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Grum
Metallurgy

CURRAGH RESOURCES INC.

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INTER OFFICE MEMORANDUM

May 15, 1989

To: Dumitru Tului

From: Cameron V. Reed

Subject: Final Compositing for Grum Metallurgical
Testing Program at Lakefield

Copy to: Gregg Jilson, L. Pigage, E. Blaxland

Two drilling programs carried out at Grum in 1987-88 yielded 776 individual ore samples from twenty-two holes. Nineteen holes were targeted to test the earliest production which comes from the shallowest portion of the main horizon between x-sections 60w to 80w. These holes range from 250' to 450' in depth. In addition, three holes; 87G-01, 87G-02 and 87G-17 were drilled into the Champ Zone which is located in the SE section of the deposit between sections 52w and 60w. Reserves from the Champ Zone are not included in the current mine plan and samples obtained from these holes are excluded from this metallurgical test.

Compositing has been carried out in accordance with the following criteria:

i) Ore type, in accordance with the original core log (conforming to the Anvil area lithostratigraphic code) and where distinctions are possible at realistic separable mining widths. The minimum mining width is about 15 feet. Three different composites were separated on the basis of ore type:

- (1) G1- dominantly 4a rock types (disseminated sulphides - carbonaceous qtzite)
- (2) G2- dominantly 4d rock types (disseminated sulphides - noncarbonaceous qtzite)
- (3) G3- dominantly 4e & 4g rock types (massive sulphide +/- barite)

ii) Porous samples were excluded from all composites. This was done to minimize the effect of drilling additives on metallurgical testing. The quartzite composites - G1 and G2 - are generally non-porous and only a few samples are excluded. The massive sulphide ore types at Grum tend to be more friable and porous than the quartzite ore types. Approximately 30% of the massive sulphide samples collected are excluded which severely limits the amount of sample available for composite G3. Almost all of the Grum massive sulphide samples easily "absorb" water,

thus composite G3 is more likely to contain some amount of drilling additives.

iii) Samples with total oxidation rating higher than 2 (moderately weathered) were excluded from the composites. The 1987 core was kept in cold storage for a year before it was bagged for use in this program. The post-drilling oxidation was logged immediately before the core was bagged to send to Lakefield. A simple numeric code ranging on a scale from 1 to 4 was used. 1 designates slightly oxidized core ranging up to a maximum of 4 indicating extremely oxidized core. Oxidation logging consisted of:

- (1) Weathered condition of the core - original log
 - gives an indication of the insitu weathered condition of the ore. (original log used qualitative descriptions of weathering, ie., slightly, moderately, or very weathered. Qualitative description was subsequently converted to the numeric scale described above)
- (2) Weathered condition of the split or sawed surface of the core.
 - gives an indication of the amount of oxidation occurring during storage of the samples
- (3) Weathered condition of the cut surface of the core.
 - gives an indication of the amount of oxidation which has occurred after the core was removed from the ground.
- (4) Total oxidation rating is the sum of 1,2 & 3. The maximum rating is 12.

The vast majority of samples selected show no visible oxidation at all. Samples with higher than 2 oxidation ratings are generally from ore located at or near the bedrock interface. Overall, this type of feed makes up a small proportion of the total and should not be a priority in this testing program. However, the current mine plan includes significant feed from ore stockpiled over extended periods. At some time in the future, metallurgical testing of more oxidized Grum core may be a concern. Possible sources of additional oxidized material is available in the old Kerr-Addison stockpiles located near the Grum adit.

iv) Mining plan: holes outside of the current IV phase 1 pit are not included in this testing program.

The final selection of composites are described below.

Composite G1: 4a Ore Type

Unit 4a is dark grey to black, moderately hard to very hard, well banded, sulphide bearing, carbonaceous locally micaceous quartzite. Compositional bands usually range from 1mm to 2cm thick. They are dark grey to black, fine grained locally micaceous quartzite interbanded with light grey to locally red-brown quartz-sulphide bands. Pyrite is usually the dominant sulphide species with lesser sphalerite and galena. Locally, base metal sulphide, particularly light reddish-brown sphalerite are dominant. Locally, pyrrhotite replaces pyrite but is

only a minor constituent overall. Carbon content is normally within the 1/4 to 1/2 % range and generally occurs in thin coatings concentrated on thin cleavage surfaces (S1 and S2 surfaces). Chalcopyrite occurs locally in traces as small blebs within sulphide bands and fractures.

Total sulphide content is variable from 15% to 30% and may locally range up to 60%.

4a rock types are more abundant than any other ore facies at Grum and constitute 53% of the millfeed in the I.V. stage 1 pit and 49% of the I.V. ultimate pit millfeed.

Composite G2: 4d Ore Type

Unit 4d is light to medium grey, moderately hard to locally very hard, usually well banded (at Grum) generally well foliated (at Grum), micaceous, pyritic quartzite. The unit is texturally and mineralogically similar to 4a at Grum except that carbon is less abundant. Banding is commonly less well developed and sulphide bands in the high grade ore are characteristically redder in colour and contain less pyrite than 4a. 4d feed grade is slightly higher and gold content is slightly elevated over 4a values. At Grum, contacts with 4a ore are commonly gradational over a few feet making a "clean" separation of these ore types at a mining scale difficult. Included in composite G2 are a few samples of moderately carbonaceous intervals occurring within thick intervals of non-carbonaceous quartzite ore to create a more representative millfeed sample.

4d rock types represent 14% of the millfeed from both the I.V. stage 1 pit and the I.V. ultimate pit.

Composite G3: 4e Ore Type

Dominant rock type of this composite is massive pyritic sulphide (4e) which may locally contain up to 10-30% barite (4g). At Grum, the 4e massive pyritic sulphide is the dominant massive sulphide species. The massive sulphides consist of banded to homogeneous, usually weakly foliated fine grained (at Grum) massive pyrite +/- barite with lesser sphalerite and galena. Total sulphide +/- sulphate content is at least 60%, generally greater than 80% and commonly near 100%. Gangue consists of quartz +/- barite +/- carbonates (calcite, dolomite, ankerite). Accessory minerals include pyrrhotite, magnetite, chalcopyrite, arsenopyrite, and marcasite.

This ore facies is the highest grade millfeed from Grum and represents 33 % of the feed from the I.V. Stage 1 pit and 37% of the I.V. ultimate millfeed.

This composite contains the least amount of sample from the 87 and 88 drilling programs . It is also much higher grade than predicted by the diluted Grum model and is probably the least representative of actual feed composition. It is recommended that a low priority be put on testing massive sulphide until additional sample is collected. 20 holes are planned to be drilled at Grum this summer and additional holes

targeted to intersect thick massive sulphide may be drilled if necessary.

Composite Statistics: Composite weight and assays are calculated from individual sample assays. (weighted to recovered interval * SG)

Comp.	Ore Type	kilograms	SG	%Pb	%Zn	Ag g/t	Au g/t
G1	4a	524	3.03	2.90	5.44	48.48	0.72
G2	4d	217	3.07	3.80	6.38	63.71	0.82
G3	4e	191	3.78	4.91	10.09	87.28	0.93

Diluted G8705 Model Feed Predictions - I.V. Grum Stage 1 Pit
Model diluted 15% at 0 grade Cutoff = 5% Pb+Zn

Comp.	Ore Type	Tonnes *1000	%Feed	%Pb	%Zn	Ag g/t	Au g/t
G1	4a	3,514	53%	2.32	4.25	39.13	0.73
G2	4d	927	14%	3.62	6.43	58.61	0.80
G3	4e	2,170	33%	4.60	6.77	73.83	0.88
Total		6,611	100%	3.25	5.38	53.25	0.79

Diluted G8705 Model Feed Predictions - Ultimate I.V. Grum Pit
Model diluted 15% at 0 grade Cutoff = 5% Pb+Zn

Comp.	Ore Type	Tonnes *1000	%Feed	%Pb	%Zn	Ag g/t	Au g/t
G1	4a	10,516	49%	2.37	4.23	40.12	0.75
G2	4d	2,974	14%	3.18	5.70	52.67	0.77
G3	4e	7,777	37%	4.39	6.95	73.36	1.01
Total		21,267	100%	3.22	5.43	54.03	0.84

G1

BRUM METALLURGICAL COMPOSITE INTERVALS
1987 & 1988 DIAMOND DRILLING PROGRAM

17-May-89

Composite Number :81 Estimate of Composite Weight: 524 KILOGRAMS
Description: Dominately carbonaceous quartzite ore types - 4a - selected intervals contain nonporous samples and have total oxidation (or = 2
Total Intervals: 209

