63.3984

LACANA MINING CORPORATION
GEOPHYSICAL REPORT
ON A
MAGNETIC SURVEY
SHAW TOWNSHIP
PORCUPINE MINING DIVISION
ONTARIO

April 1981
Kirkland Lake, Ontario

R. C. Wells, B.Sc.

R. C. Wells
25/5/81.

TABLE OF CONTENTS

PAGE NO.

INTRODUCTION

Lacana Mining Corporation took an option on 13 unpatented claims in Shaw Township in 1980. During January and February 1981, a grid was cut on the property and a magnetic survey was completed. This report gives details of the magnetic survey as required for assessment by the Ontario Government.

LOCATION AND ACCESS

Lacana Mining Corporation holds 13 contiguous unpatented claims in Shaw Township, Porcupine Mining Division. The claims are as follows:

P 353822-823-824-825-826-827-828
P 528942-943-944-945-946
P 578226

From here onwards, the claim group will be referred to as the Property. The Property is located in the northern part of Shaw Township to the west of Goose Lake. An all weather gravel road from South Porcupine gives access to Shaw Township. From Tisdale water supply an east trending bush road can be driven as far as Goose Lake in dry weather. This track passes through the northern part of the Property.

PREVIOUS WORK

The area was thoroughly prospected during the discovery era of the Porcupine Mining Camp, around 1909, and in 1925, two shafts, each 60 feet deep, were sunk by Porcupine Hudson Bay Mines Ltd.

The ground was subject to a great deal of surface stripping, trenching and sampling at various times. Bay Lake Gold Mines Ltd. held the Property between 1930 and 1966. Bay Lake optioned the Property to Sylvanite Gold Mines Ltd. in 1940, the latter did a large amount of bulk sampling. Assays from the bulk sampling program ranged up to 0.05 ounces of gold per ton.

Flint Rock Mines Ltd. staked the Property after the claims reverted to the Crown in 1966. Flint Rock drilled 11 holes on the Property in 1972 and 1974. Assays from mineralized zones in the core gave gold contents ranging from 0.02 ounces per ton over 2½ feet to 0.36 ounces per ton over 6.0 feet.

Lacana Mining Corporation took an option on the Property in 1980.

TOPOGRAPHY

Much of the northern and western parts of the Property consist of gently undulating upland with numerous outcrops and open birch woodland. The south and southeastern parts of the Property are low lying and swampy.

GENERAL GEOLOGY

The geology of Ogden, Deloro and Shaw Townships is covered by Ontario Department of Mines, Open File Report 5012 (1967) by H. D. Carlson. The claims are underlain by intermediate to mafic metavolcanic flows with narrow banded iron formation and interflow pyroclastic zones. The volcanics and iron formations strike roughly NW-SE and dip gently to the NE.

There are a number of zones of intense carbonate alteration on the Property, some of these are closely associated with the iron formations while other wider zones have a more easterly trend, have steep dips and seem to crosscut the stratigraphy.

GRID CUTTING

A grid, over 25 miles long, was cut on the Property during February 1981 by Gelinas and Associates Ltd. of St. Severe, Quebec. The base line, Az 315° and grid lines, Az 45° were cut, chained and picketed. Much of the Property was covered by 100 foot spaced grid lines with tie lines at every 500 feet.

MAGNETOMETER SURVEY

(a) METHOD

A Scintrex MP-2 Proton Magnetometer was used for the survey. Readings were taken at 50 foot stations on the grid. The survey was conducted in a series of closed loop traverses with stations on the base line being used as base stations. Diurnal corrections were made.

(b) RESULTS AND CONCLUSIONS

The readings from the magnetometer survey are plotted in Figure 1. Readings over the detailed part of the grid (100 foot spaced lines) are contoured in Figure 2.

A prominent southeast trending magnetic ridge is evident in Figure 2. The ridge has 2,000 to 10,000 gammas relief and occurs

over the main iron formation zone on the Property. The contour pattern over the formation suggests shallow dips and strong folding. Small isolated magnetic ridges to the east and west of the main zone may represent fragmented iron formation or sites where folding has brought the formation close to surface.

Away from the iron formation, the magnetic grain is predominantly SE to ESE.

The 1972 diamond drilling by Flint Rock Mines intersected mineralized tuff beds associated with iron formation which gave high gold values. The magnetic survey accurately delineated the main iron formation zone and a number of other zones. These zones are targets for future exploration.

REPORT ON EXPLORATION DURING 1981

FOR THE

SHAW PROJECT, SHAW TOWNSHIP
PORCUPINE MINING DIVISION, ONTARIO

Ronald C. Wells
Lacana Mining Corporation
Kirkland Lake, Ontario

November, 1981

A Y Barker
For R.C. Wells

CONCLUSIONS AND RECOMMENDATIONS

Six diamond drill holes totalling 2,312 feet were completed on the property during the period March to April 1981.

It is very hard to explain the differences in assay results between the 1972 drilling by Flint Rock and the 1981 drilling by Lacana. No significant gold values were obtained from the main carbonate zone in 1981, while Flint Rock reports values up to 0.24 oz. Au/ton over 15 feet. The gold distribution may be highly erratic in the carbonate zone but DDH SH-6-81 drilled within the carbonate zone for 247 feet did not intersect any gold values. The mineralized iron formation produced higher assays, in the 0.02 oz. Au/ton range, but again still not nearly as high as those obtained by Flint Rock. Assays from surface pits within the iron formation gave similar results to the Lacana drilling.

It was concluded that the Flint Rock assays were highly suspect and that the property should be dropped.

LOCATION AND PROPERTY STATUS

Lacana Mining Corporation took an option on 13 contiguous unpatented claims in Shaw Township, Porcupine Mining Division, in 1980. The property is located in the northern part of Shaw Township to the west of Goose Lake.

PREVIOUS WORK

Bay Lake Gold Mines Ltd. held the property between 1930 and 1966. Sylvanite Gold Mines Ltd. optioned the property in 1940 and completed a large amount of bulk sampling with assays ranging up to 0.05 oz. Au/ton.

Flint Rock Mines Ltd. presently holds the property. From 1972 to 1974 11 holes were drilled by the owners. Assays from mineralized zones in the core gave gold contents ranging from 0.02 oz. Au/ton over 2 1/2 feet to 0.36 oz. Au/ton over 6.0 feet.

GEOLOGY

The claims are underlain by intermediate to mafic metavolcanic flows with narrow banded iron formation and interflow pyroclastic zones. The volcanics and iron formations strike roughtly NW-SE and dip gently to the NE.

There are a number of zones of intense carbonate alteration on the property, some of which are closely associated with the iron formations while other wider zones have a more easterly trend and steep dips, and seem to crosscut the stratigraphy.

1981 WORK PROGRAM

During February 1981 Gelinas and Associates Ltd. cut a grid over 25 miles long on the property and completed a detailed magnetometer survey. Six diamond drill holes totalling 2,312 feet were put down on the property during April 1981 by Norex Drilling Ltd. Table 1 summarizes the drilling. Much of the core was sent for assay and sludge samples were taken for each hole. A probe was used on each hole producing gamma and S.P. logs. After drilling, all the old pits and trenches on the property were resampled.

RESULTS

The magnetometer survey accurately outlined the iron formation on the property.

The drill results were very disappointing, as the assays by Flint Rock could not be reproduced even though some of the same drill set-ups were used. Quartz vein material was intersected but in most cases it was barren.

Sludge samples were assayed prior to sampling the core so that no mineralized sections were missed. Four of the 1981 holes were essentially redrilling previous Flint Rock holes (Table 1). DDH-SH-6-81 was put down on the main carbonate zone close to the old shaft and was angled so that it would stay within the zone (i.e., it was drilled down dip). The hole stayed in carbonate rock for 247 feet; no significant mineralization was intersected.

