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FICHE No. 013162-

KING ISLAND SCHEELITE

Final Ore Resource Statement for Dolphin Mine and Bold Head Mine

OPEN FILE

A. D. FUDGE

93-3474.

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KING ISLAND SCHEELITE

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MEMORANDUM

Memorandum N^o: 118/90

Date: 19th October, 1990

To: Manager of Operations

From: Mining Superintendent

Subject: ORE RESOURCE

1. OPTIMISED ORE RESOURCE

The Resource statement at July 1990 was as follows:-

A. DOLPHIN MINE - ORE RESOURCES

	<u>COMBINED CUT OFF*</u>
Proven Reserves - tonnes	1 119 000
- tungstic oxide (%)	1.2
Probable Reserves - tonnes	31 000
- tungstic oxide (%)	1.5

(* - Utilising combined cut off of 0.7% for Lower C Lens and of 1% for the Upper C Lens)

B. DOLPHIN MINE - MINERAL RESOURCES

	<u>0.3% WO3 CUT OFF</u>
Measured Mineral Resources - tonnes	773 000
- tungstic oxide (%)	0.5
Indicated Mineral Resources - tonnes	575 000
- tungstic oxide (%)	0.9
Inferred Mineral Resources - tonnes	1 300 000

The Mineral Resources are additional to the Ore Reserves.

C. BOLD HEAD MINE - MINERAL RESOURCES

	<u>0.3% WO3 CUT OFF</u>
Measured Mineral Resources - tonnes	893 000
- tungstic oxide (%)	0.9
Indicated Mineral Resources - tonnes	500 000
- tungstic oxide (%)	0.8
Inferred Mineral Resources - tonnes	411 000

D. OTHER DOLPHIN MINERAL RESOURCES

Additional ore is known to exist in the Dolphin PGH Lens, Open Cut No. 1 Orebody and B Lens. Indicated Mineral Resources were previously calculated and quoted in 1983 as follow:-

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See Document 2173
File No. 512/8
Dept. Resources & Energy.KING ISLAND SCHEELITE

TO: Manager Of Operations

25th January, 1991

FROM: Mining Superintendent

Subject: FINAL ORE RESOURCE STATEMENT1. Introduction

The Ore Resource Statement for November 30, 1990 (close down date) has been prepared by the excision of ore from Resource, calculated in the July 1990 Resource Statement, which has been:-

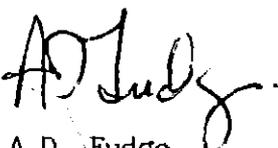
- a) Extracted by Mining
- b) Sterilized by Mining

The Resource has been estimated to a 1.0% WO₃ Cut-off for the Upper C Lens and 0.7% WO₃ Cut-off for the Lower C Lens.

2. November 30, 1990 Mining Reserve

Location	GEOLOGICAL RESOURCE			MINING RESERVE		
	Tonnes	WO ₃	Mtu's	Tonnes	WO ₃	Mtu's
Stoping Ore	1 156 050	1.31	1 514 425	836 185	1.21	1 011 780
Pillar Ore	302 400	1.35	408 240	260 820	1.24	323 417
Total	1 458 450	1.32	1 922 665	1 097 005	1.22	1 335 200

A detailed breakdown of Ore Resource/Reserve follows in Appendix 1.



A.D. Fudge
MINING SUPERINTENDENT

Dolphin Mine Geological Resource and Mining Reserve.

STOPING AREA	1% M03 Resource		0.7-1% Resource		Pillar Resource		Mineable Resource		Mining Reserve	
	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade
Hedge	67100	1.57	0	0.00	284500	1.55	386500	1.57	263000	1.45
Hedge Lower C	33100	1.20	256300	0.84	159000	1.05	430600	1.04	295013	0.97
Central	8100	1.34	0	0.00	42600	1.32	39200	1.37	32700	1.25
Central Upper C	46900	1.43	11600	0.82	25800	1.33	32700	1.29	27617	1.18
Pit	231200	1.32	0	0.00	95100	1.31	136100	1.33	116970	1.20
Pit Lower C	33950	1.32	0	0.00	15000	1.31	18950	1.32	16004	1.19
Pit Dao	20000	1.31	0	0.00	8100	1.31	11900	1.31	10469	1.19
Dodo	16700	1.24	0	0.00	0	0.00	16700	1.24	12423	1.14
Ruk	21700	2.21	0	0.00	0	0.00	21700	2.21	14534	1.39
Pheasant	0	0	0	0.00	0	0.00	0	0.00	0	0.00
Coast	1400	1.37	0	0.00	0	0.00	1400	1.37	938	1.25
Ruk Lower C	4000	1.14	14000	0.89	0	0.00	18000	0.95	12162	0.97
Swan	42300	1.36	0	0.00	0	0.00	42300	1.36	34172	1.27
Total	1585038	1.42	201900	0.84	630900	1.36	1156050	1.31	836185	1.21