SAMPLE DDHID	FROM (ft)	TO (ft)	INT. (ft)	REC.# (ft)	ACT REC. REC (X)	ROCK TYPE	PULP S.S.	Z Pb+Zn	X Pb	X Zn	Ag (g/ton)	Au (g/ton)	ZSOL Fe	ZINSOL Fe	ZTOTAL Fe	Weather- ing	Porous/ Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
TOTAL:			860.7	960.9	835.5	97.1														
SS & INTERVAL LENGTH WEIGHTED AVERAGE:							3.03	8.34	2.90	5.44	48.48	0.72	2.22	9.24	11.45					
30881 876-05	249.6	252.9	3.3	4.0	3.3	100 4A0	3.4	6.75	3.98	2.77	48.0	3.84	1.12	22.18	23.30	0 np		0	0	0
30882 876-05	252.9	256.7	3.8	4.8	3.8	100 4A0	3.5	1.27	0.45	0.82	15.0	1.17	1.35	27.25	28.60	0 np		0	0	0
30883 876-05	256.7	259.5	2.8	4.3	2.8	100 4A0	3.1	0.77	0.15	0.62	12.0	0.75	1.28	21.22	22.50	0 np		0	0	0
30884 876-05	259.5	264.6	5.1	5.5	5.1	100 4A4	3	10.92	3.82	7.10	58.0	0.86	1.62	9.18	10.80	0 np		0	0	0
30461 876-06	210.0	214.0	4.0	4.3	4.0	100 4E4	3.3	15.64	5.04	10.60	88.0	0.96	1.40	14.80	16.20	0 np		0	0	0
30462 876-06	214.0	217.0	3.0	4.2	3.0	100 4A4	2.9	8.74	2.44	6.30	41.0	0.55	1.86	9.54	11.40	0 np		0	0	0
30463 876-06	217.0	221.5	4.5	4.2	4.2	93 4A4	2.8	5.31	1.47	3.84	27.0	0.21	1.42	1.24	2.66	0 np		0	0	0
30464 876-06	221.5	226.5	5.0	4.6	4.6	92 4A4	2.8	6.18	3.22	2.96	45.0	0.55	0.93	4.29	5.22	0 np		0	0	0
30465 876-06	226.5	231.7	5.2	5.0	5.0	96 4A4	2.9	7.03	1.91	5.12	35.0	0.34	2.46	3.80	6.28	0 np		2	0	0
30467 876-06	235.5	239.5	4.0	5.6	4.0	100 4A4	2	5.83	1.74	4.09	39.0	0.34	1.44	7.84	9.28	0 np		0	0	0
30468 876-06	239.5	242.7	3.2	3.7	3.2	100 4B0	2.8	3.87	0.88	2.99	16.0	0.21	4.07	7.33	11.40	0 np		0	0	0
30469 876-06	242.7	246.8	4.1	2.7	2.7	66 4D0	2.9	6.54	1.69	4.85	28.0	0.21	4.64	5.46	10.10	0 np		0	0	0
30701 876-07	157.0	162.0	5.0	2.5	2.5	50 4A0	2.7	4.41	1.19	3.22	26.0	0.27	0.63	1.74	2.37	0 np		0	0	0
30702 876-07	162.0	165.5	3.5	4.5	3.5	100 4D4	3.2	16.31	6.11	10.20	103.0	1.30	1.90	10.50	12.40	0 np		0	0	0
30703 876-07	165.5	168.5	3.0	3.6	3.0	100 4ED4	3.4	20.63	6.83	13.80	130.0	0.89	5.15	9.25	14.40	0 np		0	0	0
30704 876-07	168.5	172.0	3.5	4.8	3.5	100 4AL	3.2	3.08	1.04	2.04	19.0	0.34	10.30	10.90	21.20	0 np		0	0	0
30705 876-07	172.0	176.0	4.0	4.9	4.0	100 5C48	2.9	3.18	0.54	2.64	10.0	0.07	13.80	4.00	17.80	0 np		0	0	0
30706 876-07	176.0	180.0	4.0	5.1	4.0	100 4A34	3.3	5.91	2.62	3.29	64.0	0.69	2.21	17.59	19.80	0 np		0	0	0
30707 876-07	180.0	183.6	3.6	4.7	3.6	100 4A30	3.2	5.87	1.92	3.95	43.0	0.96	1.97	15.33	17.30	0 np		0	0	0
30708 876-07	183.6	187.6	4.0	4.8	4.0	100 4A30	3.2	3.75	1.40	2.35	33.0	0.48	0.90	20.90	21.80	0 np		0	0	0
30724 876-07	244.1	249.0	4.9	5.8	4.9	100 4A03	3.2	6.38	1.51	4.87	29.0	0.34	2.40	12.90	15.30	0 np		0	0	0
30725 876-07	249.0	254.0	5.0	5.6	5.0	100 4A03	3.2	9.43	2.48	6.95	52.0	0.48	3.37	13.73	17.10	0 np		0	0	0
30726 876-07	254.0	259.0	5.0	5.9	5.0	100 4A03	3.2	7.15	1.80	5.35	41.0	0.69	1.90	18.40	20.30	0 np		0	0	0
30727 876-07	259.0	264.0	5.0	6.3	5.0	100 4A03	3.2	6.55	1.63	4.92	42.0	0.62	2.51	16.39	18.90	0 np		0	0	0
30728 876-07	264.0	269.0	5.0	5.7	5.0	100 4A03	3	7.28	2.35	4.93	41.0	0.75	2.42	13.18	15.60	0 np		0	0	0
30729 876-07	269.0	274.5	5.5	5.5	5.5	100 4A03	3.3	6.93	2.85	4.08	51.0	1.23	1.82	16.88	18.70	0 np		0	0	0
30730 876-07	274.5	279.0	4.5	4.8	4.5	100 4A034	3.8	13.08	9.51	3.57	119.0	2.23	1.40	19.80	21.20	0 np		0	0	0
30731 876-07	279.0	284.0	5.0	5.7	5.0	100 4A034	3.5	10.70	5.25	5.45	69.0	1.37	2.58	15.42	18.00	0 np		0	0	0
30732 876-07	284.0	289.0	5.0	5.5	5.0	100 4A034	3.4	10.80	4.12	6.68	61.0	1.17	2.07	14.63	16.70	0 np		0	0	0
30733 876-07	289.0	294.0	5.0	5.5	5.0	100 4A034	3.3	12.50	7.18	5.32	97.0	1.65	1.83	14.97	16.80	0 np		0	0	0
30734 876-07	294.0	299.0	5.0	5.6	5.0	100 4A034	3.7	9.64	3.75	5.89	53.0	1.85	2.55	17.65	20.20	0 np		0	0	0
30735 876-07	299.0	304.0	5.0	6.0	5.0	100 4A034	3.8	10.88	2.75	8.13	51.0	1.65	2.90	17.30	20.20	0 np		0	0	0
30736 876-07	304.0	309.5	5.5	6.5	5.5	100 4A034	3.9	15.64	5.24	10.40	81.0	2.02	2.82	17.98	20.80	0 np		0	0	0
30737 876-07	309.5	315.0	5.5	6.1	5.5	100 4A03	3.5	5.95	2.25	3.70	43.0	1.17	1.81	19.29	21.10	0 np		0	0	0
30738 876-07	315.0	320.0	5.0	5.4	5.0	100 4A034	3.4	11.33	5.96	5.37	72.0	2.06	1.85	15.25	17.10	0 np		0	0	0
30739 876-07	320.0	322.5	2.5	3.0	2.5	100 4A034	4.1	9.05	4.76	4.35	67.0	1.78	6.39	22.21	28.60	0 np		0	0	0
30740 876-07	322.5	325.6	3.1	3.1	3.1	100 4A04	3	10.88	4.06	6.82	56.0	0.45	4.79	4.80	9.59	0 np		0	0	0
30746 876-07	344.0	348.0	4.0	4.5	4.0	100 4A0	2.8	2.10	0.50	1.60	11.0	0.34	2.34	5.89	8.23	0 np		0	0	0
30747 876-07	348.0	351.8	3.8	4.5	3.8	100 4A0	3.1	9.50	0.75	8.75	11.0	0.07	10.70	1.60	12.30	0 np		0	0	0
30748 876-07	351.8	353.2	1.4	1.8	1.4	100 4ED4	3.1	22.64	7.54	15.10	141.0	1.58	4.37	18.23	22.60	0 np		0	0	0
30749 876-07	353.2	355.6	2.4	3.0	2.4	100 4A0	3.1	1.75	0.69	1.06	20.0	0.41	4.64	9.36	14.00	0 np		0	0	0
30762 876-09	180.0	183.6	3.6	3.9	3.6	100 4A4	2.6	4.20	1.31	2.89	23.0	0.34	0.58	2.52	3.10	0 np		0	0	0

