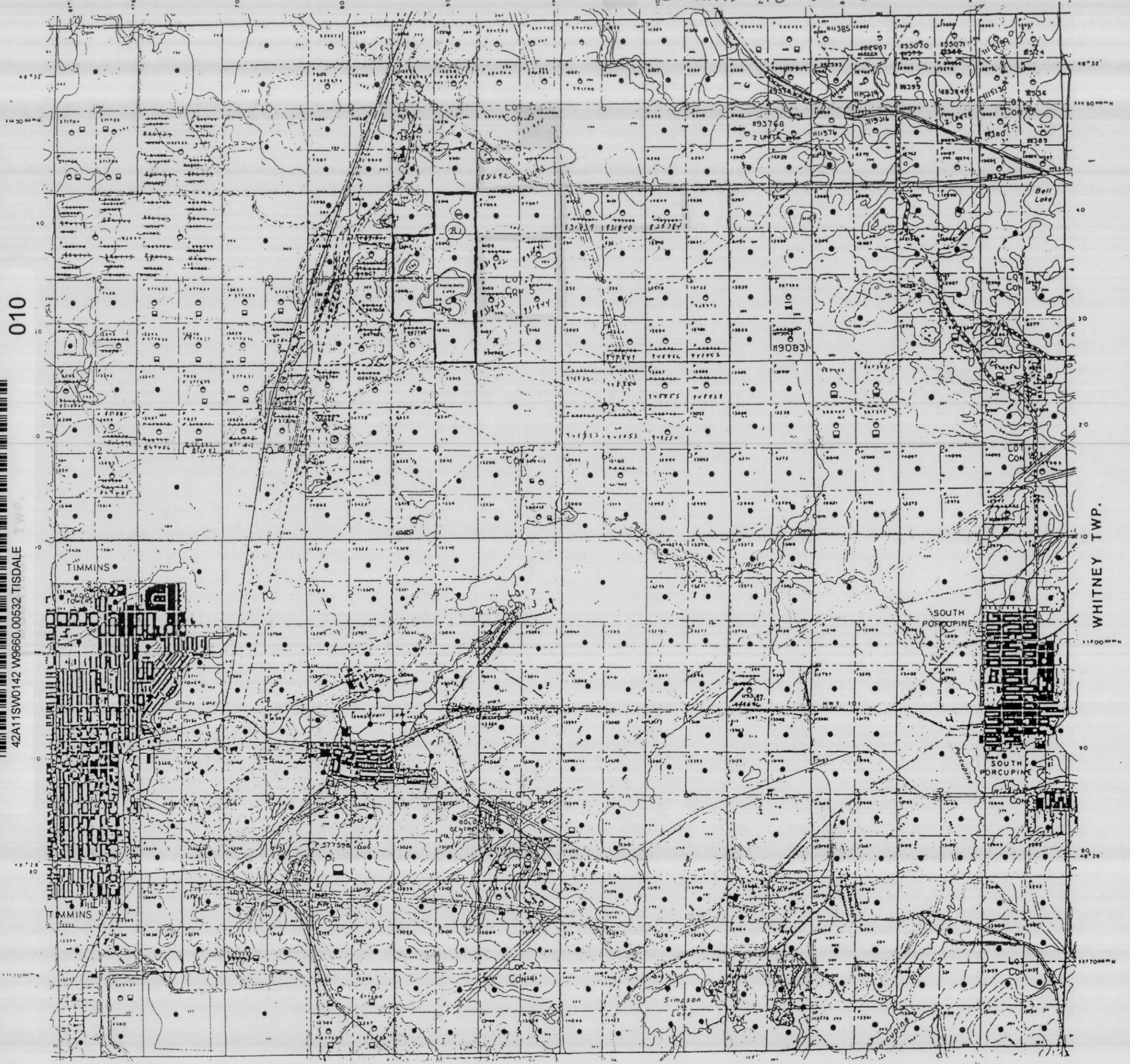
MURPHY TWP.

Claim on which drilling was done

Claims to be renewed



LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	○
" , MINING RIGHTS ONLY	◇
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	□
" , MINING RIGHTS ONLY	▽
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	∝
RESERVATION	⊙
CANCELLED	⊘
SAND & GRAVEL	○

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE 1:20 000

GRID ZONE : 17

NOTES

REGISTERED PLAN OF SUBDIVISION

TOWNSHIP

TISDALE

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE

Ministry of Natural Land Management

PENTLAND FIRTH VENTURES LTD.

