### DUNWELL MINE.

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# HISTORY

The history of the property dates back to about 1912 when it wa operated under the name of the STEWART MINING and DEVELOPMENT CO. It was staked by the Stewart Bros., after whom the village of Stewart was named. Only desultery and intermittent work was done until 1924 when a rich body of ore was struck on the Ben Hur claim. The shares became a market leader on the Vancouver Exchange going from .50  $\not{e}$  to \$ 6.50 a share. A loo ton mill was erected and did well for eight months, but the company had insufficient capital to keep up the development.

In subsequent years the property was turned over to leasers, who, without development probably extracted more than the original company. PROPERTY.

Eight mineral claims and fractions containing 360 acros, more or less with timber rights, etc., Millsite and Powersite.

### EQUIPMENT.

At mine, rail pipe, ore cars, etc., are still there. At the mill there are a number of motors, 50 K.W. Generator, Waterwheels to develop 200 HF, Penstock, and Hydro Compressor, all in need of rehabilitation. There is also a 5,000 foot aerial tram. Partial Mill equipment. BUILDINGS.

At the mine there are buildings to accommodate about 40 men. The Mill building is large enough to accommodate a 200-ton mill. All need some repairs but were of very substantial construction.

# PRODUCTION.

Total contents of ore extracted were as follows:

49,500 tons containing Gold, 12,300 Oz: Silvor, 474,400 oz: Load, 3,120,000 lbs: Zinc, 5,512,00 lbs. Much of this was flux, etc., but the average grade of heavy sulphide ore was: Gold, .30 oz, Silver, 12 oz, Lead 4%, Zinc, 7%. This varies with the printed record, however, the writer can explain this variance as he actually operated the property.

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#### ORE POTENTIAL:

The ore potential makes the property very attractive. At least two locations in the immediate vicinity of the camp should yield one large and one meduim sized ore bodies with very low cost development. Ore bodies are at the junction of shear zones with results, and with a reasonable amount of drilling it should not be very difficult to quickly develop sufficient ore to operate the 100-ton mill which is owned by the company.

#### ECONOMICS.

The mine is a very cheap property to operate. The total local costs under one 140 day operation, using diesel and water power, were \$4.25 per ton. Today the profit ratio (gross) would be 30% to 50% on heavy sulphide ore.

# CHARACTER OF ORES:

Mainly these are divided into three classes:

#### FUTURE:

It is of particular note that Gold values increase (and silver decrease with depth. One block of ore - several thousand tons - in an expesure of the batholithic rock averaged 1.0 oz Gold, 20 oz Silver and 2% Copper. Individual specimans would run up to 30 oz Gold. This is still a sulphide ore with no free Gold showing. The highest grade ore was from the deepest palces in this deposit and was not enriched.

# TRANSPORTATION.

Auto Roads exits to mill and to portal of main haulage at 1200 feet elevation. It takes about 15 minutes from the town of Stewart to the mill, and 50 minutes to the mine. It would be intended to operate the Dunwell Mill as a custom mill for the general Portland Canal Mining District with the Dunwell and Ben Bolt mines as feeders.

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	POUEDOTE OF						
	LOCATION	TONS G	OLD OZ.	SILVER	OZ. LEAD LB	S. ZINC LBS	. COPPEP
	BEN ALI	3,000	3,000	60,000	60,000	4% 240,000	~1° 120,000
	SUNBEAM	100	30	15,000	4,000	10,000	Bag MA LA PA
	SUNDOWN	, 20	10	200	2,400	2,000	Jul Dat Dat Dat
	DUNWELL		· 14 04	1. 14	7.	50%	
	X Sulphide	35,000	8,750	210,000	2,800,000	4,200,000	gang poor poor Sank
	Ø Siliceous	9,000	180	180,000	290,000	720,000	End over even blog
	GEORGE E	300	120	6,000	50,000	240,000	trady many sums grady
	MISC.	100	30	1,200	4,000	100,000	But the sea and
K	MILL TAILINGS	2,000	180	2,000		page send anno sent book duine	but was part and

49,520 12,300 474,400 3,180,400 5,512,000 120,000

- X Figure 7000 tons avoidable waste.
- & This shouldn't be included.

Ore and concentrates have been shipped to following Smelters: Anyox, Trail, Tacoma, Antwerp, Liege, Selby, and it is impossible to obtain any closer record than above: Eliminating tailings and avoidable waste, averages are: .3 Gold, 12oz Silver 4% Load, 7% Zinc.