SAMPLE DDWID	FROM	TO	INT.	REC. #	ACT REC.	ROCK	PULP	%			Ag	Au	ZSD	ZINSOL	ZTOTAL	Weather-	Porous/	Core	Split	Total
	(ft)	(ft)	(ft)	(ft)	REC (ft)	TYPE	S.B.	Pb+Zn	Pb	Zn	(g/tnn)	(g/tnn)	Fe	Fe	Fe	ing	Nonporous	Oxidation	Oxidation	Oxidation
30763 878-09	183.6	187.5	3.9	4.3	3.9	100 4A4	2.8	4.41	1.29	3.12	25.0	0.45	0.57	7.03	7.60	0 np	0	0	0	0
30764 878-09	187.5	191.0	3.5	4.8	3.5	100 4A4	3	7.89	2.30	5.59	37.0	0.51	1.02	3.75	4.77	0 np	0	0	0	0
30765 878-09	191.0	193.8	2.8	4.8	2.8	100 4A4	2.7	3.88	1.18	2.70	23.0	0.34	0.95	2.93	3.88	0 np	0	0	0	0
30766 878-09	193.8	203.5	9.7	11.0	9.7	100 4A4	2.8	4.99	1.66	3.33	25.0	0.58	1.86	5.09	6.95	0 np	0	0	0	0
30777 878-09	245.2	247.2	2.0	2.2	2.0	100 4A4	4.1	20.17	11.10	9.07	178.0	2.13	2.90	20.50	23.40	0 np	0	0	0	0
30778 878-09	247.2	252.0	4.8	2.2	2.2	46 4D4	3.2	12.07	5.28	6.79	89.0	0.89	1.71	8.27	9.98	0 np	0	0	0	0
30779 878-09	252.0	256.5	4.5	4.1	4.1	91 4A4	2.9	10.25	3.29	6.96	58.0	0.38	2.80	6.16	8.96	0 np	0	0	0	0
30780 878-09	256.5	261.3	4.8	4.8	4.8	100 4A4	2.9	8.96	2.93	6.03	56.0	0.51	0.99	4.72	5.71	0 np	0	0	0	0
30781 878-09	261.3	265.8	4.5	5.1	4.5	100 4A4	2.8	8.43	2.31	6.12	43.0	0.34	1.05	4.87	5.92	0 np	0	0	0	0
30782 878-09	265.8	270.7	4.9	5.0	4.9	100 4A4	2.7	7.58	1.92	5.66	37.0	0.38	2.13	3.05	5.18	0 np	0	0	0	0
30783 878-09	270.7	275.3	4.6	5.1	4.6	100 4A4	2.8	6.10	1.90	4.20	32.0	0.24	2.14	1.94	4.08	0 np	0	0	0	0
30784 878-09	275.3	279.0	3.7	4.8	3.7	100 5D48(4A4)	3.1	8.63	3.03	5.60	50.0	0.65	3.00	10.90	13.90	0 np	0	0	0	0
30785 878-09	279.0	282.0	3.0	3.7	3.0	100 4A4	3.1	2.57	1.05	1.52	19.0	0.69	6.58	11.52	18.10	0 np	0	0	0	0
30786 878-09	282.0	286.0	4.0	3.7	3.7	92 4A4	2.9	4.50	1.63	2.87	31.0	0.72	4.67	8.83	13.50	0 np	0	0	0	0
30787 878-09	286.0	287.8	1.8	4.9	1.8	100 5D4	3.6	17.68	7.38	10.30	124.0	1.58	1.67	16.53	18.20	0 np	0	0	0	0
30788 878-09	287.8	291.0	3.2	3.2	3.2	100 4D4	2.9	4.32	1.39	2.93	23.0	0.27	4.71	4.33	9.04	0 np	0	0	0	0
30789 878-09	291.0	295.0	4.0	3.0	3.0	75 4A4	3.1	8.33	2.64	5.69	48.0	0.45	2.27	7.48	9.75	0 np	0	0	0	0
30790 878-09	295.0	298.8	3.8	5.0	3.8	100 4A43	2.9	8.42	2.58	5.84	52.0	0.79	1.18	16.62	17.80	0 np	0	0	0	0
30791 878-09	298.8	302.9	4.1	4.8	4.1	100 4A43	2.8	5.30	1.62	3.68	37.0	0.55	1.35	10.65	12.00	0 np	0	0	0	0
30792 878-09	302.9	307.5	4.6	5.0	4.6	100 4D54	3.5	15.01	4.71	10.30	104.0	0.89	2.33	17.67	20.00	0 np	0	0	0	0
30793 878-09	307.5	311.5	4.0	5.0	4.0	100 4D54	3.2	11.42	3.45	7.97	68.0	0.75	1.33	13.77	15.10	0 np	0	0	0	0
30794 878-09	311.5	315.8	4.3	4.9	4.3	100 4A4	3.3	10.99	3.63	7.16	70.0	1.03	1.27	15.93	17.20	0 np	0	0	0	0
30795 878-09	315.8	320.2	4.4	5.0	4.4	100 4A43	3.1	11.49	4.20	7.29	66.0	0.93	1.11	12.09	13.20	0 np	0	0	0	0
30796 878-09	320.2	324.2	4.0	5.0	4.0	100 4A43	3.2	15.55	5.74	9.81	93.0	0.96	1.88	8.62	10.50	0 np	0	0	0	0
30797 878-09	324.2	330.9	6.7	4.9	4.9	73 5D48	3.7	7.87	2.62	5.25	47.0	0.45	7.96	10.14	18.10	0 np	0	0	0	0
30121 878-10	293.2	298.6	5.4	5.6	5.4	100 4E4	4.3	25.54	9.24	16.30	153.0	1.41	2.98	21.02	24.00	0 np	0	0	0	0
30122 878-10	298.6	303.1	4.5	5.2	4.5	100 4D0	3.3	7.14	2.76	4.38	40.0	0.82	2.40	11.70	14.10	0 np	0	0	0	0
30123 878-10	303.1	307.6	4.5	5.2	4.5	100 4D0	3	6.61	2.28	4.33	27.0	0.55	3.14	5.41	8.55	0 np	0	0	0	0
30124 878-10	307.6	312.6	5.0	5.3	5.0	100 4A4	2.8	8.35	2.44	5.91	36.0	0.31	0.90	3.58	4.48	0 np	0	0	0	0
30125 878-10	312.6	317.1	4.5	5.3	4.5	100 4A4	2.8	7.97	2.27	5.70	35.0	0.41	1.06	3.47	4.53	0 np	0	0	0	0
30126 878-10	317.1	321.2	4.1	4.3	4.1	100 5B621	2.8	3.05	0.92	2.13	17.0	0.10	2.35	0.93	3.28	0 np	0	0	0	0
30127 878-10	321.2	325.0	3.8	4.4	3.8	100 5B621	2.8	4.37	1.79	2.58	26.0	0.41	1.30	1.56	2.86	0 np	0	0	0	0
30128 878-10	325.0	326.7	1.7	1.4	1.4	82 4A4	2.9	6.62	4.52	2.10	69.0	0.96	3.05	5.05	8.10	0 np	0	0	0	0
30129 878-10	326.7	330.1	3.4	3.9	3.4	100 5B62	2.8	1.25	0.37	0.88	7.0	0.14	2.02	1.54	3.56	0 np	0	0	0	0
30130 878-10	330.1	334.2	4.1	4.9	4.1	100 4A0	2.9	5.38	1.52	3.86	28.0	0.34	3.16	8.94	12.10	0 np	0	0	0	0
30131 878-10	334.2	337.8	3.6	4.5	3.6	100 4A4	3	10.11	3.72	6.39	59.0	0.65	1.57	9.83	11.40	0 np	0	0	0	0
30132 878-10	337.8	342.0	4.2	4.3	4.2	100 4A4	3.3	15.26	5.57	9.69	87.0	1.47	1.39	11.41	12.80	0 np	0	0	0	0
30133 878-10	342.0	346.0	4.0	4.6	4.0	100 4A43	2.9	3.01	1.18	1.83	25.0	0.38	3.28	7.12	10.40	0 np	0	0	0	0
30134 878-10	346.0	367.9	2.9	3.7	2.9	100 4A4	3	6.52	2.11	4.41	43.0	0.48	1.24	9.56	10.80	0 np	0	0	0	0
30135 878-10	367.9	373.3	5.4	6.3	5.4	100 4D0	3.1	6.43	1.82	4.61	42.0	0.62	0.93	11.97	12.90	0 np	0	0	0	0
30136 878-10	373.3	378.1	4.8	5.2	4.8	100 4A44	3	16.50	5.20	11.30	89.0	1.03	1.44	7.51	8.95	0 np	0	0	0	0
30137 878-10	378.1	382.7	4.6	5.2	4.6	100 4A44	3.4	24.50	7.60	16.90	127.0	1.47	2.19	9.21	11.40	0 np	0	0	0	0
30138 878-10	382.7	387.3	4.6	5.2	4.6	100 4A44	3.4	22.22	7.52	14.70	112.0	1.20	2.24	11.16	13.40	0 np	0	0	0	0
30139 878-10	387.3	392.7	5.4	6.5	5.4	100 4D5	3.2	10.11	3.58	6.53	57.0	0.51	3.77	7.83	11.60	0 np	0	0	0	0
30140 878-10	392.7	397.0	4.3	5.3	4.3	100 5D48	2.9	6.30	0.74	5.54	13.0	0.14	8.71	1.99	10.70	0 np	0	0	0	0
30141 878-10	397.0	400.0	3.0	3.1	3.0	100 4A4	3.1	10.74	3.82	6.92	70.0	0.55	3.70	8.80	12.50	0 np	0	0	0	0
30798 878-11	133.5	136.0	2.5	3.2	2.5	100 4A4	2.8	6.59	2.70	3.89	39.0	0.41	0.75	2.87	3.62	2 np	0	0	2	2
30799 878-11	136.0	141.0	5.0	1.1	1.1	22 4A4	2.8	6.59	2.70	3.89	39.0	0.58	0.75	2.87	3.62	2 np	0	0	2	2
30800 878-11	141.0	146.0	5.0	3.3	3.3	66 4A4	2.7	5.15	1.42	3.73	30.0	0.31	0.74	6.14	6.88	1 np	0	0	1	1
30801 878-11	146.0	149.0	3.0	4.4	3.0	100 4A4	2.8	5.00	1.53	3.47	34.0	0.27	0.62	5.11	5.73	1 np	0	0	1	1
30802 878-11	149.0	152.0	3.0	3.2	3.0	100 4A4	2.9	9.26	2.38	6.88	46.0	0.24	0.99	4.32	5.31	1 np	0	0	1	1
30803 878-11	152.0	156.0	4.0	3.9	3.9	97 4A4	3.1	8.26	2.84	5.42	48.0	1.13	1.19	10.61	11.80	1 np	0	0	1	1
30804 878-11	156.0	159.0	3.0	5.0	3.0	100 4A4	2.9	11.68	4.48	7.20	30.0	0.75	2.28	4.20	6.48	1 np	0	0	1	1
30805 878-11	159.0	164.1	5.1	5.7	5.1	100 4A4	2.6	5.78	1.75	4.03	65.0	0.21	3.72	4.32	8.04	1 np	0	0	1	1
30806 878-11	164.1	167.6	3.5	5.3	3.5	100 4A4	2.8	6.48	1.68	4.80	28.0	0.34	1.28	4.99	6.27	1 np	0	0	1	1
30825 878-11	238.4	241.8	3.4	4.7	3.4	100 4A0	3	3.36	1.04	2.32	27.0	0.55	0.59	8.42	9.01	0 np	0	0	0	0