Assays from the surface pits and trenches generally ranged from trace Au to 0.08 oz. Au/ton.

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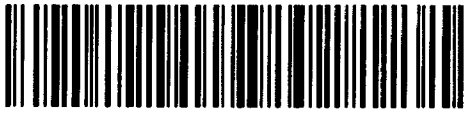
SHORT REPORT ON DIAMOND DRILLING

FLINT ROCK P[illegible]
SHAW TOWI



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GENERAL

Six diamond drill holes were completed during the period March to April 1981 on the Shaw Property by Norex Drilling Ltd. of South Porcupine. Details on the drilling occur in the following table.

Hole No. (1981)	Length	Dip	Grid Location	Bearing	Redrill Hole No. (1972)	Target
SH-1-81	550'	50°	5+20S/5+80E	180°	DDH - 8#	Carbonate Zone
SH-2-81	400'	50°	5+10S/2+80W	230°	DDH - 1#	Mineralized Tuffs
SH-3-81	389'	50°	0+75S/2+35E	190°	DDH - 10# (approx. position)	Carbonate Zone
SH-4-81	357'	50°	1+50S/1+30W	230	DDH - 5#	Mineralized Tuffs
SH-5-81	469'	50°	4+00N/0+80W	230		Intersection of Tuffs and Carbonate Zone
SH-6-81	247'	80°	6+15S/5+50E	180°		Carbonate Zone
Total	2,312'					

The first four holes tested the 1972 drilling results of Flint Rock Mines Ltd. Significant gold mineralization occurred as reported by Flint Rock in each of the four 1972 holes, as follows:

DDH-8# 224 ft. to 229 ft. (5 ft.) 0.21 oz. Au/ton
237 ft. to 252 ft. (15 ft.)0.24 oz. Au/ton

DDH-1# 71.5 ft. to 775 ft. (6 ft.) 0.36 oz. Au/ton
303 ft. to 307.5 ft. (4.5 ft.) 0.25 oz. Au/ton

DDH - 10#	148.0 ft. to 154.5 ft. (6.5 ft.)	0.38 oz. Au/ton
DDH - 5#	55.0 ft. to 58.5 ft. (3.5 ft.)	0.21 oz. Au/ton

In DDH's 1# and 5# (1972) the gold mineralization is recorded to be associated with mineralized tuff beds. The upper mineralized zone was traced 700 feet by the 1972 drilling through seven drill holes and the average gold content ranged from 0.02 oz. Au/ton over 2 1/2 feet to 0.36 oz. Au/ton over 6 feet.

In DDH's 8# and 10# (1972) the gold mineralization was associated with pyrite bearing quartz veins in the main carbonate zone.

RESULTS

The 1981 holes by Lacana that tested the previous 1972 drilling could not duplicate the results. Assays from sludge samples taken every 10 feet when possible and from core samples were not at all comparable with those from the 1972 drilling.

DDH's 1 and 3 both intersected the main carbonate zone which seems to dip vertically to 80°S. The carbonate probably follows a major fault zone. Fuchsite-bearing zones occur within the carbonate rocks and contain much broken quartz. All quartz vein material was split and assayed; the highest values obtained were in the region of 150 ppb. The 1972 drill logs mentioned that the gold-bearing quartz veins contain up to 10% sulfides; no significant sulfide mineralization was observed in any of the quartz veins in the 1981 core.

DDH-6(1981) (SH-6-81) was drilled down the carbonate zone in the vicinity of the old shaft (20 ft. away) to test whether DDH-5-81 had missed the gold-bearing zones intersected

by DDH-8#(1972). The hole kept with the carbonate zone for a total length of over 247 ft. No values higher than trace Au were obtained from the sludges on split core samples, although large amounts of vein quartz were present.

The carbonate zone is very similar in appearance to the gold-bearing carbonate-fuchsite zones in Tisdale Township with the exception that sulfide mineralization is sparse to absent.

DDH's 2 and 4(1981) intersected a number of strongly mineralized zones within a sequence of tuffs and iron formation. The iron formation varies from a few inches to over twenty feet in thickness and locally contains up to 20% pyrite and/or 20% pyrrhotite with some magnetite. Minor amounts of chalcopyrite are present with the other sulfides. The sulfides occur as conformable layer lenses and pods within the iron formation (sulfide iron formation).

Assays from the mineralized iron formation were generally much higher than from the carbonate zone. The highest value obtained was from a sludge sample (SH-4-81) 190' to 200', 0.06 oz. Au/ton. The highest core sample gave 0.03 oz. Au/ton over 2.5 ft in SH-2-81 (142 - 144.5 ft.). These values are still nowhere near as high as those obtained by the 1972 drilling.

DDH SH-5-81 tested the northern end of the iron formation zone where it merges with the main carbonate zone. Split core from this hole has still to be assayed though no significant mineralization was observed.

CONCLUSIONS

In 1940 Sylvanite Gold Mines Limited held an option on the property and did a large amount of bulk sampling on the most interesting showings; the best assay value returned from

this work was 0.05 oz. Au/ton. This value is in the same range as the highest values obtained from the 1981 Lacana drilling. Some split core from the 1972 drilling was found in the vicinity of DDH's 2# and 8# (1972). The split core was collected and assayed; trace gold was obtained from both samples.

It is very hard to explain the difference in assay results between the 1972 and 1981 drilling. The gold distribution may be highly erratic in the carbonate zone but DDH SH-6-81 drilled within the carbonate zone close to the old shaft did not intersect any significant gold mineralization over 247 feet.

The mineralized iron formation seems to be a better target for future exploration, only 700 feet of the formation has been explored so far. Again, however, it is difficult to explain the difference between the 1972 and 1981 results. The lower mineralized zone (around 300 ft.) of the 1972 drilling was not encountered by any of the three 1981 holes (SH-2,4,5). The upper mineralized zone of the 1972 drilling roughly corresponds in position with this higher values obtained in 1981. Future work should concentrate on the southerly continuation of the upper mineralized iron formation. Much of the formation occurs close to or at surface and could be examined by stripping or shallow trenching.

The possibility of salting in the Flint Rock assay values cannot be discounted, however, and additional split core located near the old holes should be sought, and assayed. If once again no significant values are obtained, either here or in the surface work, no additional expenditures can be recommended.

HOLE SH-3-51 PAGE 1

DRILL HOLE LOG

PROPERTY FLINT ROCK - SHAN
DISTRICT SHAW TWP. TIMMINS
LOCATION CLAIM S25943

OBJECTIVE Test Carbonate Zone

COMMENCED
COMPLETED
LAT 0+75S

DEP 2+35E
ELEV
BEARING Az190°
DIP -50°
LENGTH 289 FT
ETCH AT 55° @ 289 FT
TRUE DIP 50° @ 289 FT

HOR. COMPONENT
VER. COMPONENT
TOTAL RECOVERY 100%
OTHER SURVEYS MAG
DRILLED BY NOREX LTD SOUTH PORCUPINE
LOGGED BY R. E. WELLS BSc.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	oz/t	oz/t
0	90	CASING	151	34.8 - 35.3						
			152	74.9 - 75.3						
90	161.5	CARBONATED INTERMEDIATE METAVOLCANICS	153	83.0 - 87.0						
		Grey to greenish grey, moderately soft, carbonated intermediate flows (Andesite). Distinct speckled appearance from carbonate alteration. Some disseminated pyrite occurs locally. Little quartz veining. Rusty, strongly carbonated zones occur locally.								
		@ 22.0' 1" rusty carbonate zone 45° CA								
		@ 26.5' to 27.5' rusty carbonate zone with some disseminated Py.								
		@ 35.0 ½" quartz vein. 50° CA.								
		@ 75.0 1½" quartz vein 35° CA minor tourmaline.								
		@ 83.2 to 86.0 Pure Carbonate brown to pinkish, very coarse grained with small flecks of fuchsite or light								

