

Apx.15 Results of the ore reserve calculation

### Input Data

Specific Gravity	2.6	
Grade Item	Re2O3	
Recovery	By calculation	
Cutoff	0 %	
Mining Cost for Ore	5 \$/t	
Mining Cost for Waste	5 \$/t	
Processing Cost	13 \$/t	includes G&A
Minimum Pit Slope	34 deg	
Pit Bottom	780 m	
Mine Cutoff Grade	1.37 %	

### Worksheet Description

p100	100\$/kg of metal price
p140	140\$/kg of metal price
p180	180\$/kg of metal price
p218	218\$/kg of metal price (35% Conc. Price)

### Legend

REK: Re2O3 by Kriging  
CA: CaF2  
BA: BaSO4  
RECR: Recoverable Re2O3

### Calculation

Recovery =  $2.9895 \times \text{REK} + 17.955$   
RECR = Recovery  $\times$  REK / 100

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR
930	>=	0	680	1,768	0	0	0
920	>=	0	640	1,664	0	0	0
910	>=	0	1,840	4,784	0.01	0.01	0.13
900	>=	0	1,240	3,224	0.64	0.35	6.35
890	>=	0	1,280	3,328	0.80	0.35	9.94
	>=	1	922	2,396	1.11	0.49	13.80
885	>=	1	2,080	5,408	1.10	0.52	26.46
880	>=	1	2,000	5,200	1.24	0.53	27.51
875	>=	0	4,080	10,608	1.48	0.49	36.37
	>=	1	2,920	7,592	1.69	0.46	38.78
	>=	2	560	1,456	2.38	0.35	49.83
870	>=	0	8,200	21,320	1.60	0.41	42.38
	>=	1	6,200	16,120	1.83	0.35	46.81
	>=	2	4,200	10,920	2.07	0.29	51.52
865	>=	1	7,840	20,384	2.01	0.58	45.11
	>=	2	4,040	10,504	2.29	0.70	48.15
	>=	4	160	416	4.57	9.36	38.45
860	>=	1	14,320	37,232	2.92	3.01	44.65
	>=	2	12,320	32,032	3.15	3.40	46.10
	>=	3	5,120	13,312	4.33	7.60	42.44
	>=	4	4,040	10,504	4.63	9.41	38.24
	>=	5	760	1,976	5.38	2.49	44.68
855	>=	2	17,000	44,200	4.58	3.81	44.92
	>=	3	13,000	33,800	5.19	4.83	44.18
	>=	4	8,984	23,358	5.89	4.62	42.39
	>=	5	8,936	23,234	5.90	4.63	42.38
	>=	6	2,552	6,635	7.36	1.52	49.73
	>=	7	2,000	5,200	7.51	1.18	51.22
850	>=	2	19,360	50,336	6.79	5.58	46.37
	>=	4	17,360	45,136	7.23	5.97	45.20
	>=	5	14,680	38,168	7.78	5.63	46.75
	>=	6	10,900	28,340	8.62	6.00	50.48
	>=	7	8,480	22,048	9.16	6.90	50.92
	>=	8	4,480	11,648	10.81	11.69	50.47
	>=	9	3,680	9,568	11.36	13.61	48.80
	>=	10	2,800	7,280	11.88	16.73	46.59
845	>=	4	22,160	57,616	8.23	7.90	47.33
	>=	5	21,800	56,680	8.28	7.97	47.46
	>=	6	19,365	50,348	8.65	8.40	48.51
	>=	7	14,660	38,115	9.39	10.03	48.55
	>=	8	12,000	31,200	9.81	11.54	47.35
	>=	9	8,000	20,800	10.60	14.93	46.17
	>=	10	6,000	15,600	10.82	11.35	48.94
840	>=	4	22,360	58,136	8.86	8.93	47.30
	>=	5	22,210	57,747	8.88	8.96	47.35
	>=	6	20,081	52,210	9.20	9.65	46.44
	>=	7	16,081	41,810	9.88	10.92	46.49
	>=	8	15,191	39,496	10.05	11.32	46.31
	>=	9	11,191	29,096	10.48	9.82	47.38
	>=	10	6,231	16,200	11.13	11.08	46.17
835	>=	4	17,200	44,720	8.52	10.39	41.22
	>=	5	16,040	41,704	8.82	10.71	41.44
	>=	6	14,040	36,504	9.29	11.43	41.58
	>=	7	12,420	32,292	9.67	12.27	41.54
	>=	8	11,220	29,172	9.87	11.03	42.46
	>=	9	9,220	23,972	10.12	9.72	43.38
	>=	10	5,240	13,624	10.75	7.83	45.04
830	>=	3	12,020	31,252	8.26	12.28	37.73
	>=	4	11,900	30,940	8.30	12.33	37.75
	>=	5	10,900	28,340	8.67	12.84	37.91
	>=	7	10,820	28,132	8.70	12.88	37.92
	>=	8	8,820	22,932	9.03	10.33	39.30
	>=	9	3,340	8,684	9.81	7.85	41.55
	>=	10	1,440	3,744	10.22	8.01	42.23

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES				RECR	
				REK	CA	BA	RECR		
825	>=	3	7,520	19,552	8.15	9.72	33.88	3.51	
	>=	4	7,180	18,668	8.37	9.86	33.84	3.62	
	>=	6	6,980	18,148	8.49	9.93	33.87	3.69	
	>=	7	6,700	17,420	8.58	10.13	33.87	3.74	
	>=	8	4,740	12,324	8.92	10.73	34.05	3.98	
	>=	9	3,080	8,008	9.15	8.62	36.71	4.16	
820	>=	3	8,000	20,800	7.62	8.63	32.58	3.15	
	>=	5	7,760	20,176	7.75	8.72	32.79	3.22	
	>=	7	6,000	15,600	8.34	8.64	34.43	3.57	
	>=	8	4,000	10,400	8.77	8.35	35.39	3.86	
815	>=	5	2,000	5,200	5.49	9.46	31.18	1.87	
TOTALS	>=	0	171,820	446,732	6.12	6.35	41.48	2.55	Recovery
	>=	1	163,902	426,144	6.40	6.64	42.88	2.67	41.6%
	>=	2	148,740	386,724	6.90	7.27	43.80	2.91	41.7%
	>=	3	126,900	329,940	7.69	8.42	42.78	3.30	42.1%
	>=	4	121,104	314,870	7.88	8.61	42.53	3.41	43.0%
	>=	5	112,066	291,373	8.17	8.62	42.98	3.58	43.3%
	>=	6	90,738	235,918	8.80	9.33	43.93	3.98	43.8%
	>=	7	77,160	200,617	9.21	10.30	43.46	4.26	45.2%
	>=	8	60,451	157,172	9.70	10.95	43.41	4.60	46.2%
	>=	9	38,511	100,128	10.34	10.95	44.95	5.09	47.4%
	>=	10	21,711	56,448	10.99	10.90	46.46	5.62	49.2%
								51.1%	

BENCH	ORE (BCMS)	ORE (TONNES)	WASTE (TONNES)	S/R	GRADES REK	CA	BA	RECR	CUMULATIVE	
									ORE	WASTE
1015	0	0	1,872	-1	-1	-1	-1	-1	0	1,872
1010	0	0	5,928	-1	-1	-1	-1	-1	0	7,800
1005	0	0	10,400	-1	-1	-1	-1	-1	0	18,200
1000	0	0	3,328	-1	-1	-1	-1	-1	0	21,528
995	0	0	9,568	-1	-1	-1	-1	-1	0	31,096
930	680	1,768	0	0	0	0	0	0	1,768	31,096
920	640	1,664	0	0	0	0	0	0	3,432	31,096
910	1,840	4,784	0	0	0.01	0.01	0.13	0.00	8,216	31,096
900	1,240	3,224	0	0	0.64	0.35	6.35	0.13	11,440	31,096
890	1,280	3,328	0	0	0.80	0.35	9.94	0.17	14,768	31,096
885	2,080	5,408	0	0	1.10	0.52	26.46	0.24	20,176	31,096
880	2,000	5,200	0	0	1.24	0.53	27.51	0.27	25,376	31,096
875	4,080	10,608	0	0	1.48	0.49	36.37	0.34	35,984	31,096
870	8,200	21,320	0	0	1.60	0.41	42.38	0.37	57,304	31,096
865	7,840	20,384	0	0	2.01	0.58	45.11	0.49	77,688	31,096
860	14,320	37,232	0	0	2.92	3.01	44.65	0.82	114,920	31,096
855	17,000	44,200	0	0	4.58	3.81	44.92	1.52	159,120	31,096
850	19,360	50,336	0	0	6.79	5.58	46.37	2.82	209,456	31,096
845	22,160	57,616	0	0	8.23	7.90	47.33	3.63	267,072	31,096
840	22,360	58,136	0	0	8.86	8.93	47.30	4.06	325,208	31,096
835	17,200	44,720	0	0	8.52	10.39	41.22	3.83	369,928	31,096
830	12,020	31,252	0	0	8.26	12.28	37.73	3.61	401,180	31,096
825	7,520	19,552	0	0	8.15	9.72	33.88	3.51	420,732	31,096
820	8,000	20,800	0	0	7.62	8.63	32.58	3.15	441,532	31,096
815	2,000	5,200	0	0	5.49	9.46	31.18	1.87	446,732	31,096
TOTAL	171,820	446,732	31,096	0.07	6.12	6.35	41.48	2.55		

