

DIAMOND DRILLING



42A06NE0302 30 SHAW

010

TOWNSHIP: SHAW

REPORT No.: 30

WORK PERFORMED BY: ROSARIO RESOURCES LTD.

<u>CLAIM No.</u>	<u>HOLE No.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
P 528604	WS 81-2	651.0	Jan/81	(1)
P 500914	WS 81-1	598.0	Jan/81	(2)
P 500913				
500909	WS 81-3	720.0	Feb/81	(2)
P 500909	WS 81-5	171.0	Feb/81	(2)

NOTES:

(1) #241-81 (WHITNEY TWP.)

(2) #243-81



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

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HOLE NO. WS81-2. PAGE NO. 1

DRILLING COMPANY Norex Drilling Ltd.		COLLAR ELEVATION 0	BEARING OF HOLE FROM TRUE NORTH 200°	TOTAL FOOTAGE 651	DIP OF HOLE AT collar -55	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM L 52 E 27 + 00 S	MAP REFERENCE NO.	CLAIM NO. P. 528604
DATE HOLE STARTED Jan. 31, 1981	DATE COMPLETED Feb. 7, 1981	DATE LOGGED Feb. 12/81	LOGGED BY A. Philippon	200 ft -52	LOCATION (Tp., Lot, Con. OR Lat. and Long.) Shaw Twp. Lot 4, Con V N½, NW¼			
EXPLORATION CO., OWNER OR OPTIONEE Rosario Resources Canada Ltd.		DATE SUBMITTED June 8/81	SUBMITTED BY (Signature) <i>A. Philippon</i>	400 ft -52			PROPERTY NAME Rosario, Whitnev-Shaw	
				650 ft -56				

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au	ppb
0.0	16.0	Overburden	Casing- left in hole								
16.0	27.0	Rusty Quartz Porphyry	Rusty-coloured rock is well fractured, sheared + carbonated qtz-porphry. Much broken rock. Schistosity (sericite) is from 65° to 75° to C.A.	65-75°							
27.0	52.0	Sheared Volcanic Qtz.-Porphyry	Greenish-grey, fg. qtz. porphyry is moderately altered, well sericitized, sheared + locally lightly carbonated. Qtz. phenocrysts are up to 4 mm in diameter, blurred feldspars are discernible on breaks. Sporadic minor dissemination of Cubic pyrite occurs and is slightly increasing from 45'-53'. 43.0'- Schistosity at 65° to C.A. 48.5'- ½" wide carbon. micaceous dikelet parallel to schistosity	65°		12046 12047	45.0 49.0	49.0 52.0	4.0 3.0	7 3	
52.0	64.0	Altered Lamprophyre Dike	Greenish-grey, massive to schistose, med. grained-micaceous rock, carbon. pervasively throughout + to within 3 feet of bottom contact where rock becomes again more massive + chloritic. 0.5-1.0% dissemin. py throughout. Upper sharp contact at 60° to C.A., lower contact appears transitional. 52.9-53.2'- narrow remnant section of qtz. porphyry same as unit above. Lamprophyre above is finer grained + massive, below it is schistose. 57.0'- Schistosity at 65° to C.A.	60°		12048 12049 12050 12101	52.0 55.0 58.0 60.5	55.0 58.0 60.5 64.0	3.0 3.0 2.5 3.5	1 11 10 10	
64.0	68.3	Chlorite-qtz. Carb. Schist.	Green chlorite schist with narrow irregular qtz.-carb. bands, stretched aggregates of py. Lower chloritized contact at 55° to C.A.	55°		12102 12103	64.0 67.0	67.0 70.0	3.0 3.0	4 11	

* For features such as foliation, bedding, schistosity, measured from the long axis of the core. Additional credit available. See Assessment Work Regulations.



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
WS81-2	2
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft			LOCATION (Tp., Lot, Con. OR Lat. and Long.)
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft			
				ft			

FOOTAGE FROM TO		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM TO		SAMPLE LENGTH	ASSAYS + Au ppb Ag As Pb Zn				
68.3	74.0	Altered Aplite Dike	Alternating fg. fresher + lighter coloured rock contains spotty chlorite with disseminated py. and more carb. + schistose sections. Lower contact is in broken core.			12104	70.0	74.0	4.0	8				
74.0	83.7	Carb.-Sericitized Schist. Minor py	Light-grey schistose rock is silicified + carbonated with the development of fuchsite-sericite micas. Minor py occurs. Schistosity ranges from 30-50° to C.A. Lower contact is sharp at 80° to C.A.	30-50° 80°		12105 12106 12107	74.0 77.0 80.0	77.0 80.0 83.7	3.0 3.0 3.7	4 5 1				
83.7	89.0	Lamprophyre Dike	F.g. grey to darkgrey, massive lamprophyre dike. Fine to cubic pyrite near contact nor along fracture-slips. Inclusion of fuchsite rich rock 0.3' wide near chilled bottom contact which is nearly at right angles to C.A.		86'	12108	83.7	86.0	2.3	4				
89.0	100.0	Layered or Bedded Carb. rock	Harder, greenish-grey, both ankeritic + calcitic carb. rock shows good layering or bedding at 60° to C.A. at 93'. 91.0'- 1" wide barren qtz. strg. 95.3-96.0'- bedded fuchsite-qtz. with py + po at 60° to C.A.	60° 60°		12109 12110	95.0 96.0	96.0 100.0	1.0 4.0	5 4				
100.0	113.9	Silicified Carb. Fault Zone	Brown oxidized, well fractured, brecciated + broken rock. Calcitic alteration throughout. Alternating qtz-rich sections with some chlorite but very minor py. 100.0-109.0'- broken core, 4' core ground.		///'	12111 12112 12113 12114 12115	100.0 103.0 106.0 109.0 111.0	103.0 106.0 109.0 111.0 114.0	3.0 3.0 3.0 2.0 3.0	4 8 7 7 11				
113.9	141.3	Grey qtz. Rich Carb. Rock - Aplite Dike	Strong qtz. carb. banding, narrow fragmented-mottled - on calcite rich section. Rock appears predominantly ankeritic, py content is minor.		136'	12116 12117 12118	114.0 135.5 137.5	117.0 137.5 141.2	3.0 2.0 3.7	10 8 14		1	15	10 83



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS81-2	PAGE NO. 3
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft		
					ft		

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS + ppm				
							FROM	TO		Au ppb	Ag	As	Pb	Zn
113.9	141.3	Aplite Dike-con't	127.0-130.0'- fragmented + bedded section at 55° to C.A. 136.0-141.3'- Aplite porphyry dike, minor pyrite . Upper + lower contacts at 50° to C.A. 140.0-140.3'- qtz vein rimmed by ankerite, minor py	50°										
141.3	161.0	Exhalite- chert graphitic, py - sph.- gal.	Thinly bedded hard chert + graphite is interbedded with narrow massive tuff sections. Unit is chert-rich un upper 3 feet + cut by numerous tight fractures which are filled by py sphalerite and minor galena. Some sulphides occur in tight bedding planes as well. Chert is gradational into bedded graphitic rock down-hole containing seams or aggregates of pyrite. Appreciable py occurs near bottom in less graphitic rock. 141.3-144.6'- thinly bedded hard chert, numerous hairline cross fractures filled by py, disseminated sphalerite + minor galena. Some sulphides are present in bedding planes. 3/4" wide, irregular qtz. vein near end of sections shows disseminated sphalerite + f.g. grey sulphide which could be galena. Upper contact is at 55° to C.A., bedding is from 60-70° to C.A. 144.6-154.2'- hard bedded chert-graphite with seams + cubes of pyrite, interbedded with less graphitic + tuffaceous rock. Beds dip at 60° to C.A. 154.2-161.0'- alternating massive tuff sections with thin graphite bands, less sulphides, except for 2" wide - 20% py near bottom. Bedding at 60°. 158.0'- 1" wide leached qtz.-carb.- fracture zone?	55° 60-70° 60° 60°	161'	12119 12120 12121 12122 12123 12124	141.2 144.5 148.0 151.0 154.0 159.0	144.5 148.0 151.0 154.0 159.0 161.5	3.3 3.5 3.0 3.0 5.0 2.5	11 7 15 14 8 8	5 .8 .6 0.2 0.6 0.6	5 5 5 5	Pb 620 Zn 2920 Pb 128 Zn 560 Pb 124 Zn 1030	



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
WS81-2	4
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft			LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft				
				ft				

FOOTAGE FROM TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS + ppm			
						FROM	TO		Au ppb	Ag As	Pb Zn	
161.0	197.0	Green Bedded Carb. UM-Tuffaceous?		186'	12125	161.5	164.5	3.0	8	0.6		
		Alteration is fuchsite-calcite with qtz. bands in top 10' plus seams of pyrite. Thinly layered section at 164.0 exhibits strong chevron folds running at low angles to C.A. Alternating light-grey qtz.-carb. bands with irregular or regular attitudes and spotted green-white sections composed of chlorite-calcite. Upper contact through 0.5' wide chert-py section is near 80° to C.A. Bedding angles : 165' = 85° to CA 170' = 75° to CA 195' = 80° to CA	85° 75° 80°		12126	164.5	168.0	3.5	7	0.6		
		170.0'- 2" wide barren white qtz.-vein.										
197.0	233.0	Grey Bedded Carb. Rock		211'	12127	196.0	199.0	3.0	3			
		Calcitic carb. rock is well bedded for most part with alternating thin beds of grey qtz. green chlorite or sericite bands. Py occurs sporadically. Core in bottom 12' is oxidized, broken + crenulated with an increase of chert. 197.0-201.0'- brownish-grey, f.g. sericitized section + fine 1-2% pyrite. Upper contact is in broken core. Thin regular beds at 80° to C.A. 209.0'- same as above at 85° to C.A.	80° 85°		12128	199.0	201.5	2.5	3			
233.0	242.0	Chert-I.F.		236'	12129	233.0	237.5	4.5	3			
		Grey chert is composed of irregular chert bands with chloritic slips and local increases of pyrite. There is much broken core + the presence of a fault is suspected. 2-3 feet of core appears to have been lost.			12130	237.5	242.0	4.5	3			



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

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HOLE NO. WS81-2
PAGE NO. 5
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft			LOCATION (Tp., Lot, Con. OR Lat. and Long.)
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft			PROPERTY NAME
				ft			

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS + ppm		
							FROM	TO		Au ppb	Ag	Zn
242.0	270.3	Chert-Sulphide I.F.	Chert-sulphide-graphite I.F. Unit is well bedded, fractured pyrite, chert, graphite in upper half, changing to less py-chert -sugary quartz with leached limonite bands towards bottom average attitude of beds is 85° to C.A.	85°	261	12131	242.0	247.0	5.0	10	1.0	438
			Upper contact is broken; pitted, leached pieces of core are next to 0.5' long semi-massive py.			12132	247.0	250.0	2.0	49	6.0	146
			242.0-247.0'- much broken core, banded chert + 15% py about 1' core ground.			12133	250.0	252.0	2.0	4	1.0	380
			247.0-250.0'- semi-massive py, graphite, chert-frags.			12134	252.0	256.0	4.0	4	0.6	364
			250.0-256.0'- vuggy chert, limonite stains much broken core, local seams of py			12135	256.0	259.0	3.0	49	3.2	192
			256.0-259.0'- 20% py. graphite, chert assumes regular bedding at 85° to C.A	85°		12136	259.0	262.0	3.0	3	0.4	160
			259.0-270.3'- alternating lamination of chert, graphite py sugary quartz, limonite-from 80-90° to CA	80-90°		12137	262.0	265.0	3.0	18	1.0	236
			1.5 inch wide oriented spinifex in altered fuchsite-rich matrix-Fragment?-at 266'			12138	265.0	270.5	5.5	5	0.4	49
			0.7' core lost in section. Lower contact at 270.3' is broken but it appears to be near right angles to C.A.									
270.3	290.0	Basic Tuff	This is a fine grained, chloritic + well bedded tuff at 80-85° to C.A. present is some alt. UM debris- now fuchsite calcite-chlorite composition. Rock becomes UM tuff towards bottom.	80-85°	286'							
290.0	371.5	Massive Peridotite Sill?	Rock is dark-green fg. fresh + little altered and massive. Magnetite is present. Serpentinized seams or wider bands with calcite occur mostly throughout. Rock is broken in lower 5' with 1' core ground. Rock at lower contact is broken, chilled and very chloritic.		311'							
					336'							
					361'							



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
WS81-2	6
CLAIM NO.	