HOLE SH-3-81 PAGE 2 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	oz/t Au	oz/t
		@ 87.0 to 87.3 Quartz vein	154	100.9-101.6					TR	
		@ 92.8 1" quartz vein 55°CA.	155	110.4-110.8					TR	
		@ 101 to 101.4 Quartz vein with minor tourmaline. 45°CA.	156	163.4-165.4					TR	
		@ 110.6 ½" quartz vein 45°CA.	157	172.0-173.0					TR	
		@ 149.8 1" quartz vein 45°CA.	158	176.9-177.9					TR.	
		@ 155.0 1" quartz-carbonate vein 45°CA.								
161.0	167.0	QUARTZ-CARBONATE ROCK. Soft, mottled green and brown, quartz-carbonate breccia with green chlorite and fuchsite Minor fine Py.								
167.0	187.0	STRONGLY CARBONATED METAVOLCANICS Moderately soft, grey strongly carbonated metavolcanic rocks with numerous carbonate veins and pods. Some quartz veins and blebs. @ 177.0 ½" quartz vein 45°CA. @ 179.6 ½" quartz vein 45°CA @ 182.0 ¼" quartz vein 50°CA @ 187.0 2" quartz vein 45°CA.								

HOLE SH-3-81 PAGE 3 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES Au %	%	%	%	oz/t	oz/t
1970	214	CARBONATE ROCK	159	2015-2025					.002	
		Syft, grey carbonate rock. Some	160	2040-2055					TR	
		large quartz veins, rare fuchsite.	161	2087-2097					TR	
		@ 2015 & 2024 Quartz vein	162	2165-2175					TR	
		@ 2040 to 2044 Quartz vein	163	2228-2238					TR.	
		@ 2053 1" Quartz vein	164	2250-2270					.005	
		@ 2089 to 2094 Quartz vein								
214	227	QUARTZ-CARBONATE ROCK								
		Mottled grey to greenish grey.								
		Strongly carbonated with quartz								
		and fuchsite. In most part a breccia.								
		@ 217 1" quartz vein								
		@ 217.5 2" quartz vein 75°CA.								
		@ 218.4 to 219.0 Quartz vein with								
		blebs of cpy.								
		@ 219.7 2" quartz vein 80°CA.								
		@ 225.0 to 225.9 Much quartz and								
		rusty carbonate.								
227.0	257.0	CARBONATED INTERMEDIATE TUFFS								
		Medium hard to moderately soft								
		grey to green tuffs. Carbonate								
		alteration decreases down hole.								
		@ 227 to 231 Strong foliation 45°CA.								
		@ 252 to 254.2 Strongly carbonated								

HOLE SH-3-81 PAGE 4 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	oz/t	oz/t
		@ 250 to 281 Rusty carbonate zone								
@ 287		END OF HOLE.								

CORE SAMPLES DDH SH-3-81

SAMPLE NO.	DEPTH FROM	DEPTH TO	ASSAYS Au Oz. TON
27151	[illegible]	[illegible]	TRACE
2	[illegible]	[illegible]	TR
3	83.0	87.0	TR
4	100.9	101.6	TR
5	[illegible]	[illegible]	TR
6	[illegible]	[illegible]	TR
7	172.0	173.0	TR
8	176.9	177.9	TR
9	201.5	202.5	0.002 *
27160	204.0	205.5	TRACE
1	208.7	209.7	TR
2	214.5	215.5	TR
3	222.8	223.8	TR
4	225.0	227.0	0.005

* ESTIMATED

BELL-WHITE ANALYTICAL LABORATORIES LTD.
P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. B90-81 DATE: April 13, 1981

SAMPLE(S) OF: Sludge(28) RECEIVED: April 1981.

SAMPLE(S) FROM: Mr. R. Wells, Lacana Mining Corporation

Hole SH-3-81

Footage	Gold ppb
10-20	44
20-30	26
~~40-50~~ * 30-40	27
40-50 *	18
50-60	29
60-70	14
70-80	10
80-90	11
90-100	14
100-110	16
110-120	5
120-130	12
130-140	29
140-150	12
150-160	22
160-170	5
170-180	11
180-190	5
190-200	16
200-210	34
210-220	30
220-230	63
230-240	70
240-250	152
250-260	172
260-270	163
270-280	128
280-290	152

* Footages duplicated.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

HOLE SH-5-E-81 PAGE 1.

DRILL HOLE LOG

PROPERTY FLINT ROCK SHAW
DISTRICT SHAW TWP
LOCATION CLAIM S25942

OBJECTIVE Test carbonate zone to west.
COMMENCED 8/14/81
COMPLETED 8/14/81
LAT 4+00N

DEP 4+80'W
ELEV
BEARING 230°
DIP 50°
LENGTH 469
ETCH AT 58° @ 469 FT
TRUE DIP 50° @ 469 FT
~~test at 469'~~

HOR. COMPONENT 300 FT
VER. COMPONENT 360 FT
TOTAL RECOVERY 100%
OTHER SURVEYS
DRILLED BY NORCEX LTD SOUTH PORCUPINE
LOGGED BY R.C. WELLS B.Sc.

FOOTAGE FROM	TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	oz/t	oz/t
0	17'	CASING	101	20.0-21.0					TR	
17'	58'	CARBONATED INTERMEDIATE METAVOLCANICS	102	27.0-28.6					TR	
		Grey to greenish grey, carbonated andesitic lavas and tuffs.	103	35.0-36.0					TR	
			104	51.0-52.0					TR	
		@ 19.5 to 20.0 Siliceous tuff with bleby pyrite.	105	57.0-58.0					TR	
			106	64.0-65.0					TR	
		@ 27.0 & 28.6 Siliceous tuff. Stringer and disseminated pyrite. Also at 35.3 to 35.7.	107	80.0-82.0					TR	
		@ 44.5 1/2" quartz vein 35°CA. with pyrite cubes in wallrocks.	108	83.2-85.2					TR	
		@ 52.0 1/2" quartz vein. 80°CA	109	87.0-89.0					TR.	
		@ 57.0 to 58.0 K-spar alteration.								
58'	97'	CARBONATE ROCK								
		Soft, grey often coarse grained carbonate rock. Rusty in places with numerous carbonate veins and stringers in various directions. Cross cutting quartz veins are common. Sulfides are rare.								

HOLE SH-5-81 PAGE 2 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES Au %	%	%	%	oz/t	oz/t
		@ 64.0 to 65.0; 80.2 to 89.0; Rusty Carbonate zones. Quartz veins at 88.0, 88.7, 89.0. @ 70° to 90° CA.	110	106.0-108.7					TR	
			111	111.5-112.6					TR	
		@ 91.0 1" quartz vein 80° CA.	112	122.0-123.0					TR	
		@ 94.5 1½" quartz vein 45° CA.	113	126.0-129.0					TR	
970'	1420'	CARBONATED TUFFS & TUFF BRECCIAS	114	133.5-136.5					TR.	
		Grey to greenish grey to yellowish generally soft. Tuff and tuff breccias displaying original bedding and other textures. 70°-80° CA. Coarse tuff breccias occur locally.								
		@ 97.0-102.0 Carbonated tuff breccia								
		@ 102.0-108 Fine breccia and tuff with fragments of siliceous iron formation and blebby Py.								
		@ 107.0 to 108.0 rusty carbonate zone								
		@ 111.5 fine quartz vein with coarse Pyrite cubes.								
		@ 122.7 1" quartz vein 35° CA. Pyritic partings.								
		@ 126.0 to 129.0 Rusty carbonate zone with quartz and coarse Py. At top 3' of oxide iron formation.								
		@ 131.0 to 136.0 Tuff breccia with numerous fragments of siliceous								

