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CAST	LE MI	NERALS	INC.	
ASSESS	MENT REPORT (ON THE WREN CLA	IM GROUP	
	RUTHERFOR	RD CREEK AREA		
	ILLOOET MINI	NG DIVISION, B.	с.	
RECEIVED	NTS 92	J/6E AND 7W		
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ASSESSMENT REPORT ON THE WREN CLAIM GROUP RUTHERFORD CREEK AREA LILLOOET MINING DIVISION, B.C. NTS 92 J/6E AND 7W

SUMMARY

In early 1987, **CASTLE MINERALS INC.** optioned 1 Modified Grid claim (Wren Claim), comprised of 20 units in the Lillooet Mining Division. Three 2-post claims and one additional Modified Grid claim (Sparrow Claim), totalling 12 units, were later added to Castle's land position. The claims are located in the valley of Rutherford Creek, approximately 15 km southeast of the village of Pemberton.

Access to the claims is via a graded-gravel logging road along the north side of Rutherford Creek. A bridge crosses the Creek immediately north of the claims where additional logging roads traverse the claims.

The property was staked to cover a large, gold-bearing shear zone found in the lower slopes immediately south of Rutherford Creek. This area was first staked in the late 1970's and various cursory development programmes, including geochemical sampling, a test I.P. survey, and trenching. The I.P. survey outlined an anomalous area within the shear; however, this anomaly was never drill tested. Trenching over a portion of the I.P. anomaly exposed a silicified, pyrite-bearing shear zone carrying low gold values.

The results of these earlier programmes and an exploration programme carried out by Castle in 1988 outlined a 200 m wide shear zone which contained up to 780 ppb gold in soils and visible flakes of angular gold from panned soils.

Between 15 May and 15 July, 1989, Castle Minerals completed five diamond-drill holes totalling 219.8 m (721 feet). The results of Castle's 1988 soil and rock geochemical survey were used as a guide for target selection. This report summarizes the results of this small diamond drilling programme.

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1.0 INTRODUCTION

In early 1987, a dialogue was established between the claim holder, Mr. Jim McDonald, of Vancouver, B.C., and CASTLE MINERALS INC. in which the latter agreed to option 1 Modified Grid Claim, comprised of 20 units. During the initial exploration, it became apparent that the economic potential of the area was considerable and additional claims were required. CASTLE purchased or optioned three 2-post claims and one Modified Grid claims comprised of 12 units, contiguous to the original Wren Claim. These claims form a block collectively called the Wren Claim Group.

Between 15 May and 15 July, 1989, five, short diamond-drill holes totalling 219.8 m (721 feet) were completed to test five areas geochemically anomalous in gold. This report summarizes the results of that programme and discusses the various occurrence of gold as indicated from the drilling.

1.1 LOCATION AND ACCESS

The Wren Mineral Group is a gold prospect located on the south side of the Rutherford Creek in southeastern British Columbia. The claims are located in moderately steep, mountainous terrain approximately 120 km north of Vancouver (Figure 1). The town of Pemberton in 10 km north, and the Village of Whistler is approximately 15 km to the south. Terrestial co-ordinates for the centre of the claim block are as follows:

> 50[°] 16' North Latitude 123[°] 00' West Longitude NTS 92 J/6E and 7W

The property is at an elevation which ranges from 800 m (2600 feet), along Rutherford Creek, to over 2150 m (7060 feet) at the ridge top which divides the east flowing Rutherford Creek and Soo River drainages.

Access to the property is along a low-maintenance, dry weather, logging road which trends westward along the north side of Rutherford Creek. This road connects with the Vancouver-Pemberton Highway (B.C. Highway 99) approximately 10 km south of the town of Pemberton. The north boundary of the Wren Mineral Group is immediately south of a logging bridge which crosses Rutherford Creek. The lower, northern, portions of the claim group was logged during 1986 and 1987 and several logging roads cross the property.

1.2 CLAIM INFORMATION

The property is located in the Lillooet Mining Division and is comprised of two Modified Grid claims, totalling 32 units, and three 2-post claims (Figure 2). All claims are contiguous. The Wren Claim is held by an option agreement with the recorded holder, Mr. Jim McDonald of Vancouver, while the Sparrow, Robin, Jay, and Crow are recorded in the name of Castle Minerals Inc. For claim information, see Table 1.

TABLE 1

CLAIM STATUS

MODIFIED GRID CLAIMS

CLAIM NAME	RECORD NO.	UNITS	ANNIVERSARY DATE
WREN	3835	20	5 OCTOBER
SPARROW	3817	12	21 SEPTEMBER

2-POST CLAIMS

CLAIM NAME	RECORD NO.	ANNIVERSARY DATE
	······································	
TAV	3819	21 SEPTEMBER
ROBIN	3820	21 SEPTEMBER
CROW	3821	21 SEPTEMBER





1.3 PHYSIOGRAPHY, CLIMATE AND VEGETATION

The Wren prospect is located in the Pacific Ranges Subdivision of the Coast Mountains Physiographic Province (formerly referred to as the Coast Plutonic Complex). The area surrounding the claims has a rugged topography with surface elevations ranging from 600 to over 2100 m (2000 to 7000 feet). Mountains rise abruptly on either side of Rutherford Creek valley; the highest peak on the property is approximately 2150 m (7060 feet) above sea level.

The climate during the summer is generally warm although brisk winds are common on unprotected ridges and peaks. The weather station at Pemberton Meadows (elev. 655 m) records a mean rainfall of 741 mm/year, a mean snowfall of 2824 mm/year, and a mean daily temperature varying from a low of -6.loC to a high of 18.60C. However, condition are more severe at higher elevations. The area's climate is likened to that of the western interior of British Columbia (Drysdale, 1916).

Treeline is approximately 1600 m on north facing slope. At lower elevations cedar, cottonwood, white pine, Douglas fir, and hemlock fir are common with Douglas and hemlock fir being more common at higher elevations. Alpine fir, mosses and grasses are found above treeline.

2.0 GEOLOGY

2.1 REGIONAL GEOLOGY

The geology of the Pemberton map-area has been described by Woodsworth (1977), Cairnes (1925), Camsell (1918), and Drysdale (1916). The Rutherford Creek area has been studied in some detail by Woodsworth (1977), among others. The area is underlain mostly by granitoid rocks of the Coast Plutonic Complex and highly deformed volcanic and sedimentary rocks of Lower Cretaceous age.

The Coast Plutonic Complex consists largely of plutonic rocks and subordinate gneiss and migmatite, mostly of uncertain age. The plutonic rocks are dominantly quartz diorite to granodiorite, with some diorite and quartz monzonite. Regionally metamorphosed Late Triassic to Early Cretaceous sedimentary and volcanic rocks form northwest-trending roof pendants within the plutonic framework.

Highly deformed Lower Cretaceous aged stratified rocks are common with meta-volcanic rocks greatly predominate over meta-sedimentary strata. The volcanic rocks are mainly pyroclastic and are comprised of greenish tuffs and breccias, reddish brown to maroon brecciaconglomerates, and purplish breccias. Thin beds of brittle shale or siltstone are often interbedded with the volcanics.

A chain of late Tertiary and Quaternary calc-alkaline volcanic centres extends north through part of the Coast Plutonic Complex.

As in other parts of the Coast Mountains, the dominant structural trend is northwesterly. Foliation in plutonic rocks are generally northwest with steep dips. Schistosity in pendants is usually parallel or subparallel with contacts. Schistosity is rare in the meta-volcanics. It appears that deformation has been largely concentrated in narrow northwest trending zones, leaving the intervening areas with well preserved original textures suggest that deformation was controlled by deep-seated major structural features.

The geology of the area is not simple. Multiple deformation has rendered most of the rocks schistose and tightly compressed in complex repetitive folds. A subtlety of rock differences, and obscurity of bedding, facies changes in some formations, and a variation in intensity of hydrothermal alterations all combine to make a complex relationship which poor exposures, at lower elevations, further compounds.