Timmins ONTARIO

Tisdale Project
LOCATION PLAN MAP
HOLE PHT 01
Tisdale Township

DRAWN: A.H.R.	DATE: SEPT. 13/96
MAP No:	
DWG. No. HERSEY8	0 50 100 150 200m

SCALE: 1 : 5000

MAGNETIC

ASTRONOMIC

10°

N

EOH 300m

PHT 01
-45° Dip

200m

275m

P831694

CON. VI

Pond

POWERLINE AND ACCESS ROAD

Pond

P831692

P831693

POWERLINE

LOT 6

LOT 8

PENTLAND

LOT 7

LOT 8

LOT 7

LOT 6

LOT 5

LOT 4

EOH 300m

275m

PHT 01
-45° Dip

200m

POWERLINE AND ACCESS ROAD

P831694

Pond

Pond

P831692

P831693

PENTLAND

CON. VI

P831840

POWERLINE

P831839

CON. V

P825784

PENTLAND (TISDALE-HERSEY)

P831841

P831842

P831844

Hersey
(Charlebois)
Lake

P831843

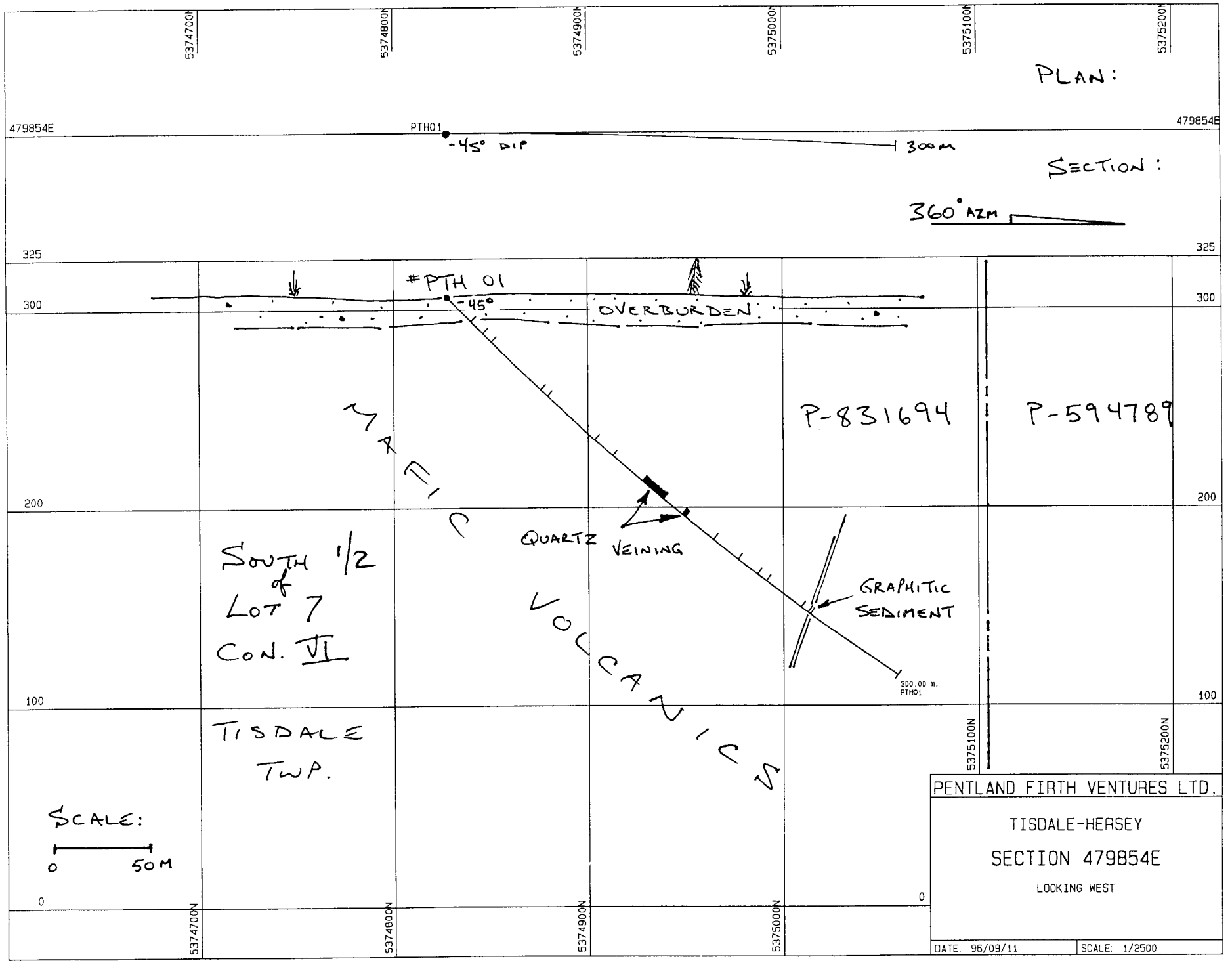
PENTLAND

N

PENTLAND FIRTH VENTURES LTD.
Timmins ONTARIO

Tisdale Project
HERSEY PROPERTY
1996 DRILLING
Tisdale Township

DRAWN A.H.R.	DATE SEPT. 13/96
MAP No.	
DWG. No. HERSEY	0 100 200 300 400m


5374700N
5374800N
5374900N
5375000N
5375100N
5375200N
PLAN:
479854E
PTH01
-45° DIP
300m
479854E
SECTION:
360° AZM
325
300
200
100
0
#PTH 01
-45°
OVERBURDEN
P-831694
P-594789
MAFIC
VOLCANICS
QUARTZ VEINING
GRAPHITIC SEDIMENT
300.00 m.
PTH01
SOUTH 1/2
of
LOT 7
CON. VI
TISDALE
TWP.
SCALE:
0
50M
PENTLAND FIRTH VENTURES LTD.
TISDALE-HERSEY
SECTION 479854E
LOOKING WEST
DATE: 96/09/11
SCALE: 1/2500

PENTLAND FIRTH VENTURES LTD.

DRILL HOLE RECORD

Property:	TISDALE PROJECT: HERSEY
EASTING:	479854.0
NORTHING:	5374828.0
Elevation:	306.000
Grid:	OVERGROWN
Collar Azi.:	360
Collar Dip:	-45
Local Ref:	\RF
Hole Length:	300.0 metres
Print Date:	11 Sep, 1996

*** Sperry Sun Tests ***

Depth	Azi.	Dip
50	1	-44
100	1	-42
150	2	-39
200	2	-38
250	3	-35
300	3	-33

Drill Hole:	PTH01
Township:	Tisdale
Claim #:	P-831694
Date Started:	SEPT 3, 1996
Completed:	SEPT 6, 1996
Logged by:	P. CALDBICK
Date(s) Logged:	SEPT 6-10, 1996
Drilled by:	BRADLEY BROS.
Core Size:	BQ
Company:	PFVL

Purpose: Collar located 200m West and 275m South of the No. 1 post. Core stored at Marlhill Mine, Timmins.

Hole Condition: CASING REMAINS, MARKED WITH 2X2 STAKE

Comments: TO TEST THE WESTERN PROJECTION OF THE NEW MINES TREND

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
.0	17.0		OVERBURDEN									
17.0	25.5		LEUCOXENE BEARING MAFIC VOLCANIC LITHOLOGY: light green fine grained weakly foliated massive leucoxene phyric basalt with scattered fractures. Unit possesses rare fractures infilled with graphite. ALTERATION: chloritic, sericitic and speckled with leucoxene flakes, rare patches of graphite. STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis, massive well indurated core with scattered fractures and localized vuggy sections MINERALIZATION: trace amounts of sulphide.									
25.5	31.5		PILLOWED MAFIC VOLCANIC FLOW	K63078	26.3	27.0	.7	2.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			LITHOLOGY: light green fine grained weakly foliated pillowed flow POSSESSING dark grey carbonaceous and graphitic selvages ORIENTED at 60 degrees to the core axis with tops to the south, unit further possesses numerous fractures infilled with chlorite.	K63079	27.0	27.9	.9	.0				
				K63080	27.9	28.3	.4	.0				
				K63081	28.3	29.0	.7	.0				
				K63082	30.7	31.2	.5	.0				
			ALTERATION: chloritic, sericitic slightly graphitic with localized carbonaceous, calcareous selvages.									
			STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis.									
			MINERALIZATION: 0.2-0.5% disseminated and massive pyrite localized at fracture fillings.									
			26.3 27.0 Numerous fractures infilled with 1-2% disseminated and massive pyrite. 27.0 27.9 Trace amounts of sulphide, localized carbonaceous and graphitic selvage 27.9 28.3 Bracket sample, trace amounts of sulphide. 28.3 29.0 30 cm barren milky with quartz-calcite vein at 25 degrees to the core axis with trace pyrite. 30.7 31.2 4 cm quartz-calcite-chlorite vein perpendicular to core axis with trace pyrite.									
31.5	66.3		MASSIVE MAFIC VOLCANIC FLOW	K63083	37.1	37.5	.4	.0				
				K63084	44.3	44.8	.5	.0				
			LITHOLOGY: fine grained to medium grained weakly foliated light green massive flow with INTERSTITIAL quartz, feldspar and chlorite. Unit speckled with approximately 5% leucoxene flakes, unit possesses rare quartz-calcite-chlorite veins. Unit quartz phyric and texture and grain size suggestive of fine grained diorite. Scattered dark grey chloritic and carbonaceous alteration patches.									
			ALTERATION: chloritic, sericitic with localized leucoxene flakes.									
			STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis.									
			MINERALIZATION: 0.1-0.3% finely disseminated pyrite throughout unit.									