HOLE SH-ST-81 PAGE 5 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	oz/t Au	oz/t
		@ 133.0 to 133.8 Large quartz vein	115	142.0-144.5					TR	
		@ 136.0 to 142.0 Strongly carbonated tuff & tuff breccia.	116	147.0-148.0					TR	
			117	168.2-170.5					TR.	
142.0	191.0	CARBONATE ROCK. Soft grey, medium to coarse grained carbonate rock with jacksite zones which are foliated 70°-80° CA								
		@ 142.0 to 144.3 jacksitic with some quartz								
		@ 144.3 to 163.0 Coarse grained carbonate								
		@ 157.2 3/4" quartz vein 80°CA.								
		@ 159.7 1/2" quartz vein 35°CA.								
		@ 163.0 to 191.0 Fine to medium grained carbonated tuff.								
		@ 168.5 to 169.0 Carbonated siliceous iron formation.								
		@ 169.5 to 170.1 rusty carbonate zone								
		@ 170.1 to 171.0 Carbonate with jacksite								
		@ 178.2 Coarse blebs of Py.								

HOLE SH-5-81 PAGE 4 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	oz/t	oz/t
191.0	350.0	CARBONATED INTERMEDIATE METAVOLCANICS Grey, speckled, strongly carbonated intermediate flows with minor tuffs @ 231 to 232 bedded tuffs 80° CA with ½" quartz vein @ 275.2 Interflow chert 35° CA @ 314.0 2" quartz vein 40° CA @ 315.7 to 316.3 rusty carbonate zone with ½" quartz vein 40° CA	118 119	313.5-314.2 393.4-394.5					TR TR	
350.0	467.0	CARBONATED GREY TUFFS Soft grey tuff with some massive units. Bedding commonly 70°-80° CA. Speckled carbonate alteration occurs locally, not as well developed as in andesites above. @ 393.4 to 395.3 Quartz vein 30° CA with sharp contacts. Wallrock carbonate. ¼" stringer of black tourmaline within vein at 394.5'.								
@ 467.0		END OF HOLE.								

CORE SAMPLES DDH SH-5-81

SAMPLE NO.	DEPTH FROM	DEPTH TO	ASSAYS Au Oz. TON
27101	20.0	21.0	TRACE
2	27.0	28.0	TR
3	35.0	36.0	TR
4	51.0	52.0	TR
5	57.0	58.0	TR
6	64.0	65.0	TR
7	80.0	82.0	TR
8	92.2	95.2	TR
9	87.0	89.0	TR
27110	106.0	108.7	TR
1	111.5	112.6	TR
2	122.0	123.0	TR
3	126.0	129.0	TR
4	133.5	136.5	TR
5	142.0	144.5	TR
6	147.0	148.0	TR
7	168.2	170.5	TR
8	313.5	314.2	TR
9	392.4	396.5	TR

SLUDGE SAMPLES DDH SH-5-81

SAMPLE NO.	DEPTH FROM	DEPTH TO	ASSAYS Au PPB
	7	30	14
	30	40	7
	40	50	18
	50	60	5
	60	65	7

BELL - WHITE ANALYTICAL LABORATORIES LTD.
P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 16716 DATE: May 22, 1981

SAMPLE(S) OF: Core(19) RECEIVED: May 1981

SAMPLE(S) FROM: Lacana Mining Corporation

SH-5-81

Sample No.	Oz. Gold
27101	Trace 20-2
2	Trace 27 28.0
3	Trace 35 - 36
4	Trace 51 - 52
5	Trace 57-58
6	Trace 64 - 65
7	Trace 80 - 82
8	Trace 83.2 - 85.2
9	Trace 87 - 88
27110	Trace 108 - 109
1	Trace 111.5 112.6
2	Trace 122 - 123
3	Trace 126 - 129
4	Trace 132.5 - 136.5
5	Trace 142 - 144.5
6	Trace 147 - 149
7	Trace 168.2 - 170.5
8	Trace 213.5 - 214.2
9	Trace 293.4 - 293.5

IN ACCORDANCE WITH LONG ESTABLISHED NORTH ... AN ASSAY FROM UNLESS OTHERWISE SPECIALLY STATED ... GOLD AND SILVER VALUES REPORTED ON ... ASSAYS HAVE NOT BEEN ADJUSTED TO COMPEN... FOR LOSSES AND GAINS OCCURRING IN THE FIRE ASSAY PROCESS

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER

HOLE SH-6-81 PAGE 1

DRILL HOLE LOG

PROPERTY FLINT ROCK SHAW DEP 5+50E
DISTRICT TIMMINS ELEV
LOCATION 20' North of shaft BEARING A2 180°
claim DIP 80°
OBJECTIVE Test carbonate zone LENGTH 247.0 FT
Drilling down-dip ETCH AT 85°/247.0
COMMENCED 10/4/81 TRUE DIP 80°/247.0
COMPLETED 11/4/81
LAT 6+15S

HOR. COMPONENT 50 FT
VER. COMPONENT 240 FT
TOTAL RECOVERY 100%
OTHER SURVEYS MAGNETIC
DRILLED BY LONGYEAR LTD SOUTH PORCUPINE
LOGGED BY R. C. LUCILLI BSc.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES %	%	%	%	Au oz/t	oz/t
0	7.0	CASING	062	20.0-23.0					TR	
			063	23.0-26.0					TR	
7	33.8	CARBONATED TUFFS	064	27.0-28.0					TR	
		Light grey, moderately soft, fine grained carbonated tuffs with much fine fracturing and stringer Pyrite.	065	48.5-51.0					TR.	
		@ 20' to 26' & 27' to 28' stringer Py.								
		@ 28' to 33' specks of fuchsite.								
33.8	91.0	COARSE GRAINED CARBONATE ROCKS								
		Soft, grey to dark grey, coarse grained carbonate rocks. Numerous sinuous carbonate veins. Minor amounts of fine pyrite.								
		@ 34.2, 34.9, 35.3 Narrow quartz veins (less ½") with sharp contacts 80°-90°CA								
		@ 37.2 Sinuous quartz vein 35°CA some disseminated Py.								
		@ 45.4 ½" quartz vein 90°CA.								
		@ 47.0 to 53.0 Finer carbonated tuffs with stringer Pyrite (48.5 to 51.0)								

HOLE SH-6-81 PAGE 2 CONTINUATION OF DRILL HOLE LOG

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES Au %	%	%	%	oz/t	oz/t
		@ 53.2 Quartz pod.	066	60.0-61.0					TR	
		@ 60.2 to 60.6 quartz-carbonate vein 45°CA with fuchsitic margins	067	69.5-70.5					TR	
		@ 69.5 to 70.5 Fine grained carbonate with much fuchsite. Zone @ 80° to CA.	068	72.3-73.3					TR	
		@ 72.2 Specks of fuchsite	069	99.5-100.5					TR	
		@ 72.4 Carbonate stringer 35°CA with speck of Cpy.	070	119.0-120.5					TR	
		@ 81.8 to 82.1 Rusty carbonate zone	071	140.6-142.0					TR	
		@ 87.5 to 87.9 Rusty carbonate zone.	072	151.5-152.5					TR	
			073	156.5-157.5					TR	
			074	165.8-167.0					TR.	
96.0	125.5	SPECKLED CARBONATE ROCKS Uniform, soft grey carbonate rock predominantly fine to medium grained with thumbs of carbonate giving a distinct spatkled texture. (similar to SH-5-81). Few veins. @ 100.1 sharp quartz vein ½" wide 90°CA. @ 116.0 ½" quartz vein 90°CA. @ 115.9, 119.0, ¾" quartz veins 80°CA.								
125	- 247.0	COARSE GRAINED CARBONATE ROCKS Soft, grey, coarse grained carbonate								