In explanation of the statistics shoon on the Goverment records, the first return shown on the 27,067 tons is correct for the metals actually paid for by the Belgium smelter, to which they wore shipped, but, to arrive at the correct millhead one would have to add milling losses, smelter deductions, two marine losses and salvage operations around mill years later. These figures are not available, but so far as I can recollect, our average for six months when running through mine ore, was approximately close to the average shown on the fore-going schedule.

It is pointed out that the grades are just what you can economically mine at the time. It will be argued that this ore is gone. All the ore was persumed to be gone when the first 27,000 tons were milled, but subsequent leasers took off more metals than the company, with no development except two short raises. This was unfortunately, during depression, with base metals at no value and silver was quite low.

Actually, all the following locations are potential for further ore.

BEN ALI - A Gold-Copper ore suitable for straight shipping to Tacoma. Quartz vein in face lower tunnel strong, and also should be drilled for parallel bodies. Last ore shipped 6 oz. Gold.

SUNBEAM- Suitable open cut mining and if grade could be maintained at over 30 oz. silver, could be shipped to Tacoma as flux (rates: \$1.00 smelting; \$5.00 freight.)DUNWELL- The leasers never mined above # 3 level as the ore was easier to get below that level. However, N.E.Nelson who was chief geologist for Granby, investigated this The property now consists of eight claims and fractions, all Crown granted, mill and power site. Mill and mine buildings serviceable with some repairs. Tramway still there but probably trucks would be just as cheap. Considerable equipment, rails and pipe still on property. One of the principal advantages of the proporty would be the speed with which the property could get into production and the low captial cost.

It is pointed out that today much of the ore found on the property would, if carefully mined, be straight shipping ore, and this would be an added inducement to anyone proceeding with development.

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area very thoroughly and arrived at the conclusion there was probably a large tennage remaining around # 2 level and that the surface outcrops were not correlated with # 1 or # 2 tunnels. Briefly speaking, the outcrop and vein montioned in Whites report in # 2 level, South, represent another orebody lying in the footwall. A few hundred feet of drilling would prove this. Incidentally, Hanson's Map, Figure No. 1 Geological Survey, Memo 175, clearly shows this also. Other parts of the mine remain to be tested as well. Possibly as much remains as was taken out, if it was thoroughly tested.

GEORGE E-WEST - Good ore in floor - two places. We never touched this because it involved sinking,

GEORGE E-EAST- This is the greatest pottential. The vein is 20-30 feet wide and drift assays about \$4,00 in precious metalsfor its whole length. When this joins fault it should make an extremely large orebody. Developing would be cheap as it only involves a few hundred feet of drift behind the camp.

For the rest, operating costs are low, and especially if the hydro poweris used again. In the Company operations it was \$4.20 mining and milling, which would be about the same. To-day, on a fifty ton basis, the operating costs should not exceed \$10.00 perton, and, if one allows a development cost of \$5.00 per ton on the grade as averaged, it should not \$12.00 to \$15.00 per ton on the Dunwell heavy sulphied ore. Ben Ali usually showed fifty per cent profit.

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The whole point of the consideration is this:

- 1. If this same ore were mined today it would yield about onethird profit, or, at any rate, we will say, about \$500,000 even if we allowed our costs to be two and one-half times as much as when it was mined previously.
- 2. The same values could have been minod with a much less tonnage.
- 3. It is probable that quite a large tonnage could be taken from the Dunwell yet, and within one thousand feet of these workings there is excellent possibilities for two further ore bodies, one of which should be about the same size as the Dunwell, and the other one much larger.
- 4. The low capital cost and speediness with which the operation could get into production.

Competent labor is plentiful, and, for some reason, always has been. The writer has been interested in a similar operation in the same area for the past three years.

L.S.Davidson.

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Vistoria B.C. August 12th, 1925.

To the President and board of Directors, DU NWELL MINES LIMITED, (Non-Personal Liability). VICTORIA. B.C.