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			37.1 37.5 4 cm quartz-calcite-chlorite vein at 70 degrees to the core axis with trace amounts of sulphide. 44.3 44.8 6 cm barren milky white QUARTZ VEIN at 30 degrees to the core axis.									
66.3	71.0		CARBONACEOUS MAFIC VOLCANIC Fault Zone.	P3768	67.6	68.0	.4	.0				
				P3769	68.0	68.8	.8	.0				
				P3770	68.8	69.6	.8	.0				
			LITHOLOGY: dark grey to dark green fine grained strongly foliated, contorted and fractured faulted Grey Zone with scattered quartz-calcite veins parallel to foliation.	P3771	69.6	71.0	1.4	.0				
			ALTERATION: chloritic, slightly sericitic and slightly graphitic with localized carbonaceous, calcareous sections.									
			STRUCTURE: strongly foliated and contorted and fractured with foliation at 30 to 40 degrees to the core axis, crumbled fault gouge localized at HW and FW contacts									
			MINERALIZATION: trace amounts of sulphide.									
			67.6 68.0 Scattered quartz-calcite veins up to 5 cm in width with trace pyrite. 68.0 68.8 Scattered quartz-calcite veinlets up to 4 cm in width with trace pyrite 68.8 69.6 Scattered contorted quartz-calcite veinlets at 30 degrees to the core axis with trace pyrite. 69.6 71.0 Crumbled faulted section with localized 5 cm QUARTZ VEIN, trace pyrite.									
71.0	104.0		MASSIVE MAFIC VOLCANIC FLOW	P3772	93.0	93.5	.5	.0				
				P3773	94.5	95.0	.5	.0				
			LITHOLOGY: light green fine grained weakly foliated massive unit possessing numerous fractures and slightly crumbled vuggy localized sections, unit further possesses scattered calcareous and quartz-calcite stringers and veinlets. Fine grained leucoxene flakes scattered throughout unit.									
			ALTERATION: chloritic, sericitic and weakly calcareous.									