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR
970	>=	0	200	520	0	0	0
965	>=	0	960	2,496	0	0	0
960	>=	0	3,080	8,008	0	0	0
955	>=	0	2,000	5,200	0	0	0
950	>=	0	3,960	10,296	0	0	0
945	>=	0	5,360	13,936	0	0	0
940	>=	0	4,000	10,400	0	0	0
935	>=	0	4,320	11,232	0	0	0
930	>=	0	6,400	16,640	0	0	0
925	>=	0	6,000	15,600	0	0	0
920	>=	0	4,280	11,128	0	0	0
915	>=	0	7,880	20,488	0	0	0
910	>=	0	6,040	15,704	0.00	0.00	0.04
905	>=	0	10,560	27,456	0.10	0.05	1.04
	>=	1	780	2,028	1.05	0.41	10.25
900	>=	0	9,180	23,868	0.52	0.29	5.69
	>=	1	1,020	2,652	1.06	0.43	11.26
895	>=	0	9,970	25,921	0.68	0.33	8.02
	>=	1	1,546	4,021	1.09	0.45	12.13
890	>=	0	9,300	24,180	0.79	0.35	10.19
	>=	1	4,942	12,848	1.13	0.49	14.54
885	>=	0	13,097	34,053	0.85	0.38	13.99
	>=	1	8,620	22,412	1.18	0.51	19.58
880	>=	0	11,380	29,588	0.88	0.40	16.87
	>=	1	5,480	14,248	1.29	0.53	22.96
875	>=	0	20,240	52,624	1.00	0.40	20.39
	>=	1	11,800	30,680	1.38	0.50	26.62
	>=	2	560	1,456	2.38	0.35	49.83
870	>=	0	26,920	69,992	1.28	0.40	32.62
	>=	1	16,920	43,992	1.63	0.40	40.78
	>=	2	4,200	10,920	2.07	0.29	51.52
865	>=	0	38,960	101,296	1.58	0.41	41.36
	>=	1	28,960	75,296	1.92	0.40	49.61
	>=	2	10,040	26,104	2.19	0.46	48.94
	>=	4	160	416	4.57	9.36	38.45
860	>=	0	51,160	133,016	2.17	1.20	47.54
	>=	1	46,440	120,744	2.35	1.27	50.49
	>=	2	25,360	65,936	2.80	1.96	50.19
	>=	3	8,000	20,800	4.09	5.47	44.41
	>=	4	4,920	12,792	4.52	8.05	40.89
	>=	5	760	1,976	5.38	2.49	44.68
855	>=	0	67,830	176,359	2.85	1.75	48.94
	>=	1	63,830	165,959	3.01	1.84	51.31
	>=	2	44,440	115,544	3.51	2.46	49.36
	>=	3	24,160	62,816	4.57	4.13	45.79
	>=	4	12,904	33,550	5.51	5.21	41.79
	>=	5	10,936	28,434	5.74	4.12	43.86
	>=	6	2,552	6,635	7.36	1.52	49.73
	>=	7	2,000	5,200	7.51	1.18	51.22
850	>=	1	78,040	202,904	3.64	2.58	50.13
	>=	2	66,120	171,912	3.97	2.98	51.14
	>=	3	32,120	83,512	5.72	5.37	44.49
	>=	4	24,120	62,712	6.51	6.57	43.17
	>=	5	14,680	38,168	7.78	5.63	46.75
	>=	6	10,900	28,340	8.62	6.00	50.48
	>=	7	8,480	22,048	9.16	6.90	50.92
	>=	8	4,480	11,648	10.81	11.69	50.47
	>=	9	3,680	9,568	11.36	13.61	48.80
	>=	10	2,800	7,280	11.88	16.73	46.59
845	>=	0	85,100	221,260	4.57	4.27	48.43
	>=	1	83,562	217,262	4.65	4.33	49.26
	>=	2	78,980	205,348	4.84	4.56	50.54
	>=	3	56,980	148,148	5.77	6.12	46.81
	>=	4	38,980	101,348	6.86	7.80	44.93
	>=	5	32,380	84,188	7.37	8.13	45.62
	>=	6	20,165	52,428	8.65	9.08	48.01
	>=	7	15,460	40,195	9.36	10.84	47.89

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR	
	>=	8	12,800	33,280	9.75	12.42	46.63	4.64
	>=	9	8,000	20,800	10.60	14.93	46.17	5.29
	>=	10	6,000	15,600	10.82	11.35	48.94	5.46
840	>=	0	81,440	211,744	5.43	5.53	49.39	2.08
	>=	1	81,180	211,068	5.45	5.54	49.51	2.08
	>=	2	77,540	201,604	5.63	5.78	50.45	2.16
	>=	3	67,540	175,604	6.08	6.58	49.10	2.39
	>=	4	53,540	139,204	6.77	7.82	46.51	2.75
	>=	5	40,230	104,599	7.57	9.08	44.54	3.22
	>=	6	26,341	68,486	8.63	10.68	44.53	3.89
	>=	7	18,081	47,010	9.71	12.50	45.18	4.62
	>=	8	17,191	44,696	9.85	12.93	44.96	4.72
	>=	9	11,191	29,096	10.48	9.82	47.38	5.20
	>=	10	6,231	16,200	11.13	11.08	46.17	5.74
835	>=	0	79,454	206,579	5.40	6.28	47.02	2.02
	>=	1	77,621	201,814	5.52	6.40	48.01	2.07
	>=	2	75,825	197,144	5.62	6.54	48.53	2.11
	>=	3	69,805	181,492	5.86	7.06	47.78	2.23
	>=	4	54,405	141,452	6.49	8.45	45.18	2.56
	>=	5	35,797	93,072	7.56	10.89	40.85	3.17
	>=	6	26,260	68,276	8.29	12.00	41.47	3.62
	>=	7	20,420	53,092	8.90	13.88	41.69	4.01
	>=	8	11,220	29,172	9.87	11.03	42.46	4.71
	>=	9	9,220	23,972	10.12	9.72	43.38	4.90
	>=	10	5,240	13,624	10.75	7.83	45.04	5.41
830	>=	0	75,400	196,040	5.17	7.01	41.52	1.88
	>=	1	70,760	183,976	5.49	7.41	43.99	2.00
	>=	2	70,040	182,104	5.53	7.48	44.27	2.02
	>=	3	68,680	178,568	5.60	7.62	44.66	2.05
	>=	4	56,020	145,652	6.06	8.85	44.70	2.28
	>=	5	36,780	95,628	6.85	11.01	40.07	2.71
	>=	6	21,440	55,744	7.95	14.79	38.13	3.36
	>=	7	16,260	42,276	8.36	14.78	37.97	3.63
	>=	8	8,820	22,932	9.03	10.33	39.30	4.08
	>=	9	3,340	8,684	9.81	7.85	41.55	4.65
	>=	10	1,440	3,744	10.22	8.01	42.23	5.01
825	>=	0	68,300	177,580	5.74	7.65	35.58	2.21
	>=	1	62,100	161,460	6.30	8.38	38.98	2.43
	>=	2	61,200	159,120	6.37	8.49	39.21	2.46
	>=	3	60,620	157,612	6.41	8.56	39.44	2.48
	>=	4	54,280	141,128	6.75	9.17	40.10	2.65
	>=	5	42,560	110,656	7.33	10.77	39.18	2.97
	>=	6	31,980	83,148	7.90	11.69	37.50	3.31
	>=	7	23,260	60,476	8.45	12.91	34.03	3.66
	>=	8	16,320	42,432	8.79	13.58	33.08	3.88
	>=	9	5,520	14,352	9.39	12.86	33.48	4.33
	>=	10	440	1,144	10.61	7.75	41.33	5.31
820	>=	0	63,140	164,164	5.67	8.76	34.94	2.11
	>=	2	59,900	155,740	5.97	9.23	36.83	2.22
	>=	3	59,220	153,972	6.02	9.33	37.10	2.24
	>=	4	55,020	143,052	6.22	9.70	37.62	2.34
	>=	5	41,520	107,952	6.75	10.35	37.68	2.63
	>=	6	23,340	60,684	7.83	11.04	35.71	3.25
	>=	7	18,580	48,308	8.13	12.88	31.60	3.44
	>=	8	11,160	29,016	8.57	13.80	29.89	3.75
	>=	10	220	572	10.72	7.49	41.74	5.36
815	>=	0	44,020	114,452	6.10	8.97	32.19	2.49
	>=	1	41,620	108,212	6.45	9.49	34.03	2.63
	>=	3	40,720	105,872	6.56	9.62	34.54	2.68
	>=	4	40,180	104,468	6.60	9.66	34.61	2.70
	>=	5	35,360	91,936	6.87	10.18	35.09	2.87
	>=	6	18,300	47,580	8.24	10.21	35.02	3.82
	>=	7	9,100	23,660	10.12	12.40	32.09	5.30
	>=	8	7,560	19,656	10.63	13.70	28.84	5.75
	>=	10	2,000	5,200	17.09	15.10	14.37	11.79
810	>=	0	25,960	67,496	6.48	10.93	33.83	2.55
	>=	3	25,440	66,144	6.61	11.15	34.48	2.61

