1691	13	31			07			10		5	19	<2	
1692	1693	1694	6	4			03			<1		<5	3	<2	
1695	1696	1697	3	3			01			<1		10	2	<2	
1698	1699	1700	5	4			01			7		<5	<2	<2	
1701	1702	1703	2	3			01			2		<5	<2	2	
1704	1705	1706	3	3			01			11		5	<2	2	
1707	1708	1709	5	10			02			3		5	<2	2	
1710	1711	1712	8	16			06			<1		10	190	2	

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GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

WCDH 25

ATTENTION: R. Cann

Composites

1980.

Sample No.	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Number	ppm	ppm	ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	W ppm	Sn ppm
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
17,13,1	7,14,	1,7,15,	1,9	3,1				4,6			3		15	2	2
17,16,,1	7,17,	1,7,18,	3	6				0,4			<1		2,0	2	3
17,19,,1	7,20,	1,7,21,	6	7				0,7			<1		1,0	<2	2
17,22,,1	7,23,	1,7,24,	3	7				0,1			4		1,5	3	3
17,25,,1	7,26,	1,7,27,	4	5				0,1			9		1,5	8	2
17,28,,1	7,29,	1,7,30,	6	6				0,1			2		1,0	<2	<2
17,31,,1	7,32,	1,7,33,	2	5				0,1			<1		1,0	<2	2
17,34,,1	7,35,	1,7,36,	2	4				0,1			1		2,0	2	<2
17,37,,1	7,38,	1,7,39,	3	5				0,2			3		5	1,0	<2
17,40,,1	7,41,	1,7,42,	8	14				0,7			<1		2,0	3,1	<2
17,43,,1	7,44,	1,7,45,	6	1,7				0,2			<1		5	14	2
17,46,,1	7,47,	1,7,48,	1	5				0,1			1		1,5	2	2
17,49,,1	7,50,	1,7,51,	2	6				0,1			6		1,0	4	2
17,52,,1	7,53,	1,7,54,	6	1,2				0,1			<1		1,5	<2	<2
17,55,,1	7,56,	1,7,57,	2	8				0,1			<1		1,5	<2	2
17,58,,1	7,59,	1,7,60,	5	1,1				0,1			2		2,0	<2	<2
17,61,,1	7,62,	1,7,63,	6	1,9				0,6			1,0		5	2,0	<2
17,64,,1	7,65,	1,7,66,	6	1,9				0,3			1,3		1,0	5	2
17,67,,1	7,68,	1,7,69,	6	1,5				0,2			2		2,0	2,6	2
17,70,,1	7,71,	1,7,72,	9	3,0				0,4			<1		1,5	1,8	4
17,73,,1	7,74,	1,7,75,	6	9				0,2			1,0		1,0	2	2
															End c
															WCDH 2

*[Handwritten signature]*

PROJECT No: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: NOV

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

1980.

Sample No	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Number	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
	Mo	Cu	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	S		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm	ppm
W.C.D.H.19	2.19	2.22	1.189											1.23	2.00
	2.22	2.25	1.190											3.75	0.00
	2.25	2.28	1.191											6.80	0.00
	2.28	2.31	1.192											7.35	0.00
	2.31	2.34	1.193											8.52	0.00
	2.34	2.37	1.194											1.58	0.00
	2.37	2.40	1.195											3.18	0.00
	2.40	2.43	1.196											8.10	0.00
	2.43	2.46	1.197											4.36	0.00
	2.46	2.49	1.198											2.75	0.00
	2.49	2.52	1.199											9.15	0.00
	2.52	2.55	1.200											3.25	0.00
	2.55	2.58	1.201											4.37	0.00
	2.58	2.61	1.202											3.36	0.00
	2.61	2.64	1.203											2.90	0.00
W.C.D.H.19	2.64	2.66	1.204											6.29	0.00
W.C.D.H.20	7.1	10.1	1.205											1.05	0.00
	10.1	13.1	1.206											1.57	0.00
	13.1	16.1	1.207											5.2	0.00
	16.1	19.1	1.208											1.30	0.00
	19.1	22.1	1.209											1.57	0.00
	22.1	25.1	1.210											1.70	0.00
	25.1	28.1	1.211											4.4	0.00
	28.1	31.1	1.212											4.6	0.00
	31.1	34.1	1.213											3.5	0.00
	34.1	37.1	1.214											3.0	0.00
	37.1	40.1	1.215											1.38	0.00
	40.1	43.1	1.216											1.75	0.00
	43.1	46.1	1.217											1.80	0.00
W.C.D.H.20	46.1	49.1	1.218											8.5	0.00

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PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: Nov. 2

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980

Sample Number	6 86	10 90	15 95	20 100	25 105	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	70 150	75 155	80 160
	Mo ppm	Sr ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppr	Mn ppm	Au ppb	S ppm			
WGDH20	-4.9-	5.2, 1.2	1.9,											4.30, 0.0		
	5.2-	5.5, 1.2	2.0,											2.15, 0.0		
	5.5-	5.8, 1.2	2.1,											1.10, 0.0		
	5.8-	6.1, 1.2	2.2,											4.2, 0.0		
	6.1-	6.4, 1.2	2.3,											2.15, 0.0		
	6.4-	6.7, 1.2	2.4,											1.36, 0.0		
	6.7-	7.0, 1.2	2.5,											1.90, 0.0		
	7.0-	7.3, 1.2	2.6,											1.32, 0.0		
	7.3-	7.6, 1.2	2.7,											1.17, 0.0		
	7.6-	7.9, 1.2	2.8,											1.98, 0.0		
	7.9-	8.2, 1.2	2.9,											5.2, 0.0		
	8.2-	8.5, 1.2	3.0,											2.18, 0.0		
	8.5-	8.8, 1.2	3.1,											1.73, 0.0		
	8.8-	9.1, 1.2	3.2,											2.41, 0.0		
	9.1-	9.4, 1.2	3.3,											1.14, 0.0		
	9.4-	9.7, 1.2	3.4,											8.3, 0.0		
	9.7-	10.0, 1.2	3.5,											1.69, 0.0		
	10.0-	10.3, 1.2	3.6,											1.42, 0.0		
	10.3-	10.6, 1.2	3.7,											2.27, 0.0		
	10.6-	10.9, 1.2	3.8,											1.85, 0.0		
	10.9-	11.2, 1.2	3.9,											1.53, 0.0		
	11.2-	11.5, 1.2	4.0,											2.10, 0.0		
	11.5-	11.8, 1.2	4.1,											1.42, 0.0		
	11.8-	12.1, 1.2	4.2,											1.3, 0.0		
	12.1-	12.4, 1.2	4.3,											5.31, 0.0		
	12.4-	12.7, 1.2	4.4,											2.76, 0.0		
	12.7-	13.0, 1.2	4.5,											1.96, 0.0		
	13.0-	13.3, 1.2	4.6,											3.12, 0.0		
	13.3-	13.6, 1.2	4.7,											5.13, 0.0		
WGDH20	-1.36-	1.39,	1.248,											1.2, 0.0		

*[Handwritten signatures and notes]*





ATTENTION: R. Cann

Sample Number	6 81	10 86	15 90	20 95	25 100	30 105	35 110	40 115	45 120	50 125	55 130	60 135	65 140	70 145	75 150	80 155	85 160					
	Cu %		Zn %		Ni ppm		Co ppm		Ag ppm		Fe ppm		Hg ppb		Mn ppm		Au ppb		S ppm			
WCDH20	-14.8	-15.1	1.252																	1.2500		
	15.1	-15.4	1.253																		1.7400	
	15.4	-15.7	1.254																		1.3600	
	15.7	-16.0	1.255																		1.6500	
	16.0	-16.3	1.256																		4.300	
	16.3	-16.6	1.257																		2.3700	
	16.6	-16.9	1.258																		1.4200	
	16.9	-17.2	1.259																		1.2500	
	17.2	-17.5	1.260																		1.8600	
	17.5	-17.8	1.261																		8.700	
	17.8	-18.1	1.262																		1.1800	
	18.1	-18.4	1.263																		3.700	
	18.4	-18.7	1.264																		6.500	
	18.7	-19.0	1.265																		9.400	
	19.0	-19.3	1.266																		8.600	
	19.3	-19.6	1.267																		1.6200	
	19.6	-19.9	1.268																		1.2400	
	19.9	-20.2	1.269																		2.9000	
	20.2	-20.5	1.270																		3.1500	
	20.5	-20.8	1.271																		7.400	
	20.8	-21.1	1.272																		1.9300	
	21.1	-21.4	1.273																		1.9800	
	21.4	-21.7	1.274																		4.5700	
	21.7	-22.0	1.275																		1.0500	
	22.0	-22.3	1.276																		5.300	
	22.3	-22.6	1.277																		1.9000	
	22.6	-22.9	1.278																		4.3500	
	22.9	-23.2	1.279																		4.4000	
	23.2	-23.5	1.280																		1.2000	
WCDH20	-23.5	-23.8	1.281																		2.600	

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GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT Whiting Ck.

MIN. Laboratories Ltd.

DATE: Nov. 8,

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

1980.

PHONE (604) 980-5814

Sample Number	As (ppm)	Se (ppm)	Pb (ppm)	From	To (m)	Co (ppm)	Au (ppm)	Fe (ppm)	Hg (ppb)	As (ppm)	Mn (ppm)	Au (ppb)	S (ppm)		
61-86	10-90	15-95	20-100	25-105	30-110	35-115	40-120	45-125	50-130	55-135	60-140	65-145	70-150	75-155	80-160
1,285,1	2,86,1	1,287,1		247,	25,6,		.		W C D H 20				3,830,0		
1,288,1	2,89,1	1,290,1					.						3,140,0		
1,291,1	2,92,1	1,293,1					.						2,890,0		
1,294,1	2,95,1	1,296,1					.						1,930,0		
1,297,1	2,98,1	1,299,1					.						2,160,0		
1,300,1	3,01,1	1,302,1		292,	302,36		.		END OF WCDH 20				4,150,0		
1,303,1	3,04,1	1,305,1		14,33	17,		.		W C D H 21				1,830,0		
1,306,1	3,07,1	1,308,1					.						3,120,0		
1,309,1	3,10,1	1,311,1					.						1,880,0		
1,312,1	3,13,1	1,314,1					.						1,370,0		
1,315,1	1,316,1	1,317,1					.						1,460,0		
1,318,1	3,19,1	1,320,1					.						1,110,0		
1,321,1	3,22,1	1,323,1					.						1,340,0		
1,324,1	3,25,1	1,326,1					.						3,590,0		
1,327,1	3,28,1	1,329,1					.						3,610,0		
1,330,1	3,31,1	1,332,1		95,	104,		.						4,400,0		
1,333,1	3,34,1	1,335,1					.						2,060,0		
1,336,1	3,37,1	1,338,1					.						2,310,0		
1,339,1	3,40,1	1,341,1					.						5,240,0		
1,342,1	3,43,1	1,344,1					.						2,450,0		
1,345,1	3,46,1	1,347,1					.						1,780,0		
1,348,1	3,49,1	1,350,1					.						1,910,0		
1,351,1	3,52,1	1,353,1					.						2,950,0		
1,354,1	3,55,1	1,356,1					.						3,460,0		
1,357,1	3,58,1	1,359,1					.						3,810,0		
1,360,1	3,61,1	1,362,1		18,3	19,4		.						3,660,0		
1,363,1	3,64,1	1,365,1					.						2,440,0		
1,366,1	3,67,1	1,368,1					.						3,530,0		
1,369,1	3,70,1	1,371,1					.						4,870,0		
1,372,1	3,73,1	1,374,1					.						4,250,0		





GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: Nov. 28

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

ATTENTION: R. Cann

Composites

1980.

Sample No	Mo	W	Pb			Co	Ag	Fe	Hg	As	Mn	Au	S		
81	90	95	100	From	To (m)	115	120	125	130	135	140	145	150	155	160
14121	14131	14141		59	68			W C D H	2.2				1640.0		
14151	14161	14171											2150.0		
14181	14191	14201											1490.0		
14211	14221	14231											1800.0		
14241	14251	14261											1540.0		
14271	14281	14291											1130.0		
14301	14311	14321											1230.0		
14331	14341	14351											1450.0		
14361	14371	14381											1620.0		
14391	14401	14411											2340.0		
14421	14431	14441		149	158								3980.0		
14451	14461	14471											1090.0		
14481	14491	14501											3360.0		
14511	14521	14531											910.0		
14541	14551	14561											1420.0		
14571	14581	14591											1160.0		
14601	14611	14621											1070.0		
14631	14641	14651											460.0		
14661	14671	14681											510.0		
14691	14701	14711											580.0		
14721	14731	14741		230	248								1960.0		
14751	14761	14771											1200.0		
14781	14791	14801											1030.0		
14811	14821	14831											1140.0		
14841	14851	14861		275	284			END OF WCDH	22				1780.0		
14871	14881	14891						W C D H	23				1540.0		
14901	14911	14921		22	31								1460.0		
14931	14941	14951											1650.0		
14961	14971	14981											1410.0		
14991	15001	15011											1430.0		

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PROJ No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: Dec

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

ATTENTION: <u>R. Cann</u>		From To (m)		Composite											
Sample Number	6 10 MaK 75m	15 98 ppm	20 78 ppm	25	30	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 S ppm	75	
81	86	90	95	100	110	115	120	125	130	135	140	145	150	155	
1533,1	534,1	1535,1			151	160							5200		
1536,1	537,1	1538,1							WCDH 23				7200		
1539,1	540,1	1541,1											14000		
1542,1	543,1	1544,1											8900		
1545,1	546,1	1547,1											16800		
1548,1	549,1	1550,1											9800		
1551,1	552,1	1553,1											18800		
1554,1	555,1	1556,1											11700		
1557,1	558,1	1559,1											9600		
1560,1	561,1	1562,1											22100		
1563,1	564,1	1565,1											10200		
1566,1	567,1	1568,1											9600		
1569,1	570,1	1571,1											14700		
1572,1	573,1	1574,1											14200		
1575,1	576,1	1577,1											10900		
1578,1	579,1	1580,1											20200		
1581,1	582,1	1583,1											34900		
1584,1	585,1	1586,1			304	413			END OF WCDH 23				34100		
1587,1	588,1	1589,1							WCDH 24				18900		
1590,1	591,1	1592,1			12	21							6500		
1593,1	594,1	1595,1											8100		
1596,1	597,1	1598,1											4900		
1599,1	600,1	1601,1											7900		
1602,1	603,1	1604,1											6600		
1605,1	606,1	1607,1											4300		
1608,1	609,1	1610,1											4600		
1611,1	612,1	1613,1											5200		
1614,1	615,1	1616,1											4000		
1617,1	618,1	1619,1											3900		
1620,1	621,1	1622,1			102	111							8800		

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NATHAN N. ...



GEOCHEMICAL ANALYSIS DATA SHEET

No. 0-1

PROJ No.: Whiting Ck.

(- EN Laboratories Ltd.

DATE: Dec.

ATTENTION: R. Cann

From To (m) 705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

Composite

1980.

Sample Number	6 10 Mg ppm	15 90 Sr ppm	20 100 Pb ppm	25 105	30 110	35 115 Co ppm	40 120 Ag ppm	45 125 Fe ppm	50 130 Hg ppb	55 135 As ppm	60 140 Mn ppm	65 145 Au ppb	70 150 S ppm	75 155
1.6.2.3 <sub>1</sub>	1.6.2.4 <sub>1</sub>	1.6.2.5 <sub>1</sub>		111	120								1.890.0	
1.6.2.6 <sub>1</sub>	1.6.2.7 <sub>1</sub>	1.6.2.8 <sub>1</sub>						WC DH 24					1.330.0	
1.6.2.9 <sub>1</sub>	1.6.3.0 <sub>1</sub>	1.6.3.1 <sub>1</sub>											1.260.0	
1.6.3.2 <sub>1</sub>	1.6.3.3 <sub>1</sub>	1.6.3.4 <sub>1</sub>											690.0	
1.6.3.5 <sub>1</sub>	1.6.3.6 <sub>1</sub>	1.6.3.7 <sub>1</sub>											920.0	
1.6.3.8 <sub>1</sub>	1.6.3.9 <sub>1</sub>	1.6.4.0 <sub>1</sub>											1400.0	
1.6.4.1 <sub>1</sub>	1.6.4.2 <sub>1</sub>	1.6.4.3 <sub>1</sub>											2060.0	
1.6.4.4 <sub>1</sub>	1.6.4.5 <sub>1</sub>	1.6.4.6 <sub>1</sub>											1820.0	
1.6.4.7 <sub>1</sub>	1.6.4.8 <sub>1</sub>	1.6.4.9 <sub>1</sub>											1930.0	
1.6.5.0 <sub>1</sub>	1.6.5.1 <sub>1</sub>	1.6.5.2 <sub>1</sub>											950.0	
1.6.5.3 <sub>1</sub>	1.6.5.4 <sub>1</sub>	1.6.5.5 <sub>1</sub>											710.0	
1.6.5.6 <sub>1</sub>	1.6.5.7 <sub>1</sub>	1.6.5.8 <sub>1</sub>											650.0	
1.6.5.9 <sub>1</sub>	1.6.6.0 <sub>1</sub>	1.6.6.1 <sub>1</sub>											570.0	
1.6.6.2 <sub>1</sub>	1.6.6.3 <sub>1</sub>	1.6.6.4 <sub>1</sub>											520.0	
1.6.6.5 <sub>1</sub>	1.6.6.6 <sub>1</sub>	1.6.6.7 <sub>1</sub>											930.0	
1.6.6.8 <sub>1</sub>	1.6.6.9 <sub>1</sub>	1.6.7.0 <sub>1</sub>											490.0	
1.6.7.1 <sub>1</sub>	1.6.7.2 <sub>1</sub>	1.6.7.3 <sub>1</sub>											550.0	
1.6.7.4 <sub>1</sub>	1.6.7.5 <sub>1</sub>	1.6.7.6 <sub>1</sub>											680.0	
1.6.7.7 <sub>1</sub>	1.6.7.8 <sub>1</sub>	1.6.7.9 <sub>1</sub>		273	282			END OF WCDH 24					440.0	
1.6.8.0 <sub>1</sub>	1.6.8.1 <sub>1</sub>	1.6.8.2 <sub>1</sub>											1790.0	
1.6.8.3 <sub>1</sub>	1.6.8.4 <sub>1</sub>	1.6.8.5 <sub>1</sub>		9	18				WCDH 25				5100.0	
1.6.8.6 <sub>1</sub>	1.6.8.7 <sub>1</sub>	1.6.8.8 <sub>1</sub>											3460.0	
1.6.8.9 <sub>1</sub>	1.6.9.0 <sub>1</sub>	1.6.9.1 <sub>1</sub>											3330.0	
1.6.9.2 <sub>1</sub>	1.6.9.3 <sub>1</sub>	1.6.9.4 <sub>1</sub>											1480.0	
1.6.9.5 <sub>1</sub>	1.6.9.6 <sub>1</sub>	1.6.9.7 <sub>1</sub>											1810.0	
1.6.9.8 <sub>1</sub>	1.6.9.9 <sub>1</sub>	1.7.0.0 <sub>1</sub>											1670.0	
1.7.0.1 <sub>1</sub>	1.7.0.2 <sub>1</sub>	1.7.0.3 <sub>1</sub>											2110.0	
1.7.0.4 <sub>1</sub>	1.7.0.5 <sub>1</sub>	1.7.0.6 <sub>1</sub>											2950.0	
1.7.0.7 <sub>1</sub>	1.7.0.8 <sub>1</sub>	1.7.0.9 <sub>1</sub>											3420.0	
1.7.1.0 <sub>1</sub>	1.7.1.1 <sub>1</sub>	1.7.1.2 <sub>1</sub>		90	99								3590.0	

*[Handwritten Signature]*

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-110

PROJECT 1

Whiting Ck.

MIN Laboratories Ltd.

DATE: Dec. 5,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

ATTENTION:

R. Cann

From

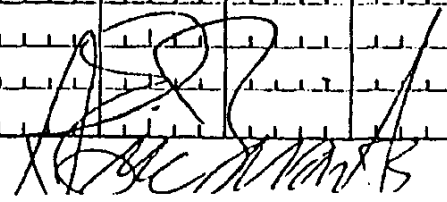
To (m)

Composites

1980.

Sample Number	6 10 86 90	15 10 95	20 Pb ppm 100	25 105	30 110	35 Co ppm 115	40 Ag ppm 120	45 Fe ppm 125	50 Hg ppb 130	55 As ppm 135	60 Mn ppm 140	65 Au ppb 145	70 S ppm 150	75 155	80 160
1713	1714	1715		99	108								1950.0		
1716	1717	1718						WC	DH 25				3310.0		
1719	1720	1721											3440.0		
1722	1723	1724											2580.0		
1725	1726	1727											2480.0		
1728	1729	1730											3610.0		
1731	1732	1733											4010.0		
1734	1735	1736											3730.0		
1737	1738	1739											3560.0		
1740	1741	1742		180	188								5700.0		
1743	1744	1745											9250.0		
1746	1747	1748											2940.0		
1749	1750	1751											2080.0		
1752	1753	1754											2410.0		
1755	1756	1757											3190.0		
1758	1759	1760											3350.0		
1761	1762	1763											2980.0		
1764	1765	1766											1660.0		
1767	1768	1769											1900.0		
1770	1771	1772											2110.0		
1773	1774	1775		279	288, 34								2050.0		
								END	OF WC DH 25						

CERTIFIED BY



APPENDIX E

PERCUSSION DRILL LOGS

## ABBREVIATED GEOLOG LEGEND

### Columns 2-4 - Zones and Horizons

SSX Supergene sulphide zone  
HYP Hypogene zone  
TRN Transition zone  
DYK Intramineral or postmineral dyke  
HFL Hornfels  
CAP Leached cap  
FRC Fracture zone  
WTH Weathered zone  
CN/ Contact  
SH/ Shear zone  
FLT Fault zone  
MSX Massive sulphides

### Columns 21-22 - Type modifier

- 2 letter code to modify main rock name; e.g. wc GRDR (Whiting Creek granodiorite).

