



52F055E0003 11 TWEEDSMUIR

010

DIAMOND DRILLING

TOWNSHIP: TWEEDSMUIR

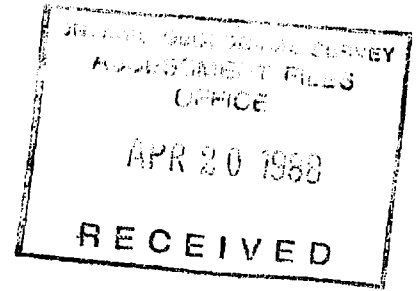
REPORT NO: 11

WORK PERFORMED FOR: Granges Exploration Ltd.

RECORDED HOLDER: Same as Above [xx]  
: Other [ ]

<u>Claim No.</u>	<u>Hole No.</u>	<u>Footage</u>	<u>Date</u>	<u>Note</u>
882188	BAG 1	172.18m	Feb/88	(1)
	BAG 2	120.38m	Feb/88	(1)
882189	BAG 3	99.04m	Feb/88	(1)
882190	BAG 4	117.33m	Feb/88	(1)
1003407	BAG 5	102.09m	Feb/88	(1)
1003411	BAG 6	92.95m	Feb/88	(1)
1003408	BAG 7	80.76m	Feb/88	(1)
	BAG 8	83.81m	Feb/88	(1)
1003406	BAG 9	102.09m	Feb/88	(1)
882188	BAG 10	144.76m	Feb/88	(1)
	BAG 11	129.52m	Feb/88	(1)
	BAG 12	144.76m	Feb-Mar/88	(1)

Notes: (1) W8801.096, filed in Sept/88



DIAMOND DRILLING REPORT  
ON

BAG LAKE AND SIOUX CLAIMS

K882188 AND K1003408

SITUATED IN THE  
KENORA MINING DIVISION, TWEEDSMUIR TOWNSHIP

UNDER OPTION TO  
GRANGES EXPLORATION LTD.  
23RD FLOOR  
885 WEST GEORGIA STREET  
VANCOUVER, B.C.  
V6C 3E8

MARCH 28, 1988

G.W. ZBITNOFF  
(A.L. NAUSS)

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ENCLOSURES

INVOICES FROM N.MORISSETTE CANADA INC. FOR DDH'S BAG-1 TO BAG-12  
DIAMOND DRILL LOGS FOR BAG-1 TO BAG-12  
VLF-EM SURVEY AND DIAMOND DRILLHOLE LOCATIONS

## INTRODUCTION

Claim blocks 882188, 882189, 882190, 1003407, 1003408, 1003406 and 1003411 are situated in Tweedsmuir Township, District of Kenora, in the Kenora Mining Division of Ontario. The claims can be accessed via highway 71 heading north towards Whitefish Bay.

Claims number 882188, 882189 and 882190 are held under option to Granges Exploration Ltd. of Vancouver, B.C. from H.R. Haggberg and R.R. Tinkess of Nestor Falls, Ontario. Claims 1003406, 1003407, 1003408 and 1003411 are held by Granges Exploration Ltd. of

## GEOPHYSICAL SURVEYING

21.42 km of linecutting and chaining were completed on the claims by Breezeway Exploration Services Inc. of Winnipeg, Manitoba, establishing a grid for geophysical surveying.

A total of 19.0 km of VLF/Magnetometer surveying was completed by Northwest Geophysics Ltd. of Thunder Bay, Ontario, using an Omni Plus unit. The Omni Plus unit is a combined VLF/Magnetometer system manufactured by EDA Instruments Inc. of Toronto, Ontario.

Nine first priority anomalies were located as a result of the VLF/Magnetometer survey and twelve diamond drill holes were planned to further investigate them.

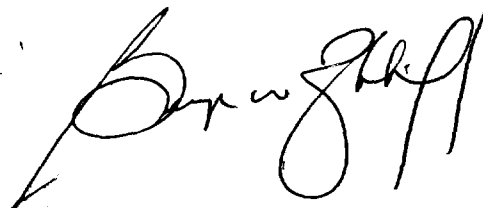
## DIAMOND DRILLING

A total of 12 diamond drill holes were drilled on the property for a total of 1389.67 m (4559.28 ft). These holes were drilled by N. Morissette Canada Inc. of Haileybury, Ontario during the period of February 5, 1988 to March 1, 1988. The programme was supervised by B. Gaboury, geologist for Granges Exploration Ltd.

The following is a summary of results, but for more information please contact Granges in order to see the appended logs and record sheets or to view the core.

SUMMARY OF DIAMOND DRILLING RESULTS

<u>Hole No.</u>	<u>Claim</u>	<u>Intersection (m)</u>	<u>Au g/t</u>
BAG-1	882188	9.19 - 9.44 19.72 - 19.93 67.87 - 68.16	3.25 7.62 2.96
BAG-2	882188	43.54 - 43.92 51.53 - 51.96	1.61 3.42
BAG-3	882189	No significant mineralization	
BAG-4	882190	29.20 - 29.42 43.90 - 43.98 48.69 - 49.01	4.24 1.81 8.69
BAG-5	1003407	No significant mineralization	
BAG-6	1003411	No significant mineralization	
BAG-7	1003408	No significant mineralization	
BAG-8	1003408	No significant mineralization	
BAG-9	1003406	38.16 - 38.43	2.65
BAG-10	882188	14.30 - 14.69 14.69 - 14.90 14.90 - 15.30 43.42 - 43.61 50.01 - 50.17 57.03 - 57.28 57.28 - 57.54 76.54 - 76.81 116.90 - 117.40 117.92 - 118.26	5.58 19.55 2.08 7.06 2.34 34.90 1.57 3.24 2.06 8.79
BAG-11	882188	25.86 - 26.38 90.39 - 90.61 102.33 - 102.63 102.63 - 102.94 102.94 - 103.11	2.23 1.82 2.92 4.44 4.30
BAG-12	882188	No significant mineralization	

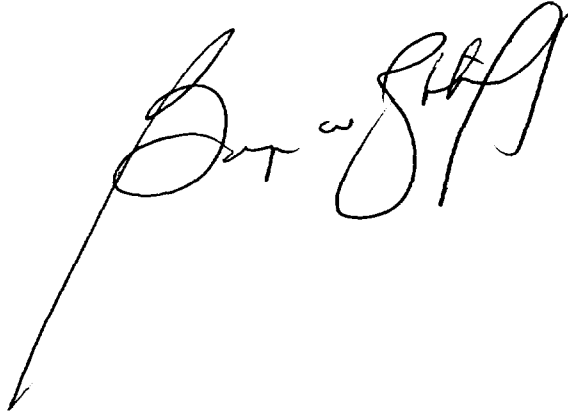


EXPENDITURES

CLAIM K882188: 2334 feet (711.60 m) diamond drilling on  
diamond drill holes Bag 1, 2, 10, 11 and 12  
= 2334 assessment days

CLAIM K1003408: 539 feet (164.57 m) diamond drilling on  
diamond drill holes Bag 7 and 8  
= 539 assessment days

TOTAL ASSESSMENT DAYS APPLIED = 2720 (SEE REPORT OF WORK FORMS)

A handwritten signature in black ink, appearing to read "D. J. G.", is written over the bottom right portion of the page. The signature is stylized and slanted.

STATEMENT OF QUALIFICATIONS  
GEORGE W. ZBITNOFF  
5160 CLIFF PLACE  
DELTA, B.C.

Name: Zbitnoff, George William

Birth Date: August 15, 1938

Birthplace: Saskatoon, Saskatchewan

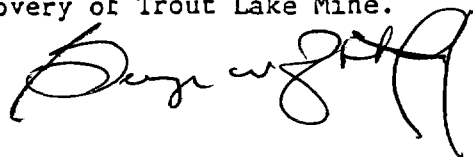
Graduated with Grade 12 matriculation from  
Blaine Lake High School in 1955.

Graduated from University of Saskatchewan with a  
B.A. (Geology and chemistry majors) in 1963.

Professional

- Associations:
- Member of the Association of Professional Engineers of the Province of Manitoba.
  - Member of the Association of Professional Engineers of the Province of British Columbia since 1973.
  - Member of the Canadian Institute of Mining and Metallurgy.

- Experience:
- Pre-graduation experience in geology with the Department of Mineral Resources of Saskatchewan.
  - May 1962 - Two and one half years, field geologist with Hudson Bay Exploration and Development, Flin Flon area.
  - January 1965 - Six years, field and resident geologist with Noranda Exploration Ltd., Flin Flon area.
  - February 1971 - Twelve and one half years, Assistant Manager, Granges Exploration Aktiebolag in Vancouver, B.C.
  - November 1983 to present - Vice President Exploration, Granges Exploration Ltd. in Vancouver, B.C.
  - Active geological experience in all provinces of Canada and parts of the United States and Mexico.
  - Participated in the discovery of Trout Lake Mine.



# GRANGES EXPLORATION LTD. DIAMOND DRILL LOG

page 1 of 10

Property: **BAG, L.** Project No: **515** Depth: **172.18 m** Date Began: **Feb 5 1988**  
 Hole No: **BAG 1** Co ord: **0+20S** Horizontal Length: **126.5 m** Date Completed: **Feb 7 1988**  
 Claim No: **882188** Core Size: **B<sub>g</sub>** Drilled By: **Morrisette**  
 Grid No: Angle & Direction: **0+10W - 45° E** Elevation: Logged By: **B. Gaboury**

INTERVAL  
FEET (METRES)

DESCRIPTION

FROM TO WIDTH SAMPLE Au% Ag% Cu Zn

0-3.05 Casing (core recovered from 2.45 m)

2.45-9.19 Massive Andesite

medium fine grained, dark green, practically unfoliated; contains ~5% thin fibrous quartz-carb veins, veinlets between 7.0 & 8.0 m have bleached alteration haloes; overall 1% py majority of quartz veinlets have core angles of 45-50  
 8.0-9.19 rock is mottled & silicified.

9.19-26.73 Quartz - Feldspar Porphyry

moderately to well silicified, bleached light greyish yellow to green, contains 10-20% vaguely discernible kaolinized feldspar phenocrysts up to 2mm wide plus 10-20% rounded somewhat clear quartz phenocrysts up to several mm wide; contains bluish grey py- bearing quartz veins up to several tens of cm wide (these have diffuse contacts & display a relict porphyritic texture with kaolinized feldspar phenocrysts so these are more correctly termed intervals of silica flooding) quartz veins contain py as well as some hematite overall ~1% py except in rock adjacent to quartz veins where py content increases, the rock also contains some thin chloritic py-bearing stringers, all possible orientations, some weak sericitization display of fracture surfaces; quartz veining & py mineralization decrease substantially below 23.01 m.

9.19-9.44; banded white to grey quartz vein with 7-10% medium grained dissem. py banding is parallel to the upper contact and is oriented ~55° to core axis.

FROM	TO	WIDTH	SAMPLE	Au%	Ag%	Cu	Zn
8.69	9.19	.50	2458	.20	1.30		
9.19	9.44	.25	2459	3.25	1.70		
9.44	10.04	.60	2460	.19	.2		
10.04	10.67	.63	2461	.22	.1		
10.67	11.22	.55	2462	.13	.2		
11.22	11.74	.52	2463	.19	.1		
11.74	12.24	.50	2464	.07	.1		
12.24	12.72	.48	2465	.21	.4		
12.72	13.29	.57	2466	.56	.3		
13.29	13.76	.47	2467	.03	.3		
13.76	14.17	.41	2468	.18	.2		
14.17	14.71	.54	2469	.02	.4		
14.71	15.17	.46	2470	.09	.2		
15.17	15.54	.37	2471	.27	.1		
15.54	15.82	.28	2472	.25	.7		
15.82	16.28	.46	2473	.18	.1		
16.28	16.70	.42	2474	.31	.3		
16.70	17.00	.30	2475	.30	.3		
17.00	17.72	.72	2476	.21	.2		
17.72	18.01	.29	2477	.29	.4		
18.01	18.48	.47	2478	.08	.6		
18.48	18.98	.50	2479	.22	.3		
18.98	19.43	.45	2480	.47	.2		
19.43	19.72	.29	2481	.99	.4		
19.72	19.93	.21	2482	7.62	1.8		
19.93	20.59	.66	2483	.55	.3		
20.59	21.09	.50	2484	.05	.1		
21.09	21.62	.53	2485	.44	.2		
21.62	22.21	.59	2486	.89	.5		
22.21	22.40	.19	2487	1.18	.6		
22.40	23.01	.61	2488	.24	.4		
23.01	23.47	.46	2489	.10	.3		
23.47	64.90	41.43	waste				
64.90	65.40	.50	2490	.04	2.5		
65.40	65.80	.40	2491	.22	1.9		
65.80	66.09	.29	2492	1.38	1.6		
66.09	66.50	.41	2493	.70	.9		
66.50	67.00	.50	2494	1.30	1.7		

3.775%  
/50m

1.102%  
/2.35m

PL



Property: **BAG L** Project No: **515** Date Began:   
 Hole No: **BAG 1** Coord: Horizontal Length: Date Completed:   
 Claim No: Core Size: Drilled By:   
 Grid No: Angle & Direction: Elevation: Logged By:

INTERVAL FEET/METRES	DESCRIPTION	Core		SAMPLE RECORD					
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
11.22 - 11.74	grey qtz vein with 1-3% fine to medium grained py; weakly banded at ~62° to core axis.	67.00	67.50	.50	2495	.70	2.1		
		67.50	67.87	.37	2496	.15	2.3		
		67.87	68.16	.29	2497	2.96	2.7		
		68.16	68.40	.24	2498	.04	2.1		
11.74 - 12.24	~15% diffuse grey qtz veins up to ~5cm wide oriented 45-65° to core axis. These contain 1-3% fine py.	68.40	68.67	.27	2499	.26	1.7		
		68.67	69.07	.40	2500	.10	1.9		
		69.07	69.41	.34	7751	.07	2.0		
		69.41	69.91	.50	7752	.01	2.4		
12.24 - 12.72	banded grey qtz vein with numerous cross-cutting fractures; contains 1-2% fine py; upper CA ~35° lower CA ~55°	69.91	90.20	20.29	waste				
		90.20	90.70	.50	7753	.04	2.2		
		90.70	91.01	.31	7754	.41	2.5		
		91.01	91.51	.50	7755	.02	2.2		
		91.51	92.01	.50	7756	.05	2.3		
		92.01	92.51	.50	7757	.02	2.1		
13.76 - 14.17	silicified interval with 1-2% py as silicious pyritic stringers up to 2mm wide with bluish grey silicious alteration haloes up to ~1cm wide; CA's ~45°.	92.51	93.01	.50	7758	.01	1.8		
		93.01	93.50	.49	7759	.01	2.1		
		93.50	94.00	.50	7760	.04	2.0		
		94.00	102.55	8.55	waste				
15.54 - 15.82	brecciated silicious mottled grey & yellowish interval with 1-2% py.	102.55	103.05	.50	7761	.07	1.9		
		103.05	103.20	.15	7762	.01	1.8		
		103.20	103.70	.50	7763	.05	1.9		
16.70 - 17.00	silicified bluish grey & yellowish mottled interval with minor cross-cutting pyritic stringers; overall 1-2% fine py.	103.70	121.61	17.91	waste				
		121.61	122.11	.50	7764	.10	1.8		
		122.11	122.32	.21	7765	.01	2.1		
		122.32	122.91	.59	7766	.01	2.3		
17.72 - 18.01	brecciated, silicified pink bluish grey & dark grey & yellowish mottled interval with ~2% fine py; includes two py stringers < 1mm wide at ~70° to core axis.	122.91	123.37	.46	waste				
		123.37	123.95	.58	7767	.01	1.7		
		123.95	124.28	.33	7768	.15	1.5		
		124.28	124.78	.50	7769	.52	1.7		
		124.78	130.28	5.50	waste				
		130.28	130.78	.50	7770	.01	1.8		
18.48 - 20.59	bluish grey to pinkish colored qtz vein with 20% wall rock inclusions; generally moderately brecciated; contains occasional thin chloritic (sometimes pyritic) stringers at steep (~70°) core angles; contains some clear narrow tensional qtz veinlets (no sulfides) at very shallow core angles (<20°) plus others at steeper (40-60°) angles.	130.78	131.15	.37	7771	.10	1.2		
		131.15	131.52	.37	7772	.01	2.2		
		131.52	131.95	.43	7773	.01	1.8		
		131.95	132.50	.55	7774	.02	2.2		
		132.50	141.93	9.43	waste				
		141.93	142.43	.50	7775	.01	1.9		
		142.43	142.76	.33	7776	.02	2.0		
		142.76	143.23	.47	7777	.05	1.8		
		143.23	143.61	.38	7778	.24	2.0		



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

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Property: 15A9 L. Project No: 212  
 Hole No: BAG 1 Co ord: \_\_\_\_\_ Date Began: \_\_\_\_\_  
 Claim No: \_\_\_\_\_ Horizontal Length: \_\_\_\_\_ Date Completed: \_\_\_\_\_  
 Grid No: \_\_\_\_\_ Angle & Direction: \_\_\_\_\_ Core Size: \_\_\_\_\_ Drilled By: \_\_\_\_\_  
 Elevation: \_\_\_\_\_ Logged By: \_\_\_\_\_

INTERVAL FEET / METRES	DESCRIPTION	CORE SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
1848-19.72	1-2% fine to med. fine py.	143.61	144.13	.52	7779	.01	2.1		
19.72-19.93	6-8% py as stringers, blebs & fine to med. disseminations	144.13	146.75	2.62	waste				
19.93-20.59	1-2% med fine to fine py & banding of ~ 2% to core py & avs.	146.75	147.25	.50	7780	.01	2.2		
20.59-21.09	interval with 1-2% py in chloritic stringers with bluish grey qtz oriented at 0° near 0°.	147.25	148.30	.55	7781	.01	1.9		
21.09-21.62	precipitated, silicified interval with bluish-grey silice alteration halos up to ~ 1 cm wide enveloping fractures (which exhibit varying core angles); overall ~ 1% fine py.	148.30	153.96	5.66	waste				
21.62-22.21	precipitated, mottled pink to bluish grey qtz vein stringers of variable core angles; contains non-sulfide-bearing qtz veinlets at near 0° core angles.	153.96	154.46	.50	7783	.04	2.0		
22.21-22.40	precipitated, mottled pink to bluish grey qtz vein stringers of variable core angles; contains non-sulfide-bearing qtz veinlets at near 0° core angles.	154.46	154.96	.50	7784	.01	1.7		
22.40-23.01	7-10% py blue-grey in an "interval containing consistently near 50% of qtz veins" of varying thickness. These veins consist of very thin py stringers in silice envelopes up to 1 cm wide.	154.96	155.26	.30	7785	.01	1.8		
		155.26	155.76	.50	7786	.01	1.6		
		155.76	156.26	.50	7787	.01	2.3		
		156.26	156.84	.58	7788	.06	1.8		
		156.84	159.15	2.31	waste				
		159.15	159.65	.50	7789	.05	1.6		
		159.65	160.11	.46	7790	.01	2.0		
		160.11	160.61	.50	7791	.10	2.0		
		160.61	160.96	.35	7792	.05	1.2		
		160.96	161.46	.50	7793	.01	1.9		
		161.46	172.18	10.72	waste				
26.73-30.12	Altered Andesite								

mottled dark green, unsilicified, carbonated andesite. This consists of patches of cream-colored patches of white silice material in a dark chloritic groundmass which gives the rock a granular porphyritic texture; contains occasional chloritic stringers (CA's at 35-45 to core axis) & 22-30% of veinlets (< 2mm wide) many of which have CA's at 35-45 but some are dark to near 0, overall

Property: B149 L. Project No: 212 Date Began

Hole No: BNG-1 Co. ord. Horizontal Length

Claim No. Core Size

Grid No. Angle & Direction Elevation Logged By

INTERVAL  
FEET / METRES

DESCRIPTION

SAMPLE RECORD

INTERVAL FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
	≤ 1% dissem. py ; rock is virtually unfoliated.								
30.12 - 48.49	Quartz - Feldspar Porphyry reddish colored ≤ porphyry wide containing 10% rounded qtz phenocrysts to 3mm / wide 40-50% feldspar phenocrysts up to 8mm wide as well as ~ 5% small white (≤ 1mm) kaolinized qtz veinlets phenocrysts very narrow (≤ 1mm) several mm wide) usually of ~ 80° to alteration haloes several mm wide) & usually of ~ 80° to core axis ; rock is silicified & hematized.								
	34.33 - 35.05 ; minor fault zone ; green altered, fractured section with limonite- action along fractures.								
	34.60 - 34.87 ; gravelly rubble								
	35.00 ; narrow clay seam.								
	38.19 - 38.77 ; unsilicified interval ; kaolinized ; contains 10-15% fine irregular limonite clots.								
	38.36 - 38.50 ; bubbly interval with fine limonite-bearing red clay (minor fault)								
	41.09 - 41.14 ; blocky rubble								
	41.74 - 48.49 ; rock looses reddish color ; all other characteristics are unchanged. sharp lower contact at ~ 90° to core axis.								
48.49 - 98.40	Altered Andesite similar to interval 26.73 - 30.12 ; contains numerous								



**GRANGES EXPLORATION LTD.  
DIAMOND DRILL LOG**

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Property: **BAG. L.** Project No: **515** Date Began: .....

Hole No: **BAG. 1** Co ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERNAL  
FEET METRES

DESCRIPTION

SAMPLE RECORD

FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
56.00	56.38						
numerous chloritic stringers at ~80° to core axis.							
65.40	69.41						
bleached, bleached, light grey, silicified, widely sheared interval with 30-40% white qtz veining & ~5% dissem. py overall. There is a minor set of very narrow tensional qtz veinlets oriented at ~90° to shearing direction.							
65.80	66.50						
white qtz - carb vein with 20-30% wallrock inclusions; some banded grey sections (these exhibit CH's of the order of 45°; 4-6% py as disseminations and stringers							
67.87	68.16						
sheared qtz vein with 4-6% py & thin stringers concordant with shearing (CH's ~ 45°)							
68.40	68.70						
silicified interval with 30% qtz veins 4-6% py as stringers concordant with shearing & qtz veins & as disseminations.							



Property: BAG L Project No: S15 Date Began: \_\_\_\_\_  
 Hole No: BAG 1 Coord: \_\_\_\_\_ Depth: \_\_\_\_\_  
 Claim No: \_\_\_\_\_ Core Size: \_\_\_\_\_ Date Completed: \_\_\_\_\_  
 Grid No: \_\_\_\_\_ Angle & Direction: \_\_\_\_\_ Elevation: \_\_\_\_\_ Drilled By: \_\_\_\_\_  
 Logged By: \_\_\_\_\_

INTERVAL FEET (METRES)	DESCRIPTION	SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.	
90.28 - 93.50	CA ~ 40° biprecipitated, very mildly sheared interval width < 1% py, fr. py & ~ 5% qtz veinlets.									
90.70 - 91.01	moderately well sheared contains 2 small qtz-carb veinlets & 2 closely spaced 2mm wide sheared dirty colored fine py bands at ~ 85° to core axis; 45° shearing to NAPIES from to 80° to core axis.									
93.07 - 93.50	moderately well sheared interval containing a 5cm wide white qtz vein at ~ 70° to core axis; overall contains fr. py & fr. pa.									
98.40 - 100.69	Quartz - Feldspar Porphyry mauve colored, somewhat silicified; contains ~ 40% readily discernible feldspar phenocrysts up to several mm wide plus < 5% qtz phenocrysts. Also contains < 1% py & practically no qtz veinlets. upper CA 45° lower CA 30°									
100.69 - 172.18	Gabbro medium coarse to coarse grained rock with ~ 50% chloritized matrix contains occasional irregular masses of cream colored carbonate plus < 3% fine hairlike qtz veinlets which near the upper contact are oriented ~ 90° to the qtz porphyry - Gabbro									



Property: BHG, L Project No: 515 Date Began: .....  
 Hole No: BAG, 1 Co ord: ..... Date Completed: .....  
 Claim No: ..... Core Size: ..... Drilled By: .....  
 Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET/METRES	DESCRIPTION	SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au	Ag	Cu	Zn	
overall	< 1% py except:									
131.15 - 131.52	well-sheared silica flooded interval with 1-3% dissem. py & py stringers									
139.25 - 142.43	numerous unmineralized epidotized fractures & some hairlike qtz veinlets at 45-50° to core axis. veinlets comprise < 3% of interval									
142.43 - 143.61	brecciated, sheared & bleached intervals									
142.43 - 142.76	brecciated; 2% dissem py, ~5% qtz-carb fracture inclusions.									
142.76 - 143.23	bleached, sheared & mildly contorted with ~20% narrow qtz-py veinlets at all possible orientations (these were affected by the subsequent shearing), overall 3-5% py as dissem. - stringers									
143.23 - 143.61	mild shearing & bleaching; 1-2% py overall									
147.25 - 147.80	mildly to moderately well sheared interval with 5-8% qtz veinlets up to 1cm wide plus ~5% dissem py.									
149.00 - 152.40	abundant hairlike epidotized fractures oriented ~55° to core axis.									
154.46 - 156.26	mildly sheared interval:									
154.46 - 155.26	bleached & silicified; 10-15% qtz veinlets up to ~1cm wide, 1-2% py.									



