DIAMOND DRILLING ASSESSMENT REPORT FOR THE VENT CLAIMS

DAVENT PROPERTY

VENT 2 CLAIM

NTS 082G/05

Latitude 49° 26′ N Longitude 115° 55′ W

Owner – Klondike Gold Corp.
711- 675 West Hastings Street
Vancouver, B.C. V6B 1N2

Operator – Same as above

Consultant – Anderson Minsearch Consultants Ltd.
3205 6th. St. South
Cranbrook, B.C.
V1C 6K1

Author - Douglas Anderson, P. Eng., Geologist

Submitted – August 27, 2002

TABLE OF CONTENTS

	Page
1.0 Introduction	**1**
1.10 Property Definition, History, Background Information	1
1.20 Summary of Work Done	2
2.00 Geological Report	**2**
3.00 Summary and Conclusions	**3**
4.00 Itemized Cost Statement	**3**
5.00 Author's Qualifications	**4**

List of Illustrations:

Figure 1	Davent Property Location Map	Scale 1:125,000
Figure 2	Vent Claim Map – Davent Property	Scale 1:20000

Appendix A

Analytical Results for Drill Hole DA02-1

Appendix B

Drill Hole Log

DIAMOND DRILLING REPORT ON THE DAVENT PROPERTY VENT CLAIM

1.0 Introduction

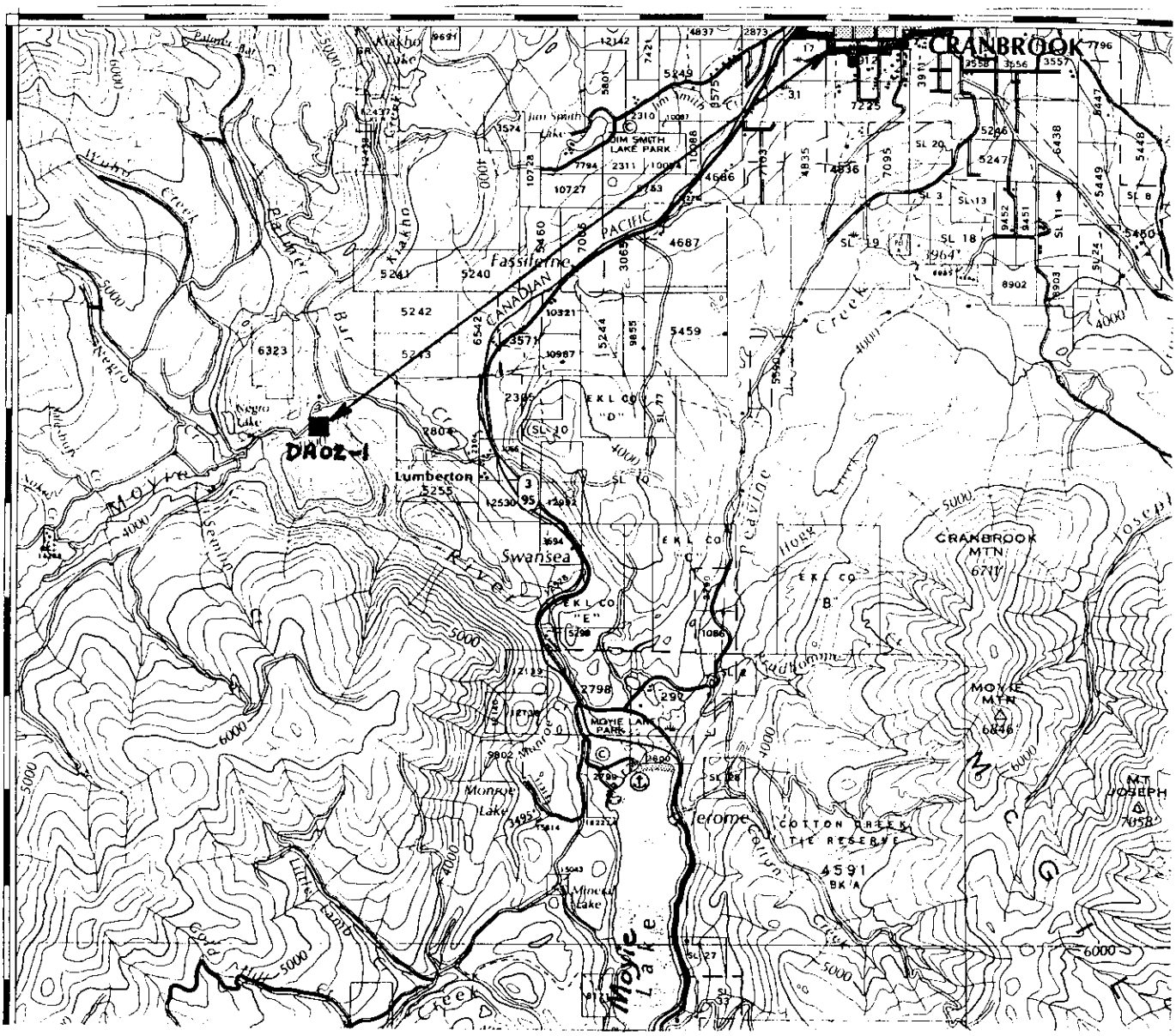
The Davent property (Vent, Smoker claims) is north-south oriented block of claims located about 15 kilometres southwest of Cranbrook, B.C. It is an area of moderate relief but centrally a steep-walled river canyon does create access difficulties. Palmer Bar creek and the Moyie river are the principal drainages. Elevations range from 1100 metres to 1800 metres, covering heavily logged areas on the north, the Moyie river canyon, and logged, burned areas to the south. Access is excellent to all points on the property via the Moyie (Lumberton) river logging road and tributary logging roads to it including the Semlin Creek road. See Location Map (Figure 1) and the accompanying claim map with drill hole location.