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft			
				ft			

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE ±	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS ±	
FROM	TO						FROM	TO		Au	DDb
371.5	442.7	Amygdaloidal-Tuffaceous Basalt	Rock is fg., dark-green chloritic, locally fragmented + amygdaloidal throughout. Pervasive alteration to calcite is present, any fracture filling or amygdules are composed of same. 393.0'- thin + weak bedding? lines at 60° to C.A. 403.0'- irregular strg. of calcite with po + minor cpy 436.5'- good bedding at 80° to C.A.	60°	386'						
442.7	467.0	Bedded Basaltic Tuff	Chloritic + calcitic tuff is well bedded from 80-85° to C.A. Occasional narrow fraction contains bedded + alt. fragments up to 1" in size. 463.0-465.0'- cubic py + seams of po. Both contacts are gradational	80-85°	461'						
467.0	496.0	Massive Basalt Flow	Rock is slightly lighter green than above, massive + less altered. Occasional narrow qtz. -strg. minor py + rare amygdules. Rock becomes chloritic near bottom + grades into unit below.		486'						
496.0	542.0	Basaltic Amygdal. Tuff	Dark-green, fg. chloritic rock, occasional chloritic fragments with dissemin. py. Beds are near 80° to C.A. 509.0-541.0'- sporadic fine dissemin. py usually around chloritic frags. or in narrow seams associated with calcite matrix.	80°	511'	12139	522.0	526.0	4.0	1	
					536'	12140	526.0	529.0	3.0	3	
						12141	529.0	532.0	3.0	3	
						12142	532.0	534.0	2.0	1	
542.0	586.5	Massive Tuffaceous Basalt	Chloritic rock is amygdaloidal. Narrow local chert-frags., rock becomes dark-grey slightly graphitic near bottom. 542.5'- light green cherty frags. with light py. 544.0'- same as above 557.5'- same as above		561'						
					586'						



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
WS81-2	8
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft			
					ft			

FOOTAGE FROM TO		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM TO		SAMPLE LENGTH	ASSAYS + Au oz	
			Sludges			12456	16	30	1	tr	
						12457	30	40	10	tr	
						12458	40	50	10	tr	
						12459	50	60	10	tr	
						12460	60	70	10	tr	
						12461	70	80	10	tr	
						12462	80	90	10	tr	
						12463	90	100	10	tr	
						12464	100	110	10	tr	
						12465	110	120	10	tr	
						12466	120	130	10	tr	
						12467	130	140	10	tr	
						12468	140	150	10	tr	
						12469	150	160	10	tr	
						12470	160	170	10	tr	
						12471	170	180	10	tr	
						12472	180	190	10	tr	
						12473	190	200	10	tr	
						12474	200	210	10	tr	
						12475	210	220	10	tr	
						12476	220	230	10	tr	
						12477	230	240	10	tr	
						12478	240	250	10	tr	
						12479	580	590	10	tr.	
						12480	590	600	10	tr.	
						12481	600	610	10	tr.	

Report on Diamond Drilling on
The Brown McDade Claims,
Shaw Twp.
Porcupine Mining Division

by:

A.J. Philipp
Rosario Resources Canada Ltd.
1407 - 7 King St/E.
Toronto, Ontario

June, 1981

INTRODUCTION

Diamond drilling was carried out during the winter of 1981 by Rosario Resources Canada Ltd. and Dupont of Canada Exploration on a group of twelve contiguous claims in Shaw Twp. These claims were staked by Brown McDade Mines Ltd. and optioned to Rosario Resources Canada Ltd. in February 1980.

Geophysical surveys, geological mapping and surface sampling were done by Rosario personnel during the summer of 1980. Reports of this work were submitted to Brown McDade Mines Ltd. along with recommended drill targets.

DIAMOND DRILLING

General Data: Drilling was performed by Norex Drilling Ltd. of Porcupine, Ontario, between January 23 and February 27, 1981. Three drill holes were drilled on the Brown McDade ground for a total of 1489 feet. These holes were drilled using BQ wireline equipment.

Detailed Notes on Drill Holes: WS81-1 This hole was drilled on claim P 500914 to a total depth of 598 feet. The dip and Azimuth were, -45° and 219° respectively. The collar location was 38 + 50E, 27 + 30S, on the grid. The objective of the hole was four-fold:

- 1) To cut across the volcanic quartz porphyry contact with the carbonated ultramafic below, where test pitting and shallow diamond drilling in the past had located some pyrite and graphite mineralization.
- 2) Cut across a 260' wide sequence of highly carbonated tuffs and flows of ultramafic origin containing abundant fuchsite, quartz-carbonate veins, disseminated pyrite and some minor galena, observed in the immediate vicinity during surface mapping.
- 3) Test VLF conductor 'I' along the stratigraphic bottom of the carbonate rocks. In the drill core this conductive zone occurs from 386.9 - 399.5' as a cherty, slightly graphitic Iron Formation containing 5 - 8% PY and a little pyrrhotite.
- 4) Cut across and sample the full width of the oxide IF which is only intermittently exposed on claim P 500915 south of the beaver ponds. It was intersected from 526.7 - 568.6' in the drill core.

All four above mentioned horizons were geochemically tested for gold but none was found to be anomalous.

WS81-3. This hole was collared on claim P 500913 at an Azimuth of 230° . The grid co-ordinates of WS81-3 were 14 + 50E and 22 + 50S. The objective of this hole was to explore the overburden covered area between the collar location which is on the volcanic quartz porphyry, and the "Ester" showing outcropping at 13E and 30S on the grid. At 720 feet this hole was stopped without reaching the Ester showing because it had steepened to -61° from -45° at the collar.

Drilling indicates that the volcanic quartz-porphyry extends further south than had been assumed from surface mapping. Intersected were a series of talc chlorite schists and a massive ultramafic flow with two intercalated impure iron formations containing some disseminated py and po and narrow bands of massive pyrite. A third chert-sulfide Iron Formation (containing approximately 8% py and po overall) was encountered from 461.5 - 482.0 feet. Samples taken from the iron formation gave no anomalous gold values.

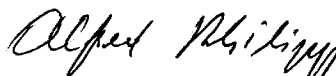
WS81-5 A third short hole of 171 feet was drilled under the Ester showing on claim P 500909. The collar location on this grid is 12 + 85E and 28 + 95S. Rocks equivalent to the Ester showing were cut from 63.0 - 92.5' in the form of a carbonated chert horizon containing abundant fuchsite, pyrrhotite and pyrite. This unit lies above a carbonated komatiitic flow to which it appears to be related.

No anomalous gold values were obtained from the core samples.

CONCLUSIONS AND RECOMMENDATIONS

Any horizons intersected by the drill holes deemed to be favorable hosts for gold mineralization were split and geochemically tested for gold. In addition, continuous sludge samples were obtained from all the drill holes and they were assayed for gold. All samples gave negative results. In view of the above, no additional work along the main carbonate horizons or the iron formations is recommended at this time.

Respectfully submitted,



A. Philipp
Field Geologist



THE MINING ACT - DEPARTMENT OF MINES
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HOLE NO. PAGE NO.
WS81-1 1

DRILLING COMPANY Norex Drilling Ltd.		COLLAR ELEVATION 0	BEARING OF HOLE FROM TRUE NORTH 219°	TOTAL FOOTAGE 598.0'	DIP OF HOLE AT collar -45°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM 38 + 50 E 27 + 30 S	MAP REFERENCE NO.	CLAIM NO. P500914
DATE HOLE STARTED 23/1/81	DATE COMPLETED 28/1/81	DATE LOGGED Jan. 30, 1981	LOGGED BY A. Phillip	200 ft -47	LOCATION (Tp., Lot, Con. OR Lat. and Long.) Shaw Twp.		PROPERTY NAME Brown McDade	
EXPLORATION CO., OWNER OR OPTIONEE Rosario Resources Canada		DATE SUBMITTED June 8/81	SUBMITTED BY (Signature) A. Phillip	397 ft -42				
				500 ft -52				

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
							FROM	TO		Au	ppb
0	20	Overburden	Casing in sand and boulders								
20	65.6	Volcanic Quartz porphyry	Greenish grey, fg, hard and well fractured rock containing abundant quartz eyes of greyish-white colour up to 8 mm in diameter. Occasional outlines of blurred porcelain-coloured feldspars along breaks. Veinlets of pink calcite-quartz are cutting the porphyry at random locations. Sericite alteration changes to more abundant chlorite down the hole.		25' 50'						
65	97.0	Diabase Dike & Assimilated Country Rock	Section consists of alternating bands of fg, dark-grey diabase, altered leucoxene + pyrite containing wall-rock, sections of pepper and salt textured lamprophyre dike rock with some pyrite and foliated or fragmented chlorite-quartz schist. with little pyrite and narrow, now brown coloured calcite rich bands. Magnetite is left only in the central - fresher sections of the diabase. Upper sharp contact at 60° to C.A. Lower sharp contact at 70° to C.A.	60° 70°	75' 100'	12001	94.0	96.5	2.5	16	
97.0	102.5	Aplite Porphyry Dike	This is a hard and massive, pinkish-white fg. feldspar porphyry dike showing up to 3 mm long white feldspar and occasional blurred phenocrysts of quartz. Pyrite cubes are present from 0.5-1.0 % in volume and there is a 2" long seam filled by massive pyrite 2' from upper contact. Other impurities appear to be fine chlorite. A 5" long ground + broken section of white, barren quartz with some carbonate + chlorite occurs at 101.5. The lower contact is somewhat gradational at 60° to C.A. with a 0.5' long, chlorite-quartz fragmented section.	60°		12002 12003 12004 12005 12006	96.5 98.5 100.5 102.5 107.5	98.5 100.5 102.5 107.5 112.0	2.0 2.0 2.0 5.0 4.5	12 7 4 5 5	

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

+ Additional credit available. See Assessment Work Regulations.



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS91-1
PAGE NO. 2

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	CLAIM NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	PROPERTY NAME
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft			
				ft				

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS †	
							FROM	TO		Au	ppb
102.5	107.2	High level Intrusive	Massive rock is fine to med. grained, lightly porphyritic with both contacts rather well defined, the upper at 60° to C.A. in broken core, lower contact at 75° to C.A., the rock here is becoming fg + chilled over the bottom 4 inches. Alteration minerals are mainly chlorite and 1% cubic pyrite is present throughout.	60° 75°							
107.2	126.5	Green Carb. UM	Schistose, fuchsite-rich, carbonatized in part tuffaceous + bedded rock contains approx. 25% quartz with some calcite in the form of numerous irregular veins, stringers and blebs of quartz. Disseminated pyrite occurs throughout from 2-3%. Carb alteration is mainly calcitic. Rock seems gradational into unit below. Schistosity angles: at 116' = 65° to C.A. at 126' = 70° to C.A.	65° 70°	125'	12008 12009	117.0 122.0	122.0 127.0	5.0 5.0	7 7	
126.5	160.9	Grey Mg- carb. Ultramafic Flow	Grey, massive, med. to coarse grained, talcose rock is a mixture of magnesite-ankerite-talc. Bluish-grey f.g. ankerite usually occurs in streaks + stringers cutting rock at irregular angles. Talc content increases in lower 1/3 with interlayered grey, barren quartz in bottom 8 feet through which unit is gradational into rock below. 139-149; 1 to 2% disseminated pyrite.		150'	12010 12011 12012	139.0 144.0 160.0	144.0 149.0 165.0	5.0 5.0 5.0	12 11 8	
160.9	215.0	Green Tuffaceous carb. UM-as above	Schistose fuchsite-rich carb rock with irregular quartz-carb veins + stringers containing 2-3% py. Intermittent, narrow bedded (?) chloritized grey carb. rock - which is calcitic throughout. Fuchsite + py content diminishes in bottom 5 feet.		175' 200'	12013 12014 12015 12016 12017	165.0 170.0 174.0 181.5 187.3	170.0 174.0 174.7 182.5 189.3	5.0 4.0 0.7 1.0 2.0	11 12 11 8 8	

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† Additional credit available. See Assessment Work Regulations.



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
WS81-1	3

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	CLAIM NO.		
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)			
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft					
					ft					
					ft		PROPERTY NAME			

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS †	
FROM	TO						FROM	TO		Au	ppb
160.9	215.0	Con't	Schistosity angles: 164' = 55° to C.A. 169' = 60° to C.A.	55° 60°							
			173.7-174.1'; qtz-carb vein with abundant tourmaline cutting core at 70° to C.A.	70°							
			181.5-182.0'; same as above								
			183.0-189.5'; 2-3" wide barren qtz- calcite veins								
			190'- regular banding or bedding at 35° to C.A.	35°							
			190-200.5'; grey carb rock, foliated qtz-carb. stringers								
			211.0'; regular bands at 85° to C.A.	85°							
			214.0'; calcite-qtz stringers + minor py								
215.0	223.5	Massive Carb. UM Flow	Brownish-grey, med. grained carb. rock showing fine random spinifex textures on top 1 foot of section. Carb. alteration appears to be both calcitic and ankeritic. Bottom contact appears to be at 80° to C.A. - in broken core	80°							
223.5	245.0	Grey Carb. UM	Grey rock is cut by numerous foliated + barren strgs. + blebs of qtz- calcite. Fuchsite occurs in top 3' feet and sporadically elsewhere.		225'						
245.0	258.0	Talc-Chlorite- MG - UM	Carb. massive rock is med. to coarse grained, dark grey to green + very talcose. Irregular, barren qtz. veins occur throughout.		250'						
253.0	275.0	Carb. Talcose UM	Unit above grades into a finer grained, carbonated, massive grey but less talcose variety and is also cut by qtz-carb. strgs. with some occasional minor fuchsite.		275'						

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS31-1
PAGE NO. 4
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft	LOCATION (Tp., Lot, Con. OR Lat. and Long.)			
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft				
				ft				

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Asspb	
275.0	237.5	Bedded Carb. Rock	This is a thinly layered or bedded tuffaceous rock, composed of alternating hard + soft bands which are of either quartz or chlorite-talc-fuchsite or biotite - quartz - calcite layers. Minor pyrite occurs at 277.5' and adjacent to a 3" quartz vein at 287'.								
			Angles of bedding: @ 277' = 65° to C.A. fuchsite @ 283' = 70° to C.A. quartz bands @ 286' = 65° to C.A. = schistosity	65° 70° 65°							
287.5	301.0	Talc Chlorite Schist	Dark-green, soft rock is cut by irregular barren qtz. strgs. Approx. 5' of core was ground.		300'	12018	285.9	287.5	1.6	11	
301.0	344.0	UM Tuffs + Inter-calated Talc-Chlorite Schist. Possible Fault Zone?	Unit begins with f.g. micaceous rock interbedded with barren calcite-quartz @ 60° to C.A. which comprise about 40% of rock, there is some development of ladder veins. Rock changes down hole to chlorite - talc schist. which is followed and alternating with beds of fuchsite-quartz-carbonate which usually contain a little pyrite.	60°	325'	12019	333.0	337.0	4.0	12	
			318' fuchsite-carb rock is badly leached and pitted and crumbly and this could mark a fault zone. About 3' of core was ground in the preceding 12' to here.								
			333.0-337.0' fuchsite-qtz-carb. section with 1% py, carbonate is calcitic								
			338.0' quartz bands at 80° to C.A.	80°							

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+ Additional credit available. See Assessment Work Regulations.