Property: Brtg. L. Project No: 515 Date Began: .....

Hole No: BAG 1 Co ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL  
FEET / METRES

DESCRIPTION

SAMPLE RECORD

INTERVAL FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
155.76 - 155.76	very bleached, silica flooded, unshattered, fr py.								
155.76 - 156.26	slightly bleached, unsilicified, slightly sheared, 1-2% py.								
160.11 - 160.96	moderately well precipitated, sheared & silicified interval with 20-30% irregular white & greenish qtz veinlets (white ones are concordant with shearing whereas greenish ones have variable (A's) < 1% py.								
172.18	End of Hole Hole uncemented Acid test 11.23m: 330, Acid test 169.14m: 310								
	<u>Core Angles</u>								
9.30 m	55° banding // contact								
11.45 m	62° banding.								
26.73 m	50° contact.								
68.00 m	45° shearing								
68.50 m	40° shearing // qtz veins								
131.15 m	45° shearing								
122.20 m	45° shearing								
123.00 m	45° shearing								
123.95 m	40° shearing								
143.50 m	70° irregular shearing.								
147.25 m	45° shearing.								
156.20 m	43° shearing.								
160.61 m	30° shearing.								



Property: **1546 L** Project No: **515** Date Began: .....

Hole No: **BAG 1** Co ord: ..... Date Completed: .....

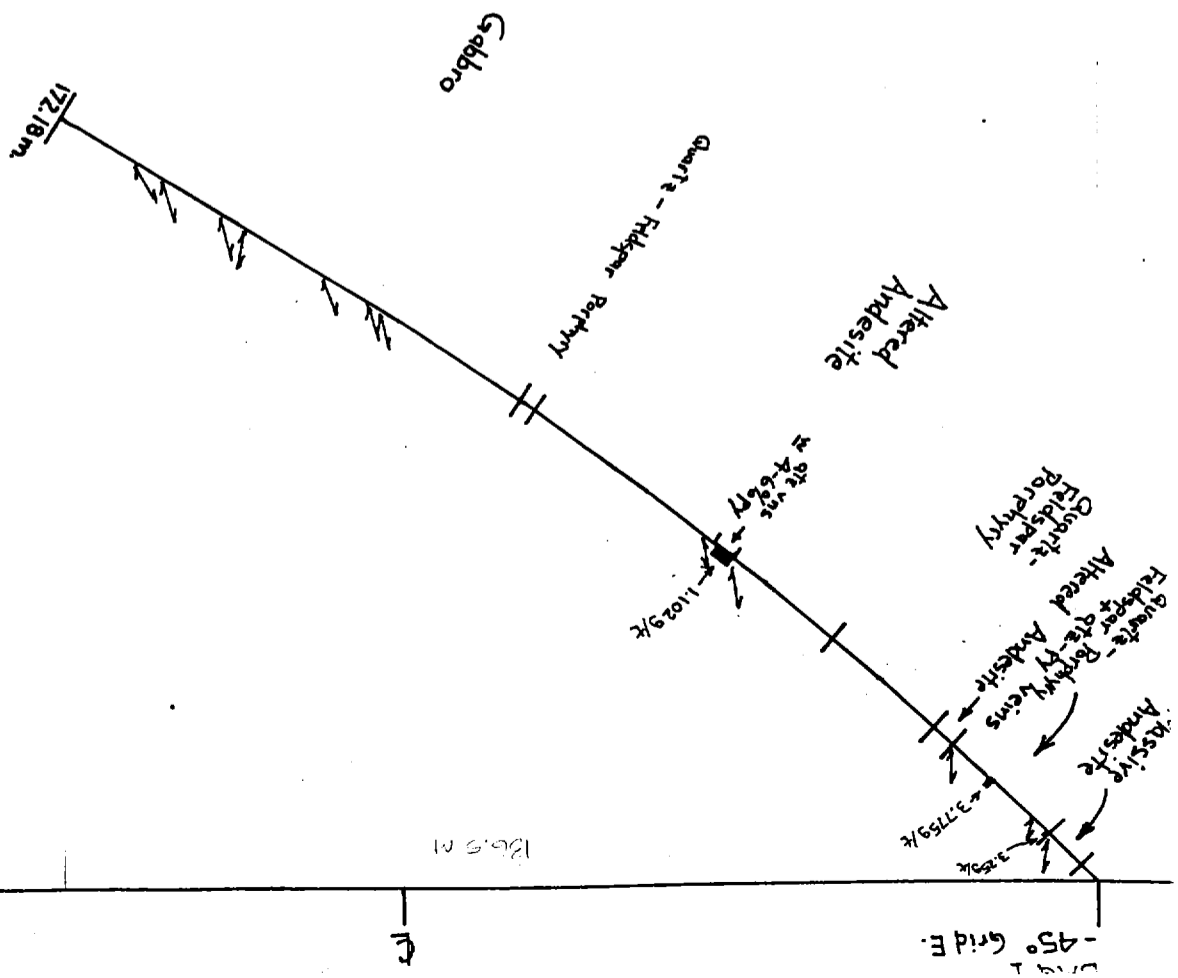
Claim No: ..... Core Size: .....

Grid No: ..... Angle & Direction: ..... Drilled By: .....

Elevation: ..... Logged By: .....

INTERVAL FEET / METRES	DESCRIPTION	Sludge SAMPLE RECORD									
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn		
0		7.62	7.62	7.62	no	sludge					
7.62		10.67	10.67	3.05	8897	.62	1.6				
10.67		13.71	13.71	3.04	8898	.33	1.2				
13.71		16.76	16.76	3.05	8899	.18	1.9				
16.76		19.81	19.81	3.05	8900	.80	2.5				
19.81		22.86	22.86	3.05	8901	.05	.7				
22.86		25.90	25.90	3.04	8902	1.34	1.8				
25.90		28.95	28.95	3.05	8903	.10	1.6				
28.95		32.00	32.00	3.05	8904	.01	1.0				
32.00		35.05	35.05	3.05	8905	.04	.8				
35.05		38.09	38.09	3.04	8906	.20	.5				
38.09		41.14	41.14	3.05	8907						
41.14		44.19	44.19	3.05	8908	.01	1.7				
44.19		47.24	47.24	3.05	8909	.01	1.4				
47.24		50.29	50.29	3.04	8910	.20	2.0				
50.29		53.34	53.34	3.04	8911	.01	.9				
53.34		56.39	56.39	3.04	8912	.25	1.3				
56.39		59.44	59.44	3.04	8913	.02	2.7				
59.44		62.49	62.49	3.04	8914						
62.49		65.54	65.54	3.04	8915						
65.54		68.59	68.59	3.04	8916	.01	2.2				
68.59		71.64	71.64	3.04	8917	.17	1.9				
71.64		74.69	74.69	3.04	8918	.02	7.6				
74.69		77.74	77.74	3.04	8919	.18	1.5				
77.74		80.79	80.79	3.04	8920	.01	1.8				
80.79		83.84	83.84	3.04	8921	.10	2.1				
83.84		86.89	86.89	3.04	sample lost.						
86.89		90.00	90.00	3.04							
90.00		93.05	93.05	3.04							
93.05		96.10	96.10	3.04							
96.10		99.15	99.15	3.04							
99.15		102.20	102.20	3.04							
102.20		105.25	105.25	3.04							
105.25		108.30	108.30	3.04							
108.30		111.35	111.35	3.04							
111.35		114.40	114.40	3.04							
114.40		117.45	117.45	3.04							
117.45		120.50	120.50	3.04							
120.50		123.55	123.55	3.04							
123.55		126.60	126.60	3.04							
126.60		129.65	129.65	3.04							
129.65		132.70	132.70	3.04							
132.70		135.75	135.75	3.04							
135.75		138.80	138.80	3.04							
138.80		141.85	141.85	3.04							
141.85		144.90	144.90	3.04							
144.90		147.95	147.95	3.04							
147.95		151.00	151.00	3.04							
151.00		154.05	154.05	3.04							
154.05		157.10	157.10	3.04							
157.10		160.15	160.15	3.04							
160.15		163.20	163.20	3.04							
163.20		166.25	166.25	3.04							
166.25		169.30	169.30	3.04							
169.30		172.35	172.35	3.04							

GRANGES EXPLORATION LTD.  
 BAG L. OPTION  
 Project 515  
 Section 0+20 S / 0+10 W  
 Scale 1:1000  
 Looking Grid N.



Property: **BAG L** Project No: **215** Depth: **120.38** m Date Began: **FEB 7, 1988**  
 Hole No: **BAG 2** Coord: **1407 S** Horizontal Length: **92.5** m Date Completed: **FEB 9, 1988**  
 Claim No: **882188** Angle & Direction: **0475 E** Core Size: **Bg** Drilled By: **Morissette**  
 Grid No: **-45° Grid E** Elevation: **139** Logged By: **B. Gaboury**

INTERVAL FEET / METRES	DESCRIPTION	Core		SAMPLE RECORD					
		FROM	TO	WIDTH	SAMPLE	Au g/t	Ag g/t	Cu	Zn
0 - 3.05	Casing (core recovery from 1.60m)	0	3.05	3.05	casing	(no samples)			
		3.05	3.57	.52	waste				
		3.57	4.07	.50	7794	.02	2.4		
		4.07	4.57	.50	7795	.01	.8		
		4.57	5.07	.50	7796	.03	1.7		
1.60 - 58.20	Gabbro	5.07	11.07	6.00	waste				
	medium coarse to coarse grained intrusive with ~50% chloritized matrix minerals up to several mm in diameter in a light greenish grey felspathic groundmass & relatively unfractured; generally <1% py & <3% thin qtz veinlets.	11.07	11.57	.50	7797	.04	1.6		
		11.57	11.89	.32	7798	.01	1.1		
		11.89	12.39	.50	7799	.01	.9		
		12.39	14.88	2.49	waste				
		14.88	15.38	.50	7800	.01	1.2		
		15.38	15.67	.29	7801	.10	2.2		
	4.07-4.57 : very mildly sheared, contorted & carbonatized section with thin py stringers at 0-1.25% to core axis; overall 1-2.3% py.	15.67	16.17	.50	7802	.01	1.9		
		16.17	16.76	.59	7803	.01	2.0		
	6.70 : ~ 5cm wide pebbly interval	16.76	17.26	.50	7804	.01	1.8		
		17.26	37.85	20.59	waste				
		37.85	38.35	.50	7805	.02	2.1		
		38.35	38.95	.60	7806	.07	2.2		
	11.65 : 2mm wide sheared py stringer at ~15° to core axis	38.95	39.45	.50	7807	.08	1.9		
		39.45	43.04	3.59	waste				
		43.04	43.54	.50	7808	.01	2.3		
		43.54	43.92	.38	7809	1.61	1.8		
		43.92	44.19	.27	7810	.63	1.9		
		44.19	44.87	.68	7811	.02	1.7		
	15.38 - 16.76 : somewhat bleached interval with narrow (<1cm wide) silicified pyritic shears with fr pe generally oriented at 30-40° to core axis; these comprise 5-8% of interval.	44.87	45.37	.50	7812	.01	1.8		
		45.37	49.68	4.31	waste				
		49.68	50.10	.42	7813	.01	2.0		
		50.10	50.23	.13	7814	.02	2.1		
		50.23	50.73	.50	7815	.01	2.2		
		50.73	51.15	.42	7816	.05	2.1		
	34.15 - 34.30 : rubbly interval with clayey gouge.	51.15	51.53	.38	7817	.20	1.9		
		51.53	51.96	.43	7818	3.42	1.8		
	34.30 - 38.35 : very slightly bleached interval with very mild shearing; <3% qtz veining & <1% py.	51.96	52.46	.50	7819	.27	1.9		
		52.46	54.40	1.94	waste				
		54.40	54.90	.50	7820	.02	1.7		
		54.90	55.30	.40	7821	.08	1.6		
		55.30	55.53	.23	7822	.25	1.9		
		55.53	55.73	.20	7823	.01	1.8		
		55.73	56.23	.50	7824	.06	1.9		
	38.35 - 38.95 : moderately well sheared & bleached interval with 10-15% thin qtz veinlets; somewhat silicified; contains ~1% py as fine disseminations & thin stringers parallel to foliation.	56.23	82.28	26.05	waste				





Property: BAG L. Project No: 515 Date Began: .....

Hole No: BAG 2 Co. ord: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET (METRES)	DESCRIPTION	SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.	
63.07-120.38	Massive Andesite									
	green, medium fine grained, $\leq 3\%$ fine fensional qtz veinlets (oriented) 40-60° to core axis near top of section, occasional intervals of wild brecciation where qtz veining (fracture infillings of varying lobe angles) increase to near 5% overall $\leq 1\%$ fine dissemin py.									
	81.76 - 82.24 : 30% sheared qtz veins with no visible sulfides; oriented ~ 20-30° to core axis.									
	83.35 - 87.90 : Occasional thin qtz veinlet oriented ~ 40° to core axis.									
	87.90 - 90.85 : Pacite band; greyish same - what more silicic band otherwise similar to enveloping andesite; bottom contact is sharp with CA = 40°.									
120.38	End of Hole									
	hole uncemented, casing removed, Acid test 120.38m: 34°									
	<u>Core Angles</u>									
	36.00 m   45° shearing									
	38.60 m   45° shearing									
	38.95 m   63° shearing									
	43.70 m   70° shearing (irregular & contorted)									
	51.80 m   45° shearing // qtz veinlets									
	55.00 m   33° shearing									
	90.85 m   40° contact									



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Page 4 of 4

Property: BAG L. Project No. 515. Depth: .....

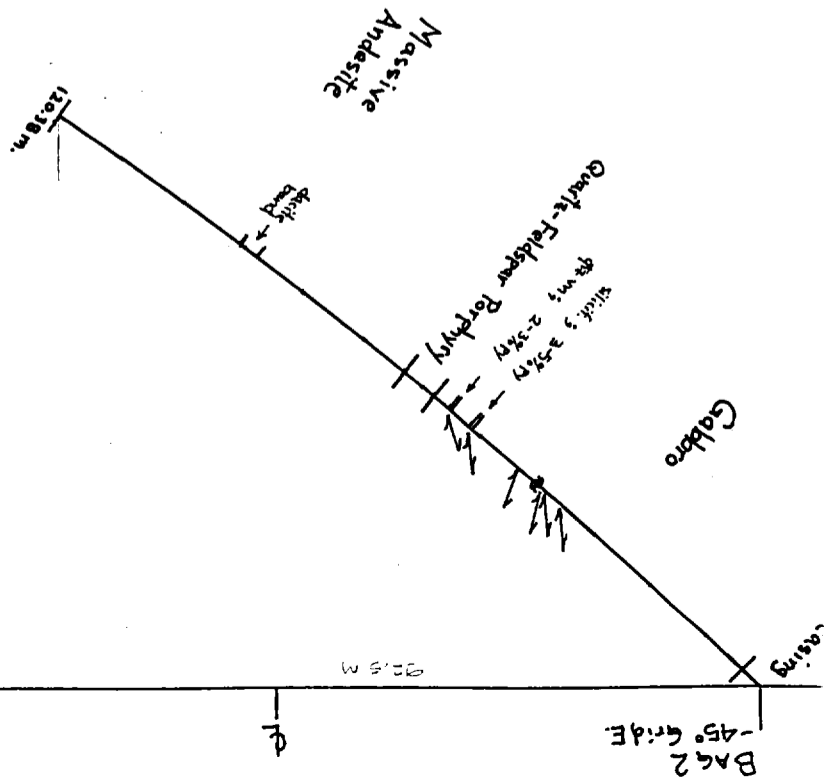
Hole No. BAG 2. Co-ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No. .... Core Size: ..... Drilled By: .....

Grid No. .... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET/METRES	DESCRIPTION	Sludge SAMPLE RECORD									
		FROM	TO	WIDTH	SAMPLE	Au $\frac{g}{t}$	Ag $\frac{g}{t}$	Cu.	Zn.		
		0	7.62	7.62	8922	.01	2.4				
		7.62	10.67	3.05	8923	.01	2.3				
		10.67	13.71	3.04	8924	.01	2.0				
		13.71	16.76	3.05	8925	.02	1.1				
		16.76	19.81	3.05	8926	.04	1.3				
		19.81	22.86	3.05	8927	.01	1.6				
		22.86	25.90	3.04	8928	.01	1.8				
		25.90	28.95	3.05	8929	.20	.7				
		28.95	32.00	3.05	8930	.02	1.6				
		32.00	35.05	3.05	8931	.01	1.3				
		35.05	38.09	3.04	8932	.42	1.8				
		38.09	41.14	3.05	8933	.04	2.2				
		41.14	44.19	3.05	8934	.25	2.5				
		44.19	47.24	3.05	8935	.03	3.6				
		47.24	50.28	3.04	8936	.24	7.8				
		50.28	53.33	3.05	8937	.08	2.1				
		53.33	56.38	3.05	8938	.20	2.4				
		56.38	59.43	3.05	8939	.01	1.9				
		59.43	62.47	3.04	8940						
		62.47	65.52	3.05	8941						

GRANGES EXPLORATION LTD.  
BAG L. OPTION  
Project SIS  
Section 1+07S / 0+75E  
Scale 1:1000  
Looking Grid N.



Property: **BA6 L.** Project No: **515** Depth: **99.04 m** Date Began: **FEB 10, 1988**  
 Hole No: **BA6 3** Coord: **2+00 S** Horizontal Length: **50 m** Date Completed: **FEB 11, 1988**  
 Claim No: **882189** Core Size: **Bq** Drilled By: **Morissette**  
 Grid No: Angle & Direction: **-55° GridE** Elevation: **Bq** Logged By: **B. Gaboury**

INTERVAL FEET (METRES)	DESCRIPTION	CORE SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn	
0 - 3.05	Casing									
	Core recovery from 1.05m)									
1.05 - 18.00	Massive Andesite	3.05	3.05	3.05	casing					
	dark green, medium fine grained, unfoliated; contains 2% fine dissemin. py	44.92	45.42	.50	waste					
		45.42	45.61	.19	7829	.02	1.8			
		45.61	46.11	.50	7836	.01	2.3			
		46.11	46.47	.36	7860		2.1			
		46.47	46.97	.50	7831	.01	1.9			
		46.97	47.16	.19	7832	.22	2.0			
		47.16	47.66	.50	7833	.02	1.9			
		47.66	49.28	1.62	waste					
		49.28	49.78	.50	7834					
18.00 - 21.74	Feldspar Porphyry	49.78	50.12	.34	7859	.03	1.7			
	fairly dark grey porphyry with 50-60% white feldspar phenocrysts up to 3mm dia. plus ~3-5% irregular black mag. phenocrysts up to 2mm in dia. fine py, almost no qtz veining, upper contact CA 35° lower contact CA 42°	50.12	50.52	.40	7835	.02	1.8			
		50.52	50.91	.39	7836	.01	2.0			
		50.91	51.18	.27	7837	.02	1.8			
		51.18	51.68	.50	7838	.02	1.9			
		51.68	78.53	26.85	waste					
		78.53	78.83	.30	7839	.01	1.2			
		78.83	79.26	.43	7840	.03	1.6			
		79.26	79.46	.20	7841	.03	1.9			
		79.46	79.96	.50	7842	.18	1.2			
		79.96	80.46	.50	7843	.21	1.3			
		80.46	80.96	.50	7844	.04	1.3			
		80.96	81.46	.50	7845	.02	1.1			
		81.46	82.00	.54	7846	.01	1.6			
		82.00	82.61	.61	7847	.02	1.5			
		82.61	83.11	.50	7848	.09	1.3			
		83.11	83.50	.39	7849	.02	1.2			
		83.50	83.81	.31	7850	.03	1.3			
		83.81	84.31	.50	7851	.01	1.1			
		84.31	87.33	3.02	waste					
		87.33	87.83	.50	7852	.04	1.4			
		87.83	88.33	.50	7853	.05	1.2			
		88.33	88.83	.50	7854	.13	2.1			
		88.83	89.05	.22	7855	.47	1.3			
		89.05	89.55	.50	7856	.01	1.8			
		89.55	90.05	.50	7857	.02	1.0			
		90.05	90.55	.50	7858	.01	1.3			
		90.55	99.04	8.49	waste					
		99.04		8.01	waste					
21.74 - 75.90	Massive Andesite									
	same as interval 1.05 - 18.00 m.									
	25.90 - 51.18; weakly brecciated with ≤ 30% irregular qtz veinlets < 1mm wide of variable CA's. Degree of brecciation decrease again below 51.18.									
		41.14	41.30		blocky, rubbly					
		42.24	42.60		minor fault, blocky rubble interval with 1-2 cm wide clay seam at 70-80° to core axis.					
		45.42	45.61		well brecciated,					



Property: BAG L. Project No: 515 Date Began: .....

Hole No: BAG 3 Co-ord: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET (METRES)	DESCRIPTION	SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
	silicified interval with 1-2% py overall.								
	46.97-47.16 : brecciated, bleached, slightly sheared, silicified, tr-1% py								
	49.78-50.12 : brecciated, bleached, sheared; contains 20-30% qtz veins; tr py + cpy, veins // shearing.								
	50.91-51.18 : brecciated, bleached, sheared; contains ~40% broken qtz veins concordant with shearing, tr-1% py								
75.90-79.26	Andesitic to Dacitic Ash Tuff. greyish medium fine to medium grained, very weakly foliated 30% qtz veinlets up to ~1cm wide at variable CA's, lighter grey volc fragments range up to ~5mm dia, overall 1-2% py. becomes more silicified toward bottom of interval.								
79.26-80.46	Intrusive Breccia. rock composed of 50-60% light colored (bleached) Andesite or dacite volcanic fragments plus ~20% qtz vein fragments in a light greenish grey fine grained pyritic groundmass; overall 3-5% very fine to medium fine disseminated py.								
80.46-83.61	Feldspar Porphyry light greenish porphyry containing 40-60% cream colored feldspar phenocrysts up to several mm dia; ~1% py overall; contains ~5% fine fensitic qtz veinlets of varying CA's due to brecciated nature of this rock.								



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Page 3 of 4

Property: **BAG L** Project No: **515** Date Began: .....

Hole No: **BAG 3** Co ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERNAL  
FEET (METRES)

DESCRIPTION

FROM

TO

WIDTH

SAMPLE

Au.

Ag.

Cu.

Zn.

SAMPLE RECORD

93.61 - 90.65

Massive Andesite.

light grey green to dark grey green, medium fine grained, contains  $\leq 1\%$  py,  $\leq 3\%$  fine gr. qtz veinlets at variable CA's, generally mildly silicified.

87.83 - 89.05 | silicified numerous silicious veinlets at  $\sim 45^\circ$  to core axis (some with py); overall  $\sim 1\%$  py except 88.83 - 89.05  $\Rightarrow$  1-2% py.