SAMPLE DDHID	FROM	TO	INT.	REC.#	ACT REC.	ROCK TYPE	PULP S.B.	I			Ag (g/ton)	Au (g/ton)	ISOL Fe	IINSOL Fe	ITOTAL Fe	Weathering	Porous/Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
	(ft)	(ft)						(ft)	(ft)	(%)										
30826 876-11	241.8	246.0	4.2	4.7	4.2	100 4A4	3	6.90	2.80	4.10	44.0	0.99	0.76	5.03	5.79	0 np	0	0	0	
30827 876-11	246.0	250.0	4.0	4.6	4.0	100 4A4	2.8	5.77	2.37	3.40	37.0	0.62	0.81	5.58	6.39	0 np	0	0	0	
30828 876-11	250.0	253.6	3.6	4.1	3.6	100 4A4	2.9	6.57	2.50	4.07	39.0	0.75	1.07	6.50	7.57	0 np	0	0	0	
30829 876-11	253.6	256.9	3.3	3.6	3.3	100 4A4	2.8	6.86	2.62	4.24	37.0	0.62	1.48	3.68	5.16	0 np	0	0	0	
30830 876-11	256.9	259.1	2.2	2.6	2.2	100 5B6	2.7	1.34	0.45	0.89	8.0	0.17	2.76	3.50	6.26	0 np	0	0	0	
30831 876-11	259.1	261.5	2.4	2.2	2.2	92 4C0	3	2.80	1.64	1.16	28.0	0.75	2.52	9.68	12.20	0 np	0	0	0	
30832 876-11	261.5	263.6	2.1	2.9	2.1	100 4E34	3.7	32.90	12.40	20.50	212.0	1.47	2.07	8.93	11.00	0 np	0	0	0	
30833 876-11	263.6	266.9	3.3	3.3	3.3	100 4A34	3.4	13.06	4.79	8.27	83.0	1.06	1.07	16.33	17.40	0 np	0	0	0	
30834 876-11	266.9	271.8	4.9	5.1	4.9	100 5B6	2.9	2.57	1.01	1.56	15.0	0.17	2.58	3.37	5.95	0 np	0	0	0	
30835 876-11	271.8	276.4	4.6	4.8	4.6	100 4A443	3.3	12.35	4.06	8.29	66.0	1.17	3.43	10.07	13.50	0 np	0	0	0	
30836 876-11	276.4	279.7	3.3	4.2	3.3	100 4A443	3.6	28.50	11.80	16.70	188.0	2.26	3.05	13.15	16.20	0 np	0	0	0	
30837 876-11	279.7	284.1	4.4	5.2	4.4	100 5B64	2.8	3.13	1.08	2.05	21.0	0.27	2.40	2.83	5.23	0 np	0	0	0	
30838 876-11	284.1	288.9	4.8	5.3	4.8	100 5B64	2.9	4.00	1.09	2.91	25.0	0.34	3.34	5.11	8.45	0 np	0	0	0	
30839 876-11	288.9	292.4	3.5	4.1	3.5	100 4A4	3	5.60	1.88	3.72	38.0	0.55	2.22	9.58	11.80	0 np	0	0	0	
30840 876-11	292.4	295.6	3.2	4.0	3.2	100 4A4	3.2	10.87	2.93	7.94	64.0	0.62	1.97	11.83	13.80	0 np	0	0	0	
30841 876-11	295.6	299.3	3.7	4.2	3.7	100 4A4	2.9	6.54	1.89	4.65	38.0	0.31	4.01	5.05	9.06	0 np	0	0	0	
30908 876-12	172.3	177.1	4.8	4.9	4.8	100 4A4	2.9	3.77	1.20	2.57	21.0	0.41	1.35	9.45	10.80	0 np	0	0	0	
30909 876-12	177.1	181.0	3.9	4.9	3.9	100 4A4	2.8	7.07	2.02	5.05	38.0	0.48	0.70	6.42	7.12	0 np	0	0	0	
30910 876-12	181.0	185.0	4.0	4.0	4.0	100 4A4	3.1	3.25	1.11	2.14	21.0	0.48	0.44	6.50	6.94	0 np	0	0	0	
30911 876-12	185.0	189.0	4.0	1.6	1.6	40 4A4	2.8	6.37	2.80	2.57	40.0	0.55	0.68	7.64	8.32	0 np	0	0	0	
30912 876-12	189.0	191.2	2.2	2.0	2.0	91 4A4	2.8	6.85	1.45	5.40	23.0	0.38	0.83	7.76	8.59	0 np	0	0	0	
30913 876-12	191.2	195.6	4.4	5.4	4.4	100 4A4	2.7	4.36	1.13	3.23	17.0	0.34	0.57	4.80	5.37	0 np	0	0	0	
30914 876-12	195.6	200.0	4.4	4.7	4.4	100 4A4	2.8	6.62	2.05	4.57	31.0	0.58	6.44	3.96	10.40	0 np	0	0	0	
30915 876-12	200.0	203.8	3.8	4.6	3.8	100 4A4	2.6	7.35	2.55	4.80	37.0	0.41	0.68	7.34	8.02	0 np	0	0	0	
30916 876-12	203.8	207.7	3.9	4.9	3.9	100 4A4	2.7	6.15	2.30	3.85	35.0	0.62	0.63	7.40	8.03	0 np	0	0	0	
30917 876-12	207.7	211.8	4.1	4.5	4.1	100 4A4	2.7	5.76	2.22	3.54	32.0	0.69	0.53	6.36	6.89	0 np	0	0	0	
30918 876-12	211.8	215.6	3.8	4.8	3.8	100 4A4	2.8	8.97	3.72	5.25	48.0	1.23	0.72	7.95	8.67	0 np	0	0	0	
30919 876-12	215.6	220.0	4.4	4.6	4.4	100 4A4	2.9	7.73	1.72	6.01	25.0	0.82	0.80	4.47	5.27	0 np	0	0	0	
30920 876-12	220.0	224.3	4.3	4.6	4.3	100 4A4	2.7	8.32	2.63	5.69	44.0	1.03	0.78	6.53	7.31	0 np	0	0	0	
30921 876-12	224.3	228.6	4.3	4.5	4.3	100 4A4	2.9	7.14	2.15	4.99	38.0	0.38	0.65	8.33	8.98	0 np	0	0	0	
30922 876-12	228.6	232.4	3.8	4.9	3.8	100 4A4	2.9	7.01	2.12	4.89	34.0	0.62	0.70	6.42	7.12	0 np	0	0	0	
30923 876-12	232.4	236.9	4.5	4.7	4.5	100 4A4	3.1	7.11	2.95	4.16	46.0	0.55	0.70	9.80	10.50	0 np	0	0	0	
30924 876-12	236.9	241.0	4.1	4.7	4.1	100 4A4	2.9	6.53	2.09	4.44	42.0	0.58	0.62	9.98	10.60	0 np	0	0	0	
30925 876-12	241.0	244.0	3.0	4.8	3.0	100 4A4	2.9	4.69	1.57	3.12	32.0	0.58	0.53	9.02	9.55	0 np	0	0	0	
30926 876-12	244.0	248.4	4.4	5.0	4.4	100 4A4	2.9	4.30	1.34	2.96	28.0	0.45	0.53	11.37	11.90	0 np	0	0	0	
30927 876-12	248.4	252.6	4.2	4.7	4.2	100 4A4	2.7	6.57	2.45	4.12	42.0	0.69	0.57	8.37	8.94	0 np	0	0	0	
30928 876-12	252.6	256.9	4.3	4.9	4.3	100 4A4	2.7	7.86	2.70	5.16	40.0	0.75	0.74	6.55	7.29	0 np	0	0	0	
30929 876-12	256.9	261.0	4.1	5.0	4.1	100 4A4	2.8	9.21	3.20	6.01	46.0	0.72	0.90	9.20	10.10	0 np	0	0	0	
30930 876-12	261.0	264.3	3.3	3.5	3.3	100 4D4	3.1	13.99	4.93	9.04	84.0	1.10	3.62	6.48	10.10	0 np	0	0	0	
30931 876-12	264.3	268.5	4.2	4.8	4.2	100 4A4	2.7	7.42	2.67	4.75	44.0	0.45	0.75	7.54	8.29	0 np	0	0	0	
30932 876-12	268.5	272.6	4.1	4.5	4.1	100 4A4	2.7	7.71	2.29	5.42	36.0	0.65	0.77	5.81	6.58	0 np	0	0	0	
30933 876-12	272.6	276.4	3.8	4.6	3.8	100 4A4	2.8	6.56	2.49	4.07	37.0	0.72	0.79	7.48	8.27	0 np	0	0	0	
30934 876-12	276.4	281.2	4.8	5.0	4.8	100 4A4	2.8	7.28	2.42	4.86	40.0	0.62	0.70	7.53	8.23	0 np	0	0	0	
30935 876-12	281.2	285.7	4.5	4.7	4.5	100 4A4	2.9	5.29	1.62	3.67	27.0	0.45	0.57	7.06	7.63	0 np	0	0	0	
30936 876-12	285.7	289.3	3.6	4.5	3.6	100 4A4	2.7	1.86	0.67	1.19	13.0	0.69	0.32	8.83	9.15	0 np	0	0	0	
30937 876-12	289.3	292.9	3.6	4.8	3.6	100 4A4	2.9	4.72	2.51	2.21	49.0	1.20	0.48	7.72	8.20	0 np	0	0	0	
30938 876-12	292.9	297.0	4.1	4.7	4.1	100 4A4	2.9	6.06	2.05	4.01	32.0	0.38	0.66	4.39	5.05	0 np	0	0	0	
30939 876-12	297.0	301.4	4.4	4.5	4.4	100 4A4	2.7	5.70	1.68	4.02	28.0	0.41	0.75	6.40	7.15	0 np	0	0	0	
30940 876-12	301.4	305.5	4.1	4.7	4.1	100 4A4	2.8	5.94	1.53	4.41	31.0	0.51	3.37	7.13	10.50	0 np	0	0	0	
30941 876-12	305.5	307.0	1.5	1.8	1.5	100 4D5	2.9	5.04	1.71	3.33	24.0	0.21	3.07	3.71	6.78	0 np	0	0	0	
30565 876-13	346.5	349.0	2.5	2.8	2.5	100 4A4	2.6	6.39	1.92	4.47	35.0	0.34	1.68	2.16	3.84	0 np	0	0	0	
30566 876-13	349.0	353.3	4.3	5.2	4.3	100 5B6	2.8	2.78	1.30	1.48	8.0	0.21	2.90	3.74	6.64	0 np	0	0	0	
30567 876-13	353.3	357.8	4.5	4.8	4.5	100 4D0	3.1	5.16	2.51	2.65	32.0	0.62	3.25	9.65	12.90	0 np	0	0	0	
30568 876-13	357.8	363.1	5.3	5.6	5.3	100 5B67	2.9	0.70	0.37	0.33	0.0	0.14	4.17	2.88	7.05	0 np	0	0	0	
30569 876-13	363.1	366.8	3.7	3.8	3.7	100 4EA	3.5	9.67	4.06	5.61	71.0	1.68	1.24	18.66	19.90	0 np	0	0	0	
30570 876-13	366.8	370.2	3.4	4.4	3.4	100 4EA	3.2	6.87	3.03	3.84	51.0	1.37	0.62	17.48	18.10	0 np	0	0	0	