The geology within the Wren Claim block appears to be divided into three parts, sediments to the east, volcanics in the centre, and quartz diorite to the west. The sediments are mostly fissile shales, black carbonaceous argillites, and minor calcareous shales or limestone. The volcanics are dominantly flows and pyroclastic andesites with minor flow breccias. The principal plutonic rock is a coarse-grained, quartz diorite within several high-level, quartz monzonite stocks intruding the quartz diorite.

3.0 PREVIOUS WORK SUMMARY

The area was first staked in the mid-1970's by the Rainbow Syndicate, a syndicate consisting of Newmont Exploration of Canada Ltd. (40%); Union Oil Company of Canada Ltd. (Calgary) (40%); Bethlehem Copper Corporation (20%); and John McGoran, (geologist). The area was staked as the GL Claims after a regional stream sediment sampling programme identified anomalous zinc and gold in the Rutherford Creek From 1977 to 1980, the property was geologically mapped drainage. A geochemically anomalous area 200 X 250 metres was and soil sampled. outlined and contained values up to 780 ppb gold. Panning the soils within the anomalous area returned visible flakes of angular gold. In 1980, an I.P. survey (a single-line, test survey) was conducted over the anomalous area and a 100 m long anomaly, believed to be disseminated pyrite, was outlined. This anomalous zone was below the area where gold had been panned from the soils. A gasoline powered, underground-slusher was mobilized onto the property, and a small trench was dug across the anomalous zone. This trench exposed a silicified, pyrite-bearing shear zone, but rock samples from the trench carry only low gold values. Two drill holes were proposed to test the I.P. anomaly at depth; however, the Syndicate was dissolved prior to the drilling, and the property was returned to Mr. McGoran who later allowed the claims to lapse.

As soon as the ground was open to staking, the core area of the original GL claims was covered by the Wren Claim and optioned to **CASTLE MINERALS INC.**

In 1987, CASTLE MINERALS relocated the Syndicate's trench and established a grid over the northern portions of the property east of the trench. Logging activity, especially road building, has exposed the shear zone in several widely spaced road cuts and consequently greatly enlarged its surface dimensions of the original showing. Grid lines 50 m (164 feet) apart were cut over the lower slopes of the Wren and Sparrow Claims. The grid was established to expand the area of known gold mineralization. All grid lines were soil or rock chip sampled at 20 m intervals. In addition to the grid sampling, all logging roads crossing the claim group were sampled at 20 m or 40 m intervals. Approximately 14 line km of grid lines and road traverses were sampled and a total of 899 samples were collected and analysed.

Results of the geochemical programme were very encouraging. Samples ranged from 1 ppb to 5690 ppb. With an anomalous threshold arbitrarily set at 100 ppb gold, over 15% of the samples are anomalous. The results of the geochemical survey were sufficiently encouraging to warrant drill testing some of the anomalous areas. A small programme of 5 drill holes totalling approximately 200 metres was proposed, and in mid-May a BBS-1 drill rig was mobilized to the property.

4.0 DIAMOND DRILL PROGRAMME

Previous geochemical soil sampling has identified an area approximately 200 X 250 metres which is highly anomalous with respect to gold. Angular gold particles were also recovered by panning the soils within the anomalous area. A ground geophysical survey (I.P. survey) outlined a pyrite zone near the centre of the anomalous area, and a small trench, constructed in the area of highest gold values, exposed a silicified shear zone containing pyrite. Subsequent road building has greatly expanded the surface exposure of the silicified shear zone.

Exploration by **CASTLE MINERALS** confirms the previous work and indicates that several shear zones, the widest is approximately 750 metres wide, are present and extend beyond the claim boundaries in both the northern and southern directions.

Five, short drill holes, totalling 219.6 metres (721 feet) were completed. Table II summarizes the drill data and Figure 3 shows the 1989 drill hole locations. All of the core was split, logged, and assayed. On the average, all core was divided into 3 metre (10 feet) sections, split lengthwise, and sent to Acme Analytical Labs. Ltd. for assaying. The core is in temporary storage in West Vancouver. Diamond-drill logs are presented in Appendix A, and assay results are presented in Appendix B.

TABLE II

SUMMARY OF DIAMOND DRILL DATA

Core diameter: AQ wire line

HOLE	NO.	AZIMUTH	DIP	DEPTH
89-1		2280	-700	32.6 m (107')
89-2		2600	· 60 0	60 m (197')
89-3		2550	-600	61.2 m (201')
89-4		1550	-470	43.3 m (142')
89-5		2600	-450	22.5 m (74')

Hole 89-1 was collared to test a gossanous outcrop within an area of anomalous soil and rock samples. The rock was highly fractured and core recovery was poor; however, the bedrock appeared to be a silicified, light greyish-green andesite containing approximately 2 per cent pyrite. Although gold values were generally low, fault gouge (at 21.3 and 27.4 metres) returned 102 and 140 ppb Au and 488 and 722 ppm W respectively. Holes 89-2 and 89-3 were collared a few tens of metres apart and were designed to test an area of high gold geochemistry in rock and soil Hole 89-2 was collared west of Hole 89-3 and was to test what samples. was believed to be a narrow, pink-coloured monzonite dyke within a zone of highly anomalous soil samples. Except of the first 10 metres, which was andesite, the entire hole returned monzonite with minor, narrow (1-3 cm) gold-bearing guartz veins. Hole (89-3) was to test the faulted contact between volcanics to the east and plutonics to the This hole intersected andesite to 21.9 metres with the balance west. of the hole in monzonite. Minor pyrite and pyrrhotite and traces of chalcopyrite were present in the volcanics. The monzonite showed minor propylitic alteration and traces of chalcopyrite. Although the volcanics were commonly sheared, there was no indication of a fault contact between the two igneous rocks. As in Hole 89-2, gold was confined to narrow quartz veins up to 3 cm wide.

Hole 89-4 was drilled to test a large area on anomalous soil samples. The core is composed of argillite to 10.7 m, and the balance of the core was altered andesite. Two 10-foot sections of the argillite contained numerous, quartz stringer which returned gold assays of 185 and 600 ppb.

Hole 89-5 was drilled to test a gold-sulphide and gold bearing shear zone up slope from the area trenched by the previous claim holders. The core contained altered andesite with approximately five per cent pyrite and only traces of gold. The anomalous surface samples were not explained.

The results from the drilling programme indicate that gold is present within fault gouge and appears to be associated with pyrite, in narrow, quartz-veins in the plutonic rocks, and in quartz stringers within an argillite host.



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CASTLE MINERALS INC. WREN CLAIM GROUP RUTHERFORD CREEK AREA 15 MAY TO 15 JULY 1989

GENERAL COSTS

FOOD & ACCOMMODATION:	
4 persons, 67 man-days @ \$45/day	\$12,060.00
SALARIES	21,353.00
VEHICLES/TRANSPORTATION	14,886.00
SUPERVISION:	5,750.00
ENGINEERING AND CONSULTING:	2,802.86
CAMP FUEL:	250.00
ROAD MAINTENANCE & DRILL SITE PREP.	1,300.00
DRILL MOR -DEMOR	2,000.00
DRILL FUEL. OIL. & MAINTENANCE	2,500.00
DIRECT DRILLING COSTS	-
incl drill bits, repairs & drill steel	
721 feet 0 \$15 54/ft	11,207.07
HRLICOPTER.	••
Perperton 206B 2 hrs @ \$600/hr	1,200,00
AGGAVING.	
Acme Analytical Labs.	1 000 50
70 core samples @ \$14.62 ea	1,023.50
	\$ 76 333 13
TUTAL CUSTS	\$ 10,332.43 ===========

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7.0 CERTIFICATE

I, R. A. Gonzalez, do hereby certify that:

1. I am a geologist and reside at 2784 Lawson Ave., West Vancouver, British Columbia.

2. I am a graduate of The University of New Mexico, U.S.A.; with a B.Sc. in geology (1965) and an M.Sc. in geology (1968).