89.55 - 90.05 | moderately well brecciated;  $\sim 5\%$  fine gr. veinlets,  $\leq 1\%$  py.

90.65 - 96.26

Feldspar Porphyry

similar to 80.46 - 83.61 except it is not brecciated; contains  $\ll 2\%$  qtz veining,  $< 1\%$  py.

96.26 - 99.04

Massive Andesite

similar to 83.61 - 90.65; brecciated near upper contact with porphyry; but brecciation diminishes downhole.

99.04

End of Hole

hole uncemented, casing removed.

Core Angles

20.75 m | 60° weak shearing

47.05 m | 35° shearing

50.00 m | 30° shearing

51.00 m | 30° shearing

79.26 m | 20° contact

80.46 m | 5° contact

90.65 m | 70° contact

96.26 m | 80°-90° contact.



**GRANGES EXPLORATION LTD.  
DIAMOND DRILL LOG**

Page 4 of 4

Property ..... **BAG, L.** ..... Project No. .... **215** ..... Date Began .....

Hole No. .... **BAG, 3** ..... Co ord. .... Horizontal Length .....

Claim No. .... Core Size .....

Grid No. .... Angle & Direction .....

Elevation .....

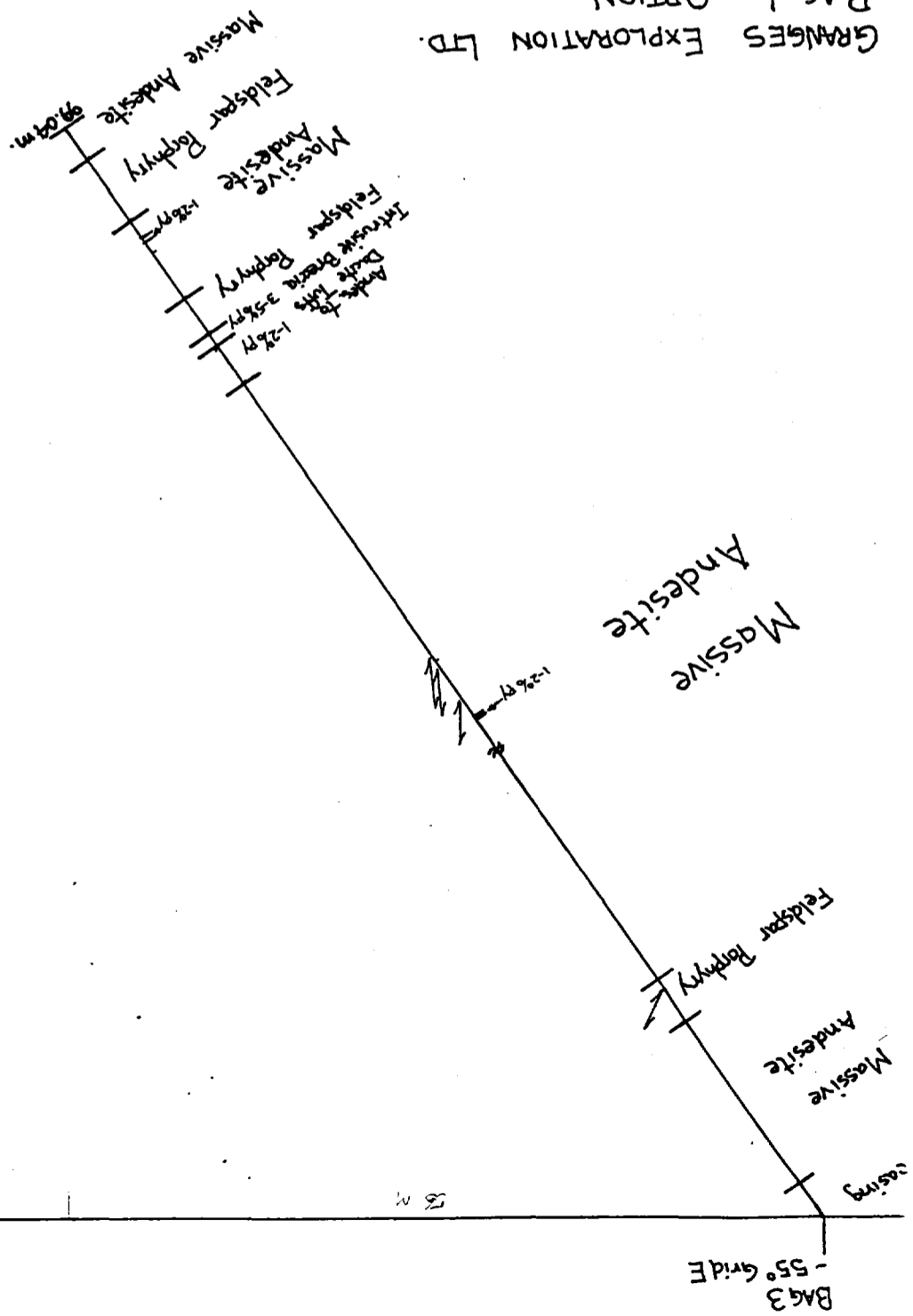
Logged By .....

Date Completed .....

Dilled By .....

INTERVAL FEET / METRES	DESCRIPTION	Sludge SAMPLE RECORD									
		FROM	TO	WIDTH	SAMPLE	Av%	Ag%	Cu	Zn		
0		13.71	13.71	3.05	8942	.03	5.7				
13.71		16.76	16.76	3.05	8943	.02	2.3				
16.76		19.81	19.81	3.05	8944	.17	1.2				
19.81		22.86	22.86	3.05	8945	.04	5.9				
22.86		25.90	25.90	3.04	8946	.02	1.8				
25.90		28.95	28.95	3.05	8947	.03	2.1				
28.95		32.00	32.00	3.05	8948	.02	2.0				
32.00		35.05	35.05	3.05	8949	.01	2.1				
35.05		38.09	38.09	3.04	8950	.02	1.9				
38.09		41.14	41.14	3.05	8951	.01	1.8				
41.14		44.19	44.19	3.05	8952	.03	2.0				
44.19		47.24	47.24	3.05	8953	.03	2.1				
47.24		50.28	50.28	3.04	8954	.02	1.7				
50.28		53.33	53.33	3.05	8955	.01	1.3				
53.33		56.38	56.38	3.05	8956	.01	1.9				
56.38		59.43	59.43	3.05	8957	.02	2.1				
59.43		62.47	62.47	3.04	8958	.03	1.8				
62.47		65.52	65.52	3.05	8959	.01	2.0				
65.52		68.57	68.57	3.05	8960	.02	1.6				
68.57		71.62	71.62	3.05	8961	.03	1.9				
71.62		74.66	74.66	3.04	8962	.02	1.8				
74.66		77.71	77.71	3.05	8963	.02	1.9				
77.71		80.76	80.76	3.05	8964	.18	1.6				
80.76		83.81	83.81	3.05	8965	.02	.8				
83.81		86.85	86.85	3.04	8966	.11	1.2				
86.85		89.90	89.90	3.05	8967	.04	1.9				
89.90		92.95	92.95	3.05	8968	.37	1.3				
92.95		96.00	96.00	3.05	8969	.16	.8				
96.00		99.04	99.04	3.04	8970	.02	1.7				

GRANGES EXPLORATION LTD.  
BAG L. OPTION  
Project 515  
Section 2+005 / 1+38E  
Scale 1:500  
Looking Grid N.



50m

BAG 3 - 55° GRID

Property: **BAG 4** Project No: **212** Depth: **117.33 m** Date Began: **FEB 12, 1988**  
 Hole No: **88 2190** Co ord: **2+00 S** Horizontal Length: **57 m** Date Completed: **FEB 13, 1988**  
 Claim No: **0 + 95 W** Core Size: **B<sub>9</sub>** Drilled By: **Morissette**  
 Grid No: **-55° Grid E** Elevation: **7863** Logged By: **B. Gaborury**

INTERVAL FEET / METRES	DESCRIPTION	CORE SAMPLE RECORD													
		FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.						
0 - 3.66	Casing (core recovered from 3.55 m)	0	3.66	3.66	casing										
		3.66	28.70	25.04	waste										
		28.70	29.20	.50	7861	.02									
		29.20	29.92	.22	7862	4.24									
		29.92	29.92	.50	7863	.05									
		29.92	42.16	12.24	waste										
		42.16	42.66	.50	7864	.03									
		42.66	42.89	.23	7865	.02									
		42.89	43.40	.51	7966	.16									
		43.40	43.90	.50	7867	.04									
		43.90	43.98	.08	7868	1.81*									
		43.98	44.48	.50	7869	.01									
		44.48	48.19	3.71	waste										
		48.19	48.69	.50	7870	.08									
		48.69	49.01	.32	7871	8.69									
		49.01	49.51	.50	7872	.09									
		49.51	111.77	61.96	waste										
		111.47	111.97	.50	7873	.02									
		111.97	112.38	.41	7874	.07									
		112.38	112.88	.50	7875	.02									
		112.88	117.33	4.45	waste										
		117.33													
21.72 - 22.86	FAULT ZONE ; blocky, rubbly andesite plus pebbly clayey, green gouge.														
22.86 - 63.47	Altered Andesite														
27.93 - 32.00	mottled green, medium fine grained, basically unfoliated rock which contains splatly white siliceous patches such as those encountered in the "altered andesites" encountered in RA6 (appears glomerophyritic) ; the rock also contains patchy epidotization and occasional chloritic stringers with no preferred orientation (except in foliated sections) ; contains 30% quartz veinlets up to 2mm wide (many are oriented ~ 50° to core axis near the top of the interval, otherwise they exhibit variable CA's) ; contains < 1% py ;														
29.20 - 29.42	wildly to moderately well foliated interval ; 3% py as disseminations & stringers concordant with foliation														







**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Property: **BAG L** Project No: **515** Depth: .....  
 Hole No: **BAG 4** Coord: ..... Horizontal Length: ..... Date Began: .....  
 Claim No: ..... Core Size: ..... Drilled By: ..... Date Completed: .....  
 Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL  
FEET / METRES

DESCRIPTION

FROM

TO

WIDTH

SAMPLE

Au.

Ag.

Cu.

Zn.

SAMPLE RECORD

114.52-117.33

Altered Andesite

same as 22.86 - 63.47 m ; very mildly sheared; contains chloritic stringers with foliation. somewhat concordant

117.33

End of Hole

Hole uncemented casing left in hole.

Core Angles

3.97 m | 52° | fol  
 7.97 m | 47° | fol  
 16.75 m | 45° | fol  
 22.95 m | 42° | fol  
 29.40 m | 40° | fol  
 42.75 m | 25° | shear shear.  
 59.00 m | 37° | fo  
 63.47 m | 12.5° | Contact.  
 74.17 m | 24° | Contact.  
 74.90 m | 20° | chlor. shear  
 75.46 m | 20° | chlor. shear.  
 78.01 m | 35° | fol.  
 89.00 m | 30° | fol.  
 93.40 m | 30° | fol.  
 115.80 m | 32° | weak fol.





**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Property: BAG L Project No: 515 Date Began: .....

Hole No: BAG 4 Co.ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

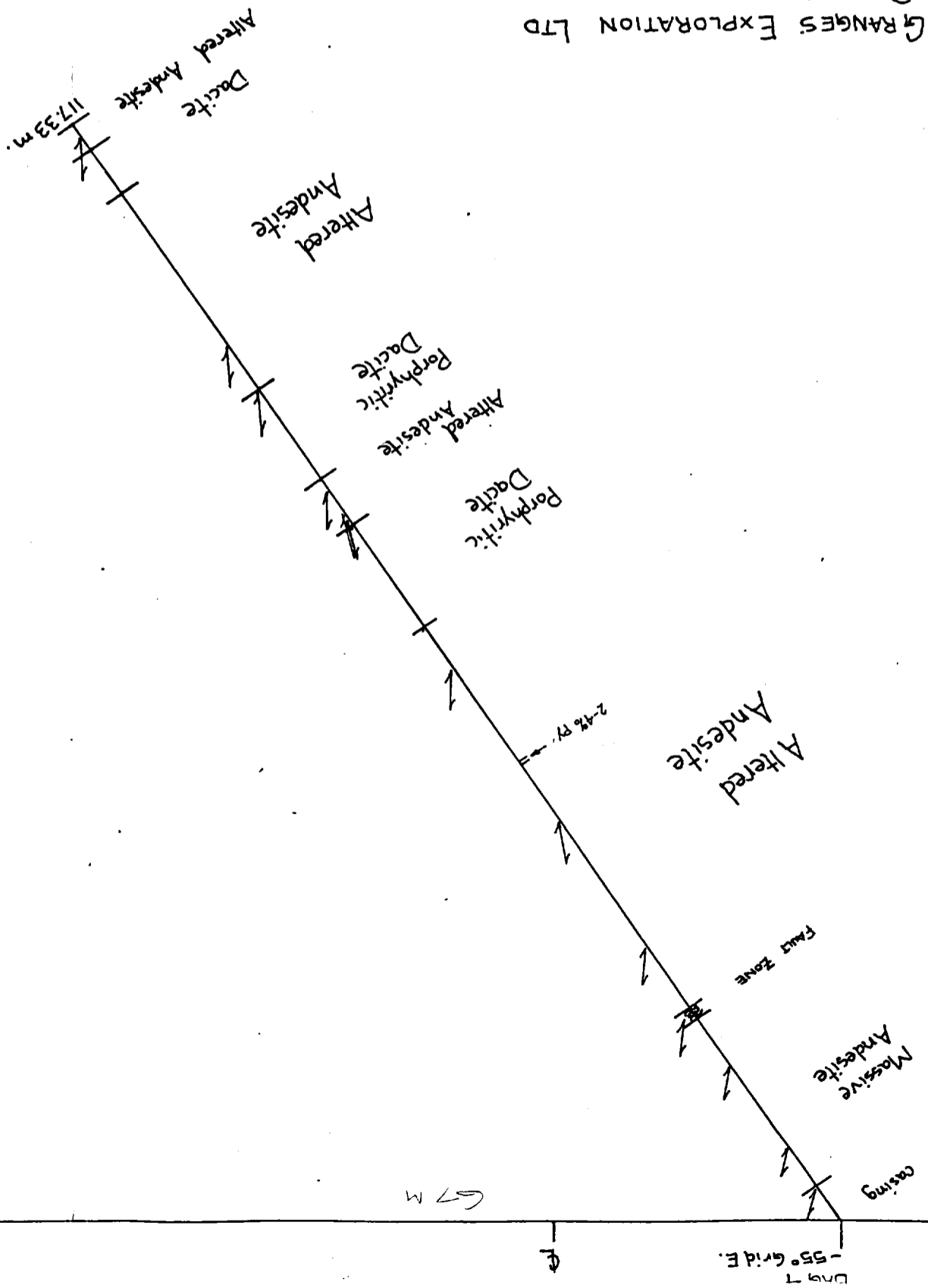
INTERVAL  
FEET / METRES

DESCRIPTION

**SLUDGE SAMPLE RECORD**

FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
0	4.57	no	sludge	recovery			
4.57	7.62	3.05	8971	.02	5.8		
7.62	10.67	3.05	8972	.01	2.5		
10.67	13.71	3.04	8973	.12	3.8		
13.71	16.76	3.05	8974	.04	1.8		
16.76	19.81	3.05	8975	.33	4.4		
19.81	22.86	3.05	8976	.02	2.1		
22.86	25.90	3.04	8977	.03	2.7		
25.90	28.95	3.05	8978	.02	2.2		
28.95	32.00	3.05	8979	.59	2.1		
32.00	35.05	3.05	8980	.07	1.6		
35.05	38.09	3.04	8981	.08	3.0		
38.09	41.14	3.05	8982	.14	1.8		
41.14	44.19	3.05	8983	.09	1.0		
44.19	47.24	3.05	8984	.23	1.4		
47.24	50.28	3.04	8985	.94	1.8		
50.28	53.33	3.05	8986	.10	.9		
53.33	56.38	3.05	8987	.39	1.8		
56.38	59.43	3.05	8988	.05	3.3		
59.43	62.47	3.04	8989	.42	2.7		
62.47	65.52	3.05	8990	.13	1.7		
65.52	68.57	3.05	8991	.04	3.8		
68.57	71.62	3.05	8992	.02	.9		
71.62	74.66	3.04	8993	.05	1.2		
74.66	77.71	3.05	8994	.03	1.7		
77.71	80.76	3.05	8995	.07	1.8		
80.76	83.81	3.05	8996	.03	5.6		
83.81	86.85	3.04	8997	.14	8.1		
86.85	89.90	3.05	8998	.08	1.5		
89.90	92.95	3.05	8999	.02	3.8		
92.95	96.00	3.05	9000	.06	16.7		
96.00	99.04	3.04	9001	.01	374.0		
99.04	102.09	3.05	9002	.02	1.8		
102.09	105.14	3.05	9003	.02	1.9		
105.14	108.19	3.05	9004	.08	1.2		
108.19	111.23	3.04	9005	.02	1.4		
111.23	114.28	3.05	9006	.03	2.0		

GRANGES EXPLORATION LTD  
BAG L. OPTION  
Project 515  
Section 2+00 S / 0+95W  
Scale 1:500  
Looking Grid N.



# GRANGES EXPLORATION LTD. DIAMOND DRILL LOG

Page 1 of 2

Property: BAG L  
 Hole No: BAG 5  
 Claim No: 100 3407  
 Grid No: 2+20 E  
 Project No: 515  
 Co ord: 10+00 S  
 Core Size: B<sub>g</sub>  
 Depth: 102.09 m  
 Horizontal Length: 5.2 m  
 Date Begun: FEB 15, 1988  
 Date Completed: FEB 16, 1988  
 Drilled By: Morrisette  
 Logged By: B. GABOURY  
 Angle & Direction: -55° Grid E. Elevation

INTERVAL  
FEET / METRES

DESCRIPTION

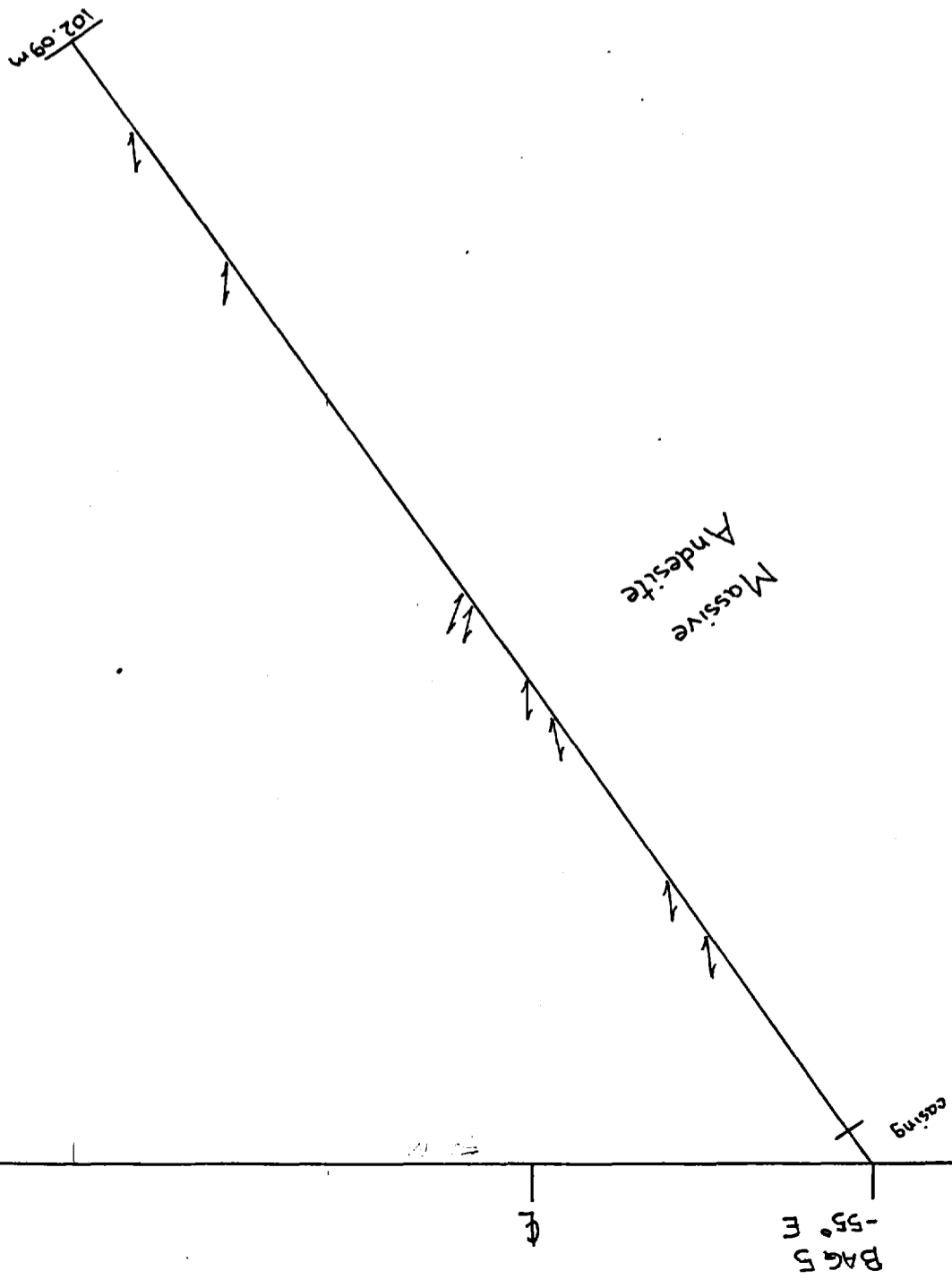
Core SAMPLE RECORD

INTERVAL FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
0 - 3.67	(casing recovery from 3.04 m)	0	3.04	casing	(no core recovery)				
		3.04	38.90	35.86	waste				
		38.90	39.40	.50	7876	.16	2.2		
		39.40	39.57	.17	7877	.14	1.8		
		39.57	40.07	.50	7878	.03	2.0		
		40.07	40.57	.50	7879	.06	2.1		
		40.57	40.73	.16	7880	.56	1.7		
		40.73	41.23	.50	7881	.01	2.0		
		41.23	41.75	.52	7882	.01	2.0		
		41.75	41.90	.15	7883	.07	1.4		
		41.90	42.55	.65	7884	.01	1.7		
		42.55	43.05	.50	7885	.02	.9		
		43.05	81.34	38.29	waste				
		81.34	81.84	.50	7886	.09	1.6		
		81.84	82.46	.62	7887	.18	.5		
		82.46	82.96	.50	7888	.05	.4		
		82.96	102.09	19.13	waste				
13.71 - 37.00	dark green, finer grained; contains 3-5% of the veining (as fracture infillings) containing cream-colored carb. < 10% py; locally porphyritic & contains intervals with 10% small chloritic matrix phenocrysts mildly to brecciated; generally								
13.96 - 14.20	fractured; blocky & rubbly; contains one semi-healed fracture at ~ 20° to core axis.								
19.75	~ 3 cm wide incipient shear (epiditized) at ~ 20° to core axis.								
25.55 - 25.70	brecciated, somewhat sheared, epiditized; no visible sulfides.								
39.40 - 42.55	medium fine grained, 5-10% of veining, ~ 1% py + po, very weak foliation.								