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR		
	>=	4	25,260	65,676	6.63	11.21	34.63	2.62	
	>=	5	23,540	61,204	6.82	11.18	34.90	2.72	
	>=	6	11,580	30,108	8.32	9.59	37.97	3.63	
	>=	7	9,020	23,452	8.89	10.46	40.51	4.00	
	>=	8	5,720	14,872	9.67	13.72	34.48	4.55	
	>=	9	4,000	10,400	10.06	15.40	32.83	4.84	
	>=	10	2,000	5,200	10.73	21.28	26.40	5.37	
805	>=	4	12,000	31,200	6.10	9.20	33.28	2.26	
	>=	5	10,000	26,000	6.50	8.77	33.82	2.46	
	>=	6	5,580	14,508	7.24	7.59	36.38	2.89	
	>=	7	3,580	9,308	7.88	8.82	35.73	3.28	
	>=	8	2,000	5,200	8.09	8.93	35.94	3.40	
800	>=	5	4,000	10,400	6.23	11.47	33.05	2.30	
	>=	7	2,000	5,200	7.16	7.76	30.98	2.79	
TOTALS	>=	0	939,931	2,443,820	3.92	4.45	37.93	1.41	Recovery 36.0%
	>=	1	786,562	2,045,060	4.63	5.28	44.25	1.67	36.1%
	>=	2	656,365	1,706,549	5.23	6.24	45.23	1.93	36.9%
	>=	3	529,445	1,376,556	5.93	7.61	42.85	2.26	38.1%
	>=	4	435,789	1,133,051	6.46	8.73	41.38	2.53	39.2%
	>=	5	328,543	854,212	7.10	9.73	40.08	2.89	40.8%
	>=	6	200,438	521,138	8.18	10.74	40.42	3.56	43.5%
	>=	7	146,240	380,225	8.84	12.12	39.57	4.00	45.3%
	>=	8	97,271	252,904	9.50	12.58	38.86	4.48	47.2%
	>=	9	47,171	122,644	10.57	11.86	41.81	5.32	50.4%
	>=	10	26,371	68,564	11.43	11.92	42.38	6.06	53.1%



BENCH	ORE (BCMS)	ORE (TONNES)	WASTE (TONNES)	S/R	GRADES				CUMULATIVE	
					REK	CA	BA	RECR	ORE	WASTE
1015	0	0	5,616	-1	-1	-1	-1	-1	0	5,616
1010	0	0	19,968	-1	-1	-1	-1	-1	0	25,584
1005	0	0	38,792	-1	-1	-1	-1	-1	0	64,376
1000	0	0	32,240	-1	-1	-1	-1	-1	0	96,616
995	0	0	40,768	-1	-1	-1	-1	-1	0	137,384
990	0	0	26,000	-1	-1	-1	-1	-1	0	163,384
985	0	0	33,800	-1	-1	-1	-1	-1	0	197,184
980	0	0	15,600	-1	-1	-1	-1	-1	0	212,784
975	0	0	18,616	-1	-1	-1	-1	-1	0	231,400
970	200	520	4,888	9.40	0	0	0	0	520	236,288
965	960	2,496	10,504	4.21	0	0	0	0	3,016	246,792
960	3,080	8,008	0	0	0	0	0	0	11,024	246,792
955	2,000	5,200	0	0	0	0	0	0	16,224	246,792
950	3,960	10,296	0	0	0	0	0	0	26,520	246,792
945	5,360	13,936	0	0	0	0	0	0	40,456	246,792
940	4,000	10,400	0	0	0	0	0	0	50,856	246,792
935	4,320	11,232	0	0	0	0	0	0	62,088	246,792
930	6,400	16,640	0	0	0	0	0	0	78,728	246,792
925	6,000	15,600	0	0	0	0	0	0	94,328	246,792
920	4,280	11,128	0	0	0	0	0	0	105,456	246,792
915	7,880	20,488	0	0	0	0	0	0	125,944	246,792
910	6,040	15,704	0	0	0.00	0.00	0.04	0.00	141,648	246,792
905	10,560	27,456	0	0	0.10	0.05	1.04	0.02	169,104	246,792
900	9,180	23,868	0	0	0.52	0.29	5.69	0.11	192,972	246,792
895	9,970	25,921	0	0	0.68	0.33	8.02	0.14	218,893	246,792
890	9,300	24,180	0	0	0.79	0.35	10.19	0.17	243,073	246,792
885	13,097	34,053	0	0	0.85	0.38	13.99	0.18	277,126	246,792
880	11,380	29,588	0	0	0.88	0.40	16.87	0.19	306,714	246,792
875	20,240	52,624	0	0	1.00	0.40	20.39	0.22	359,338	246,792
870	26,920	69,992	0	0	1.28	0.40	32.62	0.29	429,330	246,792
865	38,960	101,296	0	0	1.58	0.41	41.36	0.37	530,626	246,792
860	51,160	133,016	0	0	2.17	1.20	47.54	0.56	663,642	246,792
855	67,830	176,359	25	0	2.85	1.75	48.94	0.83	840,001	246,817
850	78,040	202,904	208	0	3.64	2.58	50.13	1.22	1,042,905	247,025
845	85,100	221,260	156	0	4.57	4.27	48.43	1.66	1,264,165	247,181
840	81,440	211,744	208	0	5.43	5.53	49.39	2.08	1,475,909	247,389
835	79,454	206,579	69	0	5.40	6.28	47.02	2.02	1,682,488	247,458
830	75,400	196,040	104	0	5.17	7.01	41.52	1.88	1,878,528	247,562
825	68,300	177,580	52	0	5.74	7.65	35.58	2.21	2,056,108	247,614
820	63,140	164,164	0	0	5.67	8.76	34.94	2.11	2,220,272	247,614
815	44,020	114,452	0	0	6.10	8.97	32.19	2.49	2,334,724	247,614
810	25,960	67,496	104	0	6.48	10.93	33.83	2.55	2,402,220	247,718
805	12,000	31,200	0	0	6.10	9.20	33.28	2.26	2,433,420	247,718
800	4,000	10,400	0	0	6.23	11.47	33.05	2.30	2,443,820	247,718
TOTAL	939,931	2,443,820	247,718	0.10	3.92	4.45	37.93	1.41		

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR
975	>=	0	1,720	4,472	0	0	0
970	>=	0	200	520	0	0	0
965	>=	0	2,960	7,696	0	0	0
960	>=	0	3,080	8,008	0	0	0
955	>=	0	6,000	15,600	0	0	0
950	>=	0	4,600	11,960	0	0	0
945	>=	0	9,240	24,024	0	0	0
940	>=	0	6,000	15,600	0	0	0
935	>=	0	7,000	18,200	0	0	0
930	>=	0	10,280	26,728	0	0	0
925	>=	0	8,000	20,800	0	0	0
920	>=	0	9,280	24,128	0	0	0
915	>=	0	9,880	25,688	0	0	0
910	>=	0	10,040	26,104	0.00	0.00	0.00
905	>=	0	11,640	30,264	0.12	0.06	1.27
	>=	1	780	2,028	1.05	0.41	10.25
900	>=	0	15,200	39,520	0.33	0.18	3.62
	>=	1	1,020	2,652	1.06	0.43	11.26
895	>=	0	11,970	31,121	0.64	0.33	7.71
	>=	1	1,546	4,021	1.09	0.45	12.13
890	>=	0	17,300	44,980	0.78	0.34	9.14
	>=	1	8,542	22,208	1.14	0.48	13.09
885	>=	0	15,297	39,773	0.85	0.38	13.67
	>=	1	8,820	22,932	1.20	0.51	19.40
880	>=	0	19,380	50,388	0.94	0.40	14.70
	>=	1	11,120	28,912	1.37	0.54	19.60
875	>=	0	22,760	59,176	1.04	0.42	20.24
	>=	1	14,320	37,232	1.38	0.51	25.28
	>=	2	560	1,456	2.38	0.35	49.83
870	>=	0	36,920	95,992	1.17	0.39	27.34
	>=	1	20,920	54,392	1.63	0.43	37.06
	>=	2	4,200	10,920	2.07	0.29	51.52
865	>=	0	45,480	118,248	1.53	0.41	39.42
	>=	1	32,960	85,696	1.89	0.41	47.78
	>=	2	10,040	26,104	2.19	0.46	48.94
	>=	4	160	416	4.57	9.36	38.45
860	>=	0	61,200	159,120	1.97	1.06	43.31
	>=	1	50,480	131,248	2.30	1.20	49.34
	>=	2	25,400	66,040	2.81	1.96	50.18
	>=	3	8,040	20,904	4.09	5.44	44.40
	>=	4	4,960	12,896	4.52	7.99	40.91
	>=	5	760	1,976	5.38	2.49	44.68
855	>=	0	79,470	206,623	2.62	1.54	46.64
	>=	1	71,470	185,823	2.88	1.68	50.71
	>=	2	46,440	120,744	3.45	2.37	49.31
	>=	3	24,160	62,816	4.57	4.13	45.79
	>=	4	12,904	33,550	5.51	5.21	41.79
	>=	5	10,936	28,434	5.74	4.12	43.86
	>=	6	2,552	6,635	7.36	1.52	49.73
	>=	7	2,000	5,200	7.51	1.18	51.22
850	>=	0	97,080	252,408	3.28	2.17	47.89
	>=	1	93,080	242,008	3.41	2.25	49.54
	>=	2	77,160	200,616	3.75	2.63	50.61
	>=	3	33,480	87,048	5.64	5.19	44.59
	>=	4	24,120	62,712	6.51	6.57	43.17
	>=	5	14,680	38,168	7.78	5.63	46.75
	>=	6	10,900	28,340	8.62	6.00	50.48
	>=	7	8,480	22,048	9.16	6.90	50.92
	>=	8	4,480	11,648	10.81	11.69	50.47
	>=	9	3,680	9,568	11.36	13.61	48.80
	>=	10	2,800	7,280	11.88	16.73	46.59
845	>=	0	97,100	252,460	4.30	3.90	48.10
	>=	1	95,562	248,462	4.36	3.95	48.83
	>=	2	86,980	226,148	4.64	4.26	50.94
	>=	3	58,980	153,348	5.70	6.01	46.86
	>=	4	38,980	101,348	6.86	7.80	44.93
	>=	5	32,380	84,188	7.37	8.13	45.62