HOLE _____ PAGE 3

DRILL HOLE LOG

PROPERTY _____ DEP _____ HOR.COMPONENT _____
DISTRICT _____ ELEV _____ VER.COMPONENT _____
LOCATION _____ BEARING _____ TOTAL RECOVERY _____
_____ DIP _____ OTHER SURVEYS _____
OBJECTIVE _____ LENGTH _____ DRILLED BY _____
_____ ETCH.AT _____ _____
COMMENCED _____ TRUE DIP _____ LOGGED BY _____
COMPLETED _____ _____
LAT _____

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NUMBER	LENGTH FT.	ANALYSES Au %	%	%	%	oz/t	oz/t
		@ 136.0 ½" quartz vein 70°CA.	075	168.7-170.0					TR	
		@ 141 to 141.2 Quartz-carbonate vein 45°CA with light green chlorite.	076	172.0-173.4					TR	
		@ 142.0 1" quartz vein 80°CA.	077	174.0-175.0					TR	
		@ 142.0 to 143.0 Rusty carbonate zone	078	177.7-180.4					TR	
		@ 152.3 to 152.4 Quartz vein 90°CA	079	183.0-185.5					TR	
		@ 153.5 1" Quartz vein 45° CA.	080	191.7-192.4					TR.	
		@ 156.0 to 157.6 Quartz breccia. Some broken core. Dark green chlorite partings some fine Py in chlorite.								
		@ 166.2 to 167 Quartz vein breccia								
		@ 168.7 to 170.0 Quartz carbonate zone with sparse sulfides								
		@ 173.0 to 176.0 Quartz-carbonate zone much quartz veining								
		@ 178.4 to 178.6 Quartz vein with carbonate 70°CA.								
		@ 180 to 181.3' broken quartz								
		@ 186.6 to 187.0 Quartz carbonate breccia								
		@ 191.7 to 192.4 ditto.								

152.3 to 183.0, 183.0 to 185.5,

CORE SAMPLES DDH SH-6-81

SAMPLE NO.	DEPTH FROM	DEPTH TO	ASSAYS Au Oz. TON
27062	35.0	38.0	TRACE
3	38.0	40.0	TR
4	37.0	23.0	TR
5	48.5	51.0	TR
6	60.0	61.0	TR
7	69.5	70.5	TR
8	72.8	73.8	TR
9	99.5	100.5	TR
27070	119.0	120.5	TR
1	140.6	142.0	TR
2	151.5	152.5	TR
3	156.5	157.5	TR
4	165.8	167.0	TR
5	168.7	170.0	TR
6	172.0	173.4	TR
7	174.0	175.0	TR
8	177.7	180.4	TR
9	183.0	185.5	TR
27080	191.7	192.4	TR

LODGE SAMPLES DDH SH-6-81

SAMPLE NO.	DEPTH FROM	DEPTH TO	ASSAYS Au PPB
	20	30	10
	30	40	7
	40	60	8
	60	70	19
	70	80	18
	80	90	14
	90	100	16

BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. B119-81

DATE: May 14, 1981

SAMPLE(S) OF: Sludge(12)

RECEIVED: May 1981

SAMPLE(S) FROM: Lacana Mining Corporation

	Footage	Gold ppb
SH-5-81	17 - 30	14
	30 - 40	7
	40 - 50	18
	50 - 60	5
	60 - 65	7
SH-6-81	20 - 30	10
	30 - 40	7
	40 - 60	8
	60 - 70	19
	70 - 80	18
	80 - 90	14
	90 - 100	16

BELL-WHITE ANALYTICAL LABORATORIES LTD.

Per [signature]

BELL-WHITE ANALYTICAL LABORATORIES LTD.
P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 14620 DATE: May 8, 1981.

SAMPLE(S) OF: Core(51) RECEIVED: May 1981.

SAMPLE(S) FROM: Mr. R. Wells, Lacana Mining Corporation.

Sample No.	Oz. Gold
27051	Trace
2	Trace
3	Trace
SH-4 4	Trace
5	Trace
6	0.002*
7	Trace
8	Trace
SH-2 9	Trace
27060	Trace
2	Trace
3	Trace
4	Trace
5	Trace
6	Trace
SH-5 7	Trace
8	Trace
9	Trace
27070	Trace
1	Trace
2	Trace
3	Trace
4	Trace

Sample No.	Oz. Gold
27075	Trace
6	Trace
7	Trace
SH-6 8	Trace
9	Trace
27080	Trace
1	Trace
old core 2	Trace
27151	Trace
2	Trace
3	Trace
4	Trace
5	Trace
SH-3-81 6	Trace
7	Trace
8	Trace
9	0.002*
27160	Trace
1	Trace
2	Trace
3	Trace
4	0.005

* Estimated.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER

Ontario

Ministry of Natu

GEOPHYSICAL – GEOLOGI
TECHNICAL DATA

42A06NE0383 63.3984 SHAW

900

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GEOPHYSICAL

Township or Area SHAW TOWNSHIP

Claim Holder(s) LACANA MINING CORP

Survey Company LACANA MINING CORP

Author of Report R C WELLS

Address of Author PO BOX 338 KIRKLAND LAKE, ONT

Covering Dates of Survey FEB 1ST 1981 – MAY 25TH 1981
(linecutting to office)

Total Miles of Line Cut 25 MILES

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes linecutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 25/5/81 SIGNATURE: R C Wells
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	353822
P	353823
P	353824
P	353825
P	353826
P	353827
P	353828
P	528942
P	528943
P	528944
P	528945
P	528946
P	578226

TOTAL CLAIMS 13

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 2397 Number of Readings 2397

Station interval 50 FEET x 100 FEET Line spacing 100FT x 400FT

Profile scale

Contour interval 200 γ

MAGNETIC

Instrument SCINTREX MP-2 PROTON MAG

Accuracy – Scale constant 1 γ

Diurnal correction method CLOSED LOOP TRAVERSES

Base Station check-in interval (hours) APPROX EVERY 40 MINUTES

Base Station location and value EVERY 100FT ALONG BASE LINE

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency (specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