Property: BAG L  
 Hole No: BAG 5  
 Claim No:  
 Grid No:  
 Project No: 515  
 Co-ord:  
 Angle & Direction:  
 Depth:  
 Horizontal Length:  
 Core Size:  
 Date Began:  
 Date Completed:  
 Drilled By:  
 Logged By:

INTERVAL FEET (METRES)	DESCRIPTION	SLUDGE SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
49.00 - 49.50	several short (< 5cm wide) & blocky rubble sections.	3.67	7.62	3.95	no sludge	.02	2.1		
49.50 - 52.00	weakly foliated interval with < 1% py. & qtz veinlets up to 3mm wide.	7.62	13.71	6.09	9008	.01	1.8		
		13.71	19.81	6.10	9009	.02	3.9		
		19.81	25.90	6.09	9010	.02	1.6		
		25.90	32.00	6.10	9011	.04	1.4		
		32.00	38.09	6.09	9012				
55.00 - 58.20	same qtz veinlets with bright pink manganese carb (core angles are variable).	38.09	44.19	6.10	9013	.03	.6		
		44.19	50.28	6.09	9014	.01	1.0		
		50.28	56.38	6.10	9015	.02	1.2		
		56.38	62.47	6.09	9016	.01	1.3		
		62.47	68.57	6.10	9017	.01	1.1		
		68.57	74.66	6.09	9018	.03	2.2		
		74.66	80.76	6.10	9019	.01	2.4		
		80.76	86.85	6.09	9020	.06	2.0		
		86.85	92.95	6.10	9021	.01	2.1		
		92.95	99.04	6.09	9022	.02	1.7		
		99.04	102.09	3.05	9023	missing			
		102.09							
102.09	End of Hole								
	hole uncemented, casing pulled.								
	<u>Core Angles</u>								
	20.80 m	30°	incipient shearing						
	25.70 m	30°	incipient shearing						
	40.40 m	25°	very weak shearing						
	43.75 m	35°	foliation.						
	50.78 m	49°	foliation.						
	52.00 m	55°	foliation.						
	82.00 m	40°	shearing.						
	94.00 m	30°	very weak incipient shearing.						

GRANGES EXPLORATION LTD.  
BAG L. OPNON  
Project S15  
Section 10+00 S / 2+20 E  
Scale 1:500  
Looking Grid N.





**GRANGES EXPLORATION LTD.  
DIAMOND DRILL LOG**

Page 1 of 2

Property: BAG L  
 Hole No: BAG 6  
 Claim No: 100 3411  
 Grid No: 3+52 W  
 Project No: 515  
 Co ord: 16+05.5 S  
 Angle & Direction: -55° Az 065  
 Depth: 92.95 m  
 Horizontal Length: 52 M  
 Core Size: Bag  
 Date Began: FEB 18 1988  
 Date Completed: FEB 19 1988  
 Drilled By: MORISSETTE  
 Logged By: B. GAMBOURY

INTERNAL  
FEET (METRES)

DESCRIPTION

Core SAMPLE RECORD

FROM	TO	WIDTH	SAMPLE	Au/g	Ag/g	Cu	Zn
0	13.70	Casing					
13.70	44.30	30.60	waste				
44.30	44.80	.50	7889	.01			
44.80	45.30	.50	7890	.02	2.1		
45.30	45.80	.50	7891	.01	1.8		
45.80	46.30	.50	7892	.01	1.6		
46.30	46.74	.44	7893	.02	1.7		
46.74	47.24	.50	7894	.04	1.0		
47.24	47.67	4.3	7895	.02	.9		
47.67	48.17	.50	7896	.01	1.1		
48.17	66.44	18.27	waste				
66.44	66.94	.50	7897	.01	1.9		
66.94	67.26	.32	7898	.02	2.1		
67.26	67.76	.50	7899	.01	1.6		
18.40 - 18.61			blacky, rubbly				
44.80 - 47.67			widely to moderately well foliated interval of crudely banded andesitic fuffs with $\leq 3\%$ qtz veining & $\sim 2\%$ dissem. py, somewhat chloritic.				
Below $\sim 53.30$ m			veining drops to $\sim 30\%$ vock; has no foliation, qtz $\leq 1\%$ .				
66.94 - 67.26			brecciated, epidotized & silicified; contains a 10/100 stringer up to 1cm wide (layers out at both ends) trending $\sim 5-10^\circ$ to core axis cross-cutting qtz epid vein with a core angle of $70-80^\circ$ .				
77.82 - 77.97			clayey pebbly rubble (minor fault)				
92.95			End of Hole				



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Page 2 of 2

Property: **BAG, L.** Project No: **515** Date Began: .....

Hole No: **BAG, 6** Co ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL  
FEET (METRES)

DESCRIPTION

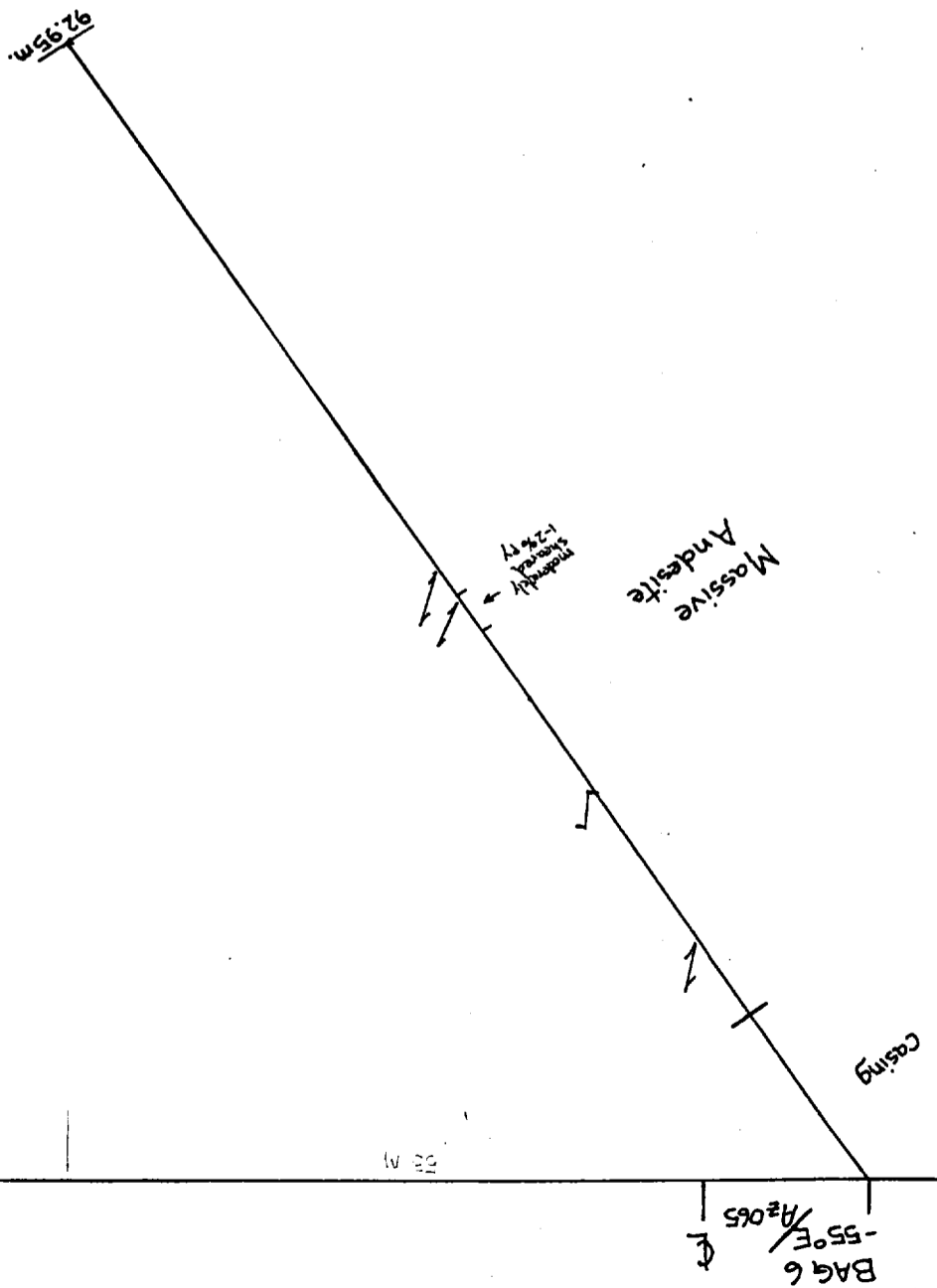
SLUDGE SAMPLE RECORD

FROM	TO	WIDTH	SAMPLE	Ag 9/4	Ag 9/4	Cu.	Zn.
0	13.71	13.71	9024	.07	1.8		
13.71	25.90	12.29	9025	.03	1.1		
25.90	32.00	6.10	9026	.02	1.3		
32.00	38.09	6.09	9027	.14	1.8		
38.09	44.19	6.10	9028	.08	1.6		
44.19	50.28	6.09	9029	.04	1.4		
50.28	56.38	6.10	9030	.02	1.3		
56.38	62.47	6.09	9031	.09	1.1		
62.47	68.57	6.10	9032	.16	1.8		
68.57	74.66	6.09	9033	.18	1.4		
74.66	80.76	6.10	9034	.02	1.7		
80.76	86.85	6.09	9035	.01	15.8		
86.85	92.95	6.10	9036	.01	11.6		
92.95	EOH						

Core ANGLES

19.53 m 57° shearing  
32.00 40° chloritic fractures  
47.20 60° foliation  
49.67 52° very weak foliation

GRANGES EXPLORATION LTD.  
BAG L. OPTION  
Project 515  
16+05.5S/3+52W ; -55°/Az 065  
Scale 1:500  
Looking N.





Property: **BAG L** Project No: **515** Date Began: **FEB 20/88**  
 Hole No: **BAG 7** Coord: **18+14S** Horizontal Length: **47 m** Date Completed: **FEB 20/88**  
 Claim No: **1003408** Core Size: **B<sub>9</sub>** Drilled By: **Morrisette**  
 Grid No: **1** Angle & Direction: **0 + 70 E** Elevation: **-55°/Az 070** Logged By: **B. Gaboury**

INTERVAL FEET / METRES	DESCRIPTION	SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
0 - 3.05	(Casing recovered from 2.65m)	0	2.65	casing	(no core recovery)				
2.65 - 36.55	Massive Andesite	2.65	14.62	11.97	waste	.01	1.8		
		14.62	15.12	.50	7900				
		15.12	15.53	.41	7901	.02	2.0		
		15.53	16.03	.50	7902	.02	1.7		
		16.03	27.81	11.78	waste				
		27.81	28.31	.50	7903	.02	1.8		
		28.31	28.58	.27	7904	.06	1.9		
		28.58	29.08	.50	7905	.03	1.3		
		29.08	52.66	23.08	waste				
		52.66	52.66	.50	7906	.02	1.7		
		52.66	53.00	.34	7907	.01	1.8		
		53.00	53.50	.50	7908	.01	1.4		
		53.50	80.76	27.26	waste				
		80.76	80.76	0.00					
		27.50 - 29.00	weakly to moderately well foliated, 3% thin (< 3mm wide) of veinlets concordant with foliation.						
		28.31 - 28.58	dark brown well-foliated section with 1-2% disseminated PY & ~ 10% broken of veinlets (includes one thin flay-PY seam of the order of a few mm wide).						
36.55 - 54.80	Pillowed Andesites	moderately to mildly brecciated, medium fine to fine grained, contains veinlets of chloritic / siliceous dark green matrix containing lighter green andesitic fragments (pillow selvages). These veinlets are up to several cm wide and are oriented at all possible angles. These also have peripheral bleaching into the host andesite; contains 1% pyrrho (but some fractured)							



Property: BAG.L. Project No: 215 Date Began: .....  
 Hole No: BAG 7 Co. ord: ..... Horizontal Length: ..... Date Completed: .....  
 Claim No: ..... Core Size: ..... Drilled By: .....  
 Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL  
FEET (METRES)

sections with up to 3% py (eg 52.66 - 53.00 m)

54.80 - 80.76

Massive Andesite

similar to interval 2.65 - 36.55 ; contains 4-8%  
 qtz - carb - (epid) veinlets up to 1cm wide at  
 varying (A's) giving the rock a pitted appearance  
 generally non-foliated ; degree of precipitation decreases  
 noticeably downhole ; such that qtz veining is < 3%  
 below 71.62m ; < 1% py + opa.

80.76

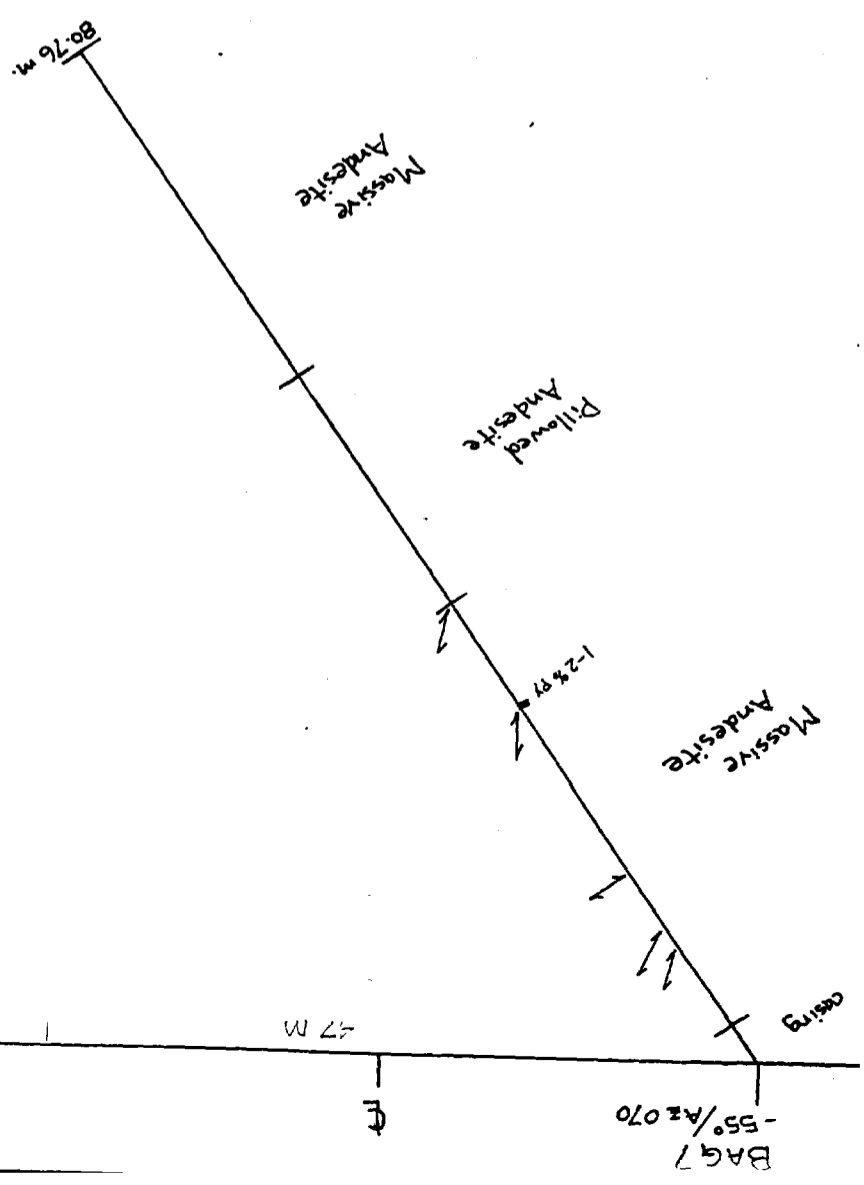
End of Hole casing pulled, hole uncemented

Core Angles

9.10 m ; 50° very weak fol.  
 10.67 m ; 62° very weak fol.  
 15.05 m ; 90° fol  
 28.00 m ; 35° fol // qtz vintts  
 28.40 m ; 40° fol (shearing)  
 36.30 m ; 58° very weak fol

INTERVAL		DESCRIPTION		SLUDGE SAMPLE RECORD									
FEET	(METRES)	FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn				
		0	3.05	nd	sludge	recovery							
		3.05	4.57	1.52	9037	.03	3.2						
		4.57	7.62	3.05	9038	.02	1.9						
		7.62	10.67	3.05	9039	.06	1.4						
		10.67	13.71	3.04	9040	.01	1.7						
		13.71	16.76	3.05	9041	.01	1.3						
		16.76	19.81	3.05	9042	.01	1.1						
		19.81	22.86	3.05	9043	.01	.8						
		22.86	25.90	3.04	9044	.03	1.2						
		25.90	28.95	3.05	9045	.14	1.8						
		28.95	32.00	3.05	9046	.02	3.7						
		32.00	35.05	3.05	9047	.01	1.6						
		35.05	38.09	3.04	9048	.12	1.7						
		38.09	41.14	3.05	9049	.03	2.0						
		41.14	44.19	3.05	9050	.02	1.3						
		44.19	47.24	3.05	9051	.02	1.1						
		47.24	50.28	3.04	9052	.01	1.4						
		50.28	53.33	3.05	9053	.01	5.8						
		53.33	56.38	3.05	9054	.01	4.2						
		56.38	59.43	3.05	9055	.03	4.1						
		59.43	62.47	3.04	9056	.02	3.8						
		62.47	65.52	3.05	9057	.02	3.1						
		65.52	68.57	3.05	9058	.05	5.9						
		68.57	71.62	3.05	9059	.03	3.6						
		71.62	74.66	3.04	9060	.02	3.1						
		74.66	77.71	3.05	9061	.01	2.4						
		77.71	80.76	3.05	9062	sample	missing						

GRANGES EXPLORATION LTD.  
BAG L. OPTION  
Project 515  
18+145/0+70E ; -55°/Az 070  
Scale 1:500  
Looking N.





Property: BAG L. Project No: 515 Depth: 23.81 m Date Began: FEB 21/88  
 Hole No: BAG B Co ord: 17+13 S Horizontal Length: 45 m Date Completed: FEB 22/88  
 Claim No: 100 3408 Core Size: B<sub>g</sub> Drilled By: MORISSETTE  
 Grid No: 1 Angle & Direction: -55°/A 077 Elevation: Core Sample Record Logged By: B. Gaboury

INTERVAL FEET (METRES)	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au. %	Ag %	Cu.	Zn.
0 - 24.38	Casing	0	24.38						
24.38 - 25.37	Massive Andesite boulder	24.38	25.87	49	no core				
25.37 - 25.87	granitic & andesitic pebbles plus one dacitic cobble.	25.87	47.33	21.46	waste				
25.87 - 50.48	Pillowed Andesite	47.33	47.83	.50	7909	.02	2.0		
		47.83	48.33	.50	7910	.02	1.8		
		48.33	48.76	.43	7911	.16	.1		
		48.76	49.28	.52	7912	.02	1.7		
		49.28	49.78	.50	7913	.01	1.0		
		49.78	50.28	.50	7914	.01	1.3		
		50.28	50.48	.20	7915	.02	.9		
		50.48	50.98	.50	7916	.02	2.0		
		50.98	83.81	32.83	waste				
		83.81	E.O.H.						
47.24 - 50.48	wildly brecciated, foliated interval with <1% py & 5-10% narrow fensitic; the veinlets, many of which are concordant with foliation.								
50.28 - 50.48	sheared & silicified, 20-30% of a veining, ~1% py + po.								
50.48 - 83.81	Massive Andesite								



GRANGES EXPLORATION LTD.  
DIAMOND DRILL LOG

Property: B461 L  
 Hole No: B461 8  
 Claim No: ...  
 Project No: 515  
 Depth: ...  
 Horizontal Length: ...  
 Date Began: ...  
 Date Completed: ...  
 Core Size: ...  
 Drilled By: ...  
 Angle & Direction: ...  
 Elevation: ...  
 Logged By: ...

INTERVAL  
FEET / METRES

DESCRIPTION

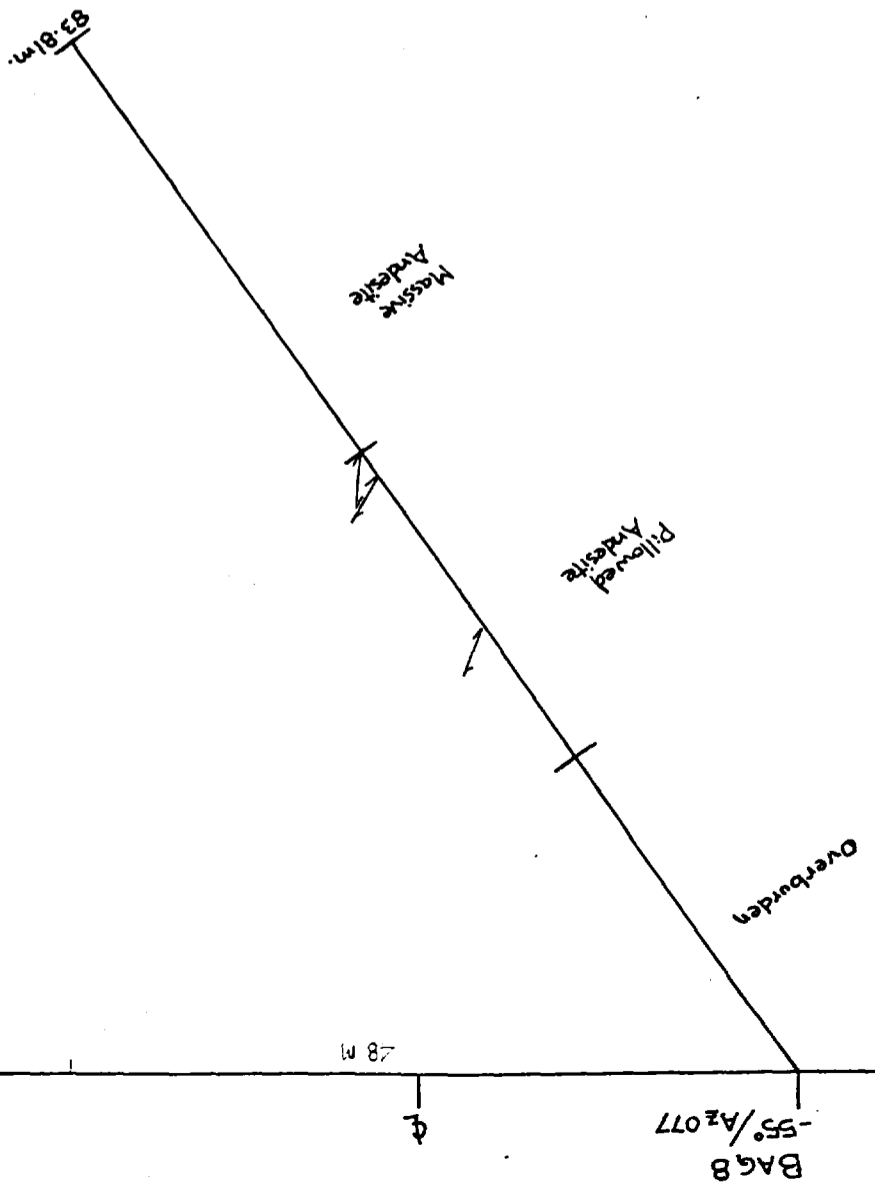
SLUDGE SAMPLE RECORD

FROM TO WIDTH SAMPLE Au % Ag % Cu Zn

83.81	End of Hole	casing pulled & hole uncemented.	0	25.90	25.90	no	sludge	recovery		
			25.90	28.95	3.05	9063	.02	10.2		
			28.95	32.00	3.05	9064	.01	3.4		
			32.00	35.05	3.05	9065	.03	2.1		
			35.05	38.09	3.04	9066	.02	1.9		
			38.09	41.14	3.05	9067	.01	2.2		
			41.14	44.19	3.05	9068	.02	2.6		
			44.19	47.24	3.05	9069	.01	2.0		
			47.24	50.28	3.04	9070	.02	3.2		
			50.28	53.33	3.05	9071	.02	3.9		
			53.33	56.38	3.05	9072	.01	3.6		
			56.38	59.43	3.05	9073	.08	2.3		
			59.43	62.47	3.04	9074	.03	2.1		
			62.47	65.52	3.05	9075	.09	1.7		
			65.52	68.57	3.05	9076	.04	1.9		
			68.57	71.62	3.05	9077	.02	2.6		
			71.62	74.66	3.04	9078	.07	2.0		
			74.66	77.71	3.05	9079	.09	1.9		
			77.71	80.76	3.05	9080	.05	3.4		
			80.76	83.81	3.05	9081	.04	1.6		

Core Angles  
 36.15 m ; 57°  
 48.40 m ; 65°  
 50.28 m ; 40°  
 f1  
 Shearing  
 Shearing.