1.10 Property Definition, History, and Background Information

The Davent Property consists of the following claims:

Claim Name	Units	Record #	Anniv.Date
Vent 1	1u	361978	2002/10/2
Vent 2	1u	361979	"
Vent 3	1u	361980	"
Vent 4	1u	361981	"
Vent 5	1u	361982	"
Vent 6	1u	361983	"
Vent 7	1u	361984	"
Vent 8	1u	361985	"
Vent 9	1u	361986	"
Vent 10	1u	361987	"
Vent 11	1u	361988	"
Vent 12	1u	361989	"
Vent 16	20u	376106	2002/10/2
Vent 15	10u	376105	"
Smoker 23	20u	376107	"

The current owner of the claims listed above is Klondike Gold Corp. of Vancouver, B.C. The claims are illustrated on Figure 2 included.



DAVENT PROPERTY

VENT CLAIMS – LOCATION MAP

NTS: 82G/05	FIGURE: 2
SCALE: As shown	

The exploration history of the Vent claims and area is quite lengthy and involved, particularly over the last 25 years. This can only be a brief summary of a lot of work. On the claims as they currently exist, evidence of minor work on the Davent fragmental was done in the 1930's pursuing a minor lead-zinc occurrence. Serious, modern exploration started in earnest with the discovery of sulphidic float boulders and uncovering of the Vine vein to the southeast by Cominco. This led to detailed work in the region including mapping, soil geochem and UTEM geophysics surveys. The vein and Sullivan Time were drilled with interesting results but no evidence of a deposit of Sullivan type. Stratabound mineralization was noted at Sullivan Time within an argillaceous sub-zone. Later Cominco pursued the horizon to depth (to the north) drilling three deep holes to Sullivan Time to the east of the Davent property. About the same time, Noranda and Goldpac Investments drilled a deep hole north of the Davent hitting a very interesting thick Sullivan Time interval and pyrrhotiferous fragmental in the footwall. This led to two more holes progressing east, over the next five years. Cominco also drilled a deep hole, just northwest of the Davent hitting a thin, uninteresting Sullivan Time.
To the south, the small Fors occurrence of stratabound lead-zinc sulfides was first explored by Cominco then some junior companies (Consolidated Ramrod and then Citation Resources Inc.) drilled quite a number of holes around this small, focussed vent system with all the Sullivan Indicators. No highly significant mineralization was located. Late in the nineties, Ascot Resources attempted to drill a deep hole on the Smoker property (between Fors and Davent) but ended the hole unsuccessfully in a thick, somewhat cross-cutting gabbro sill. In 2001, geological mapping was completed over part of the property.

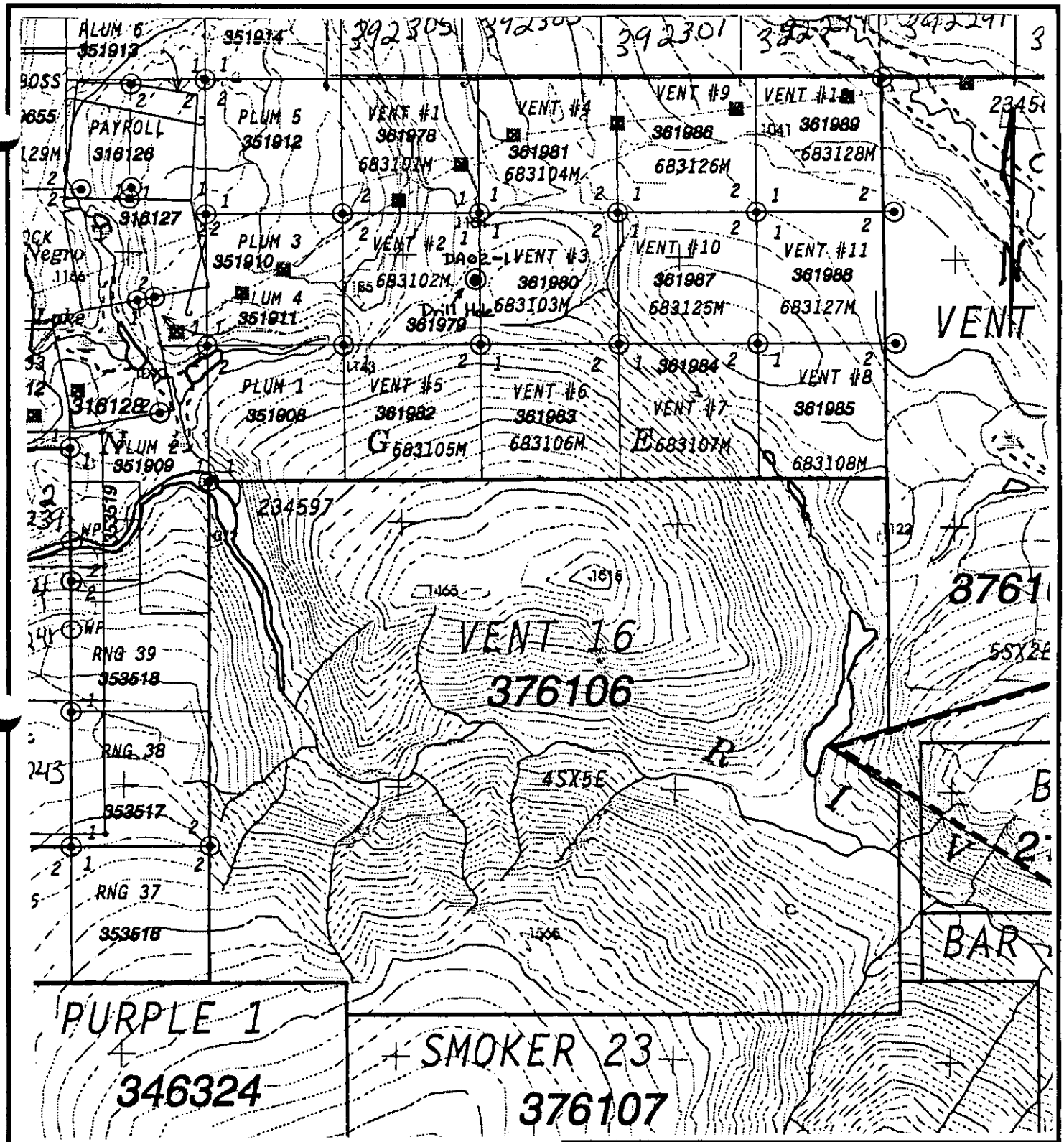
1.20 Summary of Work Done

A single diamond drill hole was completed on Vent 2. Contractor on the hole, Leclerc Diamond Drilling collared the hole on April 26 and completed it on May 22 to a total depth of 1171.3 metres. The drill hole was targeted to drill to the Sullivan Time horizon and successfully cored the interval.