3. I have practiced my profession since 1965 in Canada and abroad as indicated on the following page.

4. I am a Fellow in the Geological Association of Canada, Registration Number 4523.

5. I am a registered member of the Association of Professional Engineers of the Province of Manitoba, Registration Number 3970.

6. I have based this report on a personal examination of the property and on information obtained from the Geological Survey of Canada and engineering reports and other support documents provided by CASTLE MINERALS INC.

7. I have no interest, nor do I expect to receive any interest, either directly or indirectly in the securities or properties of CASTLE MINERALS INC.

8. I have no past or present, direct or indirect interest in any of the listed Mineral Claims or in any other property within the Lillooet Mining District.

9. This report may be used by **CASTLE RESOURCES LTD.** or their agents for a Statement of Material Facts or Shareholders' newsletter, etc. either in whole or in part.

Dated at Vancouver, British Columbia, this 27th day of DECEMBER 1989:

R. A. Gonzalez M.Sc., F.G.A.C.

8.0 STATEMENT OF PROFESSIONAL QUALIFICATIONS

R.A. GONZALEZ, M.Sc., F.G.A.C.

ACADEMIC

1965	B.Sc.	in Geology	The	University	of	New	Mexico,	U.S.A.
1968	M.Sc.	in Geology	The	University	of	New	Mexico,	U.S.A.

PROFESSIONAL

1985	Adder Exploration & Dev. Ltd.	President
1983	Archean Engineering Limited	Overseas Manager
1980-1983	Placer Development y Cia. Ltd. (Chile)	Ass't Exploration Manager
1977-1980	Consultant attached to the Geological Survey of Malaysia	Ass't Project Manager on a C.I.D.A. supported mineral exploration survey over Peninsular Malaysia
1977	Registered with the Association of Professional Engineers of the Province of Manitoba	
1975-1977	Province of Manitoba	Resident Geologist for the Manitoba Dept. of Mines.
1971-1975	Giant Mascot Mines Limited	Senior Geologist
1970-1971	New Jersey Zinc (Canada) Ltd.	Exploration Geologist
1968-1970	Anaconda American Brass Ltd.	Research Geologist
1965-1966	Mex-Tex Mining Co. (U.S.A)	Geologist

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9.0 APPENDIX A - DIAMOND DRILL LOGS

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DIAMOND DRILL RECORD

PROPERTY CASTLE MINERALS INC. WREN CLAIMS

HOLE NO _____ PAGE ____ OF ____

LATITU	DE		DIPS -	collar	-70	AZIMUTH 228°		STAR	TED						
DEPAR	TURE				0	CORE SIZE		COMP	LETED						
ELEVA	TION	<u></u>		·······	0			LENC	TU		<u> </u>				
011557							······		··· ··	32.6, (10	7 fee	∍t)			
SHEET	NO.		-		U	CLAIM N.E. corner of	WREN CLAIM	LOGG	ED BY	Ralph G	onzal	lez			
TARGE	T j	Anomalous AU in s	soil samp	les				DATE							
SECTIO	ON [ft]			BUCK DESC	וחודמופי	N	MINERALIZATI	ON		A	SSA	YS			
FROM	то					N	SUMMARY		SAMPLE	INTERVAL	WIDTH	AU 102/11	1		
0	20	Casing no core						=							
					·····				801	20-30					
2.0	27	Light greyish-g	reen.medi	<u>um-grained_an</u>	desite. (Core highly broken with few	-2% pyrite along	joint	802	30-40					
		fragments large	r than lc	m. Some secti	ons conta	ain euhedral plagioclase 15%	surfaces		803	40-50					
		of total ground	<u>mass wit</u>	<u>h crystals ap</u>	proximate	<u>ely 1mm long, -2% pyrite</u>	-0.5% diss magnet	ite	804	50-57					
		mostly along fra	acture (j	oints?) surfa	ices		at 27'. Minor dis	5	805	72-77					
		Minor ~0.5% magn	netite at	27'	21'-2	27' 1 foot of core recovered	FeOx (siderite?)		806	77-87		· ·			
					27'-3	30' 1.5 feet of core recovered	throughout		807	87-92	1				
		Fault at 19.5-20	 י ו		30'~3	321 1 foot of core recovered				01.72	<u> </u>				
					32'-3	37' 0.5 feet of core recovered					<u> </u>	<u>├</u> ──┤			
					37'-4	7' 0.1 feet of core recovered									
					47'-4	91 1 foot of core recovered									
					491-5	2^{-1} 2.5 feet of core recovered									
					<u> </u>	(2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -									
					72.7	2 U Teel of core recovered	<u> </u>				<u> </u>				
				······································	75'-7	17: 0 6 feet of core recovered									
			·		771 0										
				······	80'-8	21 1 2 feet of core recovered									
					821-0	121 1 5 fact of gore recovered									
					92'-9	7' 0 feet of core recovered									
				······································	97'-1	.07' 0 feet of core recovered									
												†	; †	†	

		T				T		JEL NO: 89-1 1 age 2 0		
from		ROCK		rval	ALTERATION		· · · · · · · · · · · · · · · · · · ·	VEINLETS		
f	t M/Et	DESCRIPTION	/nd fi	to Mift	MINERALIZATION etc.	Thickness mm	Angle to core	minerals in decreasing abunda		
27	30	Fault zone-abundant clay gouge.	27	30	3-5% discontinous veinlets of					
		Light grey 50% clay			pyrite.Veinlets -0.5mm wide					
30	_79	Light_greyish_green_lithic	30	79	Intensely altered to a mixture			-1% diss. euhedral pyrite		
		andesite tuff with rounded	L		of light grey mica(?) (probably					
		fragments upto 4mm long			a mylonite) with minor calcite	ļ		· · · · · · · · · · · · · · · · · · ·		
					along fractures					
		37-47 Fault zone with no core				i				
		recovered								
		47-49 Core ground to pea sized	72	75	Core fractured at 75°t.c.a. and			5% diss. pyrite		
		fragments			25°t.c.aAlso most intense					
		52-72 Fault zone with no core			zone of mylonization					
		recovered								
79	83	Massive light greenish-grey						1-2% pyrite crystals		
		andesite					1	+20% euhedral plagioclase		
		81-83 Highly broken core						crystals upto 1mm long. No		
83	92	Core recovery is -15% fragments						apparent sulphides		
		are plate like 1-4mm thick with								
		fractures possibly at 45°t.c.a.								
		fragments seldom with surface								
		area +1cm. Medium grained,greenis	h							
		lithic andesitic tuff. fragments								
		average 3-4mm in diametre and are								
		usually rounded although some								
		appear_strained and angular								
92	107	Va core								

