60001862

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud - Measured and Indicated Blocks Modelled with only One Composite
AUTHOR	
DATE OF DOC(S)	1995
MULTI_DIST Y / N? Additional Dist_Nos:	
QUAD_NAME	Sulphur 7½'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; South Zone; Rosebud Project Hecla Mining Co.
COMMODITY If not obvious	gold; silver
NOTES	Resource; assays; handwritten notes; statistics 26p.

Keep docs at about 250 pages if no oversized maps attached
(for every 1 oversized page (>11x17) with text reduce
the amount of pages by ~25)

SS: DP 8/1/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

MEASURED & INDICATED BLOCKS
MODELLED WITH ONLY ONE (1) COMPOSITE

6000 1862 4010

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MEASURED & INDICATED

Cut-off Au (opt)	Jan. 1995 RMI Tonnage	Au Grade (opt)	AuOz	Blocks Modelled with One (1) Composite Only Tonnage	Au Grade (opt)	AuOz	Percent of Total Measured & Indicated Tons	AuOz
0.001	13,918,802	0.064	896,284	79,624	0.293	23,303	0.6%	2.6%
0.01	13,452,332	0.066	891,460	79,624	0.293	23,303	0.6%	2.6%
0.02	8,339,869	0.098	814,443	79,624	0.293	23,303	1.0%	2.9%
0.03	4,227,718	0.170	717,349	79,624	0.293	23,303	1.9%	3.2%
0.04	2,760,613	0.242	668,112	79,589	0.293	23,299	2.9%	3.5%
0.05	2,439,957	0.268	654,455	75,421	0.307	23,121	3.1%	3.5%
0.06	2,272,058	0.284	644,634	71,315	0.321	22,885	3.1%	3.6%
0.07	2,092,614	0.303	633,220	69,662	0.327	22,777	3.3%	3.6%
0.08	1,846,861	0.333	615,039	66,169	0.340	22,511	3.6%	3.7%
0.09	1,625,451	0.367	596,802	60,486	0.364	22,026	3.7%	3.7%
0.10	1,426,889	0.405	577,579	58,621	0.373	21,859	4.1%	3.8%
0.11	1,240,119	0.450	558,328	54,819	0.391	21,450	4.4%	3.8%
0.12	1,105,382	0.491	542,893	49,358	0.422	20,827	4.5%	3.8%
0.13	1,009,285	0.526	530,733	42,210	0.472	19,919	4.2%	3.8%
0.14	918,735	0.565	518,746	42,210	0.472	19,919	4.6%	3.8%
0.15	853,701	0.597	509,419	42,210	0.472	19,919	4.9%	3.9%
0.16	811,935	0.620	503,046	41,428	0.478	19,793	5.1%	3.9%
0.17	778,962	0.639	497,602	41,056	0.481	19,730	5.3%	4.0%
0.18	753,631	0.654	493,247	37,466	0.510	19,105	5.0%	3.9%
0.19	734,217	0.667	489,575	37,466	0.510	19,105	5.1%	3.9%
0.20	718,195	0.677	486,492	37,466	0.510	19,105	5.2%	3.9%
0.21	707,090	0.685	484,051	37,466	0.510	19,105	5.3%	3.9%
0.22	689,542	0.697	480,342	36,893	0.515	18,983	5.4%	4.0%
0.23	665,548	0.714	475,083	36,893	0.515	18,983	5.5%	4.0%
0.24	648,718	0.726	470,969	35,249	0.528	18,602	5.4%	3.9%
0.25	630,807	0.740	466,731	33,643	0.541	18,208	5.3%	3.9%
0.26	602,697	0.762	459,464	32,323	0.553	17,870	5.4%	3.9%
0.27	571,476	0.789	451,177	29,484	0.581	17,125	5.2%	3.8%
0.28	547,183	0.812	444,396	26,276	0.618	16,234	4.8%	3.7%
0.29	526,415	0.833	438,542	25,294	0.631	15,955	4.8%	3.6%
0.30	515,358	0.845	435,222	25,294	0.631	15,955	4.9%	3.7%
0.40	380,131	1.026	389,836	12,953	0.922	11,948	3.4%	3.1%
0.50	334,402	1.106	369,784	12,953	0.922	11,948	3.9%	3.2%
0.60	303,398	1.163	352,804	11,178	0.976	10,910	3.7%	3.1%
0.70	263,994	1.239	327,180	7,782	1.118	8,699	2.9%	2.7%
0.80	202,827	1.386	281,188	6,717	1.174	7,883	3.3%	2.8%
0.90	151,166	1.569	237,200	5,197	1.272	6,611	3.4%	2.8%
1.00	132,947	1.655	220,092	5,197	1.272	6,611	3.9%	3.0%

file: 95rmi\compare.wk3 6\21\95

Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au2

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au2	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au2 Measured & Indicated	
							Tons	AuOz
0.00	947,760	0.092	87,194	13,306	0.101	1,344	1.4	1.5
0.01	947,760	0.092	87,194	13,306	0.101	1,344	1.4	1.5
0.02	940,224	0.093	87,441	13,306	0.101	1,344	1.4	1.5
0.03	936,103	0.093	87,058	13,306	0.101	1,344	1.4	1.5
0.04	923,367	0.094	86,797	13,306	0.101	1,344	1.4	1.5
0.05	885,115	0.096	84,971	11,824	0.108	1,277	1.3	1.5
0.06	822,969	0.099	81,474	11,803	0.108	1,275	1.4	1.6
0.07	699,510	0.105	73,449	11,803	0.108	1,275	1.7	1.7
0.08	575,279	0.112	64,431	10,374	0.112	1,162	1.8	1.8
0.09	450,141	0.120	54,017	7,462	0.122	910	1.7	1.7
0.10	324,709	0.129	41,887	5,770	0.130	750	1.8	1.8
0.11	229,602	0.140	32,144	5,770	0.130	750	2.5	2.3
0.12	149,243	0.154	22,983	3,867	0.138	534	2.6	2.3
0.13	99,789	0.168	16,765	574	0.213	122	0.6	0.7
0.14	64,442	0.187	12,051	574	0.213	122	0.9	1.0
0.15	40,268	0.212	8,537	574	0.213	122	1.4	1.4
0.16	31,795	0.228	7,249	574	0.213	122	1.8	1.7
0.17	23,718	0.250	5,930	574	0.213	122	2.4	2.1
0.18	18,790	0.269	5,054	574	0.213	122	3.1	2.4
0.19	15,671	0.286	4,482	574	0.213	122	3.7	2.7
0.20	14,604	0.293	4,279	574	0.213	122	3.9	2.9
0.21	13,554	0.300	4,066	574	0.213	122	4.2	3.0

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au3

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au3	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au3 Measured & Indicated	
							Tons	AuOz
0.00	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.01	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.02	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.03	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.04	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.05	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.06	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.07	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.08	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.09	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.10	294,894	0.295	86,994	7,195	0.311	2,238	2.4	2.6
0.11	294,316	0.295	86,823	7,195	0.311	2,238	2.4	2.6
0.12	294,106	0.295	86,761	7,195	0.311	2,238	2.4	2.6
0.13	293,267	0.295	86,514	7,195	0.311	2,238	2.5	2.6
0.14	292,866	0.296	86,688	7,195	0.311	2,238	2.5	2.6
0.15	292,396	0.296	86,549	7,195	0.311	2,238	2.5	2.6
0.16	291,081	0.297	86,451	7,195	0.311	2,238	2.5	2.6
0.17	286,154	0.299	85,560	7,177	0.311	2,232	2.5	2.6
0.18	280,144	0.302	84,603	7,177	0.311	2,232	2.6	2.6
0.19	272,264	0.305	83,041	7,177	0.311	2,232	2.6	2.7
0.20	265,495	0.308	81,772	7,177	0.311	2,232	2.7	2.7
0.21	256,924	0.311	79,903	7,177	0.311	2,232	2.8	2.8
0.22	246,404	0.315	77,617	7,177	0.311	2,232	2.9	2.9
0.23	229,964	0.322	74,048	7,177	0.311	2,232	3.1	3.0
0.24	216,180	0.327	70,691	7,177	0.311	2,232	3.3	3.2
0.25	203,495	0.333	67,764	7,177	0.311	2,232	3.5	3.3
0.26	181,525	0.342	62,082	7,177	0.311	2,232	4.0	3.6
0.27	160,881	0.352	56,630	7,177	0.311	2,232	4.5	3.9
0.28	141,168	0.362	51,103	4,267	0.334	1,425	3.0	2.8
0.29	124,772	0.373	46,540	3,285	0.349	1,146	2.6	2.5
0.30	114,762	0.379	43,495	3,285	0.349	1,146	2.9	2.6
0.31	104,920	0.387	40,604	3,285	0.349	1,146	3.1	2.8
0.32	92,347	0.396	36,569	3,285	0.349	1,146	3.6	3.1
0.33	79,512	0.408	32,441	571	0.451	257	0.7	0.8
0.34	65,779	0.423	27,825	571	0.451	257	0.9	0.9
0.35	56,979	0.435	24,786	571	0.451	257	1.0	1.0
0.36	52,067	0.443	23,066	571	0.451	257	1.1	1.1
0.37	49,514	0.447	22,133	571	0.451	257	1.2	1.2
0.38	44,051	0.456	20,087	571	0.451	257	1.3	1.3
0.39	39,306	0.465	18,277	571	0.451	257	1.5	1.4
0.40	35,799	0.472	16,897	571	0.451	257	1.6	1.5
0.41	33,707	0.476	16,045	571	0.451	257	1.7	1.6
0.42	32,665	0.478	15,614	571	0.451	257	1.7	1.6
0.43	20,356	0.512	10,422	571	0.451	257	2.8	2.5
0.44	19,748	0.515	10,170	571	0.451	257	2.9	2.5
0.45	15,931	0.531	8,459	571	0.451	257	3.6	3.0

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au4

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au4	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au4 Measured & Indicated Tons	AuOz
0.00	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.01	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.02	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.03	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.04	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.05	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.06	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.07	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.08	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.09	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.10	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.11	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.12	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.13	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.14	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.15	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.16	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.17	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.18	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.19	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.20	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.21	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.22	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.23	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.24	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.25	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.26	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.27	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.28	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.29	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.30	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.40	233,216	1.167	272,163	6,296	0.983	6,189	2.7	2.3
0.50	225,731	1.191	268,845	6,296	0.983	6,189	2.8	2.3
0.60	216,408	1.219	263,801	6,286	0.983	6,179	2.9	2.3
0.70	187,823	1.306	245,296	4,580	1.105	5,061	2.4	2.1
0.80	151,713	1.437	218,011	3,624	1.193	4,324	2.4	2.0
0.90	115,197	1.621	186,735	3,624	1.193	4,324	3.1	2.3
1.00	96,565	1.752	169,182	3,624	1.193	4,324	3.8	2.6