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis, numerous fractures varying in orientation from 70 degrees to the core axis to perpendicular to core axis. MINERALIZATION: trace amounts of sulphide. 93.0 93.5 3 cm quartz-calcite vein at 30 degrees to the core axis with trace amounts of pyrite. 94.5 95.0 Sericitized alteration patches possible hyaloclastite with variolites localized at hyaloclastite margin, trace pyrite.									
104.0	116.0		MAFIC VOLCANIC FLOW LITHOLOGY: moderately to strongly foliated fine grained mafic flow with slightly fragmental texture and numerous interbanded carbonaceous and graphitic seams parallel to foliation. ALTERATION: chloritic, sericitic, graphitic and calcareous. STRUCTURE: moderately to strongly foliated with foliation at 60 to 70 degrees to the core axis. MINERALIZATION: 0.5-1% patchy and disseminated pyrrhotite, pyrite throughout unit 105.0 105.5 Fragmental section with carbonaceous matrix possessing 1-2% disseminated pyrrhotite. 105.5 106.0 1-2% patchy and disseminated pyrrhotite throughout wallrock. 106.0 106.5 Scattered quartz-calcite boudins subparallel to core axis with 0.5-1% disseminated pyrrhotite. 106.5 107.0 1-2% disseminated pyrrhotite. 107.0 108.0 1-2% disseminated pyrrhotite, 0.5-1% chalcopyrite localized along graphitic seams parallel to foliation, 5 cm quartz-calcite vein at 60 degrees to the core axis. 110.0 111.0 0.5-1% disseminated pyrrhotite localized along graphitic patches. 111.0 112.0 0.5-1% disseminated pyrite with numerous quartz-calcite stringers	P3774	105.0	105.5	.5	2.0				
				P3775	105.5	106.0	.5	2.0				
				P3776	106.0	106.5	.5	1.0				
				P3777	106.5	107.0	.5	2.0				
				P3778	107.0	108.0	1.0	2.0				
				P3779	110.0	111.0	1.0	1.0				
				P3780	111.0	112.0	1.0	1.0				
				P3781	115.5	116.0	.5	.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			and patches parallel to foliation. 115.5 116.0 5 cm localized quartz-calcite veinlet at 70 degrees to the core axis with trace amounts of sulphide.									
116.0	136.0		MASSIVE MAFIC VOLCANIC FLOW LITHOLOGY: light green fine grained weakly foliated massive unit possessing scattered quartz-calcite stringers and veinlets unit possesses localized amygdaloidal sections with quartz-calcite amygdules stretched parallel to foliation. ALTERATION: chloritic, sericitic and slightly calcareous. STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis. MINERALIZATION: trace amounts of sulphide. 126.0 126.5 2 5 cm localized quartz-calcite veins at 65 degrees to the core axis with trace pyrite.	P3782	126.0	126.5	.5	.0				
136.0	150.0		QUARTZ VEIN ZONE LITHOLOGY: dark green to dark grey fine grained moderately foliated strongly chloritic and graphitic mafic flow with numerous quartz-calcite veins generally parallel to foliation, unit possesses localized networks of fractures infilled with graphite. ALTERATION: chloritic, graphitic and calcareous with patches of potassic alteration throughout veins. STRUCTURE: moderately to strongly foliated with foliation at 50 degrees to the core axis, veins generally parallel to fabric.	P3783	136.0	136.5	.5	.0				
				P3784	136.5	137.0	.5	.5				
				P3785	138.0	138.5	.5	.0				
				P3786	138.5	139.0	.5	.0				
				P3787	139.0	140.0	1.0	.0				
				P3788	141.2	141.6	.4	.0				
				P3789	141.6	142.2	.6	.0				
				P3790	146.0	146.5	.5	.2				
				P3791	146.5	147.2	.7	.0				
				P3792	147.2	147.8	.6	.0				
				P3793	147.8	148.3	.5	.0				
				P3794	148.3	149.0	.7	.0				
				P3795	149.0	149.7	.7	.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			MINERALIZATION: 0.2-0.5% disseminated pyrite localized at vein contacts.									
			136.0 136.5 Dark grey chloritic, graphitic and carbonaceous patches with stockwork of quartz-calcite stringers and veinlets, trace pyrite. 136.5 137.0 10 cm quartz-calcite vein at 50 degrees to the core axis with 0.2-0.5% disseminated pyrite localized at vein contacts. 138.0 138.5 2 and 4 cm quartz-calcite veins localized along graphitic slips with trace amounts of sulphide. 138.5 139.0 Numerous quartz-calcite veinlets up to 5 cm parallel to foliation within graphitic alteration with trace pyrite. 139.0 140.0 Localized 5 cm quartz-calcite vein at 60 degrees to the core axis with trace pyrite. 141.2 141.6 23 cm quartz-calcite vein at 40 degrees to the core axis with patches of potassic alteration and trace pyrite. 141.6 142.2 2 10 cm carbonaceous veins at 60 degrees to the core axis with trace amounts of sulphide. 146.0 146.5 16 cm quartz-calcite vein at 40 degrees to the core axis with patches of potassic alteration and 0.1-0.2% disseminated pyrite localized at vein contacts. 146.5 147.2 3 cm quartz-calcite-chlorite vein parallel to core axis with trace amounts of sulphide. 147.2 147.8 Bracket sample, trace pyrite. 147.8 148.3 10 cm quartz-calcite vein at 40 degrees to the core axis with trace pyrite. 148.3 149.0 Bracket sample, trace pyrite, numerous quartz-calcite stringers parallel to foliation. 149.0 149.7 10 cm quartz-calcite vein at 60 degrees to the core axis with trace amounts of sulphide.									
150.0	162.5		MASSIVE MAFIC VOLCANIC FLOW LITHOLOGY: light green to dark green fine grained weakly foliated massive unit with numerous carbonaceous patches throughout. ALTERATION: chloritic, slightly sericitic and calcareous. STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis.	P3796	161.0	162.5	1.5	.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			MINERALIZATION: trace amounts of sulphide. 161.0 162.5 Bracket sample, trace amounts of sulphide, scattered carbonaceous patches.									