SAMPLE DDWID	FROM (ft)	TO (ft)	INT. (ft)	REC. # (ft)	ACT REC	REC. (%)	ROCK TYPE	PULP S.B.	% Pb+Zn	% Pb	% Zn	Ag (g/ton)	Au (g/ton)	ISOL Fe	ISINSOL Fe	ITOTAL Fe	Weather- ing	Porous/ Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
30571 878-13	370.2	374.4	4.2	5.0	4.2	100	4A4	3.1	6.78	2.39	4.39	41.0	0.35	3.66	8.04	11.70	0	np	0	0	0
30572 878-13	374.4	378.0	3.6	3.7	3.6	100	4A4	2.9	11.14	3.97	7.17	59.0	0.75	2.21	4.91	7.12	0	np	0	0	0
30573 878-13	378.0	382.0	4.0	4.3	4.0	100	4A4	2.7	7.96	2.30	5.66	42.0	0.34	1.74	7.30	9.04	0	np	0	0	0
30574 878-13	382.0	386.0	4.0	4.8	4.0	100	4A4	3.1	9.64	3.02	6.62	57.0	0.41	2.12	7.71	9.83	0	np	0	0	0
30575 878-13	386.0	389.5	3.5	3.7	3.5	100	4A4	3.1	8.01	2.70	5.31	46.0	0.75	1.53	11.07	12.60	0	np	0	0	0
30576 878-13	389.5	391.6	2.1	2.1	2.1	100	4D4	2.9	8.22	2.92	5.30	42.0	0.21	3.54	3.50	7.04	0	np	0	0	0
30579 878-14	176.5	181.6	5.1	5.0	5.0	98	4A4	2.6	5.07	1.52	3.55	28.0	0.21	0.84	1.51	2.35	0	np	0	0	0
30580 878-14	181.6	185.7	4.1	5.0	4.1	100	4A4	3	5.08	1.85	3.23	40.0	0.48	0.87	11.33	12.20	0	np	0	0	0
30581 878-14	185.7	190.0	4.3	5.0	4.3	100	4A0	2.8	3.71	1.08	2.63	21.0	0.14	0.85	2.49	3.34	0	np	0	0	0
30582 878-14	190.0	194.2	4.2	4.9	4.2	100	4A0	3	3.83	0.76	3.07	18.0	0.14	0.72	2.71	3.43	0	np	0	0	0
30583 878-14	194.2	199.5	5.3	5.1	5.1	96	4A4	2.9	4.05	1.32	2.73	25.0	0.36	0.68	2.26	2.94	0	np	0	0	0
30584 878-14	199.5	204.0	4.5	5.1	4.5	100	4A4	2.8	5.31	1.32	3.99	25.0	0.21	1.12	2.54	3.66	0	np	0	0	0
30585 878-14	204.0	208.4	4.4	4.9	4.4	100	4A4	2.9	6.69	1.91	4.78	32.0	0.27	1.16	5.34	6.50	0	np	0	0	0
30586 878-14	208.4	213.4	5.0	5.3	5.0	100	4A4	2.9	12.21	3.72	8.49	60.0	0.41	1.18	4.52	5.70	0	np	0	0	0
30587 878-14	213.4	217.6	4.2	5.0	4.2	100	4A4	2.8	10.29	3.00	7.29	47.0	0.48	3.06	1.21	4.27	0	np	0	0	0
30588 878-14	217.6	222.5	4.9	5.1	4.9	100	4A4	2.8	4.84	1.65	3.19	25.0	0.55	1.34	6.75	8.09	0	np	0	0	0
30589 878-14	222.5	227.0	4.5	5.0	4.5	100	4C	2.9	3.78	1.63	2.15	23.0	0.62	0.93	3.83	4.76	0	np	0	0	0
30590 878-14	227.0	230.5	3.5	4.6	3.5	100	4A	3	5.71	1.64	4.07	31.0	0.55	1.17	4.07	5.24	0	np	0	0	0
30591 878-14	230.5	234.9	4.4	3.7	3.7	84	4A4	3	4.94	1.16	3.78	21.0	0.62	1.01	6.38	7.39	0	np	0	0	0
30592 878-14	234.9	239.3	4.4	4.4	4.4	100	4A4	2.9	4.78	1.38	3.40	21.0	0.48	1.88	4.95	6.83	0	np	0	0	0
30598 878-14	263.0	267.0	4.0	4.6	4.0	100	4A	2.8	5.79	0.46	5.33	8.0	0.14	3.84	7.26	11.10	0	np	0	0	0
30599 878-14	267.0	270.3	3.3	3.5	3.3	100	4A	2.6	1.22	0.47	0.75	9.0	0.14	1.75	4.84	6.59	0	np	0	0	0
30600 878-14	270.3	272.7	2.4	3.3	2.4	100	4A	2.8	7.90	2.59	5.31	47.0	0.34	2.03	5.73	7.76	0	np	0	0	0
30519 878-14	272.7	277.3	4.6	5.5	4.6	100	4A	4.7	31.10	10.20	20.90	176.0	1.71	2.35	20.95	23.30	0	np	0	0	0
30540 878-14	373.9	376.7	2.8	2.5	2.5	89	4A4	2.9	5.27	1.75	3.52	31.0	0.21	2.63	2.51	5.14	0	np	0	0	0
30541 878-14	376.7	379.2	2.5	3.8	2.5	100	4A4	2.8	6.00	1.93	4.07	28.0	0.62	1.66	2.63	4.29	0	np	0	0	0
30142 878-15	181.3	187.0	5.7	2.3	2.3	40	4A4	3	5.48	1.78	3.70	34.0	0.00	1.08	11.02	12.10	0	np	0	0	0
30143 878-15	187.0	192.0	5.0	5.2	5.0	100	4A4	2.7	4.04	0.95	3.09	23.0	0.14	0.62	3.01	3.63	0	np	0	0	0
30063 878-15	292.9	310.4	17.5	19.5	17.5	100	5C+	2.7	0.25	0.16	0.09	6.0	0.05	6.23	0.07	6.30	0	np	0	0	0
30064 878-15	310.4	315.0	4.6	5.5	4.6	100	4A4	2.6	4.46	1.45	3.01	25.0	0.27	1.33	2.84	4.17	0	np	0	0	0
30065 878-15	315.0	320.0	5.0	4.9	4.9	98	4A4	2.9	6.63	1.93	4.70	31.0	0.34	0.00	10.20	10.20	0	np	0	0	0
30066 878-15	320.0	324.0	4.0	5.0	4.0	100	4A4	2.9	7.36	2.38	4.98	35.0	0.27	0.00	9.30	9.30	0	np	0	0	0
16980 888-01	194.7	199.0	4.3	5.2	4.3	100	4A4	3.1	12.62	4.62	8.00	74.0	0.69	1.61	8.89	10.50	0	np	0	0	0
16981 888-01	199.0	204.3	5.3	6.5	5.3	100	4A4	2.9	10.34	2.93	7.41	61.0	0.55	2.22	5.07	7.29	0	np	0	0	0
16982 888-01	204.3	208.2	3.9	5.3	3.9	100	4A4	2.8	5.94	1.84	4.10	32.0	0.34	0.75	4.58	5.33	0	np	0	0	0
16983 888-01	208.2	213.0	4.8	5.3	4.8	100	4A4	2.8	6.83	2.37	4.46	36.0	0.27	2.01	2.24	4.25	0	np	0	0	0
16984 888-01	213.0	216.0	3.0	5.0	3.0	100	5B6	2.7	3.40	1.58	1.82	19.0	0.34	2.39	3.28	5.67	0	np	0	0	0
16985 888-01	216.0	218.6	2.6	3.0	2.6	100	4L24	2.8	2.24	1.07	1.17	15.0	0.14	2.31	3.09	5.40	0	np	0	0	0
16986 888-01	218.6	224.2	5.6	6.0	5.6	100	5A6	2.9	1.97	0.51	1.46	9.0	0.14	4.49	4.31	8.80	0	np	0	0	0
16987 888-01	224.2	226.8	2.6	3.7	2.6	100	4A0	3.1	4.88	3.10	1.78	19.0	0.62	3.01	14.19	17.20	0	np	0	0	0
16988 888-01	226.8	231.3	4.5	4.9	4.5	100	4E4	3.8	20.35	7.85	12.50	132.0	1.65	2.05	19.75	21.80	0	np	0	0	0
16989 888-01	231.3	236.0	4.7	4.6	4.6	98	4E4	3.9	22.05	8.55	13.50	155.0	2.26	1.87	20.43	22.30	0	np	0	0	0
16990 888-01	236.0	239.5	3.5	4.2	3.5	100	4A0	3.5	8.69	2.43	6.26	51.0	0.75	1.89	16.91	18.80	0	np	0	0	0
16991 888-01	239.5	244.1	4.6	5.1	4.6	100	4A0	3.3	7.21	2.72	4.49	51.0	0.69	2.09	15.71	17.80	0	np	0	0	0
16992 888-01	272.2	277.3	5.1	6.0	5.1	100	4A0	2.7	7.54	2.40	5.14	45.0	0.48	1.25	7.33	8.58	0	np	0	0	0
16993 888-01	277.3	280.5	3.2	4.1	3.2	100	4A4	3.5	12.13	3.48	8.65	72.0	0.41	3.21	16.69	19.90	0	np	0	0	0
16994 888-01	280.5	284.2	3.7	5.1	3.7	100	4A4	3	10.79	2.78	8.01	55.0	0.55	3.53	7.37	10.90	0	np	0	0	0
16995 888-01	284.2	289.0	4.8	5.3	4.8	100	4A4	3.2	11.70	2.91	8.79	58.0	0.62	6.58	8.02	14.60	0	np	0	0	0
16882 888-02	192.2	194.7	2.5	2.3	2.3	92	4A	3.4	11.57	5.19	6.38	38.0	1.03	1.04	18.66	19.70	2	np	0	0	2
16883 888-02	194.7	198.5	3.8	3.5	3.5	92	4A4	3.2	13.60	4.23	9.37	30.0	0.55	1.32	9.18	10.50	0	np	0	0	0
16884 888-02	198.5	202.0	3.5	3.4	3.4	97	4A4	3.3	21.58	7.58	14.00	31.0	1.10	1.65	10.15	11.80	0	np	0	0	0
16907 888-04	273.0	277.2	2.2	2.6	2.2	100	4A34	3.4	17.47	6.17	11.30	120.0	1.51	1.65	14.05	15.70	0	np	0	0	0
16908 888-04	277.2	282.0	4.8	5.0	4.8	100	4A0	3.4	5.66	2.14	3.52	40.0	0.96	1.89	18.51	20.40	0	np	0	0	0
16909 888-04	282.0	287.0	5.0	5.0	5.0	100	4A0	3.3	4.31	2.17	2.14	55.0	1.58	1.11	17.69	18.80	0	np	0	0	0
16910 888-04	287.0	292.0	5.0	7.2	5.0	100	4A0	3.3	8.07	2.73	5.34	47.0	1.13	1.69	15.41	17.10	0	np	0	0	0

* Note: Recovery is measured as the total interval occupied by the core as it lies in the core box.

G2

BRUM METALLURGICAL COMPOSITE INTERVALS
1987 & 1988 DIAMOND DRILLING PROGRAMS

17-May-89

Composite Number :62 Estimate of Composite Weight: 217 KILOGRAMS
Description: Dominately non-carbonaceous ore types - 4d (minor 4c) - selected intervals contain nonporous samples and have total oxidation (or = 2
Total Intervals: 93