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HOLE NO. WS81-1
PAGE NO. 5
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	CLAIM NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	PROPERTY NAME
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft			
					ft			

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au	ddb
344.0	345.0	Quartz-Ankerite Breccia	Serpentinized matrix holds lenses of qtz-ank. frags. which are nearly at 90° to C.A. No clear contact with chlorite schist. above, fragmented section is gradational into massive flow below.	85-90°							
345.0	346.9	Carb. Massive UM Flow - shows Well developed Spinifex	Rock in upper 12 feet of flow is from olive to grass green in colour depending on amount of fuchsite present. Carb. alteration is ankeritic which increases down-hole. Quartz-ankerite is usually rimmed by fuchsite-rich bands which are nearly at 90° to C.A.	90°	350'	12020 12021	364.1 383.4	365.6 386.5	1.5 3.1	15 15	
			253.8' 10% pyrite in 1/8 inch wide seam.								
			261.0-365.0' light brown carb rock with well developed coarse random spinifex becoming coarse oriented spinifex in bottom few inches.								
			365.0-383.5' massive grey to light brown ankerite-rich carb rock, still with some fuchsite near top + minor py.								
			383.5-386.9' increase of fuchsite + ankerite (No pyrite). Bottom contact at 65° to C.A.	65°							
386.9	399.5	Cherty S-IF	Dark green to dark grey, hard + fractured-chert S-IF. Overall sulphide content is approx. from 5-8%, chiefly pyrite + some pyrrhotite. Quartz contains admixtures of light graphite which increases locally. The total width of this unit includes a narrow upper + lower altered section which are hosting the IF.			12022 12023 12024 12025 12026 12027	386.5 383.3 391.5 394.6 395.6 396.8	383.3 391.5 394.6 395.6 396.8 399.4	1.8 3.2 3.1 1.0 1.2 2.6	12 14 10 14 16 12	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. **WS31-1** PAGE NO. **6**
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	LOCATION (Tp., Lot, Con. OR Lat. and Long.)
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft	ft			
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft	ft			
				ft	ft			
								PROPERTY NAME

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE ±	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS ±	
FROM	TO						FROM	TO		Au	ppb
386.9	399.5	Cherty S-IF Con't	386.9-388.5' f.g. dark green chloritic, slightly fragmental rock with some disseminated pyrite.								
			388.5-397.0' actual width of chert-sulphide I.F. grey to dark grey quartz contains hairline cross fracture filled by quartz-carb. minor graphite is admixed with quartz.Py + minor py occur disseminated throughout but py occurs massive over 2" at 395'.								
			397.0-399.5' dark-grey fragmental section contains no sulphides but fragments of qtz. ankerite + green - randomly spinifexed carb rock. Lower contact with tuff is at 65° to C.A.	65°							
399.5	432.0	Fragmental Tuff	Grey, moderately carbonated tuff contains sericitized, angular felsic fragments + dissem. cubic py in upper 3'.		400'	12028	399.4	402.0	2.6	11	
			414' Bedded-aligned frags. at 75° to C.A.	75°	425'	12029	430.7	431.7	1.0	7	
			423' Bedded-aligned frags. at 80° to C.A.	80°							
			426' light disseminated cubic pyrite.								
			Average size of fragments is about 1.5 inches but large blocks of approx. 2 feet in size can be seen.								
432.0	458.0	Amygdaloidal Tuff Few Frags.	Grey tuff as above, there are few fragments but abundant amygdules instead. They are light grey, up to 1" in diameter, with quartz-feldspar fillings, now altered to calcite. Core angles of bedding vary slightly on both sides of 70° to C.A.	70°	450'						



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS81-1
PAGE NO. 7
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft			LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft				
				ft				

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +		
							FROM	TO		Au	ppb	
432.0	453.0	Amygdaloidal Tuff Con't	436.5' light disseminated pyrite 444.2' seams of pyrite 454.6' seams of pyrite + dissemin. pyrite surrounding felsic frags.									
453.0	468.0	Amygdaloidal + Fragmental Tuff	Increase of fragments + pyrite 1 to 3% locally			12031	459.0	462.3	3.3	8		
463.0	478.0	Massive Carb. UM Flow or Sill	Rock is med. to coarse grained, light brown with ankerite developed throughout. Both contacts are in broken core. There are few, thin regular bands of barren quartz associated with fuchsite + ankerite at 70-75° to C.A.	70-75°		475'						
478.0	481.0	Amygdaloidal Tuff	Bedded grey amygdal. tuff, ending with massive bottom section where it seems gradational with lower unit. Bedding angles near 70° to C.A.	70°								
481.0	514.0	Fragmental Chloritic Tuff	Darker grey rock contains both felsic + chloritic fragments- Their shape is angular to subangular, matrix is now more chloritic. Pyrrhotite is increasing throughout. Numerous cherty quartz fragments occur in the bottom 14', average alignments of fragments is 80-90° to C.A.	80-90°		500'	12032	482.5	487.0	4.5	15	
			482.5-487.0' sporadic + local disseminated py. + co, 2-3%				12033	490.5	491.5	1.0	7	
			490.5-491.0' seams of py with minor cov				12034	499.0	502.0	3.0	3	
			499.0-505.0' blebs + seams of py + some py, minor cov				12035	502.0	505.0	3.0	4	
			511.0' 0.5' long, dark-grey magnetite section maybe a fragment!				12036	505.0	508.0	3.0	5	
							12037	508.0	512.0	4.0	10	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS31-1
PAGE NO. 3
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	HOLE NO. WS31-1 PAGE NO. 3 CLAIM NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft			LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft				
				ft				PROPERTY NAME

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS †	
							FROM	TO		Au	ppb
514.0	526.7	Massive felsic Flow or Tuff ?	Rock is sericitized, greenish-white to grey, aphanitic except for few 1-3mm amydules filled by Qtz-calcite. Rock is faintly laminated at 70° to C.A., same as upper contact, lower is irregular but distinctive near 90° to C.A.	70° 90°	525'						
526.7	563.6	Bedded chert-Oxide IF	Bedded I.F. is composed of alternating f.g. regular laminations of dark-grey magnetite, red jasper, grey to greenish-grey chert and buff coloured silt. Unit is occasionally fragmented and cut by numerous late fractures nearly at right angles to bedding planes which are from 70°-85° to C.A. Widest single, but still impure magnetite formation is 2.0', most other bands are from 1/2 inch to 3 inches wide. Most magnetite bands occur between 534.0-546.0'. Sulphides occur rarely and then predominantly as pyrite occurring sometimes in the cross or gash- fractures together with quartz, at the following locations: 532.3' minor py + po in cherty quartz. 543.6' seams of py + minor po in fractured magnetite. 545.0' 1/8" wide massive py in fracture. 551.0' 1/16" wide py + po in fracture. 554.0-555.0' 3" wide barren breccia zone diagonally across core = parallel to other fractures! 555.0-557.0' change of dip, here at 45° to C.A. 561.0-563.0' mainly jasper, thin bands of magnetite at 80° to C.A. 563.0-568.6' fragmented silt, chlorite + same strgs. or bands of cherty quartz. Some dissem. py at 564.0'. 568.0' minor tourmaline.	70-85°	550'	12038 12039 12040 12041 12042 12043 12044 12045	529.0 533.0 537.0 541.0 545.0 563.0 565.0 567.0 569.0	533.0 537.0 541.0 545.0 547.0 565.0 567.0 569.0	4.0 4.0 4.0 4.0 2.0 2.0 2.0 2.0	11 14 14 48 16 15 11 12	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. PAGE NO.
WS81-1 10
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft	ft		LOCATION (Tp., Lot, Con. OR Lot. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft	ft			
				ft	ft			

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au oz	
			SLUDGES			12809	20	30	10	Tr	
						12810	30	40	10	Tr	
						12811	40	50	10	Tr	
						12812	50	60	10	Tr	
						12813	60	70	10	Tr	
						12814	70	80	10	Tr	
						12815	80	90	10	Tr	
						12816	90	100	10	Tr	
						12817	100	110	10	Tr	
						12818	110	120	10	Tr	
						12819	120	130	10	Tr	
						12820	130	140	10	Tr	
						12821	140	150	10	Tr	
						12822	150	160	10	Tr	
						12823	160	170	10	Tr	
						12824	170	180	10	Tr	
						12825	180	190	10	Tr	
						12826	190	200	10	Tr	
						12827	200	210	10	Tr	
						12828	210	220	10	Tr	
						12829	220	230	10	Tr	
						12830	230	240	10	Tr	
						12831	240	250	10	Tr	
						12832	250	260	10	Tr	
						12833	260	270	10	Tr	
						12834	270	280	10	Tr	
						12835	280	290	10	Tr	
						12836	290	300	10	Tr	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. **WS81-1** PAGE NO. **11**
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	LOCATION (Tp., Lot, Con. OR Lat. and Long.)
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft				
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft				
				ft				
				ft			PROPERTY NAME	

FOOTAGE FROM TO		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM TO		SAMPLE LENGTH	ASSAYS + Au oz	
			Sludges								
						12837	300	310	10	Tr	
						12838	310	320	10	Tr	
						12839	320	330	10	Tr	
						12840	330	340	10	Tr	
						12841	340	350	10	Tr	
						12842	350	360	10	Tr	
						12843	360	370	10	Tr	
						12844	370	380	10	Tr	
						12845	380	390	10	Tr	
						12846	390	400	10	Tr	
						12847	400	410	10	Tr	
						12848	410	420	10	Tr	
						12849	420	430	10	Tr	
						12850	430	440	10	Tr	
						12851	440	450	10	Tr	
						12852	450	460	10	Tr	
						12853	460	470	10	Tr	
						12854	470	480	10	Tr	
						12855	480	484	4	Tr	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. **WS81-3** PAGE NO. **1**

DRILLING COMPANY Norex Drilling Co.		COLLAR ELEVATION 0	BEARING OF HOLE FROM TRUE NORTH 230°	TOTAL FOOTAGE 720.0	DIP OF HOLE AT collar -45	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM 14 + 50 E 22 + 50 S	MAP REFERENCE NO.	CLAIM NO. P500913 P500909	
DATE HOLE STARTED Feb. 9/81	DATE COMPLETED Feb. 14/81	DATE LOGGED 2/24/81	LOGGED BY A. Philipp	200 ft -47	PROPERTY NAME Brown McDade		LOCATION (Tp., Lot, Con. OR Lat. and Long.) Shaw Twp.		
EXPLORATION CO., OWNER OR OPTIONEE Rosario Resources Canada Ltd.		DATE SUBMITTED June 8/81	SUBMITTED BY (Signature) <i>A. Philipp</i>	400 ft -53					
				610 ft -61					

FOOTAGE FROM TO		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM TO		SAMPLE LENGTH	ASSAYS + Au ppb	
0	72.0	Overburden	casing-pulled								
72.0	244.0	Volcanic Qtz.- porphyry	F.g. greenish-grey massive rock becoming increasingly schistose and sericitized towards bottom where it is intruded by dike. Rock contains abundant grey Qtz. phenocrysts up to 5 mm in diameter set in f.g. sericitized matrix locally showing white phenocrysts of feldspars. Schistosity angles vary from 70-90° to C.A.	70 90	72' 97' 112' 137'						
			236'- 2" wide lamprophyre dikelet at 80° to C.A.		162'						
			239.5- 3" wide med. gr. micaceous + massive lamprophyre dikelet near 90° to C.A.	90°	137'						
			242.5-244.0' mixture of dense, brecciated Qtz.- porphyry and intruding lamprophyre dikes- multiple contacts.		212'						
244	262.5	Lamprophyre Dike Talc-chlorite Schist.	Massive, med. gr. , dark grey lamprophyre dike with intermittent narrow, green-schistose chlorite-talc sections. Other impurities include fragments or seams of chlorite, veins of Qtz.- carb. and some assimilated and altered country rock. Dike rock contains some disseminated py + po locally and stretched booklets of biotite mica.		237'	12162	243.0	248.0	5.0	10	
			244.0-247.3' 1" wide irreg. strg. of Qtz-carb. with some local chlorite, py, po, + minor cpy, at low angles to C.A.		262'	12163	248.0	253.0	5.0	3	
			249.0-249.5' talc-chlorite sections.			12164	253.0	256.0	3.0	3	
			254.2-256.0' silicified section is narrow vein of Qtz. at low angles to C.A. good local py+ chlorite			12165	256.0	260.0	4.0	1	
			259.5-262.5' talc-chlorite schist.			12166	260.0	263.0	3.0	11	

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

+ Additional credit available. See Assessment Work Regulations.



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

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HOLE NO. WS81-3
PAGE NO. 2
CLAIM NO.

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft			
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft			
					ft			
LOCATION (Tp., Lot, Con. OR Lat. and Long.)								