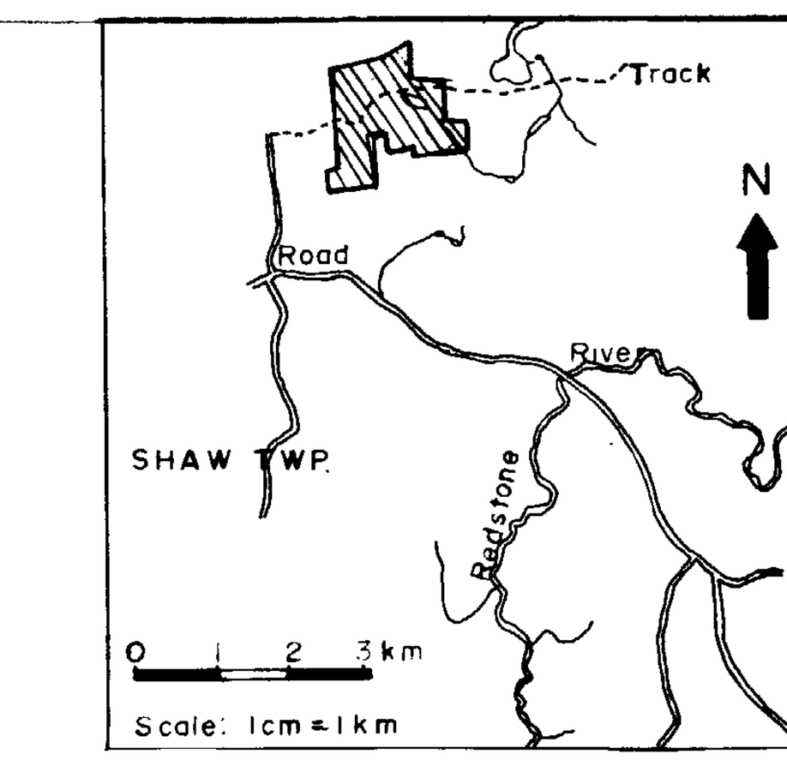
OM 46 - PE 42 - C - 80

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

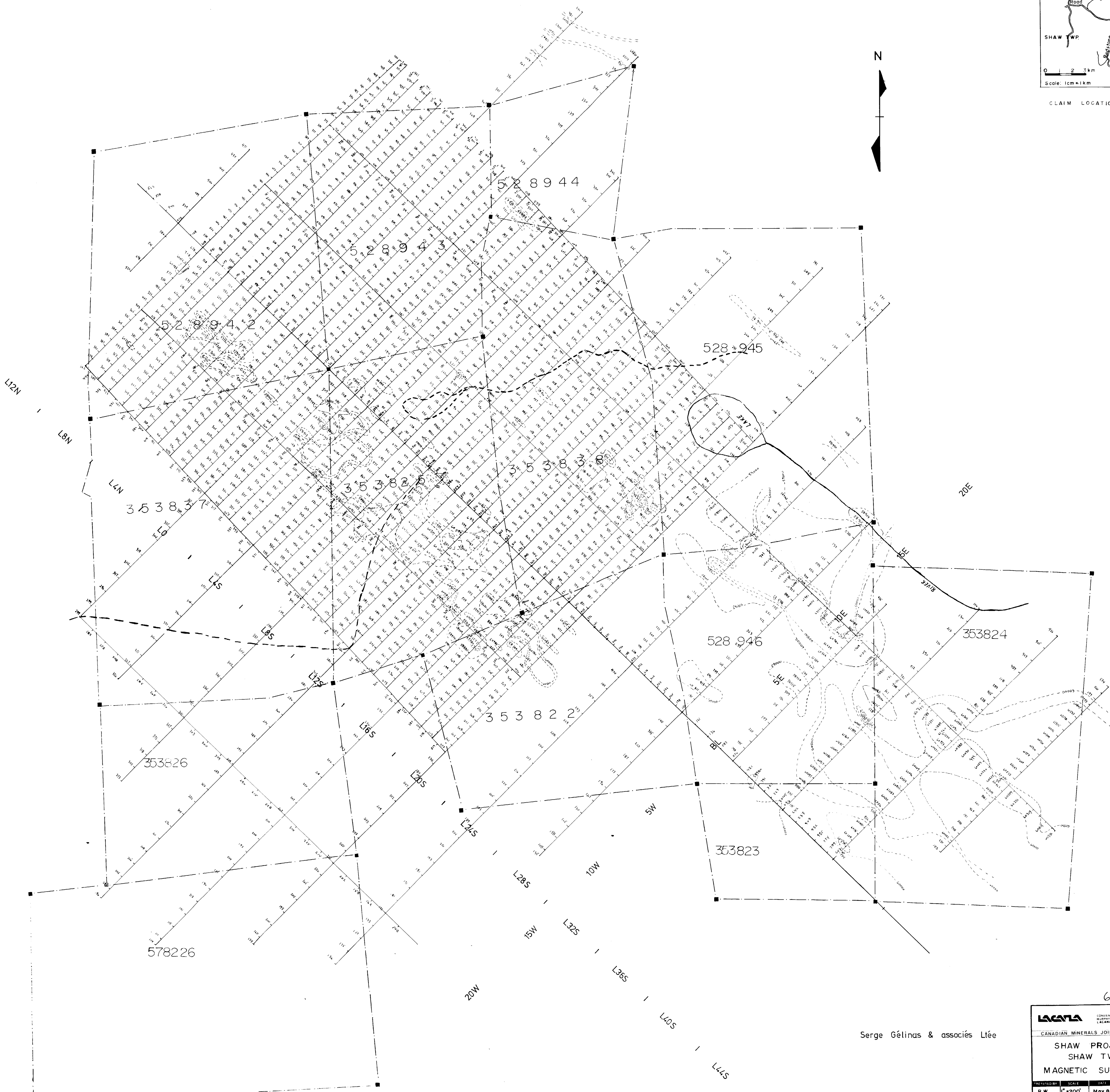
SHAW TWP. D.D.R. #29
Report of Work #90-81 ⟹ 3 drill holes, numbered SH-1-81, SH-2-81, SH-4-81

MAGNETIC SURVEY

SCINTREX MP-2



CLAIM LOCATION MAP



LEGEND

59921	GAMMAS
5994	= 59936
58000, 59000, 60000, 60500	INTERVALS
—■—	Claim Line and Claim Post
- - - -	ACCESS ROAD

BASE STATION AT EACH 100 FEET ON BL

SCALE

0 50 200 FEET

Serge Gélinas & associés Ltée

63.3984

LACANA — CONVENTURES LIMITED, MURPHY OIL COMPANY LTD, LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SHAW PROJECT
SHAW TWP.

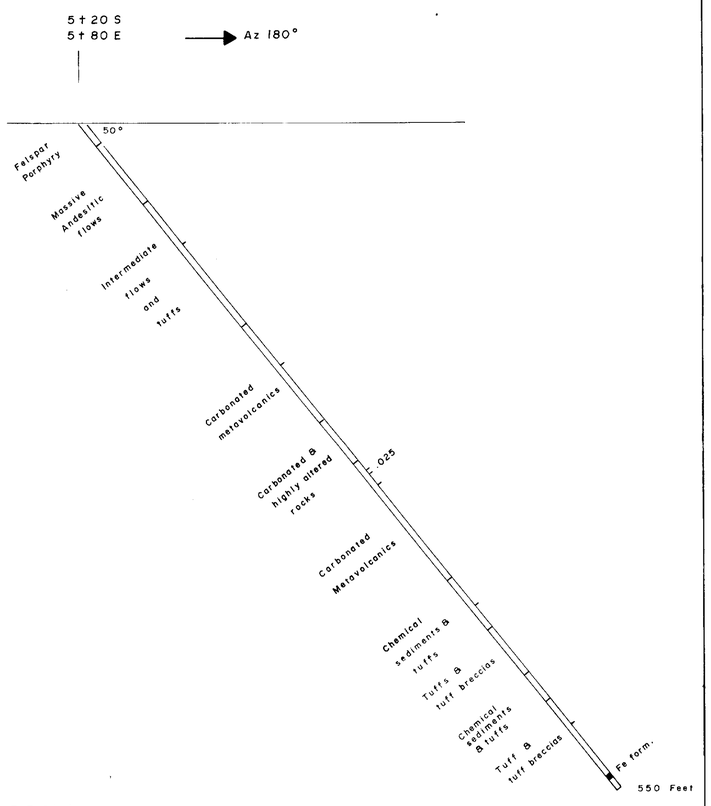
MAGNETIC SURVEY

PREPARED BY	SCALE	DATE	NTS	FIGURE
R W	1" = 200'	May 81	42 A/SW	1

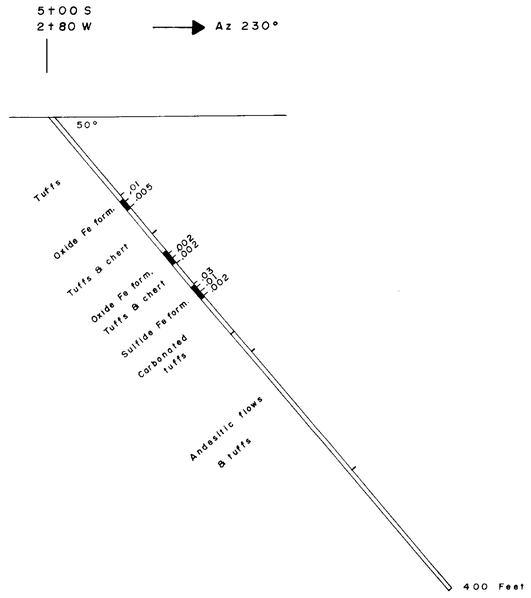
OM46-PE 42-C 80

25/9/81.