GRANGES EXPLORATION LTD  
BAG L. OPTION  
Project S15  
17+135/2+00E ; -55°/Az 077  
Scale 1:500  
Looking N.



Property: **BAG L** Project No: **515** Depth: **104.07 m** Date Began: **FEB 22 / 88**  
 Hole No: **BAG 9** Co ord: **15+00S** Horizontal Length: **59.1** Date Completed: **FEB 23 / 88**  
 Claim No: **1003406** Core Size: **B<sub>9</sub>** Drilled By: **Morrisette**  
 Grid No: **1** Angle & Direction: **-55° Grid E** Elevation: **1** Logged By: **B. Gaboury**

INTERVAL FEET (METRES)	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn
0 - 3.05	Casing (core recovery from 2.20m)	0	2.20	2.20	Casing waste				
2.20 - 38.90	Massive Andesite	2.20	5.65	3.45	waste				
		5.65	6.15	.50	7917	.02	2.1		
		6.15	6.39	.24	7918	.02	1.8		
		6.39	6.82	.43	7919	.03	1.7		
		6.82	7.32	.50	7920	.02	1.9		
		7.32	7.45	.13	7921	.01	1.6		
		7.45	7.95	.50	7922	.02	1.7		
		7.95	36.59	28.64	waste				
		36.59	37.09	.50	7923	.11	1.4		
		37.09	37.38	.29	7924	.18	1.6		
		37.38	37.50	.12	7925	.17	1.9		
		37.50	37.86	.36	7926	.14	1.8		
		37.86	38.16	.30	7927	.17	1.7		
		38.16	38.43	.27	7928	2.65	1.2		
		38.43	38.75	.32	7929	.12	.7		
		38.75	38.90	.15	7930	.21	1.1		
		38.90	39.40	.50	7931	.03	.9		
		39.40	68.23	28.83	waste				
		68.23	68.73	.50	7932	.04	.3		
		68.73	69.09	.36	7933	.03	.6		
		69.09	69.59	.50	7934	.02	.4		
		69.59	70.09	.50	7935	.05	.7		
		70.09	70.46	.37	7936	.02	.5		
		70.46	70.96	.50	7937	.02	.4		
		70.96	71.17	.21	7938	.03	1.0		
		71.17	71.67	.50	7939	.01	1.7		
		71.67	73.33	1.66	waste				
		73.33	73.83	.50	7940	.02	1.2		
		73.83	74.07	.24	7941	.06	1.1		
		74.07	74.58	.51	7942	.07	1.3		
		74.58	80.50	5.92	waste				
		80.50	80.98	.48	7943	.03	1.1		
		80.98	81.48	.50	7944	.05	1.2		
		81.48	81.98	.50	7945	.02	1.5		
		81.98	82.48	.50	7946	.03	1.1		
		82.48	82.98	.50	7947	.02	.9		
		82.98	83.46	.48	7948	.01	1.0		
		83.46	83.89	.43	7949	.02	1.1		
		83.89	84.39	.50	7950	.01	1.7		

CORE SAMPLE RECORD



Property No. BA6 L Project No. 515 Date Began .....

Hole No. BA6 9 Co. ord. .... Horizontal Length .....

Claim No. .... Core Size .....

Grid No. .... Angle & Direction .....

Elevation .....

Logged By .....

INTERNAL  
FEET / METRES

DESCRIPTION

CORE SAMPLE RECORD

FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au $\frac{3}{4}$	Ag $\frac{3}{4}$	Cu.	Zn.
	to direction of shearing.	84.39	91.39	7.00	waste	.			
		91.39	91.89	.50	7951	.01			
	38.43 - 38.75: sheared qtz-chl vein with same pink carb & fr py.	91.89	92.39	.50	7952	.01		4.8	
		92.39	92.89	.50	7953	.02		2.6	
		92.89	93.39	.50	7954	.01		1.0	
		93.39	93.89	.50	7955	.01		0.9	
		93.89	94.22	.33	7956	.03		1.1	
		94.22	94.80	.58	7957	.02		0.5	
		94.80	95.15	.35	7958	.03		2.2	
		95.15	95.65	.50	7959	.06		4.3	
		95.65	96.00	.35	7960	.07		1.5	
		96.00	96.50	.50	7961	.02		3.2	
		96.50	97.00	.50	7962	.02		1.4	
		97.00	97.40	.40	7963	.02		3.1	
		97.40	97.72	.32	7964	.01		1.2	
		97.72	98.22	.50	7965	.03		2.0	
	39.90 - 40.50 : stacked & mildly sheared & andesite blocks with pink sheared & andesite qtz-carb veinlets.	98.22	102.09	3.87	waste				
		102.09							
47.31- 56.75	" Altered Andesite								
	mottled green precipitated and somewhat sheared medium fine grained & contains qtz-carb wisps (many with dark green chloritic selvages) & chloritic stringers & epidote-carb stringers and patches up to several cm wide of all possible CAs ~ 7% overall < 3% qtz veins & vein fragments and ~ 7% dissem. py.								
56.75 - 65.70	Feldspar Porphyry								
	similar to interval 38.90 - 47.31 brownish grey groundmass < 2% very fine qtz veinlets < 1% py phenocrysts become less easily discernible below 63.00 m.								



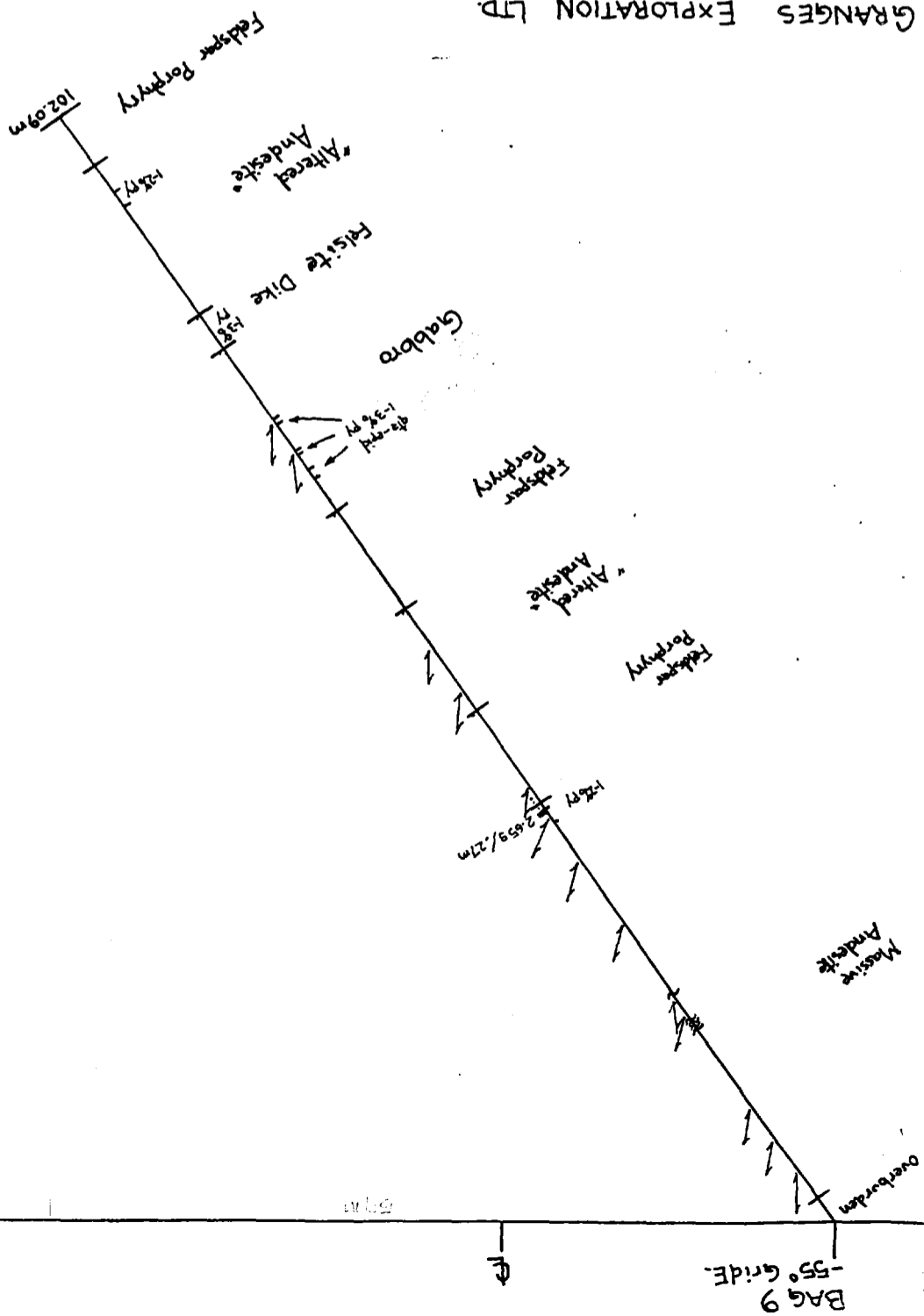
Property: BAG L  
 Hole No: BAG 9  
 Claim No:  
 Grid No:  
 Angle & Direction:  
 Elevation:  
 Project No: 515  
 Depth:  
 Horizontal Length:  
 Core Size:  
 Date Began:  
 Date Completed:  
 Drilled By:  
 Logged By:

INTERVAL FEET / METRES	DESCRIPTION	SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au	Ag	Cu	Zn
65.70 - 80.70	Gabbro dark green, medium to coarse grained, containing numerous bands or irregular patches of epidatization up to several or tens of cm wide as well as occasional (< 2%) thin of carb veins with no preferred CA's. Becomes more chloritized and carbonatized below ~ 76.00 m.								
69.73 - 69.59	band of epidatization with some of veinlets at ~ 80 to core axis; spirals 1-3% py as wisps & blebs.								
70.96 - 71.17	sheared epidate band with minor cross-cutting of veinlets; 1-3% py								
73.83 - 74.07	sheared epidate - of band with 1-3% py								
80.70 - 83.85	Felsite Dike (altered Feldspar Porphyry?) grey, silicified, fine grained rock with some faintly visible of phenocrysts, contains no appreciable of veining, 1-3% fine dissem. py.								
83.85 - 97.72	"Altered Andesite" mottled green & beige (beige to pink irregular silicified patches up to several cm wide with a fragment-like appearance in a homogenized chloritic contact green "andesitic" groundmass). Although the rock maintains a brecciated appearance, alteration decreases rapidly below 85.60 m, overall < 1% py, minor of veinlet fragments.								

Property: 15/49 L  
 Hole No: BAG 9  
 Claim No:  
 Grid No:  
 Project No: 215  
 Co ord:  
 Angle & Direction:  
 Horizontal Length:  
 Core Size:  
 Date Began:  
 Date Completed:  
 Drilled By:  
 Logged By:

INTERNAL FEET / METRES	DESCRIPTION	Sledge SAMPLE RECORD						
		FROM	TO	WIDTH	SAMPLE	Avg % Fe	Avg % Cu	Zn
91.89 - 97.72	contacted, brecciated interval with 1-3% Py 3-5% stringers blebs & disseminations; stringers of various silicified epidote stringers at various C.A.s:	0	7.62	7.62	9082	.01	2.1	
		7.62	10.67	3.05	9083	.01	3.0	
		10.67	13.71	3.04	9084	.02	2.0	
		13.71	16.76	3.05	9085	.01	2.1	
		16.76	19.81	3.05	9086	.01	2.2	
		19.81	22.86	3.05	9087	.04	2.0	
		22.86	25.90	3.04	9088	.01	1.9	
		25.90	28.95	3.05	9089	.01	2.0	
		28.95	32.00	3.05	9090	.03	1.8	
		32.00	35.05	3.05	9091	.01	2.1	
		35.05	38.09	3.04	9092			
		38.09	41.14	3.05	9093	.64	1.6	MISSING
		41.14	44.19	3.05	9094	.02	1.2	
		44.19	47.24	3.05	9095	.10	1.5	
		47.24	50.28	3.04	9096	.01	1.9	
		50.28	53.33	3.05	9097	.20	2.1	
		53.33	56.38	3.05	9098	.01	2.2	
		56.38	59.43	3.05	9099	.03	1.0	
		59.43	62.47	3.04	9100	.01	0.6	
		62.47	65.52	3.05	9151	.19	1.1	
		65.52	68.57	3.05	9152	.11	0.8	
		68.57	71.62	3.05	9153	.20	0.6	
		71.62	74.66	3.04	9154	.04	0.9	
		74.66	77.71	3.05	9155	.03	0.7	
		77.71	80.76	3.05	9156	.18	0.4	
		80.76	83.81	3.05	9157	.04	1.1	
		83.81	86.85	3.04	9158	.07	0.9	
		86.85	89.90	3.05	9159	.09	0.8	
		89.90	92.95	3.05	9160	.03	0.7	
		92.95	96.00	3.05	9161	.05	1.4	
		96.00	99.04	3.04	9162			
		99.04	102.09	sample	missing			MISSING
		102.09						
97.72 - 102.09	Feldspar Porphyry ~ 50% light colored diffuse feldspar phenocrysts in a dark grey silicified groundmass; < 3% thin Qtz veinlets and ~ 1% dissem. py.							
102.09	End of Hole casing pulled, hole uncemented.							
	<u>Core Angles</u>							
		48.80 m	40°	fo				
		53.00 m	36°	fo				
		56.75 m	36°	contact				
		65.70 m	80°	contact				
		71.00 m	30°	shearing				
		73.90 m	34°	shearing				
		80.70 m	90°	contact				
		80.60 m	35°	shearing				
		83.85 m	45°	contact				
		97.72 m	50°	contact				
		38.90 m	40°	contact				
		40.00 m	44°	fo				
		47.31 m	27°	contact				

GRANGES EXPLORATION LTD.  
 BAG L. OPTION  
 Project 515  
 Section 15+005 / 2+21 E  
 Scale 1:500  
 Looking Grid N.



Property: **BAG L** Project No: **212** Date Began: **1-13-86**  
 Hole No: **BAG 10** Co ord: **0+20S** Horizontal Length: **114.5 M** Date Completed: **FEB 27/88**  
 Claim No: **88 2188** Core Size: **B<sub>9</sub>** Drilled By: **Morissette**  
 Grid No: **1** Angle & Direction: **-45° Grid/E** Elevation: **144.16** Logged By: **B. Gaboury**

INTERVAL  
FEET (METRES)

DESCRIPTION

CORE SAMPLE RECORD

INTERVAL FEET (METRES)	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au %	Ag %	gms	gms
0-3.66	Casing (Core recovery from 1.19m)	0	1.19	casing	no core	recovery			
1.19-50.01	Massive Andesite	1.19	3.06	1.87	waste				
		3.06	3.56	.50	7966	.05	3.9		
		3.56	3.88	.32	7967	.01	2.2		
		3.88	4.57	.69	7968	.02	2.3		
		4.57	5.07	.50	7969	.03	1.9		
		5.07	5.71	.64	7970	.01	1.8		
		5.71	6.21	.50	7971	.01	2.1		
		6.21	6.56	.35	7972	.02	1.7		
		6.56	6.91	.35	7973	.02	1.5		
		6.91	7.41	.50	7974	.01	1.6		
		7.41	7.91	.50	7975	.04	1.4		
		7.91	8.41	.50	7976	.02	1.3		
		8.41	8.91	.50	7977	.01	1.6		
		8.91	9.20	.29	7978	.01	1.9		
		9.20	9.61	.41	7979	.01	1.8		
		9.61	9.89	.28	7985	.01	1.7		
		9.89	10.49	.60	7981	.01	1.4		
		10.49	10.99	.50	7982	.01	1.3		
		10.99	13.21	2.22	waste				
		13.21	13.71	.50	7983	.03	1.8		
		13.71	14.30	.59	7984	.80	1.2		
		14.30	14.69	.39	7985	5.58	1.7		
		14.69	14.90	.21	7986	19.55	1.9		
		14.90	15.30	.40	7987	2.08	1.7		
		15.30	15.59	.29	7988	.19	1.2		
		15.59	16.09	.50	7989	.21	1.3		
		16.09	41.61	25.52	waste				
		41.61	42.36	.75	7990	.02	1.5		
		42.36	42.86	.50	7991	.04	1.9		
		42.86	43.42	.56	7992	.20	1.4		
		43.42	43.61	.19	7993	7.06	1.2		
		43.61	44.11	.50	7994	1.10	1.4		
		44.11	44.61	.50	7995	.69	1.3		
		44.61	48.00	3.39	waste				
		48.00	48.50	.50	7996	.02	1.9		
		48.50	49.00	.50	7997	.04	1.3		
		49.00	49.50	.50	7998	.03	1.6		
		49.50	50.01	.51	7999	.14	1.8		
		50.01	50.17	.16	8000	2.34	1.7		

INTERVAL FEET (METRES)	DESCRIPTION	SAMPLE RECORD									
		FROM	TO	WIDTH	SAMPLE	AU 3/4	Ag 3/4	g/t	g/t		
	fr py along selvages (CA's ~ 45°) plus adjacent sheared section with abundant (20-30% irregular cross-cutting fine grained veinlets) 1-2% py, fr hem in one small gr veinlet.	50.17	50.51	.34	9251	.01	1.8				
		50.51	51.10	.59	9252	.01	1.3				
		51.10	51.38	.28	9253	.06	1.3				
		51.38	52.04	.66	9254	.01	1.8				
		52.04	52.44	.40	9255	.01	0.7				
		52.44	52.79	.35	9256	.03	1.1				
		52.79	53.37	.58	9257	.01	1.0				
		53.37	53.48	.11	9258	.02	.3				
		53.48	53.81	.33	9259	.08	.7				
		53.81	54.18	.37	9260	.18	1.3				
		54.18	54.59	.41	9261	.02	.8				
		54.59	55.09	.50	9262	.01	1.9				
		55.09	55.59	.50	9263	.01	2.1				
		55.59	56.09	.50	9264	.01	1.7				
		56.09	56.61	.52	9265	.05	1.8				
		56.61	57.03	.42	9266	1.38	1.6				
		57.03	57.28	.25	9267	34.90	2.2				
		57.28	57.54	.26	9268	1.57	1.3				
		57.54	57.94	.40	9269	.83	.9				
		57.94	58.29	.35	9270	.44	1.1				
		58.29	58.42	.13	9271	.26	.8				
		58.42	58.92	.50	9272	.05	1.2				
		58.92	59.43	.51	9273	.02	1.7				
		59.43	59.93	.50	9274	.04	.9				
		59.93	60.29	.36	9275	.03	1.0				
		60.29	60.45	.16	9276	.03	.8				
		60.45	61.04	.59	9277	.01	1.2				
		61.04	61.26	.22	9278	.72	.9				
		61.26	61.54	.28	9279	.02	1.4				
		61.54	61.88	.34	9280	.01	.7				
		61.88	62.47	.59	9281	.04	1.1				
		62.47	62.95	.48	9282	.05	.9				
		62.95	63.45	.50	9283	.02	1.3				
		63.45	63.95	.50	9284	.04	1.5				
		63.95	64.40	.45	9285	.01	1.1				
		64.40	64.90	.50	9286	.06	1.2				
		64.90	65.06	.16	9287	.03	.7				
		65.06	65.56	.50	9288	.56	1.8				
		65.56	66.06	.50	9289	.01	1.9				
		66.06	66.47	.41	9290	.02	1.4				
50.01-52.04	" Altered Andesite "										
	poorly to non-foliated, 3% below of veinlet frequency to falls to preferred orient. of veinlets ~ 35.00 m ;										
	42.36-42.86: several brecciated intervals up to ~ 8cm wide										
	42.86-44.61: mildly to moderately well sheared interval with 5-10% of veinlets & yellow fragments up to 1cm wide often rotated into direction of shearing, overall 1-2% py.										
	43.42-43.61: bleached, well-sheared interval with 5% py as dissemination & stringers ~ concordant with fabric.										
	43.61-44.11: mildly sheared, 5-10% of veinlets up to ~ 5cm wide (usually concordant with fabric).										
	47.49-47.65: blocky interval with 5cm wide clayey gouge seams.										
	48.50-50.01: mildly foliated, < 2% of veining, chloritized, 1-2% dissem py.										
	medium fine grained, moderately sheared; contains lighter colored silicic irregular splashes up to several mm										

Property: BAG. L. Project No: 515 Date Began: \_\_\_\_\_  
 Hole No: BAG. 10 Co ord: \_\_\_\_\_ Horizontal Length: \_\_\_\_\_ Date Completed: \_\_\_\_\_  
 Claim No: \_\_\_\_\_ Core Size: \_\_\_\_\_ Drilled By: \_\_\_\_\_  
 Grid No: \_\_\_\_\_ Angle & Direction: \_\_\_\_\_ Elevation: \_\_\_\_\_ Logged By: \_\_\_\_\_

INTERVAL FEET/METERS	DESCRIPTION	CORE SAMPLE RECORD									
		FROM	TO	WIDTH	SAMPLE	Au	Ag	Cu	Zn		
	in dia 5-10% dark green chloritic groundmass; overall qtz - carb veins;	66.47	66.85	.38	9291	.01	1.8				
		66.85	67.35	.50	9292	.03	.9				
	50.01 - 50.17 ; well sheared, bleached; 5-8% py + po as concordant stringers and large tabs; includes a 2.5 cm wide dirty white qtz vein.	67.35	74.79	7.44	waste						
		74.79	75.29	.50	9293	.01	.7				
		75.29	75.79	.50	9294	.04	1.4				
		75.79	76.30	.51	9295	.03	1.8				
		76.30	76.54	.24	9296	.38	2.1				
		76.54	76.81	.27	9297	3.24	1.7				
		76.81	77.31	.50	9298	.05	2.0				
	50.17 - 50.51 ; moderately well sheared; 1-2% po as blebs,	77.31	77.86	.55	9299	.02	1.9				
		77.86	78.36	.50	9300	.01	1.1				
		78.36	86.43	8.07	waste						
	51.10 - 51.38 ; ~ 30% white qtz veins with peripheral bleaching; tr-1% py (py of larger vein ~ 50%.	86.43	86.93	.50	9301	.01	1.8				
		86.93	87.13	.20	9302	.02	1.2				
		87.13	87.33	.20	9303	.24	2.1				
		87.33	87.83	.50	9304	.01	2.0				
		87.83	88.33	.50	9305	1.01	1.9				
		88.33	88.82	.49	9306	.18	2.2				
		88.82	89.22	.40	9307	.03	1.8				
		89.22	89.45	.23	9308	.04	2.0				
		89.45	89.95	.50	9309	.01	1.2				
		89.95	116.40	26.45	waste						
		116.40	116.90	.50	9310	.03	1.7				
		116.90	117.40	.50	9311	2.06	1.6				
		117.40	117.92	.52	9312	.98	1.7				
		117.92	118.26	.34	9313	8.79	1.8				
		118.26	118.75	.49	9314	.22	1.9				
		118.75	144.76	26.01	waste						
		144.76	EGH								
52.04 - 54.59	Quartz - Feldspar Porphyry beige to greenish; contains ~10% qtz phenocrysts up to 2mm dia, 5-10% cream colored relictized feldspar phenocrysts, ign. silicified & bleached groundmass which probably contained ~50% larger feldspar phenocrysts (no longer discernible); contains ~10% fine silicic cross-cutting veinlets at all CA's & <1% very fine disseminated py.										
	53.48 - 53.81 ; well silicified, light colored interval with fr visible py.										
54.59 - 57.28	"Altered Andesite" similar to interval 50.01 - 52.04 m; contains numerous chloritic wisps and stringers subparallel to foliation & widely conformed & <1% py up to 56.61 m; 56.38 - 59.41 ; mislatch, ~90% ground core, recovery										

Property No. BA 59, L. Project No. 2-15 Date Began

Hole No. BAG 10 Co. ord. Horizontal Length Date Completed

Claim No. Core Size Drilled By

Grid No. Angle & Direction Elevation Logged By

INTERVAL  
FEET / METRES

DESCRIPTION

SAMPLE RECORD

INTERVAL FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
56.61 - 57.03	bleached, sheared & contorted, carbonatized interval with 1-3% py+po, mainly as disseminations								
57.03 - 57.28	bleached, sheared, carbonatized & 10% py as medium coarse grained blebs & minor stringers concordant with foliation.								
57.28 - 65.06	Quartz - Feldspar Porphyry widdly silicified, beige to yellow-green & contains 3-5% fine qtz phenocrysts & ~10% still visible diffuse kaolinitized feldspar phenocrysts in fine grained groundmass where majority of feldspar phenocrysts are no longer clearly visible < 1% fine py disseminations along narrow fractures or along the chloritic selvages of narrow white irregular qtz veinlets up to ~1cm wide at all possible orientations. Frequency of qtz veining: 5-10%.								
58.29 - 59.43	occasional thin chl - py - (qtz) stringer < 2mm wide at ~ 55° to core axis.								
58.29 - 58.42	white qtz vein with several thin dark chl-py stringers at ~ 42° to core axis & < 1% py								
61.04 - 61.26	light colored bleached interval with a 2.5 cm wide qtz-py vein at ~ 80° to core axis plus several narrow qtz-chl veinlets at ~ 30° to core axis; overall 1-3% py as stringers and disseminations								
61.06 - 66.85	"Altered Andesite"								
57.28 m	widdly sheared & contorted interval similar to 54.59 - 57.28 m; overall < 3% qtz veinlets up to 5mm wide;								

Property: **BAG L** Project No: **515** Date Began: .....