162.5	164.5		QUARTZ VEIN ZONE LITHOLOGY: dark green fine grained weakly foliated massive unit hosting series of quartz-calcite veins with patches of potassic alteration, HW of zone slightly fractured. ALTERATION: chloritic, calcareous with patches of blocky potassic feldspar crystals localized at vein contacts. STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis. MINERALIZATION: trace amounts of sulphide. 162.5 163.0 10 cm quartz-calcite vein perpendicular to core axis with trace pyrite. 163.0 163.5 14 cm quartz-calcite vein at 40 degrees to the core axis with patches of potassic feldspar and trace pyrite. 163.5 164.0 Blocky patches of potassic feldspar with trace amounts of sulphide. 164.0 164.5 17 cm quartz-calcite vein at 30 degrees to the core axis with patches of potassic alteration and trace amounts of sulphide.	P3797 P3798 P3799 P3800	162.5 163.0 163.5 164.0	163.0 163.5 164.0 164.5	.5 .5 .5 .5	.0 .0 .0 .0				
164.5	183.0		MASSIVE MAFIC VOLCANIC FLOW LITHOLOGY: dark green fine grained to medium grained massive unit possessing numerous quartz-calcite infilled tension gashes unit possesses local leucoxene phyric sections. ALTERATION: chloritic, sericitic and carbonaceous with localized quartz-calcite veins and patches.	P3801 P3802	164.5 172.0	165.1 172.5	.6 .5	.0 2.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			STRUCTURE: weakly foliated with foliation at 65 degrees to the core axis. MINERALIZATION: 0.2-0.5% localized massive pyritic patches and nodules. 164.5 165.1 Brecciated sericitized and calcareous patches subparallel to core axis with trace pyrite. 172.0 172.5 1-2% localized nodules of pyrite.									
183.0	199.0		MAFIC VOLCANIC FLOW LITHOLOGY: dark green fine grained moderately foliated mafic flow with numerous graphitic and carbonaceous patches parallel to foliation. ALTERATION: chloritic, graphitic slightly sericitic and calcareous alteration. STRUCTURE: moderately foliated with foliation at 35 to 40 degrees to the core axis. MINERALIZATION: trace amounts of sulphide. 183.0 183.5 10 cm quartz-calcite-chlorite vein perpendicular to core axis with trace amounts of pyrite. 183.5 184.2 3 cm quartz-calcite vein at 80 degrees to the core axis with trace amounts of sulphide. 184.2 185.0 Scattered quartz-calcite veins up to 6 cm in width at 80 degrees to the core axis with trace amounts of pyrite. 188.3 188.8 Carbonaceous and graphitic patches with trace pyrite. 189.7 190.2 Carbonaceous, calcareous patches and veinlets subparallel to core axis with trace pyrite. 194.0 195.0 Carbonaceous and sericitized fold noses parallel to core axis with 0.1-0.2% finely disseminated pyrite. 195.0 195.5 Brecciated and carbonaceous zone with styolite infilled with dolomite, trace pyrite.	P3803	183.0	183.5	.5	.0				
				P3804	183.5	184.2	.7	.0				
				P3805	184.2	185.0	.8	.0				
				P3806	188.3	188.8	.5	.0				
				P3807	189.7	190.2	.5	.0				
				P3808	194.0	195.0	1.0	.2				
				P3809	195.0	195.5	.5	.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
199.0	211.6		LEUCOXENE BEARING MAFIC VOLCANIC LITHOLOGY: light green fine grained weakly foliated massive unit, possesses leucoxene flakes throughout, further possesses boudinaged quartz-calcite stringers and veinlets generally oriented parallel to foliation. ALTERATION: chloritic, leucoxinitic, slightly sericitic with localized calcareous veinlets and boudins. STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis. MINERALIZATION: 0.1-0.2% disseminated pyrite, pyrrhotite, chalcopyrite localized at QUARTZ VEINs. 200.0 200.5 10 cm quartz-calcite-chlorite vein at 50 degrees to the core axis with 0.2-0.5% patchy chalcopyrite within vein. 208.2 208.7 0.2-0.5% disseminated pyrrhotite localized within chlorite infilled fracture.	P3810 P3811	200.0 208.2	200.5 208.7	.5 .5	.5 .5				
211.6	217.2		ALTERED PILLOWED MAFIC VOLCANIC FLOW LITHOLOGY: dark green fine grained moderately foliated brecciated pillowed flow possessing pillowed flow textures unit possesses vesicles localized proximal to selvages, graphitic selvages and localized variolitic sections, unit further possesses fragmental texture and numerous fractures infilled with graphite. ALTERATION: chloritic, graphitic slightly sericitic and calcareous. STRUCTURE: moderately foliated with foliation at 70 degrees to the core axis. MINERALIZATION: 0.2-0.5% finely disseminated pyrite, pyrrhotite throughout hostrock.	P3812 P3813 P3814 P3815 P3816 P3817 P3818	212.0 212.5 213.0 214.0 215.0 215.5 216.0	212.5 213.0 214.0 215.0 215.5 216.0 217.0	.5 .5 1.0 1.0 .5 .5 1.0	1.0 .5 .5 .2 2.0 .5 .0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			212.0 212.5 0.5-1% disseminated pyrite localized within brecciated hyaloclastite with vesicles. 212.5 213.0 0.2-0.5% disseminated pyrite throughout altered zone with numerous carbonaceous stringers. 213.0 214.0 0.2-0.5% disseminated pyrite throughout altered zone with numerous fractures infilled with graphite. 214.0 215.0 0.1-0.2% finely disseminated pyrite. 215.0 215.5 1-2% disseminated pyrite localized along graphitic seams. 215.5 216.0 0.2-0.5% finely disseminated pyrite. 216.0 217.0 Trace amounts of sulphide.									
217.2	239.5		LEUCOXENE BEARING MAFIC VOLCANIC LITHOLOGY: light green fine grained weakly foliated massive unit possessing scattered quartz-calcite veins parallel to foliation, localized moderately to strongly foliated sections proximal to QUARTZ VEINs, unit speckled with leucoxene flakes. ALTERATION: chloritic, slightly sericitic with localized quartz-calcite veins, leucoxene phyric. STRUCTURE: weakly foliated with foliation at 60 to 70 degrees to the core axis. MINERALIZATION: 0.2-0.5% disseminated pyrrhotite localized at QUARTZ VEINs. 222.2 222.6 6 cm quartz-calcite-chlorite vein at 70 degrees to the core axis with 1-2% massive patchy pyrrhotite within vein. 222.6 223.0 9 and 3 cm quartz-calcite veins at 70 degrees to the core axis with trace amounts of sulphide. 232.0 232.5 6 cm quartz-calcite vein at 70 degrees to the core axis with trace amounts of sulphide.	P3819 P3820 P3821	222.2 222.6 232.0	222.6 223.0 232.5	.4 .4 .5	2.0 .0 .0			
239.5	243.9		STRONGLY ALTERED GREY ZONE - CARBONACEOUS MAFIC VOLCANIC LITHOLOGY: dark grey to black fine grained moderately foliated Grey Zone with numerous quartz-calcite infilled tension gashes.	P3822 P3823	243.0 243.5	243.5 243.9	.5 .4	4.0 3.0				