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LOCA	rion +					amona Uriti Kecord		HOLE NO. 89-2 Page 1 of 3				
AZIM	стн:	260°	DIPS – collar	-6	0 °	CONTRACTOR:		PROPERTY:				
ELEV/	TION	1	– r	n	0	LOGGED BY: Ralph Gonzalez		CLAIM NO.				
LENG	тн:	197 feet	- n	n	0	DATE :			SECTION NO.			
CORE	SIZE	: AQ	- n	n	0				STARTED:			
PURP	OSE ‡	High Au geoch	nemical respose	in roc	k and	soil			COMPLETED :			
Sect	ion	ROC	К	Inte	rval	ALTERATION			VEINLETS			
from (ft)	to (f生)	DESCRIP	TION	from (ft)	to (ft)	MINERALIZATION etc.	Thickness mm	Angle to con	e minerals in decreasing abundance			
0	3	Casing - no core										
3	27	Light greyish-gree	en andesite:	3	18	Fractured @ 50°t.c.a. with epidot	€ 1-3mm	50°	Quartz veinlets with pyrite paralle			
		porphyritic textur	e with plag.			alteration and discontinuous			to veinlet and extending into wall			
]		crystals upto 0-5c	m in length.			quartz veins perpendicular to			rock ±0.5cm Pyrite crystals anhedra			
	_	Weak to moderately	magnetic.			fracture. Alteration zone range			to subhedral and 1-2mm across			
		Locally pink quart	z? amygdules			to 1.5cm.Fracture dinsity 20-25/m						
		upto 2mm				from 7.5ft to 18ft intense epidot	e <u>6</u> .cm		@ 14' Quartz vein - no sulphides!			
						alteration.20% of core in 1cm vei	ns 14cm		@ 14' FeOx altered core			
						and -0.5mm veinlets. Approx. 1%						
						pyrite with an increase to 2-3%						
						in more altered sections						
				18	27	Same as above except reduced -5%	1-3mm		Quartz,plag,epidote veins with			
						epidote alteration			-1% pyrite.Only trace amounts of			
				26	26.5	10cm FeOx and muscovite altered			pyrite in the andesite			
						core						
27	31.5	Light greyish-gree	n,massive,				0.5	50°	75% pyrite as euhedral to subhedral			
		silicified andesit	e						disseminate crystals and as anhedral			
									grains adjacent to quartz veinlets			
T												

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				Di	amond Drill Record	· ~	нс	DLE NO. 89-2	Page ² of 3
Sec	tion	воск	Inte	erval	ALTERATION			VEINLETS	
from (ft)	10 (ft)	DESCRIPTION	from (ft)	lo (ft)	MINERALIZATION etc.	Thickness mm	Angle to core	minerals in d	ecreasing abundance
31.5 31.5	10 (ft) 141	DESCRIPTION Lower contact 30°t.c.a. fractured Coarse grained greyish pink monzonite. Hornblende (mafics) are altered to chlorite 41.5-43.5 Andisite with 5-8% pyrite similar to above Monzonite fractured 30°t.c.a. averaging 5-7/m Most of the core is weak to very weakly magnetic	170m (ft) 27 57 84	10 (ft) 31.5 57 89	MINERALIZATION etc. The lower contact is fractured and altered to quartz,plag.micas and uralitized hornblende FeOx increases toward to lower contact and pyrite decreases over the las foot Traces -0.5% chalcopyrite with FeOx along the rim. Crystals are usually euhedral All of the core shows moderate-to weak propylitic alteration with local phyllic alteration 4cm of quartz vein contact 85°t. Mafics altered to chlorite and a yellowish epidote (?) Colour change increase in pink	l hickness mm	Angle to core	minerals in d	ecreasing abundance
			98 109 106 111 120 137 127	98 109 106 112 128	(FeOx increase) and intense alteration of the mafics to micas (sericite) 4cm quartz vein 40°t.c.a. 3cm quartz vein 2cm quartz vein 90°t.c.a. Sericite alteration 3cm quartz vein 3cm quartz vein Bleached core with slight increa of chalcopyrite	e			

							:		
				Di	amond Drill Record		· []	HOLE NO. 89-2 Page 3	of 3
Sec	tion	ROCK	Inte	erval	ALTERATION			VEINLETS	
from (ft)	to (ft)	DESCRIPTION	from (ft)	lo (ft)	MINERALIZATION etc.	Thickness mm	Angle to cor	c minerals in decreasing abi	undance
		· · ·	135	137	Bleached core with muscovite				<u> </u>
141	197	Coarse grained monzonite grey to							
		pink in colour, non-magnetic to			Chalcopyrite 0.5% with FeOx rims				
		very weakly magnetic. The grey			FeOx rims increase in the more				
		coloured sections reflect and			altered sections.				
		increase in sericite alteration.			141-148,157-172,176-180				
		Generally, however, the core is							
		weakly propylifically altered							
		with mafics + epidote. The							
		sericite development may in part							
		be due to quartz veins	143	144	28cm quartz vein 85°t.c.a.				
		141-145 Sericite altered monzonit	e 172	172	Poor core recovery (50%) between				
		with lft quartz vein @ 143-144			162-172 feet 3cm quartz part of				
		157-172 FeOx abundant and fractur	es						
		@ 20/m with fractures @ 75°t.c.a.							
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LOCA	TION :				Dia	mond Drill Record		н	OLE NO. 89-3	Page 1 of 2
AZIM	UTH:	255°	DIPS - collar	-60	0	CONTRACTOR:		Р	ROPERTY:	
ELEV	ATION	1	– m		0	LOGGED BY: Ralph Gonzalez		C	LAIM NO.	· · · · · · · · · · · · · · · · · · ·
LENG	TH:	201 feet	– m		0	DATE: June 30,1989		S	ECTION NO.	
CORE	SIZE	: AQ	- m		0			S	TARTED:	
PURP	OSE :							C	OMPLETED :	
Sect	ion	ROCI	4	Inte	rval	ALTERATION			VEINLETS	
from (ft)	to (ft)	DESCRIP	TION	from (ft)	to (ft)	MINERALIZATION etc.	Thickness mm	Angle to core	minerals in d	lecreasing abundance
0	10	Casing, no core recover	red							
10	31	Mixture of light green,	fine grained			-0.1 pyrite and local pyrrhotite,odd				
		andesite;greyish,porphy	ritic andesite;			grain of chalcopyrite.Most of the				
		and pink to brownish, co	arse grained			andesitic is weakly to moderately				
		monzonite				magnetic-monzonite is non-magnetic				
		11ft and again at 12ft	5-6cm core of							
		monzonite								
		14.5-16ft Monzonite								
		16-26 Shear zone 10% co.	re							
		26-27 Porphyry andesite								
		27-30 Shear zone with 3	0% recovery							
31	72	Grey, moderately grained	(lapilli?) tuff			Sulphides are 1% pyrrhotite after pyrite			30° and 0° wispy	veinlets and fracture
		with inclusion upto 4mm	across			and very minor chalcopyrite, pyrrhotite f	orm:		filling veinlets	@30°t.c.a.,epidote and
		The bottom lft is more	silicified and			casts and along veinlets where they are		_	quartz are the pr	incipal material with
		contains 5-10% muscovite	e. At the contact w	ith		highly altered to FeOx			minor pyrrhotite	
		the underlying unit is	7cm quartz vein			Some fragments(?) upto 3cm are				
72	201	Coarse grained, pink to	grey monzonite			incorporated in the tuff and are altered				
		fractures @ 70° with der	ndity of 20/m			entirely to epidote				· · · · · · · · · · · · · · · · · · ·
						Mafics are altered to chlorite and epide	ce .		Traces -0.1% of cl	halcopyrite
						Pervasive micas are common in the grey s	ctions			