SAMPLE DDHID	FROM (ft)	TO (ft)	INT. (ft)	REC.# (ft)	ACT REC. (%)	ROCK TYPE	PULP S.#.	Z Pb+In	Z Pb	Z Zn	Ag (g/ton)	Au (g/ton)	ZSOL Fe	ZINSOL Fe	ZTOTAL Fe	Weather- ing	Porous/ Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
TOTAL:			382.1	389.3	342.1	89.5														
BB & INTERVAL LENGTH WEIGHTED AVERAGE:								3.07	10.17	3.80	6.38	63.71	0.82	4.18	7.11	11.36				
30497 876-04	158.7	162.0	3.3	4.8	3.3	100 400	3	5.55	3.40	2.15	53.0	0.62	5.90	8.30	14.20	0 np		0	0	0
30498 876-04	162.0	168.2	6.2	9.2	6.2	100 400	2.8	3.16	1.28	1.88	27.0	0.41	4.60	7.90	12.50	0 np		0	0	0
30499 876-04	168.2	172.0	3.8	5.0	3.8	100 400	3	3.34	0.53	2.81	12.0	0.27	4.06	9.64	13.70	0 np		0	0	0
30505 876-04	194.0	197.5	3.5	2.5	2.5	71 405	2.8	6.55	4.45	2.10	71.0	1.03	0.95	2.47	3.42	0 np		0	0	0
30506 876-04	197.5	202.0	4.5	4.6	4.5	100 405	3	6.83	2.69	4.14	37.0	1.37	2.36	5.33	7.69	0 np		0	0	0
30507 876-04	202.0	206.5	4.5	4.3	4.3	96 405	2.8	3.51	1.29	2.22	20.0	0.96	2.35	5.88	8.23	0 np		0	0	0
30508 876-04	206.5	211.6	5.1	5.3	5.1	100 400	3	7.27	2.88	4.39	43.0	1.13	3.09	5.52	8.61	0 np		0	0	0
30479 876-08	212.5	217.0	4.5	4.0	4.0	89 4A0	3.2	6.57	2.84	3.73	49.0	0.89	1.02	14.58	15.60	1 np		0	0	1
30480 876-08	217.0	222.0	5.0	3.7	3.7	74 4D	3.1	6.29	1.72	4.57	27.0	0.34	6.36	5.74	12.10	1 np		0	0	1
30481 876-08	222.0	227.0	5.0	2.9	2.9	58 4A4	2.6	7.70	2.06	5.64	40.0	0.31	1.87	2.87	4.74	1 np		0	0	1
30482 876-08	227.0	232.0	5.0	2.0	2.0	40 10Q	3.4	2.41	0.66	1.75	11.0	0.10	9.12	8.38	17.50	1 np		0	0	1
30483 876-08	232.0	237.0	5.0	4.3	4.3	86 4D34	3.2	9.86	3.96	5.90	68.0	0.79	1.02	12.28	13.30	1 np		0	0	1
30484 876-08	237.0	242.0	5.0	2.0	2.0	40 4D34	3.2	11.31	4.64	6.67	72.0	0.79	0.97	12.83	13.80	1 np		0	0	1
30485 876-08	242.0	247.0	5.0	2.0	2.0	40 4D34	3.2	16.62	7.18	9.44	95.0	1.20	1.80	6.79	8.59	1 np		0	0	1
30486 876-08	247.0	252.0	5.0	1.3	1.3	26 4D34	3.2	11.62	3.91	7.71	56.0	0.45	7.45	4.85	12.30	1 np		0	0	1
30548 876-10	194.2	197.0	2.8	3.5	2.8	100 5C4	3.1	6.95	0.19	6.76	11.0	0.07	14.40	3.50	17.90	0 np		0	0	0
30549 886-10	197.0	199.8	2.8	2.8	2.8	100 4D44	2.9	9.88	3.30	6.58	63.0	0.38	3.84	2.91	6.75	0 np		0	0	0
30550 886-10	199.8	203.4	3.6	4.3	3.6	100 4D44	2.8	12.43	3.78	8.65	73.0	0.24	3.42	4.23	7.65	0 np		0	0	0
30101 876-10	203.4	205.9	2.5	2.8	2.5	100 5D44	3.2	3.34	0.61	2.73	11.0	0.10	10.90	3.60	14.50	0 np		0	0	0
30102 876-10	205.9	210.5	4.6	4.5	4.5	98 4D0	3	9.87	2.73	7.14	60.0	0.24	4.38	3.93	8.31	0 np		0	0	0
30106 876-10	223.5	227.7	4.2	4.4	4.2	100 4D0	3	9.42	3.84	5.58	63.0	0.48	5.05	4.95	10.00	0 np		0	0	0
30107 876-10	227.7	232.0	4.3	5.1	4.3	100 4D0	2.9	5.99	2.40	3.59	42.0	0.55	4.52	4.29	8.81	0 np		0	0	0
30108 876-10	232.0	236.4	4.4	4.1	4.1	93 4D0	3	10.78	3.77	7.01	70.0	0.58	3.16	2.71	5.87	0 np		0	0	0
30109 876-10	236.4	240.6	4.2	5.1	4.2	100 5C4	2.7	1.41	0.32	1.09	9.0	0.07	7.86	0.75	8.61	0 np		0	0	0
30110 876-10	240.6	244.0	3.4	4.4	3.4	100 4D0	3.1	10.75	3.69	7.06	69.0	0.86	6.21	5.99	12.20	0 np		0	0	0
30111 876-10	244.0	247.8	3.8	4.0	3.8	100 4D045	2.9	6.39	2.17	4.22	38.0	0.21	3.79	4.50	8.29	0 np		0	0	0
30817 876-11	206.9	210.3	3.4	3.5	3.4	100 4D3	3.4	9.07	3.44	5.63	67.0	0.89	2.65	16.05	18.70	0 np		0	0	0
30818 876-11	210.3	214.7	4.4	4.8	4.4	100 4D0	3	8.31	3.22	5.09	53.0	0.34	2.57	4.84	7.41	0 np		0	0	0
30819 876-11	214.7	218.7	4.0	5.0	4.0	100 4D0	3.1	14.47	6.78	7.69	111.0	0.93	2.84	3.81	6.65	0 np		0	0	0
30820 876-11	218.7	222.7	4.0	4.9	4.0	100 4D0	2.8	5.41	2.31	3.10	34.0	0.31	1.25	2.63	3.88	0 np		0	0	0
30821 876-11	222.7	226.0	3.3	3.9	3.3	100 4D0	2.8	7.00	2.45	4.55	32.0	0.27	5.42	2.03	7.45	0 np		0	0	0
30822 876-11	226.0	229.7	3.7	4.8	3.7	100 4D0	2.8	9.43	3.50	5.93	56.0	0.48	1.54	4.64	6.18	0 np		0	0	0
30823 876-11	229.7	233.5	3.8	4.8	3.8	100 4D0	3	9.62	3.39	6.23	46.0	0.51	1.63	2.63	4.26	0 np		0	0	0
30824 876-11	233.5	238.4	4.9	4.5	4.5	92 4D0	2.8	10.04	3.44	6.60	52.0	0.62	3.01	2.94	5.95	0 np		0	0	0
30019 876-13	167.0	172.0	5.0	6.7	5.0	100 4D0	2.9	7.93	2.21	5.72	47.0	0.21	4.55	4.57	9.12	0 np		0	0	0
30020 876-13	172.0	177.0	5.0	6.5	5.0	100 4D0	2.8	8.94	2.52	6.42	43.0	0.07	3.82	4.97	8.79	0 np		0	0	0
30021 876-13	177.0	182.0	5.0	5.2	5.0	100 4D0	2.9	10.87	3.17	7.70	51.0	0.07	2.49	0.75	3.24	0 np		0	0	0
30022 876-13	182.0	184.4	2.4	2.2	2.2	92 4D0	2.9	6.29	1.29	5.00	26.0	0.07	4.01	1.34	5.35	0 np		0	0	0
30030 876-13	209.3	213.9	4.6	2.7	2.7	59 4D0	2.9	7.68	2.84	5.04	46.0	0.07	2.29	4.24	6.53	0 np		0	0	0
30031 876-13	213.9	219.4	5.5	4.9	4.9	89 4D0	2.9	7.31	2.28	5.03	39.0	0.14	3.01	4.06	7.07	0 np		0	0	0
30032 876-13	219.4	221.0	1.6	1.8	1.6	100 5C	2.8	7.14	1.09	6.05	21.0	0.14	5.61	2.71	8.32	0 np		0	0	0
30033 876-13	221.0	226.5	5.5	5.9	5.5	100 4D0	2.8	7.34	2.27	5.07	40.0	0.34	1.60	3.61	5.21	0 np		0	0	0