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR	
	>=	6	20,165	52,428	8.65	9.08	48.01	3.89
	>=	7	15,460	40,195	9.36	10.84	47.89	4.37
	>=	8	12,800	33,280	9.75	12.42	46.63	4.64
	>=	9	8,000	20,800	10.60	14.93	46.17	5.29
	>=	10	6,000	15,600	10.82	11.35	48.94	5.46
840	>=	0	101,440	263,744	4.92	5.08	47.76	1.83
	>=	1	98,260	255,476	5.07	5.22	49.20	1.89
	>=	2	93,540	243,204	5.25	5.46	50.38	1.97
	>=	3	75,540	196,404	5.89	6.65	48.29	2.28
	>=	4	57,540	149,604	6.65	8.00	46.03	2.68
	>=	5	42,230	109,799	7.47	9.36	43.80	3.16
	>=	6	26,341	68,486	8.63	10.68	44.53	3.89
	>=	7	18,081	47,010	9.71	12.50	45.18	4.62
	>=	8	17,191	44,696	9.85	12.93	44.96	4.72
	>=	9	11,191	29,096	10.48	9.82	47.38	5.20
	>=	10	6,231	16,200	11.13	11.08	46.17	5.74
835	>=	0	93,814	243,915	5.11	6.17	46.44	1.87
	>=	1	91,541	238,006	5.24	6.30	47.49	1.92
	>=	2	87,825	228,344	5.39	6.54	48.38	1.99
	>=	3	77,805	202,292	5.73	7.33	47.22	2.15
	>=	4	58,405	151,852	6.41	8.82	44.81	2.51
	>=	5	37,797	98,272	7.46	11.14	40.19	3.11
	>=	6	26,260	68,276	8.29	12.00	41.47	3.62
	>=	7	20,420	53,092	8.90	13.88	41.69	4.01
	>=	8	11,220	29,172	9.87	11.03	42.46	4.71
	>=	9	9,220	23,972	10.12	9.72	43.38	4.90
	>=	10	5,240	13,624	10.75	7.83	45.04	5.41
830	>=	0	91,400	237,640	5.02	7.45	42.16	1.79
	>=	1	86,760	225,576	5.28	7.80	44.20	1.89
	>=	2	86,040	223,704	5.31	7.86	44.44	1.90
	>=	3	80,680	209,768	5.49	8.34	44.50	1.98
	>=	4	62,020	161,252	6.06	9.94	44.08	2.27
	>=	5	42,780	111,228	6.73	12.29	39.83	2.64
	>=	6	23,440	60,944	7.91	15.66	37.65	3.33
	>=	7	18,260	47,476	8.27	15.90	37.37	3.56
	>=	8	8,820	22,932	9.03	10.33	39.30	4.08
	>=	9	3,340	8,684	9.81	7.85	41.55	4.65
	>=	10	1,440	3,744	10.22	8.01	42.23	5.01
825	>=	0	88,060	228,956	5.24	7.09	36.34	1.96
	>=	1	79,492	206,679	5.79	7.79	40.00	2.16
	>=	2	77,992	202,779	5.87	7.93	40.38	2.20
	>=	3	73,032	189,883	6.07	8.40	40.18	2.30
	>=	4	60,280	156,728	6.62	9.64	40.62	2.57
	>=	5	44,560	115,856	7.30	11.10	38.81	2.95
	>=	6	33,980	88,348	7.83	12.07	37.11	3.27
	>=	7	23,260	60,476	8.45	12.91	34.03	3.66
	>=	8	16,320	42,432	8.79	13.58	33.08	3.88
	>=	9	5,520	14,352	9.39	12.86	33.48	4.33
	>=	10	440	1,144	10.61	7.75	41.33	5.31
820	>=	0	85,160	221,416	5.29	8.84	33.97	1.94
	>=	1	80,640	209,664	5.58	9.30	35.73	2.05
	>=	2	79,920	207,792	5.62	9.38	35.85	2.06
	>=	3	74,460	193,596	5.83	9.95	36.01	2.16
	>=	4	62,700	163,020	6.26	10.14	36.95	2.38
	>=	5	45,540	118,404	6.91	11.18	36.47	2.73
	>=	6	27,340	71,084	7.93	12.33	33.98	3.32
	>=	7	22,580	58,708	8.20	14.12	30.25	3.49
	>=	8	15,160	39,416	8.57	15.40	28.32	3.74
	>=	10	220	572	10.72	7.49	41.74	5.36
815	>=	0	60,020	156,052	5.44	8.06	30.83	2.14
	>=	1	55,620	144,612	5.87	8.70	33.25	2.30
	>=	2	52,720	137,072	6.11	9.03	34.40	2.42
	>=	3	50,820	132,132	6.25	9.25	35.09	2.48
	>=	4	47,180	122,668	6.45	9.37	35.77	2.59
	>=	5	40,820	106,132	6.75	9.97	36.55	2.77
	>=	6	19,760	51,376	8.12	10.76	34.23	3.73
	>=	7	9,100	23,660	10.12	12.40	32.09	5.30

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES				RECR
				REK	CA	BA	RECR	
810	>= 8	7,560	19,656	10.63	13.70	28.84	5.75	
	>= 10	2,000	5,200	17.09	15.10	14.37	11.79	
	>= 0	47,980	124,748	5.46	8.78	31.15	2.03	
	>= 1	44,600	115,960	5.85	9.42	33.35	2.19	
	>= 2	42,900	111,540	6.01	9.63	34.06	2.25	
	>= 3	42,760	111,176	6.02	9.64	34.09	2.26	
	>= 4	38,140	99,164	6.28	10.05	35.04	2.40	
	>= 5	34,740	90,324	6.48	10.33	35.26	2.50	
	>= 6	15,280	39,728	7.92	10.21	37.16	3.37	
	>= 7	10,780	28,028	8.63	12.35	37.31	3.82	
805	>= 8	5,720	14,872	9.67	13.72	34.48	4.55	
	>= 9	4,000	10,400	10.06	15.40	32.83	4.84	
	>= 10	2,000	5,200	10.73	21.28	26.40	5.37	
	>= 0	26,000	67,600	5.34	8.07	31.35	1.87	
	>= 3	25,320	65,832	5.47	8.27	32.08	1.92	
	>= 4	21,380	55,588	5.76	8.73	32.94	2.06	
	>= 5	17,380	45,188	6.10	8.97	33.69	2.23	
	>= 6	5,580	14,508	7.24	7.59	36.38	2.89	
	>= 7	3,580	9,308	7.88	8.82	35.73	3.28	
	>= 8	2,000	5,200	8.09	8.93	35.94	3.40	
800	>= 0	16,000	41,600	5.03	7.09	28.17	1.72	
	>= 3	15,520	40,352	5.18	7.30	28.92	1.77	
	>= 4	13,960	36,296	5.34	7.02	29.12	1.85	
	>= 5	9,780	25,428	5.85	8.05	29.87	2.10	
	>= 6	3,340	8,684	7.06	7.60	30.76	2.75	
	>= 7	2,000	5,200	7.16	7.76	30.98	2.79	
795	>= 3	10,000	26,000	4.84	7.85	26.91	1.59	
	>= 4	8,380	21,788	5.08	7.66	27.11	1.70	
	>= 5	4,000	10,400	5.74	10.99	31.32	2.01	
	>= 6	2,000	5,200	6.17	6.81	27.52	2.22	
TOTALS	>= 0	1,238,951	3,221,272	3.60	4.28	35.34	1.27	Recovery 35.1%
	>= 1	998,374	2,595,772	4.42	5.26	42.66	1.56	35.3%
	>= 2	822,557	2,138,648	5.02	6.27	44.06	1.81	36.1%
	>= 3	650,757	1,691,968	5.72	7.77	41.53	2.13	37.3%
	>= 4	511,109	1,328,883	6.31	8.91	40.44	2.44	38.6%
	>= 5	378,383	983,796	6.96	10.00	39.27	2.80	40.3%
	>= 6	216,938	564,038	8.11	11.12	39.57	3.51	43.3%
	>= 7	154,000	400,401	8.80	12.60	38.86	3.97	45.1%
	>= 8	101,271	263,304	9.46	12.87	38.27	4.45	47.0%
	>= 9	47,171	122,644	10.57	11.86	41.81	5.32	50.4%
>= 10	26,371	68,564	11.43	11.92	42.38	6.06	53.1%	