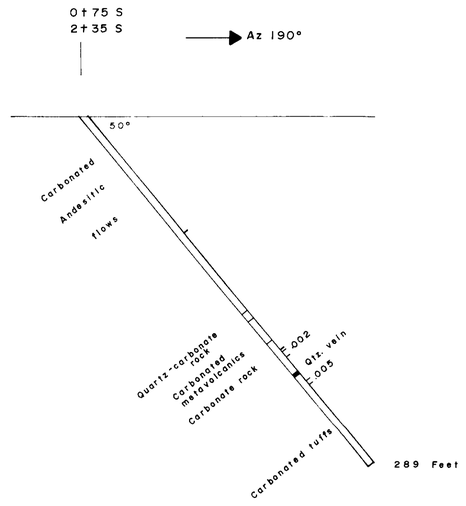
200



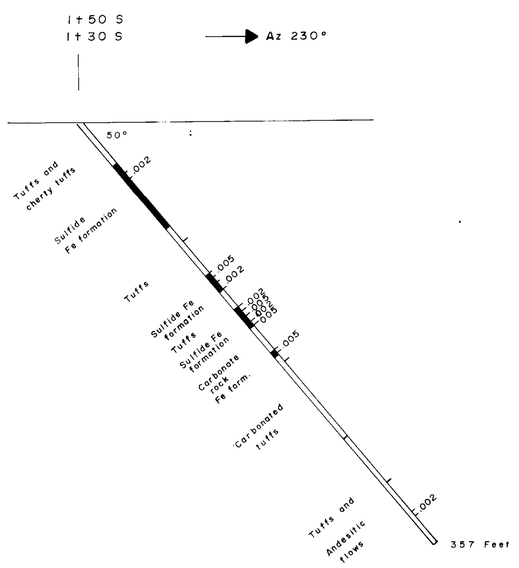
DDH 1



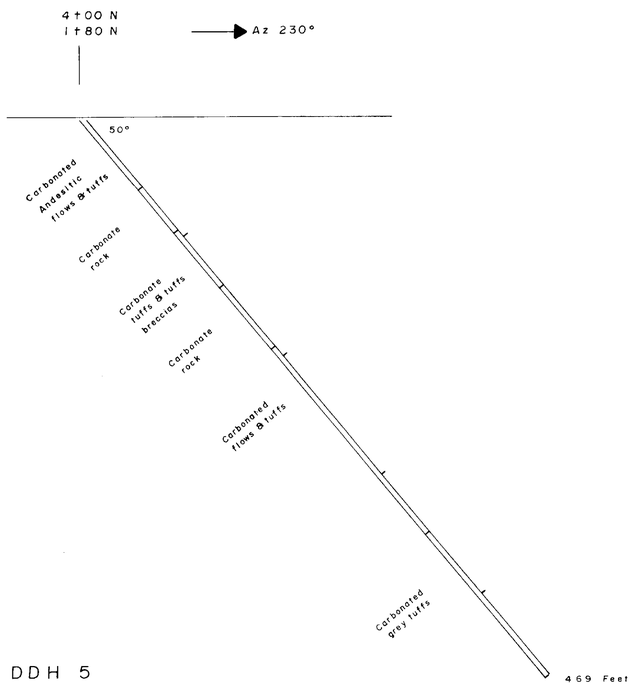
DDH 2



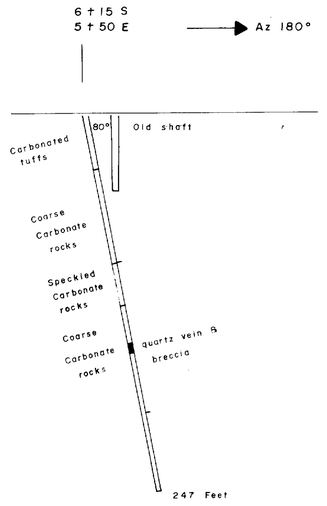
DDH 3



DDH 4



DDH 5



DDH 6

Scale : 1 inch = 50 feet vertical & horizontal

63.3984

LACANA MINING CORPORATION

DRILL PROFILES 1981

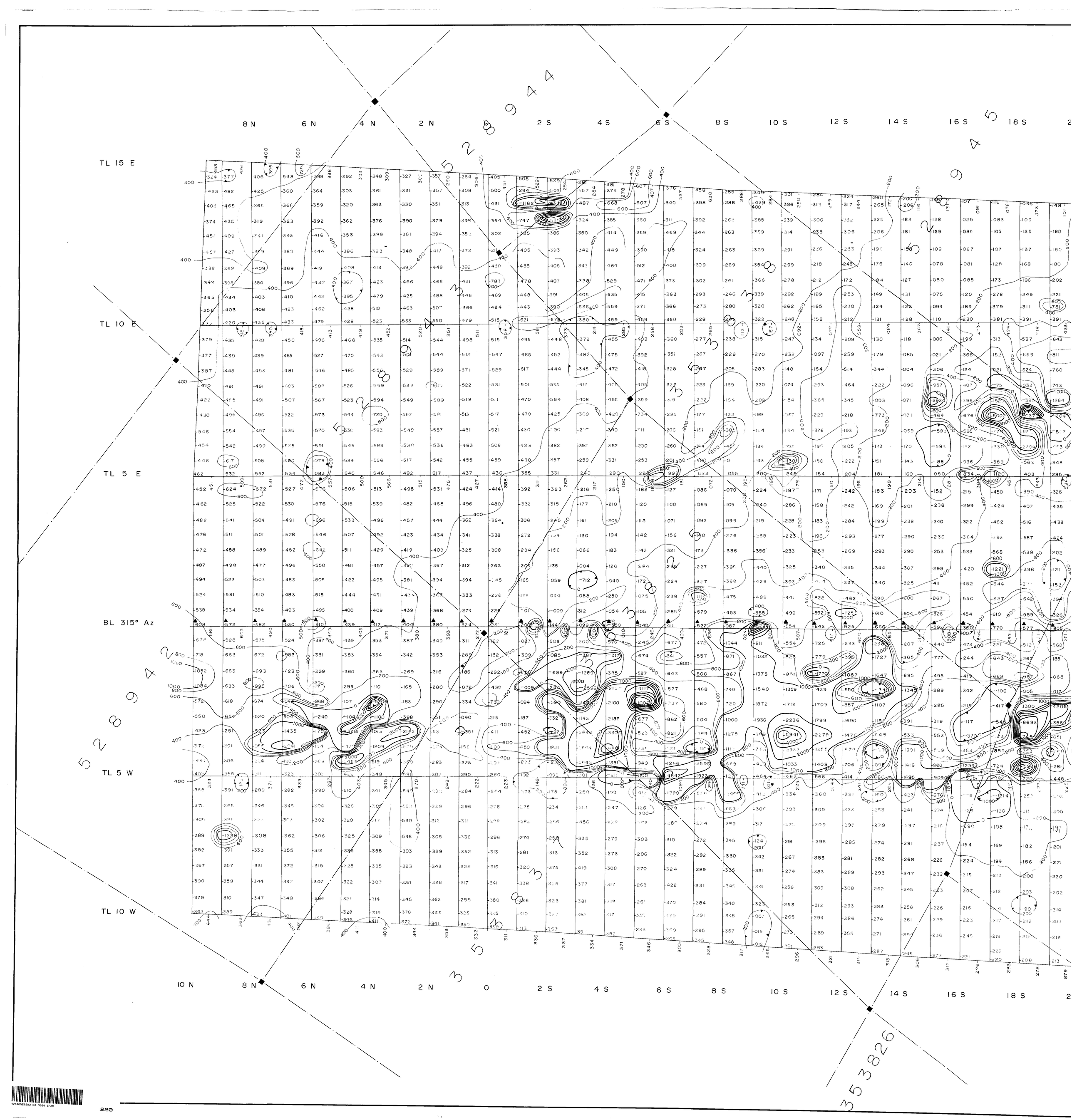
SHAW PROJECT

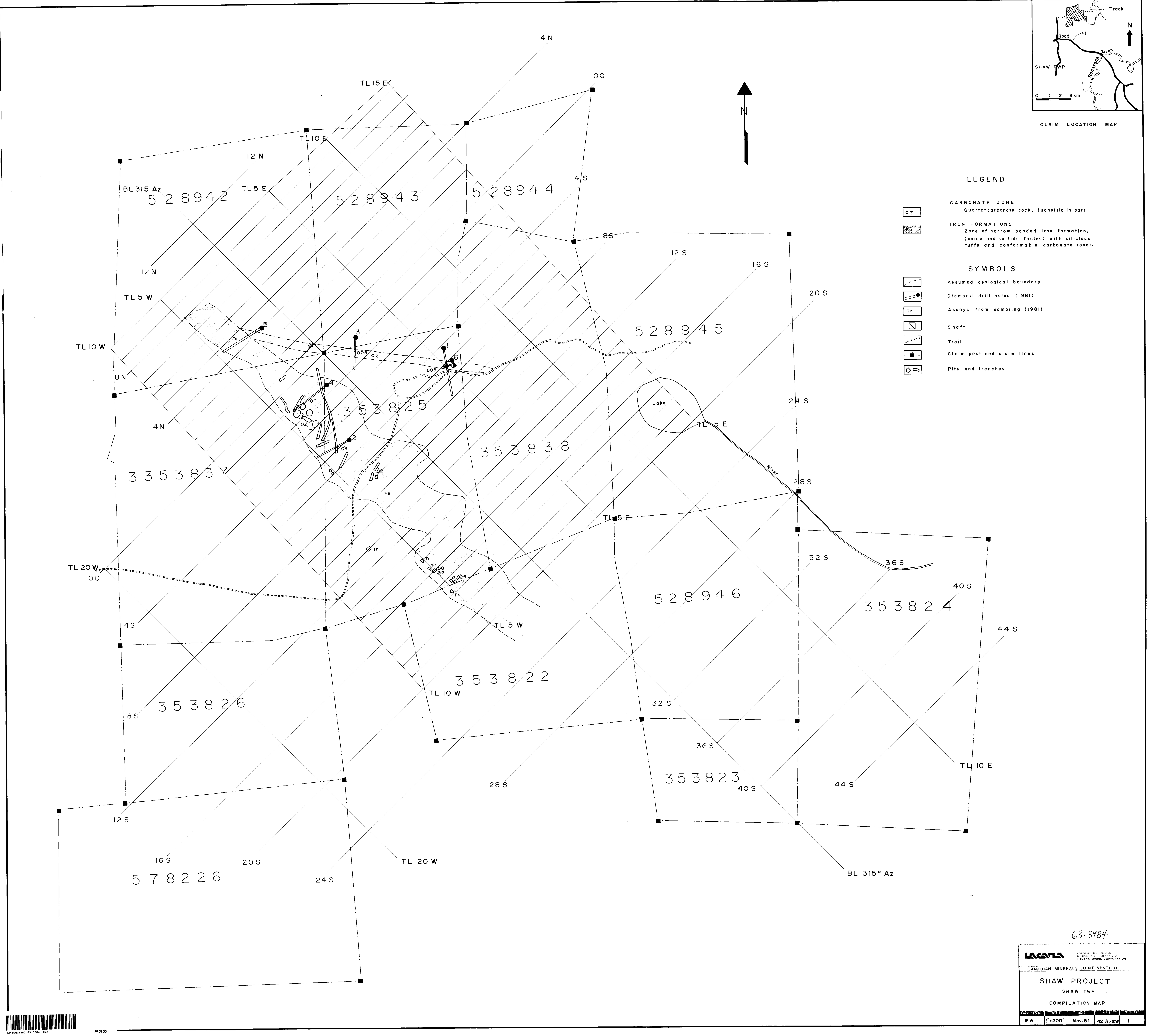
SHAW TOWNSHIP

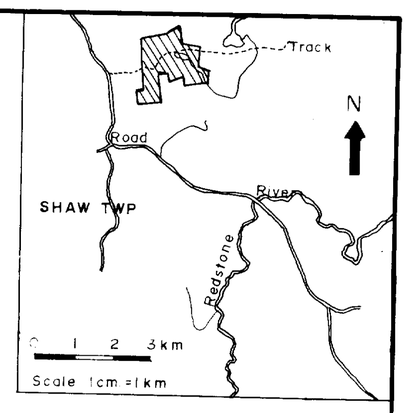
PREPARED BY	SCALE	DATE	N.T.S.	FIGURE

OM46-TEK2-C 80

R Wells 28/5/82


8 N
6 N
4 N
2 N
0
2 S
4 S
6 S
8 S
10 S
12 S
14 S
16 S
18 S
TL 15 E
TL 10 E
TL 5 E
BL 315° Az
TL 5 W
TL 10 W
10 N
8 N
6 N
4 N
2 N
0
2 S
4 S
6 S
8 S
10 S
12 S
14 S
16 S
18 S


CLAIM LOCATION MAP
Track
Road
River
Redstone
SHAW TWP
0 1 2 3km
N
LEGEND
CARBONATE ZONE
Quartz-carbonate rock, fuchsitic in part
IRON FORMATIONS
Zone of narrow banded iron formation, (oxide and sulfide facies) with silicious tuffs and conformable carbonate zones.
SYMBOLS
Assumed geological boundary
Diamond drill holes (1981)