2.00 Diamond Drill Report – Drill Hole DA02-1

Drill hole DA02-1 was a significantly deep hole drilled to test the Lower/Middle Aldridge contact or Sullivan Horizon in an untested area south and west of previous work done by other operators (see History). The surrounding drill holes yielded some positive results at Sullivan Time including an anomalous thickness for Sullivan Horizon and some pyrrhotite, galena, and sphalerite mineralization. A thick fragmental was also intersected which forms part of the horizon in Noranda's hole N-85-1. This information, combined with exposures of stratabound and cross-cutting fragmentals within the Middle Aldridge on the Vent claims, formed the nucleus of reasons to drill the 2002 deep hole.

The hole was collared vertically, adjacent to an outcropping fragmental on the Vent 2 claim. The first few metres below the 21.95 metres of overburden were in fragmental rock then the hole passed into bedded sediments with marker (laminated wackes which can be matched as time stratigraphic units over great distances) control established. This



DAVENT PROPERTY

Davent Drill Hole Location on Claim Vent 2

NTS: 82G/05	FIGURE: 2
SCALE: As shown	

marker indicated we had approximately 920 metres to drill to Sullivan Time stratigraphy. Drilling progress was very satisfactory and continued to drill Middle Aldridge sediments with included marker patterns at intervals down the hole. At a depth of 811.9 metres the hole intersected an unexpected Moyie intrusion. A total core length of 150.92 metres the gabbro is actually a dyke which cross-cuts the sediments at a shallow angle, transgressing up through the section from east to west (based on referring to logs from the surrounding drill holes). Nothing significant occurs in this dyke. The hole continued in Middle Aldridge to a depth of 1114.9 metres at which point Sullivan Horizon is intersected. About 19 metres thick, the horizon is not as diagnostic as in other holes in the area. It consists of a finely laminated top only 2.8 metres thick then a mixed section with poor bedding followed by a massive, quartzitic interval to 1134.8 metres. Lower Aldridge sediments were cored below this depth.

3.00 Summary and Conclusions

Drill hole DA02-1 was successful in its primary purpose of testing Sullivan Time within this part of the basin. Sullivan Horizon was cored as 19 metres between recognizable Middle Aldridge turbidites and Lower Aldridge distal turbidites. The hole was longer than planned due to a low-angle cross-cutting gabbro dyke which transgresses lower Middle Aldridge rocks.

The drill hole was unsuccessful in defining a significant Sullivan Horizon from depositional environment and thickness points of view. It also indicates no synsedimentary footwall activity. The sulfide content is low but some modest lead and zinc geochemistry is identified over short core lengths.

4.00 Itemized Cost Statement

Diamond Drilling all inclusive	$95,829.42
Administration (Cranbrook, Vancouver)	$ 573.68
Equipment (trucks)	$ 1601.97
Food and Lodging	$ 1914.40
Geology (Supervision)	$ 2790.00
Field Supplies	$ 363.98
Travel	$ 757.60
Shipping	$ 294.70
Reclamation	$ 981.10
Geology – consulting; logging; core handling; report writing(2.5d); trucks	$ 8500.28
	$113607.13

5.00 Author's Qualifications

I, Douglas Anderson, Consulting Geological Engineer, have my office at 3205 6th. St. South in Cranbrook, B.C., V1C 6K1.

I graduated from the University of British Columbia in 1969 with a Bachelor of Applied Science in Geological Engineering.

I have practiced my profession since 1969, predominantly with one large mining company, in a number of capacities all over Western Canada and currently within southeastern B.C. as a mineral exploration consultant.

I am a Registered Professional Engineer and member of the Association of Professional Engineers and Geoscientists of B.C., and I am authorized to use their seal which has been affixed to this report.

I am also a Fellow of the Geological Association of Canada.

Dated this 7th day August, 2002

Douglas Anderson, P.Eng., B.A.Sc., FGAC
Consulting Geological Engineer

Appendix A

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Hunting Management Corp. PROJECT P.A.-02-1 File # A201593