### Columns 24-27 - Rock type or name

#### Intrusive and Volcanic Rocks

APLT	Aplite	FBPP	Feldspar biotite porphyry
QMPP	Quartz monzonite porphyry	PPFQ	Feldspar quartz porphyry
QZMZ	Quartz monzonite		(dacite)
GRDR	Granodiorite	QFPP	Feldspar porphyry
MZPP	Crowded monzonite porphyry	PPFL	Feldspar porphyry
FELS	Felsite	QZPP	Aplitic quartz porphyry
VOLC	Volcanic		
PPAN	Porphyritic andesite		
ANDS	Andesite		

#### Volcaniclastic Rocks

TUFF	Tuff
VLCC	Volcaniclastic
TFXL	Crystal tuff
LPTF	Lapilli tuff

#### Sedimentary Rocks

MTSB	Metasediment
------	--------------

Miscellaneous

BRXX	Breccia
VEIN	Major vein
QZ/V	Quartz stockwork
MSSX	Massive sulphides
LOST	Lost core
FAUL	Fault zone
UNKN	Unknown rock type
OVER	Overburden
HORN	Hornfels

Columns 28-29, 30-31 (lower) - lightness, colour

<u>Lightness</u>		<u>Colour</u>			
W	White	R	Red	M	Mauve
9	Palest	U	Brown	W	White
8		O	Orange	A	Grey
7		T	Tan	N	Black
6		L	Lime		
5	Medium	G	Green		
4		Q	Aqua		
3		B	Blue		
2		V	Violet		
1	Darkest	P	Purple		
N	Black				

Columns 28-31 (upper) - typifying minerals in rock

See following page

Columns 35-38 - Textures

BD	Bedded	PP	Porphyritic
BR	Brecciated	RB	Ribboned
BW	Boxwork	SH	Sheared
CM	Chill margin	TC	Trachytic
EQ	Equigranular	VG	Vuggy
FB	Flow banded	VV	Veined
HF	Hornfelsic	<<	Microveined
IQ	Inequigranular		

AC actinolite	CZ clinzoisite	H* hematite ; magnetite	NF nepheline	TA talc
AD adularia	CF coffinite	min.comb'n,undif	NI niccolite	44Ni TL tellurides,gen Te
AB albite	CU copper,native	Cu HE hematite alone		TN tennantite 50Cu56Sb+As
AM almandite	CØ cordierite	H> HE>MG		TE tenorite 80Cu
Al alunite	CV covellite	66Cu H= HE=MG	ØL olivine (chrysolite)	TT tetrahedrite Cu+Sb
AX amphiboles,gen	CI cuprite	89Cu H< HE<MG	ØP opal	TX TT,TN undif
A andalusite		MC magnetite alone	ØQ opaques,gen	TZ topaz
; anglesite			ØX oxides,gen	TØ tourmaline
68Pb			ØR orthopyroxene,gen	TR tremolite
AH anhydrite	DC dickite	HB hornblende (see B*)		
AN anorthite	DG digenite	HU huebnerite	61W	
AP apatite	DI diopside	HM hydromica (IL)		PH phlogopite
AR aragonite	DØ dolomite	HY hypersthene		PF plagioclase (see K*)
AS arsenopyrite	D* dolomite : calcite			PT platinum Pt UR uraninite (pitchblend)
AØ asbestos	min.comb'n,undif	IL illite (HM)		PS psilomelane Mn UX uranium minerals,gen
AU augite	DØ dolomite alone	IM ilmenite	32Ti	PY pyrite 47Fe
AT axinite	D> DØ>CA	JD jadeite		PL pyrolusite
AZ azurite (see M*)	D= DØ=CA	JA jarosite		PX pyroxene,gen
58Cu	D< DØ<CA	JØ jorodisite	60Mo	PP pyrophyllite
AE aegerine	CA calcite alone			PR pyrrhotite 60Fe
				PN pentlandite
BA barite		KA kaolin		
BE beryl		KY kyanite		WD wad Mn + other
BI biotite	EN enargite	KF K-spar, orthoclase		WØ wollastonite
B* biotite : hornblende	ES enstatite	K* K-spar : plagioclase		WF wolframite 62W
min.comb'n,undif	EP epidote	min.comb'n,undif		WN wulfenite 56Pb+26Mo
BI biotite alone	ER erythrite	30Co KF K-spar alone		
B> BI>HB		K> KF>PF		QC quartz-carbonate
B< BI<HB	FØ forsterite	K= KF=PF		QH quartz, chert
HB hornblende alone	FA fayalite	K< KF<PF		QM quartz, amethyst
	FT farnatinite	PF plagioclase alone		QX quartz, crystals
	FX feldspars,gen			QY quartz-sericite
BS bismuthinite	70Bi			QT quartz-tourmaline
BØ bornite	63Cu			QR quartz, rutilated
BR brochantite	56Cu			QV quartz vein, massive
				XX any mineral
				YY " "
				ZZ " "
				XY " "
CA calcite (see D*)		LM laumontite		
CB carbonates,gen		FL fluorite	49F	
CT cassiterite	79Sn	GL galena	86Pb	RC rhodochrosite Mn
CE cerussite	77Pb	G* galena : sphalerite		RN rhodonite Mn
CH chalcantite	25Cu	min.comb'n,undif		RU rutile 60Ti
CC chalcocite,gen	80Cu	GL galena alone		
C\$ " on ec.min		G> GL>SL		SA sanidine
C " on gangue		G= GL=SL		MG magnetite (see H*) 72Fe
CP chalcopyrite	35Cu	G< GL<SL		MC malachite 58Cu
L chlorite		SL sphalerite alone		M* malachite : azurite
D chloritoid		min.comb'n,undif		
CR chromite	46Cr	MC malachite alone		SH scheelite 64W
CK chrysocolla	36Cu	M> MC>AZ		MS sericite (MU)
ØL chrysolite (olivine)		M= MC=AZ		SE serpentine
CS chrysolite		M< MC<AZ		SD siderite 48Fe
CN cinnabar	86Hg	AZ azurite alone		SI sillimanite
CY clay				SV silver
C* clay : muscovite				SS silver & sulphosalts
min.comb'n,undif				SØ sodalite
CY clay alone				SL sphalerite (see G*)
C> CY>MU				67Zn
C= CY=MU	HA halite			
C< CY<MU	HV helvite			SP sphen
MU muscovite alone	HE hematite, earthy			60Mo ST staurolite
	HS hematite, specularite			72Sb
CX clinopyroxene,gen				SU sulphates,gen
				SX sulphides,gen
				SR sperryllite

A D D E N D U M :

X1 ) minerals identi-  
X2 ) fied elsewhere  
Y1 ) or later

RECAP SUMMARY OF SOME IMPORTANT  
G E N E R A L M I N E R A L S

- AX amphiboles
- CB carbonates
- CC chalcocite
- CX clinopyroxene
- FX feldspars
- FD feldspathoids
- GL glass
- G\$ greisen
- LI limonite
- MF mafics
- ØQ opaques
- ØX oxides
- PF plagioclase
- PX pyroxenes
- QZ quartz
- SF sericite-fluorite assemblage
- SS silver & sulphosalts
- TU sulphates
- SX sulphides

RECAP SUMMARY OF  
MINERAL COMBINATIONS

- B\* biotite : hornblende
- C\* clay : muscovite
- D\* dolomite : calcite
- G\* galena : sphalerite
- H\* hematite : magnetite
- K\* K-spar : plagioclase
- M\* malachite : azurite

SPECIAL Any two-letter Mineral Code followed immediately by a G-Scale estimated percentage presence of that mineral becomes a three-character QALMAT (QM1 or QM2) in fields F(32-34)/L or a simple abbreviation for use in Remarks.

\*\*min.comb'n,undif=mineral combination,undifferentiated. For instance,use B\* where proportion of BI & HB cannot be given.



IGNEOUS, METAMORPHIC & CHEMICAL	PARTICLE DIAMETER RANGE	THE S-SCALE FOR GRAIN OR PARTICLE SIZE (FOR GENERAL WORKS) (FOR DETAIL WORK)				VOLCANIC-CLASTICS		
		ASSIGN VALUE	SYMBOL	ASSIGN VALUE	mm			
Glassy	mm	.003	0	CLAY SIZE	A	.003	fine	
	2 <sup>-8</sup> -.004	mm		V.FINE SILT	B	.006		
Extremely fine grained (aphanitic)	2 <sup>-7</sup>	.008	1	FINE SILT	C	.011		
	2 <sup>-6</sup> -.016			MEDIUM SILT	D	.022		
	2 <sup>-5</sup>	.03	2	COARSE SILT	E	.044		
Fine grained	2 <sup>-4</sup> -.06			V.FINE SAND	F	.088		coarse
	2 <sup>-3</sup>	.12	3	FINE SAND	G	.177		
	2 <sup>-2</sup> -.25			MEDIUM SAND	H	.354		
	2 <sup>-1</sup>	.5	4	COARSE SAND	I	.707		
Medium grained (granular)	2 <sup>0</sup> = 1			GRIT	J	1.41		ash
	2 <sup>1</sup>	2	5	GRANULE	K	2.83		
Coarse grained	2 <sup>2</sup> = 4			V.SMALL PEBBLE	L	5.66	small lapilli	
	2 <sup>3</sup>	8	6	SMALL PEBBLE	M	11.3		
Very coarse grained	2 <sup>4</sup> = 16			MEDIUM PEBBLE	N	22.6	large lapilli	
	2 <sup>5</sup>	3.2	7	LARGE PEBBLE	Ø	45.3		
Pegmatitic	2 <sup>6</sup> = 64			SMALL COBBLE	P	90.5	cobble-size bombs & blocks	
	2 <sup>7</sup>	13	8	LARGE COBBLE	Q	181		
Megapegmatitic	2 <sup>8</sup> = 250			SMALL BOULDER	R	362	boulder-size bombs & blocks	
	2 <sup>9</sup>	1/2 m	9	MEDIUM BOULDER	S	724		
Extra-coarse megapegmatitic	2 <sup>10</sup> = 1m			LARGE BOULDER	T	1450	extra large bombs & blocks	
	2 <sup>11</sup>	2m	X	V.LARGE BOULDER	U	2900		

Sym	Assign Value
.	.01
-	.03
(	.1
-	.3
)	1
+	2.5
=	5
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
X	100
1	Coarse Fraction

TYPE MODIFIER	% OF MIX
A Type Modifier is less formal than a Rock Unit name or Member name	Sym Assign Value
	.01
	.03
	.1
	.3
A Type Modifier consists of any two characters, including blank,	) 1
	+ 2.5
	= 5
	1 10
Examples are:	2 20
	3 30
	4 40
	5 50
	6 60
	7 70
	8 80
	9 90
	X 100

21.U

21.L

21	22	23
ROCK UNIT NAME		
OR	A	E
Formation name	xxx	(or xxx)
Member name	xxx	(or xxx)
Submember name	xxx	(or xxx)

Though not essential, it is recommended that a formation name consist of two letters followed by a + sign, but could be three letters; that a member name consist of 7 letters followed by an = sign, but could be 3 letters; and that a submember name consist of 2 letters followed by a - sign, but could consist of 3 letters or 7 and a number.

The age of a formation or member can be given using standard ones, two and/or three-letter codes, such as KU for Upper Cretaceous; JL for Lower Jurassic, etc., left-justified in F(21-23)L

NOTE: 1. It is quite permissible to intermix the alphabetic symbols with the numeric symbols of this S-Scale, whenever detail work demands it - no conflict ensues by doing so.

- Use the S-Scale for Fine Fraction (Ff), Coarse Fraction (Cf) and Max Particle (MxP) in F(39,40,642)/
- For Seriate Texture, in which the Grain Size varies gradually or continuously, enter significant Fine Particle size in Ff, in F(39)/ and the large end of the range in MxP, in F(42)/

This S-scale, used for the Per Cent. Cf, is the G-Scale

<p>DEGREE OF SORTING 39L</p> <p>1 extremely poorly sorted</p> <p>2 very poorly sorted</p> <p>3 poorly sorted</p> <p>4 moderately poorly sorted</p> <p>5 moderately sorted</p> <p>6 moderately well sorted</p> <p>7 well sorted</p> <p>8 very well sorted</p> <p>9 extremely well</p>	<p>DEGREE OF ROUNDNESS 40L</p> <p>1 extremely angular</p> <p>2 very angular</p> <p>3 angular</p> <p>4 moderately angular</p> <p>5 intermediate</p> <p>6 moderately rounded</p> <p>7 rounded</p> <p>8 very rounded</p> <p>9 extremely rounded</p>	<p>SHAPE(alpha) or SPHERICITY (1-9)</p> <p>41L</p>	<p>OPEN (Ø) or CLOSED (C) STRUCTURE or EQUI-(E) or INEQUI-(I) GRANULAR</p> <p>Ø-open/disturbed -majority of larger particles not touching one another</p> <p>C-closed/intact majority of particles or fragments touching</p> <p>42L</p>
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For Open or Closed Structure (Matrix-supported or Framework-supported), enter Ø or C in F(42)L

For Degree of Sorting (S<sub>n</sub>) and Degree of Roundness (R<sub>n</sub>), enter 1 to 9 in F(39,40)L

For Shape, enter C,F,M,L,P,B OR E (see triangular diagram) or, for Sphericity, 1 to 9 in F(41)L

FRACTURES AND JOINTS

THE F SCALE

Range Values	Assign Value	Sym Value	Descriptive
0	0	Ø	unfractured
0-2	1	1	scarcely low intensity
2-4	3	2	v. low intensity
4-8	6	3	low intensity
8-12	10	4	mod. low intensity
12-18	15	5	moderate
18-24	21	6	f. high intensity
24-32	28	7	high intensity
32-40	36	8	very intense
40-50	45	9	extremely intense
>50	55	X	shattered

This F-scale provides a means of expressing both fracture intensity and a fracture count per metre of DH/traverse

DEFINITIONS: (1) A rock body more or less uniformly cut by 1 set of fractures (joints), on the average 1 metre apart, is said to have a fracture density of 1 (FD=1). (2) A fracture set is a family of parallel or sub-parallel fractures.

LEMAS: (1) When one fracture set cutting a body is rotated in various directions, the fracture density, on the average, remains unchanged. (2) The fracture density in a rock body, cut by several fracture sets is the sum of the partial fracture densities attributable to each set.



^GEOLOG>SMDC01>WHITNG>PRLOG

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GCOS6 MOD400-L2.0-12/10/0744  
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1981/02/15 1618:29.8

ILPT00

HONEYWELL BILLERICA  
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^GEOLOG>SMDC01>WHITNG>PRLOG

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G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY  
INTERNATIONAL GEOSYSTEMS CORP.

SMD MINING COMPANY LTD  
WHITING CK PORPHYRY MO-CU DEPOSIT BC

FORMAT VERSION : 6802

DRILLHOLE/TRVERSE : WCPH002	COLLAR ELEVATION: 0.00	AZIMUTH( DEG ) : 0.00	GEOLOGGED BY : DTC +
TOTAL DEPTH/LENGTH : 33.53	NORTHING(- IF S): 0.00	VERTICAL ANGLE : -90.00	DATE (YY/MM/DD): 800905
CORE/HOLE DIAMETER : 2IN.	EASTING (- IF W): 0.00	CO-ORD SYSTEM : MAP	PROJECT NUMBER : 4942

F - I N T E R V A L -		CORE	T- X	TYPI- DAL	TEX-	GRAIN	TOTAL	PGI	STRUCTUR-1	ALTERATION	MINS	ORE-TYPE	MINS	SUMMARY		
K L (UNITS = . DEC.PLACE)	RECOV-	M M ROCK	FYING	MIN	TURES	CHARACS	FRAC			H H H H	H ANY	H H H ANY	ALT	ORE		
E A (MT=METRIC FT=FOOTRIC)	ERY	O I	TM TM	MAT	TX TX	F C X M	DEN	/RI T	ID STK	DIP	A A A A	A MIN	A A A MIN	- - - -		
Y G F R O M - T O - I N T ( . )	D X TYPE	1 2	QM1	1 2	F F C A	MI		1	AZM	RT	QZ BI	CY CB	MG GY	PY CP	GL YY	F I Z I
K F	ROCK	FM	RT	TM	QM2	TX TX	S R S O S		T ID	STK	DIP	KF MU	CL EP	HE XX	PR MO	SL
E L	QUAL	AGE	EN- Q	LC- 3		3 4	O N H / M		2	AZM	RT	H H H H	H H H H	H H H H	H H H H	H H
Y G	DESIG	VIR	COL				R O P C L									1 1
																2 2

/	0.00	32.00	32.00	OVER	P
L OVB					
R	0.00	32.00		OVER TO 105 FT., CASING TO 80 FT., SPENT 3 DAYS TO GET CASING	
R	0.00	32.00		OUT OF HOLE, LEFT 70 CASING PLUS COUPLINGS AND BIT IN HOLE	
/	32.00	33.53	1.53	UNKN	P
L WTH					









## G E O L O G

SMD MINING COMPANY LTD  
 WHITING CK PORPHYRY MO-CU DEPOSIT  
 DRILLHOLE/TRVERSE --- WCPH003 --- (CONTINUED)

PAGE - 3

A UMM				PM CU	PM MO		HASH	TOTAL
A LAB				MIN-EN	MIN-EN			
A TYP				PH-CUT	PH-CUT			
A MTH				PCL-AA	PCL-AA			
A 014	24.38	27.43	538	770	200			970
A 014	27.43	30.48	539	940	195			1135
A 014	30.48	33.53	540	1035	180			1215
A 014	33.53	36.58	541	475	28			503
A 014	36.58	39.62	542					
A 014	39.62	42.67	543	1900	19			1919
A 014	42.67	45.72	544					
A 014	45.72	48.77	545	780	22			802
A 014	48.77	51.82	546	655	18			673
A 014	51.82	54.86	547	665	39			704
A 014	54.86	57.91	548	178	13			191
A 014	57.91	60.96	549	134	9			143
A 014	60.96	64.01	550	1550	180			1730
A 014	64.01	67.06	551	1475	200			1675
A 014	67.06	70.10	552	1370	175			1545
A 014	70.10	73.15	553	1565	185			1750
A 014	73.15	76.20	554	1330	200			1530
A 014	76.20	79.25	555	1360	145			1505
A 014	79.25	82.30	556	1670	130			1800
A 014	82.30	85.34	557	1590	135			1725
A 014	85.34	88.39	558	2000	210			2210
A 014	88.39	91.44	559					
A 014	91.44	94.49	560	1860	230			2090

R SUM A SHARP CHANGE TO A MORE FELSIC COLOURING INDICATING POSSIBLY  
 R SUM A INCREASE IN VEINING.  
 R SUM LITHOLOGY IS HOMOGENEOUS THROUGHOUT HOLE BEING A HORNFEL. PVRITE  
 R SUM AND CHALCOPYRITE ARE NOT PRESENT IN SIGNIFICANT QUANTITIES





## G E O L O G

SMD MINING COMPANY LTD  
 WHITING CK PORPHYRY CU-MO DEPOSIT  
 DRILLHOLE/TRAVERSE --- WCPH004 --- (CONTINUED)

PAGE - 3

A UMM				PM CU	PM MO		HASH	TOTAL
A LAB				MIN-EN	MIN-EN			
A TYP				PH-CUT	PH-CUT			
A MTH				PCL-AA	PCL-AA			
A 014	14.94	18.29	561	700	160			860
A 014	18.29	21.34	562	770	236			1006
A 014	21.34	24.34	563	1220	185			1405
A 014	24.38	27.43	564	1170	225			1395
A 014	27.43	30.48	565	575	38			613
A 014	30.48	33.53	566	358	19			377
A 014	33.53	36.58	567	266	18			284
A 014	36.58	39.62	568	540	11			551
A 014	39.62	42.67	569	530	13			543
A 014	42.67	45.72	570	503	9			512
A 014	45.72	48.77	571	198	11			209
A 014	48.77	51.82	572	212	11			223
A 014	51.82	54.86	573	216	12			228
A 014	54.86	57.91	574	1410	75			1485
A 014	57.91	60.96	575	2090	190			2280
A 014	60.96	64.01	576	294	32			326
A 014	64.01	67.06	577	125	10			135
A 014	67.06	70.10	578	177	8			185
A 014	70.10	73.15	579	390	79			469
A 014	73.15	76.20	580	920	200			1120

R SUM EPIDOTE IS PRESENT IN ALL INTERVALS AND IS QUITE ABUNDANT IN  
 R SUM THE MAJORITY OF INTERVALS. PYRITE AND CHALCOPYRITE ARE NOT  
 R SUM PRESENT IN SIGNIFICANT AMOUNTS. LITHOLOGY IS FAIRLY HOMOGENEOUS,  
 R SUM A FELSIL PORPHYRY CHANGING TO A VOLCANIC TUFF BELOW 230 FEET.

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY  
INTERNATIONAL GEOSYSTEMS CORP.

SMD MINING COMPANY LTD  
WHITING CK PORPHYRY CU-MO DEPOSIT

FORMAT VERSION : 6B02

DRILLHOLE/TRVERSE : WCPH005	COLLAR ELEVATION: 1520.00	AZIMUTH( DEG ) : 0.00	GEOLOGGED BY : SLT +
TOTAL DEPTH/LENGTH : 100.58	NORTHING(- IF S): 3505.00	VERTICAL ANGLE : -90.00	DATE (YY/MM/DD): 801004
CORE/HOLE DIAMETER : 2IN	EASTING (- IF W): 1435.00	CO-ORD SYSTEM : MAP	PROJECT NUMBER : 4942

F - I N T E R V A L -		CORE	T- X	TYPI- QAL	TEX- GRAIN	TOTAL	PGI	STRUCTUR-1	ALTERATION	MINS	ORE-TYPE	MINS	SUMMARY
K L (UNITS =	. DEC.PLACE)	RECOV-	M M ROCK	FYING MIN	TURES	CHARACS	FRAC						ALT ORE
E A (MT=METRIC FT=FOOTRIC)	ERY	O I	TM TM MAT	TX TX F C X M DEN	/RI T	ID STK DIP	A A A A A	A MIN A A A	MIN	A A A	MIN	- - -	
Y G F R O M - T O - I N T ( . )	D X TYPE	1 2 QM1	1 2 F F C A	MI	1	AZM RT	OZ BI CY CB	MG GY PY CP	GL YY	F I Z I			
-----,-----,-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
K F	ROCK	FM	RT	TM QM2	TX TX S R S O S	Y ID STK DIP	KF MU CL EP HE XX PR MO SL						
E L	QUAL	AGE	EN- Q	LC- 3	3 4 O N H / M	2	AZM RT H H H H H H H H H H H H						1 1
Y G	DESIG	VIR	COL		R D P C L		STRUCTUR-2 A A A A A A A A A A A A						2 2

/	0.00	8.53	8.53		OVER		P						
L DVB													
/	8.53	9.14	0.61		HORN		P	VE			L DL		LI
L WTH						7U		CL L					CH
R	8.53	9.14			NO SAMPLE SENT FOR ASSAY								
/	9.14	12.19	3.05		HORN		P	VE			L DF		LI
L					6A			CL L					CT
/	12.19	15.24	3.05		HORN		P	VE			L DL		LI
L					6A			CL L					CH
/	15.24	18.29	3.05		HORN		P	VE		L	L DL		LI
L					6A			CL L					CO
/	18.29	21.34	3.05		HORN		P	VF			DF		
L					6A			CL L 0					
/	21.34	24.38	3.04		HORN		P	VF			DF		
L					6A			CL L 0					
/	24.38	27.43	3.05		HORN		P	VF		T	DF		
L					6A			CL UF 0					
/	27.43	30.48	3.05		HORN		P	VF		0	DF		
L					6A			CL L 0					
/	30.48	33.53	3.05		HORN		P	VF			DF		
L					6A			CL L 0					
/	33.53	36.58	3.05		HORN		P	VF			DF		
L					6A			CL L 0					







## G E O L O G

SMD MINING COMPANY LTD  
WHITING CK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- NCPH005 --- (CONTINUED)

PAGE - 4

A UMM				PM CU	PM MO	HASH	TOTAL
A LAB				MIN-EN	MIN-EN		
A TYP				PH-CUT	PH-CUT		
A MTH				PLC-AA	PLC-AA		
A 014	8.53	9.14	581				
A 014	9.14	12.19	582	4050	17		4067
A 014	12.19	15.24	583	4630	23		4653
A 014	15.24	18.29	584	2940	101		3041
A 014	18.29	21.34	585	2160	42		2202
A 014	21.34	24.38	586	2640	72		2712
A 014	24.38	27.43	587	2060	46		2106
A 014	27.43	30.48	588	3040	106		3146
A 014	30.48	33.53	589	4080	74		4154
A 014	33.53	36.58	590	3190	120		3310
A 014	36.58	39.62	591	2380	69		2449
A 014	39.62	42.67	592	2890	61		2951
A 014	42.67	45.72	593	2230	69		2299
A 014	45.72	48.77	594	1900	84		1984
A 014	48.77	51.82	595	2200	115		2315
A 014	51.82	54.86	596	1780	79		1859
A 014	54.86	57.91	597	2470	100		2570
A 014	57.91	60.96	598	2630	163		2793
A 014	60.96	64.01	599	2180	172		2352
A 014	64.01	67.06	600	1960	118		2078
A 014	67.06	70.10	601	2190	188		2378
A 014	70.10	73.15	602	2980	162		3142
A 014	73.15	76.20	603	2170	143		2313
A 014	76.20	79.25	604	1960	146		2106
A 014	79.25	82.30	605	2100	127		2227
A 014	82.30	85.34	606	2460	114		2574
A 014	85.34	88.39	607	1900	72		1972
A 014	88.39	91.44	608	1520	64		1584
A 014	91.44	94.49	609	1640	72		1712
A 014	94.49	97.54	610	1500	56		1556
A 014	97.54	100.58	611	1500	69		1569

R SUM                   HORNFEEL THROUGHOUT HOLE WITH LITTLE CHANGE IN MINERALOGY AND  
R SUM                   LITHOLOGY. PYRITE IS FAIRLY ABUNDANT IN ALL SAMPLES WHILE  
R SUM                   CHALCOPYRITE IS PRESENT IN SAMPLES OBTAINED DEEPER THAN TWO  
R SUM                   HUNDRED FEET





K E Y	P L Y	FROM - TO - INT RECOV			MD % R Q D	ROCK AGE EV RQ	TM LC	TM TM	QM1 QM2	YX TX	TX TX	F S	C R	X S	M O	TFDM SML	RI	1 2	ID ID	AZM AZM	DIP DIP	QZ KF	BI MU	CY CL	CB EP	MG HE	GY XX	PY PR	CP MO	GL SL	YY	F	I	Z	I
		88.39	91.44	3.05																															
/	L	88.39	91.44	3.05		TUFF	6A									P						VL	XF	F	UT	DF	L	LI	CT						
/	L	91.44	94.49	3.05		TUFF	6A									P						VL	XF	F	L	0	LI	CF							
/	L	94.49	97.54	3.05		TUFF	6A									P						VL	XF	F	L	0	LI	CL							
/	L	97.54	100.58	3.04		TUFF	6A									P						VL	XF	F	L	T	LI	CL							

## G E O L O G

SMD MINING COMPANY LTD  
WHITING CK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH006 --- (CONTINUED)

PAGE - 4

A UMM				PM CU	PM MO	HASH	TOTAL
A LAB				MIN-EN	MIN-EN		
A TYP				PH-CUT	PH-CUT		
A MTH				PCL-AA	PCL-AA		
A 014	8.53	9.14					
A 014	9.14	12.19	612	1270	33		1303
A 014	12.19	15.24	613	2640	18		2658
A 014	15.24	18.29	614	1960	20		1980
A 014	18.29	21.34	615	1720	54		1774
A 014	21.34	24.38	616	3610	30		3640
A 014	24.38	27.43	617	2030	22		2052
A 014	27.43	30.48	618	1920	19		1939
A 014	30.48	33.53	619	1330	56		1386
A 014	33.53	36.58	620	1300	42		1342
A 014	36.58	39.62	621	1490	8		1498
A 014	39.62	42.67	622	1090	15		1105
A 014	42.67	45.72	623	1070	18		1088
A 014	45.72	48.77	624	950	16		966
A 014	48.77	51.82	625	1240	17		1257
A 014	51.82	54.86	626	1190	22		1212
A 014	54.86	57.91	627	1410	25		1435
A 014	57.91	60.96	628	1470	50		1520
A 014	60.96	64.01	629	1360	23		1383
A 014	64.01	67.06	630	1010	34		1044
A 014	67.06	70.10	631	840	21		861
A 014	70.10	73.15	632	940	29		969
A 014	73.15	76.20	633	1290	35		1325
A 014	76.20	79.25	634	960	29		989
A 014	79.25	82.30	635	720	27		747
A 014	82.30	85.34	636	890	19		909
A 014	85.34	88.39	637	1160	18		1178
A 014	88.39	91.44	638	1180	32		1212
A 014	91.44	94.49	639	1860	19		1879
A 014	94.49	97.54	640	3960	32		3992
A 014	97.54	100.58	641	1520	48		1568

R SUM

NO COARSE SAMPLES THEREFORE ROCK NAME IS UNCERTAIN

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY  
INTERNATIONAL GEOSYSTEMS CORP.