WEDGE Orebody Geological Resource and Mining Reserves (Nov 98)

UPPER C HORIZON (-1% Only)

Level	+1% WOS Resource Tonnes	Resource Grade	0.7-1% Resource Tonnes	Resource Grade	Pillar Resource Tonnes	Resource Grade	Mineable Resource Tonnes	Resource Grade	Pillar Factor	Recu %	Dil %	Prob %	Mining Reserve Tonnes	Reserve Grade	Dilution Grade
0-10															
10-20															
20-30															
30-40															
40-50															
50-60															
60-70															
70-80	11500	1.48	0	0.00	11500	1.48									
80-90	9900	1.48	0	0.00	9900	1.48									
90-100															
100-110															
110-120															
120-130	2500	1.60	0	0.00	2500	1.60									
130-140	67900	1.60	0	0.00	56700	1.60	11200	1.60	0.82	60	15	100	6306	1.48	0.7
140-150	92300	1.60	0	0.00	0	0.00	92300	1.60	0.82	60	15	100	51969	1.48	0.7
150-160	30600	1.52	0	0.00	0	0.00	30600	1.52	0.82	60	15	100	21848	1.40	0.6
160-170	10000	1.52	0	0.00	2500	1.52	7500	1.52	0.82	60	15	100	4244	1.40	0.6
170-180	7400	1.52	0	0.00	7400	1.52									
180-190	37600	1.52	0	0.00	37600	1.52									
190-200	71000	1.52	0	0.00	32200	1.52	38800	1.52	0.80	90	15	100	32126	1.40	0.6
200-210	70000	1.59	0	0.00	15700	1.59	54300	1.59	0.80	60	15	100	33970	1.46	0.6
210-220	26000	1.59	0	0.00	17400	1.59	8600	1.59	0.80	90	15	100	7121	1.46	0.6
220-230	87900	1.59	0	0.00	55100	1.59	32800	1.59	0.80	90	15	100	27158	1.46	0.6
230-240	40000	1.59	0	0.00	16200	1.59	31800	1.59	0.80	60	15	100	19834	1.46	0.6
240-250	57900	1.59	0	0.00	14400	1.59	43500	1.59	0.80	90	15	100	36018	1.46	0.6
250-260	32500	1.49	0	0.00	5400	1.49	27100	1.49	0.80	90	15	100	22439	1.39	0.7
260-270															
270-280															
280-290															
290-300															
300-310															
TOTAL	671000	1.57	0	0.00	294500	1.56	306500	1.57					263005	1.45	

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WEDGE Orebody Geological Resource and Mining Reserves (Nov 98)

LOWER C HORIZON

Level	+1% WO3 Resource		0.7-1% Resource		Pillar Resource		Mineable Resource		Pillar	Recu	Dil	Prob	Mining Reserve		Dilution
	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Factor	%	%	%	Tonnes	Grade	Grade
0-10															
10-20															
20-30															
30-40															
40-50															
50-60															
60-70															
70-80			7500	0.89	7500	0.89									
80-90			38200	0.89	38200	0.89									
90-100			13400	0.89	13400	0.89									
100-110			100	0.95	100	0.95									
110-120															
120-130															
130-140	14500	1.04	38600	0.87	23000	0.93	22100	0.92	0.82	60	15	100	12504	0.85	0.4
140-150	25900	1.04	34700	0.87	0	0.00	60600	0.94	0.82	60	15	100	34120	0.87	0.4
150-160	51800	1.20	17800	0.80	0	0.00	69600	1.10	0.82	60	15	100	39360	1.01	0.4
160-170	12000	1.20	0	0.00	0	0.00	12000	1.20	0.82	60	15	100	6790	1.10	0.4
170-180	0	0.00	1000	0.82	1000	0.82									
180-190	9300	1.20	0	0.00	9300	1.20									
190-200	30000	1.20	7200	0.80	11900	1.20	25300	1.09	0.80	90	15	100	20940	1.01	0.5
200-210	29000	1.26	18800	0.79	10000	1.26	36800	1.02	0.80	60	15	100	23022	0.95	0.5
210-220	15000	1.26	15000	0.79	6100	1.26	21900	0.94	0.80	90	15	100	18133	0.89	0.5
220-230	33600	1.26	31300	0.79	16300	1.26	48600	0.96	0.80	90	15	100	40241	0.90	0.5
230-240	27000	1.26	20000	0.79	1500	0.80	53500	1.02	0.80	60	15	100	33470	0.96	0.5
240-250	45000	1.26	8300	0.79	5500	1.00	47000	1.20	0.80	90	15	100	39570	1.11	0.5
250-260	42000	1.17	4400	0.88	14000	1.17	32400	1.13	0.80	90	15	100	26827	1.05	0.5
260-270															
270-280															
280-290															
290-300															
300-310															
TOTAL	334100	1.20	256300	0.94	159000	1.05	430600	1.04					295013	0.97	