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MEASURED & INDICATED

	Jan. 1995 RMI			Blocks Modelled with One (1) Composite Only				
							Percent of Total Measured & Indicated	
Cut-off Au (opt)	Tonnage	Au Grade (opt)	AuOz	Tonnage	Au Grade (opt)	AuOz	Tons	AuOz
0.001	13,918,802	0.064	896,284	79,624	0.293	23,303	0.6%	2.6%
0.01	13,452,332	0.066	891,460	79,624	0.293	23,303	0.6%	2.6%
0.02	8,339,869	0.098	814,443	79,624	0.293	23,303	1.0%	2.9%
0.03	4,227,718	0.170	717,349	79,624	0.293	23,303	1.9%	3.2%
0.04	2,760,613	0.242	668,112	79,589	0.293	23,299	2.9%	3.5%
0.05	2,439,957	0.268	654,455	75,421	0.307	23,121	3.1%	3.5%
0.06	2,272,058	0.284	644,634	71,315	0.321	22,885	3.1%	3.6%
0.07	2,092,614	0.303	633,220	69,662	0.327	22,777	3.3%	3.6%
0.08	1,846,861	0.333	615,039	66,169	0.340	22,511	3.6%	3.7%
0.09	1,625,451	0.367	596,802	60,486	0.364	22,026	3.7%	3.7%
0.10	1,426,889	0.405	577,579	58,621	0.373	21,859	4.1%	3.8%
0.11	1,240,119	0.450	558,328	54,819	0.391	21,450	4.4%	3.8%
0.12	1,105,382	0.491	542,893	49,358	0.422	20,827	4.5%	3.8%
0.13	1,009,285	0.526	530,733	42,210	0.472	19,919	4.2%	3.8%
0.14	918,735	0.565	518,746	42,210	0.472	19,919	4.6%	3.8%
0.15	853,701	0.597	509,419	42,210	0.472	19,919	4.9%	3.9%
0.16	811,935	0.620	503,046	41,428	0.478	19,793	5.1%	3.9%
0.17	778,962	0.639	497,602	41,056	0.481	19,730	5.3%	4.0%
0.18	753,631	0.654	493,247	37,466	0.510	19,105	5.0%	3.9%
0.19	734,217	0.667	489,575	37,466	0.510	19,105	5.1%	3.9%
0.20	718,195	0.677	486,492	37,466	0.510	19,105	5.2%	3.9%
0.21	707,090	0.685	484,051	37,466	0.510	19,105	5.3%	3.9%
0.22	689,542	0.697	480,342	36,893	0.515	18,983	5.4%	4.0%
0.23	665,548	0.714	475,083	36,893	0.515	18,983	5.5%	4.0%
0.24	648,718	0.726	470,969	35,249	0.528	18,602	5.4%	3.9%
0.25	630,807	0.740	466,731	33,643	0.541	18,208	5.3%	3.9%
0.26	602,697	0.762	459,464	32,323	0.553	17,870	5.4%	3.9%
0.27	571,476	0.789	451,177	29,484	0.581	17,125	5.2%	3.8%
0.28	547,183	0.812	444,396	26,276	0.618	16,234	4.8%	3.7%
0.29	526,415	0.833	438,542	25,294	0.631	15,955	4.8%	3.6%
0.30	515,358	0.845	435,222	25,294	0.631	15,955	4.9%	3.7%
0.40	380,131	1.026	389,836	12,953	0.922	11,948	3.4%	3.1%
0.50	334,402	1.106	369,784	12,953	0.922	11,948	3.9%	3.2%
0.60	303,398	1.163	352,804	11,178	0.976	10,910	3.7%	3.1%
0.70	263,994	1.239	327,180	7,782	1.118	8,699	2.9%	2.7%
0.80	202,827	1.386	281,188	6,717	1.174	7,883	3.3%	2.8%
0.90	151,166	1.569	237,200	5,197	1.272	6,611	3.4%	2.8%
1.00	132,947	1.655	220,092	5,197	1.272	6,611	3.9%	3.0%

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au6

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au6	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au6 Measured & Indicated	
							Tons	AuOz
0.00	680,823	0.105	71,486	29,407	0.101	2,970	4.3	4.2
0.01	680,745	0.105	71,478	29,407	0.101	2,970	4.3	4.2
0.02	680,745	0.105	71,478	29,407	0.101	2,970	4.3	4.2
0.03	679,957	0.105	71,395	29,407	0.101	2,970	4.3	4.2
0.04	677,186	0.105	71,105	29,372	0.101	2,967	4.3	4.2
0.05	659,958	0.107	70,616	26,686	0.107	2,855	4.0	4.0
0.06	613,079	0.110	67,439	22,602	0.116	2,622	3.7	3.9
0.07	580,238	0.113	65,567	20,948	0.120	2,514	3.6	3.8
0.08	477,940	0.121	57,831	18,884	0.125	2,361	4.0	4.1
0.09	399,089	0.129	51,483	16,114	0.132	2,127	4.0	4.1
0.10	335,184	0.135	45,250	15,941	0.133	2,120	4.8	4.7
0.11	269,206	0.143	38,497	12,138	0.141	1,711	4.5	4.4
0.12	215,750	0.150	32,362	8,581	0.152	1,304	4.0	4.0
0.13	170,263	0.157	26,731	4,725	0.171	808	2.8	3.0
0.14	116,111	0.167	19,391	4,725	0.171	808	4.1	4.2
0.15	77,357	0.179	13,847	4,725	0.171	808	6.1	5.8
0.16	47,032	0.194	9,124	3,944	0.173	682	8.4	7.5
0.17	34,173	0.206	7,040	3,590	0.174	625	10.5	8.9

file: 95rmi\6compare.wk3 6/21/95

Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au7

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
							% of Total Au7 Measured & Indicated	
Cut-off Au7	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	Tons	AuOz
0.00	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.01	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.02	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.03	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.04	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.05	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.06	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.07	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.08	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.09	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.10	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.11	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.12	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.13	110,241	0.335	36,931	18,378	0.313	5,752	16.7	15.6
0.14	110,155	0.335	36,902	18,378	0.313	5,752	16.7	15.6
0.15	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.16	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.17	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.18	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.19	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.20	104,769	0.343	35,936	18,378	0.313	5,752	17.5	16.0
0.21	104,336	0.343	35,787	18,378	0.313	5,752	17.6	16.1
0.22	101,797	0.347	35,324	18,378	0.313	5,752	18.1	16.3
0.23	97,851	0.352	34,444	18,378	0.313	5,752	18.8	16.7
0.24	95,864	0.354	33,936	16,734	0.321	5,371	17.5	15.8
0.25	91,143	0.360	32,811	15,128	0.329	4,977	16.6	15.2
0.26	85,266	0.367	31,293	13,808	0.336	4,639	16.2	14.8
0.27	74,726	0.381	28,471	10,969	0.355	3,894	14.7	13.7
0.28	70,145	0.388	27,216	10,672	0.357	3,810	15.2	14.0
0.29	65,887	0.394	25,959	10,672	0.357	3,810	16.2	14.7
0.30	64,881	0.396	25,693	10,672	0.357	3,810	16.4	14.8
0.31	51,204	0.421	21,557	5,737	0.406	2,329	11.2	10.8
0.32	47,899	0.428	20,501	5,737	0.406	2,329	12.0	11.4
0.33	40,652	0.447	18,171	2,948	0.487	1,436	7.3	7.9
0.34	36,758	0.249	9,153	2,948	0.487	1,436	8.0	15.7
0.35	33,112	0.472	15,629	2,948	0.487	1,436	8.9	9.2
0.36	31,204	0.479	14,947	2,948	0.487	1,436	9.4	9.6
0.37	25,691	0.504	12,948	1,615	0.588	950	6.3	7.3
0.38	24,524	0.510	12,507	1,615	0.588	950	6.6	7.6
0.39	22,610	0.520	11,757	1,615	0.588	950	7.1	8.1
0.40	21,121	0.529	11,173	1,615	0.588	950	7.6	8.5
0.41	18,465	0.547	10,100	1,615	0.588	950	8.7	9.4
0.42	17,449	0.555	9,684	1,615	0.588	950	9.3	9.8
0.43	16,904	0.559	9,449	1,615	0.588	950	9.6	10.1
0.44	15,430	0.571	8,811	1,615	0.588	950	10.5	10.8
0.45	14,725	0.577	8,496	1,615	0.588	950	11.0	11.2
0.46	14,186	0.582	8,256	1,615	0.588	950	11.4	11.5
0.47	13,993	0.583	8,158	1,615	0.588	950	11.5	11.6
0.48	13,993	0.583	8,158	1,615	0.588	950	11.5	11.6
0.49	13,993	0.583	8,158	1,615	0.588	950	11.5	11.6
0.50	13,975	0.584	8,161	1,615	0.588	950	11.6	11.6
0.51	13,914	0.584	8,126	1,615	0.588	950	11.6	11.7
0.52	13,914	0.584	8,126	1,615	0.588	950	11.6	11.7
0.53	13,849	0.584	8,088	1,615	0.588	950	11.7	11.7
0.54	13,384	0.586	7,843	1,615	0.588	950	12.1	12.1
0.55	8,629	0.611	5,272	1,615	0.588	950	18.7	18.0
0.56	8,219	0.613	5,038	1,615	0.588	950	19.7	18.8
0.57	5,474	0.638	3,492	1,615	0.588	950	29.5	27.2
0.58	5,111	0.642	3,281	1,615	0.588	950	31.6	28.9

file: 95rmi\7compare.wk3 6/21/95

Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au8

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au8	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au8 Measured & Indicated	
							Tons	AuOz
0.00	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.01	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.02	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.03	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.04	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.05	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.06	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.07	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.08	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.09	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.10	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.11	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.12	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.13	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.14	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.15	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.16	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.17	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.18	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.19	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.20	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.21	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.22	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.23	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.24	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.25	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.26	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.27	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.28	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.29	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.30	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.40	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.50	71,597	1.082	82,586	5,042	0.954	4,810	6.6	5.8
0.60	68,048	1.111	79,544	4,892	0.967	4,731	6.8	5.9
0.70	62,126	1.153	78,459	3,203	1.136	3,638	4.7	4.6
0.80	51,114	1.236	76,787	3,093	1.151	3,560	5.0	4.6
0.90	35,969	1.403	71,712	1,573	1.454	2,288	3.1	3.2
1.00	35,304	1.412	50,788	1,573	1.454	2,288	4.4	4.5

file: 95rmi\8compare.wk3 6/21/95

SZ – 1995 RMI

South Zone @ 0.01 Au opt Increments																	
	All Domains					Domain	1			Domain	2			Domain	3		
Cutoff	Tons Above	Grade Above	Ounces			Tons	Grade	Ounces		Tons	Grade	Ounces		Tons	Grade	Ounces	
0.00	4,291,372	0.103	442,035		0	2555529	0.022	56221.64	0	608553.2	0.091	55378.34	0	211564.8	0.296	62623.18	0
0.01	4,189,282	0.105	439,934		0.01	2482565	0.022	54616.43	0.01	608553.2	0.091	55378.34	0.01	211564.8	0.296	62623.18	0.01
0.02	2,582,017	0.161	415,996		0.02	1303971	0.028	36511.17	0.02	608480.1	0.091	55371.69	0.02	211564.8	0.296	62623.18	0.02
0.03	1,492,947	0.261	390,227		0.03	372581.8	0.039	14530.69	0.03	607258.1	0.091	55260.49	0.03	211564.8	0.296	62623.18	0.03
0.04	1,202,816	0.317	380,780		0.04	115177.5	0.053	6104.408	0.04	598112.9	0.092	55026.39	0.04	211564.8	0.296	62623.18	0.04
0.05	1,109,051	0.340	376,746		0.05	52619.8	0.064	3367.667	0.05	576665.4	0.094	54206.55	0.05	211564.8	0.296	62623.18	0.05
0.06	1,042,659	0.358	373,076		0.06	29213.4	0.072	2103.365	0.06	534427.5	0.097	51839.47	0.06	211564.8	0.296	62623.18	0.06
0.07	945,951	0.387	366,403		0.07	16429.2	0.078	1281.478	0.07	451305.6	0.102	46033.17	0.07	211564.8	0.296	62623.18	0.07
0.08	841,036	0.426	358,698		0.08	5997.8	0.084	503.8152	0.08	363049.7	0.109	39572.42	0.08	211564.8	0.296	62623.18	0.08
0.09	747,765	0.469	350,841		0.09	275.3	0.091	25.0523	0.09	282022.4	0.116	32714.6	0.09	211564.8	0.296	62623.18	0.09
0.10	667,007	0.515	343,512						0.1	203483.1	0.125	25435.39	0.1	211265.7	0.297	62745.91	0.1
0.11	601,874	0.559	336,535						0.11	144877.8	0.133	19268.75	0.11	210687.5	0.297	62574.19	0.11
0.12	541,159	0.609	329,566						0.12	91431.2	0.144	13166.09	0.12	210477.9	0.297	62511.94	0.12
0.13	500,818	0.648	324,650						0.13	60102.2	0.155	9315.841	0.13	209638.7	0.298	62472.33	0.13
0.14	473,899	0.677	320,961						0.14	36616.7	0.168	6151.606	0.14	209237.3	0.298	62352.72	0.14