BENCH	ORE (BCMS)	ORE (TONNES)	WASTE (TONNES)	S/R	GRADES REK	CA	BA	RECR	CUMULATIVE ORE	WASTE
1020	0	0	312	-1	-1	-1	-1	-1	0	312
1015	0	0	10,504	-1	-1	-1	-1	-1	0	10,816
1010	0	0	20,072	-1	-1	-1	-1	-1	0	30,888
1005	0	0	41,808	-1	-1	-1	-1	-1	0	72,696
1000	0	0	32,240	-1	-1	-1	-1	-1	0	104,936
995	0	0	40,768	-1	-1	-1	-1	-1	0	145,704
990	0	0	26,000	-1	-1	-1	-1	-1	0	171,704
985	0	0	33,800	-1	-1	-1	-1	-1	0	205,504
980	0	0	15,600	-1	-1	-1	-1	-1	0	221,104
975	1,720	4,472	18,616	4.16	0	0	0	0	4,472	239,720
970	200	520	4,888	9.40	0	0	0	0	4,992	244,608
965	2,960	7,696	10,504	1.36	0	0	0	0	12,688	255,112
960	3,080	8,008	0	0	0	0	0	0	20,696	255,112
955	6,000	15,600	0	0	0	0	0	0	36,296	255,112
950	4,600	11,960	0	0	0	0	0	0	48,256	255,112
945	9,240	24,024	0	0	0	0	0	0	72,280	255,112
940	6,000	15,600	0	0	0	0	0	0	87,880	255,112
935	7,000	18,200	0	0	0	0	0	0	106,080	255,112
930	10,280	26,728	0	0	0	0	0	0	132,808	255,112
925	8,000	20,800	0	0	0	0	0	0	153,608	255,112
920	9,280	24,128	0	0	0	0	0	0	177,736	255,112
915	9,880	25,688	0	0	0	0	0	0	203,424	255,112
910	10,040	26,104	0	0	0.00	0.00	0.02	0.00	229,528	255,112
905	11,640	30,264	0	0	0.12	0.06	1.27	0.02	259,792	255,112
900	15,200	39,520	0	0	0.33	0.18	3.62	0.07	299,312	255,112
895	11,970	31,121	0	0	0.64	0.33	7.71	0.13	330,433	255,112
890	17,300	44,980	0	0	0.78	0.34	9.14	0.16	375,413	255,112
885	15,297	39,773	0	0	0.85	0.38	13.67	0.18	415,186	255,112
880	19,380	50,388	0	0	0.94	0.40	14.70	0.21	465,574	255,112
875	22,760	59,176	0	0	1.04	0.42	20.24	0.23	524,750	255,112
870	36,920	95,992	0	0	1.17	0.39	27.34	0.26	620,742	255,112
865	45,480	118,248	0	0	1.53	0.41	39.42	0.36	738,990	255,112
860	61,200	159,120	0	0	1.97	1.06	43.31	0.50	898,110	255,112
855	79,470	206,623	25	0	2.62	1.54	46.64	0.75	1,104,733	255,137
850	97,080	252,408	208	0	3.28	2.17	47.89	1.07	1,357,141	255,345
845	97,100	252,460	156	0	4.30	3.90	48.10	1.53	1,609,601	255,501
840	101,440	263,744	208	0	4.92	5.08	47.76	1.83	1,873,345	255,709
835	93,814	243,915	277	0	5.11	6.17	46.44	1.87	2,117,260	255,986
830	91,400	237,640	104	0	5.02	7.45	42.16	1.79	2,354,900	256,090
825	88,060	228,956	52	0	5.24	7.09	36.34	1.96	2,583,856	256,142
820	85,160	221,416	0	0	5.29	8.84	33.97	1.94	2,805,272	256,142
815	60,020	156,052	0	0	5.44	8.06	30.83	2.14	2,961,324	256,142
810	47,980	124,748	52	0	5.46	8.78	31.15	2.03	3,086,072	256,194
805	26,000	67,600	0	0	5.34	8.07	31.35	1.87	3,153,672	256,194
800	16,000	41,600	0	0	5.03	7.09	28.17	1.72	3,195,272	256,194
795	10,000	26,000	0	0	4.84	7.85	26.91	1.59	3,221,272	256,194
TOTAL	1,238,951	3,221,272	256,194	0.08	3.60	4.28	35.34	1.27		

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR	
1075	>=	0	2,200	5,720	0	0	0	0
1070	>=	0	2,040	5,304	0	0	0	0
1065	>=	0	5,480	14,248	0	0	0	0
1060	>=	0	7,000	18,200	0	0	0	0
1055	>=	0	12,400	32,240	0	0	0	0
1050	>=	0	12,680	32,968	0	0	0	0
1045	>=	0	16,440	42,744	0	0	0	0
1040	>=	0	18,920	49,192	0	0	0	0
1035	>=	0	17,640	45,864	0	0	0	0
1030	>=	0	21,360	55,536	0	0	0	0
1025	>=	0	22,080	57,408	0	0	0	0
1020	>=	0	24,920	64,792	0	0	0	0
1015	>=	0	27,120	70,512	0	0	0	0
1010	>=	0	31,720	82,472	0	0	0	0
1005	>=	0	31,880	82,888	0	0	0	0
1000	>=	0	35,800	93,080	0	0	0	0
995	>=	0	38,160	99,216	0	0	0	0
990	>=	0	42,200	109,720	0	0	0	0
985	>=	0	48,080	125,008	0	0	0	0
980	>=	0	50,833	132,166	0	0	0	0
975	>=	0	56,421	146,694	0	0	0	0
970	>=	0	52,504	136,510	0	0	0	0
965	>=	0	61,843	160,792	0	0	0	0
960	>=	0	58,960	153,296	0	0	0	0
955	>=	0	64,966	168,912	0	0	0	0
950	>=	0	66,100	171,860	0	0	0	0
945	>=	0	71,180	185,068	0	0	0	0
940	>=	0	67,576	175,697	0	0	0	0
935	>=	0	68,098	177,056	0	0	0	0
930	>=	0	71,610	186,187	0	0	0	0
925	>=	0	76,040	197,704	0	0	0	0
920	>=	0	69,820	181,532	0	0	0	0
915	>=	0	78,664	204,525	0	0	0	0
910	>=	0	73,420	190,892	0	0	0	0
905	>=	0	77,233	200,805	0.02	0.01	0.24	0.00
	>=	1	780	2,028	1.05	0.41	10.25	0.22
900	>=	0	81,851	212,813	0.08	0.05	0.96	0.02
	>=	1	1,020	2,652	1.06	0.43	11.26	0.22
895	>=	0	81,150	210,989	0.13	0.08	1.67	0.03
	>=	1	1,546	4,021	1.09	0.45	12.13	0.23
890	>=	0	90,280	234,728	0.21	0.11	2.60	0.04
	>=	1	8,722	22,676	1.14	0.48	13.11	0.24
885	>=	0	89,853	233,618	0.34	0.17	4.40	0.07
	>=	1	16,380	42,588	1.22	0.53	14.79	0.26
880	>=	0	96,380	250,588	0.46	0.22	5.75	0.10
	>=	1	23,140	60,164	1.36	0.57	14.71	0.31
	>=	2	60	156	2.27	2.63	21.93	0.57
875	>=	0	104,705	272,232	0.59	0.28	8.08	0.13
	>=	1	32,060	83,356	1.37	0.59	17.62	0.31
	>=	2	1,260	3,276	2.32	1.62	34.33	0.58
870	>=	0	119,660	311,116	0.75	0.33	12.58	0.17
	>=	1	45,940	119,444	1.48	0.57	23.50	0.33
	>=	2	5,020	13,052	2.10	0.67	46.68	0.51
865	>=	0	134,281	349,130	0.99	0.42	18.97	0.23
	>=	1	61,840	160,784	1.71	0.62	32.48	0.40
	>=	2	12,040	31,304	2.20	0.82	44.45	0.55
	>=	4	160	416	4.57	9.36	38.45	1.46
860	>=	0	155,000	403,000	1.18	0.67	23.47	0.29
	>=	1	76,620	199,212	2.02	1.07	38.90	0.51
	>=	2	26,380	68,588	2.83	1.92	49.83	0.77
	>=	3	9,000	23,400	4.03	4.95	44.07	1.22
	>=	4	4,960	12,896	4.52	7.99	40.91	1.43
	>=	5	760	1,976	5.38	2.49	44.68	1.83
855	>=	0	176,126	457,929	1.68	0.95	30.15	0.46
	>=	1	108,970	283,323	2.51	1.35	42.76	0.70
	>=	2	52,440	136,344	3.49	2.19	48.64	1.05
	>=	3	30,160	78,416	4.41	3.48	45.33	1.41
	>=	4	14,904	38,750	5.31	4.61	41.91	1.82
	>=	5	10,936	28,434	5.74	4.12	43.86	2.03