SMD MINING COMPANY LTD  
WHITING CK PORPHYRY CU-MO DEPOSIT

FORMAT VERSION : 6802

DRILLHOLE/TRVERSE : WCPH007	COLLAR ELEVATION: 1510.00	AZIMUTH( DEG ) : 0.00	GEOLOGGED BY : SLT +
TOTAL DEPTH/LENGTH : 94.79	NORTHING(- IF S): 3080.00	VERTICAL ANGLE : -90.00	DATE (YY/MM/DD): 800908
CORE/HOLE DIAMETER : 2IN	EASTING (- IF W): 1490.00	CO-ORD SYSTEM : MAP	PROJECT NUMBER : 4942

F - I N T E R V A L =		CORE	T- X	TYPI-	QAL	TEX-	GRAIN	TOTAL	PGI	STRUCTUR-1	ALTERATION				MINS	ORE-TYPE	MINS	SUMMARY					
K L	(UNITS =	REC OV-	M M	ROCK	F Y I N G	M I N	T U R E S	C H A R A C S	F R A C	/ R I T	I D	STK	DIP	A	A	A	A	M I N	A	A	M I N	- - -	
E A	(MT=METRIC FT=FOOTRIC)	ERY	D I	T M	T M	M A T	T X	T X	F C	X M	D E N												
Y G	F R O M - T O - I N T ( . )	D X	T Y P E	1	2	Q M 1	1	2	F	F	C	A											
-----		-----		-----		-----		-----		-----		-----		-----		-----		-----		-----		-----	
K F		ROCK	F M	R T	T M	Q M 2	T X	T X	S	R	S	O	S										
E L		QUAL	A G E	E N - Q	L C - 3		3	4	O	N	H	/	M										
Y G		DESIG	V I R	C O L			R	D	P	C	L												
											STRUCTUR-2	A	A	A	A	A	A	A	A	A	A	2	2

/	L	0.00	4.57	4.57		OVER																	
/	L	4.57	6.10	1.53		TUFF																	
						7A								VL	XL	T	DL			DF	DL	LI	
														SL	CF							CL	
/	L	6.10	9.14	3.04		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF							DT	
/	L	9.14	12.19	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	LI	
														SL	CF							CL	
/	L	12.19	15.24	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	UF						DT	
/	L	15.24	18.29	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	UF						DT	
/	L	18.29	21.34	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	UF						DT	
/	L	21.34	24.38	3.04		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	UF	L					DT	
/	L	24.38	27.43	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	UF						DT	
/	L	27.43	30.48	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	UF						DT	
/	L	30.48	33.53	3.05		TUFF																	
						7A																	
														VL	XL	T	DL			DF	DL	BO	
														SL	CF	VB						DT	

G E O L O G

SMD MINING COMPANY LTD  
 WHITING CK PORPHYRY CU-MO DEPOSIT  
 DRILLHOLE/TRVERSE --- WCPH007 --- (CONTINUED)

K E Y	F R O M - T O - I N T R E C O V			M D A G E	R O C K E V R R	T M L C	T M T M	Q M 1 Q M 2	T X T X	T X T X	F C S R	X M S O	T F D M S M L	R I 2	I D I D	A Z M A Z M	D I P D I P	Q Z K F	B I M U	C Y C L	C B E P	M G H E	G Y X X	P Y P R	C P M O	G L S L	Y Y Y Y	F I F I	Z I Z I	
	Y G	---	---																											R O D
/	33.53	36.58	3.05		TUFF									P				VL	XL	T					DF	DL				
L						7A												SL	VF	VB	L									
/	36.58	39.62	3.04		TUFF									P				VL	XL	T					DF	DL	LI			
L						7A												SL	VF	VB	L						CL			
/	39.62	42.67	3.05		TUFF									P				VL	XL	T					DF	DL				
L						7A												SL	VF	VB	0									
/	42.67	45.72	3.05		TUFF									P				VL	XL	T					DF	DL				
L						7A												SL	VF	VB	L									
/	45.72	48.77	3.05		TUFF									P				/L	XF	T					DF	DL				
L						7A												SL	VF	VB	L									
/	48.77	51.82	3.05		TUFF									P				VL	XL	T					DF	DL				
L						7A												SL	VF	VB	L									
/	51.82	54.86	3.04		TUFF									P				VL	XF	T					DF	DL	LI			
L						7A												SL	CF	VB	L						CF			
/	54.86	57.91	3.05		TUFF									P				VF	XF	T					DF	DL	LI			
L						7A												SL	CF	VF	L						CF			
/	57.91	60.96	3.05		TUFF									P				VL	XF	T					DF	DL	LI			
L						7A												SL	CF	VB	L						CF			
/	60.96	64.01	3.05		TUFF									P				VL	XF	T					DF	DL	LI			
L						7A	7A											SL	CF	VB	L						CF			
/	64.01	67.06	3.05		TUFF									P				VL	XF	T					DF	DL	LI			
L						7A												SL	CF	VB	L						CF			
/	67.06	70.10	3.04		TUFF									P				VL	XF	T					DF	DL	LI			
L						7A												SL	CF	VB	L						CF			
/	70.10	73.15	3.05		TUFF									P				VF	XF	T					DF	DL	LI			
L						7A												SL	CF	VF							CF			
/	73.15	76.20	3.05		TUFF									P				VL	XF	T					DF	DL	LI			
L						7A												SL	CF	VF							CF			
/	76.20	79.25	3.05		TUFF									P				VF	XF	T					DF	DL	LI			
L						7A												SL	CF	VF							CF			
/	79.25	82.30	3.05		TUFF									P				VF	XF	T					DF	DL	LI			
L						7A												SL	CF	VF							CF			
/	82.30	85.34	3.04		TUFF									P				VF	XF	T					DF	DL	LI			
L						7A												SL	CF	VF							CF			





## G E O L O G

SMD MINING COMPANY LTD  
WHITING CK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH007 --- (CONTINUED)

PAGE - 4

A UMM				PM CU	PM MO		HASH	TOTAL
A LAB				MIN-EN	MIN-EN			
A TYP				PH-CUT	PH-CUT			
A MTH				PCL-AA	PCL-AA			
A 014	4.57	6.10	642	274	10			284
A 014	6.10	9.14	643	345	19			364
A 014	9.14	12.19	644	915	20			935
A 014	12.19	15.24	645	800	17			817
A 014	15.24	18.29	646	970	14			984
A 014	18.29	21.34	647	960	11			971
A 014	21.34	24.38	648	4030	15			4045
A 014	24.38	27.43	649	2220	21			2241
A 014	27.43	30.48	650	2170	17			2187
A 014	30.48	33.53	651	1040	14			1054
A 014	33.53	36.58	652	735	11			746
A 014	36.58	39.62	653	1760	16			1776
A 014	39.62	42.67	654	945	15			960
A 014	42.67	45.72	655	910	14			924
A 014	45.72	48.77	656	610	16			626
A 014	48.77	51.82	657	650	11			661
A 014	51.82	54.86	658	830	12			842
A 014	54.86	57.91	659	1030	15			1045
A 014	57.91	60.96	660	1100	18			1118
A 014	60.96	64.01	661	1020	21			1041
A 014	64.01	67.06	662	700	16			716
A 014	67.06	70.10	663	640	26			666
A 014	70.10	73.15	664	620	22			642
A 014	73.15	76.20	665	645	17			662
A 014	76.20	79.25	666	770	20			790
A 014	79.25	82.30	667	685	23			708
A 014	82.30	85.34	668	790	23			813
A 014	85.34	88.39	669	670	21			691
A 014	88.39	91.44	670	915	19			934
A 014	91.44	94.49	671	920	21			941
A 014	94.49	94.79	672	1025	18			1043

R SUM

NO COARSE SAMPLES THEREFORE ROCK NAME IS UNCERTAIN

R SUM

LIMONITE COATING IS HIGH IN COARSE SAMPLES

R SUM

BORNITE APPEARS TO BE PRESENT BUT ONLY TRACE AMOUNTS

R SUM

LITHOLOGY AND MINERALOGY IS FAIRLY HOMOGENEOUS THROUGHOUT HOLE



G E O L O G

SMD MINING COMPANY LTD  
 WHITING CK PORPHYRY CU-MO DEPOSIT  
 DRILLHOLE/TRVERSE --- WCPH008 --- (CONTINUED)

K E Y	F R O M	- T O	- I N T R O D U C E D	R E C O V E R Y	M O D E L	R O C K T Y P E	T M P E R A T U R E	T M P E R A T U R E	Q M 1	T X	T X	F C	M T F D M	R I	1	I D	A Z M	D I P	Q Z	B I	C Y	C B	M G	G Y	P Y	C P	G L	Y Y	F I	Z I
/	33.53	36.58	3.05			TUFF								P						VL	SF			SL	DF			LI		
L							7A															DL					CT			
/	36.58	39.62	3.04			TUFF								P						VL	SF			SL	DF			LI		
L							7 AA															DL					CT			
/	39.62	42.67	3.05			TUFF								P						VL	SF			SL	DF			LI		
L							7 AA															DL					CT			
/	42.67	45.72	3.05			TUFF								P						VL	SF			SL	DF			LI		
L							7 AA															DL					CT			
/	45.72	48.77	3.05			TUFF								P						VL	SF			SL	DF			LI		
L							7 AA															DL					CT			
/	48.77	51.82	3.05			TUFF								P						VL	SF			SL	DF	DT		LI		
L							7 AA															DL					CT			
/	51.82	54.86	3.04			TUFF								P						UL	SB			SL	DF	DT		LI		
L							7 A														CL	SL					CT			
/	54.86	57.91	3.05			TUFF								P						UL	SB			SL	DF	DT		LI		
L							7 A														CL	SL					CT			
/	57.91	60.96	3.05			TUFF								P						UL	SB			SL	DF	DT		LI		
L							7 A														CL	SL					CT			
/	60.96	64.01	3.05			TUFF								P						UL	SB			SL	DF	DT		LI		
L							7 A														CL	SL					CT			
/	64.01	67.06	3.05			TUFF								P						UL	SB			SL	DF	DT		LI		
L							7 A														CL	SL					CT			
/	67.06	69.19	2.13			TUFF								P						UL	SB			SL	DF	DT		LI		
L							7 A														CL	SL					CT			

A UMM				PM CU	PM MO	PM S		HASH	TOTAL
A LAB				MIN-EN	MIN-EN	MIN-EN			
A TYP				PH-CUT	PH-CUT	PH-CUT			
A MTH				PCL-AA	PCL-AA	PCL-AA			
A 014	3.35	6.10	673	218	13				231
A 014	6.10	9.14	674	353	16				369
A 014	9.14	12.19	675	595	14				609
A 014	12.19	15.24	676	424	46				470
A 014	15.24	18.29	677	471	46				517
A 014	18.29	21.34	678	399	12				411
A 014	21.34	24.38	679	322	39	19300			19661
A 014	24.38	27.43	680	470	38				508
A 014	27.43	30.48	681	500	22				522
A 014	30.48	33.53	682	446	16				462
A 014	33.53	36.58	683	535	18				553
A 014	36.58	39.62	684	950	15				965
A 014	39.62	42.67	685	1020	12				1032
A 014	42.67	45.72	686	640	6				646
A 014	45.72	48.77	687	890	15				905
A 014	48.77	51.82	688	740	8				748
A 014	51.82	54.86	689	620	5				625
A 014	54.86	57.91	690	479	5				484
A 014	57.91	60.96	691	990	12				1002
A 014	60.96	64.01	692	1420	28				1448
A 014	64.01	67.06	693	980	11				991
A 014	67.06	69.19	694	750	7				757

R SUM PYRITE IS PRESENT IN MINOR AMOUNTS THROUGHOUT HOLE. CHALCOPYRITE

R SUM IS PRESENT IN TRACE AMOUNTS BELOW 160 FEET ONLY.

R SUM LITHOLOGY AND MINERALOGY IS FAIRLY HOMOGENEOUS THROUGHOUT HOLE

R SUM NO COARSE SAMPLES OBTAINED THUS ROCK NAME IS UNCERTAIN

R SUM NO COARSE SAMPLE OBTAINED THUS ROCK NAME IS UNCERTAIN







SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH009 --- (CONTINUED)

PAGE - 4

G E O L O G

A UMM				PM CU	PM MO	PM S	HASH	TOTAL
A LAB				MIN-EN	MIN-EN	MIN-EN		
A TYP				PH-CUT	PH-CUT	PH-CUT		
A MTH				PCL-AA	PCL-AA	PCL-AA		
A	0.00	10.36						
A	10.36	12.19	695	164	4			168
A	12.19	15.24	696	159	5			164
A	15.24	18.29	697	1760	2			1762
A	18.29	21.34	698	6500	1			6501
A	21.34	24.38	699	930	6			936
A	24.38	27.43	700	670	4			674
A	27.43	30.48	701	2030	2			2032
A	30.48	33.53	702	720	1			721
A	33.53	36.58	703	780	3			783
A	36.58	39.62	704	4520	5			4525
A	39.62	42.67	705	1930	11			1941
A	42.67	45.72	706	1900	19	250000		251919
A	45.72	48.77	707	1960	9			1969
A	48.77	51.82	708	600	7			607
A	51.82	54.86	709	575	3			578
A	54.86	57.91	710	462	3			465
A	57.91	60.96	711	690	5			695
A	60.96	64.01	712	469	2			471
A	64.01	67.06	713	483	2			485
A	67.06	70.10	714	392	2			394
A	70.10	73.15	715	520	19			539
A	73.15	76.20	716	595	11			606
A	76.20	79.25	717	810	16			826
A	79.25	82.30	718	780	14			794
A	82.30	85.34	719	860	12			872
A	85.34	88.39	720	740	12			752
A	88.39	91.44	721	820	157			977
A	91.44	94.49	722	535	78			613
A	94.49	97.54	723	710	35			745
A	97.54	100.58	724	1140	63			1203

R SUM LIMONITE COATING ON CHIPS PRESENT THROUGHOUT HOLE

R SUM LITHOLOGY IS FAIRLY HOMOGENEOUS THROUGHOUT THE ENTIRE HOLE ,

R SUM BEING A PORPHYRITIC ANDESITE WITH PLAGIOCLASE AND BIOTITE

R SUM PHENOCRYSTS.

R SUM TRACE AMOUNTS OF BORNITE MAY BE PRESENT.

R SUM THE MINERALS PRESENT EXHIBIT A LOW GRADE METAMORPHISM

R SUM BIOTITE IS PRESENT AS RELATIVELY LARGE CRYSTALS OF 2 MM

R SUM EPIDOTE IS FAIRLY ABUNDANT THROUGHOUT THE HOLE BUT IS NOT SEEN

R SUM IN EVERY INTERVAL. CARBONATES ARE ABSENT.









A UMM			PM CU	PM MO	PM S	HASH	TOTAL
A LAB			MIN-EN	MIN-EN	MIN-EN		
A TYP			PH-CUT	PH-CUT	PH-CUT		
A MTH			PCL-AA	PCL-AA	PCL-AA		
A	0.00	5.49					
A	5.49	9.14	725	650	400		1050
A	9.14	12.19	726	920	258		1178
A	12.19	15.24	727	328	342		670
A	15.24	18.29	728	780	322		1102
A	18.29	21.34	729	670	256		926
A	21.34	24.38	730	1050	638		1688
A	24.38	27.43	731	452	352		804
A	27.43	30.48	732	620	229		849
A	30.48	33.53	733	600	468		1068
A	33.53	36.58	734	595	252		847
A	36.58	39.62	735	590	232	44600	45422
A	39.62	42.67	736	640	639		1279
A	42.67	45.72	737	690	338		1028
A	45.72	48.77	738	930	380		1310
A	48.77	51.82	739	840	259		1099
A	51.82	54.86	740	970	470		1440
A	54.86	57.91	741	690	438		1128
A	57.91	60.96	742	550	378		928
A	60.96	64.01	743	540	372		912
A	64.01	67.06	744	406	267		673
A	67.06	70.10	745	505	329		834
A	70.10	73.15	746	354	188		542
A	73.15	76.20	747	344	172		516
A	76.20	79.25	748	430	292		722
A	79.25	82.30	749	401	247		648
A	82.30	85.34	750	424	197		621
A	85.34	88.39	751	373	194		567
A	88.39	91.44	752	425	219		644
A	91.44	94.49	753	440	200		640
A	94.49	97.54	754	426	209		635
A	97.54	100.58	755	323	217		540

R SUM COLOUR AND LITHOLOGY ARE VERY HOMOGENEOUS FOR THE ENTIRE LENGTH  
R SUM OF THE DRILLHOLE.  
R SUM PYRITE IS PRESENT IN ALL INTERVALS. CHALCOPYRITE IS PRESENT  
R SUM IN TRACE AMOUNTS BELOW 60  
R SUM BIOTITE AND/OR CHLORITE WITH .1 TO .3 MM PATCHES OF PLAGIOCLASE  
R SUM MAKE THE FRAMEWORK FOR THE TUFF ,THE ROCK UNIT PRESENT IN THIS  
R SUM HOLE





## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH011 --- (CONTINUED)

PAGE - 3

A UMM					PM CU	PM MO	PM S	HASH	TOTAL
A LAB					MIN-EN	MIN-EN	MIN-EN		
A TYP					PH-CUT	PH-CUT	PH-CUT		
A MTH					PCL-AA	PCL-AA	PCL-AA		
A 014	3.35	6.10	756	266	120				386
A 014	6.10	9.14	757	528	92				620
A 014	9.14	12.19	758	243	125				368
A 014	12.19	15.24	759	391	44				435
A 014	15.24	18.29	760	500	175				675
A 014	18.29	21.34	761	499	160				659
A 014	21.34	24.38	762	495	125				620
A 014	24.38	27.43	763	396	410				806
A 014	27.43	30.48	764	276	305				581
A 014	30.48	33.53	765	326	120				446
A 014	33.53	36.58	766	198	130				328
A 014	36.58	39.62	767	329	150	26300			26979
A 014	39.62	42.67	768	178	240				418
A 014	42.67	45.72	769	184	180				364
A 014	45.72	48.77	770	438	190				628
A 014	48.77	51.82	771	441	125				566
A 014	51.82	54.86	772	650	190				840
A 014	54.86	57.91	773	615	175				790
A 014	57.91	60.96	774	491	145				636
A 014	60.96	64.01	775	352	100				452
A 014	64.01	67.06	776	670	86				756
A 014	67.06	70.10	777	238	32				270
A 014	70.10	73.15	778	149	69				218
A 014	73.15	73.76	779	166	46				212









## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH012 --- (CONTINUED)

PAGE - 4

A UMM					PM CU	PM MO	PM S	HASH	TOTAL
A LAB					MIN-EN	MIN-EN	MIN-EN		
A TYP					PH-CUT	PH-CUT	PH-CUT		
A MTH					PCL-AA	PCL-AA	PCL-AA		
A 014	7.32	9.14	780	338	20	13900			14258
A 014	9.14	12.19	781	248	13	21000			21261
A 014	12.19	15.24	782	725	36	19400			20161
A 014	15.24	18.29	783	431	16	14600			15047
A 014	18.29	21.34	784	414	19	16500			16933
A 014	21.34	24.38	785	635	20	33700			34355
A 014	24.38	27.43	786	480	20	22600			23100
A 014	27.43	30.48	787	328	22	18300			18650
A 014	30.48	33.53	788	284	14	13500			13798
A 014	33.53	36.58	789	214	20	18700			18934
A 014	36.58	39.62	790	299	26	17900			18225
A 014	39.62	42.67	791	274	30	18000			18304
A 014	42.67	45.72	792	379	78	20600			21057
A 014	45.72	48.77	793	311	410	64300			65021
A 014	48.77	51.82	794	338	210	18600			19148
A 014	51.82	54.86	795	249	94	15200			15543
A 014	54.86	57.91	796	273	60	21000			21333
A 014	57.91	60.96	797	407	37	32200			32644
A 014	60.96	64.01	798	462	24	39400			39886
A 014	64.01	67.06	799	435	24	40700			45159
A 014	67.06	70.10	800	2000	28	57500			59528
A 014	70.10	73.15	801	720	33	65000			65753
A 014	73.15	76.20	802	770	104	43300			44174
A 014	76.20	79.25	803	429	84	51800			52313
A 014	79.25	82.30	804	317	22	27400			27739
A 014	82.30	85.34	805	348	27	21400			21775
A 014	85.34	88.39	806	212	23	33500			33735
A 014	88.39	91.44	807	271	20	31600			31891
A 014	91.44	94.49	808	327	38	46400			46765
A 014	94.49	97.54	809	346	28	43200			43574
A 014	97.54	100.58	810	348	27	45300			45675

R SUM LITHOLOGY AND MINERALOGY ARE VERY HOMOGENEOUS THOUGHOUT ENTIRE  
R SUM SECTION. CHALCOPYRITE IS ABSENT WHILE PYRITE IS PRESENT IN LOW  
R SUM AMOUNTS. LIMONITE AND HEMATITE ARE PREVALENT BELOW 240 FEET





## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH013 --- (CONTINUED)