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +		
FROM	TO						FROM	TO		Au	ppb	
262.5	234.0	Qtz.- Porphyry Fragmental	Greenish-grey fragmental rock is composed of altered qtz. and feldspar porphyry fragments which are up to 3" in size set in chloritic matrix. Rock is very fine grained and qtz. phenocrysts are blurred. 283-284.0' shattered and brecciated rock with 5% py 2-1" wide barren qtz.- carb. veinlets.			22167	283.0	284.0	1.0	3		
284	238	Carb. Talc- Chlorite Schist. U.M. Fault ?	Crumbly and ground upper contact is probably near 90° to C.A. lower 1.5' of rock shows multiple sharp intrusive contacts at varying degrees to C.A. Talc-chlorite schist contains blebs + strgs. of qtz. -carb. without sulphides.	90°		287'						
238	327	Intermed. Dike Lamprophyre ?	This is a massive, grey f. to med. grained rock with incipient chlorite and or biotite minerals towards bottom. Occasional fragments of chlorite. Dissemin. py and po from 0.5-1.0%. Bottom contact is sharp at 45° to C.A. Light schistosity from 35-45° to C.A.	45° 35-45°		312'						
327	386.5	Talc Chlorite Schist. U.M. as above	Dark-green, soft talcose rock is carbonated with numerous bands + irreg. strgs. of qtz-carb. green talc, from 30-90° to C.A. Minor local py. Rock becomes less talcose + more siliceous in bottom 20' 375.4-375.8' lamprophyre dikelet, both contacts sharp at 80° to C.A.	30-90° 30°		337' 362'						
386.5	409	Impure bedded chert IF. py-po	Alternating sections of thinly bedded dark-grey carb. - rich rock with 2% dissemin. py, po or narrow bands of massive py + po. Cherty qtz. contains lesser amounts of same sulphides plus rare cpy. 2-3 smears of molybdenite occur with py in chert near bottom. (407.4') Dark-grey bedded sections are composed of biotite and carb.			397'	12143 12144 12145 12146 12147 12148	386.5 388.5 393.0 397.0 400.0 403.0	388.5 393.0 397.0 400.0 403.0 409.0	2.0 4.5 4.0 3.0 3.0 6.0	3 1 4 4 3 3	

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

+ Additional credit available. See Assessment Work Regulations.



DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
VS81-3	3
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft			
					ft			

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
							FROM	TO		Au	ppb
336.5	409	cont.	crystals. Alteration is calcitic. 397.5-401.5' bedded carb. + chert bands with 3 narrow bands of massive py-no, widest is 1 1/2 inches Narrow crenulated beds of chlorite-chert near end. 401.5-409.0' predomin. greyish-white, cherty quartz, minor smears of moly. with py at 407.4' Bedding angles 393'-75° to C.A. (0.5' core ground)	75°							
			396'-80° " "	30°							
			401.5'-80°	80°							
409	421.0	Alt. Massive UM Flow	Greenish-grey, chloritized + harder rock containing local chert with narrow talcose sections. Serpentine appears to be present. Rock is less calcitic.		412'						
421	443.7	Impure Chert-IF.	Unit consists of 50% chert, alternating with chert-chlorite or biotite mica sections. Rock is generally poorly bedded + there are sporadic occurrences of dissemin. - or seams of mainly cubic pyrite. Calcite content is low. 438.5' bedded chert at 70° to C.A.	70°	437	12149	421.0	425.0	4.0	3	
						12150	425.0	429.0	4.0	3	
						12151	429.0	433.0	4.0	1	
						12152	433.0	437.0	4.0	3	
						12153	437.0	441.0	4.0	3	
						12154	441.0	445.0	4.0	1	
443.7	461.5	Foliated Chlorite Schist.	Soft., foliated chlorite schist. with narrow interbands of quartz locally running parallel to C.A. 3" wide massive chert near 455'. Bands of chert w/ py increase in lower 1.5'. Much core was ground in the following sections. 445.0-448.0' = 50% core ground 448.0-455.0' = 30% core ground								

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+ Additional credit available. See Assessment Work Regulations.



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DIAMOND DRILLING LOG

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HOLE NO. WS31-3	PAGE NO. 4
CLAIM NO.	

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft		
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft		
				ft		
						LOCATION (Tp., Lot, Con. OR Lat. and Long.)
						PROPERTY NAME

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au	ppb
461.5	482.0	Bedded S-Chert. IF.	Hard, grey to greenish - grey bedded chert with sulphide- rich sections composed of po + py, overall S- content is approx. 8%.		462	12155	461.0	464.0	3.0	1	
			462.5-469.0' best sulphide section . 70% po, 30% py, overall approx. 15% sulphides.			12156	464.0	467.0	3.0	3	
			Bedding angles of chert: 469' = 70° to C.A.	70°		12157	467.0	470.0	3.0	4	
			473' = 80° to C.A.	80°		12158	470.0	474.0	4.0	4	
						12159	474.0	478.0	4.0	4	
						12160	478.0	482.0	4.0	5	
						12161	482.0	485.0	3.0	3	
482.0	496.0	Bedded Tuff	Rock is dark-grey above and grey below because of diminishing content of graphite. Top 12' of section is composed of lightly graphitic chert + minor py changing to bedded fragments and thinly bedded tuff below where it seems gradational into unit below.								
			Bedding angles : 491.0' - 35° to C.A.	30°							
			496.0' - 75° to C.A.	75°							
496.0	720.0'	Tuffaceous Amygdaloidal Basalt	Grey rock is locally bedded and alternating with more massive and lighter grey varieties. Amygdules range up to 1" in size and are composed of carb. + quartz. Rock is pervasively sericitized and weakly carbonated to about 544' after which the chlorite content increases.		512'						
			496.0-508.0' bedding at 75° to C.A.		537'						
			544.7-548.0' fragmental section, replacements of some fragments by qtz., chlorite pyrrhotite, with some pyrite in the matrixes.		562'						
			Bedding at 70° to C.A.	70°	612'	12163	544.5	548.5	4.0	1	
					637'						

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+ Additional credit available. See Assessment Work Regulations.



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DIAMOND DRILLING LOG

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HOLE NO. WS31-3	PAGE NO. 5
CLAIM NO.	

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft			
				ft			

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au	ppb
496.0	720.0	Tuffaceous Amygdaloidal Basalt Con't	555.0-556.0' Bedding from 75° - 80° to C.A.	75-80°							
			559.5-560.5' silicified fragments, some po.								
			577.0-578.0' bedded, chloritized fragmental section with some py + po, at 30° to C.A.	80°							
			639.5' 2" wide qtz.- carb. zone with little py at 50° to C.A.	50°							
			652.0' 2" wide fault gauge zone at 45° to C.A. followed by broken core to 654'	45°							
			656.0' some fragmentation with coarse pyrite								
			666.2-667.2' bedded, light green fragmental section at 75° to C.A. with few cubes of py.	75°							
			682.5-686.0' chloritized fragmental section with narrow local zones containing 10% finely disseminated po + py.			12169	632.5	686.0	3.5	5	
			697.0-704.0' strongly chloritized fragmental section calcitic alteration throughout, few qtz.-strgs. local dissemin. of po, little py			12170	697.0	700.5	3.5	1	
			705.0' irregular banding at 90° to C.A.	90°		12171	700.5	704.0	3.5	11	
720.0			End of hole.								

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS31-3	PAGE NO. 6
CLAIM NO.	

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft		
				ft		
						PROPERTY NAME

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au	OZ
			Sludges			12482	70	80	10	Tr	
						12433	30	90	10	Tr	
						12484	90	100	10	Tr	
						12435	100	110	10	Tr	
						12436	110	120	10	Tr	
						12437	120	130	10	Tr	
						12488	130	140	10	Tr	
						12489	140	150	10	Tr	
						12490	150	160	10	Tr	
						12491	160	170	10	Tr	
						12492	170	180	10	Tr	
						12493	180	190	10	Tr	
						12494	190	200	10	Tr	
						12495	200	210	10	Tr	
						12496	210	220	10	Tr	
						12497	220	230	10	Tr	
						12498	230	240	10	Tr	
						12499	240	250	10	Tr	
						12500	250	260	10	Tr	
						12401	260	270	10	Tr	
						12402	270	280	10	Tr	
						12403	280	290	10	005	
						12404	290	300	10	Tr	
						12405	300	310	10	Tr	
						12406	310	320	10	Tr	
						12407	320	330	10	Tr	
						12408	330	340	10	Tr	
						12409	340	350	10	002	
						12410	350	360	10	002	
						12411	360	370	10	Tr	
						12412	370	380	10	Tr	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS31-3	PAGE NO. 7
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	LOCATION (Tp., Lot, Con. OR Lat. and Long.)
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft	ft		PROPERTY NAME	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft	ft			
				ft				

FOOTAGE		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +	
FROM	TO						FROM	TO		Au oz	
			Sludges			12413	380	390	10	.002	
						12414	390	400	10	Tr	
						12415	400	410	10	Tr	
						12416	410	420	10	Tr	
						12417	420	430	10	Tr	
						12418	430	440	10	Tr	
						12419	440	450	10	Tr	
						12420	450	460	10	.005	
						12421	460	470	10	Tr	
						12422	470	480	10	.002	
						12423	480	490	10	Tr	
						12424	490	500	10	Tr	
						12425	500	510	10	Tr	
						12426	510	520	10	Tr	
						12427	520	530	10	Tr	
						12428	530	540	10	Tr	
						12429	540	550	10	Tr	
						12430	550	560	10	Tr	
						12431	560	570	10	Tr	
						12432	570	580	10	Tr	
						12433	580	590	10	Tr	
						12434	590	600	10	Tr	
						12435	600	610	10	Tr	
						12436	610	620	10	Tr	
						12437	620	630	10	Tr	
						12438	630	640	10	Tr	
						12439	640	650	10	Tr	
						12440	650	660	10	Tr	

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THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO. WS31-5 PAGE NO. 1

DRILLING COMPANY Norex Drilling		COLLAR ELEVATION 0	BEARING OF HOLE FROM TRUE NORTH 235°	TOTAL FOOTAGE 171.0'	DIP OF HOLE AT collar -45°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM 12 + 85 E 23 + 95 S	MAP REFERENCE NO.	CLAIM NO. P509909
DATE HOLE STARTED Feb. 26, 1981	DATE COMPLETED Feb. 27, 1981	DATE LOGGED Mar. 28/81	LOGGED BY A. Philipp	170 ft	-47°		LOCATION (Tp., Lot, Con. OR Lat. and Long.) Shaw Twp.	PROPERTY NAME Brown McDade
EXPLORATION CO., OWNER OR OPTIONEE Rosario Resources Canada Ltd.		DATE SUBMITTED June 8/81	SUBMITTED BY (Signature) A. Philipp	ft				
				ft				

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +		
							FROM	TO		Au ppb	Zn ppm	Ag
0	16.0	Overburden	Casing left in hole.									
16.0	63.0	Bedded Argillite & Silt	Dark grey, fine grained, lightly graphitic argillite alternating with grey, coarser grained beds of silt containing wisps of graphitic material. Rock is locally foliated but the regularly bedded argillite predominates. Pyrrhotite, lesser pyrite and minor cov occurs throughout in the form of disseminations, lenses or in irregular seams. Rock grades into unit below through fine grained, thinly bedded material containing some cherty quartz.			12187	16.0	21.0	5.0	5		
						41	21.0	26.0	5.0	10		
						12189	26.0	31.0	5.0	8		
						66						
						12190	41.0	46.0	5.0	4		
			Attitudes of bedding: 20' = 35' to C.A.	85								
			53' = 85' to C.A.	85								
			62' = 79' to C.A.	70								
63.0	92.5	Carb. Impure Chert-Fuchsite-S IF. Alt. U.M. tuff "Ester showing"	Unit appears to be a carb. + bedded U.M. tuff-locally slightly fragmental - which has an upper rather gradational contact with the argillite and a lower well defined contact at 45° with the massive flow. Rock above consists of alternating well bedded chert with minor graphitic material and fuchsite-carb. rock with lesser chert sections below. Carb. alteration is calcitic throughout, in the same manner occurs po + py as disseminations, lenses or irregular strgs. The po-py ratio is about 3:1, overall sulphide content approx. 7%. 74.0-78.0' best sulphide section = 15% combined po-py Bedding angles 69'- bedded chert at 70° to C.A. 92'- thinly bedded chert-fuchsite-sulphide at 65° to C.A.	45°		12191	63.0	67.0	4.0	3		
						12192	67.0	71.0	4.0	26		
						12193	71.0	74.0	3.0	8		
						91	74.0	78.0	4.0	44	489	ND
						12195	78.0	83.0	5.0	5		
						12196	83.0	87.0	4.0	3		
						12197	87.0	91.0	4.0	3	96	ND
						12193	91.0	96.0	5.0	1		
						12199	96.0	101.0	5.0	5		
						12200	101.0	106.0	5.0	ND		
						12201	106.0	111.0	5.0	1		
						12202	111.0	116.0	5.0	3	152	ND
						12203	116.0	121.0	5.0	ND		
						12204	121.0	126.0	5.0	3		
						12205	126.0	131.0	5.0	3		

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

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HOLE NO.	PAGE NO.
WS31-5	2
CLAIM NO.	