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR	
	>=	6	2,552	6,635	7.36	1.52	49.73	2.91
	>=	7	2,000	5,200	7.51	1.18	51.22	3.00
850	>=	0	194,820	506,532	2.16	1.37	34.15	0.66
	>=	1	140,920	366,392	2.87	1.76	43.27	0.89
	>=	2	85,940	223,444	3.72	2.46	50.12	1.23
	>=	3	40,700	105,820	5.29	4.45	44.70	1.96
	>=	4	24,120	62,712	6.51	6.57	43.17	2.62
	>=	5	14,680	38,168	7.78	5.63	46.75	3.38
	>=	6	10,900	28,340	8.62	6.00	50.48	3.92
	>=	7	8,480	22,048	9.16	6.90	50.92	4.31
	>=	8	4,480	11,648	10.81	11.69	50.47	5.54
	>=	9	3,680	9,568	11.36	13.61	48.80	5.98
	>=	10	2,800	7,280	11.88	16.73	46.59	6.42
845	>=	0	204,407	531,459	2.84	2.35	37.42	0.93
	>=	1	169,463	440,603	3.37	2.75	43.07	1.11
	>=	2	122,040	317,304	4.09	3.41	48.44	1.40
	>=	3	68,700	178,620	5.41	5.34	46.61	2.02
	>=	4	38,980	101,348	6.86	7.80	44.93	2.80
	>=	5	32,380	84,188	7.37	8.13	45.62	3.09
	>=	6	20,165	52,428	8.65	9.08	48.01	3.89
	>=	7	15,460	40,195	9.36	10.84	47.89	4.37
	>=	8	12,800	33,280	9.75	12.42	46.63	4.64
	>=	9	8,000	20,800	10.60	14.93	46.17	5.29
	>=	10	6,000	15,600	10.82	11.35	48.94	5.46
840	>=	0	224,740	584,324	3.22	3.00	38.89	1.08
	>=	1	187,820	488,332	3.79	3.48	44.64	1.28
	>=	2	156,560	407,056	4.21	4.00	46.98	1.46
	>=	3	91,220	237,172	5.49	5.97	47.36	2.06
	>=	4	58,420	151,892	6.61	7.89	45.98	2.66
	>=	5	42,230	109,799	7.47	9.36	43.80	3.16
	>=	6	26,341	68,486	8.63	10.68	44.53	3.89
	>=	7	18,081	47,010	9.71	12.50	45.18	4.62
	>=	8	17,191	44,696	9.85	12.93	44.96	4.72
	>=	9	11,191	29,096	10.48	9.82	47.38	5.20
	>=	10	6,231	16,200	11.13	11.08	46.17	5.74
835	>=	0	228,994	595,383	3.43	3.79	40.44	1.12
	>=	1	202,541	526,606	3.84	4.20	44.49	1.26
	>=	2	186,225	484,185	4.03	4.43	45.83	1.33
	>=	3	108,525	282,165	5.08	6.52	45.01	1.82
	>=	4	60,405	157,052	6.39	9.05	44.25	2.49
	>=	5	39,797	103,472	7.38	11.38	39.57	3.05
	>=	6	26,260	68,276	8.29	12.00	41.47	3.62
	>=	7	20,420	53,092	8.90	13.88	41.69	4.01
	>=	8	11,220	29,172	9.87	11.03	42.46	4.71
	>=	9	9,220	23,972	10.12	9.72	43.38	4.90
	>=	10	5,240	13,624	10.75	7.83	45.04	5.41
830	>=	0	224,500	583,700	3.59	4.88	39.70	1.16
	>=	1	201,560	524,056	3.97	5.35	43.42	1.28
	>=	2	192,960	501,696	4.07	5.45	44.02	1.32
	>=	3	130,640	339,664	4.78	7.21	43.23	1.63
	>=	4	76,020	197,652	5.78	10.23	41.67	2.12
	>=	5	46,780	121,628	6.64	12.63	38.79	2.58
	>=	6	23,440	60,944	7.91	15.66	37.65	3.33
	>=	7	18,260	47,476	8.27	15.90	37.37	3.56
	>=	8	8,820	22,932	9.03	10.33	39.30	4.08
	>=	9	3,340	8,684	9.81	7.85	41.55	4.65
	>=	10	1,440	3,744	10.22	8.01	42.23	5.01
825	>=	0	217,100	564,460	3.98	5.68	38.55	1.35
	>=	1	195,892	509,319	4.39	6.24	42.26	1.49
	>=	2	187,572	487,687	4.51	6.31	42.67	1.54
	>=	3	139,012	361,431	5.17	7.78	41.05	1.84
	>=	4	85,200	221,520	6.30	10.56	38.03	2.40
	>=	5	56,560	147,056	7.20	11.93	36.47	2.89
	>=	6	41,980	109,148	7.78	12.77	35.03	3.24
	>=	7	27,260	70,876	8.45	13.53	33.05	3.66
	>=	8	18,320	47,632	8.84	14.34	32.39	3.92
	>=	9	7,520	19,552	9.35	14.92	31.70	4.31
	>=	10	440	1,144	10.61	7.75	41.33	5.31
820	>=	0	199,180	517,868	4.24	6.92	38.34	1.43

BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR	
	>=	1	188,260	489,476	4.47	7.29	40.36	1.51
	>=	2	183,420	476,892	4.54	7.29	40.66	1.54
	>=	3	141,820	368,732	5.09	8.76	38.86	1.79
	>=	4	84,700	220,220	6.24	10.75	34.86	2.35
	>=	5	63,540	165,204	6.79	11.71	33.34	2.65
	>=	6	35,340	91,884	7.84	12.72	31.72	3.26
	>=	7	28,580	74,308	8.14	14.48	28.91	3.45
	>=	8	17,160	44,616	8.56	15.80	27.74	3.73
	>=	10	220	572	10.72	7.49	41.74	5.36
815	>=	0	182,040	473,304	4.39	7.53	38.67	1.52
	>=	1	176,180	458,068	4.53	7.77	39.81	1.57
	>=	2	170,360	442,936	4.63	7.85	40.44	1.61
	>=	3	133,240	346,424	5.21	8.11	41.29	1.88
	>=	4	86,300	224,380	6.18	10.45	36.88	2.38
	>=	5	62,820	163,332	6.76	11.93	32.66	2.72
	>=	6	35,760	92,976	7.69	13.92	30.40	3.33
	>=	7	19,100	49,660	8.81	16.26	28.76	4.16
	>=	8	9,560	24,856	10.33	15.17	27.84	5.41
	>=	9	4,000	10,400	13.14	17.92	19.22	7.97
	>=	10	2,000	5,200	17.09	15.10	14.37	11.79
810	>=	0	160,040	416,104	4.24	7.51	36.71	1.42
	>=	1	154,320	401,232	4.38	7.76	37.73	1.47
	>=	2	148,080	385,008	4.50	7.96	38.72	1.51
	>=	3	114,220	296,972	5.07	8.34	39.69	1.76
	>=	4	80,340	208,884	5.72	9.58	37.79	2.08
	>=	5	51,940	135,044	6.46	12.23	31.21	2.47
	>=	6	27,100	70,460	7.41	12.44	31.27	3.04
	>=	7	12,600	32,760	8.62	13.57	34.98	3.83
	>=	8	7,540	19,604	9.41	15.43	31.27	4.38
	>=	9	4,060	10,556	10.20	15.45	32.73	5.00
	>=	10	2,060	5,356	11.00	21.21	26.39	5.67
805	>=	0	127,920	332,592	4.60	7.58	34.50	1.55
	>=	1	126,120	327,912	4.65	7.67	34.88	1.57
	>=	2	123,260	320,476	4.72	7.65	35.22	1.60
	>=	3	111,080	288,808	4.95	8.16	35.62	1.70
	>=	4	74,500	193,700	5.64	9.41	33.96	2.03
	>=	5	48,740	126,724	6.32	10.09	32.22	2.39
	>=	6	24,660	64,116	7.13	12.57	23.14	2.88
	>=	7	13,280	34,528	7.92	12.99	22.95	3.41
	>=	8	2,320	6,032	9.73	9.81	35.01	5.08
	>=	10	320	832	20.00	15.28	29.21	15.60
800	>=	0	104,000	270,400	4.74	7.80	33.19	1.59
	>=	1	102,460	266,396	4.80	7.91	33.60	1.62
	>=	2	99,780	259,428	4.87	7.90	33.95	1.65
	>=	3	89,800	233,480	5.13	8.33	34.57	1.76
	>=	4	66,520	172,952	5.64	9.22	35.22	2.00
	>=	5	50,940	132,444	6.03	10.14	35.10	2.19
	>=	6	26,860	69,836	6.67	10.66	34.22	2.54
	>=	7	6,060	15,756	7.20	12.43	25.65	2.84
	>=	8	60	156	8.79	12.48	22.99	3.87
795	>=	0	86,020	223,652	5.60	7.62	30.53	2.10
	>=	1	84,660	220,116	5.68	7.73	30.91	2.13
	>=	2	84,080	218,608	5.71	7.76	30.97	2.15
	>=	3	72,040	187,304	6.22	8.21	32.52	2.39
	>=	4	61,940	161,044	6.68	8.84	33.24	2.62
	>=	5	50,480	131,248	7.16	9.53	35.55	2.89
	>=	6	33,120	86,112	7.97	11.32	33.32	3.38
	>=	7	24,380	63,388	8.56	11.02	37.74	3.75
	>=	8	18,000	46,800	8.93	9.56	44.37	4.00
	>=	9	10,000	26,000	9.49	10.35	43.63	4.41
790	>=	0	62,000	161,200	6.82	8.30	33.14	2.84
	>=	1	61,140	158,964	6.91	8.41	33.51	2.88
	>=	2	60,060	156,156	7.01	8.49	33.71	2.92
	>=	3	60,000	156,000	7.01	8.49	33.72	2.93
	>=	4	52,900	137,540	7.49	8.91	34.35	3.19
	>=	5	43,500	113,100	8.14	9.50	37.33	3.57
	>=	6	34,620	90,012	8.79	9.74	40.36	3.99
	>=	7	26,000	67,600	9.51	11.67	38.84	4.48
	>=	8	20,000	52,000	10.17	11.41	41.42	4.95