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					Di	iamond Drill Record	· ~	но	DLE NO. MRO 89-3 Page 2 of 2
	Sec	tion	воск	Inte	rval	ALTERATION		·	VEINLETS
	from	to 	DESCRIPTION	from	to	MINERALIZATION etc.	Thickness mm	Angle to core	minerals in decreasing abundance
		{		116	116	3cm quartz vein-increased mica for 4cm on		{	
					ļ	either side of quartz vein		· ·	
				127	127	7cm quartz vein-contact 90°t.c.a.			
				128	135	Sericite alteration. The core is grey in			
						color and FeOx alteration. Commonly			
						extends 2-3cm on either side of fractures			
						Fractures average 10/m 45-60°t.c.a.			
						0.1% chalcopyrite with 0.5% chalcopyrite			
	ł				Ì	in FeOx zones			
				142	152	Sericite alteration-the core is grey in			· ·
						color with 8 fractures per metre. Fracture	s		
	1					40°t.c.a. several of which have 1-2mm			
	1					thick epidote veinlets along the face			
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LOCA	TION :				Dia	amond Drill Record			HOLE NO. ⁸⁹⁻⁴ Page 1 of
AZIM	UTH:	155°	DIPS - collar	-47	0	CONTRACTOR:			PROPERTY:
ELEV	ATION	1	– m		0	LOGGED BY: R. Gonzalez			CLAIM NO. WREN 1
LENG	iTH:	142'	- m		0	DATE: July 15,1989			SECTION NO.
CORE	SIZE	: AQ	– m		0				STARTED:
PURP	OSE :	High Au geoche	mistry in soils						COMPLETED :
Sect	tion	POC	V	Inte	rval	ALTERATION			VEINLETS
from (ft)	to (ft)	DESCRIP	N PTION	from (ft)	to (ft)	MINERALIZATION etc.	Thickness mm	Ang to co	ne minerals in decreasing abundance
0	14	Casing-No core							
14	35.2	Dark grey argillit	e:core recovery						
		40%,most of the co	ore is fractures						
		and the core is ba	dly ground. 1-2m	m					
		wide carbonate vei	ns averaging						
		1 per meter							
35.2	57	Andesite agglomera	te:dark grey in						
		colour with elonga	te,well rounded						
		fragments upto 50m	m in length and						
		slightly lighter i	n colour,core						
		is vuggy and fract	ured at 10-15°						
		and 15/metre. Vugg	yy are filled						
		with FeOx and MnOx	L						
57	92	<u>Olive green to gre</u>	y pyroclastic	57	58	Olive green colour with abundant			
	ļ	andesite with frag	ments 3-5mm	60	70	FeOx (+5% of surface) also			
		highly fractureu 3	0/metre	74	76	the core is highly altered to	 		
	<u> </u>			83	85	clay esp. at 74-76'		 	
					ļ		ļ		

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				Di	amond Drill Record	-	н	DLE NO. 89-4 Page 2 of 2
Sec	tion	воск	Inte	erval	ALTERATION			VEINLETS
from	to	DESCRIPTION	from	to	MINERALIZATION etc.	Thickness mm	Angle to core	minerals in decreasing abundance
92	142	Light greenish-grey andesite with -2% plagioclase crystals upto 4mm long. Core is massive with fractures at 35° to core and	115	117	Vuggy core with MnOx filling the cavities			
ЕОН		9/metre	121	142		1-2	0,10 upto 30	epidote
		None of the core was magnetic	137	142	The only sulphides seen: 1-3% pyrite euhedral crystals 1-2mm across. The most abundant amount is at the top 137' decreasing downward			

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LOCA	TION :				Dia	amond Drill Record		Γ	HOLE NO. 89-5 Page 1 of 2
AZIM	UTH:	260°	DIPS - collar	45	0	CONTRACTOR:			PROPERTY: WREN GROUP
ELEV	ATION	1	– m		0	LOGGED BY: R. Gonzalez			CLAIM NO. WREN 1
LENC	ith:	74'	- m		0	DATE: July 15,1989			SECTION NO.
CORE	SIZE	: AQ	- m		•				STARTED:
PURP	OSE :	Shear zone with	Au and sulphide	s					COMPLETED :
Sec	tion	ROCI	к	Inte	erval	AITERATION	1		VEINLETS
from (ft)	to (ft)	DESCRIP	TION	from (ft)	to (ft)	MINERALIZATION etc.	Thickness mm	Angle to con	e minerals in decreasing abundance
0	4	Casing no core							
4	10	Weathered light gr	ey andesite,						
		stained rusty brow	n						
10	24	Light grey,f/g and	esite,+20%	10	24	+5% very fine grained sulphides			
		plagioclase crysta	ls,2-4mm long			(pyrite?)			
		60% core recovery						-	
24	43	Lithic tuff compos	ed of light	20	35	Pyrite is less than 1% and			
		olive green,f/g gr	oundmass and			usually poorly formed euhedral			
		dark grey to black	.10-15% f/g			crystals			
		fraqments_upto_6mm	long. Pyrite	41	43	Vuggy quartz vein parallel to			
· · · · · · · · · · · · · · · · · · ·		generally confined	to the mafic			core with FeOx staining			
		fragments. The cor	e becomes						
		"greener" with dep	th and lithic						
		fragments more rou	nded and often						
		with a core of qua	rtz			<u> </u>			
								<u> </u>	

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				÷ .	Dia	amond Drill Record		но	LE NO.	Page 2	of 2
	Sect	ion	ROCK	Inte	rval	ALTERATION			VEINLETS		
	from (ft)	10 (ft)	DESCRIPTION	from (ft)	to (ft)	MINERALIZATION etc.	Thickness mm	Angle to core	minerals in de	creasing ab	undance
	from (ft) 43	to (ft) 74	ROCK DESCRIPTION Light grey, f/g massive andesite slightly metamorphosed with plagioclase and sulphides parallel to schistosity 51-60 Lithic tuff with no visible sulphides 68-70 Light green tuff with local clots and stringers of chlorite Some of the more greenish materia is very talc like to the touch 70-75 core lost	from (ft)	lo (ft)	ALLERATION. MINERALIZATION etc. Pyrite occurs as stringers and and clusters parallel to the schistosity 30-40° to core Pyrite locally may be as high as 5% but usually averages about 1-2% Disseminated and clusters of pyrite parallel to schistosity	Thickness	Angle to core	minerals in de Discontinous qu carbonate vein1 the schistosity 5 veinlets/mete	artz and ets 1-3mm 70 ° to r	undance quartz across core
	}										

10.0 APPENDIX B - ASSAY RESULTS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

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ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR MA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPN. - SAMPLE TYPE: COTE AU* ANALYSIS BY ACID LEACH/AA FROM 10 GK SAMPLE.

DATE RECEIVED: JUN 7 1989 DATE REPORT MAILED: June 12/89 SIGNED BY. C. D. TOYE. C. LEONG. J. WANG: CERTIFIED B.C. ASSAYERS CASTLE MINERALS INC. PROJECT WREN CLAIMS FILE # 89-1369