PAGE - 3

A UMM				PM CU	PM MO	PM S	HASH	TOTAL
A LAB				MIN-EN	MIN-EN	MIN-EN		
A TYP				PH-CUT	PH-CUT	PH-CUT		
A MTH				PCL-AA	PCL-AA	PCL-AA		
A 014	9.45	12.19	811	565	29	32800		33394
A 014	12.19	15.24	812	725	41	41700		42466
A 014	15.24	18.29	813	630	35	39500		40165
A 014	18.29	21.34	814	770	245	37600		38615
A 014	21.34	24.38	815	585	141	42500		43226
A 014	24.38	27.43	816	640	25	58200		58863
A 014	27.43	30.48	817	504	42	62700		63246
A 014	30.48	33.53	818	825	118	22000		22943
A 014	33.53	36.58	819	570	50	27500		28120
A 014	36.58	39.62	820	370	119	17300		17789
A 014	39.62	42.67	821	142	24	10600		10766
A 014	42.67	45.72	822	78	14	4400		4492
A 014	45.72	48.77	823	48	10	5300		5358
A 014	48.77	51.82	824	48	22	4000		4070
A 014	51.82	54.86	825	51	12	2400		2463
A 014	54.86	57.91	826	95	24	2600		2719
A 014	57.91	60.96	827	62	12	3200		3274
A 014	60.96	64.01	828	58	12	5000		5070
A 014	64.01	65.53	829	73	15	4500		4588
R ASY	64.01	65.53						

END OF WCPH013

R SUM VOLCANIC TUFF IS PRESENT ABOVE 130 FEET. A LARBONATE ROCK IS  
R SUM PRESENT BELOW 130 FEET. NEITHER ROCK TYPE IS HOST TO  
R SUM CHALCOPYRITE AND BOTH HAVE MODERATE TO LOW AMOUNTS IF PYRITE









## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH014 --- (CONTINUED)

PAGE - 4

A UMM									
A LAB									
A TYP									
A MTH									
					PM CU	PM MO	PM S		HASH TOTAL
					MIN-EN	MIN-EN	MIN-EN		
					PH-CUT	PH-CUT	PH-CUT		
					PCL-AA	PCL-AA	PCL-AA		
A 014	3.96	6.10	830	106	10	18000			18116
A 014	6.10	9.14	831	132	20	22700			22852
A 014	9.14	12.19	832	128	26	35000			35154
A 014	12.19	15.24	833	321	19	41500			41840
A 014	15.24	18.29	834	265	28	41000			41293
A 014	18.29	21.34	835	162	21	46500			46683
A 014	21.34	24.38	836	128	16	9700			9844
A 014	24.38	27.43	837	378	15	65000			65393
A 014	27.43	30.48	838	374	20	45300			45694
A 014	30.48	33.53	839	289	26	56700			57015
A 014	33.53	36.58	840	190	26	40500			40716
A 014	36.58	39.62	841	136	16	21000			21152
A 014	39.62	42.67	842	225	13	28600			28838
A 014	42.67	45.72	843	258	20	34200			34478
A 014	45.72	48.77	844	376	12	38600			38988
A 014	48.77	51.82	845	580	16	39000			39596
A 014	51.82	54.86	846	364	18	41000			41382
A 014	54.86	57.91	847	365	18	39500			39883
A 014	57.91	60.96	848	461	300	48000			48761
A 014	60.96	64.01	849	233	78	29600			29911
A 014	64.01	67.06	850	226	39	35300			35565
A 014	67.06	70.10	851	260	13	19000			19273
A 014	70.10	73.15	852	217	26	75000			75343
A 014	73.15	76.20	853	1200	15	92500			93715
A 014	76.20	79.25	854	375	22	47600			47997
A 014	79.25	82.30	855	183	20	41000			41213
A 014	82.30	85.34	856	136	19	39200			39355
A 014	85.34	88.39	857	91	13	21800			21904
A 014	88.39	91.44	858	69	10	9000			9079
A 014	91.44	94.49	859	65	8	10300			10371
A 014	94.49	97.54	860	63	6	15800			15871
A 014	97.54	100.58	861	79	8	17600			17687



## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPHO15 --- (CONTINUED)

PAGE 3

A UMM					PM CU	PM MO	PM S	HASH	TOTAL
A LAB					MIN-EN	MIN-EN	MIN-EN		
A TYP					PH-CUT	PH-CUT	PH-CUT		
A MTH					PCL-AA	PCL-AA	PCL-AA		
A 014	14.63	15.24	862	680	32	120000			120712
A 014	15.24	18.29	863	364	29	35600			35993
A 014	18.29	21.34	864	519	26	49700			50245
A 014	21.34	24.38	865	540	23	62100			62663
A 014	24.38	27.43	866	398	53	35300			35751
A 014	27.43	30.48	867	404	85	29500			29989
A 014	30.48	33.53	868	316	79	33800			34195
A 014	33.53	36.58	869	308	54	49400			49762
A 014	36.58	39.62	870	236	31	35200			35467
A 014	39.62	42.67	871	170	18	52900			53088
A 014	42.67	45.72	872	137	38	44800			44975
A 014	45.72	48.77	873	202	66	40600			40868
A 014	48.77	51.82	874	185	43	21100			21328
A 014	51.82	54.86	875	328	53	32700			33081
A 014	54.86	57.91	876	284	36	38300			38620
A 014	57.91	60.96	877	232	49	45900			46181
A 014	60.96	64.01	878	278	97	46400			46775
A 014	64.01	67.06	879	344	160	36700			37204
A 014	67.06	70.10	880	408	77	34500			34985
A 014	70.10	73.15	881	402	52	33600			34054
A 014	73.15	76.20	882	565	39	41900			42504
A 014	76.20	79.25	883	570	60	46100			46730
A 014	79.25	82.30	884	765	41	47200			48006
A 014	82.30	84.12	885	810	46	28800			29656
R ASY	82.30	84.12							

END OF WCPHO15

SMD MINING COMPANY LIMITED  
 WHITING CREEK PORPHYRY CU-MO DEPOSIT  
 DRILLHOLE/TRVERSE --- WCPH015 --- (CONTINUED)

K E Y	F R O M - T O - I N T R E C O V			M D	R O C K	T M	T M	Q M 1	T X	T X	F	C	X	M	T F O M	R I	1	I D	A Z M	D I P	Q Z	B I	C Y	C B	M G	G Y	P Y	C P	G L	Y Y	F	I	Z	I	
	L	---	---																																R O O
/	42.67	45.72	3.05		HORN											P					VF	SF													LI
L						6A															CF	SL	0												CL
/	45.72	48.77	3.05		HORN											P					VF	SF													LI
L						6A															CF	SL	0												CL
/	48.77	54.86	6.09		HORN											P					VF	SF													LI
L						6A															CF	SL	0												CL
/	54.86	57.91	3.05		HORN											P					VF	SF													CA
L						6A															CF	SL	0												GF
/	57.91	60.96	3.05		HORN											P					VF	SF													LI
L						6A															CF	SL	SL												CL
/	60.96	64.01	3.05		HORN											P					VF	SF													LI
L						6A															CF	SL	0												CL
/	64.01	67.06	3.05		HORN											P					VL	SF													CA
L						6A																	SF												GF
/	67.06	70.10	3.04		HORN											P					VL	SF													PH
L						6A																	SF												GF
/	70.10	73.15	3.05		HORN											P					VL	SF													CA
L						6A																	SF												GF
/	73.15	76.20	3.05		HORN											P					VL	SF													CA
L						6A																	SF												GF
/	76.20	79.25	3.05		HORN											P					VL	SF													CA
L						6A																	SF	ST											GF
/	79.25	82.30	3.05		HORN											P					VL	SF													LI
L						6A																CL		SF											CL
/	82.30	84.12	1.82		HORN											P					VL	SF													LI
L						6A																CL	SF	SL											CL
R	14.63	84.12																																	

AVE. CU=394 PPM, AVE. MO=54 PPM.

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY  
INTERNATIONAL GEOSYSTEMS CORP.

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT

FORMAT VERSION : 6802

DRILLHOLE/TRVERSE : WCPH016      COLLAR ELEVATION:      1480.00      AZIMUTH( DEG ) :      0.00      GEOLOGGED BY : SLT +  
TOTAL DEPTH/LENGTH :      33.53      NORTHING(- IF S):      3125.00      VERTICAL ANGLE :      -90.00      DATE (YY/MM/DD): 801019  
CORE/HOLE DIAMETER :      2IN      EASTING (- IF W):      2242.00      CO-ORD SYSTEM :      MAP      PROJECT NUMBER :      4942

K E Y	F - I N T E R V A L -			CORE RECOV- ERY	T- % M M	ROCK DI	TYPI- TM	GAL MAT	TEX- TX	GRAIN F C	TOTAL % M	PGI DEN	STRUCTUR-1 /RI	ALTERATION H H H H	MINS H H H H	ORE-TYPE A A A A	MINS A A A A	SUMMARY F I Z I	
	UNITS =	DEC.PLACE)																	
L	0.00	6.10	6.10																
L	6.10	9.14	3.04																
L	9.14	12.19	3.05																
L	12.19	15.24	3.05																
L	15.24	18.29	3.05																
L	18.29	21.34	3.05																
L	21.34	24.38	3.04																
L	24.38	27.43	3.05																
R	24.38	27.43	A VOLCANIC ROLL IS PRESENT WITH GRANODIORITE IN THIS INTEVAL																
L	27.43	30.48	3.05																
L	30.48	33.53	3.05																
R	6.10	33.53	AVE. CU=1318 PPM, AVE. MO=198 PPM.																

## G E O L O G

SMD MINING COMPANY LIMITED  
 WHITING CREEK PORPHYRY CU-MO DEPOSIT  
 DRILLHOLE/TRVERSE --- WCPH016 --- (CONTINUED)

PAGE - 2

				PM CU	PM MO	PM S	HASH	TOTAL	
A UMM				MIN-EN	MIN-EN	MIN-EN			
A LAB				PH-CUT	PH-CUT	PH-CUT			
A TYP				PCL-AA	PCL-AA	PCL-AA			
A MTH									
A 014	6.10	9.14	886	150	490	7100		7740	
A 014	9.14	12.19	887	970	270	15900		17140	
A 014	12.19	15.24	888	1590	69	22300		23959	
A 014	15.24	18.29	889	3630	93	17900		21623	
A 014	18.29	21.34	890	1570	48	13800		15418	
A 014	21.34	24.38	891	1130	90	12100		13320	
A 014	24.38	27.43	892	800	300	10200		11300	
A 014	27.43	30.48	893	1300	220	10900		12420	
A 014	30.48	33.53	894	720	200	14400		15320	
R ASY	30.48	33.53	END OF WCPH 016						









## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CREEK PORPHYRY CU-MO DEPOSIT  
DRILLHOLE/TRVERSE --- WCPH017 --- (CONTINUED)

PAGE - 4

A UMM				PM CU	PM MO	PM S	HASH	TOTAL
A LAB				MIN-EN	MIN-EN	MIN-EN		
A TYP				PH-CUT	PH-CUT	PH-CUT		
A MTH				PCL-AA	PCL-AA	PCL-AA		
A 014	8.53	9.14	895	21	39	4200		4260
A 014	9.14	12.19	896	45	150	4600		4795
A 014	12.19	15.24	897	24	155	5100		5279
A 014	15.24	18.29	898	15	145	4900		5060
A 014	18.29	21.34	899	50	205	6000		6255
A 014	21.34	24.38	900	39	275	12600		12914
A 014	24.38	27.43	901	38	300	9700		10038
A 014	27.43	30.48	902	53	300	13300		13653
A 014	30.48	33.53	903	42	220	19700		19962
A 014	33.53	36.58	904	258	150	13200		13608
A 014	36.58	39.62	905	415	130	16800		17345
A 014	39.62	42.67	906	267	230	17700		18197
A 014	42.67	45.72	907	173	135	19000		19308
A 014	45.72	48.77	908	136	165	18300		18601
A 014	48.77	51.82	909	268	67	17500		17835
A 014	51.82	54.86	910	87	91	17900		18078
A 014	54.86	57.91	911	123	104	13900		14127
A 014	57.91	60.96	912	107	195	20900		21202
A 014	60.96	64.01	913	96	140	22100		22336
A 014	64.01	67.06	914	52	115	18100		18267
A 014	67.06	70.10	915	57	970	14300		15327
A 014	70.10	73.15	916	120	85	15000		15205
A 014	73.15	76.20	917	161	62	13900		14123
A 014	76.20	79.25	918	189	101	18500		18790
A 014	79.25	82.30	919	209	45	24200		24454
A 014	82.30	85.34	920	239	43	22400		22682
A 014	85.34	88.39	921	535	78	24900		25313
A 014	88.39	91.44	922	755	125	27500		28380
A 014	91.44	94.49	923	1290	130	26300		27720
A 014	94.49	97.54	924	1620	81	33700		35401
A 014	97.54	100.58	925	1070	110	17400		18580



G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CK PORPHYRY MO-CU DEPOSIT BC  
DRILLHOLE/TRVERSE --- WCPH019 --- (CONTINUED)

K E Y	F R O M	- T O	I N T R E C O V	M D %	R O C K	T M	T M	Q M 1	T X	T X	F C	%	M T F D M	R I	1	I D	A Z M	D I P	Q Z	B I	C Y	C B	M G	G Y	P Y	C P	G L	Y Y	F I Z I
/	48.77	51.82	3.05		GRDR									P						<F			DF	<T	DF	D/			1L
L					8A															PL	T				DT				
/	51.82	54.86	3.04		GRDR									P						<M			DB	<T	DF	D/			1L
L					8A															PL	T				00				
R	51.82	54.86	MAGNETITE CONTENT INCREASES WITH INCREASING AMOUNT OF QZ VEINS.																										
/	54.86	57.91	3.05		GRDR									P						<B		P/	DF	<F	DL			1L	
L					8A															PL	T				D/				
/	57.91	60.96	3.05		GRDR	GR	DR							P						<B		P/	DF	<F	DL			1L	
L					8A															PL	T				00				
/	60.96	64.01	3.05		GRDR									P						<L		P/	DF	<F	DL			1L	
L					8A															PL	T				D/				
/	64.01	67.06	3.05		GRDR									P						<B		P/	DL	<F	DT			1L	
L					8A															PL	T				D/				
/	67.06	70.10	3.04		GRDR									P															
L					8A																								
R	64.01	76.20	NO COARSE CUTTINGS FROM 210 FT. TO 250 FT., FINE CUTTINGS SHOWED SIMILAR LITHOLOGY AS ABOVE (GRDR).																										
R	64.01	76.20																											
/	70.10	73.15	3.05		GRDR									P									DL						
L					8A																					D/			
/	73.15	76.20	3.05		GRDR									P								ST				00			
L					8A																								
/	76.20	79.25	3.05		GRDR									P						<B		?	DL	<M				1L	
L					8A															PT	/				D/				
/	79.25	82.30	3.05		GRDR									P						<B		?	DT	<M				1L	
L					8A															PT	/				00				
R	79.25	100.56	PHLOGOBITE MORE ABUNDANT THAN BIOTITE FROM 260 TO 330 FT.																										
/	82.30	85.34	3.04		GRDR									P						<B		?	DL	<M				1L	
L					8A															PT	/				DT				
/	85.34	88.39	3.05		GRDR									P						<B		?	DL	<M				1L	
L					8A															PT	/				00				
/	88.39	91.44	3.05		GRDR									P						<B		?	DL	<M				1L	
L					8A															PT	/				D/				
R	88.39	91.44	NO COARSE CUTTINGS FROM 290 FT. TO 320 FT.																										
/	91.44	94.49	3.05		GRDR									P						<B		?	DL	<M				1L	
L					8A															PT	/				<T				
/	94.49	97.54	3.05		GRDR									P						<M		PB	DT	<B	DT			1L	
L					8A															PT	?				D/				

K F FROM - TO - INT RECOV	MO % ROCK	TM TM QM1 TX TX F C % M TFD	RI 1 ID AZM DIP OZ BI CY CB MG GY PY CP GL YY F I Z I
E -L- -----	-----	-----	-----
Y G	R Q D AGE EV RQ LC TM QM2 TX TX S R S D SML	2 ID AZM DIP KF MU CL EP HE XX PR MO SL	
/	97.54 100.58 3.04	GRDR	P <B ? DL <M 1L
L		BA	PT / D/
R	21.34 100.58	HOMOGENEOUS LITHOLOGY, GRANDDIORITE IS SLIGHTLY ALTERED (PROPYL-ITIC ALTERNATION). CHALCOPYRITE APPEARS THROUGHOUT THE ENTIRE HOLE. MO, IS COMMONLY FOUND WHERE OZ VEIN IS ABUNDANT, MAGNETITE IS ABUNDANT FROM 70 TO 230 FT., MINOR TOWARDS BOTTOM OF HOLE.	
R	21.34 100.58		
R	21.34 70.10		
R	21.34 70.10		
R	21.34 100.58	AVE. CU#2230 PPM, AVE. MO#401 PPM,	

## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CK PORPHYRY MO-CU DEPOSIT BC  
DRILLHOLE/TRVERSE --- WCPH019 --- (CONTINUED)

PAGE - 4

A UMM	A LAB	A TYP	A MTH	PM CU MIN-EN PH-CUT PCL-AA	PM MO MIN-EN PH-CUT PCL-AA	PM S MIN-EN PH-CUT MUL-AA	HASH	TOTAL
A 014	21.34	24.38		926	456	19	1500	1975
A 014	24.38	27.43		927	1950	61	7200	9211
A 014	27.43	30.48		928	1770	35	8300	10105
A 014	30.48	33.53		929	1980	71	7600	9651
A 014	33.53	36.58		930	1560	740	5200	7500
A 014	36.58	39.62		931	2090	780	6400	9270
A 014	39.62	42.67		932	2960	1040	8700	12700
A 014	42.67	45.72		933	2440	660	7000	10100
A 014	45.72	48.77		934	4950	390	6500	11840
A 014	48.77	51.82		935	1970	330	5800	8100
A 014	51.82	54.86		936	2120	460	6600	9180
A 014	54.86	57.91		937	2540	350	8500	11390
A 014	57.91	60.96		938	1810	275	5100	7185
A 014	60.96	64.01		939	1320	660	4800	6780
A 014	64.01	67.06		940	1840	580	4900	7320
A 014	67.06	70.10		941	1500	500	5700	7700
A 014	70.10	73.15		942	1590	350	5300	7240
A 014	73.15	76.20		943	2270	175	5400	7845
A 014	76.20	79.25		944	2510	310	7100	9920
A 014	79.25	82.30		945	2200	490	4300	6990
A 014	82.30	85.34		946	2000	340	4600	6940
A 014	85.34	88.39		947	2640	320	7800	10760
A 014	88.39	91.44		948	2150	230	7600	9980
A 014	91.44	94.49		949	4750	340	8600	13690
A 014	94.49	97.54		950	2270	330	5200	7800
A 014	97.54	100.58		951	2370	610	5500	8480
R ASY	97.54	100.58						

END OF WCPH019

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY  
INTERNATIONAL GEOSYSTEMS CORP.

SMD MINING COMPANY LIMITED  
WHITING CK PORPHYRY MO-CU DEPOSIT BC

FORMAT VERSION : 6802

DRILLHOLE/TRaverse : WCPH020	COLLAR ELEVATION: 1190.00	AZIMUTH( DEG ) : 0.00	GEOLOGGED BY : +
TOTAL DEPTH/LENGTH : 94.49	NORTHING(- IF S): 1500.00	VERTICAL ANGLE : -90.00	DATE (YY/MM/DD): 801100
CORE/HOLE DIAMETER : 2IN	EASTING (- IF W): 2290.00	CO-ORD SYSTEM : MAP	PROJECT NUMBER : 4942

F - I N T E R V A L -	CORE	T- X	TYPI- DAL	TEX- GRAIN	TOTAL PGI	STRUCTUR-1	ALTERATION	MINS	ORE-TYPE	MINS	SUMMARY
K L (UNITS = . DEC.PLACE)	RECOV- M M	ROCK	FYING MIN	TURES	CHARACS FRAC		H H H H	H H ANY	H H H ANY	ALT	ORE
E A (MT=METRIC FT=FOOTRIC)	ERY O I	TM TM	MAT TX TX	F C X M	DEN /RI T	ID STK DIP	A A A A	A A MIN	A A A MIN	- - -	
Y G F R O M - T O - I N Y ( . )	D X TYPE	1 2 QM1	1 2 F F C A	MI	1	AZM RT	QZ BI CY CB	MG GY PY CP	GL YY F I Z I		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
K F	ROCK	FM RT	TM QM2	TX TX S R S O S		T ID STK DIP	KF MU CL EP	HE XX PR MO	SL		
E L	QUAL	AGE EN- Q LC- 3	3 4	O N H / M		2	AZM RT	H H H H H H H H	H H H H	1 1	
Y G	DESIG	VIR COL		R O P C L			STRUCTUR-2	A A A A A A A A	A A A A	2 2	

/	0.00	5.49	5.49		OVER						
L											P
/	5.49	9.14	3.65		GRDR PF KF BI						
L					8A QZ HB		<F		PT DM <L <L ?		1F
								PL BF			
/	9.14	12.19	3.05		GRDR PF KF BI						
L					8A QZ HB		<F		PT DF <L <F D/		1F
								PL BF			
R	9.14	12.19		BIOTITE IS PARTLY REPLACED BY CHLORITE, HORNBLENDE IS COMPLETELY							
R	9.14	12.19		REPLACED BY CHLORITE, SERICITIEATION IS MODERATE.							
/	12.19	15.24	3.05		GRDR PF KF BI						
L					8A QZ HB		<F		PT DM <L <L DT		1F
								PL BF			
/	15.24	18.29	3.05		GRDR PF KF BI						
L					8A QZ HB		<F		PT DM <L <L ?		1F
								PB BF			
R	15.24	18.29		CHALCOPYRITE APPEARS VERY FINE-GRAINED, AS							
R	15.24	18.29		DISSEMINATIONS IN THE GROUNDMASS (PF-QZ-KF) AND IN							
R	15.24	18.29		QZ-MICROVEINS.							
/	18.29	21.34	3.05		GRDR PF KF BI						
L					8A QZ HB		<F		PT DM <L <L ?		1F
								PL BF			
/	21.34	24.38	3.04		GRDR PF KF BI						
L					8A QZ HB		<F		PT DM <L <L ?		1F
								PL BF			
/	24.38	27.43	3.05		GRDR						
L					8A		<L		? DL DB D/		1F
								PB PF			
/	27.43	30.48	3.05		GRDR						
L					8A		<L		/ DT DB D/		1F
								PB PF	DT		



K E Y	F R O M - T O - I N T R E C D V			M D	X	R O C K	T M	T M	G M 1	T X	T X	F C	X	M	T F O M	R I	1	I D	A Z M	D I P	O Z	B I	C Y	C B	M G	S Y	P Y	C P	G L	Y Y	F	I	Z	I
	L	G	R O D																															
/	30.48	33.53	3.05			GRDR										P					<F			? DL		DB DT							1F	
L	30.48	33.53				7A																PB PF				ST								
OZ-MICROVEIN WITH MO-SELVAGES AND CP-ENVELOPE.																																		
/	33.53	36.58	3.05			GRDR										P					<L			? DL		DB DL							1F	
L	33.53	36.58				7A																PB PF				DL								
/	36.58	39.62	3.04			GRDR										P					<L			? DL		DB D/							1F	
L	36.58	39.62				7A																PB PF												
/	39.62	42.67	3.05			GRDR										P					<L			PT DL		DB D/							1F	
L	39.62	42.67				7A																PB PF												
/	42.67	45.72	3.05			GRDR										P					<L			P/ DL		DB DT							1F	
L	42.67	45.72				7A																PF BL												
/	45.72	48.77	3.05			GRDR										P					<L			P/ DL		DB DT							1F	
L	45.72	48.77				8A																PF BL												
/	48.77	51.82	3.05			GRDR										P					<L			P/ DL		DB <T							1F	
L	48.77	51.82				8A																PF BL												
/	51.82	54.86	3.04			GRDR										P					<L			P/ DL		DB DT							1F	
L	51.82	54.86				8A																PF BL												
/	54.86	57.91	3.05			GRDR										P					<L			P/ DL		DB DT							1F	
L	54.86	57.91				8A																PF BL				DT								
/	57.91	60.96	3.05			GRDR										P					<L			P/ DL		DB DT							1F	
L	57.91	60.96				8A																PF BL				00								
/	60.96	64.01	3.05			GRDR										P					<L			P/ DL		DB D/							1F	
L	60.96	64.01				8A																PF BL												
/	64.01	67.06	3.05			GRDR										P					<L			/ PF DT		DB D/							1F	
L	64.01	67.06				7A																PT PT												
/	67.06	70.10	3.04			GRDR										P					<L			/ PF DT		DB D/							1F	
L	67.06	70.10				7A																PT PT				DT								
/	70.10	73.15	3.05			GRDR										P					<L			/ PF DT		DB D/							1F	
L	70.10	73.15				7A																PT PT												
R	70.10	76.20				NO COARSE CUTTINGS FROM 230 TO 250 FT.																												
/	73.15	76.20	3.05			GRDR										P					<L			/ PF DT		DB D/							1F	
L	73.15	76.20				7A																PT P?				00								
/	76.20	79.25	3.05			GRDR										P					<L			/ PF DT		DB D/							1F	
L	76.20	79.25				7A																PT PT												
/	79.25	82.30	3.05			GRDR										P					<L			/ PF DT		DB D/							1F	
L	79.25	82.30				7A																PT PT				DT								



## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CK PORPHYRY MO-CU DEPOSIT BC  
DRILLHOLE/TRVERSE --- WCPH020 --- (CONTINUED)

PAGE - 4

A UMM			PM CU	PM MO	PM S	HASH	TOTAL
A LAB			MIN-EN	MIN-EN	MIN-EN		
A TYP			PH-CUT	PH-CUT	PH-CUT		
A MTH			PCL-AA	PCL-AA	MUL-AA		
A 014	5.49	9.14	952	560	11	6400	6971
A 014	9.14	12.19	953	760	19	12500	13279
A 014	12.19	15.24	954	620	29	16900	17549
A 014	15.24	18.29	955	1240	13	7100	8353
A 014	18.29	21.34	956	457	19	15000	15476
A 014	21.34	24.38	957	685	13	19400	20098
A 014	24.38	27.43	958	283	7	16200	16490
A 014	27.43	30.48	959	138	81	34600	34819
A 014	30.48	33.53	960	6300	37	85000	91337
A 014	33.53	36.58	961	6500	33	81500	88033
A 014	36.58	39.62	962	6500	15	43800	50315
A 014	39.62	42.67	963	430	6	72600	73038
A 014	42.67	45.72	964	6500	175	33100	39775
A 014	45.72	48.77	965	1560	16	14200	15776
A 014	48.77	51.82	966	915	15	12700	13630
A 014	51.82	54.86	967	4620	32	29000	33652
A 014	54.86	57.91	968	6100	35	44300	50435
A 014	57.91	60.96	969	6000	36	30800	36836
A 014	60.96	64.01	970	4170	38	18200	22408
A 014	64.01	67.06	971	3530	295	82400	86225
A 014	67.06	70.10	972	1620	525	143000	145145
A 014	70.10	73.15	973	1220	2400	142500	146120
A 014	73.15	76.20	974	1490	580	114000	116070
A 014	76.20	79.25	975	1740	230	41400	43370
A 014	79.25	82.30	976	1270	190	34600	36060
A 014	82.30	85.34	977	1080	165	39400	40645
A 014	85.34	88.39	978	1620	70	28500	30190
A 014	88.39	91.44	979	1690	104	21700	23494
A 014	91.44	94.49	980	1520	165	21000	22685
R ASY	91.44	94.49					

END OF WCPH020

R SUM LITHOLOGY IS HOMOGENEOUS (GRANODIORITE), ALTERATION  
R SUM IS FAIR (PROPYLITIC), MAGNETITE IS COMMON NEAR TOP  
R SUM OF HOLE AND DECREASES TOWARDS BOTTOM OF THE HOLE.  
R SUM CHALCOPYRITE APPEARS THROUGHOUT THE ENTIRE HOLE,  
R SUM MOSTLY AS FINE-GRAINED DISSEMINATIONS, MO-MICRO-  
R SUM VEINS AND SELVAGES ARE ASSOCIATED WITH OZ-  
R SUM MICROVEINS.







## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CK PORPHYRY MO-CU DEPOSIT BC  
DRILLHOLE/TRVERSE --- WCPH021 --- (CONTINUED)

PAGE - 4

A UMM				PM CU	PM MO	PM S		HASH	TOTAL
A LAB				MIN-EN	MIN-EN	MIN-EN			
A TYP				PH-CUT	PH-CUT	PH-CUT			
A MTH				PCL-AA	PCL-AA	MUL-AA			
A 014	4.57	6.10	981	237	14	13200			13451
A 014	6.10	9.14	982	790	11	12500			13301
A 014	9.14	12.19	983	522	9	18300			18831
A 014	12.19	15.24	984	2100	9	15700			17809
A 014	15.24	18.29	985	1520	7	14200			15727
A 014	18.29	21.34	986	309	9	21800			22118
A 014	21.34	24.38	987	309	9	10600			10918
A 014	24.38	27.43	988	303	7	11000			11310
A 014	27.43	30.48	989	383	8	22400			22791
A 014	30.48	33.53	990	208	11	6500			6759
A 014	33.53	36.58	991	400	16	75400			79476
A 014	36.58	39.62	992	1790	7	43600			45397
A 014	39.62	42.67	993	1330	6	25500			26836
A 014	42.67	45.72	994	680	8	18200			18888
A 014	45.72	48.77	995	369	5	13900			14274
A 014	48.77	51.82	996	397	6	9700			10103
A 014	51.82	54.86	997	259	13	7400			7672
A 014	54.86	57.91	998	358	7	4800			5165
A 014	57.91	60.96	999	300	13	11900			12213
A 014	60.96	64.01	1000	401	7	10500			10908
A 014	64.01	67.06	1001	351	5	11400			11756
A 014	67.06	70.10	1002	225	5	12100			12330
A 014	70.10	73.15	1003	236	4	16300			16540
A 014	73.15	76.20	1004	119	5	10300			10424
A 014	76.20	79.25	1005	282	4	33500			33786
A 014	79.25	82.30	1006	476	11	14000			14487
A 014	82.30	85.34	1007	279	6	9500			9785
A 014	85.34	88.39	1008	234	9	5800			6043
A 014	88.39	91.44	1009	524	46	46800			47370
R ASY	88.39	91.44							

END OF WCPH021







## G E O L O G

SMD MINING COMPANY LIMITED  
WHITING CK PORPHYRY MO-CU DEPOSIT BC  
DRILLHOLE/TRVERSE --- WCPH022 --- (CONTINUED)

PAGE - 3

A UMM				PM CU	PM MD	PM S		HASH	TOTAL	
A LAB				MIN-EN	MIN-EN	MIN-EN				
A TYP				PH-CUT	PH-CUT	PH-CUT				
A MTH				PCL-AA	PCL-AA	MUL-AA				
A 014	5.18	6.10	2010	29	5	35600			35634	
A 014	6.10	9.14	2011	291	18	16200			16509	
A 014	9.14	12.19	2012	354	6	49300			49660	
A 014	12.19	15.24	2013	231	5	47600			47836	
A 014	15.24	18.29	2014	274	3	45500			45777	
A 014	18.29	21.34	2015	290	5	31400			31695	
A 014	21.34	24.38	2016	367	6	29800			30173	
A 014	24.38	27.43	2017	580	6	21000			21586	
A 014	27.43	30.48	2018	385	5	21600			21990	
A 014	30.48	33.53	2019	352	5	30700			31057	
A 014	33.53	36.58	2020	429	5	21000			21434	
A 014	36.58	39.62	2021	234	9	123600			123843	
A 014	39.62	42.67	2022	1120	25	17600			18745	
A 014	42.67	45.72	2023	1300	8	53000			54308	
A 014	45.72	48.77	2024	1020	7	47500			48527	
A 014	48.77	51.82	2025	309	6	63800			64115	
A 014	51.82	54.86	2026	413	7	34600			35020	
A 014	54.86	57.91	2027	320	9	46500			46829	
A 014	57.91	60.35	2028	326	12	35300			35638	
R ASY	57.91	60.35	END OF WCPH 022							



APPENDIX F

PERCUSSION CHIP GEOCHEMISTRY

RESULTS FOR CU, MO, S

# MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke  
705 WEST 15th STREET  
NORTH VANCOUVER, B.C.  
CANADA

## ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

### PROCEDURES FOR: Cu, Mo, Cd, Pb, Mn, Ni, Ag, Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with  $\text{HNO}_3$  and  $\text{HClO}_4$  mixture.

After cooling the samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the  $\text{CH}_2\text{H}_2$ -Air Flame combination but the Molybdenum determination is carried out by  $\text{C}_2\text{H}_2$ - $\text{N}_2\text{O}$  gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

Background corrections for Pb, Ag, Cd upon request are completed.

COMPAN Sask. Mining Dev.

PROJEC. No.: Whiting 4942

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

File No. 0 - 1

DATE: Oct

1980

ATTENTION: R. Cann

Sample Number	As 10 ppm	Se 15 ppm	Pb 20 ppm	Zn 25 ppm	Ni 30 ppm	Co 35 ppm	Ag 40 ppm	Fe 45 ppm	Hg 50 ppb	As 55 ppm	Mn 60 ppm	Au 65 ppb	Mo 70 ppm	Cu 75 ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
ABPHO30	0-90	100-100												8	44
	100-110													4	22
	110-120													3	27
	120-130													3	48
	130-140													6	24
	140-150													2	21
	150-160													3	32
	160-170													5	37
	170-180													3	21
	180-190													3	13
ABPHO30	190-200													3	14
WCPHO01	1-35	40											120	458	
	40-50												258	1040	
	50-60												158	496	
	60-70												158	725	
	70-80												97	1110	
	80-90												94	1035	
	90-100												82	965	
	100-110												99	1065	
	110-120												246	1770	
	120-130												148	1365	
	130-140												102	1960	
	140-150												86	1725	
	150-160												52	1730	
	160-170												59	1705	
	170-180												62	2150	
	180-190												49	1655	
	190-200												61	1430	
	200-210												61	1415	
WCPHO01	210-220												54	1405	

*[Handwritten signature]*

Sample Number	Mo X ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Mo ppm	Cu ppm
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
81	86	90	95	100	105	110	120	125	130	135	140	145	150	155
W.G.P.H.O.0	1-2.20	0-2.30											3.8	1,140
	2.30	0-2.40											5.7	1,159
	2.40	0-2.50											6.4	1,115
	2.50	0-2.60											7.8	1,125
	2.60	0-2.70											6.0	1,020
	2.70	0-2.80											5.2	986
	2.80	0-2.90											6.2	1,210
	2.90	0-3.00											6.8	1,135
	3.00	0-3.10											4.4	1,345
	3.10	0-3.20											2.6	763
W.G.P.H.O.0	1-3.20	0-3.30											2.7	737
A.B.P.H.#1	1-1.80	0-1.90											2	36
#2	2-2.20	0-2.30											1	59
#7	2-2.40	0-2.50											2	18
#9	2-2.10	0-2.20											2	17
#10	0-2.70	0-2.80											3	18
#11	1-1.90	0-2.00											5	22
#13	3-2.20	0-2.30											6	124
#14	4-1.50	0-1.60											3	18
#15	5-2.20	0-2.30											4	32
#16	6-5.0	0-6.0											4.5	5.5
#17	7-2.40	0-2.50											6	30
#17	7-2.50	0-2.60											6.2	45.5
#18	8-1.40	0-1.50											4	68
#19	9-1.10	0-1.20											5	163
#20	0-2.40	0-2.50											1.2	1.87
#22	2-1.90	0-1.98											1.0	3.4
#25	5-1.00	0-1.10											2	5.4
A.B.P.H.#26	6-1.80	0-1.90											2	3.5

*[Handwritten signature and initials]*

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE: (604) 980-5814

1980

Sample Number	As ppm	Cd ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm	Mo ppm
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150
WCPH002	2.10	5.1	1.10										135.8	6.0
WCPH001	1.12	0.13											14.60	1.12
WCPH003	3.80	9.0											77.0	2.00
	9.0	10.0											94.0	1.95
	1.00	1.10											103.5	1.80
	1.10	1.20											147.5	2.8
	1.20	1.30											no sample	
	1.30	1.40											190.0	1.9
	1.40	1.50											no sample	
	1.50	1.60											178.0	2.2
	1.60	1.70											165.5	1.8
	1.70	1.80											166.5	3.9
	1.80	1.90											17.8	1.3
	1.90	2.00											13.4	.9
	2.00	2.10											155.0	1.80
	2.10	2.20											147.5	2.00
	2.20	2.30											137.0	1.75
	2.30	2.40											156.5	1.85
	2.40	2.50											133.0	2.00
	2.50	2.60											136.0	1.45
	2.60	2.70											167.0	1.30
	2.70	2.80											159.0	1.35
	2.80	2.90											200.0	2.10
	2.90	3.00											no sample	
WCPH003	3.00	3.10											186.0	2.30
WCPH004	4.9	5.0											170.0	1.60
	5.0	6.0											no sample	
	6.0	7.0											177.0	2.36
	7.0	8.0											122.0	1.85
WCPH004	8.0	9.0											117.0	2.25

*[Handwritten signature and initials]*



PROJECT No. Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

198

Sample No.	Mo 10	Cd 15	Pb 20	Zn 25	Ni 30	Co 35	Ag 40	Fe 45	Hg 50	As 55	Mn 60	Au 65	Cu 70	Mo 75	
Number	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm	
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
W.C.P.H.O.0	4-9.0	-10.0											5.75	3.8	
	1.0	-11.0											3.58	1.9	
	1.1	-12.0											2.66	1.8	
	1.2	-13.0											5.40	1.1	
	1.3	-14.0											5.30	1.3	
	1.4	-15.0											5.03	0.9	
	1.5	-16.0											1.98	1.1	
	1.6	-17.0											2.12	1.1	
	1.7	-18.0											2.16	1.2	
	1.8	-19.0											14.10	7.5	
	1.9	-20.0											20.90	1.90	
	2.0	-21.0											2.94	3.2	
	2.1	-22.0											1.25	1.0	
	2.2	-23.0											1.77	0.8	
	2.3	-24.0											3.90	7.9	
W.C.P.H.O.0	4-24.0	-25.0											9.20	2.00	
W.C.P.H.O.0	3-1.1	-12.0											20.50	2.82	
W.C.P.H.O.0	3-1.1	-12.0											18.40	1.26	(Duff)

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PROJECT No.:

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## GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

FILE No. 0-

DATE: Oct

1980

ATTENTION:

R. Cann

Sample Number	6 %K	10 %S	15 %O	20 %Zn	25 %Ni	30 %Co	35 %Ag	40 %Fe	45 %Hg	50 %As	55 %Mn	60 %Au	65 %Cu	70 %Mo	75
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm	ppm
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155	
WCPH-005	30	40	58.2										40.50	1.7	
	40	50	58.3										46.30	2.3	
	50	60	58.4										29.40	1.0	
	60	70	58.5										21.60	4.2	
	70	80	58.6										26.40	7.2	
	80	90	58.7										20.60	4.6	
	90	100	58.8										30.40	10.6	
	100	110	58.9										40.80	7.4	
	110	120	59.0										31.90	12.0	
	120	130	59.1										23.80	6.9	
	130	140	59.2										28.90	6.1	
	140	150	59.3										22.30	6.9	
	150	160	59.4										19.00	8.4	
	160	170	59.5										22.00	11.5	
	170	180	59.6										17.80	7.9	
	180	190	59.7										24.70	10.0	
	190	200	59.8										26.30	16.3	
	200	210	59.9										21.80	17.2	
	210	220	60.0										19.60	11.8	
	220	230	60.1										21.90	18.8	
	230	240	60.2										29.80	16.2	
	240	250	60.3										21.70	14.3	
	250	260	60.4										19.60	14.6	
	260	270	60.5										21.00	12.7	
	270	280	60.6										24.60	11.4	
	280	290	60.7										19.00	7.2	
	290	300	60.8										15.20	6.4	
	300	310	60.9										16.40	7.2	
	310	320	61.0										15.00	5.6	
WCPH-005	320	330	61.1										15.00	6.9	

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
	ppm	ppm	ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm	Mo ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH-006	0.6-1.3	0.4-1.0	6.1, 2.1											1.2, 7.0	3.3
	1.4-1.5	0.1-1.5	6.1, 3.1											2.6, 4.0	1.8
	1.5-1.6	0.1-1.6	6.1, 4.1											1.9, 6.0	2.0
	1.6-1.7	0.1-1.7	6.1, 5.1											1.7, 2.0	5.4
	1.7-1.8	0.1-1.8	6.1, 6.1											3.6, 1.0	3.0
	1.8-1.9	0.1-1.9	6.1, 7.1											2.0, 3.0	2.2
	1.9-2.0	0.1-2.0	6.1, 8.1											1.9, 2.0	1.9
	2.0-2.1	0.1-2.1	6.1, 9.1											1.3, 3.0	5.6
	2.1-2.2	0.1-2.2	6.1, 10.1											1.3, 0.0	4.2
	2.2-2.3	0.1-2.3	6.1, 11.1											1.4, 9.0	8.1
	2.3-2.4	0.1-2.4	6.1, 12.1											1.0, 9.0	1.5
	2.4-2.5	0.1-2.5	6.1, 13.1											1.0, 7.0	1.8
	2.5-2.6	0.1-2.6	6.1, 14.1											1.9, 5.0	1.6
	2.6-2.7	0.1-2.7	6.1, 15.1											1.2, 4.0	1.7
	2.7-2.8	0.1-2.8	6.1, 16.1											1.1, 9.0	2.2
	2.8-2.9	0.1-2.9	6.1, 17.1											1.4, 1.0	2.5
	2.9-3.0	0.1-3.0	6.1, 18.1											1.4, 7.0	5.0
	3.0-3.1	0.1-3.1	6.1, 19.1											1.3, 6.0	2.3
	3.1-3.2	0.1-3.2	6.1, 20.1											1.0, 1.0	3.4
	3.2-3.3	0.1-3.3	6.1, 21.1											8.4, 0.0	?
	3.3-3.4	0.1-3.4	6.1, 22.1											9.6, 0.0	2.9
	3.4-3.5	0.1-3.5	6.1, 23.1											7.2, 0.0	2.7
	3.5-3.6	0.1-3.6	6.1, 24.1											8.9, 0.0	1.9
	3.6-3.7	0.1-3.7	6.1, 25.1											1.1, 6.0	1.8
	3.7-3.8	0.1-3.8	6.1, 26.1											1.1, 8.0	3.2
	3.8-3.9	0.1-3.9	6.1, 27.1											1.8, 6.0	1.9
	3.9-4.0	0.1-4.0	6.1, 28.1											3.8, 6.0	3.2
WCPH-006	3.2-3.3	0.1-3.3	6.1, 29.1											1.5, 2.0	4.8

*[Handwritten signature and notes]*

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

Sample Number	6 10 ppm	15 Cu ppm	20 Pb ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 Cu ppm	75 Mo ppm	80
	86 90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
WCPH-007-1	0.7-1.0	15-20	6.42				.						2.74	1.0	
	2.0-3.0	6.43					.						3.45	1.9	
	3.0-4.0	6.44					.						9.15	2.0	
	4.0-5.0	6.45					.						8.00	1.7	
	5.0-6.0	6.46					.						9.70	1.4	
	6.0-7.0	6.47					.						9.60	1.1	
	7.0-8.0	6.48					.						40.30	1.5	
	8.0-9.0	6.49					.						22.20	2.1	
	9.0-10.0	6.50					.						21.70	1.7	
	10.0-11.0	6.51					.						10.40	1.4	
	11.0-12.0	6.52					.						7.35	1.1	
	12.0-13.0	6.53					.						17.60	1.6	
	13.0-14.0	6.54					.						9.45	1.5	
	14.0-15.0	6.55					.						9.10	1.4	
	15.0-16.0	6.56					.						6.10	1.6	
	16.0-17.0	6.57					.						8.50	1.1	
	17.0-18.0	6.58					.						8.30	1.2	
	18.0-19.0	6.59					.						10.30	1.5	
	19.0-20.0	6.60					.						11.00	1.8	
	20.0-21.0	6.61					.						10.20	2.1	
	21.0-22.0	6.62					.						7.00	1.6	
	22.0-23.0	6.63					.						6.40	2.6	
	23.0-24.0	6.64					.						6.20	2.2	
	24.0-25.0	6.65					.						6.45	1.7	
	25.0-26.0	6.66					.						7.70	2.0	
	26.0-27.0	6.67					.						6.85	2.3	
	27.0-28.0	6.68					.						7.90	2.3	
	28.0-29.0	6.69					.						6.70	2.1	
	29.0-30.0	6.70					.						9.15	1.9	
WCPH-007-3	00-31.0	6.71					.						9.20	2.1	

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PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5014

1980

Sample Number	6 10 ppm	15 ppm	20 ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 Cu ppm	75 Mo ppm
W.C.P.H.-10	0.8-1.1	1.2-2.0	6.7.3										21.8	1.3
	2.0-3.0	6.7.4											35.3	1.6
	3.0-4.0	6.7.5											59.5	1.4
	4.0-5.0	6.7.6											42.4	4.6
	5.0-6.0	6.7.7											47.1	4.6
	6.0-7.0	6.7.8											39.9	1.2
	7.0-8.0	6.7.9											32.2	3.9
	8.0-9.0	6.8.0											47.0	3.8
	9.0-10.0	6.8.1											50.0	2.2
	10.0-11.0	6.8.2											44.6	1.6
	11.0-12.0	6.8.3											53.5	1.8
	12.0-13.0	6.8.4											95.0	1.5
W.C.P.H.-10	0.8-1.3	1.4-2.0	6.8.5										10.2.0	1.2
W.C.P.H.-10	0.7-1.3	1.0-3.1	6.7.2										10.2.5	1.8

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10-11-80

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

198

Sample Number	6 Mg ppm	10 Ca ppm	15 P ppm	20 K ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 Cu ppm	75 Mo ppm
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPIH-008-1	0.8-1	4.0-1.5	0.16	8.6				•						6.40	6
	1	5.0-1.6	0.16	8.7				•						8.90	15
	1	6.0-1.7	0.16	8.8				•						7.40	8
	1	7.0-1.8	0.16	8.9				•						6.20	5
	1	8.0-1.9	0.16	9.0				•						4.79	5
	1	9.0-2.0	0.16	9.1				•						9.90	12
	2	20.0-2.1	0.16	9.2				•						14.20	28
	2	1.0-2.2	0.16	9.3				•						9.80	11
WCPIH-008-2	2.0-2.2	7.1	6.9	4				•						7.50	7
WCPIH-009-3	4.0-4.0	6.9	5					•						1.64	4
	4.0-5.0	6.9	6					•						1.59	5
	5.0-6.0	6.9	7					•						17.60	2
	6.0-7.0	6.9	8					•						6.50	1
	7.0-8.0	6.9	9					•						9.30	6
	8.0-9.0	7.0	0					•						6.70	4
	9.0-10.0	7.0	1					•						20.30	2
	10.0-11.0	7.0	2					•						7.20	1
	11.0-12.0	7.0	3					•						7.80	3
	12.0-13.0	7.0	4					•						4.52	5
	13.0-14.0	7.0	5					•						19.30	11
	14.0-15.0	7.0	6					•						19.00	19
	15.0-16.0	7.0	7					•						19.60	9
	16.0-17.0	7.0	8					•						6.00	7
	17.0-18.0	7.0	9					•						5.75	3
	18.0-19.0	7.1	0					•						4.62	3
	19.0-20.0	7.1	1					•						6.90	5
	20.0-21.0	7.1	2					•						4.69	2
	21.0-22.0	7.1	3					•						4.83	2
	22.0-23.0	7.1	4					•						3.92	2
WCPIG-009-2	3.0-2.4	7.1	5					•						5.20	1.9

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
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Sample Number	Mo	Sr	Rb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	Cu	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH-009-2	4.0-2.5	0.716											5.95	1.1
	2.50-2.60	0.717											8.10	1.6
	2.60-2.70	0.718											7.80	1.4
	2.70-2.80	0.719											8.60	1.2
	2.80-2.90	0.720											7.40	1.2
	2.90-3.00	0.721											8.20	1.57
	3.00-3.10	0.722											5.35	1.78
	3.10-3.20	0.723											7.10	3.5
WCPH-009-3	2.0-3.3	0.724											11.40	6.3
WCPH-010-1	8-3.0	7.25											6.50	4.00
	3.0-4.0	7.26											9.20	2.58
	4.0-5.0	7.27											3.28	3.42
	5.0-6.0	7.28											7.80	3.22
	6.0-7.0	7.29											6.70	2.56
	7.0-8.0	7.30											10.50	6.38
	8.0-9.0	7.31											4.52	3.52
	9.0-10.0	7.32											6.20	2.29
	10.0-11.0	7.33											6.00	4.68
	11.0-12.0	7.34											5.95	2.52
	12.0-13.0	7.35											5.90	2.32
	13.0-14.0	7.36											6.40	6.39
	14.0-15.0	7.37											6.90	3.38
	15.0-16.0	7.38											9.30	3.80
	16.0-17.0	7.39											8.40	2.59
	17.0-18.0	7.40											9.70	4.70
	18.0-19.0	7.41											6.90	4.38
	19.0-20.0	7.42											5.50	3.78
	20.0-21.0	7.43											5.40	3.72
	21.0-22.0	7.44											40.6	2.67
WCPH-010-2	2.0-2.3	7.45											50.0	3.29

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

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705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
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Sample Number	6 70 ppm	10 80 ppm	15 90 ppm	20 100 ppm	25 105 ppm	30 110 ppm	35 115 ppm	40 120 ppm	45 125 ppm	50 130 ppb	55 135 ppm	60 140 ppm	65 145 ppb	70 150 ppm	75 155 ppm
WCPH-010-2			30-240	746										354	188
			240-250	747										344	172
			250-260	748										430	292
			260-270	749										401	247
			270-280	750										424	197
			280-290	751										373	194
			290-300	752										425	219
			300-310	753										440	200
			310-320	754										426	209
WCPH-010-3			20-330	755										323	217

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PROJECT No: Whiting 4942

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ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
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1980

Sample No.	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm
W.C.P.H.-0	1.1-1.1	1.1-2.0	7.56											1.20	2.66
		2.0-3.0	7.57											.92	5.28
		3.0-4.0	7.58											1.25	2.43
		4.0-5.0	7.59											.44	3.91
		5.0-6.0	7.60											1.75	5.00
		6.0-7.0	7.61											1.60	4.99
		7.0-8.0	7.62											1.25	4.95
		8.0-9.0	7.63											4.10	3.96
		9.0-10.0	7.64											3.05	2.76
		10.0-11.0	7.65											1.20	3.26
		11.0-12.0	7.66											1.30	1.98
		12.0-13.0	7.67											1.50	5.29
		13.0-14.0	7.68											2.40	1.78
		14.0-15.0	7.69											1.80	1.84
		15.0-16.0	7.70											1.90	4.38
		16.0-17.0	7.71											1.25	4.41
		17.0-18.0	7.72											1.90	.650
		18.0-19.0	7.73											1.75	6.15
		19.0-20.0	7.74											1.45	4.91
		20.0-21.0	7.75											1.00	3.52
		21.0-22.0	7.76											.86	6.70
		22.0-23.0	7.77											.32	2.38
		23.0-24.0	7.78											.69	1.49
W.C.P.H.-0	1.1-2.4	2.4-2.4	7.79											4.6	1.66

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Sask. Mining Dev.

## GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-1

PROJECT No.

Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION:

R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

1980.

PHONE (604) 980-5814

Sample Number	As ppm	Ag ppm	Co ppm	Ni ppm	Zn ppm	Pb ppm	Cd ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm	Mo ppm
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH012-21	24	30	7	80									338	20
	30	40	7	81									248	13
	40	50	7	82									725	36
	50	60	7	83									431	16
	60	70	7	84									414	19
	70	80	7	85									635	20
	80	90	7	86									480	20
	90	100	7	87									328	22
	100	110	7	88									284	14
	110	120	7	89									214	20
	120	130	7	90									299	26
	130	140	7	91									274	30
	140	150	7	92									379	78
	150	160	7	93									311	410
	160	170	7	94									338	210
	170	180	7	95									249	94
	180	190	7	96									273	60
	190	200	7	97									407	37
	200	210	7	98									462	24
	210	220	7	99									435	24
	220	230	8	00									2000	28
	230	240	8	01									720	33
	240	250	8	02									770	104
	250	260	8	03									429	84
	260	270	8	04									317	22
	270	280	8	05									348	27
	280	290	8	06									212	23
	290	300	8	07									271	20
	300	310	8	08									327	38
WCPH012-31	30	320	8	09									346	28

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GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0 -

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
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Sample Number	As ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm	Mo ppm	
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPHO1	2-320	0-330	810										348	27
WCPHO1	3-31	40-811	812										565	29
	40	50-812											725	41
	50	60-813											630	35
	60	70-814											770	245
	70	80-815											585	141
	80	90-816											640	25
	90	100-817											504	42
	100	110-818											825	118
	110	120-819											570	50
	120	130-820											370	119
	130	140-821											142	24
	140	150-822											78	14
	150	160-823											48	10
	160	170-824											48	22
	170	180-825											51	12
	180	190-826											95	24
	190	200-827											62	12
	200	210-828											58	12
WCPHO1	3-210	215-829											73	15
WCPHO1	4-13	20-830											106	10
	20	30-831											132	20
	30	40-832											128	26
	40	50-833											321	19
	50	60-834											265	28
	60	70-835											162	21
	70	80-836											128	16
	80	90-837											378	15
	90	100-838											374	20
WCPHO1	4-100	110-839											289	26

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PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Oct.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
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6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Sample Number	Ni ppm	Ni ppm	Ni ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Cu ppm	Mo ppm	
81	90	95	100	105	110	115	120	125	130	135	140	145	150	155	
WCPH014	110	120	84.0										19.0	2.6	
	120	130	84.1										13.6	1.6	
	130	140	84.2										22.5	1.3	
	140	150	84.3										25.8	2.0	
	150	160	84.4										37.6	1.2	
	160	170	84.5										5.80	1.6	
	170	180	84.6										36.4	1.8	
	180	190	84.7										36.5	1.8	
	190	200	84.8										46.1	3.00	
	200	210	84.9										23.3	7.8	
	210	220	85.0										22.6	3.9	
	220	230	85.1										26.0	1.3	
	230	240	85.2										31.7	2.6	
	240	250	85.3										120.0	1.5	
	250	260	85.4										37.5	2.2	
	260	270	85.5										19.3	2.0	
	270	280	85.6										13.6	1.9	
	280	290	85.7										9.1	1.3	
	290	300	85.8										6.9	1.0	
	300	310	85.9										6.3	8	
	310	320	86.0										6.5	6	
WCPH014	320	330	86.1										7.9	8	

*R. Cann*

GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Nov.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE: (604) 980-5814

1980

Sample Number	Cr ppm	Sr ppm	Rb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	Mo ppm	Cu ppm
6 81	10 86	15 90	20 95	25 100	30 105	35 110	40 115	45 120	50 125	55 130	60 135	65 140	70 145	75 150
WGPH-015	4	81.5	50.1	86.2									3.2	68.0
	5	81.5	60.1	86.3									2.9	36.4
	6	81.6	0.-70.1	86.4									2.6	51.9
	7	81.7	0.-80.1	86.5									2.3	54.0
	8	81.8	0.-90.1	86.6									5.3	39.8
	9	81.9	0.-100.1	86.7									8.5	40.4
	10	81.10	0.-110.1	86.8									7.9	31.6
	11	81.11	0.-120.1	86.9									5.4	30.8
	12	81.12	0.-130.1	87.0									3.1	23.6
	13	81.13	0.-140.1	87.1									1.8	17.0
	14	81.14	0.-150.1	87.2									3.8	13.7
	15	81.15	0.-160.1	87.3									6.6	20.2
	16	81.16	0.-170.1	87.4									4.3	18.5
	17	81.17	0.-180.1	87.5									5.3	32.8
	18	81.18	0.-190.1	87.6									3.6	28.4
	19	81.19	0.-200.1	87.7									4.9	23.2
	20	81.20	0.-210.1	87.8									9.7	27.8
	21	81.21	0.-220.1	87.9									16.0	34.4
	22	81.22	0.-230.1	88.0									7.7	40.8
	23	81.23	0.-240.1	88.1									5.2	40.2
	24	81.24	0.-250.1	88.2									3.9	56.5
	25	81.25	0.-260.1	88.3									6.0	57.0
	26	81.26	0.-270.1	88.4									4.1	76.5
WGPH-015	27	81.27	0.-276.1	88.5									4.6	81.0
WGPH-016	28	81.28	0.-30.1	88.6									4.9	15.0
	29	81.29	0.-40.1	88.7									2.7	9.7
	30	81.30	0.-50.1	88.8									6.9	159.0
	31	81.31	0.-60.1	88.9									9.3	363.0
	32	81.32	0.-70.1	89.0									4.8	157.0
WGPH-016	33	81.33	0.-80.1	89.1									9.0	113.0

R. Cann

PROJECT No.: Whiting 4942

MIN - EN Laboratories Ltd.

DATE: Nov.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

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Sample Number	6 10 86 90	15 98 95	20 Pb 100	25 Zn 105	30 Ni 110	35 Co 115	40 Ag 120	45 Fe 125	50 Hg 130	55 As 135	60 Mn 140	65 Au 145	70 Mo 150	75 Cu 155
WCPH-016-80-90	80.1	89.2											30.0	80.0
	90-100	89.3											22.0	130.0
WCPH-016-100-110	100.1	89.4											2.00	7.20
WCPH-017-28-30	28.1	89.5											3.9	2.1
	30-40	89.6											15.0	4.5
	40-50	89.7											15.5	2.4
	50-60	89.8											14.5	1.5
	60-70	89.9											20.5	5.0
	70-80	90.0											27.5	3.9
	80-90	90.1											30.0	3.8
	90-100	90.2											30.0	5.3
	100-110	90.3											22.0	4.2
	110-120	90.4											15.0	25.8
	120-130	90.5											13.0	41.5
	130-140	90.6											23.0	26.7
	140-150	90.7											13.5	17.3
	150-160	90.8											16.5	13.6
	160-170	90.9											6.7	26.8
	170-180	91.0											9.1	8.7
	180-190	91.1											10.4	12.3
	190-200	91.2											19.5	10.7
	200-210	91.3											14.0	9.6
	210-220	91.4											11.5	5.2
	220-230	91.5											11.70	5.7
	230-240	91.6											8.5	12.0
	240-250	91.7											6.2	16.1
	250-260	91.8											10.1	18.9
	260-270	91.9											4.5	20.9
	270-280	92.0											4.3	23.9
WCPH-017-280-290	280.1	92.1											7.8	5.35

*R. Cann*

ATTENTION: R. Cann

Sample Number	6 86	10 90	15 95	20 100	Zn ppm 105	Ni ppm 110	Co ppm 115	Ag ppm 120	Fe ppm 125	Hg ppb 130	As ppm 135	Mn ppm 140	Au ppb 145	Mo ppm 150	Cu ppm 155
WCPH-017-2	17-2	90-300	0-922											125	755
		300-310	0-923											130	1290
		310-320	0-924											81	1620
WCPH-017-3	17-3	20-330	0-925											110	1070
WCPH-019-7	19-7	0-80	926											19	456
		80-90	927											61	1950
		90-100	928											35	1770
		100-110	929											71	1980
		110-120	930											740	1560
		120-130	931											780	2090
		130-140	932											1040	2960
		140-150	933											660	2440
		150-160	934											390	4950
		160-170	935											330	1970
		170-180	936											460	2120
		180-190	937											350	2540
		190-200	938											275	1810
		200-210	939											660	1320
		210-220	940											580	1840
		220-230	941											500	1500
		230-240	942											350	1590
		240-250	943											1175	2270
		250-260	944											310	2510
		260-270	945											490	2200
		270-280	946											340	2000
		280-290	947											320	2640
		290-300	948											230	2150
		300-310	949											340	4750
		310-320	950											330	2270
WCPH-019-3	19-3	20-330	951											610	2370

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ATTENTION: R. Cann

1980.

Sample No.	Ag	Cd	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	Mo	Cu
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm
WCPH-020	18	30	95.2										11	560
	30	40	95.3										19	760
	40	50	95.4										29	620
	50	60	95.5										13	1240
	60	70	95.6										19	457
	70	80	95.7										13	685
	80	90	95.8										7	283
	90	100	95.9										81	138
	100	110	96.0										37	6300
	110	120	96.1										33	6500
	120	130	96.2										15	6500
	130	140	96.3										8	430
	140	150	96.4										175	6500
	150	160	96.5										16	1560
	160	170	96.6										15	915
	170	180	96.7										32	4620
	180	190	96.8										35	6100
	190	200	96.9										36	6000
	200	210	97.0										38	4170
	210	220	97.1										295	3530
	220	230	97.2										525	1620
	230	240	97.3										2400	1220
	240	250	97.4										580	1490
	250	260	97.5										230	1740
	260	270	97.6										190	1270
	270	280	97.7										165	1080
	280	290	97.8										70	1620
	290	300	97.9										104	1690
WCPH-020	300	310	98.0										165	1520



PROJ No.: Whiting 4942

MIND - EN Laboratories Ltd.

DATE: Nov

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

Sample Number	10 ppm	15 ppm	20 ppm	25 ppm	30 ppm	35 ppm	40 ppm	45 ppm	50 ppb	55 ppm	60 ppm	65 ppb	70 ppm	75 ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH-021	15-20	9.81												14	237
	20-30	9.82												11	790
	30-40	9.83												9	522
	40-50	9.84												9	2100
	50-60	9.85												7	1520
	60-70	9.86												9	309
	70-80	9.87												9	309
	80-90	9.88												7	303
	90-100	9.89												8	383
	100-110	9.90												11	248
	110-120	9.91												16	4060
	120-130	9.92												7	1790
	130-140	9.93												6	1330
	140-150	9.94												8	680
	150-160	9.95												5	369
	160-170	9.96												6	397
	170-180	9.97												13	259
	180-190	9.98												7	358
	190-200	9.99												13	300
	200-210	10.00												7	401
	210-220	10.01												5	351
	220-230	10.02												5	225
	230-240	10.03												4	236
	240-250	10.04												5	119
	250-260	10.05												4	282
	260-270	10.06												11	476
	270-280	10.07												6	279
	280-290	10.08												9	234
WCPH-021	290-300	10.09												46	524
WCPH-022	17-20	20.10												5	29

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COMPANY: Sask. Mining Dev.

GEOCHEMICAL ANALYSIS DATA SHEET

FILE No. 0-93

PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: Nov.

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T1  
PHONE (604) 980-5814

1980.

Sample Number	6 86	10 90	15 95	20 100	25 105	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	S ppm 150	75 155	80 160
WCPH005	260	270	605											72800		
WCPH006	90	100	618											71700		
WCPH007	110	120	652											63100		
WCPH008	70	80	679											19300		

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PROJEC. No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: NOV

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980

Sample Number	10	15	20	25	30	35	40	45	50	55	60	65	70	75	
	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	S ppm					
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH01	5.48	5.8	6.2											12000	
	5.0	6.0	6.3											35600	
	6.0	7.0	6.4											49700	
	7.0	8.0	6.5											62100	
	8.0	9.0	6.6											35300	
	9.0	10.0	8.7											29500	
	1.00	1.10	8.68											33800	
	1.10	1.20	8.69											49400	
	1.20	1.30	8.70											35200	
	1.30	1.40	8.71											52900	
	1.40	1.50	8.72											44800	
	1.50	1.60	8.73											40600	
	1.60	1.70	8.74											21100	
	1.70	1.80	8.75											32700	
	1.80	1.90	8.76											38300	
	1.90	2.00	8.77											45900	
	2.00	2.10	8.78											46400	
	2.10	2.20	8.79											36700	
	2.20	2.30	8.80											34500	
	2.30	2.40	8.81											33600	
	2.40	2.50	8.82											41900	
	2.50	2.60	8.83											46100	
	2.60	2.70	8.84											47200	
WCPH01	5.27	27.6	8.85											28800	
WCPH01	6.20	30.8	8.86											7100	
	3.0	40.8	8.87											15900	
	4.0	50.8	8.88											22300	
	5.0	60.8	8.89											17900	
	6.0	70.8	8.90											13800	
WCPH01	6.70	80.8	8.91											12100	

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PROJECT No. Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: NOV

ATTENTION: R. Cann

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980

Sample Number	MX K <sub>0m</sub>	CX ppm	K <sub>0</sub> ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	S ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150
WCPHO1	6-80	-90	,892										1,020	
	90	-100	,893										1,090	
WCPHO1	6-100	-110	,894										1,440	
WCPHO1	7-28	-30	,895										4,200	
	30	-40	,896										4,600	
	40	-50	,897										5,100	
	50	-60	,898										4,900	
	60	-70	,899										6,000	
	70	-80	,900										1,260	
	80	-90	,901										9,700	
	90	-100	,902										1,330	
	100	-110	,903										1,970	
	110	-120	,904										1,320	
	120	-130	,905										1,680	
	130	-140	,906										1,770	
	140	-150	,907										1,900	
	150	-160	,908										1,830	
	160	-170	,909										1,750	
	170	-180	,910										1,790	
	180	-190	,911										1,390	
	190	-200	,912										2,090	
	200	-210	,913										2,210	
	210	-220	,914										1,810	
	220	-230	,915										1,430	
	230	-240	,916										1,500	
	240	-250	,917										1,390	
	250	-260	,918										1,850	
	260	-270	,919										2,470	
	270	-280	,920										2,200	
WCPHO1	7-280	-290	,921										2,490	

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PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: Nov

ATTENTION: R. Cann

705 WEST 151st ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980

Sample Number	6 10 ppm	15 ppm	20 ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 As ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 S ppm	75	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH01	7.29	0.300	9.22										2.75	0.0	
	3.0	0.310	9.23										2.63	0.0	
	3.10	0.320	9.24										3.37	0.0	
WCPH01	7.32	0.330	9.25										1.74	0.0	
WCPH01	9.70	0.80	9.26										1.50	0.0	
	8.0	0.90	9.27										7.20	0.0	
	9.0	1.00	9.28										8.30	0.0	
	1.00	1.10	9.29										7.60	0.0	
	1.10	1.20	9.30										5.20	0.0	
	1.20	1.30	9.31										6.40	0.0	
	1.30	1.40	9.32										8.70	0.0	
	1.40	1.50	9.33										7.00	0.0	
	1.50	1.60	9.34										6.50	0.0	
	1.60	1.70	9.35										5.80	0.0	
	1.70	1.80	9.36										6.60	0.0	
	1.80	1.90	9.37										8.50	0.0	
	1.90	2.00	9.38										5.10	0.0	
	2.00	2.10	9.39										4.80	0.0	
	2.10	2.20	9.40										4.90	0.0	
	2.20	2.30	9.41										5.70	0.0	
	2.30	2.40	9.42										5.30	0.0	
	2.40	2.50	9.43										5.40	0.0	
	2.50	2.60	9.44										7.10	0.0	
	2.60	2.70	9.45										4.30	0.0	
	2.70	2.80	9.46										4.60	0.0	
	2.80	2.90	9.47										7.80	0.0	
	2.90	3.00	9.48										7.60	0.0	
	3.00	3.10	9.49										8.60	0.0	
	3.10	3.20	9.50										6.20	0.0	
WCPH01	9.320	0.330	9.51										5.50	0.0	

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11/21/80



GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: Whiting Ck.

MIN - EN Laboratories Ltd.

DATE: NOV.

ATTENTION: R. Cann

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE: (604) 980-5814

1980

Sample No	Mo	Fe	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	S	
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Number	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150
WCPHO20	18	30	52										64	0
	30	40	53										12	5
	40	50	54										16	9
	50	60	55										7	1
	60	70	56										15	0
	70	80	57										19	4
	80	90	58										16	2
	90	100	59										34	6
	100	110	60										85	0
	110	120	61										81	5
	120	130	62										43	8
	130	140	63										72	6
	140	150	64										33	1
	150	160	65										14	2
	160	170	66										12	7
	170	180	67										29	0
	180	190	68										44	3
	190	200	69										30	8
	200	210	70										18	2
	210	220	71										82	4
	220	230	72										14	3
	230	240	73										14	2
	240	250	74										11	4
	250	260	75										41	4
	260	270	76										34	6
	270	280	77										39	4
	280	290	78										28	5
	290	300	79										21	7
WCPHO20	300	310	80										21	0

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COMPASS Sask. Mining Dev.

PROJECT No. Whiting Ck.

ATTENTION: R. Cann

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

File No. 0-1

DATE: Nov.

1980.

Sample No.	6 Mg ppm	10 Ca ppm	15 Sr ppm	20 Ba ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 S ppm	75
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155
WCPH02	1-1.5	-20.9	81.					.						1320.0	
	2.0	-30.9	82.					.						1250.0	
	3.0	-40.9	83.					.						1830.0	
	4.0	-50.9	84.					.						1570.0	
	5.0	-60.9	85.					.						1420.0	
	6.0	-70.9	86.					.						2180.0	
	7.0	-80.9	87.					.						1060.0	
	8.0	-90.9	88.					.						1100.0	
	9.0	-100.9	89.					.						2240.0	
	10.0	-110.9	90.					.						650.0	
	11.0	-120.9	91.					.						7540.0	
	12.0	-130.9	92.					.						4360.0	
	13.0	-140.9	93.					.						2550.0	
	14.0	-150.9	94.					.						1820.0	
	15.0	-160.9	95.					.						1390.0	
	16.0	-170.9	96.					.						970.0	
	17.0	-180.9	97.					.						740.0	
	18.0	-190.9	98.					.						480.0	
	19.0	-200.9	99.					.						1190.0	
	20.0	-210.9	100.					.						1050.0	
	21.0	-220.9	100.1					.						1140.0	
	22.0	-230.9	100.2					.						1210.0	
	23.0	-240.9	100.3					.						1630.0	
	24.0	-250.9	100.4					.						1030.0	
	25.0	-260.9	100.5					.						3350.0	
	26.0	-270.9	100.6					.						1400.0	
	27.0	-280.9	100.7					.						950.0	
	28.0	-290.9	100.8					.						580.0	
WCPH02	1, 29.0	-300.9	100.9					.						4680.0	
WCPH02	2, 17.0	-20.9	101.0					.						3560.0	

COMP

Sask. Mining Dev.

GEOCHEMICAL ANALYSIS DATA SHEET

FILE No. 0-1

PROJECT No.: Whiting Ck.

MIN-EN Laboratories Ltd.

DATE: Nov.

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

1980.

ATTENTION: R. Cann

Sample Number	6 Mg ppm 86	10 Ca ppm 90	15 Cu ppm 95	20 Pb ppm 100	25 Zn ppm 105	30 Ni ppm 110	35 Co ppm 115	40 Ag ppm 120	45 Fe ppm 125	50 Hg ppb 130	55 As ppm 135	60 Mn ppm 140	65 Au ppb 145	70 S ppm 150	75 155
WCPH02	2.1	2.0	3.0	2.0	1.1									1.6	2.0
		3.0	4.0	2.0	1.2									4.9	3.0
		4.0	5.0	2.0	1.3									4.7	6.0
		5.0	6.0	2.0	1.4									4.5	5.0
		6.0	7.0	2.0	1.5									3.1	4.0
		7.0	8.0	2.0	1.6									2.9	8.0
		8.0	9.0	2.0	1.7									2.1	0.0
		9.0	10.0	2.0	1.8									2.1	6.0
		10.0	11.0	2.0	1.9									3.0	7.0
		11.0	12.0	2.0	2.0									2.1	0.0
		12.0	13.0	2.0	2.1									1.2	3.6
		13.0	14.0	2.0	2.2									1.7	6.0
		14.0	15.0	2.0	2.3									5.3	0.0
		15.0	16.0	2.0	2.4									4.7	5.0
		16.0	17.0	2.0	2.5									6.3	8.0
		17.0	18.0	2.0	2.6									3.4	6.0
		18.0	19.0	2.0	2.7									4.6	5.0
WCPH02	2.1	1.9	1.9	2.0	2.8									3.5	3.0

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APPENDIX G

SERVICE CONTRACT # 93

GRID PREPARATION

SCOPE EXPLORATION SERVICES LTD.

SMD MINING COMPANY LIMITED  
122 - 3rd Avenue North  
SASKATOON, Saskatchewan  
S7K 2H6

Service Contract

93

BETWEEN:

SMD MINING COMPANY LIMITED

as represented by L. A. Clark

Hereinafter referred to as SMDC

AND:

Scope Exploration Services Ltd.