From (m)	To (m)	Rock Type	Geology	Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
			ALTERATION: chloritic, graphitic and calcareous. STRUCTURE: moderately foliated with foliation at 70 degrees to the core axis, numerous quartz-calcite infilled tension gashes parallel to foliation. MINERALIZATION: 1-2% disseminated and patchy pyrite proximal to unit FW contact. 243.0 243.5 3-4% disseminated and patchy pyrite throughout graphitic section. 243.5 243.9 2-3% disseminated and massive pyrite localized along fractures and quartz-calcite stringers.										
243.9	245.5		GRAPHITIC/ARGILLACEOUS SEDIMENT LITHOLOGY: fine grained moderately foliated massive contorted unit with numerous patches and nodules of pyrite throughout. ALTERATION: graphitic, slightly siliceous and calcareous. STRUCTURE: moderately foliated and contorted with bedding at 70 degrees to the core axis, unit possesses crumbled faulted HW contact with fault gouge, fractured FW contact. MINERALIZATION: 6-7% massive, disseminated and nodular pyrite throughout unit. 243.9 244.5 5-6% disseminated and massive pyrite localized along bedding planes. 244.5 245.0 8-9% massive, patchy and nodular pyrite throughout unit. 245.0 245.5 3-4% massive and nodular pyrite with healed fractures infilled with quartz-calcite.	P3824 P3825 P3826	243.9 244.5 245.0	244.5 245.0 245.5	.6 .5 .5	6.0 9.0 4.0				
245.5	300.0		LEUCOXENE BEARING MAFIC VOLCANIC	P3827 P3828	248.7 251.3	249.2 251.8	.5 .5	.2 2.0				