89-1

302 30-40 1 169 12 215 .2 15 17 958 4.91 2 5 ND 1 26 1 2 2 59 .45 .074 5 21 3.22 205 .03 2 4.55 .03 .09 1 34 803 40-50 1 193 10 188 .3 2 8 225 2.98 7 5 ND 1 12 1 2 2 1 .16 .073 2 1 .99 71 .01 2 1.75 .04 .23 1 .99 71 .01 2 .31 .04 .23 1 .99 71 .01 2 .31 .04 .23 1 .99 .01 .2 .31 .04 .23 1 .99 .01 .2 .31 .14 .04 .23 .11 .42 .23 .01 .02 .31 .14 .42 .23 .04 .17 1 .42 .23	·			10	F01	• •	U				•	2	1.0	•		•	•		••			•	••				•					
903 40 - 50, 1 193 10 188 .3 2 8 225 2.98 7 5 ND 1 12 1 2 2 1 .6073 2 1 .99 71 .01 2 1.75 .04 .23 1 59 804 50 - 57, 2 173 10 100 .1 6 8 307 3.44 4 5 ND 1 14 1 2 233 .11 .055 2 5 1.21 85 .01 2 2.31 .05 .31 1 44 905 72 - 77 3 214 10 100 .2 3 12 645 3.63 6 5 ND 2 19 1 2 20 .001 4 1 1.59 88 .01 2 2.34 .04 .17 1 4 905 72 - 77 3 214 10 100 .2 3 16 5 ND 1 67 1 3 2 59 2.15<	302 30-40,	1	169	12	215	. 2	15	17	958	4.91	2	5	ND	1	26	1	2	2	59	. 45	.074	5	21	3.22	205	.03	2	4.55	.03	.09	I	34
804 50-57, 2 173 10 100 .1 6 8 307 3.44 4 5 ND 1 14 1 2 2 33 .11 .055 2 5 1.21 85 .01 2 2.31 .05 .31 1 45 805 72-77 3 214 10 100 .2 3 12 645 3.63 6 5 ND 2 19 1 2 2 20 .20 .081 4 1 1.59 88 .01 2 2.34 .04 .17 1 41 905 77-87, 1 121 30 102 .4 27 24 1143 3.58 8 5 ND 1 67 1 3 2 59 2.15 .064 4 57 3.47 79 .12 2 4.01 .01 .04 1 14 807 87-92 1 151 12 169 .2 5 9 983 3.97 6 5 ND 2 36 1 3 2 34 .22 .080 10 3 2.48 118 .01 2 3.78 .06 .19 1 15 STD C/AU-R 18 63 41 132 5.6 73 31 1022 3.83 42 22 7 37 51 19 15 18 59 .47 .090 38 56 .88 173 .07 35 1.83 .06 .13 13 490	803 40-50,	1	193	10	198	.3	2	8	225	2.99	7	5	ND	1	12	1	2	2	21	.15	.073	2	1	. 99	71	.01	2	1.75	.04	. 23	1	54
805 72 - 77 3 214 10 100 .2 3 12 645 3.63 6 5 ND 2 19 1 2 2 20 .20 .081 4 1 1.59 88 .01 2 2.34 .04 .17 1 41 906 77 - 87 , 1 121 30 102 .4 27 24 1143 3.58 8 5 ND 1 67 1 3 2 59 2.15 .064 4 57 3.47 79 .12 2 4.01 .01 .04 1 14 807 87 - 92 1 151 12 169 .2 5 9 983 3.97 6 5 ND 2 36 1 3 2 34 .22 .080 10 3 2.48 118 .01 2 3.78 .06 .19 1 15 STD C/AU-R 18 63 41 132 5.6 73 31 1022 3.83 42 22 7 37 51 19 15 18 59 .47 .090 38 56 .88 173 .07 35 1.83 .06 .13 13 490	801 50-57,	2	173	10	100	.1	5	9	307	3.44	4	5	ND	1	14	1	2	2	33	.11	.055	2	5	1.21	85	.01	2	2.31	.05	.31	1	48
805 77-87, 1 121 30 102 .4 27 24 1143 3.58 8 5 ND 1 67 1 3 2 59 2.15 .064 4 57 3.47 79 .12 2 4.01 .01 .04 1 14 807 87-92 1 151 12 169 .2 5 9 983 3.97 6 5 ND 2 36 1 3 2 34 .22 .080 10 3 2.48 118 .01 2 3.78 .06 .19 1 19 STD C/AU-R 18 63 41 132 5.6 73 31 1022 3.83 42 22 7 37 51 19 15 18 59 .47 .090 38 55 .88 173 .07 35 1.83 .06 .13 13 490	805 72 - 77	3	214	10	100	. 2	3	12	645	3.63	6	5	ND	2	19	1	2	2	20	. 20	.081	4	1	1.59	88	.01	2	2.34	.04	.17	1	43
805 77-87, 1 121 30 102 .4 27 24 1143 3.58 8 5 ND 1 67 1 3 2 59 2.15 .064 4 57 3.47 79 .12 2 4.01 .01 .04 1 14 807 87-92 1 151 12 169 .2 5 9 983 3.97 6 5 ND 2 35 1 3 2 34 .22 .080 10 3 2.48 118 .01 2 3.78 .06 .19 1 14 STD C/AU-R 18 63 41 132 5.6 73 31 1022 3.83 42 22 7 37 51 19 15 18 59 .47 .090 38 55 .88 173 .07 35 1.83 .06 .13 13 490																																
807 87-92 1 151 12 169 .2 5 9 983 3.97 6 5 ND 2 36 1 3 2 34 .22 .080 10 3 2.48 118 .01 2 3.78 .06 .19 1 19 STD C/AU-R 18 63 41 132 5.6 73 31 1022 3.83 42 22 7 37 51 19 15 18 59 .47 .090 38 55 .88 173 .07 35 1.83 .06 .13 13 490	305 77-87,	1	121	30	102	.4	27	24	1143	3.58	8	5	ND	1	67	1	3	2	59	2.15	.064	4	57	3.47	79	.12	2	4.01	.01	.04	1	- 14
STD C/AU-R 18 63 41 132 5.6 73 31 1022 3.83 42 22 7 37 51 19 15 18 59 .47 .090 38 56 .88 173 .07 35 1.83 .06 .13 13 490	807 87- 92	1	151	12	169	. 2	5	9	983	3.97	6	5	ND	2	36	1	3	2	34	. 22	.080	10	3	2.48	118	.01	2	3.78	.06	.19	1	19
	STD C/AU-R	19	63	41	132	5.6	73	31	1022	3.83	42	22	7	37	51	19	15	19	59	.47	.090	38	55	. 99	173	.07	35	1.83	.05	.13	13	490

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GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CUTTING AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NAY 29 1989 DATE REPORT MAILED: June 1/89 7. . D. TOYE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS SIGNED BY. CASTLE MINERAL INC. File # 89-1242 CC Mn Fe As U Au Th sr Cd Sb Bi V Ca K W Au* - SAMPLE: Mo Cu Pb Zn Ac Ni P La Cr Mo Ba Ti B Al Na אסם אסם אסם אמת אמת אסם אסם אסם א 00V 00V 5 001 BDM 5 DOM DOD

No turner		rra	rra	rra	rra	rra	rrn	rra	770	رد	rra	ttu	rra	ttu	rra	ttu	rrn	tta	rra	4	c		rra	đ	IIA		r : n	'n		'n	114	110
Sludge	89-1 70'	5	771	22	170	1.3	50	34	592	8.05	2	5	ND	1	56	1	3	2	30	. 29	.085	3	20	1.18	1	.01	12	1.91	.05	.16	488	102
bom Bault zones	89-1 90' 5-	11	525	13	194	. 2	63	21	514	6.48	6	5	ND	1	36	1	4	2	24	.22	.075	2	14	1.01	15	.01	2	1.66	. U 4	.15	722	140

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GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAN SAMPLE IS DIGESTED WITH 3NL 3-1-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 NL WITH WATER. THIS LEACH IS PARTIAL FOR MW FE SR CA P LA CR WG BA TI B W AND LIMITED FOR WA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: COTE AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