Dear .Sirs:-

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Carrying out your instructions to ascertain, sample and report upon the mineral values developed in the Dunwell Mine by the work done up to date, I now report that I have ascertained the following qualities and values:

VEIN	TONNAGE	AVERAGE PER TON	TOTAL
Bel and and bel	Jug and per see and but Sug	gang persi beng sani, sani, gang deng	graß best men went tran
Lead	20,328 )	\$85.25 }	\$1,912,119
Pyrite	750)	38.80 )	•
Quartz # 2 up	2,550	5.50	14,025
Quartz $\#$ 2 down	4,050	7.20	29,160
North # 3	21,335	29,90	637,916
Intermediate vein	9,500	14.00	133,000
	53-515		2. 126.220

Averaging \$46.59 per ton.

The working consists of the following developments:

No.	1	Tunnel	- 184.5	feet
No.	2	Tunnel	. 305.6	u
No.	2	Drift	341.3	11
No.	2	Crosscuts	148.0	11
No.	3	Tunnel	495.0	19
No.	3	Drift	394.6	11
No.	3	Cross cuts -	191.0	11

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110. 4 Junnel	998-0 feet
No. 4 Drift	158,0 "
No. 4 Crosscut	90.0 11
"George E" Tunnel-	600.0 <sup>11</sup>
TOTAL **	-3,906.0 "

In the explanation of the results obtained and my reason for holding a confident degree of dependence thereon, I will deal briefly with the mature of the mineral deposists.

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The vein system, for practical purposes, is divided into three classes:

1. High Lead values as in the Lead Shoot.

2. Heavy Pyrite as in the intermediate vein, and in No. 4 and in "George E".

3. High Silver value as in North # 3 and "Sunbeam".

While my work was primarily confined to the existing developments in the Dunwell mino itself, yet from the standpoint of the degree of dependance, I must bring into account as factors of proof, the two veins found on the Dunwell Company's "Sunbeam" claim. The strike on the "Sunbeam" has on one vein been proven for about 800 feet, and on the other vein about 200 feet; there is every indication that this length will, be extended on both veins, and the classes of ore found add certainty to the fact that the Dunwell mine in the course of ordinary development work will add materially to the quantities of lead and of silver which I have given above; and this ordinary development work as carried on towards the north will be certain to bring in the veins discovered on the surface of the "Sunbeam" claim.

Mining conditions will be very flavorable and mining costs will not exceed the average cost of mining in this Province, and there are no indications in the ore bodies from which to fear any difficulties in working out a system of concentration and milling. under which satisfactory realization of values can be obtained, subjost always to careful experimentation and expert advise as to the process finally to be adopted.

Facilities for transportation, having in view a short distance to tidewater, give the Dunwell Property the most favored situation of any in the district and the combined factors of mining, milling and shipping should certainly be realized at a cost comparing favorably with that of any mine in the Province.

Dealing with the ascertainment of minerals in the Dunwell Mine proper, and reverting to my former classification of (1) High Lead values--(2) Heavy Pyrite-- and (3) High Silver, the following summary will be of assistance:

THE LEAD SHOOT: Galena is found from the open cut above # 1 Tunnel to # 3 Tunnel. While # 1 Tunnel has not encountered the heavy ore appearing in the open cut, yet it shows considerable galena. The heavy body appears to dip down to the East side into # 2 Tunnel where a very heavy showing occurs. Then in # 3 Tunnel, the same heavy galena-blende-pyrite ore is encountered, but has a greater length here. It shows every evisence of continuation below # 3, that is, there are no signs of the walls coming closer together than in # 2 Tunnel. The dyke, which is associated with the vein in # 3, does not appear or is metamorphosed in # 2. Also the south drift on the ore body in # 3 shows that the dyke leaves the ore formation on the hanging or west side. It is therefore only reasonable to continue the main tunnel in # 4 to a point where one is justified at present to assume the ore body or else the formation should be struck. This point, I believe to be no more than 100 feet in, but there is a great possibility of meeting the formation at far less if the general dip of the veins has not been interfered with between the two levels.

Should it be deemed advisable to raise into # 3 tunnel from # 4, then the further east within reason, the shorter footage will be necessary to put the raise into the main lead shoot. Ore in # 2 tunnel assays \$77.50 average per ton, while in # 3 tunnel it runs \$93.00 average per ton. Assuming 50 feet above and below these levels we should have about 21,000 tons. But if the ore body is continous between #2 and #3 as it has every appearance of being, then the tonnage will be very much more. I estimate the value of this deposit at \$1,912,119.00 in gold, silver, lead and zine. There is a vein of decidedly high grade in the south drift of # 2 tunnel. This vein has not been opened up, having only been cut in the tunnel. This is a separte vein in itself and conveniently situated to the lead shoot to be opened up and treated in conjunction. It is mainly quartz showing galena and blende.