Domain	4			Domain	5			Domain	6			Domain	7			Domain	8	
Tons	Grade	Ounces		Tons	Grade	Ounces		Tons	Grade	Ounces		Tons	Grade	Ounces		Tons	Grade	Ounces
198256	1.209	239691.5	0	640206.8	0.017	10883.52	0	50378.1	0.099	4987.432	0	25249.5	0.391	9872.555	0	1634.5	1.454	2376.563
198256	1.209	239691.5	0.01	611080.6	0.017	10388.37	0.01	50378.1	0.099	4987.432	0.01	25249.5	0.391	9872.555	0.01	1634.5	1.454	2376.563
198256	1.209	239691.5	0.02	182483.8	0.025	4562.095	0.02	50378.1	0.099	4987.432	0.02	25249.5	0.391	9872.555	0.02	1634.5	1.454	2376.563
198256	1.209	239691.5	0.03	26024.5	0.034	884.833	0.03	50378.1	0.099	4987.432	0.03	25249.5	0.391	9872.555	0.03	1634.5	1.454	2376.563
198256	1.209	239691.5	0.04	2480	0.041	101.68	0.04	50340.9	0.099	4983.749	0.04	25249.5	0.391	9872.555	0.04	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.05	43061.3	0.107	4607.559	0.05	25249.5	0.391	9872.555	0.05	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.06	42313.4	0.108	4569.847	0.06	25249.5	0.391	9872.555	0.06	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.07	41511.3	0.109	4524.732	0.07	25249.5	0.391	9872.555	0.07	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.08	35283.4	0.115	4057.591	0.08	25249.5	0.391	9872.555	0.08	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.09	28762.6	0.123	3537.8	0.09	25249.5	0.391	9872.555	0.09	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.1	27118	0.125	3389.75	0.1	25249.5	0.391	9872.555	0.1	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.11	21168.3	0.13	2751.879	0.11	25249.5	0.391	9872.555	0.11	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.12	14109.6	0.138	1947.125	0.12	25249.5	0.391	9872.555	0.12	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.13	5959	0.156	929.604	0.13	25227.8	0.391	9864.07	0.13	1634.5	1.454	2376.563
198256	1.209	239691.5				0	0.14	3011.6	0.177	533.0532	0.14	25142.5	0.392	9855.86	0.14	1634.5	1.454	2376.563

HECLA MINING COMPANY – ROSEBUD PROJECT
CROSS–SECTIONAL POLYGONAL RESOURCE ESTIMATE

January 18, 1995

Sum of Composited Blocks > 0.10 opt Au

Domain	Tonnage	Au Oz	Ag Oz	Au (opt)	Ag (opt)	
1	59,365	6,233	9,736	0.105	0.16	1.5/1
2	384,907	49,078	365,033	0.128	0.95	7.4/1
3	274,548	92,797	789,598	0.338	2.88	8.5/1
4	228,910	271,738	1,423,235	1.187	6.22	—
5	33,955	9,847	9,508	0.290	0.28	1/1
6	507,344	68,854	998,541	0.136	1.97	14.5/1
7	129,235	43,004	326,621	0.333	2.53	7.6/1
8	86,125	104,420	143,365	1.212	1.66	—
11	26,393	9,494	277,772	0.360	10.52	29.2/1
TOTALS	1,730,782	655,466	4,343,410	0.379	2.51	

Use these figures as the diluted estimate?

.ade

zone 4 (.01-2.0) range = 66' we used 90'

(in zone 4, everything holds up pretty well to 3 oz → goes to hell past 3oz → still no range to project extreme high grades)

zone 2	range	50'-65'	we used	96'
3	"	70'-75'	" "	100'
6 (directional)	"	75'-90'	" "	80'
7		—	" "	100'
8	"	90' (downhole only)	" "	90'

Δ to Model Ranges

zone 1	remains the same (@ 132')	;	40' for ≥ .06
2	Δ to 60'	;	30' for ≥ .20
3	Δ to 75'	;	56' for ≥ .60
4	Δ to 70'	;	20' for ≥ 2.0
5	Δ to 160'	;	50' for ≥ .06
6	remains the same (@ 80')	;	50' for ≥ .25
7	Δ to 75'	;	45' for ≥ .60
8	Δ to 50'	;	15' for ≥ 2.0

this is probably conservative since vanigrs did not fall apart until 3 opt.

MEASURED & INDICATED

	Jan. 1995 RMI			Blocks Modelled with One (1) Composite Only				
							Percent of Total Measured & Indicated	
Cut-off Au (opt)	Tonnage	Au Grade (opt)	AuOz	Tonnage	Au Grade (opt)	AuOz	Tons	AuOz
0.001	13,918,802	0.064	896,284	79,624	0.293	23,303	0.6%	2.6%
0.01	13,452,332	0.066	891,460	79,624	0.293	23,303	0.6%	2.6%
0.02	8,339,869	0.098	814,443	79,624	0.293	23,303	1.0%	2.9%
0.03	4,227,718	0.170	717,349	79,624	0.293	23,303	1.9%	3.2%
0.04	2,760,613	0.242	668,112	79,589	0.293	23,299	2.9%	3.5%
0.05	2,439,957	0.268	654,455	75,421	0.307	23,121	3.1%	3.5%
0.06	2,272,058	0.284	644,634	71,315	0.321	22,885	3.1%	3.6%
0.07	2,092,614	0.303	633,220	69,662	0.327	22,777	3.3%	3.6%
0.08	1,846,861	0.333	615,039	66,169	0.340	22,511	3.6%	3.7%
0.09	1,625,451	0.367	596,802	60,486	0.364	22,026	3.7%	3.7%
0.10	1,426,889	0.405	577,579	58,621	0.373	21,859	4.1%	3.8%
0.11	1,240,119	0.450	558,328	54,819	0.391	21,450	4.4%	3.8%
0.12	1,105,382	0.491	542,893	49,358	0.422	20,827	4.5%	3.8%
0.13	1,009,285	0.526	530,733	42,210	0.472	19,919	4.2%	3.8%
0.14	918,735	0.565	518,746	42,210	0.472	19,919	4.6%	3.8%
0.15	853,701	0.597	509,419	42,210	0.472	19,919	4.9%	3.9%
0.16	811,935	0.620	503,046	41,428	0.478	19,793	5.1%	3.9%
0.17	778,962	0.639	497,602	41,056	0.481	19,730	5.3%	4.0%
0.18	753,631	0.654	493,247	37,466	0.510	19,105	5.0%	3.9%
0.19	734,217	0.667	489,575	37,466	0.510	19,105	5.1%	3.9%
0.20	718,195	0.677	486,492	37,466	0.510	19,105	5.2%	3.9%
0.21	707,090	0.685	484,051	37,466	0.510	19,105	5.3%	3.9%
0.22	689,542	0.697	480,342	36,893	0.515	18,983	5.4%	4.0%
0.23	665,548	0.714	475,083	36,893	0.515	18,983	5.5%	4.0%
0.24	648,718	0.726	470,969	35,249	0.528	18,602	5.4%	3.9%
0.25	630,807	0.740	466,731	33,643	0.541	18,208	5.3%	3.9%
0.26	602,697	0.762	459,464	32,323	0.553	17,870	5.4%	3.9%
0.27	571,476	0.789	451,177	29,484	0.581	17,125	5.2%	3.8%
0.28	547,183	0.812	444,396	26,276	0.618	16,234	4.8%	3.7%
0.29	526,415	0.833	438,542	25,294	0.631	15,955	4.8%	3.6%
0.30	515,358	0.845	435,222	25,294	0.631	15,955	4.9%	3.7%
0.40	380,131	1.026	389,836	12,953	0.922	11,948	3.4%	3.1%
0.50	334,402	1.106	369,784	12,953	0.922	11,948	3.9%	3.2%
0.60	303,398	1.163	352,804	11,178	0.976	10,910	3.7%	3.1%
0.70	263,994	1.239	327,180	7,782	1.118	8,699	2.9%	2.7%
0.80	202,827	1.386	281,188	6,717	1.174	7,883	3.3%	2.8%
0.90	151,166	1.569	237,200	5,197	1.272	6,611	3.4%	2.8%
1.00	132,947	1.655	220,092	5,197	1.272	6,611	3.9%	3.0%

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MEASURED & INDICATED

Cut-off Au (opt)	Jan. 1995 RMI			Blocks Modelled with One (1) Composite Only			Percent of Total Measured & Indicated	
	Tonnage	Au Grade (opt)	AuOz	Tonnage	Au Grade (opt)	AuOz	Tons	AuOz
0.001	13,918,802	0.064	896,284	79,624	0.293	23,303	0.6%	2.6%
0.01	13,452,332	0.066	891,460	79,624	0.293	23,303	0.6%	2.6%
0.02	8,339,869	0.098	814,443	79,624	0.293	23,303	1.0%	2.9%
0.03	4,227,718	0.170	717,349	79,624	0.293	23,303	1.9%	3.2%
0.04	2,760,613	0.242	668,112	79,589	0.293	23,299	2.9%	3.5%
0.05	2,439,957	0.268	654,455	75,421	0.307	23,121	3.1%	3.5%
0.06	2,272,058	0.284	644,634	71,315	0.321	22,885	3.1%	3.6%
0.07	2,092,614	0.303	633,220	69,662	0.327	22,777	3.3%	3.6%
0.08	1,846,861	0.333	615,039	66,169	0.340	22,511	3.6%	3.7%
0.09	1,625,451	0.367	596,802	60,486	0.364	22,026	3.7%	3.7%
0.10	1,426,889	0.405	577,579	58,621	0.373	21,859	4.1%	3.8%
0.11	1,240,119	0.450	558,328	54,819	0.391	21,450	4.4%	3.8%
0.12	1,105,382	0.491	542,893	49,358	0.422	20,827	4.5%	3.8%
0.13	1,009,285	0.526	530,733	42,210	0.472	19,919	4.2%	3.8%
0.14	918,735	0.565	518,746	42,210	0.472	19,919	4.6%	3.8%
0.15	853,701	0.597	509,419	42,210	0.472	19,919	4.9%	3.9%
0.16	811,935	0.620	503,046	41,428	0.478	19,793	5.1%	3.9%
0.17	778,962	0.639	497,602	41,056	0.481	19,730	5.3%	4.0%
0.18	753,631	0.654	493,247	37,466	0.510	19,105	5.0%	3.9%
0.19	734,217	0.667	489,575	37,466	0.510	19,105	5.1%	3.9%
0.20	718,195	0.677	486,492	37,466	0.510	19,105	5.2%	3.9%
0.21	707,090	0.685	484,051	37,466	0.510	19,105	5.3%	3.9%
0.22	689,542	0.697	480,342	36,893	0.515	18,983	5.4%	4.0%
0.23	665,548	0.714	475,083	36,893	0.515	18,983	5.5%	4.0%
0.24	648,718	0.726	470,969	35,249	0.528	18,602	5.4%	3.9%
0.25	630,807	0.740	466,731	33,643	0.541	18,208	5.3%	3.9%
0.26	602,697	0.762	459,464	32,323	0.553	17,870	5.4%	3.9%
0.27	571,476	0.789	451,177	29,484	0.581	17,125	5.2%	3.8%
0.28	547,183	0.812	444,396	26,276	0.618	16,234	4.8%	3.7%
0.29	526,415	0.833	438,542	25,294	0.631	15,955	4.8%	3.6%
0.30	515,358	0.845	435,222	25,294	0.631	15,955	4.9%	3.7%
0.40	380,131	1.026	389,836	12,953	0.922	11,948	3.4%	3.1%
0.50	334,402	1.106	369,784	12,953	0.922	11,948	3.9%	3.2%
0.60	303,398	1.163	352,804	11,178	0.976	10,910	3.7%	3.1%
0.70	263,994	1.239	327,180	7,782	1.118	8,699	2.9%	2.7%
0.80	202,827	1.386	281,188	6,717	1.174	7,883	3.3%	2.8%
0.90	151,166	1.569	237,200	5,197	1.272	6,611	3.4%	2.8%
1.00	132,947	1.655	220,092	5,197	1.272	6,611	3.9%	3.0%