July 3/89 DATE RECEIVED: JUN 29 1989 DATE REPORT MAILED: SIGNED BY. CASTLE MINERALS LTD. File # 89-1855

SAMPLE#	Mo PPM	Cu PPN	PD PPM	Zn PPM	Ag PPM	Nİ PPM	CO PPM	Nn PPN	Fe %	As PPM	U PPM	AU PPM	Th PPN	ST PPN	Cd PPN	SD PPM	Bİ PPN	V PPN	Ca %	P %	La PPX	Cr PPN	₩g %	Ba PPM	Ti %	B PPN	Al S	Na X	X X	W PPN	AU* PPB	(
89-2 3-12	1	101	16	137	.1	7	11	1055	3.60	2	5	ND	1	52	1	2	3	92	. 65	.062	3	10	1.07	254	.17	11	2.02	.05	.64	1	18	,
89-2 12-20	3	87	17	169	.1	6	13	1156	2.96	4	5	ND	1	41	1	2	2	49	. 49	.058	4	20	1.06	68	.07	13	1.67	.02	.12	1	5	
89-2 20-27	3	41	11	140	.1	8	13	1182	2.71	2	5	ND	1	49	1	2	2	48	.61	.063	4	9	.93	74	.06	5	1.62	.02	.13	1	5	
89-2 27-31.5	1	72	16	149	.1	8	14	1583	4.67	2	5	ND	1	11	1	2	2	58	. 49	.052	5	12	1.38	35	.01	3	2.26	.01	.13	1	2	
89-2 31.5-42	4	64	12	101	.2	6	9	853	2.53	2	5	ND	1	21	1	2	3	31	.20	.028	5	8	.76	91	.02	7	1.40	.02	.12	1	3	
89-2 42-52	1	74	10	80	.1	5	6	728	2.32	2	5	ND	1	31	1	2	2	30	. 55	.041	1	20	. 58	132	.03	12	1.18	.02	,13	1	6	I
89-2 52-62	2	35	11	40	.1	5	3	451	.90	6	5	ND	1	29	1	2	2	5	.45	.027	7	5	.18	116	.01	4	. 58	.02	.13	3	4	
89-2 62-72	2	37	10	40	. 2	4	3	389	. 88	5	5	ND	1	33	1	2	2	6	. 53	.036	6	6	.21	137	.01	4	. 62	.02	.11	3	12	
89-2 72-82	2	42	6	36	. 2	4	3	349	. 81	2	5	ND	1	35	1	2	2	4	.72	.034	6	5	.13	203	.01	3	. 49	.02	.12	1	8	+ (2)(
99-2 82-92	2	41	11	40	.1	4	3	380	.91	7	5	ND	2	27	1	2	2	5	. 44	.035	8	18	.15	119	.01	6	.55	.02	.12	3	139	gon zon
89-2 92-102	3	37	11	41	.4	5	3	417	. 99	5	5	ND	2	29	1	3	2	4	.40	.032	9	5	.13	168	.01	9	.54	.02	. 12	3	10	-
89-2 102-112	3	62	10	36	.3	6	3	394	, 91	5	5	ND	2	36	1	2	2	4	.40	.032	7	1	.14	178	.01	9	. 57	.02	.14	3	16	ť
89-2 112-122	6	30	7	42	.3	6	3	528	.97	3	5	ND	2	19	1	2	2	3	.35	.036	9	1	.11	98	.01	10	. 49	.02	.14	3	4	
89-2 122-132	1	73	8	30	.1	3	2	491	. 83	2	5	ND	1	55	1	3	2	3	1.31	.034	7	22	.10	104	.01	7	.44	.02	.14	1	13	
89-2 132-142	2	77	7	40	.3	4	3	444	.80	3	5	ND	2	42	1	2	2	3	.90	.045	7	5	.15	87	.01	1	.51	.02	.12	1	5	(
STD C/AU-R	18	60	43	132	6.9	71	31	1015	4.09	41	22	1	37	50	19	15	21	60	.49	.093	39	55	. 84	183	.07	38	1.96	.06	.13	12	490	(

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3NL 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORe AU* ANALYSIS BY ACID LEACH/AA FROM 10 GK SAMPLE.

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SAMPLE	NC PPM	CU PPN	Pb PPM	Zn PPN	Ag PPM	NI PPH	CO PPN	Hn PPM	Fe ۲	As PPM	U PPM	Au PPM	Th PPN	Sr PPM	Cd PPN	Sb PPM	Bİ PPM	V PPM	Ca %	P %	La PP M	Cr PPN	Mg %	Ba PPN	Ti %	B PPM	Al X	Na X	K X	W PPN	Au* PPB	
89-2 142-152	4	35	7	35	1	ŕ	,	348	66	,	8	ND	1	25	1	3	4	3	26	033	۶	7	11	84	PT	4	11	02	12	3	6	
84-7 157-167	1	76	11	19	1	ŭ	1	421	80	ī	7	ND	;	28	1	,	2	5	.20	021	7	,,	12	106	01	ŝ	.64	02	14	4	ž	
89-2 162-172	5	49	12	45		5	1	528	49	28	Ś	ND	3	20	i	1	,	ş	51	.033	10	6	.09	112	.01	12	.57	.02	.14	;	Ę	
89-2 172-192	4	11	13	4.9	;	ž	,	406	84	1	ş	ND	1	33	i	1	;	ç	47	036	Å	Â	15	102	01	5	67	.03	.16	1	,	
89-2 182-187	;	23	10	40	.1	6	3	359	. 70	2	5	ND	1	42	1	2	3	4	.80	.035	8	6	.15	90	.01	5	.57	.03	. 13	i	2	
•••••••••	-		••			•	•	•••		•	•		•		•	•	•	•			•	•				•				•	•	
89-3 10-16	1	42	12	70	.1	6	8	710	2.27	2	5	ND	1	52	1	2	4	42	1.07	.053	1	28	.70	92	.06	8	1.33	.05	.19	1	2	
89-3 16-27	1	86	16	105	.2	5	8	1117	2.67	2	5	ND	1	51	1	2	3	64	.62	.053	6	9	.90	288	.17	11	1.98	.09	.91	1	1	
89-3 27-33	2	60	22	99	.1	7	9	945	2.11	2	5	ND	1	34	1	2	2	38	.65	.054	6	11	. 81	105	.09	2	1.57	.05	. 35	1	7	
89-3 33-43	1	47	24	150	.1	8	10	1257	2.75	2	5	ND	1	33	1	2	2	47	.73	.058	6	11	1.19	92	.09	4	1.87	.04	. 32	1	3	
89-3 43-53	1	56	12	11	.4	5	9	864	2.71	2	7	ND	2	89	1	2	2	70	1.00	.061	6	22	.90	366	.16	8	1.99	.11	. 59	1	2	
																										_						
89-3 53-53	2	53	20	198	.2	6	10	833	2.56	2	5	ND	1	55	1	2	3	62	.82	.070	5	11	. 99	211	.14	5	1.74	.07	.41	1	3	
89-3 63-73	2	47	12	133	.1	5	6	638	1.97	2	5	ND	1	38	1	2	2	29	.61	.043	6	7	. 54	198	.08	2	1.02	.04	.27	1	9	
89-3 73-83	2	12	8	45	.1	3	3	463	.91	2	5	ND	2	36	1	2	2	6	.36	.032	7	6	.23	80	.01	9	.78	.03	.13	2	2	
89-3 83-93	2	13	5	39	.1	4	3	456	.85	3	5	ND	2	34	1	2	2	5	.59	.032	8	6	.19	82	.01	12	.73	.03	.14	1	1	
89-3 93-103	2	17	8	33	. 2	3	3	292	. 69	2	5	ND	2	50	1	2	2	4	.31	.035	5	5	.14	156	.02	14	.61	.04	.15	3	2	
80-3 103-113	2	"	7	41	1	5	2	400	67	,	5	un.	1	44	1	,	,		10	031	5	6	17	140	02	,	63	64	15	1	1	
89-3 113-173	2	17	1	12		ŝ	2	100	.02	;	5	מא תוא	1	32	1	,	2	1		031	, R	10	16	147	01	10		04	15	;	16	et veins
84-3 123-133	4	74	ś	14	1	5	;	551	94	1	ŝ	מא	1	37	1	2	,	i	80	036	4	6	11	99	01	20	51	11	15	1	11	with some
84-3 133-143	1	68	š	34		2	3	354	73	i	, š	พก	1	17	1	;	;	ì	47	039	ŝ	Å	15	222	01	27	57	02	11	1	10	well rock .
89-3 143-153	;	56	5	33	.1	ŝ	3	317	.74	2	5	ND	1	55	i	;	;	i	.92	.036	8	1	.14	253	.01	7	.57	.01	.13	1	2	atteration
	•	**	v		••		J			•			•		•	•	•	1			v	ť				.'				•	•	adjarent
89-3 153-160	1	81	6	40	.4	3	3	359	.75	2	5	ND	3	41	1	2	2	4	.53	.041	7	5	.17	82	.01	11	.60	.03	.13	1	7	5 gtz ve
STD C/AU-R	18	59	- 44	132	1.2	69	31	1020	4.04	42	19	1	37	50	18	15	24	60	.47	.091	39	55	.82	182	.07	35	1.93	.06	.14	11	520	•

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: PI CORE P2 SLUDGE AU* AMALYSIS BY ACID LEACH/AA PRON 10 GN SAMPLE.