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Adjacent to the lead shoot in both # 2 and # 3, is a deposit of quartz containing gold. This would be, as far as I can judge at present, a cyanide proposition, and judging from the thickness of the deposit it must contain considerable tonnage.

Most of the ore in the lead shoot is of such a nature that apart from preferential separation no further treatment may be necessary. By preferential separation I imply that the ground ore will be passed into flotation cells where the lead will be extracted and then afterwards the zine will be extracted. The gangue matter will pass on in the tails- pyrite will probably follow lead and zine in small quantities but it should be induced if possible to follow the lead as it carries values that should not get into a zine concentrate. I have found that by carefully picking out pieces of three ores and ascaying them separately, that the zine does not carry high values, which is favozable, In # 2 tunnel the pyrite which contains considerable chalcopyrite also, runs heavy in

Gold. Experimentation will envolve a flow sheet necessary and I think that owing to the mass of data necessary, before a mill is erected that this should be collected as early as possible. 2. HEAVY FYRITE VEINS: There is a considerable tonnage of milling grade ore in the mine and in the "George E" workings on the west side of the creek. This class of ore might be mixed with the heavy lead ore but most careful experimentation should be carried out before hand as it is often found in flotation that the presence, in one ore or the absence of another of some chemical constituent totally alters the recovery. These heavy pyrite ores can make a profit if they have to be milled separatly, however, but at present with the higher grade ores in sight they make a splendid reserve, and, if continous, would yield 9,500 tons of \$14.00 per ton. 3. HIGH SILVER ORES: Ores of this class are encountered in the north droft of #3 tunnel and on the "Sunbeam" claim. While much of the "Sunbean" ore shows every indication at present of being in the direct shipping class, yet it may be necessary to mill portions of the deposists. There is every liklihood that the tailings from the flotation machines will have to be cyanided owing to the heavy sh showing of native silver. The galena and blende, however, appear to be clean and should present no obstacles to milling, There is some arsenic present on the "Sunbean" but the quantities I have encountered so far are not sufficient to be detrimental.

The values in the north face of #3tunnel are considerably higher than further back the level, and the galena, while not heavy, is however, heavier than further back- further exploration here is most necessary to prove the extent of this stepping up in values. The average of the whole level over 6 feet is \$29.90 per ton. The object I have kept in view in the work alluded to in this Report, has been to ascertain actual values upon which a reliable degree of dependence can be placed, not to deal with hopes or prospects, and for this reason, I have kept down the allowance of ores in place, to what I know will be actually turned into money as a result of mining, and it would be out of place for me, in view of my instructions, to go any further or make any predictions as to the nature of the property, but it must be clearly understood that the values I give are those found in the actual workings, and are not intended to cover the total value of the properties of the Dunwell Company or to indicate that all existing ore deposists have been located, for such is not the case.

Yours truly,

"H. J. White, M.E., E.I.C., A.P.E. Camborne, 1910 Assayer of the Province of B.C." DUNWELL MINES, LIMITED.

Memoir No. 159.

By

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G. Hansen.

The Dunwell Mine is on the east side of Bear River north of Glacier Creek between the Sunbeam Claim on the north and George E claim on the south. The elevation of the lowest adit is 1.250 feet and of the highest, 1.750 feet. The country rock is argillite of the Bitter Creek formation. Several quartzsulphide veins cross the property and one of them has been the objective of extensive underground workduring the past few years. After concluding tests, on the concentration of the ore, the company in 1926 erected an aerial tranway somewhat over a milè long connecting the mine with a 100-ton per day mill which the company built in the same year. Milling operations began early in 1927 and ceased later in the same year.

Several quartz sulphied veins are exposed in the Dunwell mine workings, but only one of them is of commercial importance. The North-South vein, fault A of Figure 12, is cut by adits Nos. 2, 3, and 4 of the mine. Fault A is shown on Figure 12 as A-4, A-3, etc., depending on which level or adit is represented. The veins encountered in the workings west of this fault (Nos. 5, 6, and 7, Figure 12) consists of quartz with very sparse suphide mineralization and have not been followed up. A

quartz vein east of the fault (No. 22 in figure 12) was found in No. 2 and No. 3 adits, but although it contained some galena,

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sphalerite, and pyrite, was below commercial grade and was explored only by two short adits. The Dunwell vein, exposed on the surface and in the four adtis is the only ore-bearing vein so far discovered in the mine. This is No. 23 vein of Figure 12 and is shown there as 23-4, 23-3, etc., depending on which adit is represented. The vein joins the North-South vein and the two continue north as one. North of the junction the vein is known as the North-South vein.