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	LOCATION (Tp., Lot, Con. OR Lat. and Long.)
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	ft			
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)	ft			
				ft			
						PROPERTY NAME	

FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS †	
							FROM	TO		Au ppb	Ag ppm
92.5	111.3	Carb. Mafic Komatiite	Rock is massive carb., brownish-grey, coarsely textured which is a mixture of grains or blebs of cherty quartz, ankerite crystals, chlorite and / or biotite minerals. There is some dissemin. py + po but the overall sulphide content is only about 1%. Rock has vague, yet well defined and irregular lower contact roughly at 50° to C.A. with flow.	50°							
111.3	170.4	Carb. U.M. Flow	Fuchsite rich, green to brown carb. rock where carb. alteration is ankerite, as above. Rock is locally layered in the green + fuchsite - chert variety and more massive in the brown or grey sections where rock is coarsely textured, then usually containing numerous quartz sweets and an increase in ankerite carbonate crystals. Flow-top polyhedral jointings occur in upper 3 feet. Finely disseminated py + po or seams with some sulphides occur to about 130' and in minor amounts below it. 111.3'-116.0' greenish-grey carb. rock, polyhedral jointings, some qtz.-ank.-fuchsite, 15% sulphides as finely dissem. po + py or occurring in seams at 70° to C.A. 138.0' layering at 65° to C.A. 157.5' local layering at 75° to C.A. in grey coarsely ankeritic carb. rock.	70° 65° 75°							
170.4	171.0	S-Chert-IF.	Hard fractured, grey chert with seams of pyrite. Contact is in broken graphitic chert with pyrite.			12206	170.0	171.0	1.0	5	
171.0			End of Hole.								

* For features such as foliation, bedding, schistosity, measured from the long axis of the core



THE MINING ACT - DEPARTMENT OF MINES
DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

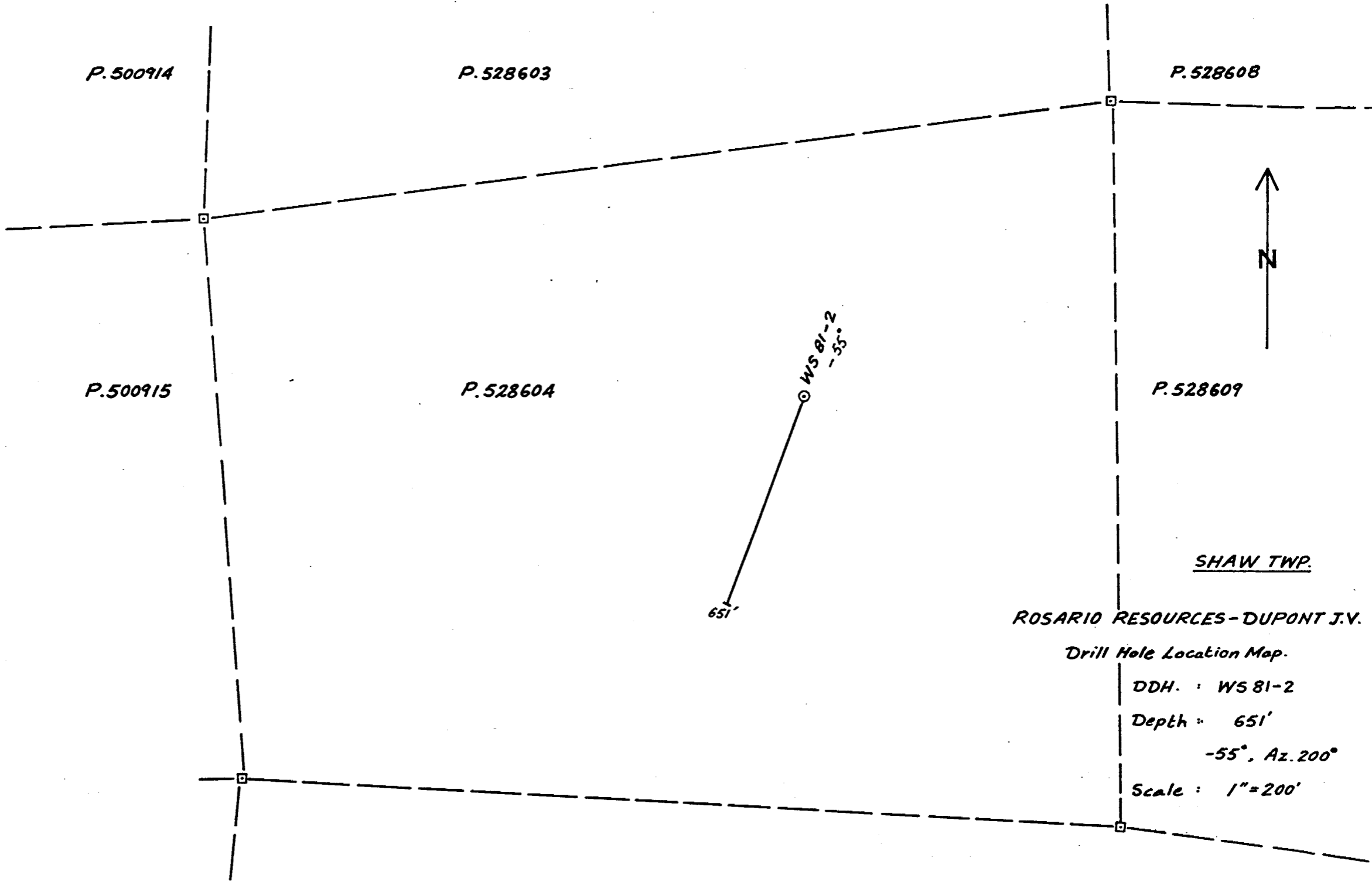
FILL IN ON EVERY PAGE

HOLE NO. WS31-5	PAGE NO. 3
CLAIM NO.	

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	PROPERTY NAME
DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE		DATE SUBMITTED	SUBMITTED BY (Signature)		ft			
					ft			

FOOTAGE FROM TO		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM TO		SAMPLE LENGTH	ASSAYS + Au oz	
			Sludges								
						12378	15	20	5		Tr
						12379	20	30	10		Tr
						12380	30	40	10		Tr
						12381	40	50	10		Tr
						12382	50	60	10		Tr
						12383	60	70	10		Tr
						12384	70	80	10		Tr
						12385	80	90	10		Tr
						12386	90	100	10		Tr
						12387	100	110	10		Tr
						12388	110	120	10		Tr
						12389	120	130	10		Tr
						12390	130	140	10		Tr
						12391	140	150	10		Tr
						12392	160	170	10		Tr
						12393	150	160	10		Tr

† For features such as foliation, bedding, schistosity, measured from the top surface of the specimen.



P.500914

P.528603

P.528608

P.500915

P.528604

P.528609

WS 81-2
-55°

651'



SHAW TWP.

ROSARIO RESOURCES-DUPONT J.V.

Drill Hole Location Map.

DDH. : WS 81-2

Depth : 651'

-55°, Az. 200°

Scale : 1"=200'

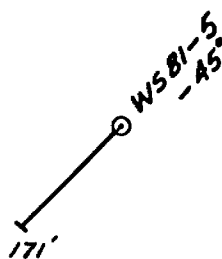
P.500971



SHAW TWP.
Scale : 1" = 200'

P.500909

P.500913



P.500910

P.500914

ROSARIO RESOURCES-DUPONT J.V.

Drill Hole Location Map

DDH. : WS81-5

Depth : 171'

-45°, Az. 235°

SW

NE

12+85E
28+95S

WS 81-5
-45°



Bedded Argillite & Silt

Carb. Impure Chert-Fuchsite-S IF. All. U.M. Tuff "Easter Showing"

Carb. Mafic Komatiite

Carb. U.M. Flow

S-Chert-IF.

171.0'

100'

ROSARIO RESOURCES-DUPONT J.V.

SHAW TWP.

DDH. WS 81-5

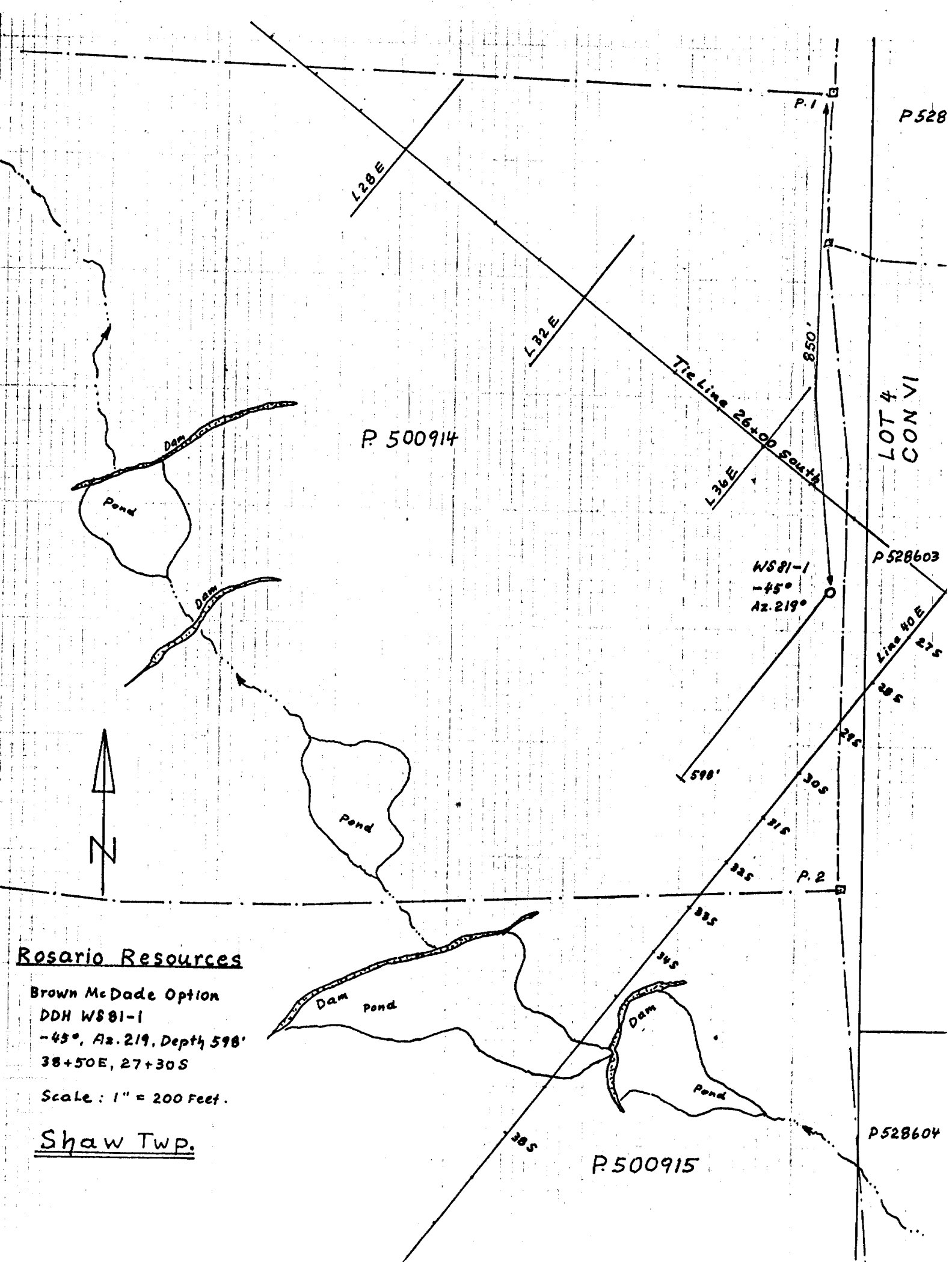
-45°, Az. 235°

Depth 171.0'

Grid Reference: 12+85E, 28+95S

Claim : P. 500909

Scale : 1" = 40'



Rosario Resources

Brown McDade Option
 DDH WS81-1
 -45°, Az. 219, Depth 598'
 38+50E, 27+30S

Scale: 1" = 200 Feet.

Shaw Twp.