SAMPLE#	Ho PPM	Cu PPH	Pb PPN	Zn PPM	Ag PPM	Nİ PPM	CO PPH	Mn PPM	Fe %	AS PPM	U PPM	Au PPN	Th PPN	Sr PPN	Cđ PPN	SD PPM	Bİ PPM	V PPM	Ca %	P %	La PPN	Cr PPM	Mg %	Ba PPN	Ti %	B PPN	Al %	Na %	K %	W PPM	Au* PPB
89-2 192	13	13	12	5	. 3	28	1	108	1.19	21	5	ND	1	1	1	4	2	1	.01	.004	2	33	.01	13	.01	2	.02	.01	.03	9	11
89-4 14-24	2	36	14	104	.1	5	8	859	7.13	11	5	ND	3	20	1	2	2	28	.34	.150	6	3	.74	27	.03	3	3.22	. 02	.16	1	185
89-4 24-34	1	60	18	141	. 2	9	13	1135	6.85	9	5	ND	2	18	1	4	2	52	.25	.083	4	6	1.41	33	.03	5	3.87	.01	,10	1	600
99-4 34-44	1	63	37	211	.1	10	16	2226	6.84	8	5	ND	2	32	1	4	2	100	.46	.116	3	8	2.08	27	.07	4	4.82	.05	.09	1	6
89-4 44-54	1	102	34	213	.3	10	23	2290	7.08	12	5	ND	1	15	2	6	2	86	. 33	.088	2	7	2.21	29	.08	2	4.62	.02	.09	1	18
89-4 54-64	1	56	41	171	.1	9	17	2044	5.34	11	5	ND	1	16	1	2	2	65	. 37	.093	3	5	1.94	42	. 09	2	3.74	. 03	.14	1	4.
89-4 64-74	1	86	14	123	.1	7	14	1544	5.22	3	5	ND	2	17	1	4	2	43	.90	.070	4	4	1.53	40	.05	2	3.24	.02	,16	1	1
89-4 74-84	1	50	11	117	.3	9	14	1427	4.66	15	5	ND	2	10	1	5	2	36	, 33	.078	3	4	1.61	34	.06	2	1.03	.02	.15	1	3
89-4 84-94	1	113	11	144	.3	8	15	1690	5.28	8	5	ND	1	15	1	2	2	48	1.33	.076	3	4	1.59	37	.06	2	3.35	.02	.17	1	3
89-4 94-104	1	70	11	137	. 1	7	16	1646	5.51	8	5	ND	1	11	1	2	2	41	1.33	.072	2	3	1.39	30	.06	2	3.07	.02	.14	1	2
89-4 104-114	1	49	8	142	. 2	7	21	- 1405	5.26	4	5	ND	1	9	1	2	2	32	.57	.078	2	3	1.47	32	.05	2	2.95	.01	.17	1	4
89-4 114-124	1	28	10	125	. 2	6	12	1084	3.02	5	5	ND	1	37	1	4	2	30	1.26	.074	2	3	1.75	30	. 09	2	2.31	.03	.10	1	2
89-4 124-134	1	24	6	111	.1	4	12	1070	3.08	2	5	ND	1	37	1	2	2	29	1.72	.073	2	2	1.67	44	.10	2	2.25	.03	.12	2	1
89-4 134-144	1	23	6	119	.1	5	11	1113	2.92	6	5	ND	1	35	1	2	2	25	1.22	. 073	2	2	1.56	57	.07	2	2.07	.02	.11	1	3
STD C/AU-R	18	58	38	132	6.8	69	31	1024	3.95	42	20	7	36	48	19	14	22	61	.47	.097	38	53	.93	172	.07	35	1.98	.06	.13	11	490

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CASTLE MINERALS INC. FILE # 89-2237

SAMPLE	No	Cu	Pb	Zn	Αç	Ni	Co	Hn	Fe	As	U	Au	Th	Sr	Cđ	Sb	Bi	y	Ca	P	La	Cr	Mg	Ba	Ti	В	Al	Na	K	¥	Au*
	PPM	PPM	PPN	PPM	PPN	PPN	PPN	PPN	Ś	PPM	PPN	PPN	PPM	254	PPR	Pra	rrn	PPM	\$	3	PPM	PPN	3	PPN	3	PPN	3	3	8	PPN	PPB
DDH#4 15-20 A	3	<u>34</u>	12	135	. 1	9	13	B13	5.99	20	5	ND	4	31	1	2	2	24	.37	.114	10	4	.60	84	.03	22.	94.	.01	.13	5	11
DDH#4 20-25 A	3	96	11	94	. 1	8	9	668	7.25	16	5	ND	1	27	1	2	2	21	. 35	.136	10	5	.51	62	.02	22.	38.	.02	.15	1	8
DDH#4 15-20 5	2	89	12	144	.1	9	14	836	7.49	16	5	ND	4	37	2	2	2	24	.42	.117	10	5	.61	97	.03	23.	19.	.02	.13	2	6
DDH#4 20-25 B	4	105	12	99	.1	10	9	690	7.05	11	5	ND	4	33	1	2	2	22	.36	.132	10	5	.47	84	.02	22.	94,	. 02	.22	11	3

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GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MM FE SR CA P LA CR MG BA TI B W AND LIMITED FOR MA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORe AU* AMALYSIS BY ACID LEACHAA FROM 10 GM SAMPLE.

SAMPLE‡	No	Cu	Pb	Zn	λg	Ni	Co	Mn	Fe	λs	U	Au	Th	Sr	Cđ	Sb	Bi	٧	Ca	P	La	Cr	Kg	Ba	Ti	В	Al	Na	K	¥	Au*
	PPM	PPM	PPN	PPN	PPN	PPN	PPN	PPM	1	PPK	PPN	PPH	PPN	PPN	PPN	PPN	PPN	PPH	\$	8	PPH	PPN	1	PPN	ł	PPN	ł	ł	۲	PPH	PPB
89-5 5-15	1	113	20	52	. 5	7	13	929	5.01	10	5	ND	1	15	1	2	2	25	.14	.090	2	3	2.13	44	.10	2	2.19	.03	.10	1	3
89-5 15-25	1	134	38	61	1.7	16	16	1049	4.40	1	5	ND	1	14	1	2	2	40	.18	.075	2	42	2.64	34	.12	2	2.56	.03	.07	1	5
89-5 25-35	1	127	15	80	.3	41	30	1150	4,92	4	5	ND	1	41	1	2	2	117	.90	.088	3	202	4.59	4	.20	2	4.41	.01	.01	1	1
89-5 35-45	1	115	32	60	. 8	37	24	650	4.54	8	5	ND	1	34	1	2	2	85	.50	.090	2	147	3.23	19	.10	3.	3.00	.01	.06	1	4
89-5 45-55	3	69	20	10	2.4	11	17	57	4.22	17	5	ND	1	16	1	3	2	9	.15	.077	2	8	.15	29	.01	2	.78	.04	.13	1	10
89-5 55-65	1	155	573	306	1.3	41	25	2115	5.35	3	5	ND	1	9	2	2	2	109	.32	.098	2	181	4.76	10	.05	2	4.64	.01	.04	1	1
89-5 65-75	2	201	25	258	.8	9	15	648	4.71	16	5	ND	1	12	1	2	2	29	.15	.088	4	6	1.96	24	.01	3	2.47	.03	.12	1	37
STD C/AU-R	19	52	40	133	7.4	73	31	1038	4.11	42	21	8	39	52	20	16	23	64	.45	.090	42	55	.93	181	.08	38	2.05	.06	. 14	13	530