SAMPLE DDHID	FROM (ft)	TO (ft)	INT. (ft)	REC.# (ft)	ACT REC	REC. (%)	ROCK TYPE	PULP S.G.	Z Pb+Zn	Z Pb	Z Zn	Ag (g/ton)	Au (g/ton)	XSOL Fe	XINSOL Fe	XTOTAL Fe	Weather- ing	Porous/ Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
30034 876-13	226.5	231.5	5.0	3.3	3.3	66	404	3	17.70	5.90	11.80	100.0	0.62	5.09	3.81	8.90	0	np	0	0	0
30035 876-13	231.5	236.0	4.5	5.0	4.5	100	404	2.8	8.12	2.65	5.47	49.0	0.48	1.54	5.66	7.20	0	np	0	0	0
30036 876-13	236.0	241.5	5.5	3.0	3.0	55	400	2.8	7.16	2.60	4.56	41.0	0.27	1.44	2.43	3.87	0	np	0	0	0
30037 876-13	241.5	244.4	2.9	4.3	2.9	100	400	2.8	5.03	1.58	3.45	25.0	0.34	1.28	2.19	3.47	0	np	0	0	0
30038 876-13	244.4	246.5	2.1	2.1	2.1	100	5C	2.8	4.98	0.08	4.90	2.0	0.05	6.98	0.63	7.61	0	np	0	0	0
30039 876-13	246.5	251.2	4.7	5.2	4.7	100	400	2.9	8.22	2.62	5.60	43.0	0.34	1.83	1.45	3.28	0	np	0	0	0
30040 876-13	251.2	255.5	4.3	5.6	4.3	100	400	2.8	5.12	1.92	3.20	32.0	0.41	1.67	2.16	3.83	0	np	0	0	0
30041 876-13	255.5	260.0	4.5	5.5	4.5	100	404	2.9	9.73	3.05	6.68	46.0	0.41	3.06	4.66	7.72	0	np	0	0	0
30043 876-13	262.0	264.5	2.5	2.6	2.5	100	404	3	13.58	4.31	9.27	75.0	0.55	2.58	2.99	5.57	0	np	0	0	0
30047 876-13	272.5	275.5	3.0	3.4	3.0	100	404	2.9	7.73	2.05	5.68	30.0	0.21	2.64	2.73	5.37	0	np	0	0	0
30048 876-13	275.5	280.2	4.7	5.2	4.7	100	404	3	10.80	4.07	6.73	63.0	0.90	6.69	11.21	17.90	0	np	0	0	0
30050 876-13	281.8	284.7	2.9	3.1	2.9	100	404	3.3	11.68	3.87	7.81	66.0	0.75	2.13	9.47	11.60	0	np	0	0	0
30551 876-13	284.7	288.4	3.7	3.5	3.5	95	404	2.9	10.57	4.59	5.98	64.0	0.41	3.41	5.08	8.49	0	np	0	0	0
30552 876-13	288.4	291.2	2.8	4.1	2.8	100	404	2.9	10.75	3.49	7.26	61.0	0.41	2.58	4.06	6.64	0	np	0	0	0
30553 876-13	291.2	294.6	3.4	3.8	3.4	100	404	2.9	10.96	3.49	7.47	61.0	0.45	2.80	3.51	6.31	0	np	0	0	0
30557 876-13	308.5	311.2	2.7	3.3	2.7	100	4E4	3.4	10.36	3.22	7.14	66.0	0.55	3.80	16.90	20.70	0	np	0	0	0
30558 876-13	311.2	317.3	6.1	7.1	6.1	100	5C	2.9	0.62	0.16	0.46	4.0	0.34	9.97	2.33	12.30	0	np	0	0	0
30559 876-13	317.3	323.2	5.9	5.5	5.5	93	5C	2.8	1.08	0.31	0.77	10.0	0.14	6.61	3.39	10.00	0	np	0	0	0
30560 876-13	323.2	328.9	5.7	6.8	5.7	100	4H4	3.4	10.93	5.11	4.92	93.0	1.82	1.63	17.67	19.30	0	np	0	0	0
30561 876-13	328.9	332.5	3.6	3.9	3.6	100	4D34	3.8	14.42	4.02	10.40	83.0	1.23	14.20	15.90	30.10	0	np	0	0	0
30562 876-13	332.5	337.5	5.0	5.4	5.0	100	404	2.6	9.78	3.48	6.30	49.0	0.62	2.26	3.59	5.85	0	np	0	0	0
30563 876-13	337.5	342.2	4.7	4.4	4.4	94	404	2.9	10.53	4.11	6.42	70.0	0.82	2.17	9.63	11.80	0	np	0	0	0
30564 876-13	342.2	346.5	4.3	4.6	4.3	100	400	2.9	5.37	1.79	3.58	35.0	0.27	3.63	4.15	7.78	0	np	0	0	0
30534 876-14	346.8	351.0	4.2	4.9	4.2	100	4D44	3.1	16.77	6.80	9.97	105.0	0.96	3.09	5.74	8.83	0	np	0	0	0
30535 876-14	351.0	354.1	3.1	3.1	3.1	100	4044	3.7	28.70	11.60	17.10	186.0	1.92	3.44	11.76	15.20	0	np	0	0	0
30536 876-14	354.1	358.5	4.4	5.0	4.4	100	4D44	3.4	24.88	9.88	15.00	170.0	0.96	4.48	4.22	8.70	0	np	0	0	0
30537 876-14	358.5	362.8	4.3	4.6	4.3	100	4D44	3.4	27.11	8.61	18.50	146.0	0.90	5.06	3.18	8.24	0	np	0	0	0
30538 876-14	362.8	371.3	8.5	9.6	8.5	100	5C4	2.9	0.37	0.15	0.22	8.0	0.07	6.24	0.64	6.88	0	np	0	0	0
30539 876-14	371.3	373.9	2.6	2.8	2.6	100	4D44	3.4	26.71	9.61	17.10	161.0	0.96	5.95	4.75	10.70	0	np	0	0	0
30442 876-16	124.0	129.0	5.0	3.6	3.6	72	400	3	7.94	3.23	4.71	60.0	0.62	6.15	6.35	12.50	2	np	0	0	2
30443 876-16	129.0	132.0	3.0	1.5	1.5	50	400	3	7.23	3.03	4.20	53.0	1.30	4.55	11.65	16.20	2	np	0	0	2
30444 876-16	132.0	137.0	5.0	3.2	3.2	64	400	2.9	4.58	1.96	2.62	28.0	0.21	4.01	3.26	7.27	2	np	0	0	2
30445 876-16	137.0	142.0	5.0	3.2	3.2	64	400	3.4	10.42	5.09	5.33	87.0	1.30	21.00	1.00	22.00	1	np	0	0	1
30446 876-16	142.0	147.0	5.0	1.7	1.7	34	400	2.8	6.42	3.43	2.99	47.0	1.89	5.37	6.03	11.40	0	np	0	0	0
16920 886-05	210.2	212.3	2.1	1.9	1.9	90	4D44	3.3	28.63	8.83	19.80	142.0	1.58	4.43	5.67	10.10	1	np	0	0	1
16921 886-05	212.3	213.9	1.6	2.5	1.6	100	404	3.4	15.01	6.79	8.22	108.0	1.65	1.99	11.51	13.50	1	np	0	0	1
16922 886-05	213.9	217.1	3.2	4.0	3.2	100	4C0	3.4	10.08	5.81	4.27	93.0	1.99	1.57	17.13	18.70	0	np	0	0	0
16923 886-05	217.1	220.0	2.9	3.8	2.9	100	4C0	3.3	7.17	4.96	2.21	78.0	1.78	1.58	17.52	19.10	0	np	0	0	0
16924 886-05	220.0	224.0	4.0	5.4	4.0	100	404	3.4	22.29	9.49	12.80	144.0	1.78	2.51	9.59	12.10	0	np	0	0	0
16925 886-05	224.0	228.4	4.4	5.1	4.4	100	404	3.6	13.37	5.35	8.02	85.0	1.78	1.65	18.45	20.10	0	np	0	0	0
16926 886-05	228.4	232.4	4.0	5.2	4.0	100	404	3.8	23.09	9.89	13.20	144.0	2.33	3.04	13.76	16.80	0	np	0	0	0
16927 886-05	232.4	235.4	3.0	3.7	3.0	100	4D44	3.6	26.27	8.57	17.70	139.0	1.51	2.93	11.77	14.70	0	np	0	0	0
16928 886-05	235.4	239.0	3.6	4.3	3.6	100	4D44	3.6	27.43	9.23	18.20	154.0	1.92	3.89	8.21	12.10	0	np	0	0	0
16929 886-05	239.0	242.9	3.9	5.2	3.9	100	404	3.4	18.45	7.25	11.20	120.0	2.40	5.55	8.65	14.20	0	np	0	0	0
16930 886-05	253.4	256.6	3.2	4.3	3.2	100	4D7	3.5	10.74	4.74	6.00	76.0	1.44	10.90	12.60	23.50	0	np	0	0	0
16931 886-05	256.6	259.9	3.3	3.8	3.3	100	4D44	3.5	21.91	8.71	13.20	145.0	2.06	3.33	10.07	13.40	0	np	0	0	0
16932 886-05	259.9	265.5	5.6	3.3	3.3	59	4D3	3.1	9.18	4.47	4.71	76.0	1.10	3.15	6.60	9.75	0	np	0	0	0
16933 886-05	265.5	269.3	3.8	4.7	3.8	100	4D3	3.4	4.06	1.92	2.14	31.0	1.82	1.35	18.85	20.20	0	np	0	0	0
16934 886-05	269.3	273.7	4.4	4.4	4.4	100	4D3	3.7	7.31	4.09	3.22	70.0	2.47	1.56	22.84	24.40	0	np	0	0	0
16935 886-05	273.7	276.3	2.6	4.6	2.6	100	4D3	3.5	4.13	1.91	2.22	48.0	1.71	4.77	19.73	24.50	0	np	0	0	0
16936 886-05	291.5	296.3	4.8	4.2	4.2	88	4E1	3.3	5.52	2.20	3.32	54.0	1.37	9.40	14.60	24.00	0	np	0	0	0

* Note : Recovery is measured as the total interval occupied by the core as it lies in the core box.

Recovery has been adjusted in the ACT REC column to correct the intervals where measured core recovery is greater than the drilled interval.

This occurs when the recovered core has been spread out in the core box.

G3
BRUM METALLURGICAL COMPOSITE INTERVALS
1987 & 1988 DIAMOND DRILLING PROGRAMS
17-Nov-89

Composite Number : COMP **G3** Estimate of Composite Weight: 191 KILOGRAMS
 Description: Dominately massive pyritic +/- barite sulphide ore types - 4e and 4g - selected intervals contain nonporous samples and have total oxidation (or = 2
 Total Intervals: 64