P528

P. 500914

LOT 4
 CON VI

P528603

P528604

P.500915

WS81-1
 -45°
 Az. 219°

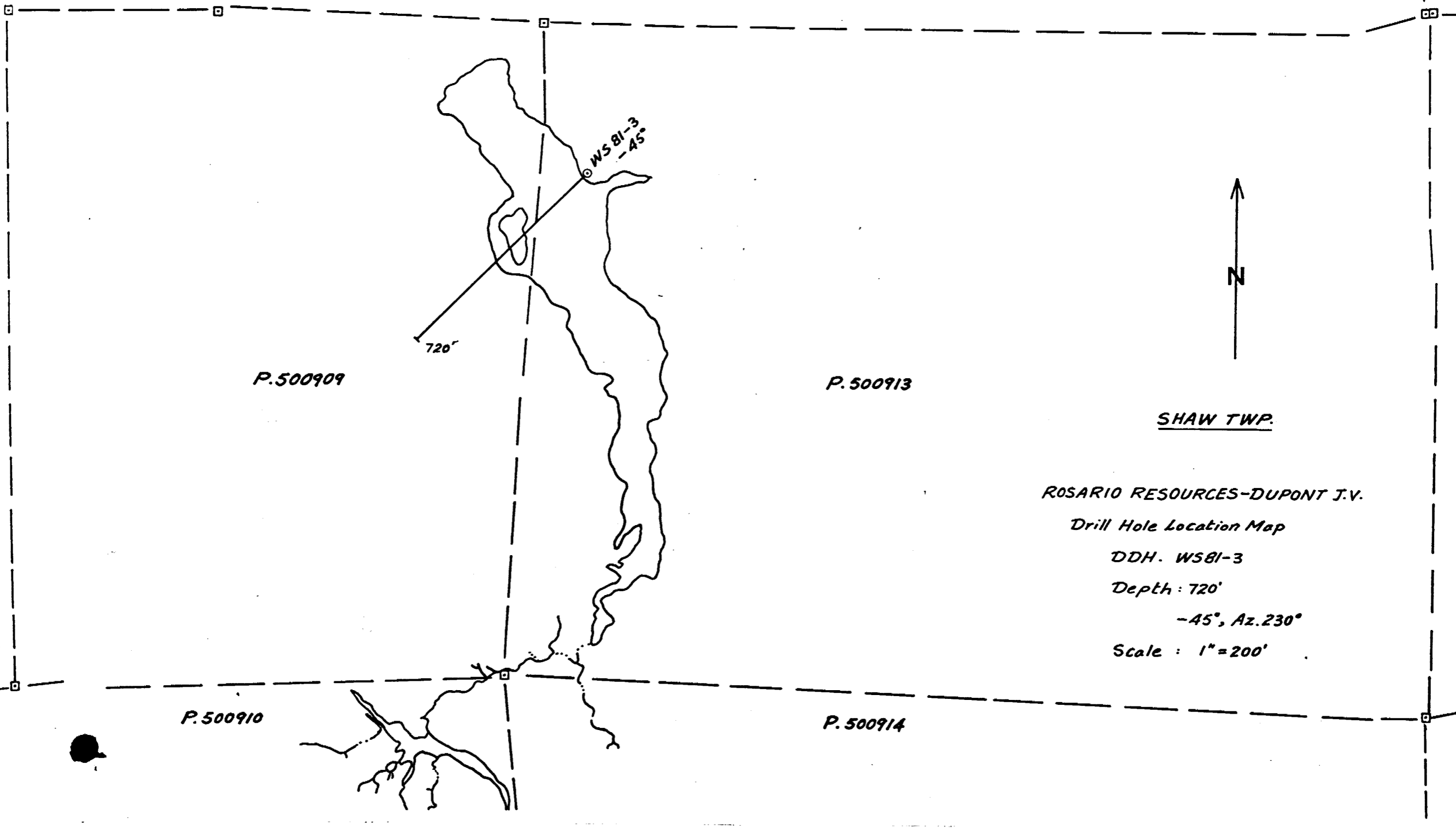
Tie Line 26+00 South

Line 40 E
 27 S

P.1

P.2





P.500909

P.500913

P.500910

P.500914

WS81-3
-45°

720'



SHAW TWP.

ROSARIO RESOURCES-DUPONT J.V.

Drill Hole Location Map

DDH. WS81-3

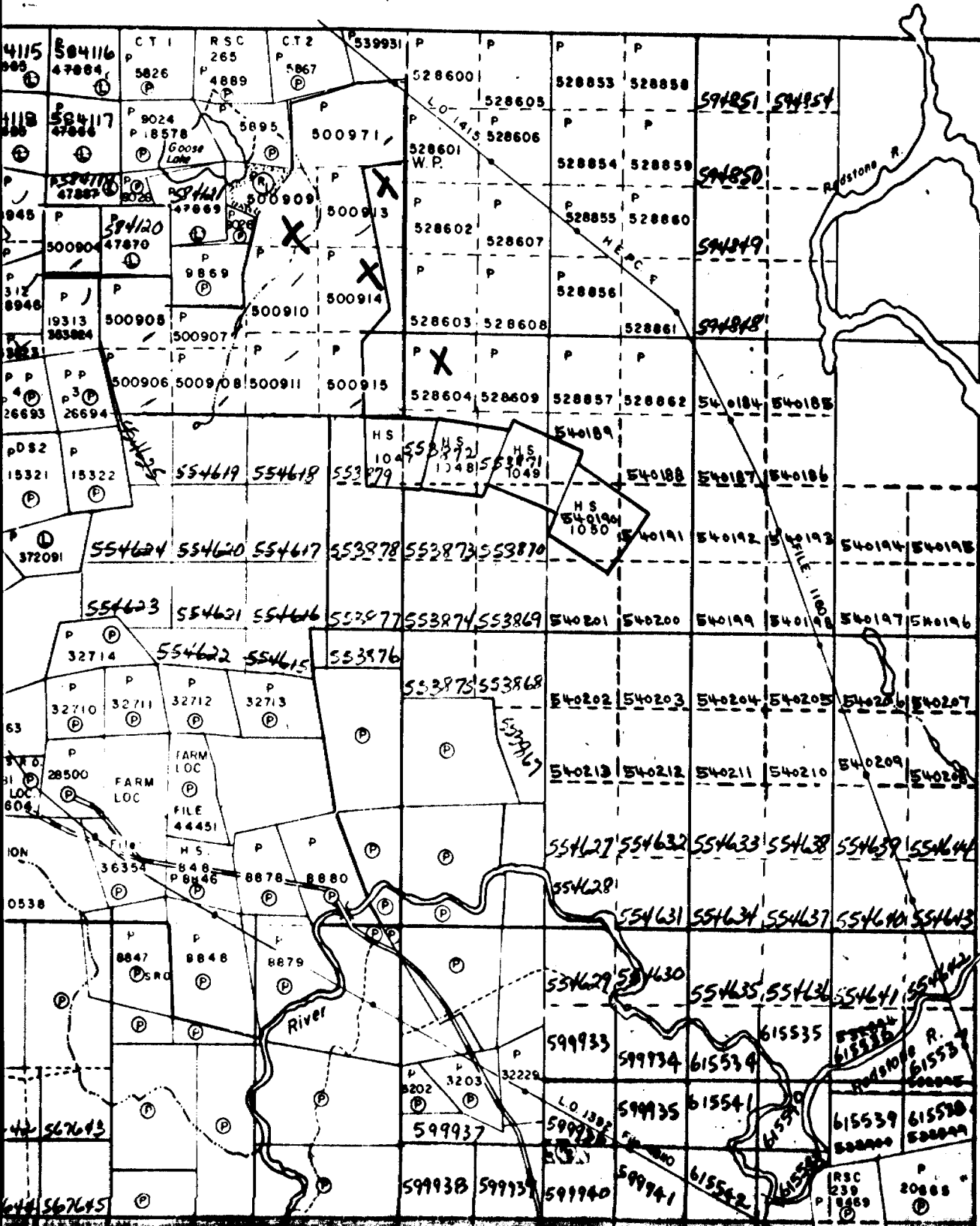
Depth: 720'

-45°, Az. 230°

Scale: 1" = 200'

Shaw Twp.

Whitney Twp. M. 319



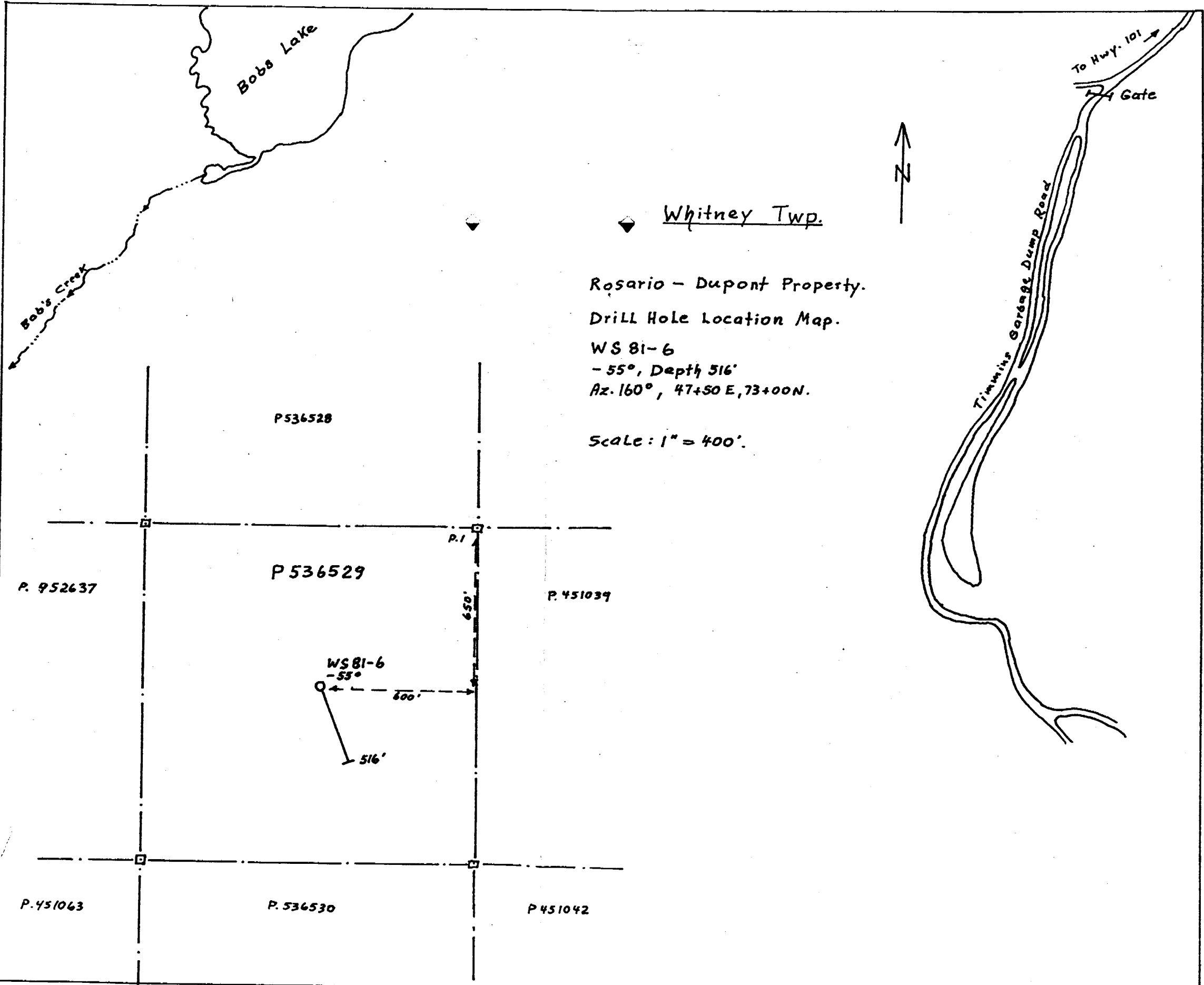
VI

V

IV

III

Carmen Twp M 266



Bobs Lake

Bob's Creek

Whitney Twp.

Rosario - Dupont Property.

Drill Hole Location Map.

WS 81-6
-55°, Depth 516'
Az. 160°, 47+50 E, 73+00 N.

Scale: 1" = 400'.

P. 536528

P. 536529

P. 952637

P. 451039

WS 81-6
-55°
600'
516'

P. I

650'

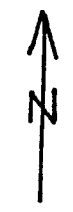
P. 451063

P. 536530

P. 451042

Timmins Garbage Dump Road

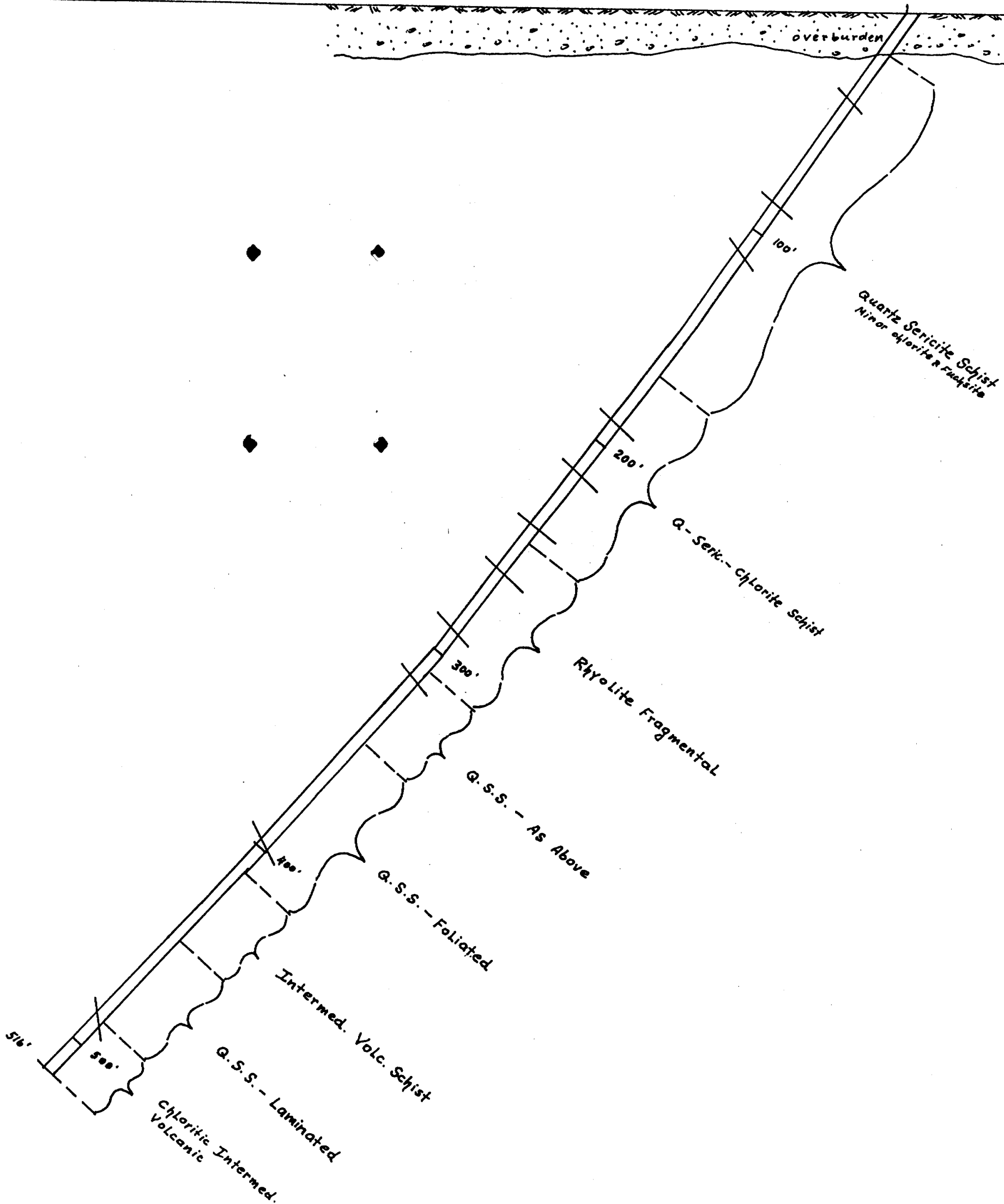
To Hwy. 101 Gate



Section - Looking SW (250°)

WS81-6
- 55°

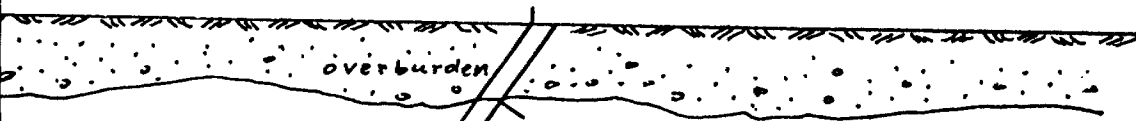
SE



Looking SW (250°)

WS81-6
-55°

NW



100'

Quartz Sericite Schist
Minor chlorite & fuchsite

200'

Q-Serik.-Chlorite Schist

ite Fragmental

Rosario - Dupont J. V.