[illegible] 172

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
BI	<1	1	<3	4	<.3	1	<1	4	.03	3	<5	<2	<2	2	<.2	<3	<3	1	.08	<.001	<1	2	<.01	3	<.01	<3	<.01	.35	.01	<2
16613	4	34	71	92	<.3	21	12	649	3.64	3	<5	<2	9	14	<.2	<3	8	40	.52	.044	28	38	1.31	172	.18	3	2.24	.15	1.39	4
16614	3	29	451	342	.6	22	11	549	3.17	2	<5	<2	10	11	3.7	<3	<3	31	.29	.046	29	45	1.14	112	.17	4	1.70	.08	1.12	<2
16615	4	27	72	240	<.3	23	10	474	3.00	4	<5	<2	9	9	1.8	<3	<3	25	.33	.044	29	30	1.02	107	.16	4	1.58	.07	.96	4
16616	3	25	41	384	<.3	19	14	296	2.70	4	<5	<2	12	6	5.6	<3	<3	14	.20	.051	32	23	.75	131	.11	3	1.26	.03	.85	<2
16617	3	33	46	441	<.3	20	11	419	3.13	<2	<5	<2	9	7	4.6	<3	<3	20	.35	.045	28	30	.88	87	.13	4	1.30	.06	.57	5
16618	4	35	18	88	<.3	20	14	446	3.17	25	<5	<2	9	6	<.2	<3	3	19	.31	.039	28	38	.74	107	.12	5	1.26	.05	.61	3
16619	2	22	12	58	<.3	20	10	449	2.77	4	<5	<2	12	5	<.2	<3	<3	19	.22	.036	34	26	.68	155	.13	8	1.29	.05	.84	5
16620	1	18	6	60	<.3	15	9	418	2.54	12	<5	<2	10	5	<.2	<3	<3	21	.22	.035	27	39	.67	125	.14	3	1.17	.05	.76	2
16621	2	17	14	62	<.3	17	9	552	2.39	9	<5	<2	10	9	.2	<3	<3	16	.89	.030	25	32	.55	122	.12	4	1.16	.05	.78	8
16622	1	13	5	58	<.3	16	8	358	2.20	11	<5	<2	10	5	<.2	<3	3	18	.19	.031	28	41	.54	144	.13	3	1.13	.05	.85	2
RE 16622	<1	13	10	60	<.3	17	8	365	2.24	11	<5	<2	11	5	<.2	<3	<3	19	.20	.031	29	40	.55	147	.13	3	1.16	.05	.87	3
RRE 16622	3	13	8	58	<.3	16	8	366	2.25	9	<5	<2	11	5	<.2	<3	<3	17	.19	.031	28	27	.54	148	.13	4	1.16	.05	.86	7
16623	2	15	6	65	<.3	15	8	370	2.21	11	<5	<2	10	6	<.2	<3	<3	21	.26	.031	27	40	.57	150	.14	<3	1.15	.07	.87	2
16624	3	17	10	63	<.3	17	9	449	2.61	4	<5	<2	10	9	<.2	<3	<3	21	.41	.034	29	29	.66	156	.14	<3	1.35	.06	.99	6
16625	2	21	7	60	<.3	18	10	361	2.64	4	<5	<2	11	5	<.2	<3	<3	20	.16	.033	30	32	.59	149	.12	4	1.23	.04	.91	<2
16626	2	15	15	55	<.3	15	9	365	2.30	8	<5	<2	10	7	<.2	<3	3	20	.22	.028	28	29	.56	96	.11	<3	1.05	.07	.60	5
16627	1	10	12	58	<.3	15	7	373	2.01	12	<5	<2	10	5	<.2	<3	<3	19	.20	.030	29	29	.58	135	.12	5	1.09	.05	.85	2
16628	3	20	14	48	<.3	17	10	363	2.34	14	<5	<2	10	5	<.2	<3	<3	12	.16	.030	29	27	.51	81	.07	<3	.91	.05	.53	5
16629	1	21	17	48	<.3	14	10	348	2.29	14	<5	<2	9	5	<.2	<3	<3	15	.19	.029	30	31	.52	93	.09	<3	.95	.06	.66	<2
16630	2	15	16	56	<.3	15	9	404	2.17	37	<5	<2	10	5	<.2	<3	<3	15	.16	.030	30	27	.60	105	.11	<3	1.05	.06	.85	4
16631	1	30	19	51	<.3	17	12	371	2.70	12	<5	<2	10	4	<.2	<3	<3	13	.14	.032	29	38	.55	90	.11	4	1.04	.05	.85	2
16632	2	11	43	65	<.3	15	7	485	2.30	11	<5	<2	10	20	.2	<3	<3	25	.37	.031	31	32	.74	128	.14	3	1.35	.09	1.00	4
STANDARD 9K5	9	120	32	152	.3	37	13	843	3.15	31	<5	<2	3	28	5.5	6	6	72	.52	.091	16	177	.57	146	.09	3	1.67	.04	.16	6

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CU, PB, ZN, AS, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 6 2002 DATE REPORT MAILED: June 13/02 SIGNED BY: C. Toye

D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Date FA

Appendix B.

DRILL HOLE RECORD **Klondike Gold Corp**

Property: Davent **Hori. Comp: 148m** **HOLE #: DA02-1**

Location: Just off the Lumberton road at the 5 km mark. **Vert. Comp:** **LENGTH: 1171.3m**
Commenced: April 26, 2002 Completed: May 22/02 **Corr. Dip: -90** **Drill Contractor: Leclerc Drilling**

Coords: Long. **Lat.** **True Bearing: ------** **Core Size: NQ**
Coords: UTM (E) 0578335 **(N) 5475972** **(EL) 1140m** **% Recovery: excellent**
Casing:
Coords: Grid (E) (N) (EL) **Logged date:** **Core Storage: Peavine creek- Vine**
Elevation: **Collar Dip: -90** **Azi:** **Logged by: DA**

OBJECTIVE: To drill test Sullivan Horizon on Vent claim2, adjacent to the Davent fragmental.

Surveys: Depth: 154.5m Dip:-85 Azi: S40W Type: Sperry Sun Depth: 503m Dip: -83 Azi: S45W
Additional Surveys: Depth: 609.7m Dip: -82 Azi: S50W Depth: 915.2m Dip: -83 Azi:S50W Depth: 1170m Dip: -82 Azi: S50W

From	To	
		LITHOLOGY: Thin to thick bedded overall (to 24.3m massive QW with alteration spotting and some clasts) with decreasing quartzite content to depth; argillites are shredded often; scattered sediment clasts.
0	21.95 OB	COLOR: Grey
21.95	47.6	PRIMARY STRUCTURE: Current has been active with t.b. argillites often shredded. Bedding at 78 to 85 to c.a.
		TECTONIC STRUCTURE:Fractures @ 0 to 20 to c.a.
		GENERAL ALTERATION:The quartzites look altered with fine sericite. Clots of salt and pepper textured clast-like material. A function of the alteration.
		MINERALIZATION & ASSOCIATED ALTERATIONS, HOST STRUCTURE: Several less than 1cm wide quartz veins.
		ADDITIONAL OBSERVATIONS:

From	To	
		LITHOLOGY: Much more laminated to thin bedded, argillaceous section and marker material; occassional quartzitic wacke; looks like Kid marker style- about 25% of interval is marker which is not well preserved. (Kid match S90-1)
47.6	54.27	COLOR: Grey to brown
		PRIMARY STRUCTURE: Bedding @ 75 to 80 degrees to c.a.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Perhaps very fine biotite. Some small wedge-shaped crystals at various angles to bedding.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: 46.6m 5 cm vuggy vein with py, po and biotite. Tight 1 – 2mm low angle fractures with Q-py—biotite.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Standard MA style – 60% QcW/ 40% t.b. to laminated wacke to argillite. Dominated by medium bedded, f.g. AE/ACE turbidites. Most QcW/A contacts are planar. Some Q to 1m thick/
54.27	73.7	COLOR: Grey
		PRIMARY STRUCTURE: Bedding at 75 to c.a. Bedding only slightly to moderately disrupted. At 59.6m a few cms of marker.
		TECTONIC STRUCTURE: good solid ground
		GENERAL ALTERATION: :Low
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Nothing to note
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: T.b. and laminated, dominantly Moyie marker (match S-90-4) – only ~50% recovered and somewhat disrupted. (mid section of marker preserved).
73.7	75.2	COLOR: Striped/grey
		PRIMARY STRUCTURE: Bedding is @ 80 to c.a.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Low greenschist