Hole No: **BAG 10** Co ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET / METRES	DESCRIPTION	SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au	Ag	Cu	Zn
66.85 - 75.29	Quartz - Feldspar Porphyry vein colored, contains a 5% recrystallized white feldspar phenocrysts, up to 2mm wide & ~50% irregular beige colored feldspar phenocrysts up to 5mm wide (these are discernible only in certain portions of the interval), weakly to non-foliated, ~3% qtz-carb veinlets up to ~5mm wide, <1% very fine py.								
75.29 - 77.86	" Altered Andesite similar to 54.59 - 57.28; mildly to moderately well sheared; contains abundant chloritic wisps & stringers semi-parallel to foliation; 1-3% py as disseminations and larger blebs, overall 3-5% qtz-carb veinlets, many of which cross-cut foliation at ~35° to core axis;								
76.54 - 76.81	some what bleached interval with two concordant white qtz veins (each ~2cm wide) with abundant cream colored carb, overall ~3% py.								
77.86 - 86.93	Quartz - Feldspar Porphyry very similar to the interval 66.85 - 75.29, poorly to non-foliated, <2% qtz veining, ~1% fine py								
86.93 - 89.45	" Altered Andesite similar to 54.59 - 57.28; sheared, mottled green, some portions contain numerous small dark chloritic magmatic porphyroblasts (5mm dia), 3-5% irregular thin often horse-tailing qtz-carb veinlets up to 5cm wide often oriented at ~10° to core axis; overall 1-2% py.								



Property: **BA6, L** Project No: **515** Date Began:   
 Hole No: **BA6, 10** Co ord: Horizontal Length: Date Completed:   
 Claim No: Core Size: Drilled By:   
 Grid No: Angle & Direction: Elevation: Logged By:

INTERVAL FEET / METRES	DESCRIPTION	SLUDGE SAMPLE RECORD																		
		FROM	TO	WIDTH	SAMPLE	Au %	Ag %	Cu	Zn											
86.93 - 87.13	well - sheared, bleached, silica flooded interval with numerous thin qtz veinlets at very shallow core angles (0-10°), 1-3% dissem py.	0	3.05	3.05	no	sludge														
		3.05	4.57	1.55	9163															
		4.57	7.62	3.05	9164	.12	1.2													
		7.62	10.67	3.05	9165	.17	1.8													
		10.67	13.71	3.04	9166	.14	1.4													
		13.71	16.76	3.05	9167	3.42	1.7													
		16.76	19.81	3.05	9168	.15	1.5													
		19.81	22.86	3.05	9169	.97	0.8													
		22.86	25.90	3.04	9170	.18	6.3													
		25.90	28.95	3.05	9171	.27	2.0													
		28.95	32.00	3.05	9172	.04	2.2													
		32.00	35.05	3.05	9173	.23	1.6													
		35.05	38.09	3.04	9174	.14	1.4													
		38.09	41.14	3.05	9175	.05	1.2													
		41.14	44.19	3.05	9176	.23	1.7													
		44.19	47.24	3.05	9177	.97	2.0													
		47.24	56.38	9.14	9128	.03	1.8													
		56.38	65.52	9.14	9129	1.04	1.5													
		65.52	74.66	9.14	9130	.04	1.4													
		74.66	89.90	15.24	9131	.01	1.0													
98.25 - 132.30	"Altered Andesite"	no	105.14	15.24	9132	.02	1.2													
	similar to interval 54.59 - 57.28 dark green, poorly foliated, contains 4-8% irregular tensional qtz veinlets, at all possible Ct's (but there are several in the upper part of this interval that cross-cut chloritic stringers & wings at core angles of ~30°), ≤ 1% dissem py, numerous irregular discontinuous chloritic stringers & wisps often trending ~50-55° to core axis (eg interval 103.59 - 104.59). Starts developing a "glomerular porphyritic-like" texture below 119.76 m and becomes well-developed shortly thereafter.																			
	116.90 - 118.26: interval contains short, intensely sheared intervals at ~80-90° to core axis; 10-15% sheared kartz qtz-carb veins with py (≤ 2cm wide) at 70-90° to core axis; overall 1-3% py.																			
	117.92 - 118.26: 15 cm wide kartz, silic.																			

Property: 13A91 L  
 Hole No: BAG 10  
 Claim No:  
 Grid No:  
 Project No: 515  
 Depth:  
 Horizontal Length:  
 Core Size:  
 Date Began:  
 Date Completed:  
 Drilled By:  
 Logged By:

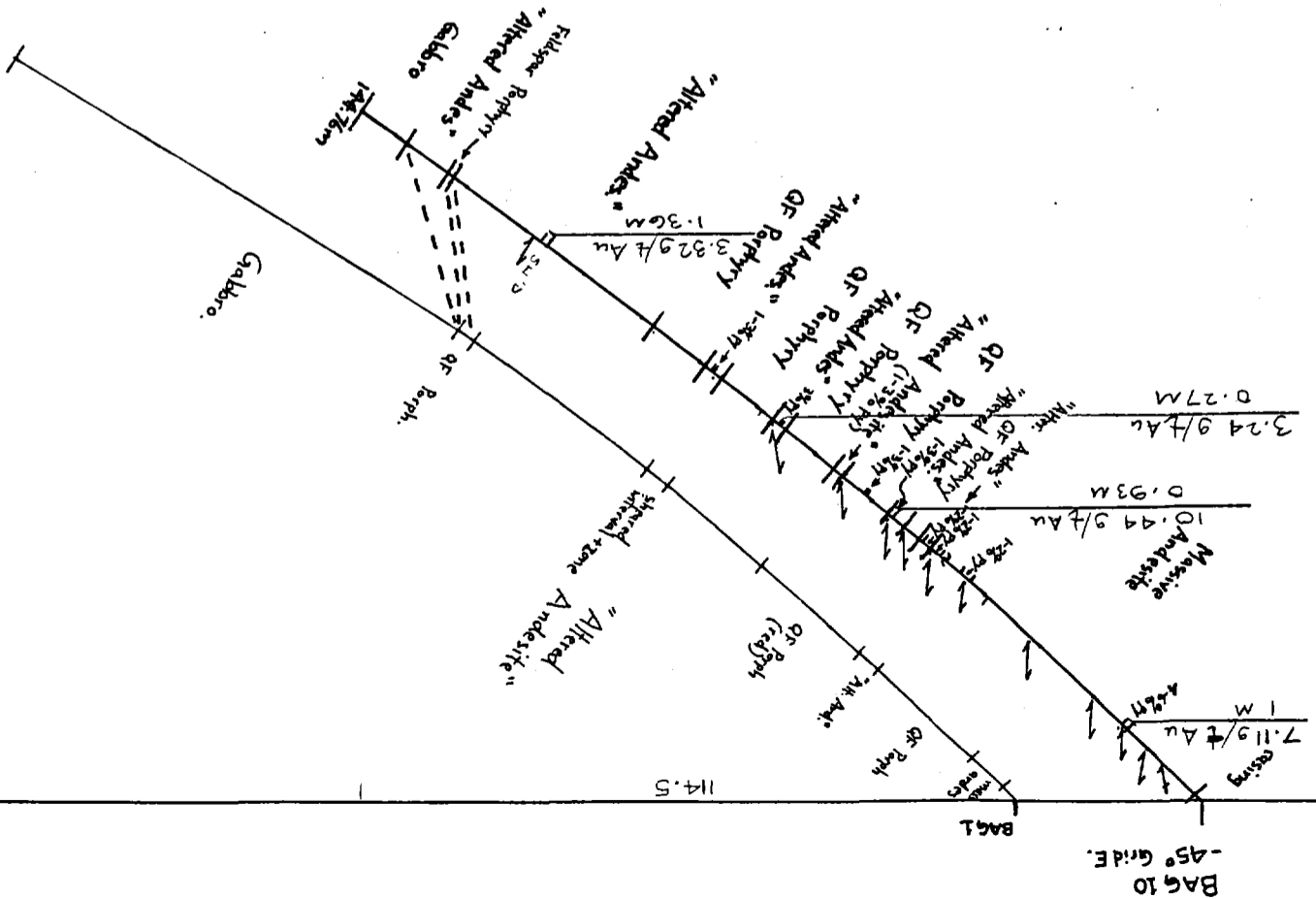
INTERVAL  
FEET / METRES

DESCRIPTION

SLUDGE SAMPLE RECORD

INTERVAL FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
132.30-133.40	Feldspar Porphyry ~40% white feldspar phenocrysts up to 5mm in dia in a brownish grey fine grained groundmass, unfoliated, no qtz veining, < 1% py.								
133.40-140.55	"Altered Andesite" similar to 98.25-132.30 m. & grades into:								
140.55-144.76	Gabbro chloritic coarse grained; 50% chloritized mafic minerals in a lighter green feldspathic groundmass, occasional epidotized fractures.								
144.76	End of Hole hole uncemented, casing left in hole; Acid test 144.76m: 30°								
<u>CORE ANGLES</u>									
6.45m   35°	weak shearing	57.15m   55°	shearing						
9.65m   57°	shearing, slickensides	65.06m   45°	shearing // contact						
	take ~ 0° to CA.	66.85m   23°	contact						
13.71m   49°	shearing	77.20m   48°	shearing						
14.30m   40°	shearing	86.93m   43°	shearing // contact						
19.50m   50°	shearing	87.25m   65°	shearing						
31.45m   50°	shearing	93.50m   57°	fracture slickensides						
43.42m   67°	shearing		take 45° to CA.						
43.75m   45°	shearing	96.55m   38°	" " " "						
49.80m   55°	shearing	98.25m   80°	irregular contact						
50.35m   50°	shearing	118.12m   85°-90°	shearing						
54.59m   50°	shearing // contact	132.30m   55°	contact						
		132.30m   55°	contact						

GRANGES EXPLORATION LTD  
 BAG L. OPTION  
 PROJECT SIS  
 SECTION 01205 / 0+35W  
 Scale 1:1000  
 Looking Grid N.





**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Page 1 of 7

Property: BAG L  
Hole No: BAG 11  
Claim No: 88 2188  
Grid No: 1  
Project No: 215  
Co ord: 0+05 N  
Angle & Direction: -45° Grid  
Depth: 129.52 m  
Horizontal Length: 0+20 W  
Core Size: B<sub>g</sub>  
Date Began: FEB 27/88  
Date Completed: FEB 28/88  
Drilled By: Morrisette  
Logged By: B. Gaboury

INTERNAL FEET (METRES)	DESCRIPTION	CORE					SAMPLE RECORD		
		FROM	TO	WIDTH	SAMPLE	Au g/t	Ag g/t	Cu	Zn
0 - 3.66	Gasing (core recovery from 3.32m)	0	3.32	3.32	casings & waste				
3.32 - 27.04	Massive Andesite	3.32	16.26	12.94	waste				
		16.26	16.76	.50	9315	.06		2.2	
		17.32	17.32	.56	9316	.03		1.7	
		17.32	17.62	.30	9317	.03			
	medium fine grained & unfoliated, very mildly brecciated; contains ~ 5% thin qtz - (epid.) veinlets up to 5mm wide at all possible CA's, <= 1% fine py;	17.62	17.98	.36	9318				
		17.98	18.48	.50	9319	.02		2.1	
		18.48	18.98	.50	9320	.04		1.6	
		18.98	19.48	.50	9321	.08		1.4	
		19.48	19.98	.50	9322	.07		1.7	
	12.00 - 15.00; many quartz veinlets oriented ~ 30° to core axis.	19.98	20.58	.60	9323	.02		1.9	
		20.58	21.03	.45	9324	1.10		1.1	
	17.32 - 17.98; brecciated interval with ~ 10% irregular qtz veinlets, mildly sheared portions, & ~ 2% py;	21.03	21.53	.50	9325	.20		1.8	
		21.53	22.03	.50	9326	.09		1.5	
		22.03	25.36	3.33	waste				
		25.36	25.86	.50	9327	.03		1.9	
	18.60 - 18.70; blocky, & rubbly	25.86	26.38	.52	9328	2.23		1.7	
		26.38	27.04	.66	9329	.01		2.3	
	20.58 - 21.03; well sheared, silicified & bleached interval with 20-25% qtz veins up to 2cm dia, 1-3% py	27.04	27.52	.48	9330	.03		1.2	
		27.52	33.55	6.03	waste				
		33.55	34.05	.50	9331	.01		.8	
		34.05	34.55	.50	9332	.02		.7	
		34.55	34.71	.16	9333	.01		1.4	
	21.03 - 21.53; brecciated, bleached, silicified; 1-2% py	34.71	35.26	.55	9334	.01		1.9	
		35.26	35.59	.33	9335	.04		1.6	
	25.86 - 27.04; moderately well sheared interval with 1-2% py overall;	35.59	36.09	.50	9336	.02		1.7	
		36.09	46.73	10.64	waste				
		46.73	46.23	.50	9337	.18		1.5	
		46.23	46.56	.33	9338	.29		1.1	
		46.56	46.91	.35	9339	.42		1.3	
		46.91	47.45	.54	9340	.98		1.9	
		47.45	47.95	.50	9341	.04		1.7	
		47.95	48.45	.50	9342	.01		1.8	
		48.45	48.95	.50	9343	.01		2.0	
		48.95	49.45	.50	9344	.02		1.2	
		49.45	49.60	.15	9345	.01		2.1	
		49.60	49.89	.29	9346	.02		2.2	
		49.89	50.39	.50	9347	.02		2.2	
3.04 - 34.55	Quartz - Feldspar Porphyry	50.39	50.82	.43	9348	.40		2.0	
	pink to beige to watery colored; contains 5-10% qtz phenocrysts & 40-60% feldspar phenocrysts (some	50.82	51.32	.50	9349	1.33		2.3	

Property: **BAG L** Project No: **515** Date Began: \_\_\_\_\_  
 Hole No: **BAG 11** Co-ord: \_\_\_\_\_ Horizontal Length: \_\_\_\_\_  
 Claim No: \_\_\_\_\_ Core Size: \_\_\_\_\_ Drilled By: \_\_\_\_\_  
 Grid No: \_\_\_\_\_ Angle & Direction: \_\_\_\_\_ Elevation: \_\_\_\_\_ Logged By: \_\_\_\_\_

INTERVAL FEET / METRES	DESCRIPTION	FROM	TO	WIDTH	SAMPLE	Au 94	Ag 94	Cu	Zn
	replaced by pinkish limonitized kaolinite, mild localized by shearing, < 2% qtz veining, no visible sulfides.	51.32	51.62	.30	9350	.73	2.1		
		51.62	51.95	.33	9351	.21	2.2		
		51.95	52.45	.50	9352	.01	2.0		
		52.45	52.85	.40	9353	.02	2.3		
		52.85	53.26	.41	9354	.03	1.8		
		53.26	53.77	.51	9355	.01	2.3		
		53.77	54.27	.50	9356	.37	2.2		
		54.27	54.77	.50	9357	.02	1.6		
		54.77	55.27	.50	9358	.18	1.0		
		55.27	55.69	.42	9359	.01	1.3		
		55.69	56.19	.50	9360	.02	1.0		
		56.19	88.90	32.71	waste				
		88.90	89.40	.50	9361	.77	2.0		
		89.40	89.90	.50	9362	.19	1.6		
		89.90	90.39	.49	9363	.18	2.3		
		90.39	90.61	.22	9364	1.82	2.2		
		90.61	91.11	.50	9365	.03	2.1		
		91.11	91.70	.59	9366	.02	1.6		
		91.70	91.82	.12	9367	.03	2.0		
		91.82	92.32	.50	9368	.01	2.1		
		92.32	95.85	3.53	waste				
		95.85	96.35	.50	9369	.02	1.8		
		96.35	96.85	.50	9370	1.23	2.0		
		96.85	97.15	.30	9371	1.12	1.0		
		97.15	97.47	.32	9372	.36	1.2		
		97.47	97.97	.50	9373	.05	1.0		
		97.97	98.37	.40	9374	.04	1.4		
		98.37	98.79	.42	9375	.02	1.7		
		98.79	99.29	.50	9376	.01	2.0		
		99.29	99.89	.55	9377	.03	2.1		
		99.89	100.34	.50	9378	.02	1.5		
		100.34	100.84	.50	9379	.04	1.2		
		100.84	101.34	.50	9380	.01	1.8		
		101.34	101.84	.50	9381	.01	2.0		
		101.84	102.01	.17	9382	.03	1.7		
		102.01	102.33	.32	9383	.03	1.2		
		102.33	102.63	.30	9384	2.92	1.3		
		102.63	102.94	.31	9385	4.44	2.1		
		102.94	103.11	.17	9386	4.30	2.0		
		103.11	103.61	.50	9387	.16	1.4		
38.64 - 39.74	Feldspar Porphyry								
	contains ~ 40-60% white feldspar phenocrysts up to 5mm dia in a dark brownish grey, fine grained groundmass; < 2% very thin qtz veinlets at all orientations; no visible py; non-foliated.								
39.74 - 48.95	" Altered Andesite "								
	same as interval 34.55 - 38.64 m								
	46.23 - 47.45: brecciated, very mildly sheared, somewhat bleached interval with ~ 50% qtz veining 1-2% py;								
	46.23 - 46.91: white qtz vein with ~ 20% bleached pyritic wallrock inclusions with carb-rich								

**Core SAMPLE RECORD**

Property: BAG L Project No: 212 Date Began:             
 Hole No: BAG 11 Co-ord:            Horizontal Length:            Date Completed:             
 Claim No:            Core Size:            Drilled By:             
 Grid No:            Angle & Direction:            Elevation:            Logged By:           

INTERVAL FEET (METRES)	DESCRIPTION	CORE SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au <sup>g</sup> /t	Ag <sup>g</sup> /t	Cu	Zn	
48.95 - 49.60	Feldspar Porphyry									
	Same as interval 38.64 - 39.74 m.									
	selvages, overall 1-2% py.	103.61	104.10	.49	9385	.06	1.6			
		104.10	129.52	25.42	waste					
		129.52	E01.							
49.60 - 53.77	"Altered Andesite"									
	Same as interval 34.55 m - 38.64 m.									
	50.39 - 51.95 : bleached, brecciated, silicified & 35-40% of 2 veins at all possible orientations (most are $\leq$ 2cm wide), 3-5% py									
	50.39 - 50.82 : 15-20% of 2 carb veining; 3-5% dissem. py.									
	50.82 - 51.32 : well-brecciated, silica-flooded, well bleached, 3-5% py as disseminations and some stringers at ~45° to core axis (identical in appearance to the silica flooded portion of the interval which ran 1.02 g / 2.36 m in BAG 1)									
	51.32 - 51.95 : 15-20% of 2 carb veinlets up to 1cm wide with bleached wallrock selvages, 3-5% py overall, rock has a coarse grained gabbroic texture.									
	53.26 - 53.77 : mildly sheared interval with ~1-2% dissem. py & includes a sheared of veinlet at ~60° to core angle (concordant with shearings)									

Property: BAG 11 Project No: 512 Date Began: .....

Hole No: BAG 11 Coord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET / METRES	DESCRIPTION	SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.	
53.77-55.69	Feldspar Porphyry similar to interval 38.64-39.74 m except feldspars are more diffuse and it contains ~5% small hornblende phenocrysts, almost no quartz veining, 1-2% fine py.									
55.69-63.89	"Altered Andesite" mottled green, medium grained, "glomeroporphyritic" like containing occasional large fracture white feldspar porphyroblast and occasional irregular chloritic stringers <2% thin qtz veinlets at all orientations ~1% py as dissemination, some sections with 10-15% chloritic mafic porphyroblasts, up to ~2mm dia in a fine green homogenized chloritic groundmass (eg near lower contact), chloritic stringers generally trend 40-50° to core axis.									
63.89-68.73	Quartz - Feldspar Porphyry 5-10% qtz phenocrysts & ~50-60% white feldspar phenocrysts in a matrix to grey fine grained groundmass, <2% qtz veinlets at all orientations, ~1% medium fine py, occasional slickensided fracture at ~45° to core axis.									
68.73-78.08	"Altered Andesite" very similar to interval 55.69-63.89m, <2% qtz veining, <1% py.									
78.08-86.43	Quartz - Feldspar Porphyry ~10% qtz phenocrysts & 50-60% diffuse greenish feldspar phenocrysts plus ~5% smaller white radiating feldspar phenocrysts in a greenish grey groundmass, <2% qtz veining, ~1% py.									

Property: BAG L. Project No: 515 Date Begun: .....  
 Hole No: BAG 11 Co ord: ..... Depth: .....  
 Claim No: ..... Horizontal Length: ..... Date Completed: .....  
 Grid No: ..... Core Size: ..... Drilled By: .....  
 Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL FEET (METRES)	DESCRIPTION	SAMPLE RECORD								
		FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.	
86.43 - 122.17	" Altered Andesite "									
	very similar to interval 55.69 - 63.89 m:									
	86.43 - 108.40 : 10-15% small chloritized mafic porphyro- blasts in a greenish porphyritic medium fine grained chloritic groundmass:									
	90.39 - 90.61 : sheared, contacted, carbonatized & silicified, beige interval with ~3% Py as blebs & stringers at ~60° to core axis (concordant with shearing)									
	91.70 - 91.82 : sheared, carbonatized, silicified beige interval, fr Py OAs 65-70°									
	96.35 - 97.47 : brecciated & very mildly sheared, with abundant cross- cutting chloritic stringers, patchy silicification, 1-2% dissem. py.									
	98.37 - 98.79 : ~ 2cm wide qtz-carb-epid- py veinlet at ~10° to core axis									
	101.84 - 102.01 : bleached, sheared, carbonat- ized & 1-3% dissem. py.									
	102.33 - 103.11 : bleached, carbonatized, silicified interval with localized silicified shears & ~3% py.									
	102.63 - 102.94 : well-sheared, silica-flooded bleached interval with 3-5% py as stringers & dissemi- nations, abundant cream- colored carbonate.									