Whitney Twp.

DDH WS81-6

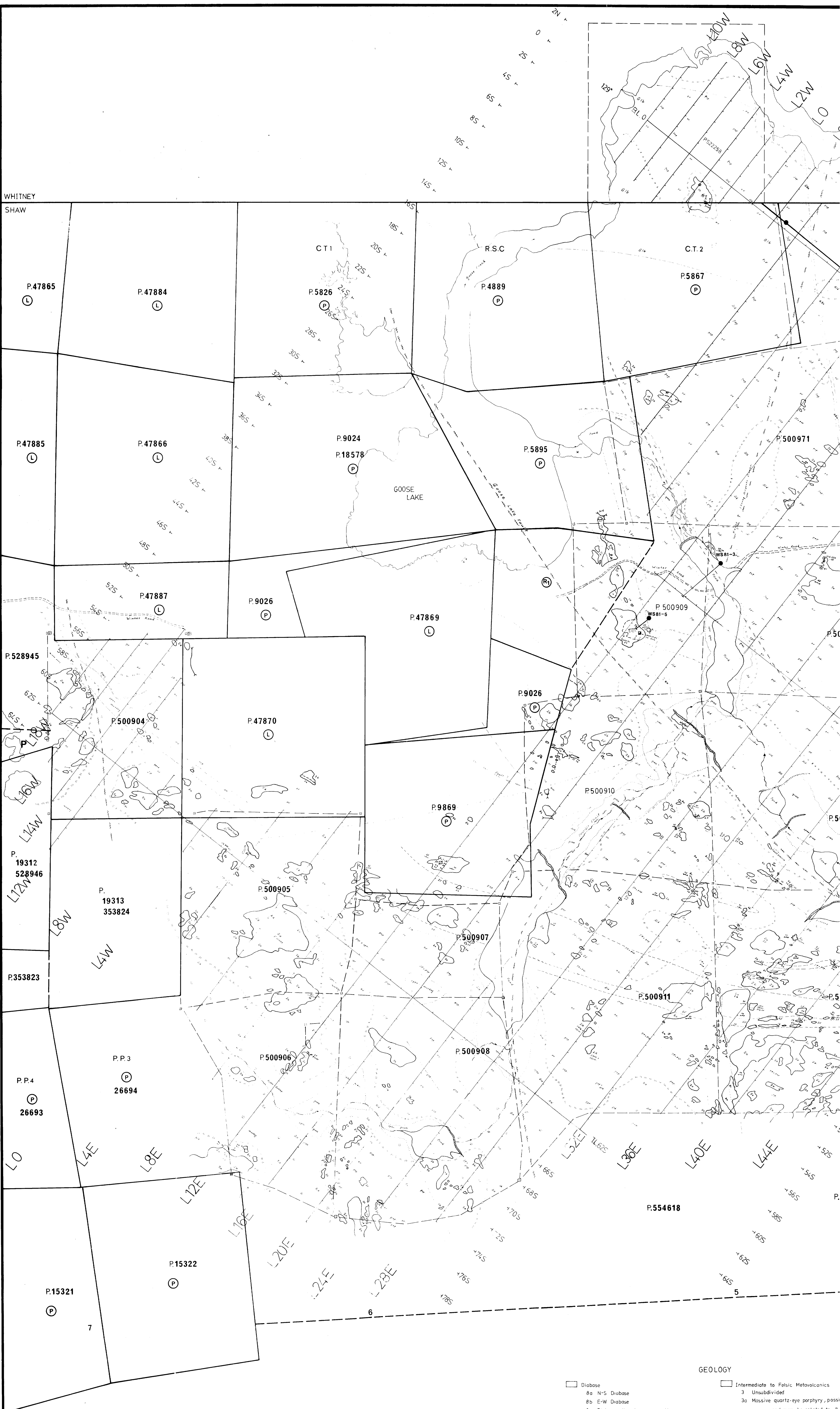
-55°, Az. 160°

Depth: 516'

Grid Reference: 47+50E, 73+00N.

Claim: P. 536529

Scale: 1" = 40'



LEGEND:

- Claim Line
- Creek
- Road
- Power Line
- Patented Land
- Leases
- IRON BAR
- PICKET LINE AND STATIONS

SYMBOLS

- Geological boundary, defined, inferred
- Trench
- Shaft
- Pit
- Schistosity, foliation, inclined
- Bedding, tops known, inclined
- Fault or shear zone, defined, inferred
- Diamond drill hole
- pyr pyrrhotite
- pyr pyrite
- cpy chalcopyrite
- gal galena
- sph sphalerite
- cb carbonized
- graph graphite
- qv quartz vein
- fuch fuchsite
- bld breccias
- Alders
- Poplars
- Spruce
- Jack pine
- Overburden
- Wet-swamp
- Beaver dam and pond
- Topographic change lines

GEOLOGY

- Diabase
 - 8a N-S Diabase
 - 8b E-W Diabase
 - 8c Diabase, altered, non-magnetic
- Felsic Intrusive Rocks
 - 7 Unsubdivided (may include members of 3)
 - 7a Aplite
 - 7b Altered feldspar porphyry
- Metamorphosed Ultramafic Intrusives
 - 5a Talc
 - 5b Peridotite
 - 5c Chloritized
- Metasediments and Exhalites (Iron Formations)
 - 4a Chert facies
 - 4b Magnetite-jasper
 - 4c Hematite-jasper
 - 4d Pyrite
 - 4e Pyrrhotite
 - 4f Carbonate
 - 4g Chloritized
 - 4h Graphite
- Intermediate to Felsic Metavolcanics
 - 3 Unsubdivided
 - 3a Massive quartz-eye porphyry, possibly and may be related to 7
 - 3b Tuff and lapilli tuff
 - 3c Schistose, sericitic
 - 3d Agglomerate-breccia (occasional)
 - 3e Rusty weathering
 - 3f Carbonized
 - 3g Chloritized
 - 3h Quartz sericitic schist (quartz eye)
- Mafic Metavolcanics
 - 2 Unsubdivided
 - 2a Massive flows
 - 2b Light coloured tuffs and fragments of iron formation bands of iron formation
 - 2c Mafic tuff, lapilli tuff
 - 2d Agglomerate
 - 2e Amphibolized
 - 2f Carbonized
 - 2g Sheared
- Ultramafic Metavolcanics
 - 1a Spinifex textured and/or polytextured
 - 1b Carbonized flows (some fuchsite)
 - 1c Talc chlorite alteration

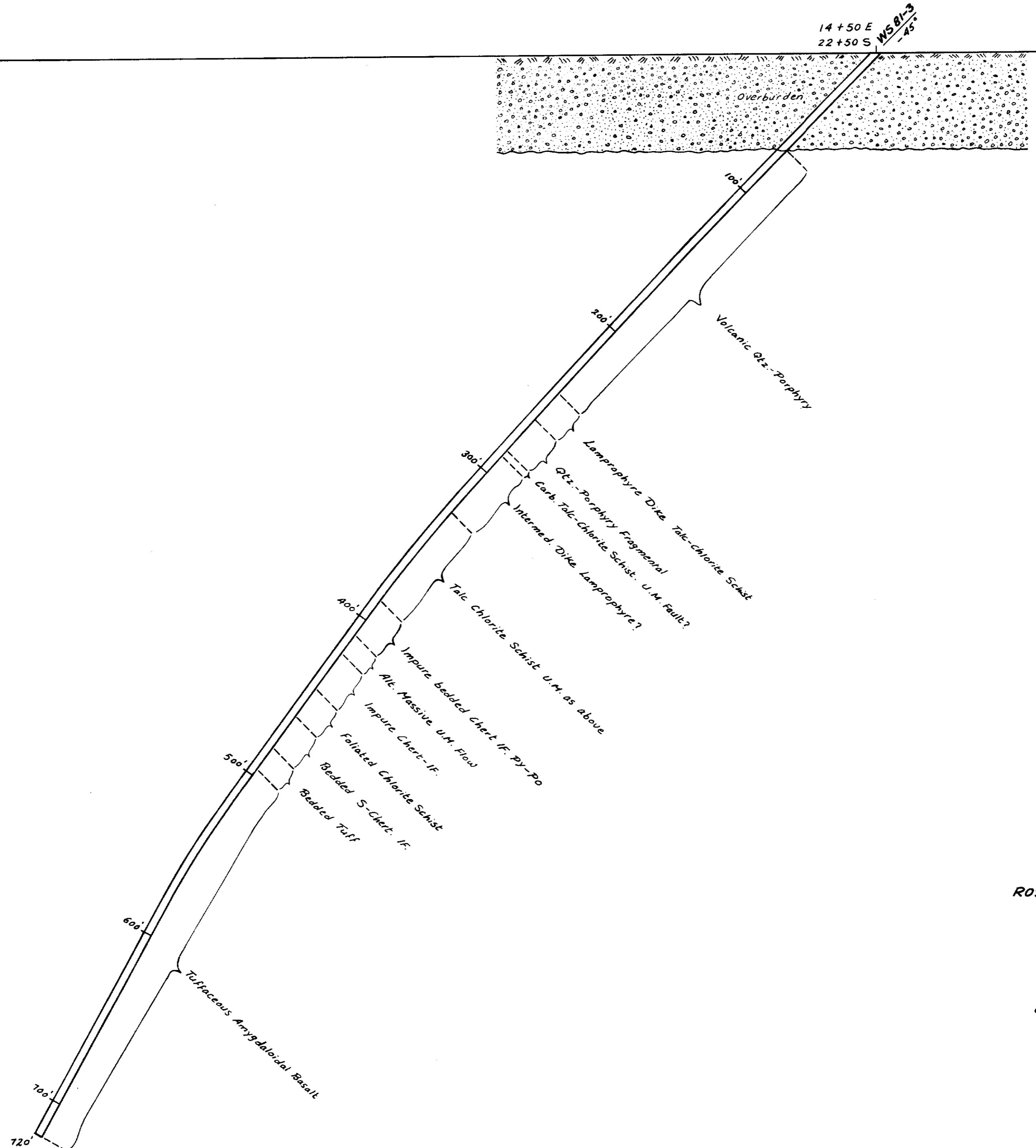


SW

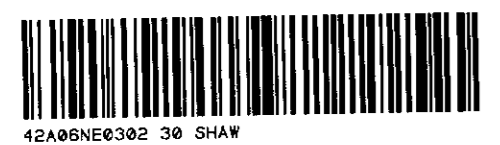
14+50 E
22+50 S

WS 81-3
-45°

NE



ROSARIO RESOURCES-DUPONT J.V.
 SHAW TWP.
 DDH. WS 81-3
 -45°, Az. 230°
 Depth : 720'
 Grid Reference : 14+50 E , 22+50 S
 Claim : P.500913 , P.500909
 Scale : 1" = 40'