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au2

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
							% of Total Au2 Measured & Indicated	
Cut-off Au2	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	Tons	AuOz
0.00	947,760	0.092	87,194	13,306	0.101	1,344	1.4	1.5
0.01	947,760	0.092	87,194	13,306	0.101	1,344	1.4	1.5
0.02	940,224	0.093	87,441	13,306	0.101	1,344	1.4	1.5
0.03	936,103	0.093	87,058	13,306	0.101	1,344	1.4	1.5
0.04	923,367	0.094	86,797	13,306	0.101	1,344	1.4	1.5
0.05	885,115	0.096	84,971	11,824	0.108	1,277	1.3	1.5
0.06	822,969	0.099	81,474	11,803	0.108	1,275	1.4	1.6
0.07	699,510	0.105	73,449	11,803	0.108	1,275	1.7	1.7
0.08	575,279	0.112	64,431	10,374	0.112	1,162	1.8	1.8
0.09	450,141	0.120	54,017	7,462	0.122	910	1.7	1.7
0.10	324,709	0.129	41,887	5,770	0.130	750	1.8	1.8
0.11	229,602	0.140	32,144	5,770	0.130	750	2.5	2.3
0.12	149,243	0.154	22,983	3,867	0.138	534	2.6	2.3
0.13	99,789	0.168	16,765	574	0.213	122	0.6	0.7
0.14	64,442	0.187	12,051	574	0.213	122	0.9	1.0
0.15	40,268	0.212	8,537	574	0.213	122	1.4	1.4
0.16	31,795	0.228	7,249	574	0.213	122	1.8	1.7
0.17	23,718	0.250	5,930	574	0.213	122	2.4	2.1
0.18	18,790	0.269	5,054	574	0.213	122	3.1	2.4
0.19	15,671	0.286	4,482	574	0.213	122	3.7	2.7
0.20	14,604	0.293	4,279	574	0.213	122	3.9	2.9
0.21	13,554	0.300	4,066	574	0.213	122	4.2	3.0

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au3

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au3	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au3 Measured & Indicated Tons	% of Total Au3 Measured & Indicated AuOz
0.00	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.01	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.02	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.03	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.04	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.05	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.06	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.07	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.08	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.09	297,852	0.293	87,271	7,195	0.311	2,238	2.4	2.6
0.10	294,894	0.295	86,994	7,195	0.311	2,238	2.4	2.6
0.11	294,316	0.295	86,823	7,195	0.311	2,238	2.4	2.6
0.12	294,106	0.295	86,761	7,195	0.311	2,238	2.4	2.6
0.13	293,267	0.295	86,514	7,195	0.311	2,238	2.5	2.6
0.14	292,866	0.296	86,688	7,195	0.311	2,238	2.5	2.6
0.15	292,396	0.296	86,549	7,195	0.311	2,238	2.5	2.6
0.16	291,081	0.297	86,451	7,195	0.311	2,238	2.5	2.6
0.17	286,154	0.299	85,560	7,177	0.311	2,232	2.5	2.6
0.18	280,144	0.302	84,603	7,177	0.311	2,232	2.6	2.6
0.19	272,264	0.305	83,041	7,177	0.311	2,232	2.6	2.7
0.20	265,495	0.308	81,772	7,177	0.311	2,232	2.7	2.7
0.21	256,924	0.311	79,903	7,177	0.311	2,232	2.8	2.8
0.22	246,404	0.315	77,617	7,177	0.311	2,232	2.9	2.9
0.23	229,964	0.322	74,048	7,177	0.311	2,232	3.1	3.0
0.24	216,180	0.327	70,691	7,177	0.311	2,232	3.3	3.2
0.25	203,495	0.333	67,764	7,177	0.311	2,232	3.5	3.3
0.26	181,525	0.342	62,082	7,177	0.311	2,232	4.0	3.6
0.27	160,881	0.352	56,630	7,177	0.311	2,232	4.5	3.9
0.28	141,168	0.362	51,103	4,267	0.334	1,425	3.0	2.8
0.29	124,772	0.373	46,540	3,285	0.349	1,146	2.6	2.5
0.30	114,762	0.379	43,495	3,285	0.349	1,146	2.9	2.6
0.31	104,920	0.387	40,604	3,285	0.349	1,146	3.1	2.8
0.32	92,347	0.396	36,569	3,285	0.349	1,146	3.6	3.1
0.33	79,512	0.408	32,441	571	0.451	257	0.7	0.8
0.34	65,779	0.423	27,825	571	0.451	257	0.9	0.9
0.35	56,979	0.435	24,786	571	0.451	257	1.0	1.0
0.36	52,067	0.443	23,066	571	0.451	257	1.1	1.1
0.37	49,514	0.447	22,133	571	0.451	257	1.2	1.2
0.38	44,051	0.456	20,087	571	0.451	257	1.3	1.3
0.39	39,306	0.465	18,277	571	0.451	257	1.5	1.4
0.40	35,799	0.472	16,897	571	0.451	257	1.6	1.5
0.41	33,707	0.476	16,045	571	0.451	257	1.7	1.6
0.42	32,665	0.478	15,614	571	0.451	257	1.7	1.6
0.43	20,356	0.512	10,422	571	0.451	257	2.8	2.5
0.44	19,748	0.515	10,170	571	0.451	257	2.9	2.5
0.45	15,931	0.531	8,459	571	0.451	257	3.6	3.0

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au4

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au4	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au4 Measured & Indicated Tons	% of Total Au4 Measured & Indicated AuOz
0.00	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.01	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.02	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.03	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.04	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.05	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.06	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.07	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.08	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.09	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.10	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.11	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.12	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.13	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.14	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.15	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.16	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.17	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.18	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.19	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.20	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.21	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.22	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.23	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.24	233,590	1.166	272,366	6,296	0.983	6,189	2.7	2.3
0.25	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.26	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.27	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.28	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.29	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.30	233,515	1.166	272,278	6,296	0.983	6,189	2.7	2.3
0.40	233,216	1.167	272,163	6,296	0.983	6,189	2.7	2.3
0.50	225,731	1.191	268,845	6,296	0.983	6,189	2.8	2.3
0.60	216,408	1.219	263,801	6,286	0.983	6,179	2.9	2.3
0.70	187,823	1.306	245,296	4,580	1.105	5,061	2.4	2.1
0.80	151,713	1.437	218,011	3,624	1.193	4,324	2.4	2.0
0.90	115,197	1.621	186,735	3,624	1.193	4,324	3.1	2.3
1.00	96,565	1.752	169,182	3,624	1.193	4,324	3.8	2.6

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au6

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au6	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au6 Measured & Indicated	
							Tons	AuOz
0.00	680,823	0.105	71,486	29,407	0.101	2,970	4.3	4.2
0.01	680,745	0.105	71,478	29,407	0.101	2,970	4.3	4.2
0.02	680,745	0.105	71,478	29,407	0.101	2,970	4.3	4.2
0.03	679,957	0.105	71,395	29,407	0.101	2,970	4.3	4.2
0.04	677,186	0.105	71,105	29,372	0.101	2,967	4.3	4.2
0.05	659,958	0.107	70,616	26,686	0.107	2,855	4.0	4.0
0.06	613,079	0.110	67,439	22,602	0.116	2,622	3.7	3.9
0.07	580,238	0.113	65,567	20,948	0.120	2,514	3.6	3.8
0.08	477,940	0.121	57,831	18,884	0.125	2,361	4.0	4.1
0.09	399,089	0.129	51,483	16,114	0.132	2,127	4.0	4.1
0.10	335,184	0.135	45,250	15,941	0.133	2,120	4.8	4.7
0.11	269,206	0.143	38,497	12,138	0.141	1,711	4.5	4.4
0.12	215,750	0.150	32,362	8,581	0.152	1,304	4.0	4.0
0.13	170,263	0.157	26,731	4,725	0.171	808	2.8	3.0
0.14	116,111	0.167	19,391	4,725	0.171	808	4.1	4.2
0.15	77,357	0.179	13,847	4,725	0.171	808	6.1	5.8
0.16	47,032	0.194	9,124	3,944	0.173	682	8.4	7.5
0.17	34,173	0.206	7,040	3,590	0.174	625	10.5	8.9

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au7

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
							% of Total Au7 Measured & Indicated	
Cut-off Au7	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	Tons	AuOz
0.00	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.01	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.02	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.03	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.04	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.05	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.06	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.07	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.08	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.09	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.10	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.11	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.12	110,262	0.335	36,938	18,378	0.313	5,752	16.7	15.6
0.13	110,241	0.335	36,931	18,378	0.313	5,752	16.7	15.6
0.14	110,155	0.335	36,902	18,378	0.313	5,752	16.7	15.6
0.15	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.16	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.17	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.18	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.19	110,057	0.336	36,979	18,378	0.313	5,752	16.7	15.6
0.20	104,769	0.343	35,936	18,378	0.313	5,752	17.5	16.0
0.21	104,336	0.343	35,787	18,378	0.313	5,752	17.6	16.1
0.22	101,797	0.347	35,324	18,378	0.313	5,752	18.1	16.3
0.23	97,851	0.352	34,444	18,378	0.313	5,752	18.8	16.7
0.24	95,864	0.354	33,936	16,734	0.321	5,371	17.5	15.8
0.25	91,143	0.360	32,811	15,128	0.329	4,977	16.6	15.2
0.26	85,266	0.367	31,293	13,808	0.336	4,639	16.2	14.8
0.27	74,726	0.381	28,471	10,969	0.355	3,894	14.7	13.7
0.28	70,145	0.388	27,216	10,672	0.357	3,810	15.2	14.0
0.29	65,887	0.394	25,959	10,672	0.357	3,810	16.2	14.7
0.30	64,881	0.396	25,693	10,672	0.357	3,810	16.4	14.8
0.31	51,204	0.421	21,557	5,737	0.406	2,329	11.2	10.8
0.32	47,899	0.428	20,501	5,737	0.406	2,329	12.0	11.4
0.33	40,652	0.447	18,171	2,948	0.487	1,436	7.3	7.9
0.34	36,758	0.249	9,153	2,948	0.487	1,436	8.0	15.7
0.35	33,112	0.472	15,629	2,948	0.487	1,436	8.9	9.2
0.36	31,204	0.479	14,947	2,948	0.487	1,436	9.4	9.6
0.37	25,691	0.504	12,948	1,615	0.588	950	6.3	7.3
0.38	24,524	0.510	12,507	1,615	0.588	950	6.6	7.6
0.39	22,610	0.520	11,757	1,615	0.588	950	7.1	8.1
0.40	21,121	0.529	11,173	1,615	0.588	950	7.6	8.5
0.41	18,465	0.547	10,100	1,615	0.588	950	8.7	9.4
0.42	17,449	0.555	9,684	1,615	0.588	950	9.3	9.8
0.43	16,904	0.559	9,449	1,615	0.588	950	9.6	10.1
0.44	15,430	0.571	8,811	1,615	0.588	950	10.5	10.8
0.45	14,725	0.577	8,496	1,615	0.588	950	11.0	11.2
0.46	14,186	0.582	8,256	1,615	0.588	950	11.4	11.5
0.47	13,993	0.583	8,158	1,615	0.588	950	11.5	11.6
0.48	13,993	0.583	8,158	1,615	0.588	950	11.5	11.6
0.49	13,993	0.583	8,158	1,615	0.588	950	11.5	11.6
0.50	13,975	0.584	8,161	1,615	0.588	950	11.6	11.6
0.51	13,914	0.584	8,126	1,615	0.588	950	11.6	11.7
0.52	13,914	0.584	8,126	1,615	0.588	950	11.6	11.7
0.53	13,849	0.584	8,088	1,615	0.588	950	11.7	11.7
0.54	13,384	0.586	7,843	1,615	0.588	950	12.1	12.1
0.55	8,629	0.611	5,272	1,615	0.588	950	18.7	18.0
0.56	8,219	0.613	5,038	1,615	0.588	950	19.7	18.8
0.57	5,474	0.638	3,492	1,615	0.588	950	29.5	27.2
0.58	5,111	0.642	3,281	1,615	0.588	950	31.6	28.9

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Statistical Analysis of Model Grades
Measured & Indicated Resource - Grade Domain Au8

	Jan., 1995 RMI			Blocks Modelled with One (1) Composite Only				
Cut-off Au8	Tonnage	Mean Grade	AuOz	Tonnage	Mean Grade	AuOz	% of Total Au8 Measured & Indicated Tons	% of Total Au8 Measured & Indicated AuOz
0.00	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.01	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.02	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.03	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.04	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.05	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.06	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.07	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.08	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.09	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.10	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.11	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.12	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.13	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.14	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.15	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.16	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.17	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.18	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.19	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.20	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.21	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.22	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.23	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.24	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.25	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.26	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.27	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.28	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.29	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.30	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.40	76,327	1.045	79,762	5,042	0.954	4,810	6.6	6.0
0.50	71,597	1.082	82,586	5,042	0.954	4,810	6.6	5.8
0.60	68,048	1.111	79,544	4,892	0.967	4,731	6.8	5.9
0.70	62,126	1.153	78,459	3,203	1.136	3,638	4.7	4.6
0.80	51,114	1.236	76,787	3,093	1.151	3,560	5.0	4.6
0.90	35,969	1.403	71,712	1,573	1.454	2,288	3.1	3.2
1.00	35,304	1.412	50,788	1,573	1.454	2,288	4.4	4.5