Property: BAG L  
Hole No: BAG 11  
Claim No:  
Grid No:  
Project No: 515  
Co-ord:  
Date Began:  
Depth:  
Horizontal Length:  
Date Completed:

Core Size:  
Angle & Direction:  
Elevation:  
Logged By:

INTERVAL  
FEET (METRES)

DESCRIPTION

SLUDGE SAMPLE RECORD

FROM	TO	WIDTH	SAMPLE	Ag/t	Ag g/t	Cu	Zn
0	7.62	7.62	9133	.01	1.4		
7.62	10.67	3.05	9134	.02	1.5		
10.67	13.71	3.04	9135	.01	0.8		
13.71	16.76	3.05	9136	.01	1.0		
16.76	19.81	3.05	9137	.01	0.5		
19.81	22.86	3.05	9138	.20	1.8		
22.86	25.90	3.04	9139	.02	1.7		
25.90	28.95	3.05	9140	.18	2.1		
28.95	32.00	3.05	9141	.01	0.7		
32.00	35.05	3.05	9142	.01	1.6		
35.05	38.09	3.04	9143	.12	6.2		
38.09	41.14	3.05	9144	.08	2.4		
41.14	44.19	3.05	9145	.03	3.2		
44.19	47.24	3.05	9146	.14	2.2		
47.24	50.28	3.04	9147	.19	1.9		
50.28	53.33	3.05	9148	.42	2.3		
53.33	56.38	3.05	9149	.43	3.8		
56.38	59.43	3.05	9150	.39	2.2		
59.43	62.47	3.04	9101	.22	2.0		
62.47	65.52	3.05	9102	.10	2.3		
65.52	68.57	3.05	9103	.20	1.9		
68.57	71.62	3.05	9104	.12	1.9		
71.62	74.66	3.04	9105	.08	1.9		
74.66	77.71	3.05	9106	.2	2.1		
77.71	80.76	3.05	9107	.07	1.9		
80.76	83.81	3.05	9108	.08	1.9		
83.81	86.85	3.04	9109	.02	1.0		
86.85	89.90	3.05	9110	.07	2.0		
89.90	92.95	3.05	9111	.07	2.1		
92.95	96.00	3.05	9112	.07	2.2		
96.00	99.04	3.04	9113	.21	2.3		
99.04	102.09	3.05	9114	.39	2.4		
102.09	105.14	3.05	9115	.41	1.9		
105.14	108.19	3.05	9116	.24	2.5		
108.19	111.23	3.04	9117	.42	2.3		
111.23	114.28	3.05	9118	.08	1.8		
114.28	117.33	3.05	9119	.18	1.9		
117.33	120.38	3.05	9120	.04	1.6		
120.38	123.42	3.04	9121	.02	1.5		
123.42	126.47	3.05	9122	.01	1.9		

108.40 - 122.17 : rock acquires "glomeroporphyritic-like" texture;  
119.28 - 122.17 : appearance of patches where rock is medium coarse grained gabbroic in texture and composition; the other portions consist of ~5-10% small chloritic mafic porph- yroblasts in a fine grained chloritic groundmass  
122.17 - 128.89 Gabbro chloritized, medium coarse grained, minor epiditized features.  
128.89 - 129.52 Quarts - Feldspar Porphyry  
< 5% qtz phenocrysts & ~ 50% white feldspar phenocrysts in a dark grey - brown groundmass, generally non- foliated, < 3% qtz veinlets, < 1% py.  
129.52 End of Hole  
hole unseamed, casing left in hole  
Acid test 129.52 m : 32°



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Page 7 of 7

Property: **BA9 L'** Project No: **515** Depth: .....

Hole No: **BAG 11** Co.ord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL  
FEET / METRES

DESCRIPTION

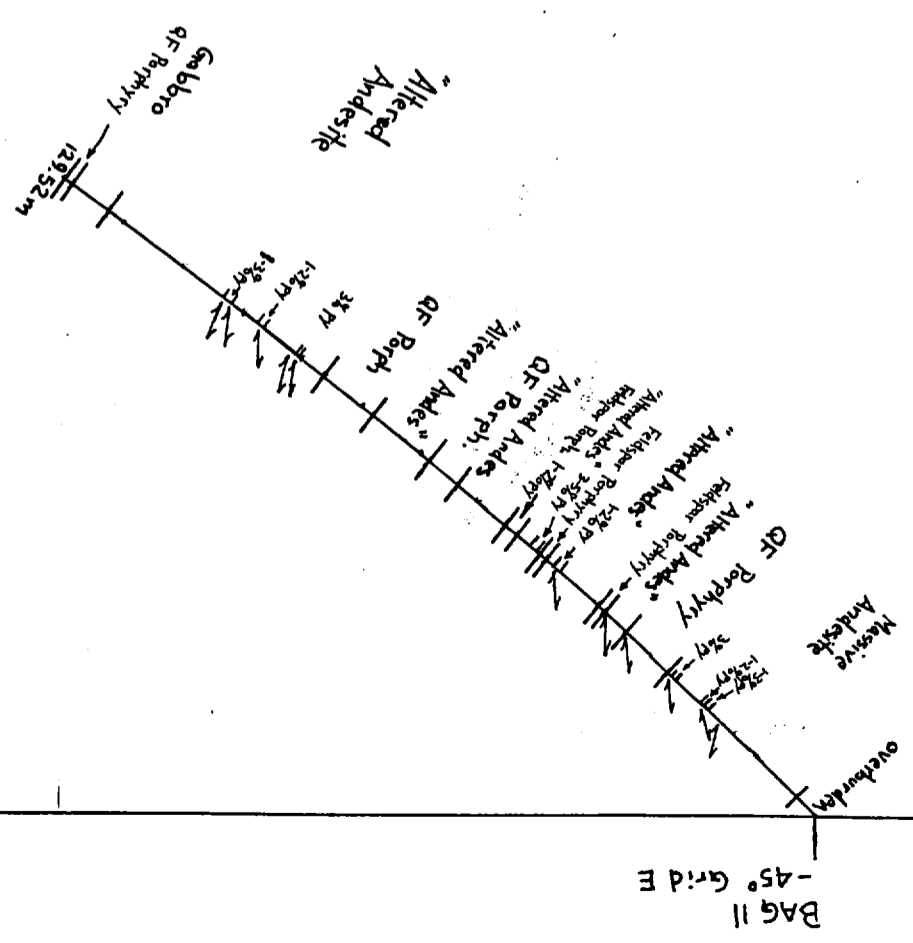
SLUDGE SAMPLE RECORD

CORE ANGLES

17.98 m | 60° Shearing  
 20.80 m | 32° Shearing  
 26.10 m | 42° Shearing  
 29.62 m | 37° slickensided fracture ; rake = 0°  
 34.55 m | 40° Shearing // contact  
 35.26 m | 45° Shearing  
 38.64 m | 49° contact  
 39.74 m | 44° contact  
 46.91 m | 47° Shearing  
 55.69 m | 32° contact  
 63.89 m | 52° contact  
 65.86 m | 55° slickensided fracture ; rake 75°  
 66.55 m | 47° slickensided fracture ; rake 80°  
 68.73 m | 45° contact  
 78.08 m | 40° contact  
 86.43 m | 37° contact  
 90.50 m | 60° Shearing  
 91.75 m | 67° Shearing  
 97.00 m | 54° Shearing  
 101.90 m | 60° Shearing  
 102.42 m | 75° Shearing  
 102.65 m | 75° Shearing

FROM	TO	WIDTH	SAMPLE	Au $\frac{1}{4}$	Ag $\frac{1}{4}$	Cu	Zn
126.47	129.52	3.05	9123	.02	1.9		

GRANGES EXPLORATION LTD.  
 BAG L. OPTION  
 PROJECT 515  
 Section 0+05N / 0+20W  
 Scale 1:1000  
 Looking Grid N.



BAG II  
 -45° Grid E

Property: BAg, L  
 Hole No: BAg, 12  
 Claim No: 882188  
 Grid No: 1  
 Project No: 04455  
 Co ord: 0430W  
 Angle & Direction: -45° GridE  
 Depth: 144.76 m  
 Horizontal Length: 112 m  
 Core Size: Bg  
 Date Began: FEB 28/88  
 Date Completed: MARCH 1/88  
 Drilled By: Morrisette  
 Logged By: B. Gaboury

INTERNAL FEET (METRES)	DESCRIPTION	CORE SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au %/g	Ag %/g	Cu	Zn
0 - 3.66	Casing (no core recovery)	0	3.66	3.66	Casing & no pebbles & no core recovery				
3.66 - 3.90	granitic pebbles	3.66	3.90	.24	waste				
		3.90	8.57	4.67	9389	.04			
		8.57	9.07	.50	9389	.04			
		9.07	9.53	.46	9390	.16			
		9.53	10.03	.50	9391	.03			
		10.03	10.63	.60	9392	.01			
		10.63	11.07	.44	9393	.02			
		11.07	11.22	.15	9394	.12			
		11.22	11.72	.50	9395	.19			
		11.72	39.39	27.67	waste				
		39.39	39.89	.50	9396	.04			
		39.89	40.46	.57	9397	.58			
		40.46	40.96	.50	9398	.03			
		40.96	48.78	7.82	waste				
		48.78	49.28	.50	9399	.01			
		49.28	49.78	.50	9400	.22			
		49.78	50.18	.40	9401	.02			
		50.18	61.81	11.63	waste				
		61.81	62.31	.50	9402	.17			
		62.31	62.50	.19	9403	.18			
		62.50	63.00	.50	9404	.06			
		63.00	63.50	.50	9405	.01			
		63.50	63.90	.40	9406	.03			
		63.90	64.03	.13	9407	1.00			
		64.03	64.50	.47	9408	.13			
		64.50	65.00	.50	9409	.01			
		65.00	68.32	3.32	waste				
		68.32	68.89	.57	9410	.01			
		68.89	69.32	.43	9411	.04			
		69.32	69.82	.50	9412	.01			
		69.82	70.32	.50	9413	.02			
		70.32	72.69	2.37	waste				
		72.69	73.19	.50	9414	.01			
		73.19	73.52	.33	9415	.35			
		73.52	73.80	.28	9416	.02			
		73.80	74.30	.50	9417	.01			
		74.30	80.94	6.64	waste				
		80.94	81.44	.50	9418	.01			
		81.44	81.56	.12	9419	.01			
25.57 - 35.02	Altered Andesite								
	11.07 - 11.22 : bleached, silicified interval similar to 9.07 - 9.53, 1-2% py.								
	9.07 - 9.53 : brecciated with silicified greyish bleached interval with 1-3% glassy py & some coarse, cream-colored carb.								
	6.44 - 6.69 : rubble, pebbly, limonitized & minor fault								
	5.67 - 5.82 : rubble, pebbly interval & minor fault.								
	3.90 - 4.70 : blocky, rubble interval with limonite-coated fractures								
	widely to non-foliated, green, medium fine grained, overall 3-5% qtz-carb veins up to 1cm wide at all orientations, <= 1% py; foliation decreases below 19.80m ;								
	35.02 - 68.89								
	Quartz - Feldspar Porphyry								
	unfoliated & varies from reddish, limonitized to greenish								



**GRANGES EXPLORATION LTD.**  
**DIAMOND DRILL LOG**

Page 2 of 5

Property: BAG L Project No. 515 Depth: .....  
 Hole No. BAG, 12 Co. grid: ..... Horizontal Length: ..... Date Began: .....  
 Claim No. .... Core Size: ..... Date Completed: .....  
 Grid No. .... Angle & Direction: ..... Elevation: ..... Logged By: .....  
 Drilled By: .....

INTERVAL FEET (METRES)	DESCRIPTION	CORE SAMPLE RECORD							
		FROM	TO	WIDTH	SAMPLE	Au. %	Ag %	Cu.	Zn.
81.54	silicified; contains 60-70% feldspar phenocrysts, 5-10% qtz phenocrysts (w 5% of feldspar phenocrysts are smaller light-colored & basitized); contains 3-5% pinkish limonitized qtz-carb veinlets with bleached greyish wallrock selvages, ~5mm wide at all possible orientations; contains ~1% py up to 45.29 m & <1% py below 45.29 m.	81.54	81.96	.40	9420	.04	1.6		
81.96		82.34	.38	9421	.03	1.5			
82.34		82.84	.50	9422	.01	2.1			
82.84		90.36	7.52	waste					
90.36		90.86	.50	9423	.01	1.9			
90.86		91.15	.29	9424	.01	1.8			
91.15		91.65	.50	9425	.04	1.7			
91.65		103.58	11.93	waste					
103.58		104.08	.50	9426	.02	2.0			
104.08		104.57	.49	9427	.07	1.4			
104.57		104.94	.37	9428	.20	1.0			
104.94		105.44	.50	9429	.01	.9			
105.44		105.94	.50	9430	.01	1.6			
105.94		106.59	.45	9431	.01	1.0			
106.59	106.78	.19	9432	.85	1.2				
106.78	107.28	.50	9433	.02	1.8				
107.28	107.78	.50	9434	.03	1.1				
107.78	108.31	.53	9435	.04	2.0				
108.31	108.86	.55	9436	.08	1.8				
108.86	109.39	.53	9437	.06	1.9				
109.39	109.71	.32	9438	.39	1.6				
109.71	110.21	.50	9439	.05	1.7				
110.21	110.71	.50	9440	.03	1.6				
110.71	111.10	.39	9441	.01	1.4				
111.10	111.41	.31	9442	.01	1.0				
111.41	111.91	.50	9443	.02	1.4				
111.91	118.23	6.32	waste						
118.23	118.57	.34	9444	.01	1.2				
118.57	118.68	.11	9445	.09	1.6				
118.68	119.28	.60	9446	.01	2.0				
119.28	119.88	.60	9447	.02	1.6				
119.88	120.50	.62	9448	.02	1.5				
120.50	120.75	.25	9449	.05	1.7				
120.75	121.25	.50	9450	.01	2.0				
121.25	121.75	.50	9451	.03	2.1				
121.75	144.76	23.01	waste						
144.76	E011								
51.18 - 68.89	rock loses its reddish color & feldspar phenocrysts become more readily discernible; less silicified; no quartz veining, <1% py.								
49.28 - 49.78	Minor Fault & well-sheared, well-sericitized rubble.								
62.31 - 64.50	greenish, silicified; ~1% py								
62.31 - 62.50	3cm wide qtz-py vein with chloritic selvages, CAS ~33%.								
63.50 - 63.90	bleached yellowish section with a 5cm qtz-chl-py stringer at ~18° to core axis,								



Property: BAG 1 L. Project No: 515  
 Hole No: BAG 12 Co. ord.  
 Claim No.  
 Grid No. Angle & Direction  
 Elevation  
 Date Began  
 Date Completed  
 Drilled By  
 Logged By

INTERNAL  
FEET (METRES)

DESCRIPTION

SAMPLE RECORD

FROM	TO	WIDTH	SAMPLE	Au.	Ag.	Cu.	Zn.
63.90 - 64.03							
<p>63.90 - 64.03 : sheared qtz-carb-py vein at ~43° to core axis (~2cm wide)</p>							
"Altered Andesite"							
<p>welded green, mildly sheared, contains irregular greyish patches up to several mm dia in a dark greenish medium fine grained chloritic groundmass. Some sections with ~10% sub-mm sized chloritized mafic porphyroblasts, contains cross-cutting chloritic stringers;</p>							
68.89 - 69.82							
<p>68.89 - 69.82 : chloritic, mildly sheared, carbonatized interval with ~10% qtz-carb veinlets, 1-2% py.</p>							
71.87 - 72.66							
<p>71.87 - 72.66 : 40 cm of ground core.</p>							
73.19 - 73.80							
<p>73.19 - 73.80 : sheared, chloritic interval with 10% qtz-py veinlets, ~2% dissemin. py.</p>							
81.44 - 82.34							
<p>81.44 - 82.34 : interval with mild to moderate but patchy shearing; 10% qtz-chl (py) veinlets;</p>							
<p>81.44 - 81.56 : qtz-chl vein with fr py, CA ~ 37°</p>							
<p>below 83.60 m rock acquires 'glomeroporphyritic - like' texture; it also contains occasionally large fractured feldspar, porphyroblast, basically unfoliated;</p>							
90.86 - 91.15							
<p>90.86 - 91.15 : two sheared qtz-chl veins, one 10cm wide at CA ± 40°, the other 3cm wide at CA ~ 50°, in opposite direction to the first vein; fr py in both,</p>							
96.00 - 97.20							
<p>Feldspar Porphyry</p>							
<p>40-50% white feldspar phenocrysts in a fine grained dark brownish grey groundmass,</p>							

Property: BAG 1 Project No. 515 Date Begun:             
 Hole No. BAG 12 Coord.            Horizontal Length            Date Completed             
 Claim No.            Angle & Direction            Core Size            Drilled By             
 Grid No.            Elevation            Logged By           

INTERVAL FEET (METRES)	DESCRIPTION	SLUDGE SAMPLE RECORD									
		FROM	TO	WIDTH	SAMPLE	Au 9/4	Ag 9/4	Cu	Zn		
97.20 - 111.41	"Altered Andesite"	0	7.62	7.62	9124	.01	2.0				
	similar to interval 68.89 - 96.60 m.	7.62	10.67	3.05	9125	.01	2.1				
	103.08 - 110.71 : wildly to moderately well-sheared interval with 10-15% sheared greyish pyritic silicified bands up to 2cm wide, frequency of these bands is ~4 veinlets per metre, many of fairly steep CAV's, overall ~1% py and ~5% small disseminated flesh colored carbonate crystals;	10.67	13.71	3.04	9176	.03	1.6				
	* 104.08 - 104.57 : bleached, well-sheared, 1-2% py	13.71	16.76	3.05	9177	.03	1.9				
	* 104.57 - 104.94 : precipitated, silica-carb flooded interval with 20-30% bleached, pyritic wallrock inclusions with carb-rich selvages; ~ pattern 10cm of the interval is sheared at ~ 60° to core axis, overall 1-2% py.	16.76	19.81	3.05	9178	.07	2.1				
	* 106.59 - 106.78 : sheared, bleached, carbonatized, silica-flooded, greyish interval with 1-2% py	19.81	22.86	3.05	9179	.18	1.8				
	* 109.39 - 109.71 : moderately well-sheared; contains ~20% fine qtz veinlets, overall ~1% py.	22.86	25.90	3.04	9180	.03	1.4				
		25.90	28.95	3.05	9181	.11	1.7				
		28.95	32.00	3.05	9182	.04	1.8				
		32.00	35.05	3.05	9183	.03	1.9				
		35.05	38.09	3.04	9184	.08	1.6				
		38.09	41.14	3.05	9185	.19	0.9				
		41.14	44.19	3.05	9186	.18	1.3				
		44.19	47.24	3.05	9187	.24	1.2				
		47.24	50.28	3.04	9188	.06	0.8				
		50.28	53.33	3.05	9189	.22	1.7				
		53.33	56.38	3.05	9190	.17	1.2				
		56.38	59.43	3.05	9191	.48	0.6				
		59.43	62.47	3.04	9192	.41	1.3				
		62.47	65.52	3.05	9193	.93	0.4				
		65.52	68.57	3.05	9194	.91	1.0				
		68.57	71.62	3.05	9195	.52	1.1				
		71.62	74.66	3.04	9196	.34	7.9				
		74.66	77.71	3.05	9197	.06	1.8				
		77.71	80.76	3.05	9198	.02	1.7				
		80.76	83.81	3.05	9199	.03	1.6				
		83.81	86.85	3.04	9200	.02	1.7				
		86.85	89.90	3.05	9201	.02	1.2				
		89.90	92.95	3.05	9202	.03	1.8				
		92.95	96.00	3.05	9203	.18	1.3				
		96.00	99.04	3.04	9204	.07	1.4				
		99.04	102.09	3.05	9205	.02	0.8				
		102.09	105.14	3.05	9206	.17	1.3				
		105.14	108.19	3.05	9207	.19	0.9				
		108.19	111.23	3.04	9208	.04	2.0				
111.41 - 144.76	Grabbons	111.23	114.28	3.05	9209	.16	1.8				
	chloritized, medium coarse grained, unfoliated; contains minor qtz-epid-chl veinlets, minor sheared chloritic intervals;	114.28	117.33	3.05	9210	.03	2.1				
		117.33	120.38	3.05	9211	.15	1.2				
		120.38	123.42	3.04	9212	.11	2.0				
		123.42	126.47	3.05	9213	.03	0.9				



Property: **BAG L** Project No: **515** Date Began: .....

Hole No: **BAG 12** Coord: ..... Horizontal Length: ..... Date Completed: .....

Claim No: ..... Core Size: ..... Drilled By: .....

Grid No: ..... Angle & Direction: ..... Elevation: ..... Logged By: .....

INTERVAL  
FEET (METRES)

118.51 - 118.68 : chloritized, sheared; 20% horse tailing  
fine qtz veins, fr py overall  
118.68 - 121.75 : patchy chloritized, sheared homogenized  
gabbro with fr py

144.76 End of Hole hole uncemented, casing left in hole  
Acid Test. 144.76 m : 31°

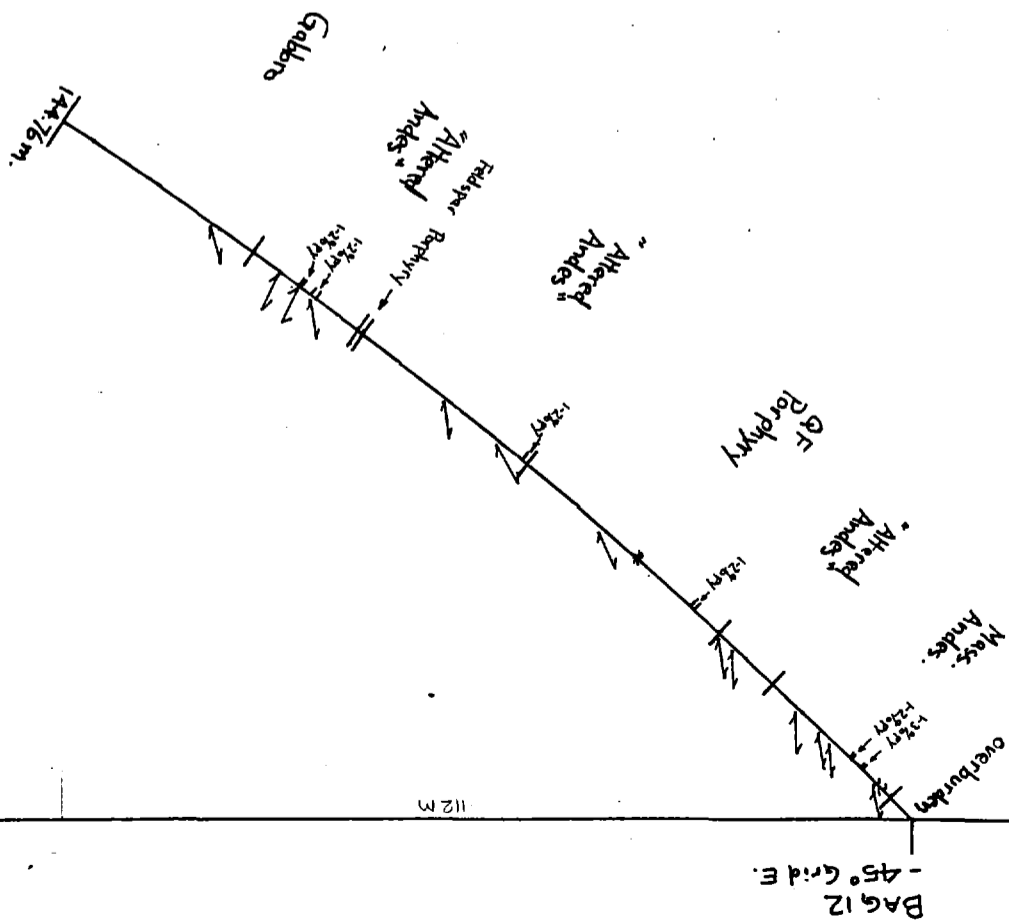
CORE ANGLES

5.55 m : 40° shearing  
6.07 m : 33° shearing  
14.46 m : 42° shearing  
16.46 m : 37° shearing  
20.56 m : 45° shearing  
32.10 m : 45° shearing  
34.90 m : 39° shearing  
35.02 m : 45° contact  
49.28 m : 58° slickensided fracture strike = 90°  
56.00 m : 25° shearing with slickensides striking ~ 20° to core axis  
73.19 m : 23° shearing // qtz veins  
82.25 m : 45° shearing  
96.60 m : ~85° contact  
97.20 m : ~85° contact  
104.50 m : 45° shearing  
106.65 m : 80° shearing  
109.60 m : 80° shearing  
119.60 m : 40° shearing // qtz veins  
120.62 m : 40° shearing

SLUDGE SAMPLE RECORD						
FROM	TO	WIDTH	SAMPLE	Au g/g	Ag g/g	
126.47	129.52	3.05	9214	.02	1.4	
129.52	132.57	3.05	9215	.03	1.7	
132.57	135.61	3.04	9216	.04	1.6	
135.61	138.66	3.05	9217	.02	1.8	
138.66	141.71	3.05	9218	.01	1.3	
141.71	144.76	3.05	9219	.02	1.1	



GRANGES EXPLORATION LTD  
BAG L. OPTION  
PROJECT 515  
Section 0+45S/0+30W  
Scale 1:1000  
Looking Grid N.