Hereinafter referred to as the "Contractor"

WHEREAS the Contractor has agreed to supply SMDC survey line cutting and chaining hereinafter referred to as the "services", and SMDC has agreed to pay the Contractor for provision of such service upon the following terms and conditions, the parties hereto agree as follows:

1. (i) The lines are to be cut and chained in accordance with the attached approximate plans (detailed plans to be provided by SMDC before May 15th, 1980).
- (ii) Other lines, as directed by SMDC, are to be chained and flagged compass lines, picketed, or otherwise marked at 25 metre intervals.
- (iii) Established grids at both properties are to be re-chained as directed.
- (iv) The pickets are to be erected at precisely 25 metre intervals and clearly marked with a soft graphite carpenter's-type pencil in legible characters. For baselines both co-ordinates must be clearly marked on the pickets and inscribed on both

sides facing the line direction and for cross-lines both co-ordinates are to be inscribed on the side facing north.

- (v) This agreement is made on approximately 50 line kilometres of line cutting and chaining at Andrew Bay (35 km) and Whiting Creek (15 km) projects and approximately 110 km of chained and flagged compass line and re-chained existing grids at Andrew Bay (70 km) and Whiting Creek (40 km) of the Omenica Mining District in the province of British Columbia.
  - (vi) Principle<sup>al</sup> baselines are to be astronomic north-south. Cross-lines to be turned off at 90 degree angles using transit.
  - (vii) Upon conclusion of the contract work, the Contractor must provide maps indicating chained length of each baseline and cross-line, and location of topographic features such as lakes and streams with respect to cut grids of lines.
2. The Contractor agrees to furnish the above services during the period commencing May 1st, 1980 and concluding on or before July 1st, 1980.
  3. The Contractor agrees that in provision of the above described services to indemnify and save SMDC harmless from any action, inter alia, claims, suits, demands, loss and damage caused by the Contractor, his associates, or servants in the course of discharging the terms of this agreement.
  4. SMDC agrees to pay the Contractor for provision of the above described services, the sum of \$ 354.00\* per line kilometre he cuts, and \$ as per attached schedule per line kilometre of chained and flagged compass line, to be paid to the Contractor upon the Contractor submitting a written invoice of services rendered and such invoice being duly verified by an authorized officer of SMDC. Upon completion of one half of the line cutting, the Contractor may submit an initial invoice for one half

\* - If the area is more than 25% logged rendering the contract work significantly easier, the rates for line cutting, compass-flagging, and chaining will be negotiated downward through on site discussion with the SMDC Geologist.

- of the services rendered. A final invoice should be submitted upon completion of the contract, accompanied by the map(s) referred to in Section 1(vii) above, with inspection of the work by SMDC and payment to follow promptly.
5. The Contractor agrees to provide transportation to and from the line cutting area, plus all equipment and sustenance deemed necessary by SMDC to perform the line cutting.
  6. Termination of Contract: The parties hereto agree that -
    - (i) SMDC may upon giving 30 days written notice to the Contractor terminate this agreement at any time, and in such case, the Contractor shall prepare and submit his full invoice in writing up to the date of the termination representing unpaid amounts up to the date of termination of this agreement.
    - (ii) SMDC and the Contractor may by mutual agreement terminate this agreement at any time and in such case the Contractor shall prepare and submit his full invoice in writing up to the date of such termination representing unpaid accounts up to the date of termination of this agreement.
  7. The Contractor agrees that he is responsible for appropriate insurance coverage, including workers' compensation or equivalent, and all taxes related to persons employed by him in completing the contract work.
  8. Service of any written notice as provided for by this agreement heretobefore shall be served as follows:
    - (i) Service shall be upon SMDC by personal service on SMDC or any employee thereof authorized to accept service of same, or by registered post addressed to SMDC at 122 - 3rd Avenue North in Saskatoon, Saskatchewan S7K 2H6.
    - (ii) Service shall be effected upon the Contractor by either personal service or by sending it registered post to the Contractor at his regular mailing address.

9. It is understood and agreed that this agreement covers the whole contractual relationship between the Contractor and SMDC and shall not be assigned by the Contractor without the prior written consent of SMDC.
10. Notwithstanding that it is the intention of the parties that this agreement express the whole contractual relationship between them, SMDC and the Contractor may add to, delete from, vary and amend the terms of this agreement by reciprocal correspondence to that effect, without the necessity of formally amending this agreement.

Signed on behalf of:

WITNESS

M. A. Matyas

SMD MINING COMPANY LIMITED

L. A. Clark  
L. A. Clark, Exploration Manager

Date: April 16, 1980

WITNESS

Harkiss  
Box 1863  
Merrett, B.C.

CONTRACTOR

Scope Exploration Services Ltd.

Maureen Harkiss  
President

Date: April 1st. 1980



# SMD

MINING CO. LTD.  
122-3rd Avenue North,  
Saskatoon, Saskatchewan  
S7K 2H6 Telex 074-2864  
Ph. 664-5000

1980 April 16

Mr. Maurice Mathieu  
Scope Exploration Services  
P. O. Box 1101  
MERRITT, British Columbia

Dear Maurice,

Re: Grid Preparation Work - Andrew Bay  
& Whiting Creek Properties - B.C.

As discussed by telephone on April 11th, we wish to accept your bid on the above work and a copy of the signed contract is enclosed.

Additional points discussed and agreed to are as follows:

- (1) The compass and flag lines will be done by Topofil measurement with care being taken to correct for all possible errors in chainage caused by topographic variations. These lines will be well marked, blazed, and tree limbed in order to be easily followed by geological and geophysical survey crews.
- (2) The work should be completed more quickly than indicated in your April 1st letter, to which end you will add additional manpower with a view to completing the Andrew Bay work by the end of the first week in June and the Whiting Creek grids by about June 20th.
- (3) It is my understanding that a large portion of the Andrew Bay proposed grid area has been logged off, although this has not been confirmed. If it is more than 25% logged, we agreed that you would review the linecutting and other grid rates with the Project Geologist, R. M. Cann, in order to arrive at a lower rate which would be equitable to SMD Mining.

Peter E. Walcott & Associates Limited will be doing the IP and magnetic surveying and expect to start work at Andrew Bay in the latter part of May. Mr. Walcott may be in contact with you

regarding the timing of initial grid preparation. We look forward to working with you and appreciate your bidding on this contract.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "L.A. Clark".

Lloyd A. Clark  
Exploration Manager

LAC/mam  
cc: R. M. Cann

APPENDIX H

SERVICE CONTRACT # 92

GEOPHYSICS

SCOPE EXPLORATION SERVICE LTD.

SASKATCHEWAN MINING DEVELOPMENT CORPORATION

122 - 3rd Avenue North  
Saskatoon, Saskatchewan  
S7K 2H6

Service Contract # 92

BETWEEN

SMD Mining Company Limited

as represented by L. A. Clark

Hereinafter referred to as SMDC

- and -

PETER E. WALCOTT & ASSOC. LTD.

Hereinafter referred to as the "Contractor"

WHEREAS the Contactor has agreed to supply to SMDC geophysical surveys as defined in Appendix I, hereinafter referred to as the "services" and SMDC has agreed to pay to the Contractor for the provisions of such services upon the following terms and conditions, the parties hereto agree as follows:

1. The surveys are to be carried out in the Andrew Bay & Whiting Creek project area(s), NTS 93E11,14,15. The cut and chained grids are defined on the plans attached as Appendix 2.
2. The Contractor agrees to provide SMDC with field notes keying all readings to the stations of the cut lines. The final presentation of the data shall be as outlined in Appendix 1.
3. The Contractor agrees to furnish the above services during the period June 1st, 1980 up to and including July 15th, 1980.
4. The Contractor agrees that in provision of the above described

services, to indemnify and save SMDC harmless from any action, inter alia, claims, suits, demands, loss and damage caused by the Contractor, his associates or servants in the course of discharging the terms of this Agreement.

5. SMDC agrees to pay to the Contractor for the provision of the above services, the sum of see attached Appendix II
- 
- 
- 

to be paid to the Contractor upon the Contractor submitting a written invoice of service rendered and such invoice being duly verified by an officer of SMDC, so authorized.

6. The Contractor agrees to provide transportation to and from the survey area plus all equipment and sustenance<sup>\*</sup> deemed necessary by SMDC to carry out the survey.

8. The Contractor and SMDC agree that should any dispute arise over the accuracy and veracity of the geophysical readings submitted by the Contractor, that said dispute will be settled by a third impartial party, knowledgeable in the practice and study of geophysics, to be agreed upon by the Contractor and SMDC.

9. Termination of Contract: The parties hereto agree that:

(i) SMDC upon giving 30 days written notice to the Contractor may terminate this Agreement at any time, and in such case, the Contractor shall prepare and submit his full invoice in writing up to the date of the termination representing unpaid amounts up to the date of termination of this Agreement.

(ii) SMDC and Contractor may by mutual agreement terminate this Agreement at any time and in such case the contractor shall prepare and submit his full invoice in writing up to the date

\* See Appendix I

of such termination representing unpaid amounts up to the date of termination of this Agreement.

10. The Contractor agrees that he is responsible for appropriate insurance coverage, including worker's compensation or equivalent and all taxes related to persons employed by him in completing the work called for in the contract.

11. Service of any written notice as provided for by this Agreement hereto before shall be served as follows:

(i) Service shall be upon SMDC by personal service on SMDC or any employee thereof authorized to accept service of same, or by registered post addressed to SMDC at Saskatoon, in the Province of Saskatchewan.

(ii) Service shall be effected upon the Contractor by either personal service or by sending it registered post addressed to the Contractor at 605 Rutland Court, Coquitlam, B.C. V3J 3T8.

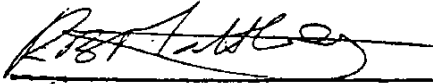
12. It is understood and agreed that this Agreement covers the whole contractual relationship between the Contractor and SMDC and shall not be assigned by the Contractor without the prior written consent of SMDC.

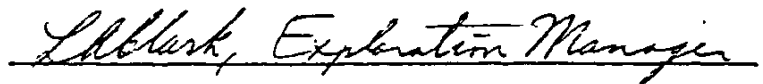
13. Notwithstanding that it is the intention of the parties that this Agreement express the whole contractual relationship between them, SMDC and the Contractor may add to, delete from, vary and amend the terms of this Agreement by reciprocal correspondence to that effect, without the necessity of formally amending this Agreement.

Signed on behalf of:

WITNESS

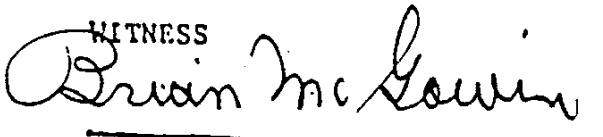
-- SMD MINING COMPANY LIMITED

  
Senior Geophysicist.

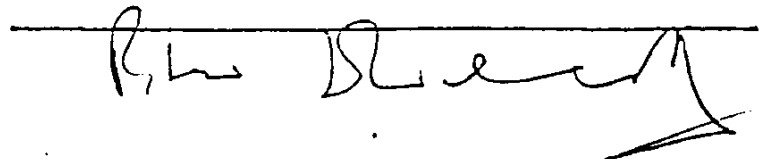
  
Exploration Manager

WITNESS

CONTRACTOR



PETER E. WALCOTT & ASSOCIATES LTD.



## NOTICE OF REQUEST FOR TENDER

SMD Mining Company Limited is accepting tenders stating all contract conditions as described below until April 10th, 1980. It is requested that tenders follow as closely as possible, the terms and conditions in the attached proposed contract form; if the contractor considers alterations, deletions, or additions to this contract form essential, he should contact SMD by telephone at the earliest possible date to discuss revisions (L. A. Clark - 306-664-6155 or R. B. Matthews - 664-6133).

1. Projects: Andrew Bay and Whiting Creek Projects, Omenica Mining District, B.C.
2. Location: Approximately 10 km northwest of Andrew Bay at Ootsa Lake along Wistaria Main logging road, and 70 miles south of Smithers and four miles NE of Tahtsa Lake.
3. Access & Transportation: Via existing logging and drill roads. A grid of drill roads was established at Whiting Creek for a drilling program in 1967. These will be repaired and other roads established for the proposed 1980 program. The Andrew property is gridded with logging roads.
4. IP & Resistivity Survey: 35 km at Andrew Bay and 15 to 20 km at Whiting Creek (total 55 km); electrode spacing - 100 m, n = 1 to 4. *Survey to be performed employing frequency domains method. LAb*
5. Magnetic Survey: 80 km at Andrew Bay and 40 km at Whiting Creek (total 120 km); readings on 50 metre intervals on E-W cut lines and N-S flagged lines (some intermediate lines and/or stations where magnetic relief high). Diurnal corrections to be made using a recording base station magnetometer.
6. Reporting: IP and resistivity data to be presented in pseudo-section form at 1:5,000 scale.

Magnetics to be contoured at an interval compatible with the data, and also presented as stacked profiles.

A report on logistics and procedures employed during the geophysical surveys is required.

7. Mobilization & Demobilization: Either to be included in the contract price or quoted as lump sum payments.
8. Accommodation: At Andrew Bay, accommodation at <sup>the Eurocan</sup> ~~a nearby~~ logging camp is ~~believed to be~~ available for the crew at ~~Contractor's~~ <sup>SMDC's</sup> expense. At Whiting Creek, SMDC agrees to provide at its cost a suitable camp, which will provide accommodation and meals for the geophysical crew. *Lab*
9. The Contractor should be adequately insured and observe all relevant Government regulations.
10. SMD does not bind itself to accept the lowest or any tender.
11. Work to commence mid May to June 1st, 1980, and continue to completion.



APPENDIX II

Option A as per Appendix I.

1.	Mobilization and demobilization from Vancouver to Andrew Bay and return - 6 crewmen & equipment (We plan to drive a truck and trailer from Vancouver to property - 2 days each way. Should we find it cheaper to fly to Smithers and rent a truck there we would reduce the the price accordingly but equipment weighs 1200 lbs. and is bulky.		\$4,300.00
2.	Provision of senior operator, transmitter operator, pulse type I.P. system	a.)	\$420.00 per survey day
		b.)	\$320.00 per standby day
3.	Provision of 3 helpers at		\$75.00 per man day
4.	Provision of 4 x 4 truck and gasoline for same and for I.P. motor		\$50.00 per day
5.	Magnetometer surveying		\$50.00 per line km
6.	Draughting		N/C

Daily charges would commence with arrival of crew at Andrew Bay and cease with departure from same.

A survey day is understood to be any day in which 4 or more hours of useful work are performed. A standby day is understood to be any day in which work is not possible due to weather, lack of orders and/or maps from client, etc. There will be no charge other than living expenses for days not worked due to unserviceability of equipment and/or crew sickness.

Based on an estimate of doing 2.4 kilometres per day our estimated cost for doing the 55 kilometres of I.P. surveying would be -

<u>1.</u>	I.P. surveying 22 days at \$695.00 per day	\$15,290.00
<u>2.</u>	Magnetometer surveying 120 kms at \$50.00 per km	6,000.00
<u>3.</u>	Mobilization	<u>4,300.00</u>
	Total estimated cost	\$25,590.00
		=====

cont'd

APPENDIX II cont'd

CR

Option B.

- |    |  |                                |
|----|--|--------------------------------|
| 1. | Mobilization as before   | \$4,300.00                     |
| 2. | I.P. surveying based on a = 100 metres, n = 1 to 4<br>minimum 50 kms | \$480.00 per<br>line kilometre |
| 3. | Magnetometer surveying   | \$50.00 per<br>line kilometre  |

It is understood that SMDC will provide

- 1.) Room and board at ~~Andrew Bay~~ and Whiting Creek <sup>and</sup> that contractor may board at Eurocan camp at Andrew Bay and charge SMDC at cost. *Llb.*
- 2.) Lines cut chained and picketed at appropriate intervals in accordance with geophysical standards.

S.M.D.C. accepts Option A

" " " 2

*Llbask*

# SMD

MINING CO. LTD.  
122-3rd Avenue North,  
Saskatoon, Saskatchewan  
S7K 2H6 Telex 074-2864  
Ph. 664-5000

1980 April 15

Mr. P. E. Walcott  
Peter E. Walcott & Associates Limited  
605 Rutland Court  
COQUITLAM, British Columbia  
V3J 3T8

Dear Mr. Walcott:

Re: IP & Mag Survey Contract - Andrew Bay  
& Whiting Creek Properties, B.C.

A signed copy of the above contract is enclosed indicating acceptance of your bid tendered together with your March 27th, 1980 letter. Appendix 1 has been amended to indicate our preference for a survey by the frequency domain method. Regarding accommodation, clause 8 has been amended to indicate that SMDC will cover the cost of housing your crew at the Eurocan logging camp while survey work is in progress at Andrew Bay. As previously stated, SMDC will provide camp facilities at Whiting Creek.

On Appendix 2, option B has been selected wherein IP surveying will be done at a flat rate of \$480 per line kilometre, mag surveying at \$50 per line kilometre and mobilization at \$4,300.

Grid preparation will be done by Maurice Mathieu of Scope Explorations Services Limited, which work is to begin at Andrew Bay property by mid-May or soon thereafter and be completed before June 10th with work at Whiting Creek to be completed on or before June 20th.

Our Geologist in charge of the work at these properties will be Robert M. Cann, and if you have any questions you can contact him directly at telephone number 306-664-6982 or our Senior Geophysicist Ron Matthews at 306-664-6163. We look forward to the results of your work on these properties.

Very sincerely,



Lloyd A. Clark  
Exploration Manager

LAC/mam

cc: R. B. Matthews  
R. M. Cann

APPENDIX I  
SERVICE CONTRACT #90  
DIAMOND DRILLING  
TONTO DRILLING COMPANY

Contract # 90

MEMORANDUM OF AGREEMENT made this 31st day of March 1980

BETWEEN: SMD MINING COMPANY LIMITED

Hereinafter referred to as "SMDC"

AND: Tonto Drilling Company  
1215 West 7th Avenue  
Vancouver, B.C.  
V6H 1B7

Hereinafter referred to as "Contractor"

WHEREAS SMDC has requested the Contractor to perform certain drilling and other services as herein set forth on its mineral disposition(s) designated as Whiting Creek in the province of

B.C.

AND WHEREAS the Contractor in consideration of payments set forth herein has agreed to perform the said drilling and other services.

THIS agreement witnesseth that the parties hereto mutually agree to the covenants hereinafter contained:

1. General

The Contractor agrees to sink standpiping and/or casing through overburden and to recover core from bedrock as directed by SMDC and to perform such other services as requested by SMDC according to conditions and provisos hereinafter set forth provided, however, that the Contractor does not unconditionally guarantee to complete any hole in which conditions are such that completion is not possible with the specified equipment and employing good drilling practice.

The Contractor agrees to operate each drill at least 20 hours per day.

2. EXTENT OF CONTRACT

The Contractor agrees to drill and SMDC agrees to pay for:

A minimum of 2500 lineal metres of diamond drilling.

A maximum of 6000 lineal metres of diamond drilling.

The metreage drilled shall be determined as the sum total of all holes duly completed and measured from the top of casing or standpipe to the bottom of the hole and shall include holes abandoned by mutual consent of the parties hereto.

SMDC reserves the right to terminate the contract at any time after completion of the minimum total metreage.

The Contractor agrees to terminate the contract at the request of SMDC at any time after the minimum metreage has been completed.

The Contractor agrees to continue drilling at the request of SMDC up to the maximum metreage.

Extension of the contract beyond the maximum metreage listed above will be subject to re-negotiation.

3. DESIGN OF PROGRAM

The parties hereto mutually agree that:

Size of core recovered shall be NO approximately 1 7/8 inches in diameter.

Maximum depth (length) of hole shall be 700 metres.

Minimum depth (length) of hole shall be 100 metres.

The angle of inclination of any hole shall not be less than 45 degrees.

In the event that cavities or loose and caving materials are encountered of a nature as to prevent the completion of any hole, then the Contractor does not, under these conditions, guarantee to drill to a predetermined depth and in the event that it becomes necessary to abandon the said hole, the Contractor shall charge SMDC for those holes abandoned, at the depth at which they were abandoned, at the footage rates specified. If required to continue on in the hole, then the Contractor has the option to revert to the hourly rate plus all materials, supplies and equipment needed at replacement cost plus 10%, subsequent to SMDC's approval.

*Lll*

4. LABOR, EQUIPMENT, MATERIALS

The Contractor, at its cost, will provide all labor including skilled operators at no time to be less than a two-man crew per shift per machine operating.

The Contractor at its cost will provide all equipment and materials necessary to properly operate and maintain drilling rigs which will specifically include the following equipment:

Drilling rig(s): one with an approximate capacity of 700 metres of NQ hole.

Sufficient standpiping and casing to leave in all holes.

Sufficient NQ rods to drill holes 700 metres in depth (length).

A quantity of quick-set cement.

Drilling mud on site or available on short notice from a nearby base.

Equipment for acid dip tests.

*Lll*

5. SCHEDULE OF RATES

5.1 Coring

SMDC agrees to pay the Contractor for drilling in bedrock to recover core at the following rates:

*Lll*

0 to 2000 metres

<u>From</u>		<u>To</u>		<u>Price per Metre</u>	
				<u>NQ</u>	<u>BQ</u>
<u>0</u>	metres	<u>150</u>	metres	<u>76.00</u>	<u>74.30</u>
<u>150</u>	metres	<u>300</u>	metres	<u>79.25</u>	<u>77.60</u>
<u>300</u>	metres	<u>450</u>	metres	<u>82.50</u>	<u>80.90</u>
<u>450</u>	metres	<u>600</u>	metres	<u>86.60</u>	<u>85.00</u>
<u>600</u>	metres	<u>750</u>	metres	<u>90.75</u>	<u>89.00</u>

2000 to 4000 metres

<u>From</u>		<u>To</u>		<u>Price per Metre</u>	
				<u>NQ</u>	<u>BQ</u>
<u>0</u>	metres	<u>150</u>	metres	<u>74.30</u>	<u>72.70</u>
<u>150</u>	metres	<u>300</u>	metres	<u>77.60</u>	<u>76.00</u>
<u>300</u>	metres	<u>450</u>	metres	<u>80.90</u>	<u>79.25</u>
<u>450</u>	metres	<u>600</u>	metres	<u>85.00</u>	<u>83.30</u>
<u>600</u>	metres	<u>750</u>	metres	<u>89.00</u>	<u>87.40</u>

4000 to 6000 metres

<u>From</u>		<u>To</u>		<u>Price per Metre</u>	
				<u>NQ</u>	<u>BQ</u>
<u>0</u>	metres	<u>150</u>	metres	<u>72.70</u>	<u>71.70</u>
<u>150</u>	metres	<u>300</u>	metres	<u>76.00</u>	<u>75.00</u>
<u>300</u>	metres	<u>450</u>	metres	<u>79.25</u>	<u>78.25</u>
<u>450</u>	metres	<u>600</u>	metres	<u>83.30</u>	<u>82.35</u>
<u>600</u>	metres	<u>750</u>	metres	<u>87.40</u>	<u>86.45</u>

*Lab*

The Contractor shall make every reasonable attempt to recover core from bedrock.



5.2 Drilling Through Overburden

SMDC agrees to pay the Contractor for penetrating unconsolidated overburden and placing casing and/or standpipe from land or ice surface to bedrock surface at the following rates:

<u>From</u>		<u>To</u>		<u>Price per Metre</u>
<u>0</u>	metres	<u>7.5</u>	metres	<u>76.00</u>
<u>7.5</u>	metres	<u>15</u>	metres	<u>79.25</u>
<u>15</u>	metres	<u>22.5</u>	metres	<u>82.50</u>
<u>22.5</u>	metres	<u>30</u>	metres	<u>86.60</u>

*LL6*

5.3 Field Cost Rates

It is mutually agreed by the parties hereto that certain costs as specified herein will not be covered by the price per metre rates but will be charged to SMDC as "field cost", according to the following schedule:

Hourly work functions including reaming, geophysical logging, cementing, setting and pulling of casing beyond six rig hours per hole, hole reduction, hole conditioning ..... \$66.00/hour.

*LL6*

It is mutually agreed that "Drill and Equipment" shall include the drilling machine, pumps, drilling rods and all other tools and accessories necessary for the operation of the drill unless otherwise specified herein. "Standby Time" is defined as any time the drill is not operating at the request of SMDC such as time required for probing holes or any delays in the drilling resulting from neglect on the part of SMDC's representative such as not having a hole spotted sufficiently in advance of drill set-up.