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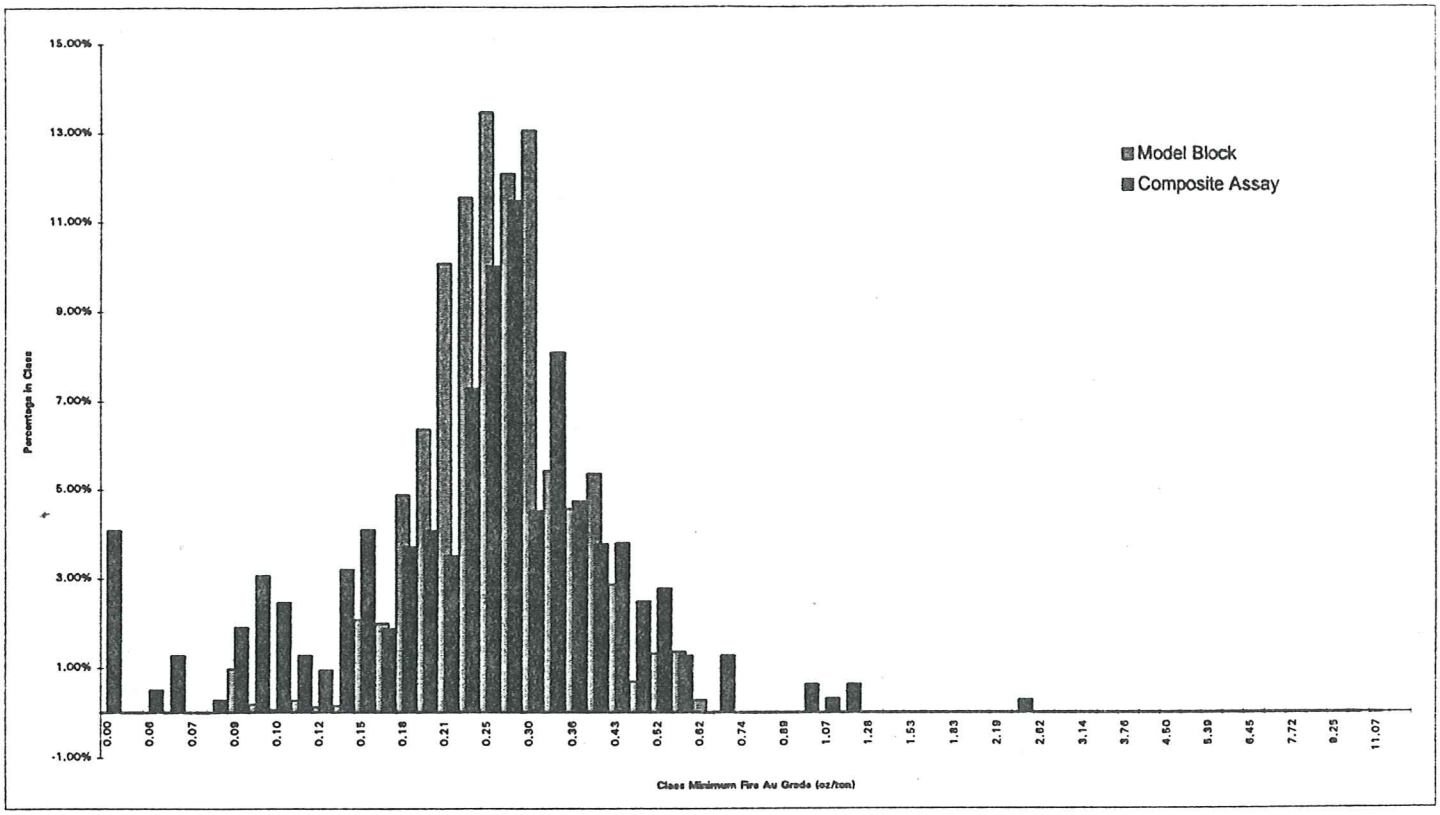
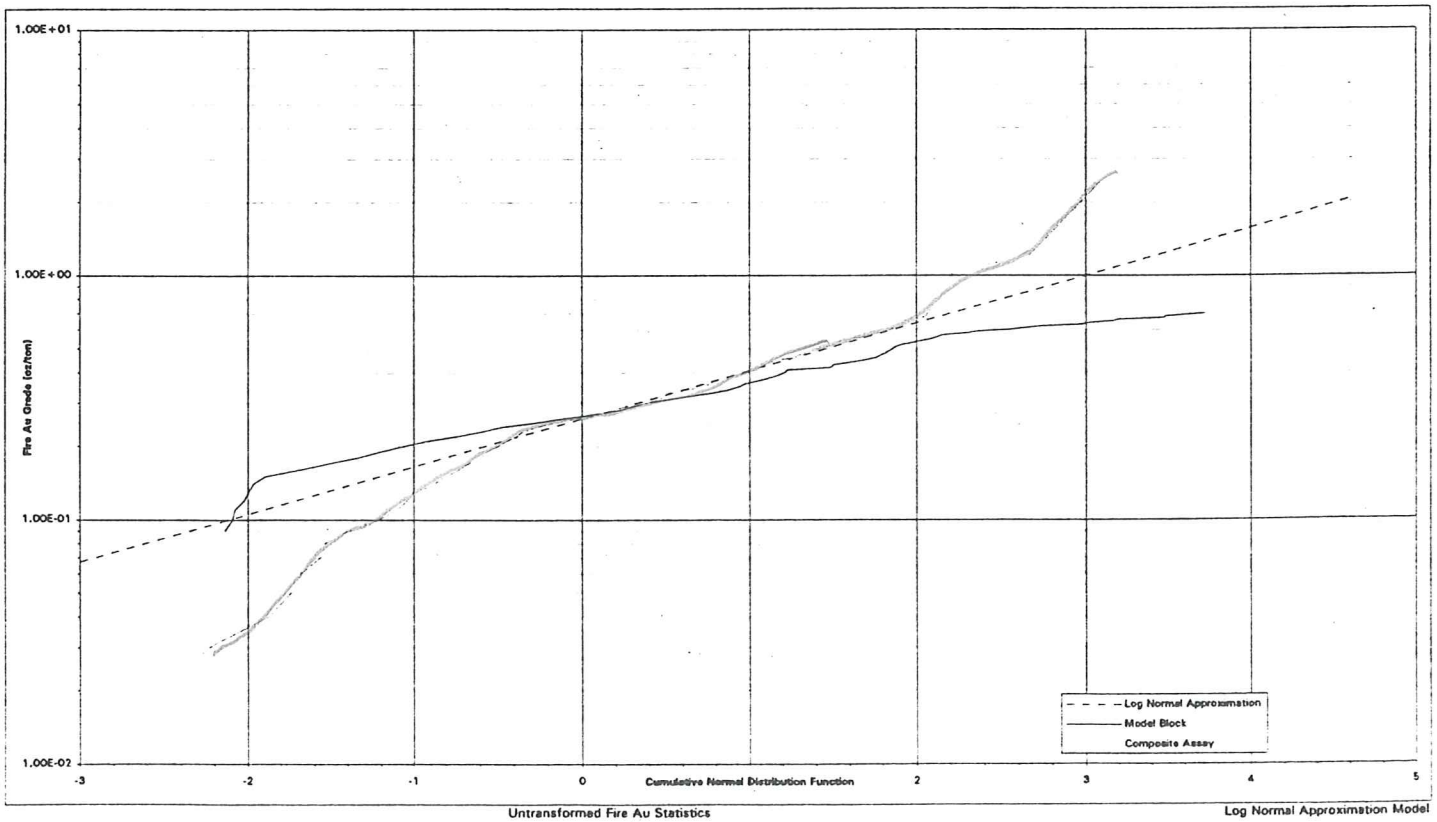
Figure 1 - 1

Frequency Distribution of Model Block and Composite Assay Fire Au Grades in Domain 3 - Rosebud Project





Untransformed Fire Au Statistics

	Fire Au Cutoff = 0.00 oz/ton		Fire Au Cutoff = 0.10 oz/ton		Fire Au Cutoff = 0.50 oz/ton		Fire Au Cutoff = 1.00 oz/ton	
	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)
Model Block	299,863	0.286	295,000	0.290	9,886	0.568	0	0.000
Composite Assa	1,561	0.293	1,561	0.293	135	0.755	31	1.360

Log Normal Approximation Model

Mean	Standard Deviation	Third Parameter
-1.35	0.45	0.00

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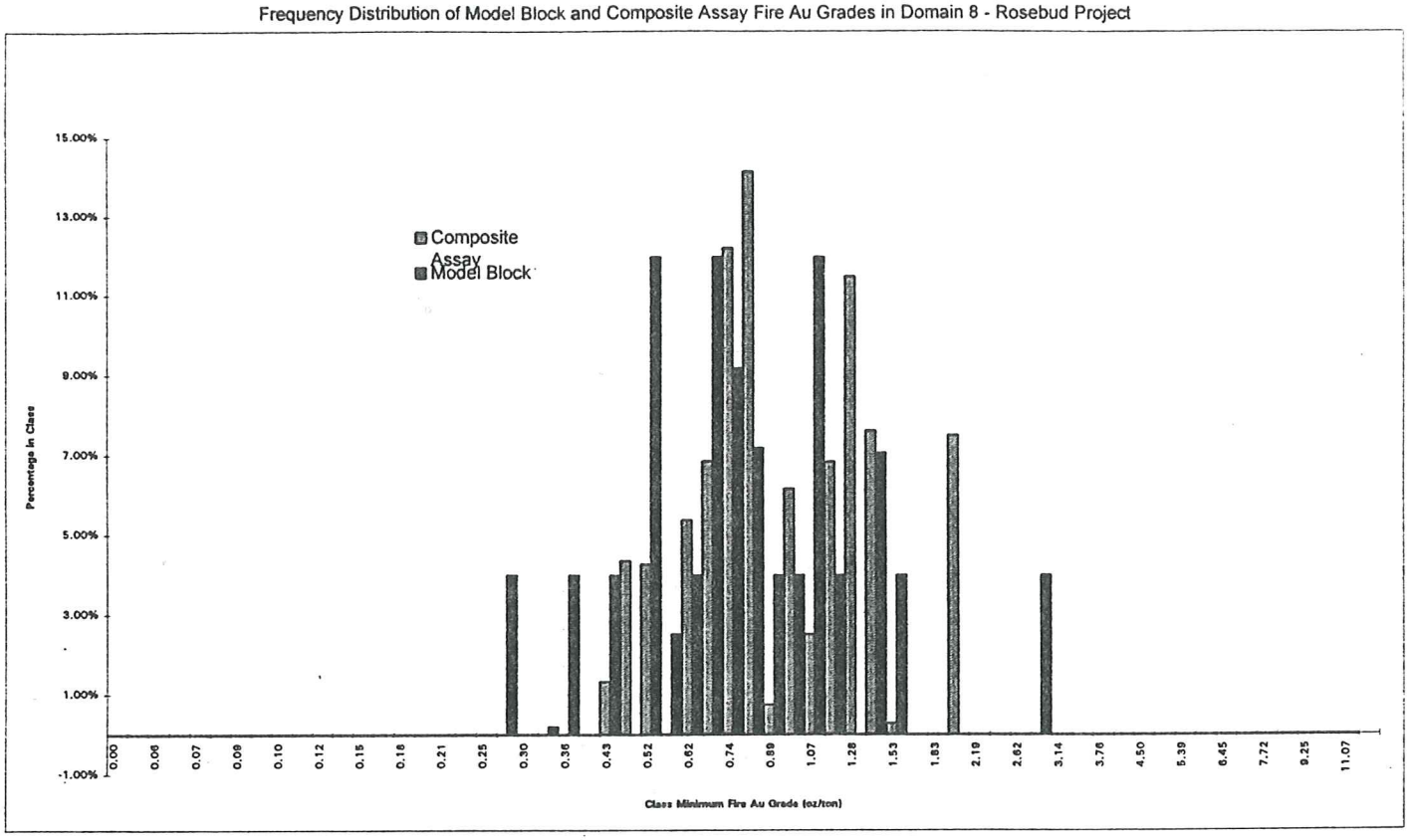
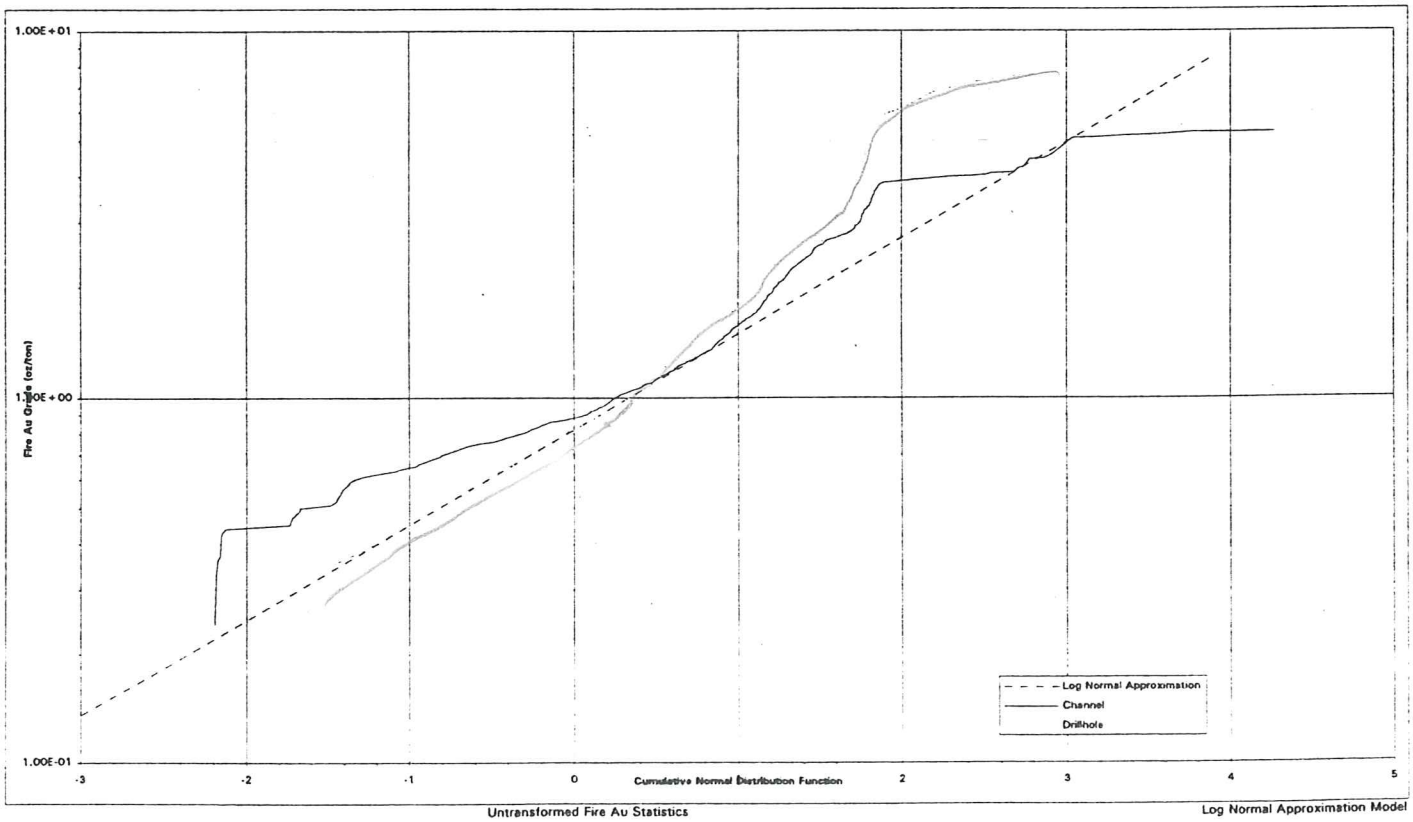
Figure 1 - 3
Frequency Distribution of Model Block and Composite Assay Fire Au Grades in Domain 8 - Rosebud Project