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CENTRAL Orebody Geological Resource and Mining Reserves (Nov 98)

UPPER C HORIZON (<1% Only)

Level	-1% M03 Resource		0.7-1% M03 Resource		Pillar Resource		Mineable Resource		Pillar	Recu	Dil	Prob	Mining Reserve		Dilution
	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Factor	%	%	%	Tonnes	Grade	Grade
0-10															
10-20															
20-30															
30-40															
40-50															
50-60															
60-70															
70-80															
80-90	1100	1.40	0	0.00	0	0.00	1100	1.40	0.00	90	12	100	887	1.25	0.6
90-100	5200	1.40	0	0.00	5200	1.40									
100-110	8500	1.30	0	0.00	8500	1.30									
110-120	5600	1.30	0	0.00	5600	1.30									
120-130	6300	1.30	0	0.00	6300	1.30									
130-140	9100	1.26	0	0.00	9100	1.26									
140-150	17600	1.26	0	0.00	2900	1.26	14700	1.26	0.32	90	14	100	12307	1.15	0.4
150-160	21500	1.43	0	0.00	5000	1.43	16500	1.43	0.82	90	14	100	13014	1.30	0.4
160-170	6900	1.43	0	0.00	0	0.00	6900	1.43	0.82	90	14	100	5777	1.30	0.4
170-180															
180-190															
190-200															
200-210															
210-220															
220-230															
230-240															
240-250															
250-260															
260-270															
270-280															
280-290															
290-300															
300-310															
TOTAL	81300	1.34	0	0.00	42600	1.32	39200	1.37					32785	1.25	

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CENTRAL Orebody Geological Resource and Mining Reserves (Nov 90)

LOWER C HORIZON

Level	-1% WO3 Resource Tonnes	Grade	0.7-1% WO3 Resource Tonnes	Grade	Pillar Resource Tonnes	Grade	Mineable Resource Tonnes	Grade	Pillar Factor	Recu %	Dil %	Prob %	Mining Reserve Tonnes	Grade	Dilution Grade
0-10															
10-20															
20-30															
30-40															
40-50															
50-60															
60-70															
70-80															
80-90															
90-100	1300	2.34	0	0.00	1300	2.34									
100-110	4300	1.34	700	0.97	5000	1.29									
110-120	5700	1.34	400	0.97	6100	1.32									
120-130	2900	1.34	0	0.00	2900	1.34									
130-140	1800	1.39	200	0.87	2000	1.34									
140-150	1100	1.39	200	0.87	1300	1.31									
150-160	16300	1.43	4200	0.97	5600	1.20	14900	1.36	0.02	90	15	100	12504	1.23	8.4
160-170	12000	1.43	5300	0.75	300	0.75	17000	1.24	0.02	90	15	100	15033	1.13	8.4
170-180	1300	1.43	300	0.75	1600	1.30									
180-190			300	0.75	300	0.75									
190-200															
200-210															
210-220															
220-230															
230-240															
240-250															
250-260															
260-270															
270-280															
280-290															
290-300															
300-310															
TOTAL	46900	1.43	11600	0.82	25800	1.39	32700	1.29					27617	1.18	

800666

PIT Orebody Geological Resource and Mining Reserves (Nov 98)

UPPER C HORIZON (<+1% Only)