The Dunwell vein is 1 to 7 feet wide, and on # 3 level, where it has drifted on for the greatest distance, including the north-south part, it has a known length of 800 feet. It has a known vertical depth of some 550 feet and depth along the dip of about 800 feet. The Dunwell vein has an average dip of 42 degrees and the North-South vein a dip of approximately 50 degrees. The vein lies on either side or on both sides of a dyke 6 inches to 2 feet wide throughout most of its length and depth. The dyke is present in places only on #2 level and is not known above this level.

The vein is quartz mineralized with pyrite, galena, sphalerite and tetrahedrite. The metallic minerals are disseminated through the quartz and in some places make up 75% of the vein. On the surface and in No. 1 adit the vein is 5 feet wide, contains locally 50 percent sulphide, but is not of commercial grade. Only one ore-shoot is known in the vein. It has a maximum strike length of a 100 feet, a dip length of about 500 feet, and averages probably more than four feet in thickness. The ore-shoot does not extend higher than No. 2 adit and very little of it at all deeper than No. 4 adit. It lies mostly in the Dunwell or No. 23 vein, but extends for 20 feet or less north of the junction with the north-south vein. The ore-shoot is wider than the rest of the vein along the strike, but above and below it, along the dip, the vein is just as wide. The ore-shoot contains higher-grade wein matter than the rest of the voin. The North-South vein north of the ore-shoot is below commercial grade and is less than 5 feet wide. The Dunwell vein south of the oreshoot is also below commercial grade and is less than 3 feet wide.

The available information does not suggest a complete explanation of the origin of the ore-shoot. Many of the veins and all of the known ore-bearing veins in the Portland canal fissure zone are associated with pre-mineral dykes. In the Dunwell mine the dyke accompanying the vein is present in all the underground workings below No. 2 adit, Where the voin is lean as well as where it is rich. The dyke is not present above No. 2 adit and the vein above this level although it is as wide as it is at lower levels, is not of commercial grade. The dyke probably exerted considerable influence in the formation of the voin by guiding or holding the ore-forming solutions within cortain channels, but probably had very little to do with the origin of the ore-shoot. The Dunwell vein joins the North-South vein from the southeast and on No. 3 and 4 adits (See Figure 12) 50 to a 100 feet south of the junction the strike of the voin changes from northwest to north. It is possible that the north-westerly striking part of the voin, which is practically the ore-shoot, may have been formed in a wider or more open shear zone than the rest of the vein. The width of the ore-shoot may be explained in this way, but not the localization of higher grade vein matter. The writer has no data that will completely explain the ore-shoot.

The development at the Dunwell mine is extensive and is practically all under ground. The vein has been entered by 4 adits driven into the mountainside at different elevations. No. 1 adit is a drift 180 feet long. No. 2 adit, 190 feet below and 300 feet west of No. 1 adit, is a crosscut for 280 feet and then enters the Bunwell vein on which about 400 hundred feet of drifting had been done. Two raises have been driven along the dip of the vein to No. 1 adit. No. 3 adit, 160 feet below and 300 feet southwost of No. 2 adit, is a crosscut for 440 feet to where it enters the Dunwell voin. About 1,000 feet of drifting has been done on this level. The ore-shoots between adit: Nos. 2 and 3 has been largely stoped out. A sublevel about 350 long exists 100 feet below No. 3 adit. The ore-shoot has been largely stoped out between No. 3 adit and the sublevel. No. 4 adit 200 feet below and 750 feet southwest of No. 3 adit, is a crosscut for 900 feet to where it enters the Dunwell vein. About 400 feet of drifting has been done on this level. Raises have been driven along the vein to the sublevel and most of the ore has been stoped. A winze has been sunk on the vein for a short distance below # 4 adit, and diamond drill holes have been bored crosscutting the vein 100 feet below the adit.