BENCH	CUTOFF	ORE (BCMS)	ORE (TONNES)	GRADES REK	CA	BA	RECR		
	>=	9	18,000	46,800	10.31	10.89	43.90	5.07	
	>=	10	8,000	20,800	11.47	11.19	47.04	5.98	
785	>=	0	46,040	119,704	7.59	9.30	32.89	3.39	
	>=	1	44,440	115,544	7.83	9.61	33.79	3.50	
	>=	2	43,680	113,568	7.94	9.68	33.99	3.56	
	>=	3	43,520	113,152	7.96	9.69	34.01	3.57	
	>=	4	38,400	99,840	8.55	10.29	35.99	3.91	
	>=	5	34,400	89,440	8.97	10.49	37.57	4.18	
	>=	6	31,280	81,328	9.33	10.14	39.00	4.41	
	>=	7	27,880	72,488	9.64	10.74	39.89	4.63	
	>=	8	19,980	51,948	10.49	10.74	41.82	5.26	
	>=	10	9,980	25,948	12.19	10.23	50.18	6.64	
780	>=	0	34,000	88,400	8.08	9.88	35.15	3.72	
	>=	1	32,580	84,708	8.39	10.28	36.30	3.88	
	>=	2	32,140	83,564	8.49	10.41	36.58	3.93	
	>=	3	31,700	82,420	8.57	10.42	36.72	3.97	
	>=	4	30,360	78,936	8.78	10.59	37.45	4.10	
	>=	5	28,360	73,736	9.06	11.12	38.20	4.28	
	>=	6	24,720	64,272	9.52	11.31	40.11	4.59	
	>=	7	19,940	51,844	10.27	11.12	42.99	5.13	
	>=	8	17,940	46,644	10.62	11.43	42.66	5.39	
	>=	10	9,940	25,844	12.24	11.73	47.98	6.69	
								Recovery	
TOTALS	>=	0	4,908,475	12,762,034	2.04	2.59	20.51	0.69	33.8%
	>=	1	2,445,374	6,357,973	3.99	5.11	39.04	1.36	34.1%
	>=	1.2	2,356,654	6,127,301	4.10	5.29	39.98	1.40	34.2%
	>=	1.4	2,262,834	5,883,369	4.21	5.47	40.82	1.45	34.4%
	>=	1.6	2,176,577	5,659,101	4.32	5.65	41.41	1.49	34.5%
	>=	1.8	2,118,297	5,507,573	4.39	5.77	41.60	1.52	34.7%
	>=	2	1,973,357	5,130,728	4.58	6.08	41.75	1.60	35.0%
	>=	3	1,415,537	3,680,396	5.40	7.60	40.24	1.98	36.7%
	>=	4	939,129	2,441,735	6.39	9.47	38.15	2.49	39.0%
	>=	5	678,843	1,764,992	7.12	10.63	36.71	2.91	40.8%
	>=	6	425,098	1,105,254	8.11	11.63	36.50	3.52	43.4%
	>=	7	287,780	748,229	8.91	12.63	37.19	4.06	45.6%
	>=	8	185,391	482,016	9.70	12.34	39.38	4.64	47.8%
	>=	9	99,471	258,624	10.73	11.73	43.12	5.45	50.8%
	>=	10	54,671	142,144	11.78	11.50	45.41	6.34	53.8%

BENCH	ORE (BCMS)	ORE (TONNES)	WASTE (TONNES)	S/R	GRADES				CUMULATIVE	
					REK	CA	BA	RECR	ORE	WASTE
1075	2,200	5,720	0	0	0	0	0	0	5,720	0
1070	2,040	5,304	0	0	0	0	0	0	11,024	0
1065	5,480	14,248	0	0	0	0	0	0	25,272	0
1060	7,000	18,200	0	0	0	0	0	0	43,472	0
1055	12,400	32,240	0	0	0	0	0	0	75,712	0
1050	12,680	32,968	0	0	0	0	0	0	108,680	0
1045	16,440	42,744	0	0	0	0	0	0	151,424	0
1040	18,920	49,192	0	0	0	0	0	0	200,616	0
1035	17,640	45,864	104	0	0	0	0	0	246,480	104
1030	21,360	55,536	0	0	0	0	0	0	302,016	104
1025	22,080	57,408	3,432	0.06	0	0	0	0	359,424	3,536
1020	24,920	64,792	2,288	0.04	0	0	0	0	424,216	5,824
1015	27,120	70,512	15,704	0.22	0	0	0	0	494,728	21,528
1010	31,720	82,472	35,672	0.43	0	0	0	0	577,200	57,200
1005	31,880	82,888	47,008	0.57	0	0	0	0	660,088	104,208
1000	35,800	93,080	58,240	0.63	0	0	0	0	753,168	162,448
995	38,160	99,216	41,288	0.42	0	0	0	0	852,384	203,736
990	42,200	109,720	46,800	0.43	0	0	0	0	962,104	250,536
985	48,080	125,008	33,800	0.27	0	0	0	0	1,087,112	284,336
980	50,833	132,166	36,522	0.28	0	0	0	0	1,219,278	320,858
975	56,421	146,694	19,706	0.13	0	0	0	0	1,365,972	340,564
970	52,504	136,510	23,442	0.17	0	0	0	0	1,502,482	364,006
965	61,843	160,792	15,176	0.09	0	0	0	0	1,663,274	379,182
960	58,960	153,296	15,912	0.10	0	0	0	0	1,816,570	395,094
955	64,966	168,912	6,744	0.04	0	0	0	0	1,985,482	401,838
950	66,100	171,860	7,332	0.04	0	0	0	0	2,157,342	409,170
945	71,180	185,068	4,108	0.02	0	0	0	0	2,342,410	413,278
940	67,576	175,697	5,263	0.03	0	0	0	0	2,518,107	418,541
935	68,098	177,056	2,344	0.01	0	0	0	0	2,695,163	420,885
930	71,610	186,187	6,213	0.03	0	0	0	0	2,881,350	427,098
925	76,040	197,704	13,416	0.07	0	0	0	0	3,079,054	440,514
920	69,820	181,532	16,172	0.09	0	0	0	0	3,260,586	456,686
915	78,664	204,525	21,051	0.10	0	0	0	0	3,465,111	477,737
910	73,420	190,892	15,964	0.08	0	0	0	0	3,656,003	493,701
905	77,233	200,805	17,491	0.09	0.02	0.01	0.24	0.00	3,856,808	511,192
900	81,851	212,813	15,571	0.07	0.08	0.05	0.96	0.02	4,069,621	526,763
895	81,150	210,989	14,171	0.07	0.13	0.08	1.67	0.03	4,280,610	540,934
890	90,280	234,728	10,504	0.04	0.21	0.11	2.60	0.04	4,515,338	551,438
885	89,853	233,618	9,950	0.04	0.34	0.17	4.40	0.07	4,748,956	561,388
880	96,380	250,588	6,188	0.02	0.46	0.22	5.75	0.10	4,999,544	567,576
875	104,705	272,232	768	0	0.59	0.28	8.08	0.13	5,271,776	568,344
870	119,660	311,116	2,132	0.01	0.75	0.33	12.58	0.17	5,582,892	570,476
865	134,281	349,130	2,494	0.01	0.99	0.42	18.97	0.23	5,932,022	572,970
860	155,000	403,000	3,224	0.01	1.18	0.67	23.47	0.29	6,335,022	576,194
855	176,126	457,929	919	0	1.68	0.95	30.15	0.46	6,792,951	577,113
850	194,820	506,532	468	0	2.16	1.37	34.15	0.66	7,299,483	577,581
845	204,407	531,459	397	0	2.84	2.35	37.42	0.93	7,830,942	577,978
840	224,740	584,324	468	0	3.22	3.00	38.89	1.08	8,415,266	578,446
835	228,994	595,383	537	0	3.43	3.79	40.44	1.12	9,010,649	578,983
830	224,500	583,700	364	0	3.59	4.88	39.70	1.16	9,594,349	579,347
825	217,100	564,460	260	0	3.98	5.68	38.55	1.35	10,158,809	579,607
820	199,180	517,868	0	0	4.24	6.92	38.34	1.43	10,676,677	579,607
815	182,040	473,304	0	0	4.39	7.53	38.67	1.52	11,149,981	579,607
810	160,040	416,104	0	0	4.24	7.51	36.71	1.42	11,566,085	579,607
805	127,920	332,592	208	0	4.60	7.58	34.50	1.55	11,898,677	579,815
800	104,000	270,400	0	0	4.74	7.80	33.19	1.59	12,169,077	579,815
795	86,020	223,652	0	0	5.60	7.62	30.53	2.10	12,392,729	579,815
790	62,000	161,200	0	0	6.82	8.30	33.14	2.84	12,553,929	579,815
785	46,040	119,704	0	0	7.59	9.30	32.89	3.39	12,673,633	579,815
780	34,000	88,400	0	0	8.08	9.88	35.15	3.72	12,762,033	579,815
TOTAL	4,908,475	12,762,034	579,814	0.05	2.04	2.59	20.51	0.69		