Level	-1% WO3 Resource Tonnes	Resource Grade	0.7-1% WO3 Resource Tonnes	Resource Grade	Pillar Resource Tonnes	Grade	Mineable Resource Tonnes	Resource Grade	Pillar Factor	Recu %	Dil %	Prob %	Mining Reserve Tonnes	Reserve Grade	Dilution Grade
0-10															
10-20															
20-30															
30-40															
40-50															
50-60	26700	1.29	0	0.00	26700	1.29									
60-70	53500	1.29	0	0.00	53500	1.29									
70-80	28500	1.29	0	0.00	9700	1.29	18800	1.29	0.90	90	20	100	18274	1.13	0.3
80-90	3700	1.29	0	0.00	0	0.00	3700	1.29	0.90	90	20	100	3536	1.13	0.3
90-100															
100-110															
110-120															
120-130															
130-140															
140-150	6000	1.95	0	0.00	2400	1.95	3600	1.95	0.92	90	14	100	3014	1.75	0.3
150-160	72000	1.28	0	0.00	2100	1.28	70700	1.28	0.82	90	14	100	59191	1.16	0.3
160-170	40000	1.39	0	0.00	700	1.39	39300	1.39	0.82	90	14	100	32983	1.26	0.3
170-180															
180-190															
190-200															
200-210															
210-220															
220-230															
230-240															
240-250															
250-260															
260-270															
270-280															
280-290															
290-300															
300-310															
TOTAL	231200	1.32	0	0.00	95100	1.31	136100	1.33					116978	1.20	

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PIT Orebody Geological Resource and Mining Reserves (Nov 98)

LOWER C HORIZON

Level	+1% WO3 Resource		0.7-1% WO3 Resource		Pillar Resource		Mineable Resource			Pillar	Recu	Dil	Prob	Mining Reserve		Dilution
	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Factor	%	%	%	Tonnes	Grade	Grade	
0-10																
10-20																
20-30																
30-40																
40-50																
50-60																
60-70																
70-80																
80-90																
90-100																
100-110																
110-120																
120-130																
130-140																
140-150	0	0.00	0	0.00	0	0.00										
150-160	12200	1.32	0	0.00	11500	1.32	700	1.32	0.02	90	15	100	591	1.19	0.3	
160-170	10250	1.32	0	0.00	0	0.00	10250	1.32	0.02	90	15	100	15413	1.19	0.3	
170-180	0	0.00	0	0.00	0	0.00										
180-190	3500	1.29	0	0.00	3500	1.29										
190-200	0	0	0	0.00	0	0.00										
200-210																
210-220																
220-230																
230-240																
240-250																
250-260																
260-270																
270-280																
280-290																
290-300																
300-310																
TOTAL	33950	1.32	0	0.00	15000	1.31	10950	1.32					16004	1.19		

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MINOR Orebodies Geological Resource and Mining Reserves (Nov 98)

UPPER AND LOWER LENS 'S

AREA	~1% HOS Resource		0.7-1% Resource		Pillar Resource		Mineable Resource		Pillar Factor	Recu %	Dil %	Prob %	Mining Reserve		Dilution Grade
	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade					Tonnes	Grade	
Pit Dag Lower C	20000	1.31	0	0.00	8100	1.31	11900	1.31	0.85	90	15	100	10469	1.19	0.4
Dodo Upper C	16700	1.24	0	0.00	0	0.00	16700	1.24	0.82	80	14	100	12428	1.14	0.4
Ruk Upper C	21700	2.21	0	0.00	0	0.00	21700	2.21	0.82	80	14	90	14534	1.99	0.4
Pheasant Upper C	0	0.00	0	0.00	0	0.00	0	0.00							
Coast Upper C	1400	1.37	0	0.00	0	0.00	1400	1.37	0.82	80	14	90	938	1.25	0.4
Ruk Lower C	4000	1.14	14000	0.89	0	0.00	18000	0.95	0.82	80	15	90	12162	0.87	0.4
Suan Upper C	42300	1.36	0	0.00	0	0.00	42300	1.36	0.82	90	10	100	34172	1.27	0.4
TOTAL	106100	1.50	14000	0.89	8100	1.31	112000	1.43					84702	1.31	

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Dolphin Resource and Mining Reserve in Pillars .

STOPING	AREA	Pillar Resource Tonnes	Grade	Sterile Resource Tonnes	Grade	Mineable Resource Tonnes	Grade	Mining Reserve Tonnes	Grade	Dilution Grade
Hedge	Upper C	204500	1.56	157800	1.56	126700	1.56	109279	1.42	0.5
Hedge	Lower C	159000	1.05	81300	1.04	70500	1.06	67706	0.99	0.5
Central	Upper C	42600	1.32	42600	1.32	0	0.00	0	0.00	0.5
Central	Lower C	25800	1.33	25800	1.33					
Pit	Upper C	95100	1.31	3000	1.29	92100	1.31	79436	1.20	0.5
Pit	Lower C	15000	1.31	9900	1.32	5100	1.29	4399	1.19	0.5
Pit Dag	Lower C	0100	1.31	0100	1.31	0	0.00	0	0.00	0.5
Total		630900	1.36	320500	1.37	302400	1.35	260820	1.24	

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