Untransformed Fire Au Statistics

	Fire Au Cutoff = 0.00 oz/ton		Fire Au Cutoff = 0.10 oz/ton		Fire Au Cutoff = 0.50 oz/ton		Fire Au Cutoff = 1.00 oz/ton	
	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)
Channel	80,051	0.954	73,498	1.039	68,943	1.077	33,996	1.407
Drillhole	251	1.213	251	1.213	220	1.329	83	2.334

Log Normal Approximation Model

Mean	Standard Deviation	Third Parameter
-0.20	0.60	0.00

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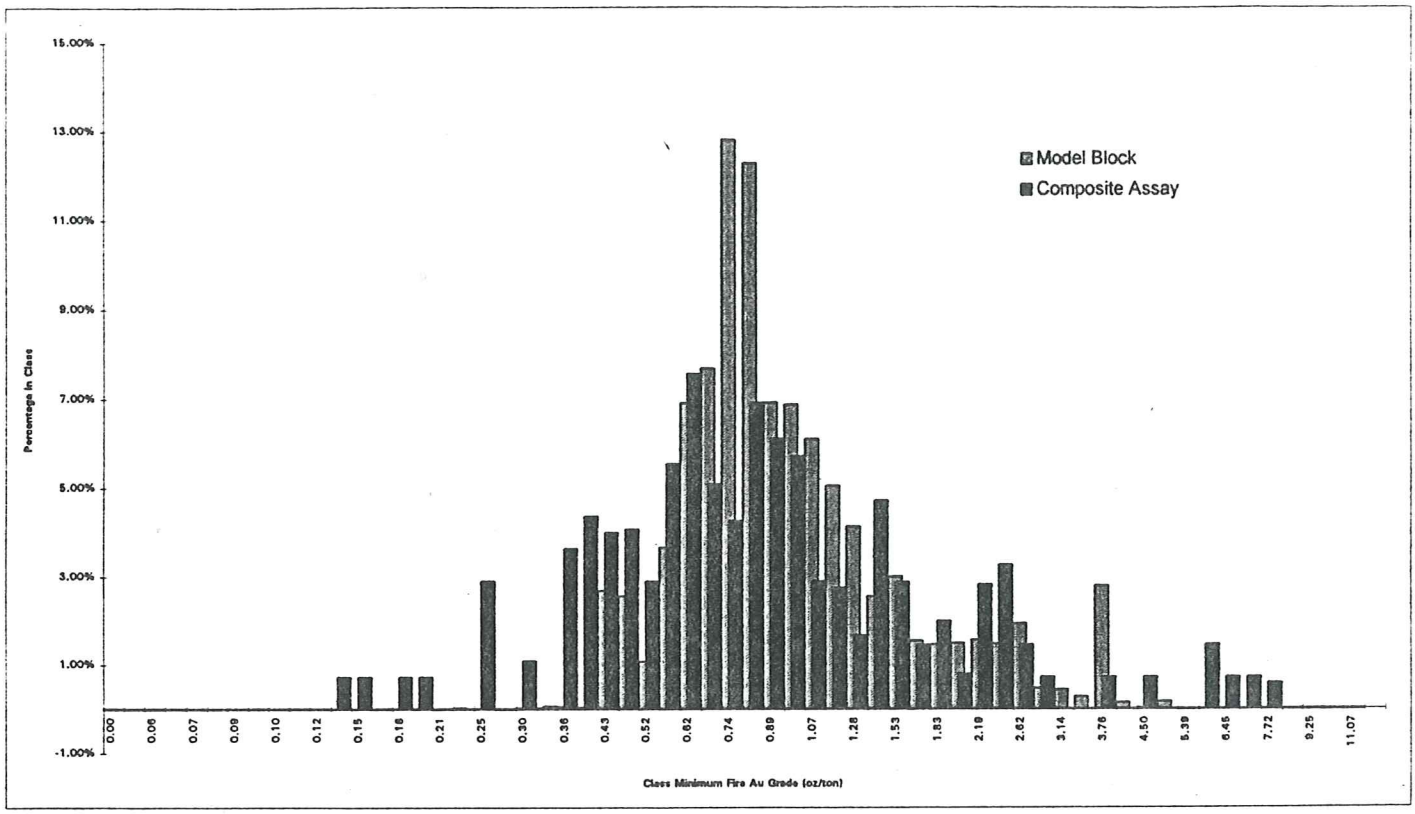
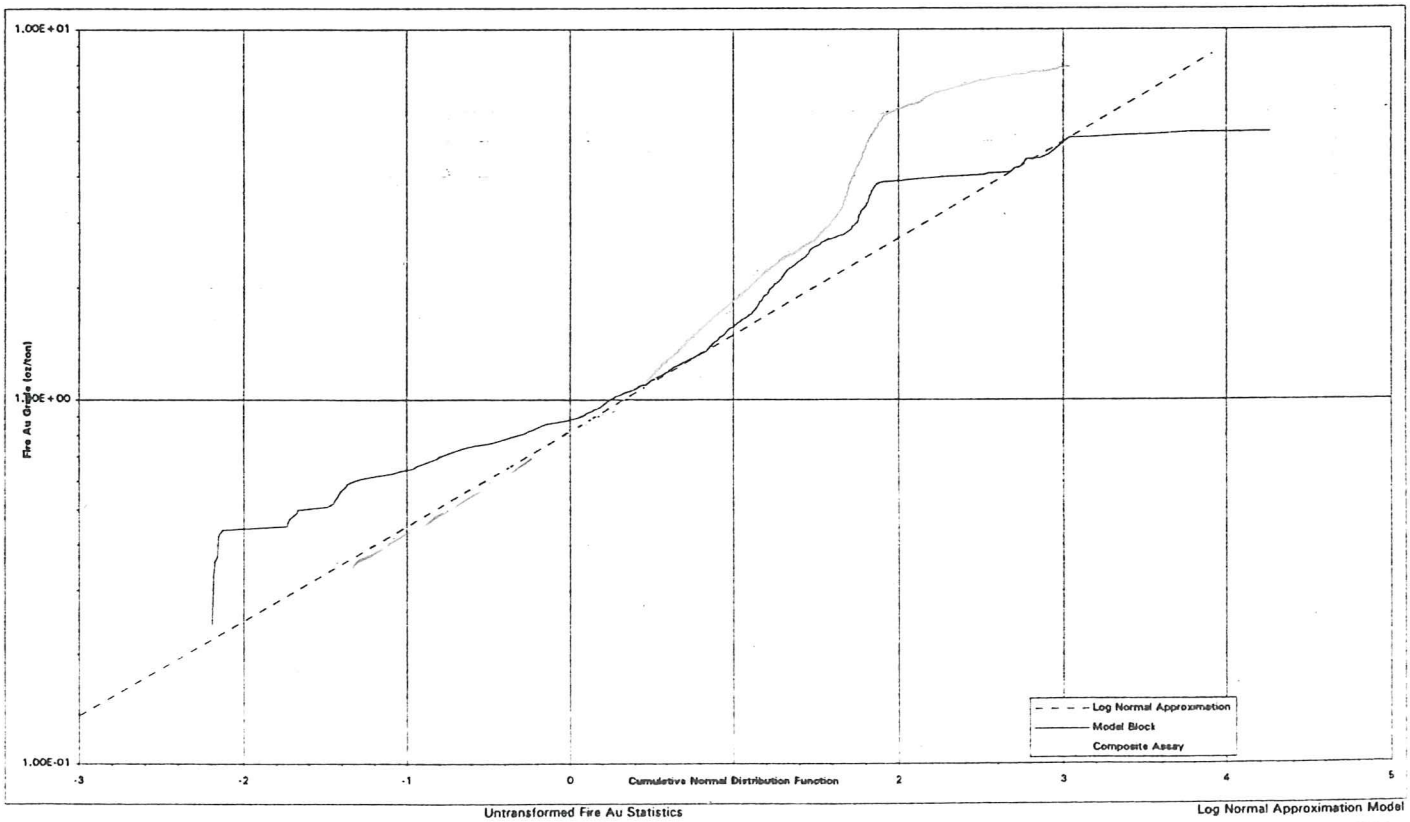
Figure 1 - 2
Frequency Distribution of Model Block and Composite Assay Fire Au Grades in Domain 4 - Rosebud Project





Untransformed Fire Au Statistics

	Fire Au Cutoff = 0.00 oz/ton		Fire Au Cutoff = 0.10 oz/ton		Fire Au Cutoff = 0.50 oz/ton		Fire Au Cutoff = 1.00 oz/ton		Log Normal Approximation Model		
	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Mean	Standard Deviation	Third Parameter
Model Block	236,954	1.145	233,673	1.161	225,812	1.186	96,600	1.748	-0.20	0.60	0.00
omposite Ass	1,371	1.233	1,371	1.233	1,074	1.472	517	2.271			