*Assessment files*  
TV-EDSMUIR M-2023 Mining A

Name and Postal Address of Recorded Holder: **GRANGES EXPLORATION LTD.** T1970 900  
 23rd Floor, 885 West Georgia St., Vancouver, BC., V6C 8E8

Summary of Work Performance and Distribution of Credits

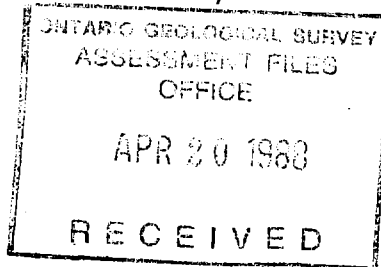
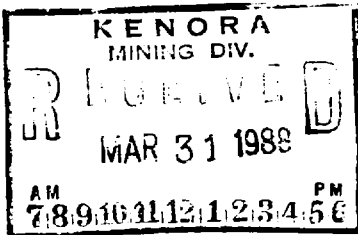
Total Work Days Cr. claimed	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.
	Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.	
400	K	1003408	200					
		1003410	200					
for Performance of the following work. (Check one only)								
<input type="checkbox"/> Manual Work <input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work. <input type="checkbox"/> Compressed Air, other Power driven or mechanical equip. <input type="checkbox"/> Power Stripping <input checked="" type="checkbox"/> Diamond or other Core drilling <input type="checkbox"/> Land Survey								

All the work was performed on Mining Claim(s): **K 1003408**

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

539 feet diamond drilling, Bq core  
 N. Morissette Canada Inc. contractor for Granges Exploration Ltd.

DDH'S Bag 7 and 8 - Feb 8 - Mar 5/88



Date of Report: **March 28/88** Recorded Holder or Agent (Signature): *[Signature]*

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: **GEORGE ZBITNOFF, Vice-President Exploration, Granges Exploration Ltd.**  
 (as above) Date Certified: **March 28/88** Certified by (Signature): *[Signature]*

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	1003404	
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core	Signed core log showing; footage, diameter of	Names and addresses of owner or operator together with dates when drilling/stripping done.	Work Sketch (as



Ministry of Northern Development and Mines

Report of Work

DOCUMENT No.

W8801-097

Instructions - Supply required data on a separate form for each type of work to be recorded (see table below).  
- For Geo-technical work use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical and Expenditures)".

T. EDMUR M-2023

Mining Act

Name and Postal Address of Recorded Holder <b>GRANGES EXPLORATION LTD.</b>	Prospector's Licence No. <b>T1970</b>
<b>23rd Floor, 885 West Georgia St., Vancouver, BC., V6C 3E8</b>	

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed <b>2320</b>	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.
	Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.	
For Performance of the following work. (Check one only) <input type="checkbox"/> Manual Work <input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work. <input type="checkbox"/> Compressed Air, other Power driven or mechanical equip. <input type="checkbox"/> Power Stripping <input checked="" type="checkbox"/> Diamond or other Core drilling <input type="checkbox"/> Land Survey	K	882188	180	K	1003406	200		
		882189	180		1003407	200		
		882190	180		1003409	200		
		882191	180		1003411	200		
		898734	200					
		898735	200					
		1003404	200					
	1003405	200						

All the work was performed on Mining Claim(s): **K 882188**

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

**2334 feet diamond drilling, Bq core**  
**N. Morissette Canada Inc. contractor for Granges Exploration Ltd.**  
**DDH'S BAG-1, 2, 10, 11 and 12 Feb 8 - Mar 5/88**

KENORA MINING DIV.  
 RECEIVED  
 MAR 31 1988  
 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

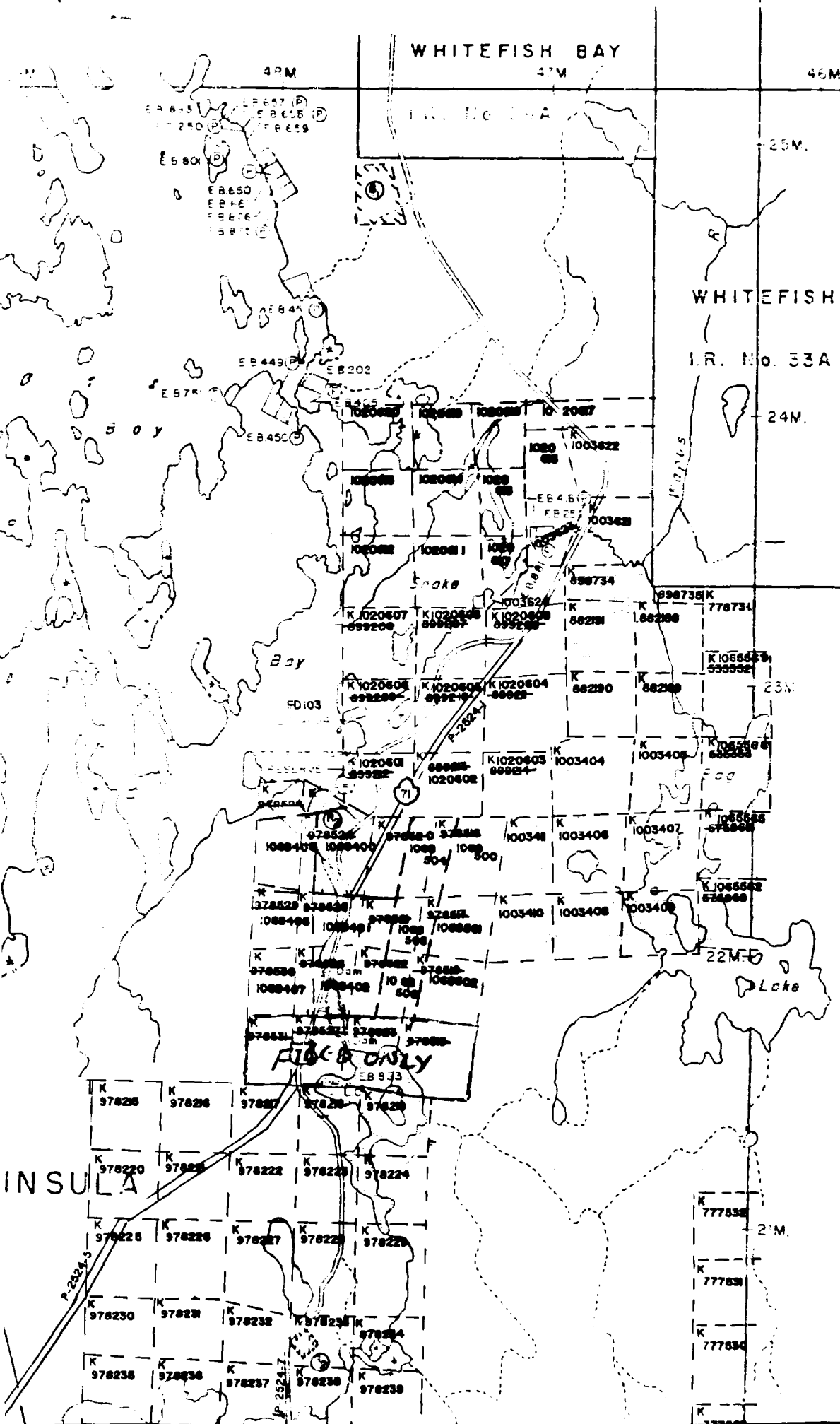
Date of Report <b>March 28/88</b>	Recorded Holder or Agent (Signature) <i>[Signature]</i>
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**Certification Verifying Report of Work**  
 I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying <b>GEORGE ZBITNOFF, Vice-President Exploration, Granges Exploration Ltd.</b>	Date Certified <b>March 28/88</b>	Certified by (Signature) <i>[Signature]</i>
<b>(as above)</b>		

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	None	Names and addresses of man who performed manual work/operated equipment, together with dates and hours of employment. <b>882188</b>	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	Names and addresses of owner or operator together with dates when drilling/stripping done.	Work Sketch (as
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core	Signed core log showing: footage, diameter of		

wp.



**TWE**  
DI  
MINI  
**SCALE: 1-**

PATENTED LA  
CROWN LAND  
LEASES  
LOCATED LAND  
LICENSE OF  
MINING RIGHTS  
SURFACE RIGH  
ROADS  
IMPROVED BOA  
KING'S HIGHW  
RAILWAYS  
POWER LINES  
MARSH OR MU  
MINES  
CANCELLED

400' Reserve  
Dept. of Land

Inlands in Lake  
staking Sect 8

Flooding right  
mean sea level  
Lake of the W

**AREAS WITH**

S.R. SURFACE F

INVOICE



**J. MORISSETTE CANADA INC.**

BOX 789 HAILEYBURY, ONTARIO TELEX 067-82590

TEL. (705) 672-3311 TELECOPIER (705) 672-2371

IN ACCOUNT WITH

Granges Exploration Ltd.,  
372 Toke Street,  
TIMMINS, Ontario.  
P4N 6V7

- Dr -

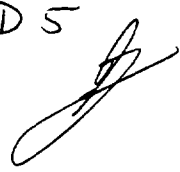
INVOICE NO.	2560
CUSTOMER NO.	1034
JOB NO.	1083
DEST.	069
INVOICE DATE	February 26, 1988.
FOR	February 1-15, 1988.

To invoice for Surface Diamond Drilling performed on the Sioux Narrows Area property during the period Feb. 1-15/88 as per the agreement dated Oct. 19/87.

Hole #	Size	From	To	Total	Rate	Amount
ML-15	B.Q. Drilling	266'	280'	14'	\$21.00	\$ 294.00 ✓
BAG-1	Overburden	0'	10'	10'	\$21.00	210.00 ✓
	B.Q. Drilling	10'	500'	490'	\$21.00	10,290.00 ✓
	B.Q. Drilling	500'	565'	65'	\$22.00	1,430.00 ✓
BAG-2	Overburden	0'	10'	10'	\$21.00	210.00 ✓
	B.Q. Drilling	10'	395'	385'	\$21.00	8,085.00 ✓
BAG-3	Overburden	0'	10'	10'	\$21.00	210.00 ✓
	B.Q. Drilling	10'	325'	315'	\$21.00	6,615.00 ✓
BAG-4	Overburden	0'	12'	12'	\$21.00	252.00 ✓
	B.Q. Drilling	12'	385'	373'	\$21.00	7,833.00 ✓
				<u>1684'</u>		<u>35,429.00</u> ✓
<u>Material left in hole - see footage form</u>						
	70 ft. BW Casing - 10 ft. length			@ \$10.75 per ft.		752.50 ✓
	6 ft. BW Casing - 2 ft. length			@ \$17.75 per ft.		106.50 ✓
	2 BW Casing Shoes			@ 155.00 each		310.00 ✓
	plus 15% (\$1,169.00)					175.35 ✓
	3 acid tests			@ \$63.00 each		189.00 ✓
	Pulling Casing Charges - see attached					189.75 ✓
	Moving to next property - see attached					5,998.69 ✓
	Travelling time of crew - see attached					99.19 ✓
	Waterline Charges - see attached					612.20 ✓
						<u>\$43,862.18</u> ✓

\$ 294. - 517 DD 5

had 515 DD 5



February 1-15, 1988 - Sioux B.Q.



# N. MORISSETTE CANADA INC.

BOX 789 HAILEYBURY, ONTARIO TELEX 067-82590  
TEL. (705) 672-3311 TELECOPIER (705) 672-2371

IN ACCOUNT WITH

Granges Exploration Ltd.,  
372 Toke Street,  
TIMMINS, Ontario.  
P4N 6V7

- DR -

INVOICE NO.	2642
CUSTOMER NO.	1034
JOB NO.	1083
DEST.	069
INVOICE DATE	March 9, 1988
FOR	February 16-29/88

PAGE 1 of 2

To invoice for Surface Diamond Drilling performed on the Sioux Narrows Area Property during the period of Feb. 16-29/88 as per agreement dated Oct. 19/87.

Please Note - Daily Reports have not been received for Feb. 28-29/88, any charges applicable for these days will follow.

Hole #	Size	From	To	Total	Rate	Amount
S BAG 5	Overburden	0	12'	12'	\$21.00	\$ 252.00
	BQ Wireline	12'	335'	323'	\$21.00	6,783.00
S BAG 6	Overburden	0	50'	50'	\$21.00	1,050.00
	Overburden	50	52'	2'	\$27.00	54.00
	BQ Wireline	52'	305'	253'	\$21.00	5,313.00
S BAG 7	Overburden	0	10'	10'	\$21.00	210.00
	BQ Wireline	10'	265'	255'	\$21.00	5,355.00
S BAG 8	Overburden	0	50'	50'	\$21.00	1,050.00
	Overburden	50'	80'	30'	\$27.00	810.00
	BQ Drilling	80'	275'	195'	\$21.00	4,095.00
S BAG 9	Overburden	0	10'	10'	\$21.00	210.00
	BQ Drilling	10'	335'	325'	\$21.00	6,825.00
B BAG 10	Overburden	0	14'	14'	\$21.00	294.00
	BQ Drilling	14'	475'	461'	\$21.00	9,681.00
B BAG 11	Overburden	0	12'	12'	\$21.00	252.00
	BQ Drilling	12'	185'	173'	\$21.00	3,633.00
				2175'		45,867.00

516  
DD5  
515  
DD5

\* CONTINUED \*

February 16-29/88 BQ Sioux Narrows.

INVOICE



**N. MORISSETTE CANADA INC.**

BOX 789 HAILEYBURY, ONTARIO TELEX 067-82590  
 TEL. (705) 672-3311 TELECOPIER (705) 672-2371

IN ACCOUNT WITH

Granges Exploration Ltd.,  
 372 Toke Street,  
 TIMMINS, Ontario.  
 P4N 6V7

INVOICE NO.	2657
CUSTOMER NO.	1034
JOB NO.	1083
DEST.	069
INVOICE DATE	March 10, 1988
FOR	Feb. 28th & 29th/88

- DR -

To invoice for surface diamond drilling performed on the Sioux Narrows Area property during the period of Feb. 28th & 29th/88 as per agreement dated October 19, 1987.

Hole #	Size	From	To	Total	Rate	Amount
Bag 11	BQ Wireline	185'	425'	240'	\$21.00	5,040.00
Bag 12	BW Overburden	0	12'	12'	\$21.00	252.00
	BQ Wireline	12'	425'	413'	\$21.00	8,673.00
				665'		13,965.00

Materials left in hole:

10'	B.W. Casing - 10' length	@ \$ 10.75 p/ft.	\$107.50	
2'	B.W. Casing - 2' length	@ \$ 17.75 p/ft.	35.50	
1	B.W. Casing Shoe	@ \$155.00 each	155.00	
		Plus 15% (298.00)	44.70	342.70

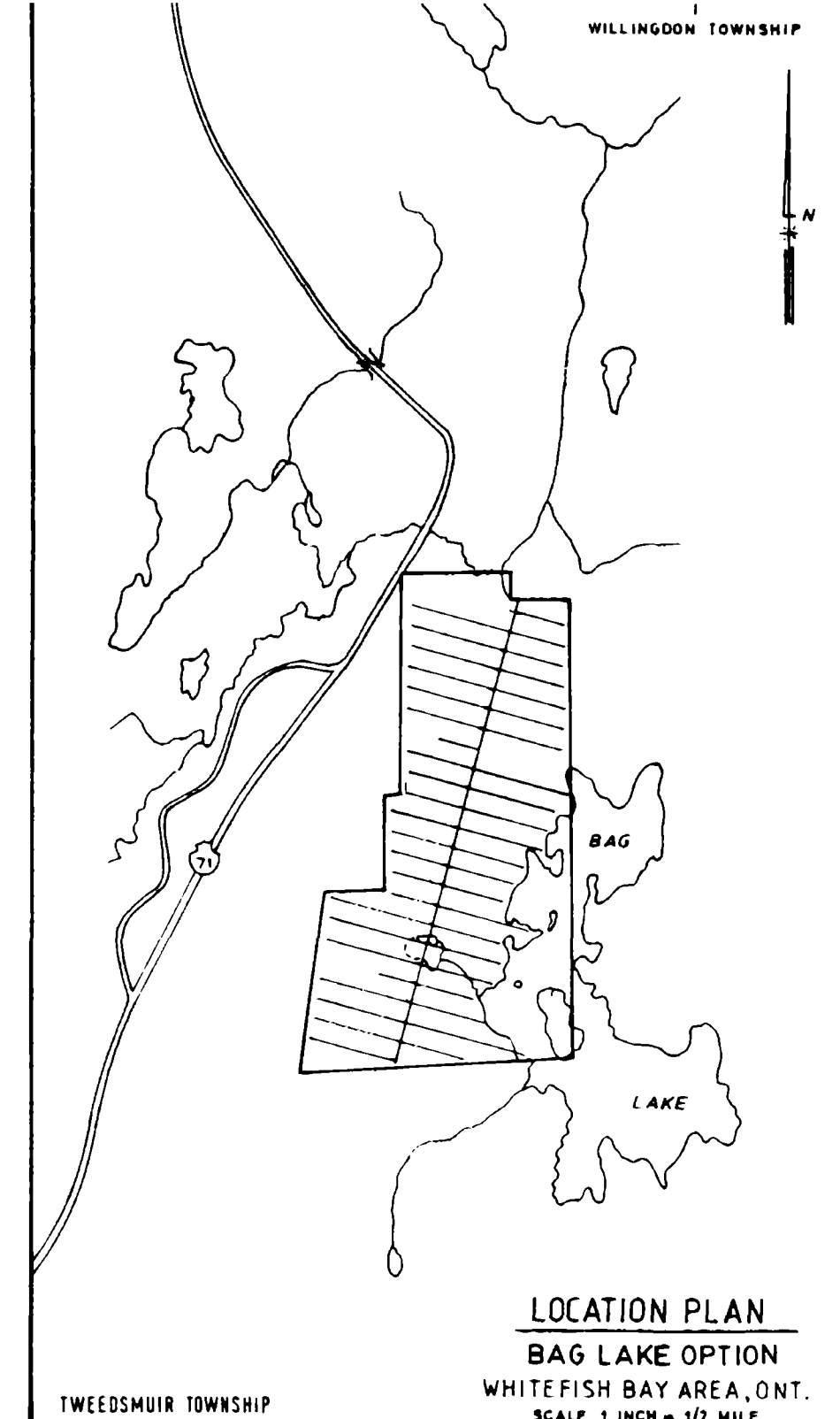
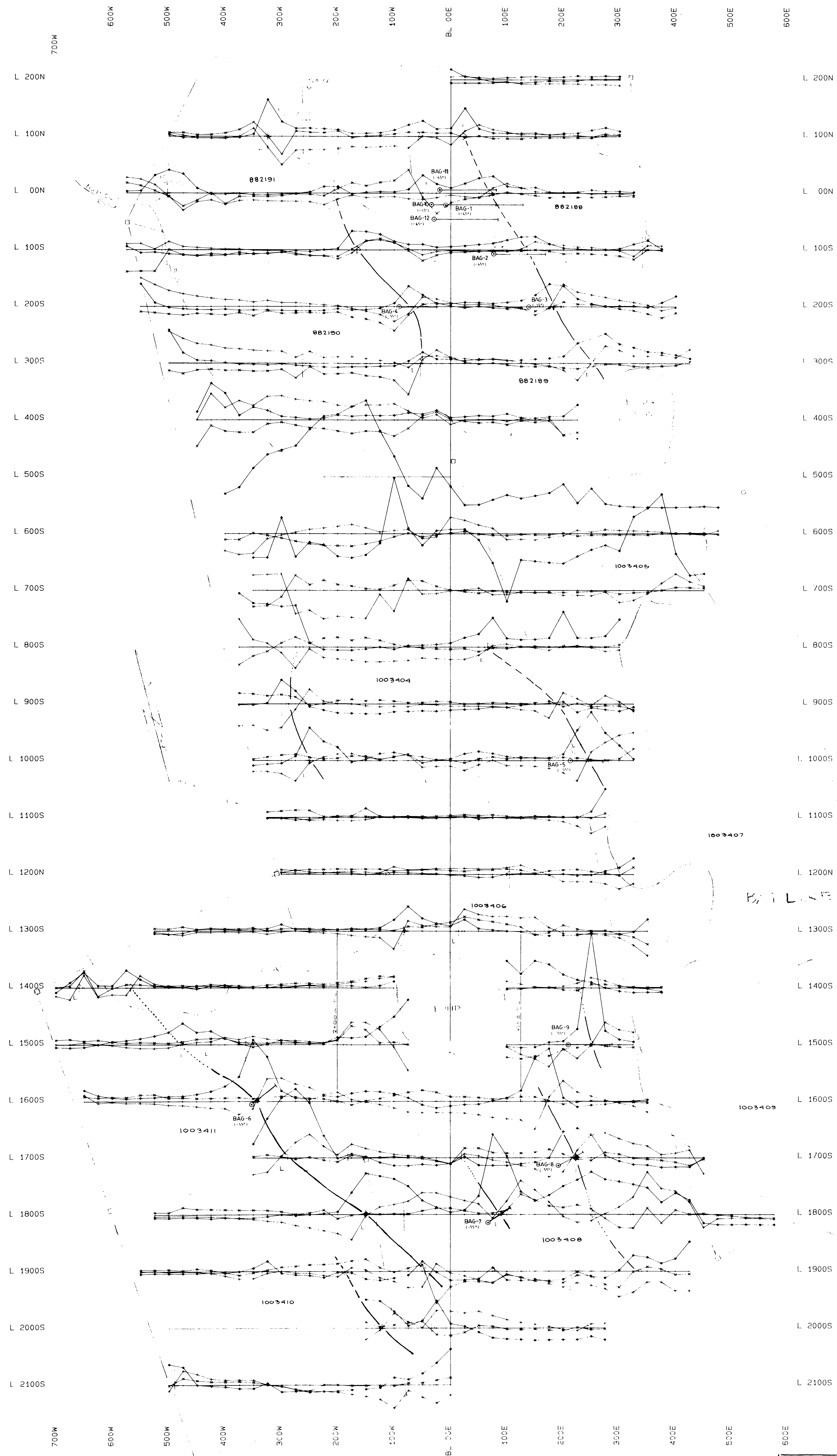
1 Clinometer test (425') 63.00

\$14,370.70

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Feb. 28 & 29th, 1988: BQ - Sioux Narrows.

515 DDS



○ TOTAL FIELD - 500% / cm  
 Plotting base - 1500

× QUADRATURE - 20% / cm  
 Plotting base - 0

+ INPHASE - 40% / cm  
 Plotting base - 0

GRANGES EXPLORATION LTD  
 BAG LAKE PROJECT  
 VLF-EM SURVEY  
 TRANSMITTER: ANNAPOLIS  
 Scale 1: 2500.0

**KEY**

- Indicates location shown by net angle and field strength component (see also circled)
- × FIRST PRIORITY ANOMALY
- + SECOND PRIORITY ANOMALY
- THIRD PRIORITY ANOMALY
- FOURTH PRIORITY ANOMALY

Date: OCT 1987  
 WHITE GEOPHYSICAL INC.