From (m)	To (m)	Rock Type	Geology
			LITHOLOGY: light grey to light green fine grained to medium grained weakly foliated massive leucoxene phyric unit possessing numerous localized QUARTZ VEINs and quartz-calcite infilled tension gashes and contorted stringers subparallel to core axis. ALTERATION: chloritic, sericitic, slightly siliceous and calcareous unit. STRUCTURE: weakly foliated with foliation at 60 degrees to the core axis, unit possesses 2 generations of veining with primary generation parallel to fabric and 2ND generation subparallel to core axis. MINERALIZATION: 0.2-0.5% disseminated chalcopyrite localized at vein contacts. 248.7 249.2 3 2 cm quartz-calcite veinlets at 35 degrees to the core axis with 0.1-0.2% disseminated pyrite localized at vein contacts. 251.3 251.8 4 cm quartz-calcite-chlorite vein at 80 degrees to the core axis with 1-2% disseminated pyrite, pyrrhotite localized at vein contacts. 254.0 254.5 4 cm quartz-calcite vein at 50 degrees to the core axis with trace amounts of pyrite. 255.3 255.8 6 cm quartz-ankerite vein at 60 degrees to the core axis with trace amounts of sulphide. 261.5 262.0 2 4 cm QUARTZ VEINs at 80 degrees to the core axis with trace amounts of sulphide. 280.0 280.6 Quartz-calcite stringers at 30 degrees to the core axis with 0.5-1% disseminated chalcopyrite localized at vein contacts. 280.6 281.0 Quartz-calcite stringers subparallel to core axis with 0.5-1% disseminated chalcopyrite localized at vein contacts. 298.0 298.5 14 cm quartz-ankerite vein at 70 degrees to the core axis with trace amounts of sulphide. HOLE STATUS: CASING REMAINS, HOLE MARKED W 2X2 STAKE. 72 Samples sent to Swastika Labs Ltd,. At 300.0 meters EOH.