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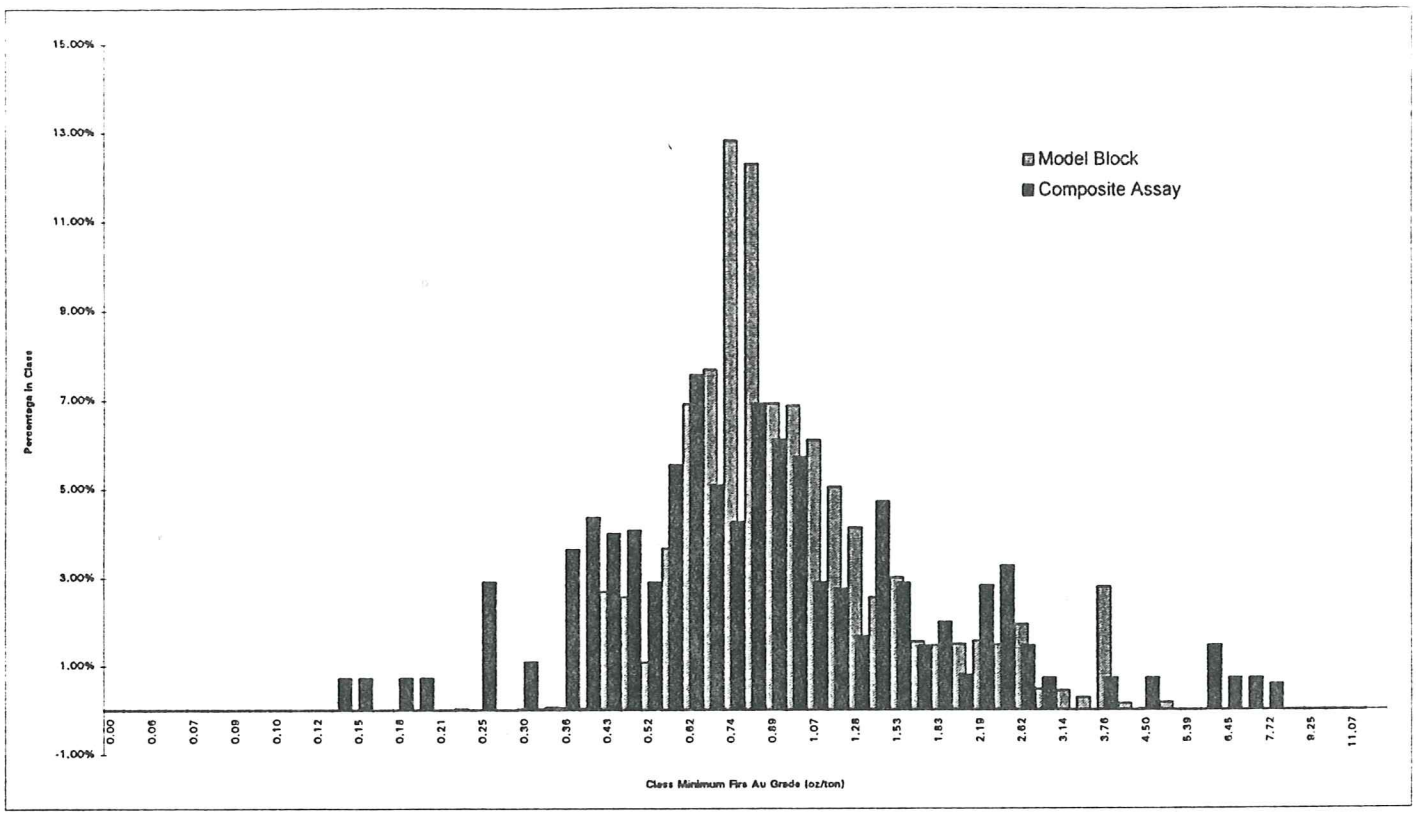
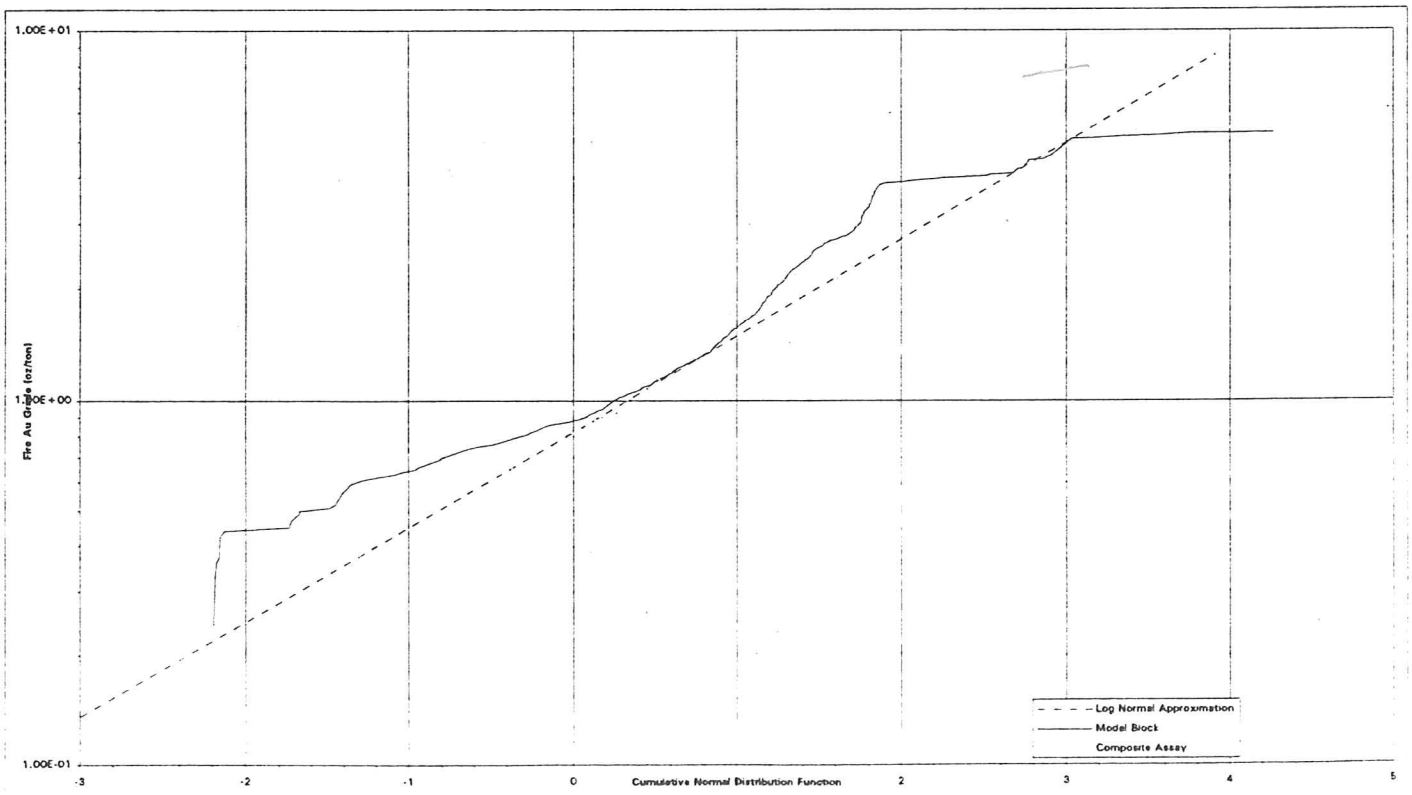
Figure 1 - 2
Frequency Distribution of Model Block and Composite Assay Fire Au Grades in Domain 4 - Rosebud Project





	Untransformed Fire Au Statistics								Log Normal Approximation Model		
	Fire Au Cutoff = 0.00 oz/ton		Fire Au Cutoff = 0.10 oz/ton		Fire Au Cutoff = 0.50 oz/ton		Fire Au Cutoff = 1.00 oz/ton			Standard	Third
	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Mean	Deviation	Parameter
Model Block	236,954	1.145	233,673	1.161	225,812	1.186	96,600	1.748	-0.20	0.60	0.00
omposite Ass	1,371	1.233	1,371	1.233	1,074	1.472	517	2.271			

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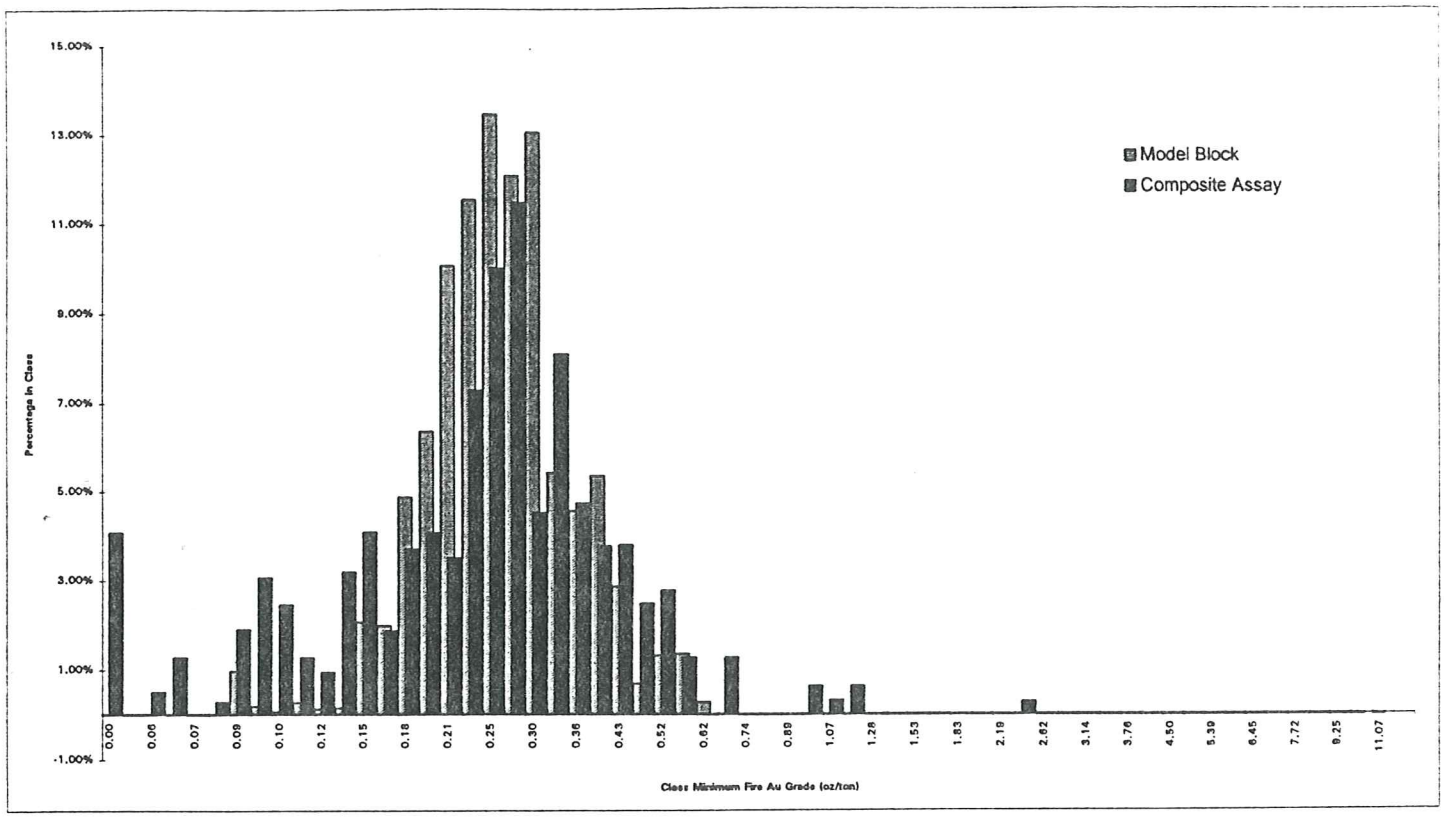
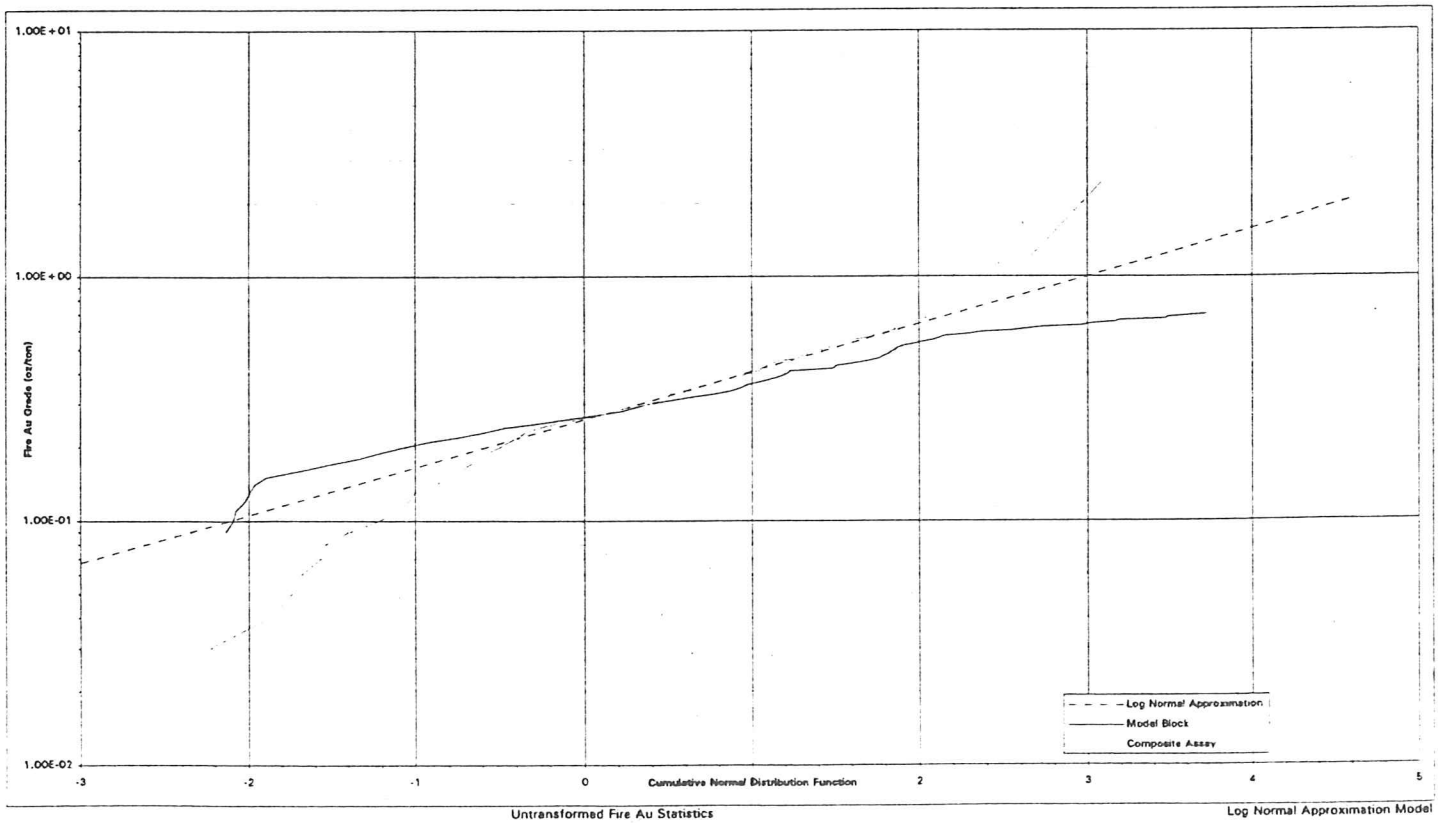
Figure 1 - 1