		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Nothing to report.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominated by medium bedded AE/ACE turbidites – disrupted SW beds to more planar with depth. Marker remnants 91.8 – 91.92m; 95.5-96.1m. (Moyie) Inter marker sedimentation.
75.2	102.1	COLOR: Grey to brownish
		PRIMARY STRUCTURE: 75.2 – 82.0m Thinner bedded wackes dominate – often disrupted bedding. Remainder of interval – bedding at 65 to c.a. planar contacts.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Low level greenschist – some sericite developed in the more quartzitic beds. A few garnets developed locally. Some argillites greenish.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Minor pyrrhotite only. Occassional po patch with Cp.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominated by medium to thick bedded quartzitic wackes. Some current erosion – channeling.
102.1	109.33m	COLOR: Grey
		PRIMARY STRUCTURE: Bedding less marked – still at 70 to c.a.
		TECTONIC STRUCTURE: Nothing to note
		GENERAL ALTERATION: Sericite within the more quartzitic units.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Two quartz veins at 15 – 20 degrees to c.a. Arsenopyrite along margins.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominantly medium bedded quartzitic wackes with thin bedded SW breaks which are mostly planar. Still some erosion – sand of argillite. AE turbidiites.
109.33	123.4m	COLOR: Brownish-grey
		PRIMARY STRUCTURE: Bedding is both planar and disrupted. A few shredded argillite intervals. Bedding at 65 – 70 to c.a.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Garnet spotting in more quartzitic units. Some local chloritization. Some alteration clots in the quartzites – silica, chlorite, biotite (small and minor). Incipient meta.

		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: 119.4m Chlorite /albite with po (trace sphalerite).
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominantly t.b. to laminated (marker) wackes. Transitional top with some shredding of argillite beds - rip ups also. A few clasts. There are 20% quartzitic wacke, some altered biotitic. Butte marker- best 136.9 to 137.3m but there are a few scattered, short intervals above.
123.4	139.3m	COLOR: Brownish coloration
		PRIMARY STRUCTURE: Bedding at 70 to c.a.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Fine biotite coloration
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Pyrrhotite is more common – lams and patches, especially 127.5 – 132m. Fractures with po at 15 to c.a.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: More typical MA again - med to thick bedded quartzitic wackes with 10 to 15% subwacke (argillite) tops to turbidites. Rip-ups in contaminated (argillaceous) quartzitic wackes near top of interval. More Butte 151.25 -151.4; 156.6-157.6 suspected Butte (Butte minus) Possible marker at 165.5m
139.3	190.3m	COLOR: Grey
		PRIMARY STRUCTURE: Bedding at 70 – 72 at 151.5m; 75 at 185.5m
		TECTONIC STRUCTURE: Fractured with black chlorite – no significance. 189.3 – 190.3m Fractured with chlorite and py at low angle to c.a.
		GENERAL ALTERATION: typical lower greenschist. 154.5 chloritic argillite, there are a few other patches – pale greenish chlorite/silica combined. Minor fine garnets developed in more porous sands. Sericite and garnets sporadic.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Occassional q.v. with po 169.6 –171.3m 2 q.v. with marginal alteration of silica and bronzite. Po in the veins.
		ADDITIONAL OBSERVATIONS:

From	To	
		LITHOLOGY: Thin bedded to laminated subwacke – Falls marker mostly. Some interbeds of quartzitic wacke.
190.3	194.5m	COLOR: Darker grey
		PRIMARY STRUCTURE: Bedding at 75 to c.a.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Some minor white (calcareous) lozenge shaped, after sericite?
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Nil except po along laminations - not conductive across the core.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Typical MA – thin to medium bedded quartzitic wacke. Argillite are 1 to 10cm and often wavy, eroded.
194.5	208.4	COLOR: Grey light
		PRIMARY STRUCTURE: Bedding at 75 to c.a. Irregular contacts getting more planar with depth.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: White lozenge-shaped clacite after selenite?
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Quartz vein at 20 to c.z. with po. Tight fractures with po and py.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Monroe markder – laminated and thin-bedded wacke.
208.4	210.55	COLOR: Dark grey
		PRIMARY STRUCTURE: Bedding at 75 – 78 to c.a.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Nothing to note
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Pyrrhotite as usual
		ADDITIONAL OBSERVATIONS:

From	To	
From	To	LITHOLOGY: Typical MA – t.b. subwackes (argillites), some finely laminated over 0.5m thicknesses but 75% dominated by thin to thick bedded quartzitic to quartz wackes. A few contacts erosional. Middle Park standard match at 292.25m No stellar quartz wackes.
210.5	368.0m	COLOR: Brownish grey
		PRIMARY STRUCTURE: Most bedding contacts planar. Argillites are not as disrupted – perhaps 10% shredded argillites. Bedding at 80 @ 224m. 82 at 284m; 78 at 317m. Flames/erosion of argillites by sands. Some rip-ups locally.
		TECTONIC STRUCTURE: Nil -short marker intervals 285.56-285.76 Park; 316.75- 317.35 Lamb top; 322.3; 324.8; 328.7-328.75; 329-329.15; 332.35; 338.05; 339.75-339.95; and 347.4-347.5m
		GENERAL ALTERATION: Spotty garnet development; silvery sericite. Vague incipient concretion develoment in some quartzites. Lessen with depth in interval. Argillaceous intervals are often brownish - v.fine biotite(?) Some local silicification.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Pyrrhotite primarily in the f.g. laminated wackes. 211-215m Some q.v. with po, cp, biotite, py at 10 – 20 to c.a. Overall very few. A bit more po as disseminations and patches/lams with the laminated markers.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominated by thick bedded quart wackes. F.g. with < 10% breaks to argillaceous intervals. One marker interval 377.9 – 378.18m.
368	381.8m	COLOR: Grey
		PRIMARY STRUCTURE: Bedding rare - @ 80 to c.a. Some disrupted beds within the quartzites.
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: Fine sericite interspersed. Fractures with q.v. and bounding biotite and or garnets.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Base of zone – q.v. at 75 to c.a.
		ADDITIONAL OBSERVATIONS:

From	To	
From	To	LITHOLOGY: MA typical – medium to thin-bedded; alternating t.b. subwacke and m.b. quartzitic wackes. Few cms of marker lams at 385.5 and 397.8m Some variation in the percentage of quartzites to argillaceous sediments over a few metres of stratigraphy at a time.
381.8	395m	COLOR: Grey-brown
		PRIMARY STRUCTURE: Bedding at 80 to c.a. Bed style varies from planar to irregular, disrupted contacts sand to argillite.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Spotting locally by silica-garnet zones.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Quartz vein with po and cp and biotite. 389.3 – 390.0m at 10 to c.a. Some po disseminated in the bases of the quartzite beds.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: MA – dominated by thinner bedded and more subwacke dominated sections. Quartzitic wackes are t.b. as well. Argillaceous units are lenticular.
395.0	401.0m	COLOR: Grey to brownish
		PRIMARY STRUCTURE: Bedding at 404m is 80 to c.a.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Some silicification of quartzites. Minor garnets.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE:
		ADDITIONAL OBSERVATIONS:

From	To	
401	428.88	LITHOLOGY: Thin to medium to occassionally thick bedded MA. Quartzitic wacke to quartz wackes.
		COLOR: Bluish – grey
		PRIMARY STRUCTURE:Bedding at 80 @ 429.5m. Contacts dominantly planar - some disturbed SW or shredded units but only occassional.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Weak sericite-garnet within quartzitic units.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Pyrrhotite at the bases of quartzitic wackes seem more common. Narrow Q.v. Some small pyrrhotite clots scattered in quartzites.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominantly thin bedded wackes to argillites 75 – 80% of section. Contacts are exclusively planar. Includes Hia 1 marker intervals 436.65 – 437.1 and 438.1 – 439.6m (match @ 439.5-439.6 to SM99-3) and 441.5 – 442.0m. Bedding less obvious in some more massive subwacke.
428.88	444.7m	COLOR: Brownish – grey
		PRIMARY STRUCTURE:
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Low level as usual. Some white (in part calcareous) spotting along lams in some units.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Some massive wackes have enriched po (tr Cp) – a few with vague clasts along the bedding.
		ADDITIONAL OBSERVATIONS:

From	To	
444.7	449.9	LITHOLOGY: Mixed MA, m.b. quartzitic wackes to t.b. subwacke units. Possible minor marker preserved. Occassional dark rip-ups.
		COLOR: Brownish – grey
		PRIMARY STRUCTURE: Bedding at 80 to c.a.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Same as above in mixed lithologies.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE:
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominated by t.b. wackes to subwackes. Planar beds. A few weak, poorly preserved lam'd. marker intervals.
449.9	453.4m	COLOR: Brownish
		PRIMARY STRUCTURE: Bedding at 80 to c.a.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Same as other t.b. units. Biotite in some thin argillites.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Fine po disseminations.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Typicla MA mixed turbiditic package – 60-75% quartzitic. Turbidites AE or ACE style.
453.4	484.75	COLOR: Grey-brown
		PRIMARY STRUCTURE: Bedding planar to lenticular to shredded locally. Beds still @ 80 to c.a. Some rip-ups.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Garnet growths along narrow fratures with q.v. Some bleaching, weak chlorite along fractures.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: A few narrow q.v. at 0 to 15 to c.a. Weak diss. Po., py, cp in qv.
		ADDITIONAL OBSERVATIONS:

From	To	
484.75	491.10	LITHOLOGY: Dominantly thin-bedded wackes/subwackes. Poorly preserved marker intervals over short lengths.
		COLOR: Light grey
		PRIMARY STRUCTURE: Bedding at 85 to c.a.
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Minor bleaching of beds.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Nothing to note.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Dominated by quartz wackes to quartzitic wackes and thicker beds.
491.1	505.9	COLOR: Grey to tan
		PRIMARY STRUCTURE: Bedded
		TECTONIC STRUCTURE: Structural zone 498.2m likely fault zone @ 45 to c.a. Bx zone with quartz. Fine pale chlorite. Bleaching alteration.
		GENERAL ALTERATION: Occassional bleached pale green wacke reflecting structural zone above.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Fractures (tight) with silica.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: MA style – turbidites thin to medium bedded. QcW dominates. Some c.g. QW present. 20cm altered zone against sill.
505.9	529.6	COLOR: Grey
		PRIMARY STRUCTURE: Bedding is quite regular – subject to shredding by sands occassionally. Some wavy beds but a lot is planar. @85 to ca
		TECTONIC STRUCTURE: None
		GENERAL ALTERATION: A few chloritic SW beds. About 523m biotite in argillites due to sill below.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: A few tight fractures with quartz.
		ADDITIONAL OBSERVATIONS:

From	To	
From	To	LITHOLOGY: Moyie Intrusion – sill as contact ~ with bedding. Fine to medium crystalline.
529.6	534.4	COLOR: Dark green
		PRIMARY STRUCTURE:
		TECTONIC STRUCTURE :
		GENERAL ALTERATION: Some chlorite/biotite alteration of hornblende.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Minor fractures with quartz.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Middle Aldridge – dominated by thin to thick bedded quartz wackes. Most bedding contacts are planar. Q/A=85/15 A few c.g. bases to quartzites. Seems to be more biotite with depth. Concretions in the quartzites. More biotite+po in alteration zones in the sands – silicification. There are some short more quartzitic intervals.
534.4	706.5m	COLOR: Grey to grey – brown
		PRIMARY STRUCTURE: Bedding at 70-80 to ca. A few lenticular bedded SW.
		TECTONIC STRUCTURE: None – qv are lenticular gash veins.
		GENERAL ALTERATION: Some tight fracturing in the quartzites with silicification, chlorite, garnets, sericite in the quartzites. Some argillite beds chloritic. Concretions in occassional quartzite, more with depth. Biotite/chlorite laths in argillite beds around 600m. Alteration or meta – more banding with white spotting(calcareous) and biotite. By 635m some argillites altered (soft). Beyond 655m more intense silica.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Usual pyrrhotite. Smears on fractures. Around 610 – a few po rich lams in QcW. 611 Fr at 20 to ca with po,py,sph,galena. 619.5m diss.po with 3mm biotite. 640.2 po adjacent to chl/po. 652.8 Narrow qv with biotite., po, tr galena. 658.8m fr at 15 with po, gal, sph. 662.7m 10cm of silica/chlorite alteration cross-cutting. 0.5cm q-calcite vein at 20 with po,sph,galena at 667.3m.
		ADDITIONAL OBSERVATIONS:

From	To	
706.5	707.5m	LITHOLOGY: Altered sediments – quartz veining and brecciation. Minor fault likely.
		COLOR: Grey-white
		PRIMARY STRUCTURE: Bedding above and below still 70-80 to ca.
		TECTONIC STRUCTURE: Fault likely but not a major – broken ground.
		GENERAL ALTERATION: Clay-like/albitic in part. Bleaching of argillaceous sediments below.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: pyrrhotite
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: MA turbidites dominated by 80% quartzite. Medium to thick bedded. Occassional clast but rare.
707.5	756.7m	COLOR: Grey
		PRIMARY STRUCTURE: Bedding contacts are quite planar – not disrupted as higher in hole. Beds at 80 to c.a. Some grading/
		TECTONIC STRUCTURE: Nil – some tight fractures with q-chlorite+ po.
		GENERAL ALTERATION: Concretions. Some quartzites sericite/quartz rich. Garnet/horn very local. Biotite spotting of argillites.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Fractures with po. Po with chlorite patches at 737.35m 3 –4 mm po band
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Still turbidites but interval is dominated by more t.b. argillaceous units. Some channeling Q into A. 60% argillite/wack
756.7	762m	COLOR: Greenish-brown
		PRIMARY STRUCTURE: Bedding mostly planar @ 85 to ca
		TECTONIC STRUCTURE: Nil
		GENERAL ALTERATION: Quartzites contain garnets, chlorite, biotite+silica.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE:Usual po
		ADDITIONAL OBSERVATIONS:

From	To	
762	811.9	LITHOLOGY: MA – typical quartzite dominated (75%). Medium to thick bedded quartzitic wackes to quartz wackes.
		COLOR: Medium grey
		PRIMARY STRUCTURE: Bedding is somewhat more irregular than above. Keel of argillite into quartzite. At 85 to ca.
		TECTONIC STRUCTURE: More tight fractures with depth with seams of q-calcite. Some gash veins also.
		GENERAL ALTERATION: More pronounced – spherulitic alteration within quartzites. Biotite and chlorite more prominent. From 810 greenish.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Pyrrhotite, traces Cp within Q-cal veins and fr fillings.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Gabbro intrusion – U.Contact at 60 to ca. L.Contact at ~ 55. By 814.5m getting coarser. By 817 very coarsely crystalline to m.c. to 852.5m Very c.crystalline 854.2 – 876.5 Shear 866.4 – 867.3 altered with q.v. Coarse with higher quartz and feldspar. Fine patchy po and cp < 1%. 976.5 – 922m f-m. crystalline; 922- 951.2 coarser crystalline again. 951-962.8 finer towards contact. 876.5 – 895m fine to med crystalline. More qv at 10 to ca. 890 – 903m fracturing
811.9	962.82	COLOR: Dark green
		PRIMARY STRUCTURE: Massive
		TECTONIC STRUCTURE: Fracturing at 20 to ca. Calcite gash veins. 852.5 – 854.2 Shear zone with qv at 0- 30 to ca. Alteration= quartz, chlorite/epidote. Not a lot of sulfides. 890 -903.9 fracture zone with shear at 900.5-903.5 could be a sig structure @ 0 -20 to ca. 922-927m Shear @ 40 to ca – biotite and chlorite
		GENERAL ALTERATION: Chloritized hornblende. Some epidote. Salmon colored mineral along with quartz and chlorite along fractures.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Numerous quartz-calcite veins and fr filling. Very minor Cp with po. Coarser phase has weakly diss. Po+cp . Below fault > 903.9 more po in fr.
		ADDITIONAL OBSERVATIONS:

From	To	
		LITHOLOGY: Dominated by quartz wacke to quartzitic wackes – MA – t.b. wackes/sw are altered intervals to 35cm thick. L.Contact of low angle dyke is @ 55 to c.a. Contacts are overall planar but not sharp. Quartzites dominantly medium bedded and 65-75% of interval. A few clasts towards base of interval.
962.82	1006.72	COLOR: Grey -light colored
		PRIMARY STRUCTURE: Bedding below dyke 70 to ca. Drops to 40 by 964.2m By 970.1 at 75. In structure B@50 to ca at 073.9m. By 977 B @ 80 to ca.
		TECTONIC STRUCTURE: Fracturing at 0 to 20 to ca. but not intense. 966.5-976.5m some fracturing with qv and brecciation. At 976m recent fault at 15 to ca. Irregular floods along irregular fractures – chlorite, biotite, sericite.
		GENERAL ALTERATION: Weak but pervasive chlorite/biotite. In the fractured/veined zones sericite gets intense with a soft orange mineral. A few scattered pinky-orange garnets. Argillites are often chloritic/soft. Quartzites are often locally mottled due to alteration- grey coloration particularly below 991m. Silica, sericite, garnet. Biotite speckling (G). Spotting (fine) by the tan to orangey mineral. Some doubly term. needles.
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Minor pyrrhotite, chalcopyrite traces.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: MA – darker package, overall medium bedded. QcW 5 to 35cm thick but higher argillaceous percentage. (Q:A=50:50) Contacts are planar. Some LA-style bedding but scattered amongst quartzites(mb) Brown biotitic wackes; banded bedding.
1006.72	1035.77	COLOR: Darker grey-brown
		PRIMARY STRUCTURE: Bedding at 80-85 to ca.
		TECTONIC STRUCTURE: Minor fracturing
		GENERAL ALTERATION: Altered gabbro sill 1018.46-1018.66m very biotitic. Green to dark green chlorite laths in argillite. Some argillites still quite chloritic. Garnet/sericite in quartzites.
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: Traces of sphalerite with po along a few tight fractures. 1031.4 – down fractures/narrow qv with po/sphalerite/galena. QV 22cm thick at 1028.7m at 10 to ca. with po + chlorite. 1033.95 – 1035.3m tight fr with po/sphalerite/galena. Discontinuous po lam with minor ZnS.
		ADDITIONAL OBSERVATIONS:

From	To	
		LITHOLOGY: MA – dominated by med-thick quartz wackes, often bleached (silicified) fg and hard. Wackes/sw are t.b., dark grey – some greenish+soft due to fine chlorite (sericite) A few coarse-grained bases to AE turbidites.
1035.77	1114.9	COLOR: Grey (slightly greenish)
		PRIMARY STRUCTURE: Bedding at 80 @ 1039.4; 60 @ 1052m; 80 @ 1060m. Beds are a bit wavy but not disturbed, exception being around 1050m with shredded Subwacke.
		TECTONIC STRUCTURE: More intense fracture zone 1043 -1048.87 tight fracturing; quartz veining + some brecciation with quartz +possible minor albite. Widest qv ~ 20cm. Most fracturing at 0 to 20 to ca. 1086.6 –1088.2m Highly fractured with calcite and qv filling. Shear @ 45 to c.a. Hard, green cherty layers.
		GENERAL ALTERATION: Silicification of quartzites common. Fracturing with po-qv-chlorite-albite. Fine chloritization(fr-related) Some coarseing of t.b. argillites. (some shlorite; also white spheres)
		MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Below ~ 1058m slight increase inpo as patches or weak diss. Lams parallel to B. <1% po in fr sometimes has trace cp and tr sphalerite. 1092.8-1093.3m qv with alteration – chlorite+garnet+po; 1098.05-1098.85m grey qv.; 1109.2-1109.8m gash vein with chlorite-garnet-po.
		ADDITIONAL OBSERVATIONS:
From	To	LITHOLOGY: Sullivan Time - lithologically and depositionally different interval. Finely laminated wackes to 1117.7m then mixed, poorly bedded section of quartzitic wacke to subwacke, some weak, foliated laminated wackes also to 1128.65m.1128.65-1134.8m massive, quartzitic wacke with a few clasts/tiny white clasts. Base of ST is subjective could be extended somewhat into more bedded units but LA style present.
1114.9	1134.8m	COLOR: Grey-brown
		PRIMARY STRUCTURE: Bedding as lams at 70 to ca near top of interval. Bedding still 60-75 to ca 1120-1127m . B at 1128.6m is 65 to c.a.
		TECTONIC STRUCTURE: Fractures with narrow qv and or pyrrhotite.
		GENERAL ALTERATION: Band of albite/chlorite with po in x-cutting qv @ 1117.1m (8cmthick). Some silicification zones obfuscate true nature of rocks over short intervals. (gets more pervasive in the LA below).
		MINERALIZATION & ASSOCIATED ALTERATION; HOST STRUCTURE: 1116.7 Two 2mm thick po lams with galena and sphalerite. Tight fractures at 20 to ca., some with traces of sphalerite in the fractures and diss. adjacent. 1118.15-1118.2m po in fr with Zn and diss.Zn Tr Aspy 1119.5m po fractures with diss. Zn po in fractures/narrow qv -traces of Zn to 1128.65m Fewer mineralized fractures in massive section.
		ADDITIONAL OBSERVATIONS:

From To	LITHOLOGY: Lower Aldridge – as stated discerning change to LA is difficult – do so on basis of some t.b. banded wackes and presence of quartzites and little laminated rock. Made more difficult by alteration (see below) Thin to medium bedded quartzites wacke to wacke. Thin graded turbidites. Some thin cg bases. Quartz grains in a soft matrix.
1134.8 1171.3m	COLOR: Brownish/banded
End of Hole	PRIMARY STRUCTURE: Bedding at top at 60 to ca. B @ 1142 at 60 to ca. At 1171 at 70 to ca. 75 by end of hole.
	TECTONIC STRUCTURE: Fractures with po continue.
	GENERAL ALTERATION: Bleaching/silicification continues/gets more intense to 1151m. Silica, biotite,garnet. Lessen to depth. 1148.3-1148.6 altered gabbro sill or dyke. Some argillite are greenish (chlorite). Biotite and sericite in brownish beds with white spotting.
	MINERALIZATION & ASSOCIATED, HOST STRUCTURE: Pyrrhotite along fractures but only one per 50cm. Around 1142-1145m a few po beds – po-rich to 1 cm thicknesses. No Zn. 1149.95 Narrow fr with po-Pb-Zn. Fracture po lessens with depth.
	ADDITIONAL OBSERVATIONS:

ANALYTICAL RESULTS FOR SULLIVAN TIME

Sample #	From	To	Length	Pb	Zn	As
16613	1114.9	1116	1.0	71	92	3
16614	1116	1117	1.0	451	342	2
16615	1117	1118	1.0	72	240	4
16616	1118	1119	1.0	41	384	4
16617	1119	1120	1.0	46	441	2
16618	1120	1121	1.0	18	88	23
16619	1121	1122	1.0m	12	58	4
16620	1122	1123	1.0	6	60	12
16621	1123	1124	1.0	14	62	9
16622	1124	1125	1.0	5	58	11
16623	1125	1126	1.0	6	65	11

16624	1126	1127	1.0	10	63	4
16625	1127	1128	1.0	7	60	4
16626	1128	1129	1.0	15	55	8
16627	1129	1130	1.0	12	58	12
16628	1130	1131	1.0	14	48	14
16629	1131	1132	1.0	17	48	14
16630	1132	1133	1.0	16	56	37
16631	1133	1134	1.0	19	51	12
16632	1134	1135	1.0	43	65	11