SAMPLE DDHID	FROM (ft)	TO (ft)	INT. (ft)	REC. # (ft)	ACT REC. (Z)	REC. (Z)	ROCK TYPE	PULP S.G.	Z Pb+Zn	Z Pb	Z Zn	Ag (g/ton)	Au (g/ton)	ZSOL Fe	ZINSOL Fe	ZTOTAL Fe	Weathering	Porous/ Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
TOTAL:			259.6	280	244.5	94.2															
SG & INTERVAL LENGTH WEIGHTED AVERAGE:								3.78	15.00	4.91	10.09	87.28	0.93	3.40	18.44	21.84					
30426 876-03	194.8	197.0	2.2	2.6	2.2	100	4E4	3.4	17.63	5.73	11.90	95.0	0.82	3.44	9.86	13.30	0	np	0	0	0
30427 876-03	197.0	203.0	6.0	7.7	6.0	100	5A196	2.7	1.51	0.50	1.01	11.0	0.55	1.78	5.73	7.51	0	np	0	0	0
30428 876-03	203.0	208.0	5.0	6.1	5.0	100	4E4	4.1	22.54	8.54	14.00	148.0	1.58	1.67	22.93	24.60	0	np	0	0	0
30429 876-03	208.0	213.1	5.1	5.6	5.1	100	4E4	4	16.01	5.91	10.30	91.0	1.92	2.35	27.95	30.30	0	np	0	0	0
30430 876-03	214.6	217.4	2.8	3.9	2.8	100	4E4	4	12.00	3.50	8.50	59.0	1.10	0.53	8.07	8.60	0	np	0	0	0
30431 876-03	217.4	220.8	3.4	3.1	3.1	91	4E44	4.4	28.80	11.00	17.80	153.0	1.44	7.46	17.74	25.20	0	np	0	0	0
30432 876-03	220.8	225.0	4.2	5.0	4.2	100	4E4	4.4	14.95	5.49	9.46	109.0	0.89	0.74	14.66	15.40	0	np	0	0	0
30433 876-03	225.0	229.0	4.0	4.8	4.0	100	4E4	4.5	12.04	3.99	8.05	97.0	0.96	0.47	16.33	16.80	0	np	0	0	0
30434 876-03	229.0	233.5	4.5	4.6	4.5	100	4E4	4.3	12.72	4.84	7.88	91.0	1.13	8.79	8.11	16.90	0	np	0	0	0
30435 876-03	233.5	238.1	4.6	5.0	4.6	100	4E4	4.5	9.96	3.75	6.21	72.0	0.96	0.40	19.90	20.30	0	np	0	0	0
30436 876-03	238.1	242.1	4.0	5.0	4.0	100	4E4	4.4	12.19	5.04	7.15	96.0	1.37	0.88	28.92	29.80	0	np	0	0	0
30437 876-03	242.1	246.5	4.4	5.0	4.4	100	4E4	4.5	11.53	4.78	6.75	113.0	1.30	0.64	31.46	32.10	0	np	0	0	0
30438 876-03	246.5	250.5	4.0	4.2	4.0	100	4E0	3.9	4.16	2.47	1.69	61.0	1.10	1.42	32.98	34.40	0	np	0	0	0
30439 876-03	250.5	254.8	4.3	4.9	4.3	100	3E0	2.8	0.18	0.06	0.12	4.0	0.14	2.04	2.34	4.38	0	np	0	0	0
30440 876-03	254.8	258.4	3.6	4.5	3.6	100	4E6	4.2	9.95	4.90	5.05	66.0	0.96	1.57	31.93	33.50	0	np	0	0	0
30441 876-03	258.4	262.0	3.6	4.3	3.6	100	4E0	4.5	14.49	5.53	8.96	82.0	0.89	0.65	21.35	22.00	0	np	0	0	0
30870 876-05	198.6	203.0	4.4	4.6	4.4	100	5D4	3	10.24	1.80	8.44	32.0	0.55	6.99	13.51	26.50	0	np	0	0	0
30871 876-05	203.0	207.0	4.0	4.8	4.0	100	5D4	4.3	24.75	6.75	18.00	129.0	1.23	6.86	17.74	24.60	0	np	0	0	0
30873 876-05	212.0	216.7	4.7	6.3	4.7	100	4E4	4.6	30.00	7.90	22.10	114.0	0.69	1.76	25.74	27.50	0	np	0	0	0
30874 876-05	216.7	221.4	4.7	4.8	4.7	100	4E4	4.4	36.96	9.86	27.10	137.0	0.89	1.60	19.80	21.40	0	np	0	0	0
30875 876-05	221.4	227.0	5.6	5.4	5.4	96	4E4	4.7	18.91	1.01	17.90	178.0	0.96	0.99	26.31	27.30	0	np	0	0	0
30876 876-05	227.0	232.0	5.0	1.9	1.9	38	4E4	4.6	9.10	2.68	6.42	31.0	0.48	1.38	39.12	40.50	0	np	0	0	0
30877 876-05	232.0	237.4	5.4	5.3	5.3	98	4E4	4.4	16.33	4.43	11.90	74.0	0.75	1.73	31.57	33.30	0	np	0	0	0
30878 876-05	237.4	242.6	5.2	4.8	4.8	92	4E4	4.5	24.18	6.98	17.20	99.0	1.03	4.44	25.86	30.30	0	np	0	0	0
30879 876-05	242.6	246.8	4.2	4.0	4.0	95	4E4	4	34.10	11.20	22.90	201.0	1.78	2.75	15.95	18.70	0	np	0	0	0
30880 876-05	246.8	249.6	2.8	4.9	2.8	100	4E4	4.5	14.06	4.18	9.88	75.0	1.27	3.56	31.74	35.30	0	np	0	0	0
30886 876-05	338.0	344.1	6.1	5.6	5.6	92	4E4	4	16.12	4.56	9.56	79.0	1.17	2.96	27.34	30.30	0	np	0	0	0
30887 876-05	344.1	348.0	3.9	4.1	3.9	100	5D4	3.3	7.52	1.55	5.97	21.0	0.62	0.96	12.74	21.70	0	np	0	0	0
30888 876-05	348.0	354.7	6.7	4.3	4.3	64	4E4	4.2	15.48	5.08	10.40	98.0	1.03	1.18	23.72	24.90	0	np	0	0	0
30889 876-05	354.7	358.3	3.6	3.7	3.6	100	4E4	4.2	12.80	3.99	8.81	75.0	0.62	2.48	30.22	32.70	0	np	0	0	0
30890 876-05	358.3	363.0	4.7	2.8	2.8	60	4L023	2.9	1.19	0.37	0.82	6.0	0.14	1.02	10.28	11.30	0	np	0	0	0
30891 876-05	363.0	367.0	4.0	5.0	4.0	100	4E4	3.9	15.91	5.51	10.40	97.0	1.30	3.32	21.48	24.80	0	np	0	0	0
30892 876-05	367.0	371.8	4.8	4.9	4.8	100	4E4	4.3	19.45	6.25	13.20	93.0	1.30	4.27	27.73	32.00	0	np	0	0	0
30893 876-05	371.8	374.0	2.2	2.4	2.2	100	4B34	3.5	9.64	3.42	6.22	54.0	1.65	3.42	17.88	21.30	0	np	0	0	0
30813 876-11	190.0	193.0	3.0	4.7	3.0	100	4E0	4.1	22.36	6.96	15.40	136.0	0.96	18.70	7.80	26.50	0	np	0	0	0
30814 876-11	193.0	196.3	3.3	3.3	3.3	100	4E4	4.4	25.87	8.77	17.10	180.0	1.58	1.35	26.65	28.00	0	np	0	0	0
30815 876-11	196.3	203.7	7.4	8.1	7.4	100	5E44	2.9	4.93	0.48	4.45	8.0	0.10	8.96	1.74	10.70	0	np	0	0	0
30942 876-12	307.0	309.5	2.5	2.6	2.5	100	5B62	2.9	1.87	0.79	1.08	11.0	0.07	2.66	2.78	5.44	0	np	0	0	0
30943 876-12	309.5	316.5	7.0	7.7	7.0	100	5B6	2.9	0.33	0.04	0.29	0.0	0.05	2.87	2.25	5.12	0	np	0	0	0
30944 876-12	316.5	320.4	3.9	4.6	3.9	100	4A4	2.6	6.72	1.96	4.76	34.0	0.27	0.97	0.79	1.76	0	np	0	0	0
30945 876-12	320.4	322.4	2.2	3.1	2.2	100	4E4	3.3	10.29	3.36	6.93	61.0	0.27	2.63	12.77	15.40	0	np	0	0	0
30946 876-12	322.4	325.5	2.9	3.2	2.9	100	4E4	3.6	14.15	5.05	9.10	96.0	0.41	1.37	17.73	19.10	0	np	0	0	0

SAMPLE	DDHID	FROM (ft)	TO (ft)	INT. (ft)	REC. (ft)	ACT REC. (ft)	REC. (%)	ROCK TYPE	PULP S.G.	% Pb+Zn	% Pb	% Zn	Ag (g/ton)	Au (g/ton)	ISOL Fe	ZINSOL Fe	ZTOTAL Fe	Weathering	Porous/Nonporous	Core Oxidation	Split Oxidation	Total Oxidation
30520	878-14	277.3	280.8	3.5	4.1	3.5	100	4E4	3.2	13.43	5.11	8.32	101.0	0.69	2.93	11.07	14.00	0	np	0	0	0
30521	878-14	280.8	284.2	3.4	3.7	3.4	100	4E4	3.9	24.37	8.67	15.70	155.0	1.30	4.85	13.35	18.20	0	np	0	0	0
30522	878-14	284.2	288.6	4.4	4.4	4.4	100	5B8	2.9	1.95	0.46	1.49	10.0	0.14	5.89	2.38	8.27	0	np	0	0	0
30523	878-14	288.6	292.8	4.2	4.7	4.2	100	5D8	2.8	0.44	0.26	0.18	4.0	0.07	5.95	0.34	6.29	0	np	0	0	0
30524	878-14	292.8	296.5	3.7	4.3	3.7	100	4A34	3.3	14.67	3.47	11.20	62.0	1.17	2.46	9.74	12.20	0	np	0	0	0
30455	878-14	239.8	242.0	2.2	2.0	2.0	91	4E468	3	23.72	7.92	15.80	113.0	1.37	3.54	19.66	23.20	0	np	0	0	0
16971	886-01	157.0	162.5	5.5	6.7	5.5	100	4A4	3	13.83	4.55	9.28	72.0	0.34	2.81	1.84	4.65	1	np	0	0	1
16972	886-01	162.5	166.8	4.3	4.8	4.3	100	4D0	2.9	5.66	1.37	4.29	24.0	0.07	6.34	4.06	10.40	0	np	0	0	0
16973	886-01	166.8	171.6	4.8	1.3	1.3	27	5C4	2.5	3.21	0.20	3.01	5.0	0.14	13.20	4.20	17.40	0	np	0	0	0
16974	886-01	171.6	172.7	1.1	1.0	1.0	91	4E0	3.8	3.19	0.87	2.32	5.0	1.03	0.90	35.10	36.00	0	np	0	0	0
16975	886-01	172.7	177.4	4.7	4.8	4.7	100	4D0	2.8	3.99	1.11	2.88	17.0	0.75	1.16	7.54	8.70	0	np	0	0	0
16976	886-01	177.4	182.0	4.6	5.1	4.6	100	4E4	3.7	11.65	3.98	7.67	91.0	1.30	0.77	26.53	27.30	0	np	0	0	0
16977	886-01	182.0	186.5	4.5	4.7	4.5	100	4E4	4.3	26.32	9.62	16.70	154.0	1.17	1.17	24.33	25.50	0	np	0	0	0
16978	886-01	186.5	190.0	3.5	5.0	3.5	100	4E4	4	28.10	11.30	16.80	177.0	1.30	3.56	16.04	19.60	0	np	0	0	0
16979	886-01	190.0	194.7	4.7	6.6	4.7	100	4E4	3.9	28.90	11.40	17.50	165.0	1.75	4.27	16.53	20.80	0	np	0	0	0
16956	886-03	166.3	169.0	2.7	1.4	1.4	52	4E0	3.8	5.57	2.83	2.74	35.0	0.51	15.00	18.90	33.90	0	np	0	0	0
16957	886-03	169.0	172.0	3.0	4.4	3.0	100	4L24	3.1	4.95	2.32	2.63	33.0	0.21	6.72	12.48	19.20	0	no	0	0	0
16958	886-03	172.0	175.5	3.5	4.3	3.5	100	4E0	4.5	11.46	6.94	4.52	94.0	0.96	0.85	28.05	28.90	0	np	0	0	0
16960	886-03	272.9	276.1	3.2	3.9	3.2	100	4B0	4.3	23.77	8.87	14.90	131.0	0.82	1.41	19.49	20.90	0	np	0	0	0
16961	886-03	276.1	279.5	3.4	4.2	3.4	100	4B0	4.4	14.68	5.25	9.43	83.0	1.71	2.76	21.54	24.30	0	np	0	0	0
16962	886-03	279.5	280.5	1.0	2.5	1.0	100	4A0	2.8	5.38	0.56	4.82	14.0	0.27	3.27	7.23	10.50	0	np	0	0	0
16970	886-03	417.2	421.0	3.8	2.9	2.9	76	4E1	3.8	5.56	2.41	3.15	34.0	0.21	18.00	17.10	35.10	0	np	0	0	0

* Note: Recovery is measured as the total interval occupied by the core as it lies in the core box. Recovery has been adjusted in the ACT REC column to correct the intervals where measured core recovery is greater than the drilled interval. This occurs when the recovered core has been spread out in the core box.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100