The top terminal of the aerial tramway is at the portal of No. 4 adit. All the ore mined is taken out of the mine through No. 4 adit and from there sent down on the aerial tramway to the mill. The mill feed is the ore as mined and carries lead, zinc, silver, and gold. The chief mill products are: galena concentrates containing lead, silver and gold. Two hundred tons of run of mine ore shipped in 1926, prior to the erection of the mill, assayed 0.6 ounce gold, 24 ounces of silver, 19 per cent lead and 16 percent zinc. The garde of this shipment was better than the average of the ore mined.

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# DUNWELL MINES, LIMITED.

References: Annual Report of the Minister of Mines, British Columbia, 1920, 1922, 1923, 1924, 1925, 1926, 1927, 1928 and, 1932: Geol. Surv., Canada.

MEMOIR, 159.

The Dunwell Mine is on the east side of Bear River north of Glacier Creek between the Sunbeam Claim on the north and the George E Claim on the south. In 1926 a 100 ton mill was built and connected with the mine by an aerial tramway somewhat over a mile long. Milling began early in 1927 but ceased later in the same year. The elevation of the lowest adit is 1,250 feet and of the highest 1,750 feet.

The country rock is argillite of the lower part of the Hazelton group. Several quartz-sulphide veins cross the property. One of them, the Dunwell vein, is exposed on the surface and in the four adits and is the only ore-bearing vein so far discovered in the mine. One of the other veins occupies a fault fissure and is known as the North-South vein. The Dunwell vein joins the North-South vein and the two continue north as one. North of the junction the vein is known as the North-South vein. The Dunwell vein is 1 to 7 feet wide, and on the No. 3 level where it has been drifted on for the greatest distance, it, and the continuation known as the North-South vein have a combined known length of 800 feet. The Dunwell vein has been flllowed down the dip for about 800 feet to a verteail depth of some 550 feet. The Dunwell vein has an average dip of 42 degrees and the North-South vein a dip of approximately 50 degrees. The Dunwell vein throughout most of its known length and depth lies in one or the other or on both sides of a dyke 6 inches to 2 feet wide, but the dyke is known to be present only below No. 1 level.

The Dunwell vein consists of quartz mineralized with pyrite, galena, Sphalorite and tetrahedrite disseminated through the quartz and in some places making up 75% of the vein. On the surface and in No. 1 adit the vein is 5 feet wide, locally contains 50 percent sulphide, but is not of commercial grade. Only one ore shoot is known. It has a maximum strike length of 100 feet, a dip length of about 500 feet, and averages probably more than 4 feet in thickness. The ore shoot does not extend higher than No. 2 adit and very little if at all deeper than No. 4 adit. It lies mostly in the Dunwell vein but extends for 20 feet or less north of the junction with the North-South vein. The vein where it holds the ore shoot and above and below the ore shoot is wider than elsewhere. The North\*South vein north of the ore shoot is less than 3 feet wide.

The Dunwell vein lies in the Portland Canal fissure zone and like many of the veins and all of the known ore-bearing veins in the Portland Canal fissure zone is associated with a pre-mineral dyke that is present in all the underground workings below No. 2 adit where the vein is lean as well as where it is rich. The dyke probably guidod or hold the one forming solutions within certain channels, but probably had very little to do with the origin of the ore shoot.

The D anwell vein has been entered by 4 adits, The highest adit, No. 1 adit, is at an elevation of 1,750 feet. No. 4 adit is the lowest and its portal is 500 feet below and 1,300 feet

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southwest of that of No. 1 adit. A winze has been sunk on the vein for a short distance below No. 4 adit and diamond drill holes crosscut the vein 100 feet below the adit.

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The mill feed was the ore as mined and carried lead, zinc, silver and gold. The chief mill products were: galena concentrates containing lead, silver, and gold: sphalerite concentrates containing zinc, silver and gold. Two hundred tons of run of mine ore shipped in 1926, prior to the erection of the mill, assayed 0.6 ounce gold, 24 ounces of silver, 19 percent lead and 16 percent zinc. The grade of this shipment was better than the average of the ore mined. The production in 1927 was 27,067 tons of ore yielding 4,805 ounces gold, 102,200 ounces silver, 1,264,700 pounds lead and 1,608,600 pounds zinc. Part of the holdings of the company was worked in 1932 by leasers who produced 27 tons yielding 23 ounces gold, 2,495 ounces silver 2,611 pounds lead and 221 pounds of copper.

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