Sample	From (m)	To (m)	Lngt (m)	SUL (%)	AU (gpt)	AURE (gpt)	AUREJ (gpt)	AUAV (gpt)
P3829	254.0	254.5	.5	.0				
P3830	255.3	255.8	.5	.0				
P3831	261.5	262.0	.5	.0				
P3832	280.0	280.6	.6	1.0				
P3833	280.6	281.0	.4	1.0				
P3834	298.0	298.5	.5	.0				

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
W9660.00532

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Recorder.
- A separate copy of this form
- Technical reports and maps
- A sketch, showing the claim

ult the Mining

42A11SW0142 W9660.00532 TISDALE

900

Recorded Holder(s): PENTLAND FIRTH VENTURES LTD.		Client No.: 300694
Address: P.O. Box 1690 SOUTH PORCUPINE ONT.		Telephone No.: (705) 235-2311
Mining Division: PORCUPINE	Township/Area: TISDALE TWP.	M or G Plan No.: G-3976
Dates Work Performed From: SEPTEMBER 3, 1996	To: SEPTEMBER 6, 1996	

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	
✓	Physical Work, Including Drilling	DIAMOND DRILLING
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ 15,276

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
BRADLEY BROTHERS	Hwy 101 W., Timmins Ont.

(attach a schedule if necessary)

RECORDED
SEP 20 1996
Receipt

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date: Sept. 20/96	Recorded Holder or Agent (Signature):

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying		
Ken Tylee P.O. Box 1690 South Porcupine, Ontario		
Telepone No.: (705) 235-2311	Date: Sept. 20/96	Certified By (Signature):

For Office Use Only

Total Value Cr. Recorded: $15,276.	Date Recorded:	Mining Recorder:	Recorded Holder:
	Deemed Approval Date: DEC. 19/96	Date Approved: Dec 19/96	
	Date Notice for Amendments Sent:		

RECEIVED
SEP 20 1996
4/8
PORCUPINE MINING DIVISION

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	P831694	1	15,276	1200	10,800	3276
	P831692	1		1200		
	P831693	1		1200		
	P831839	1		1200		
	P831840	1		1200		
	P831841	1		1200		
	P831842	1		1200		
	P831843	1		1200		
	P831844	1		1200		
	P825784	1		1200		
	10		15,276	12,000	10,800	3276
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0241 (03/91)

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

	Signature	Date
I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.		

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W9660.00532

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit	Total Cost
Diamond Drilling	300m	50.31/m	15,093
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs		0.61/m	183
Food and Lodging Costs			
		Total Value of Assessment Work	$15,276.00

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, JANE A. McCAW (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as PROPERTY ADMINISTRATOR (recorded holder, agent, or state company position with signing authority). I am authorized to make this certification.

Signature: Jane McCaw Date: Sept. 20/96

MURPHY TWP.

MAP SYMBOLOGY

- Aerial Cableway
- Boundary
  - International
  - Interprovincial
  - District, Township Indian Reserve
  - Approximate
  - Lot, Concession
  - Approximate
  - Park Boundary
- Bridge
- Road, Railroad
- Building
- Chimney
- Cliff, Pit, Pile
- Contours
  - Intermediate
  - Approximate
  - Depression
- Control Points
  - Horizontal
  - Vertical
- Culvert
- Falls
  - Double Line River
- Fence, Hedge, Wall
- Feature Outline (Construction Features, etc.)
- Flooded Land
- Lock
- Marsh or Swamp
- Mast
- Mine Head Frame
- Outcrop
- Pipeline (above ground)
- Railroad
  - Single Track
  - Double Track
  - Abandoned
  - Turntable
- Road
  - Highway, County Township
  - Access (road of doubtful maintenance or significant driveway)
  - Trail, Bush Road (portage, winter)
- Rapids
  - Double Line River with Multiple Rapids
  - Double Line River with Multiple Rapids
- Reservoir
- River, Stream, Canal
  - Approximate Seasonal
  - Direction of Flow
- Rock
  - Significant
  - Shoal
- Spot Elevation (Tidal Elevations) -300.0
- Tower
- Transmission Line
  - Poles
  - Pylons
- Tunnel
- Utility Poles
- Wharf, Dock, Pier
- Wooded Area

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY

S.R.O. – SURFACE RIGHTS ONLY

M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

(R2) — THE SURFACE AND MINING RIGHTS ARE WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT RSO 1990, DATED MAY 29, 1996 AT ... ORDER NO. W-P-23/96 NER

(R1) MINING RIGHTS ONLY WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT RSO 1990 DATED 02-MAY-27 AT 13:20 E.S.T. ORDER NO. W-P-28/92 NER

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

MOUNTJOY TWP.

WHITNEY TWP.

DELORO TWP.

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS PARCELS ETC.
- UNSURVEYED LINES
  - LOT LINE
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◒
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◨
" MINING RIGHTS ONLY	◨
LICENCE OF OCCUPATION	▼
ORDER IN COUNCIL	OC
RESERVATION	⊕
CANCELLED	⊗
SAND & GRAVEL	⊕

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

Metres 500 0 1000 Metres

Chains 10 0 10 20 30 40 50 60 70 Chains

Feet 500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000

GRID ZONE 17

NOTES

REGISTERED PLAN OF SUBDIVISION

12

TOWNSHIP

TISDALE

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE

42A11SW0142 W9660.00532 TISDALE

200

ORIGINAL COMPILATION JULY 1984

REVISED

Number G-3976