6. EQUIPMENT LEFT IN HOLE

It is mutually agreed by the parties hereto that the cost of materials left in holes be shared equally by the Contractor and SMDC, as defined below, except for material such as casing left in hole at SMDC request or materials lost in hole during field cost operation which will be charged to SMDC as follows:

Standpiping & Casing (new): Cost FOB drill site + 10%  
Casing (used): - 60% of (cost FOB drill site + 10%) *Let*  
Casing Shoes: new in hole - Cost FOB drill site + 10%  
                  previously used - 60% cost FOB drill site + 10%  
Drill Rods : 60% of (cost FOB drill site + 10%)  
Drill Bits : 60% of (cost FOB drill site + 10%)

In the event that SMDC decides to recover materials from a previously drilled hole, the Contractor will attempt such recovery and SMDC agrees to pay for such recovery attempt at operating field cost rates.

7. REAMING & CASING

When the Contractor deems reaming and casing in bedrock necessary to prevent cave-ins and/or to maintain return flow of drilling fluid, the Contractor's representative shall recommend same to SMDC's representative. With the consent of SMDC's representative, the Contractor will perform such reaming and casing and SMDC agrees to pay for same at operating field cost rates which shall include:

(a) Labor hours at rates specified herein.

- (b) Machine hours at rates specified herein.
- (c) \$ 3.25 per metre for wear and tear on casing used except where such casing is left in the hole at SMDC's request when it will be paid for as detailed in clause 6.

8. CEMENTING

When the Contractor deems cementing of the hole necessary to prevent cave-ins and/or maintain flow of water, the Contractor's representative shall recommend same to SMDC's representative. At the request of SMDC's representative, the Contractor shall perform such cementing and SMDC agrees to pay for same at field operating rates which shall include:

- (a) Labor at rates specified herein.
- (b) Machine hours at rates specified herein.
- (c) \$ 31.45 per bag of cement consumed. (Fondu)

Provided that, time waiting for cement to set in the hole shall be charged at Stand-By rates.

SMDC agrees to pay for redrilling of cemented holes at the rate of 30.40 per metre.

9. MUD AND ADDITIVES

The Contractor agrees when necessary to add drilling mud and such other additives to the drilling fluid and agrees to have such materials available on short notice.

SMDC agrees to pay for such drilling mud and additives at field costs specified herein.

Should the Contractor's representative deem the use of mud and/or additives necessary to optimum drilling results, he shall so notify the SMDC representative and with the consent of the SMDC representative will proceed using such mud and/or additives.

The Contractor agrees to supply such mud and/or additives and SMDC agrees to pay for same at the following rates FOB the drill site:

Quik gel or equivalent \$ \_\_\_\_\_ per \_\_\_\_\_ pound bag  
Supplier Invoice f.o.b. site plus 10%

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SMDC agrees to pay the Contractor for moving its men, equipment and supplies to the project area for a lump sum of \$ 2600.00.

SMDC agrees to pay the Contractor for removing its men, equipment and supplies from the project area for a lump sum of \$ 2600.00.

11. MOVING ON PROJECT AREA

To be at Contractor expense, for the first five hours per move.

The Contractor will rent a suitable tractor in the Contractor's name, to be operated by Contractor's personnel, the cost to be billed to SMDC without carrying charge.

*Lhb*

12. TRANSPORTATION OF MEN TO AND FROM CAMP TO DRILL SITES

The Contractor agrees that where vehicular transport of men is feasible, transport of men to and from campsite to drill sites is at its own expense.

The Contractor agrees that where vehicular transport of men to and from campsite to drill sites is not feasible, walking time will be at its own expense provided that the walking time one way does not exceed two kilometres.

13. WATER LINES

The Contractor agrees to lay, maintain and remove water lines, pumps, and heaters (if necessary) up to a distance of 1,000 metres and/or a vertical lift of 60 metres at its own expense, covered by the schedule of ratio per metre drilled.

SMDC agrees that where water lines exceed a vertical lift of 60 metres, (200 ft.) SMDC will pay the Contractor an additional metreage fee of \$ 2.00 .

Water line length in most cases shall be defined as the straight line distance between the hole and the nearest suitable water source provided however that the line may be taken around certain obstacles by mutual consent of the parties hereto.

In the event that water line length exceeds 1,000 metres a premium rate per metre of hole drilled will be charged according to the following schedule:

<u>Water Line Length</u> (metres)	<u>Premium Price Per Metre Drilled</u>	
	(summer)	(Winter)
1,000 to 1,500	\$ 1.20	\$ 2.40
1,500 to 2,000	1.60	3.20
2,000 to 2,500	2.00	4.00
2,500 to 3,000	2.40	4.80

SMDC agrees that where walking distance one way from camp to drill site exceeds two kilometres, SMDC will pay a portion of walking time at the rate of one hour per three kilometres of distance in excess of two kilometres one way.

14. CAMP

The Contractor agrees to provide at its cost a suitable camp, favourably located with respect to the drill sites, which will provide accommodation including heating and meals for the drill crews and including one heated tent for exclusive company use and meals for up to three SMDC representatives.

SMDC agrees to pay the Contractor at the rate of \$ 20.00 per man per day for meals.

In the event that the Contractor desires to make a camp move without the consent of SMDC, it may make this move at its own expense.

15. CORE HANDLING

The Contractor agrees to place the core in boxes provided by SMDC, to mark the boxes clearly with the hole number and footage included in the box and to place wooden blocks clearly marked with the footage at the end of each run.

The Contractor agrees to transport empty core boxes and lids from camp to drill site, to wire lids securely on full core boxes and to transport full boxes to a central location specified by the SMDC representative.

16. SLUDGE SAMPLING

The Contractor agrees to collect sludges at the request of the SMDC representative in containers supplied by SMDC at intervals of not less than 10 feet provided, however, that if there is no return of drilling fluid, no sludges will be collected.

17. DIP TESTS

The Contractor agrees to make acid dip test measurements as directed by the SMDC representative.

SMDC agrees to pay for dip tests at the following rates:

<u>0</u>	to	<u>300</u>	metres hole depth	\$	<u>66.00</u>	per test
<u>300</u>	to	<u>600</u>	metres hole depth	\$	<u>82.50</u>	per test
<u>600</u>	to	<u>750</u>	metres hole depth	\$	<u>99.00</u>	per test

18. DRILLING REPORTS

The Contractor agrees to complete daily drilling reports supplied by the Contractor and to submit two copies of same to SMDC's representative without delay.

The Contractor will also supply the SMDC's representative with daily reports of any third party services which may subsequently be charged to SMDC.

The SMDC's representative will examine daily reports promptly and either:

- (a) Sign the daily report and return one copy to the Contractors' representative, or
- (b) In the event of a dispute regarding charges which cannot be resolved on the job, will make qualifying notes on the report, or attached thereto, sign the report and return it to the Contractor's representative.

19. INVOICING AND PAYMENTS

The Contractor shall submit to SMDC invoices in triplicate with separate sheets for each machine in operation at the end of the first 15 days of each calendar month and at the end of each calendar month, copies shall be distributed as follows:

- (a) Two copies to the designated Project Geologist at his base of operations.
- (b) One copy to the SMDC head office in Saskatoon; to the attention of the Exploration Manager.

The Contractor shall attach to one copy of the invoice sent to the Project Geologist, copies of daily drilling reports, a price list or invoice from a recognized supplier showing prices of equipment and materials charged to SMDC, and copies of daily reports for any third party services being charged to SMDC.

Any invoice not disputed by SMDC shall be paid promptly.

In the event SMDC disputes an invoice, it will pay the undisputed portion of the invoice promptly and will attach written details of the disputed charges to a copy of the invoice and return it with payment to the Contractor.



Undisputed invoices shall be payable within 30 days of receipt by SMDC, interest on overdue accounts will be charged at 18% per annum calculated monthly.

Disputed charges will not be considered payable until 30 days after the dispute is settled.

20. RIGHTS OF WAY

SMDC agrees, at its own expense, to provide all rights-of-way, all rights of ingress and egress and all real property that may be required in connection with the said work, including real property upon which temporary buildings may be erected, and other facilities required, and shall also warrant the quiet and peaceful possession of all such real property, and hereby indemnifies and saves the Contractor harmless from any and all damages, claims, demands, costs, charges, actions, suits and other proceedings of whatever kind or character by whomsoever made, brought or prosecuted incident to this covenant by SMDC.

21. POLLUTION AND CONDITION OF PREMISES

The Contractor agrees at its own expense to keep the premises in a condition consistent with good workmanship and safe operation and to comply with all government regulations regarding pollution of air, water or land including approved disposal of waste materials and removal of all materials from the premises at the end of the job.

The Contractor agrees to indemnify and hold SMDC harmless from any or all claims, expenses, loss and damages resulting from Contractor's negligence, or Contractor's violation of any federal, provincial, municipal or other governmental law, rule or regulation.

22. INSURANCE

Contractor and any of its (his) subcontractors which are approved in writing by SMDC covenant to carry and maintain through the currency of this Agreement the following insurance with a reputable insurance company or companies with limits of not less than:

1. Workmen's Compensation - statutory amount;
2. Employer's liability - \$1,000,000.00;
3. Comprehensive General Liability Insurance, including contractual liability to cover every clause of indemnification in this Agreement:
  - a. Bodily injury - \$100,000.00 each occurrence,  
\$100,000.00 aggregate;
  - b. Property damage - \$ 50,000.00 each occurrence,  
\$100,000.00 aggregate
4. Where any motorized vehicle is to be used, Automobile Public Liability and Property Damage Insurance (including all owned, non-owned and hired automotive equipment):
  - a. Bodily injury \$1,000,000.00 each person,  
\$1,000,000.00 each occurrence;
  - b. Property damage \$ 300,000.00 each occurrence.
5. Forest Damage Liability Insurance if and as required by the Province in which the work under this Agreement is to be performed.

All insurance required under this Agreement, other than that referred to in 3 and 4 of this section, shall contain a waiver of subrogation in favour of SMDC.

Without limiting or prejudicing anything in this section, where any airplane or helicopter is to be used, the owner of such airplane or helicopter charter shall carry, and Contractor hereby ensures such charter owner shall carry the kind and amount of insurance hereinbefore provided in this section, covering all of such owner's operations relative to this Agreement.

Contractor shall deliver or cause to be delivered to SMDC (and, where applicable, Contractor hereby ensures that such charter owner shall deliver or cause to be delivered to SMDC) certificates of insurance evidencing the foregoing respective insurance coverage, naming SMDC as a co-insured, and containing an undertaking by the insurer(s) issuing such insurance to the effect that the same shall not be cancelled nor the limits thereof altered within ten (10) days prior written notice to SMDC.

23. RISK OF LOSS AND DAMAGE TO EQUIPMENT

All risk of loss and damage to any equipment, materials and supplies owned or hired by Contractor or its (his) subcontractors shall be totally borne by Contractor or any such subcontractor at all times during the performance of this Agreement and when such property is being transported to and from any area where the work hereunder is to be performed. Contractor shall indemnify and hold SMDC harmless from and against all such loss and damage. Should Contractor insure said tools and equipment, such policies of insurance shall contain a waiver of subrogation in favour of SMDC.

24. SECURITY AND NON-ACQUISITIONS

All information and data obtained by, or coming to the attention of Contractor, its (his) servants, agents and workmen during the course of the work to be performed under this Agreement shall be for the exclusive use and benefit of SMDC and shall remain SMDC's exclusive and secret property forever. Contractor hereby covenants and agrees he shall make his best effort to ensure as follows:

- 1. that neither Contractor nor any of its (his) servants, agents or workmen shall divulge to anyone, other than SMDC and its duly authorized representatives, any information concerning the progress or results of the work being conducted under this Agreement;
- 2. that neither Contractor nor any of its (his) servants, agents, or workmen shall, in any manner, make use of any information which may be gained by them in respect of the said work, except for the sole and exclusive benefit of SMDC.
- 3. that Contractor shall not, either directly or indirectly, acquire for itself or for any other person, any mineral interest within the work area or within a distance of 2 miles outside of the boundaries of the work area during 2 years after the date hereof.

25. TAXES

Contractor and its (his) subcontractor(s) shall pay all taxes, licenses and fees levied or assessed on Contractor in connection with or incident to the performance of this Agreement by any governmental

agency for sales and use tax, unemployment compensation insurance, old age benefits, social insurance, or any other taxes.

Contractor shall reimburse SMDC on demand for all such taxes or governmental charges, provincial or federal, which SMDC may be required to or deem it necessary to pay on account of employees of Contractor or its (his) subcontractors. Contractor shall furnish SMDC with the information required to enable it to make the necessary reports and to pay such taxes or charges. At its election, SMDC may deduct all sums so paid for such taxes and governmental charges from such amounts as may be or become due to Contractor hereunder.

Contractor agrees that any federal, provincial, or municipal taxes applicable to the materials, good, or equipment consumed by Contractor in the performance of this Agreement, are for the account of, and will be paid by, Contractor and that any rates or charges contained in this Agreement are inclusive of such taxes.

26. CANCELLATION

This agreement may be cancelled with the mutual consent of the parties hereto.

27. SUCCESSORS BOUND

This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns; except that, this Agreement shall not be assigned or subcontracted by Contractor without the prior written consent of SMDC.

28. SEVERABILITY

If any portion of this Agreement is invalid, illegal or contrary to law, that portion shall be stricken herefrom, and the remainder of this Agreement shall be unaffected thereby.

29. INTERPRETATION - PROVINCIAL LAWS

Any dispute arising under this Agreement shall be interpreted and determined in accordance with the laws of the Province of Saskatchewan.

30. INDEPENDENT CONTRACTOR

Contractor hereby represents to SMDC that it (he) has its (his) own business office, and notwithstanding anything to the contrary in this Agreement, express or implied, the status of Contractor shall be that

of an independent contractor and not a servant of SMDC. Further, no employee or agent of Contractor engaged on the work herein to be performed by Contractor shall be treated or considered as an employee or agent of SMDC. SMDC shall have no direction or control of Contractor, its (his) employees and agents except in the result to be obtained hereunder. Contractor shall have no authority to, and shall not, pledge the credit of SMDC.

31. FORCE MAJEURE

Notwithstanding anything in this Agreement, express or implied, any obligation of a party hereto shall be suspended for so long as such party is prevented from discharging the same, in whole or in part, by reason of any law, order or regulation or by reason of any occurrence, matter or state of affairs beyond the control of the party affected; except that, in no case shall lack of funds constitute an occurrence, matter or state of affairs beyond the control of such party.

32. SERVICE

Any notice required to be given hereunder shall be properly given if mailed by registered letter addressed to SMDC as follows:

Saskatchewan Mining Development Corporation  
122 - Third Avenue North  
SASKATOON, Saskatchewan  
S7K 2H6

or if mailed by registered letter to the Contractor as follows:

Tonto Drilling Company  
1215 West 7th Avenue  
Vancouver, B.C.  
V6H 1B7

IN WITNESS WHEREOF, the parties have executed this Agreement  
as of the day and year first mentioned above.

ATTEST:

M. A. Matyas

By L. H. Clark  
Position Exploration Manager

ATTEST:

E. Mueller

Company TONTO DRILLING COMPANY  
By J. H. Hansen  
Position Manager

APPENDIX J  
SERVICE CONTRACT #91  
PERCUSSION DRILLING  
TONTO DRILLING COMPANY

CONTRACT NO.

91

MEMORANDUM OF AGREEMENT made this 27th day of March 1980

BETWEEN:

SMD MINING COMPANY LIMITED

Hereinafter referred to as "SMDC"

AND:

TONTO DRILLING COMPANY  
1215 West 7th Avenue  
Vancouver, B.C.  
V6H 1B7

Hereinafter referred to as "Contractor"

WHEREAS SMDC has requested the Contractor to perform certain drilling and other services as herein set forth on its mineral properties designated as Andrew Bay and Whiting Creek, Omica Mining District, B.C.

AND WHEREAS the Contractor in consideration of payments set forth herein has agreed to perform the said drilling and other services.

THIS agreement witnesseth that the parties hereto mutually agree to the covenants hereinafter contained:



1. GENERAL

The Contractor agrees to sink standpiping and/or casing through overburden and to recover core from bedrock as directed by SMDC and to perform such other services as requested by SMDC according to conditions and provisos hereinafter set forth provided, however, that the Contractor does not unconditionally guarantee to complete any hole in which conditions are such that completion is not possible with the specified equipment and employing good drilling practice.

2. EXTENT OF CONTRACT

The Contractor agrees to drill and SMDC agrees to pay for:

A minimum of 6,500 lineal metres of percussion drilling

A maximum of 9,000 lineal metres of percussion drilling

The extent of contract shall be determined as the sum total of all holes duly completed and measured from the top of casing or standpipe to the bottom of the hole and shall include holes abandoned by mutual consent of the parties hereto.

SMDC reserves the right to terminate the contract at any time after completion of the minimum total metreage.

The Contractor agrees to terminate the contract at the request of SMDC at any time after the minimum metreage has been completed.

The Contractor agrees to continue drilling at the request of SMDC up to the maximum metreage.

Extension of the contract beyond the maximum metreage listed above will be subject to re-negotiation.

3. DESIGN OF PROGRAM

The parties hereto mutually agree that:

Diameter of holes shall be at least two inches.

Maximum depth (length) of hole shall be approximately 120 metres.

Minimum depth (length) of hole shall be approximately 30 metres.

Average depth of hole shall be approximately 85 metres. *280*

The angle of inclination of holes will be 90° for almost all holes.

4. LABOR, EQUIPMENT, MATERIALS

The Contractor, at its cost, will provide all labor including skilled operators at no time to be less than a two-man crew per machine operating.

The Contractor at its cost will provide all equipment and materials necessary to properly operate and maintain drilling rigs which will specifically include the following equipment:

Drilling rig: BBE-57-01 Drill with an approximate capacity of 120 metres of 2" hole.

Compressor: 750 Holman with approximate capacity of 750 CFM at 100 psi

Sufficient casing to penetrate 50 metres of overburden.

Sufficient 1 1/4" rods to drill holes up to 120 metres in depth (length).

All necessary sampling and ancillary equipment.

5. SCHEDULE OF RATES

5.1 Percussion Drilling:

SMDC agrees to pay the Contractor for test hole drilling in overburden and bedrock to recover cuttings at the following rate of \$ 18.40 per lineal metre of hole. Depth measurements used to determine amounts due Contractor shall be based on metreage as measured from top of casing.

The Contractor shall make every reasonable attempt to recover cuttings from bedrock.

5.2 Stand-By Rates:

It is mutually agreed by the parties hereto that certain costs as specified herein will not be covered by the price per metre rates but will be charged to SMDC as "stand-by", according to the following schedule:

	<u>Stand-By Time</u>	
Labor	<u>\$22.00</u>	per man hour
Drill & Equipment	<u>\$35.00</u>	per machine hour

Maximum labor stand-by time will be 8 hours per day per man including Foreman.

Maximum drill stand-by time will be 8 hours per day.

It is mutually agreed that "Drill & Equipment" shall include the drilling machine, compressor, drilling rods and all other tools and accessories necessary for the operation of the drill unless otherwise specified herein. "Stand-By Time" is defined as any time the drill is not operating at the request of SMDC or any delays in the drilling resulting from neglect on the part of SMDC's representative such as not having a hole spotted sufficiently in advance of drill set-up.

6. EQUIPMENT LEFT IN HOLE

It is mutually agreed by the parties hereto that materials left in the hole shall not be charged to SMDC except, that when more than 18.3 metres (60 feet) of casing or 100.6 metres (330 feet) of drill rods are employed, SMDC agrees to pay the Contractor for such equipment at the following rates:

Casing:	Replacement Cost plus 10%
Casing Couplings:	Replacement Cost plus 10%
Casing Ring Bits:	Replacement Cost plus 10%
Drill Rods:	Replacement Cost plus 10%
Drill Rod Coupling:	Replacement Cost plus 10%

7. MOBILIZATION

SMDC agrees to pay the Contractor for moving its men, equipment, and supplies to the project area for a lump sum of \$2,000.

SMDC agrees to pay the Contractor for removing its men, equipment and supplies from the project area for a lump sum of \$ 2,000.

8. MOVING ON PROJECT AREA

To be at Contractor's expense.

9. TRANSPORTATION OF MEN TO AND FROM CAMP TO DRILL SITES

The Contractor agrees that where vehicular transport of men is feasible, transport of men to and from campsite to drill sites is at its own expense.

The Contractor agrees that where vehicular transport of men to and from campsite to drill sites is not feasible, walking time will be at its own expense provided that the walking time one way does not exceed two kilometres.

10. CAMP

At Andrew Bay, accommodation at a nearby logging camp is believed to be available for the drill crew at Contractor's expense. At Whiting Creek, SMDC agrees to provide at its cost a suitable camp, which will provide accommodation for the two-man drill crew.

11. Sample Handling

The Contractor agrees to assist the SMDC representative in sample collection, handling, and transport to the base camp:

The Contractor agrees to provide sampling equipment to collect samples at intervals of not less than three metres (or 10 feet) provided, however, that if there is no return of cuttings, no samples will be collected. At completion of each 10 foot run the drilling medium (air and/or water) will be circulated for a sufficient length of time to clear the cuttings from the hole.

12. MUD & ADDITIVES

The Contractor agrees when necessary to add drilling mud and such other additives to the drilling fluid and agrees to have such materials available on short notice. SMDC may specify a degradable organic-based drilling mud and chemicals suitable for flushing same.

SMDC agrees to pay for such drilling mud and additives at field costs specified herein.

Should the Contractor's representative deem the use of mud and/or additives necessary to optimum drilling results, he shall so notify the SMDC representative and with the consent of the SMDC representative will proceed using such mud and/or additives.

The Contractor agrees to supply such mud and/or additives and SMDC agrees to pay for same at the following rates FOB the drill site:

Quik gel or equivalent \$ \_\_\_\_\_ per \_\_\_\_\_ pound bag

DELIVERED COST PLUS 10%

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13. DRILLING REPORTS

The Contractor agrees to complete daily drilling reports supplied by the Contractor and to submit two copies of same to SMDC's representative without delay.

The Contractor will also supply the SMDC's representative with daily reports of any third party services which may subsequently be charged to SMDC.

The SMDC's representative will examine daily reports promptly and either:

- (a) Sign the daily report and return one copy to the Contractor's representative, or
- (b) In the event of a dispute regarding charges which cannot be resolved on the job, will make qualifying notes on the report, or attached thereto, sign the report and return it to the Contractor's representative.

14. INVOICING AND PAYMENTS

The Contractor shall submit to SMDC invoices in triplicate with separate sheets for each machine in operation at the end of the first 15 days of each calendar month and at the end of each calendar month, copies shall be distributed as follows:

- (a) Two copies to the designated Project Geologist at his base of operations.
- (b) One copy to the SMDC head office in Saskatoon to the attention of the Senior Geologist-Exploration - J. S. Kermeen

The Contractor shall attach to one copy of the invoice sent to the Project Geologist, copies of daily drilling reports, a price list or invoice from a recognized supplier showing prices of equipment and materials charged to SMDC, and copies of daily reports for any third party services being charged to SMDC.

Any invoice not disputed by SMDC shall be paid promptly.

In the event SMDC disputes an invoice, it will pay the undisputed portion of the invoice promptly and will attach written details of the disputed charges to a copy of the invoice and return it with payment to the Contractor.

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1. that neither Contractor nor any of its (his) servants, agents or workmen shall divulge to anyone, other than SMDC and its duly authorized representatives, any information concerning the progress or results of the work being conducted under this Agreement;
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Saskatchewan Mining Development Corporation  
122 - Third Avenue North  
SASKATOON, Saskatchewan  
S7K 2H6

or if mailed by registered letter to the Contractor as follows:

Tonto Drilling Company  
1215 West 7th Avenue  
Vancouver, B.C.  
V6H 1B7

IN WITNESS WHEREOF, the parties have executed this Agreement  
as of the day and year first mentioned above.

ATTEST:

SASKATCHEWAN MINING DEVELOPMENT CORPORATION

M. A. N. T. J. A. S.

By L. H. Clark  
Position Exploration Manager

ATTEST:

Company TONTO DRILLING COMPANY

\_\_\_\_\_

By M. A. Hassan  
Position Manager