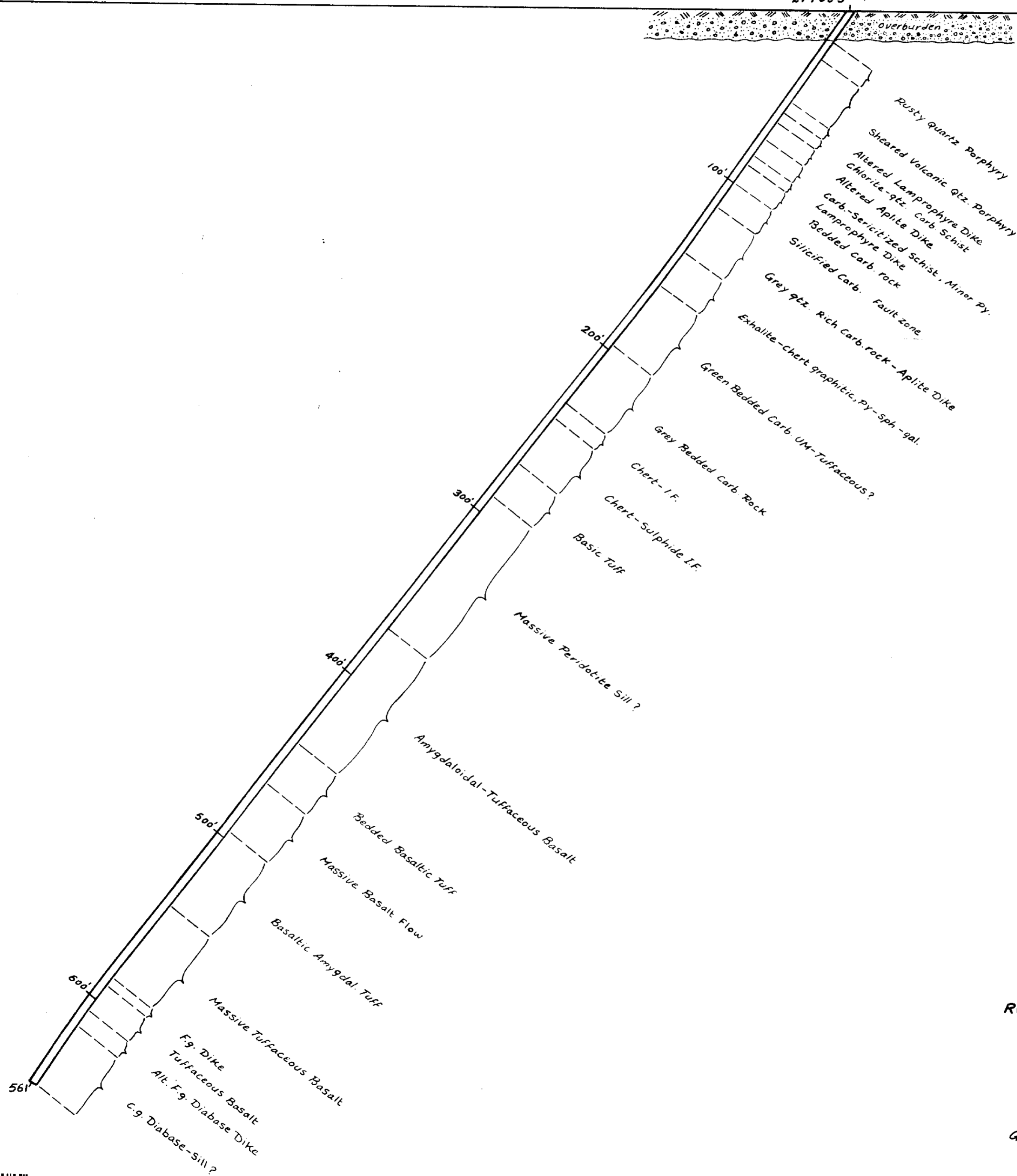
42A05NE0302 30 SHAW

SW

NE

52+00E
27+00S

WS 81-2
-55°



ROSARIO RESOURCES - DUPONT J.V.

SHAW TWP.

DDH. WS 81-2

-55°, Az. 200°

Depth: 651'

Grid Reference: 52+00E, 27+00S

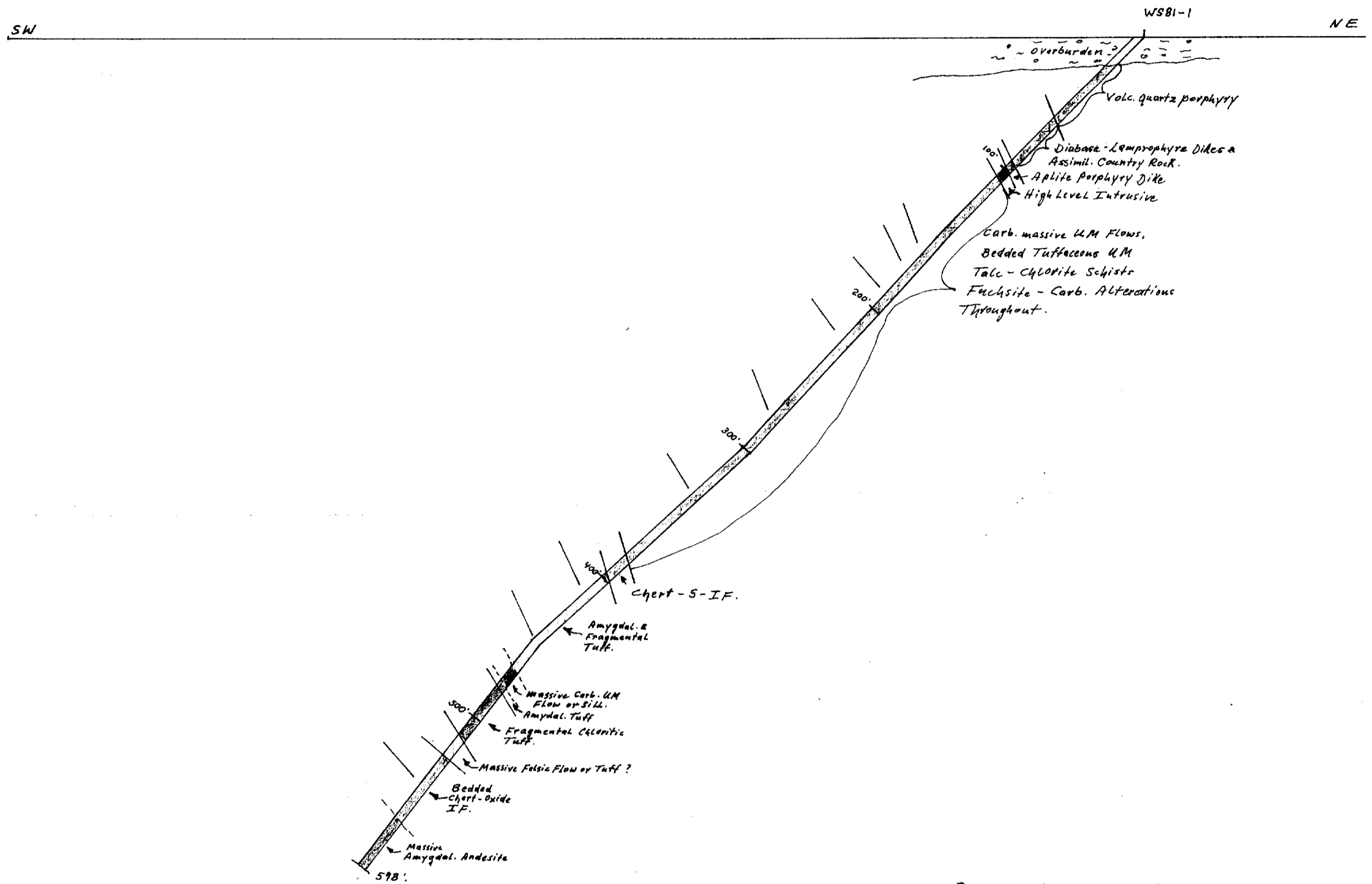
Claim: P.528604

Scale: 1"=40'



42A06NE0302 30 SHAW

Section - Looking NW (309°)



Rosario Resources Canada Ltd.

Shaw Twp. - Brown McDade Option.
Claim: P500914

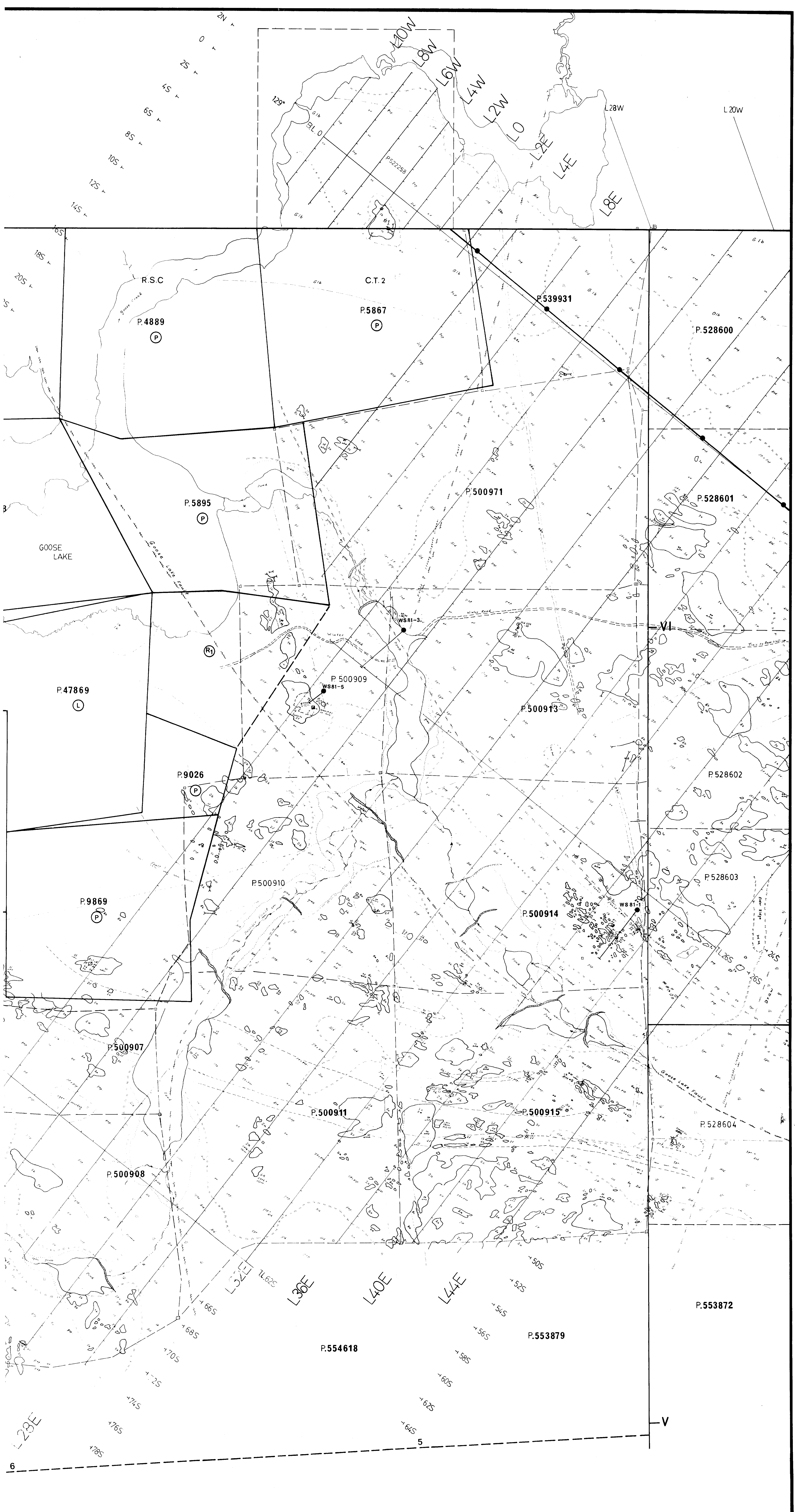
WS 81-1
- 45°, Az. 219°.

38+50 E, 27+30 S

Scale: 1" = 50 Feet.



42A06NE0302 30 SHAW



GEOLOGY

- | | |
|---|--|
| <ul style="list-style-type: none"> □ Diabase <ul style="list-style-type: none"> 8a N-S Diabase 8b E-W Diabase 8c Diabase, altered, non-magnetic □ Felsic Intrusive Rocks <ul style="list-style-type: none"> 7 Unsubdivided (may include members of 3) 7a Aplite 7b Altered feldspar porphyry □ Metamorphosed Ultramafic Intrusives <ul style="list-style-type: none"> 5a Talc 5b Peridotite 5c Chloritized □ Metasediments and Exhalites (Iron Formations) <ul style="list-style-type: none"> 4a Chert facies 4b Magnetite-jasper 4c Hematite-jasper 4d Pyrite 4e Pyrrhotite 4f Carbonate 4g Chloritized 4h Graphite | <ul style="list-style-type: none"> □ Intermediate to Felsic Metavolcanics <ul style="list-style-type: none"> 3 Unsubdivided <ul style="list-style-type: none"> 3a Massive quartz-eye porphyry, possibly high level intrusive and may be related to 7, aplite 3b Tuff and lapilli tuff 3c Schistose, sericitic 3d Agglomerate-breccia (occasional fuchsite fragments) 3e Rusty weathering 3f Carbonatized 3g Chloritized 3n Quartz sericitic schist (quartz eyes) □ Mafic Metavolcanics <ul style="list-style-type: none"> 2 Unsubdivided <ul style="list-style-type: none"> 2a Massive flows 2b Light coloured tufts and fragmentals with thin bands of iron formation <ul style="list-style-type: none"> 2c Mafic tuff, lapilli tuff 2d Agglomerate 2e Amphibolitized 2f Carbonatized 2g Sheared □ Ultramafic Metavolcanics <ul style="list-style-type: none"> 1a Spinifex textured and/or polysutured flows 1b Carbonatized flows (some fuchsite bands) 1c Talc chlorite alteration |
|---|--|

SYMBOLS

- | | |
|--|--|
| <ul style="list-style-type: none"> defined, inferred inclined inclined, inferred defined, inferred | <ul style="list-style-type: none"> <i>Ala</i> Alders <i>Pop</i> Poplars <i>Spr</i> Spruce <i>JP</i> Jack pine <i>ov</i> Overburden <i>W</i> Wet-swamp <i>BD</i> Beaver dam and pond <i>TL</i> Topographic change lines |
|--|--|

N



ROSARIO RESOURCES CANADA LTD.	
SHAW TWP. Brown M ^c Dade Option	
GEOLOGY	
OPER. : A. Philipp, R. Markov	
SCALE : 1" = 200'	DATE : July - September, 1980.