Frequency Distribution of Model Block and Composite Assay Fire Au Grades in Domain 3 - Rosebud Project





Untransformed Fire Au Statistics

	Fire Au Cutoff = 0.00 oz/ton		Fire Au Cutoff = 0.10 oz/ton		Fire Au Cutoff = 0.50 oz/ton		Fire Au Cutoff = 1.00 oz/ton	
	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)
Model Block	299,863	0.286	295,000	0.290	9,886	0.568	0	0.000
Composite Assa	1,561	0.293	1,561	0.293	135	0.755	31	1.360

Log Normal Approximation Model

Mean	Standard Deviation	Third Parameter
-1.35	0.45	0.00

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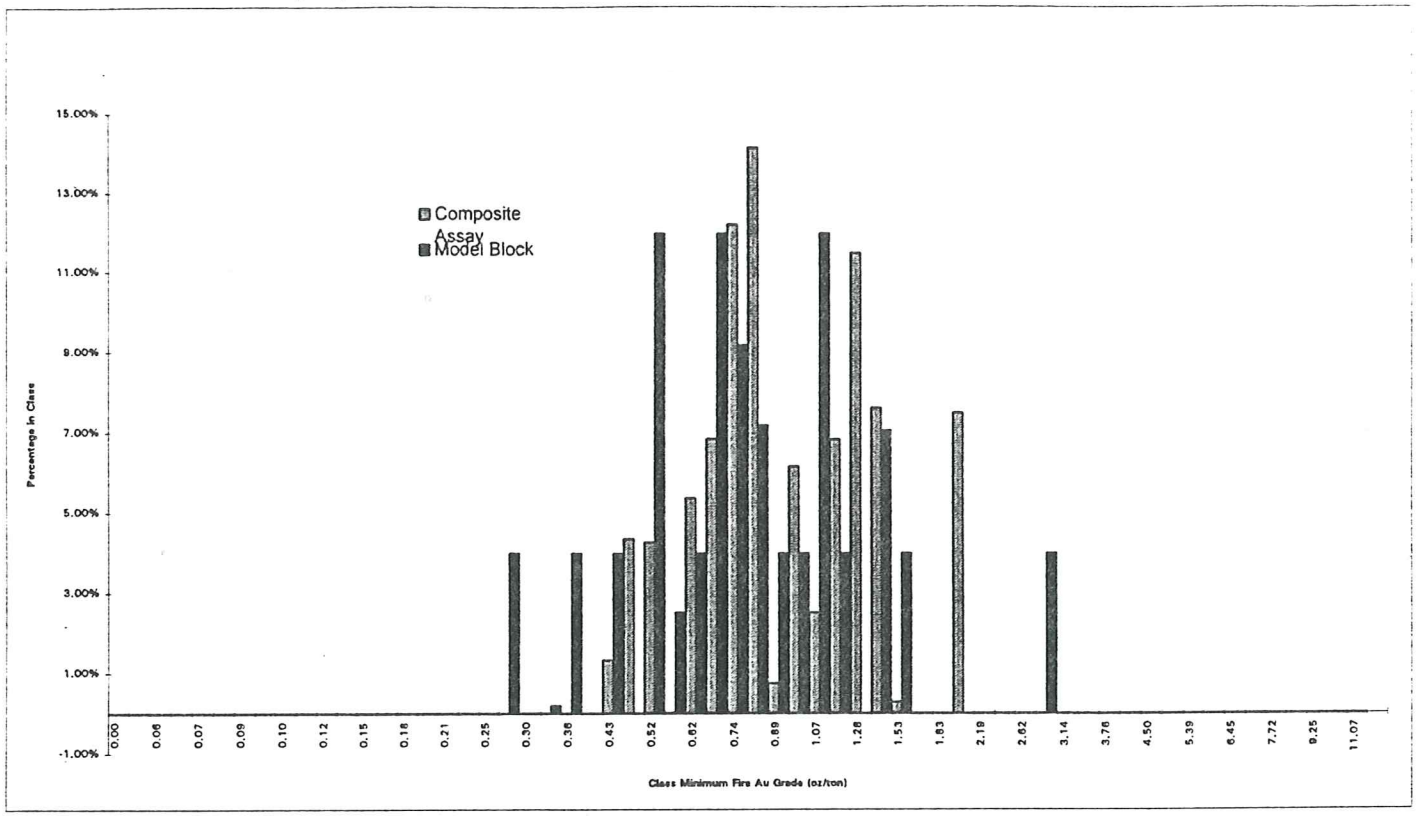
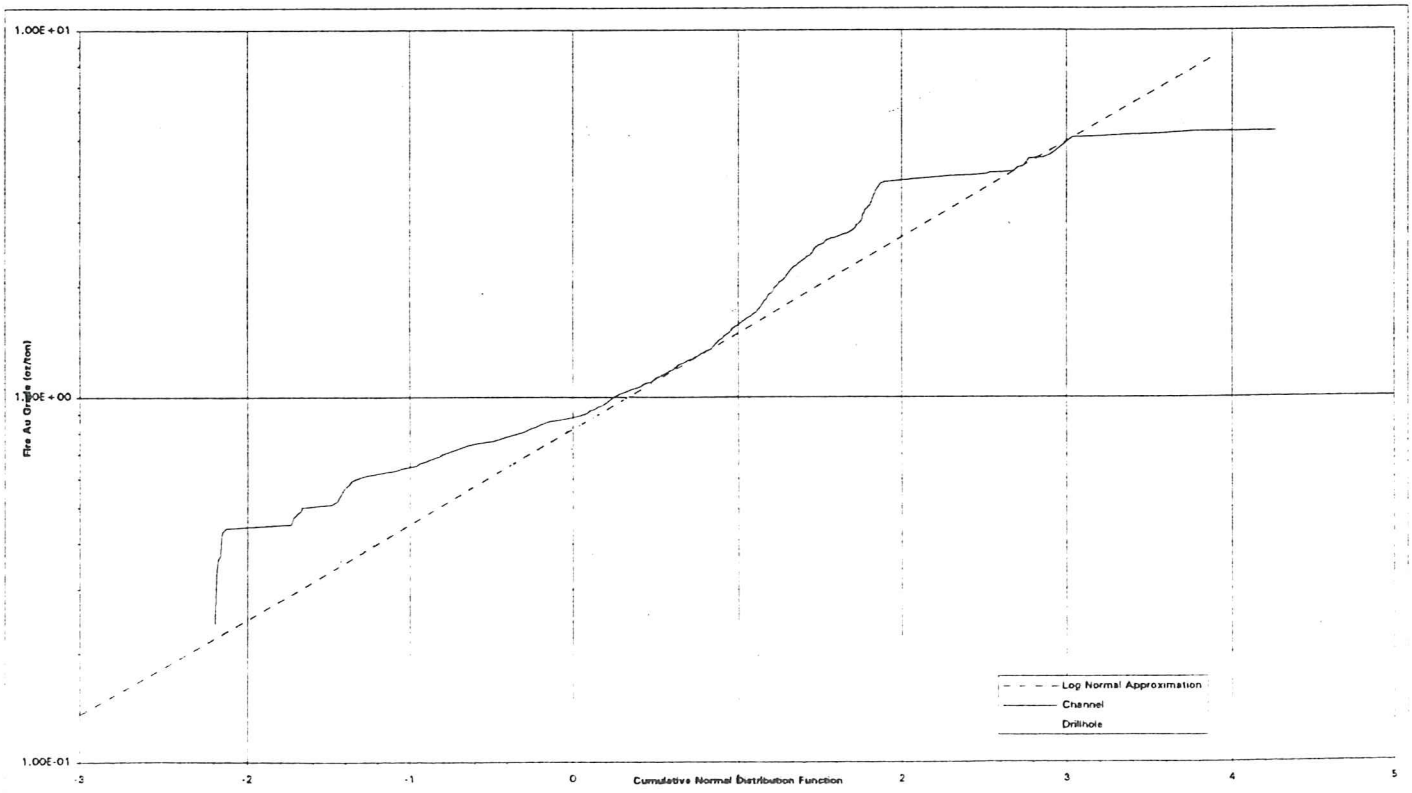
Figure 1 - 3

Frequency Distribution of Model Block and Composite Assay Fire Au Grades in Domain 8 - Rosebud Project





Untransformed Fire Au Statistics

	Fire Au Cutoff = 0.00 oz/ton		Fire Au Cutoff = 0.10 oz/ton		Fire Au Cutoff = 0.50 oz/ton		Fire Au Cutoff = 1.00 oz/ton		Log Normal Approximation Model		
	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Meters	ire Au (oz/ton)	Mean	Standard Deviation	Third Parameter
Channel	80,051	0.954	73,498	1.039	68,943	1.077	33,996	1.407	-0.20	0.60	0.00
Drillhole	251	1.213	251	1.213	220	1.329	83	2.334			

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