Assays from sampling (1981)
Shaft
Trail
Claim post and claim lines
Pits and trenches
528942
528943
528944
528945
528946
353825
353838
3353837
353822
353826
353823
353824
578226
BL 315 Az
BL 315° Az
TL 15 E
TL 10 E
TL 5 E
TL 5 W
TL 10 W
TL 20 W
Lake
River
63.3984
LACANA
CANADIAN MINERALS JOINT VENTURE
SHAW PROJECT
SHAW TWP
COMPILATION MAP
RW
1"=200'
Nov.81
42 A/SW
1



CLAIM LOCATION MAP

10 S 12 S 14 S 16 S 18 S 20 S

TL 15 E

TL 10 E

TL 5 E

TL 5 W

TL 10 W

N

GEOPHYSICAL LEGEND

Instrument	SCINTREX MP-2 PROTON MAGNETOMETER
Accuracy	5 gammas
Operators	Serge Gélinas & associés Ltée
Date	March 1981

PLOTTING CONVENTION

BL 315° Az

- Magnetic contour at 1000 gamma intervals
- Magnetic contour at 200 gamma intervals.
- ▲ Base station (400' along base line)
- ■ Claim post
- Claim line.

59 000 gammas = 0

0 100' 200'

63.3984

LACANA CONVENTURES LIMITED
MURPHY OIL COMPANY LTD.
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SHAW PROJECT

SHAW TWP.

MAGNETIC SURVEY

PREPARED BY	SCALE	DATE	N.T.S.	FIGURE
R.W.	1" = 100'	May/81	42 A/SW	2

25/5/81 DM4E-PE42-C-80