Apx.16 Photographs of the works

- (1) Water sampling and tracer test
- (2) Trench survey
- (3) Drilling survey
- (4) Ore dressing (Floatation)



DW-11, 12, 13 ; Dong Pao stream



DW-14



DW-16



DW-17



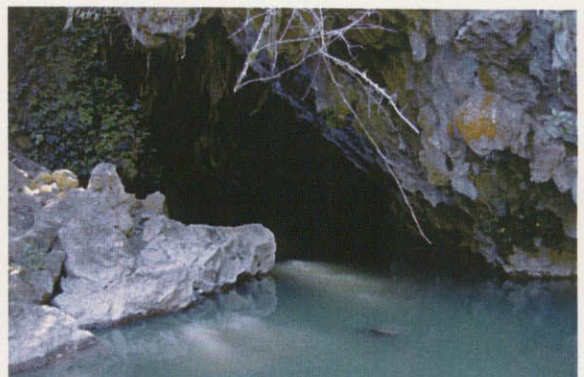
DW-10 ; Water go into the cave



DW-06 ; Water come from the cave



Water go into the cave from DW-06



Water come from the cave

Water sampling and tracer test (1/2)





DW-04 ; Ban Hon Hot spring,  
Tracer sampling point (S-2)



DW-05



DW-06 ; Tracer sampling point (S-1)



DW-07



DW-08



DW-09



DW-10 ; Tracer input point



Tracer (Uranine); dissolved water

Water sampling and tracer test (2/2)





T1 Trench



T3 Trench



T5 Trench

Trench survey (1/2)





Outcrop of fluorite rich ore along the creek



Outcrop of fluorite - barite -  
rare earth ore along the road

Trench survey (2/2)





Distant view of the F3 ore body  
in the survey area



Core warehouse (left side ) and  
laborer's lodgings (right side)  
of TERRAPRODEX



Drilling worker's base camp  
of INTERGIO

Drilling survey (1/7)





Carry-in situation of  
drill equipments



Carry-in situation of  
drill equipments by  
help of bulldozer



Carry-in situation of  
drill equipments  
(Track slipped and inclined)

Drilling survey (2/7)





Water pump  
(Dong Pao river site)



Construction of pool  
for drilling mud



Mixer for drilling mud





Drilling work



Drilling work



Extraction work of core

Drilling survey (4/7)





Completion sign of MJVD-17



Completion sign of MJVD-18

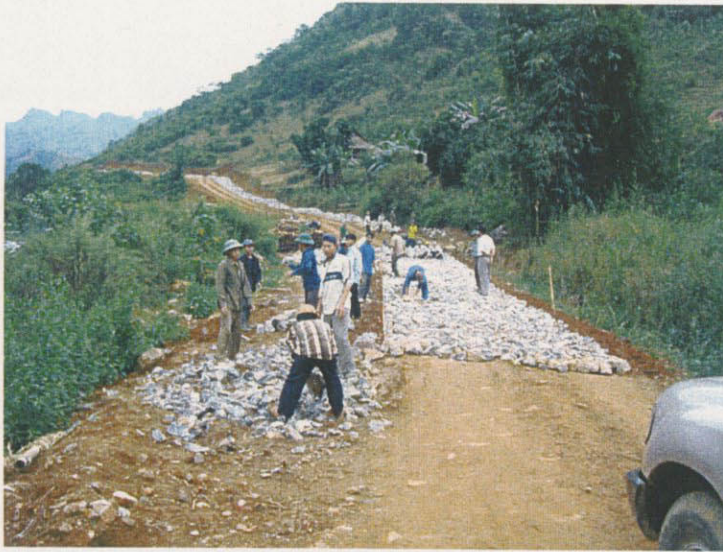


Completion sign of MJVD-19

Notes : The completion sign was installed in all drilling points

Drilling survey (5/7)





Road construction of main road  
near Old Dong Pao  
(Vietnam governmental work)



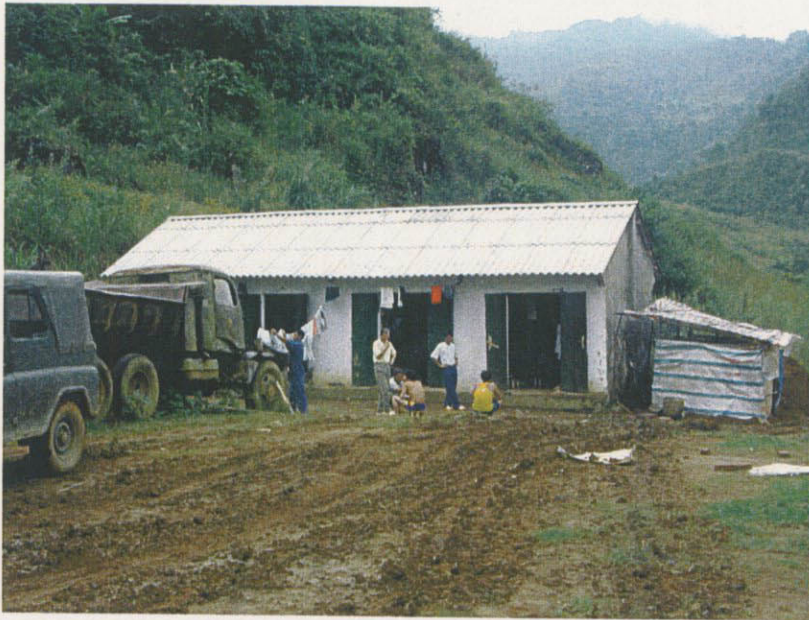
Reinforcement of road  
cross part of the river  
(Work of TERRAPRODEX)



Almost construction work  
was done by human power  
(Work of TERRAPRODEX)

Drilling survey (6/7)





Laborer's lodging  
of TERRAPRODEX



Neighboring residents  
of Dong Pao village



Neighboring residents  
of Dong Pao village





Laboratory of Flotation



Mill for grinding

Ore dressing (Flotation) (1/5)





Ore dressing test



BaSO<sub>4</sub>-flotation test

Ore dressing (Flotation) (2/5)





CaF<sub>2</sub>-flotation test



Dehydrate of CaF<sub>2</sub> conc.

Ore dressing (Flotation) (3/5)





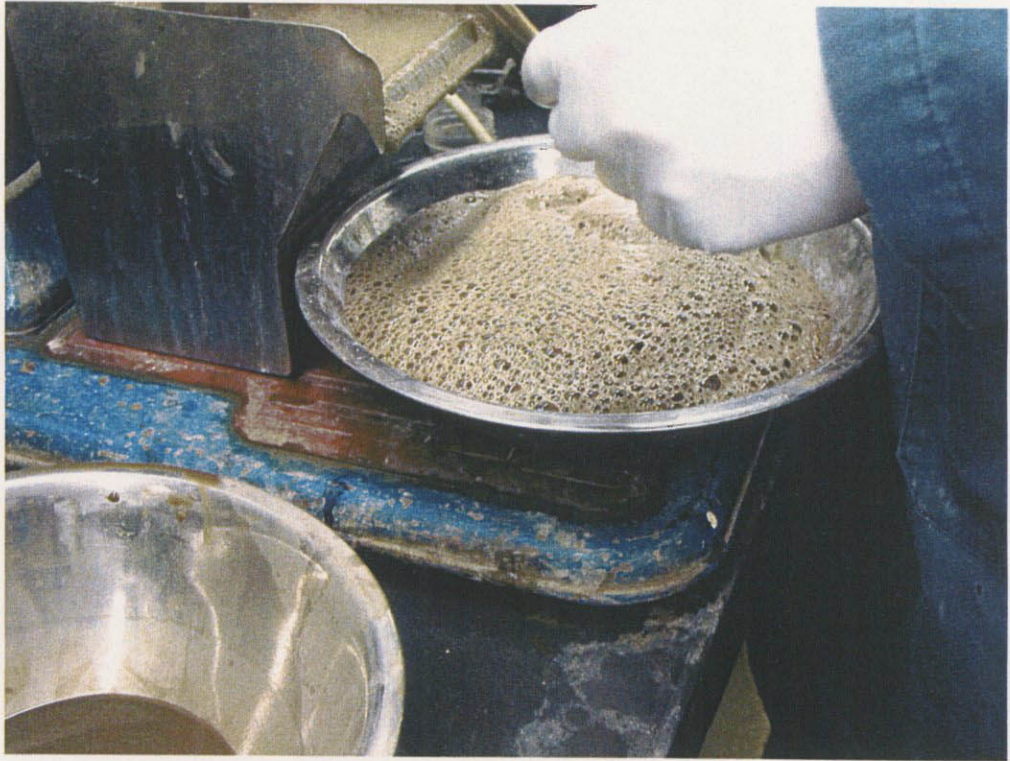
Bucket for hot condition



Hot condition test

Ore dressing (Floatation) (4/5)





REO-flotation test



REO concentrate

Ore dressing (Floatation) (5/5)