

Prepared by: E. Lawrence, P.Geol.

24 February 2005

JERSEY MOLYBDENUM POTENTIAL

Sultan Minerals' Salmo Property *IRON MOUNTAIN*

INTRODUCTION

The recent increase in the price of molybdenum has renewed interest in molybdenum exploration. Sultan Minerals Ltd. has mineral rights to a potentially large porphyry molybdenum deposit in the Salmo area. This interesting deposit is contained within a large intrusive complex that has been known to be molybdenum bearing for many years. Depressed prices for the last 23 years have been the main reason for the lack of exploration work. The current price range and the fact that Sultan has ownership of the claims that cover this deposit, are strong incentives to initiate evaluation of this very large potential.

Widespread molybdenum occurrences have been noted on this property since the 1930's, confirming that the underlying intrusive is molybdenum bearing. Initially they were found in surface showings on the western slope of Iron Mountain, where the Emerald and Feeny tungsten deposits were developed. In general these occurrences consisted of high grade moly along fracture surfaces, and in the skarns associated with tungsten mineralization. These tended to have limited continuity or potential volume. However as the tungsten deposits were being developed in the 1940's, 1950's, and 1970's the source of this skarn moly was found to be in a stockwork within the underlying granitic intrusive.

A general geological picture of this area is best described as sediments that have been intruded by granitics. A cap of sediments still remains above the area where earlier mining took place, with the intrusive being exposed occasionally on surface where erosion has removed some of overlying rocks. Initial mining was carried out for *lead-zinc ore* in the carbonate sediments, which are older than the intrusive; and for *tungsten ore* that occurs at the contact of the intrusive with the limestone sediment, and also in a skarn that formed near the limestone-shale contact. It has long been recognized that this area is unusually metal-rich, having operations over the years since 1906 to 1973 that extracted silver, lead-zinc, and tungsten. Considering the extensive occurrence of moly throughout the area, there is also a possibility of a large porphyry molybdenum deposit here.

PREVIOUS WORK

During the operation of the lead-zinc and the tungsten mines in the period from 1906 to 1973, no specific molybdenum evaluation was carried out. It wasn't until 1981 that a preliminary program was initiated, but unfortunately was curtailed because of falling Mo prices. However this limited work showed that significant moly occurs in a large stockwork of vertical quartz veins which formed in the intrusives. The best exposure of this is in the Dodger 4200 Drift North (Dodger 42DrN). This is a 5 meter by 5 meter former truck haulage drift that was driven northerly, from near the end of the Dodger 4200 Crosscut East. Mapping of this drift revealed moly in a stockwork of east-west trending quartz veins for the entire distance that the drift was in intrusive; about 330 meters. Above average frequency of veins occurs over a distance of 110 meters in the central area of this exposure. Similar veins but with a north-south trend were also found in this drift, their moly content is undetermined at this point. The 1981 program was terminated before a detailed sampling program could be carried out on the underground workings. The north end of this drift was still in the stockwork, so it is unknown how far it continues to the north. At the

south end of the exposure the intrusive dips under the development work and is not available to visual examination.

Another area that the intrusive was revealed was in development of the East Dodger mine that is located about 100 meters east of the Dodger 42DrN mentioned earlier. It was developed and operated by Placer in the 1970's. During this work moly was also found in the typical stockwork described earlier, both in development work and also in diamond drill core. These occurrences are probably the easterly extension of the large exposure in the Dodger 42DrN. One remarkable drill core sample ran 4.44% Mo over a 4.0 meter length, with one section of 20.8% Mo for 0.8 meters within this intersection. Another intersection in the same general area ran 0.71% Mo over a 2.1 meter length, and another ran 0.60% Mo over a 2.2 meter length. While these may not be representative of the overall grade of the area, these and many other intersections indicate that there is unusually high distribution of molybdenum in the Dodger area.

Further evidence of this was obtained during sampling of a development drift in the same area carried out by Sultan Minerals in the 1995-96 season. These samples ran 0.05% Mo over a 57 meter length, with a 12.1 meter section running 0.11% Mo. This drift is about 150 meters north of the high-grade drill intersection mentioned above.

Also of interest is the occurrence of widespread moly in a similar stockwork located about 700 meters to the west where it has been intersected by the Invincible Main Haulage decline. Here again it is seen in a stockwork of vertical quartz veins within an intrusive. The northern extent of the zone is unknown here because in 1981 it was not possible to map the decline beyond about 75 meters from the first corner due to flooding. The strike of the veins here is about 150° Azimuth. Again, because the 1981 program was not continued, further dewatering and mapping and sampling of this drift did not take place.

In summary, the currently known stockwork-type moly occurrences are open in all directions, with the greatest potential being to the west of the Dodger 42DrN. This is shown on the 1:2500 plan. The main objective of initial work will be to establish where the highest grades occur within the stockwork and to establish grade trends.

INTRUSIVE STOCK

Geological work on Iron Mountain over the years has referred to the Emerald stock (Western) and the Dodger stock (Eastern). These 'stocks' are topographic highs or apophyses of the underlying intrusive which happened to be cut by development of the lead-zinc and the tungsten mines. They are not identified on the basis of composition. Because mining activities were primarily in the sediments or their contact with the intrusives, little information was available on the composition of the stocks. Also, differentiation of the intrusives was not necessary for the success of the mining operations at that time. Consequently most references in the drill logs or in mapping refer to the intrusive as 'granite' or 'granitics'. The only 'intrusive' work done in the earlier operations was to contour the stock surfaces in the Emerald and Invincible mining areas as a crucial guide to exploration. Drilling carried out by Sultan Minerals in 1997 indicated that a central stock (the Jersey stock) might exist between the other two. Molybdenum was also found in this central area. These stocks trend north-south, and are known to exist over a 4000 meter distance. Their relative ages are not known at this time.

INTRUSIVE ROCK TYPES

The work done in 1981 began the differentiation process, identifying at least five separate intrusive types. The two major types are the coarse-grained granite (cgg) and the medium-grained granite (mgg). The cgg is seen on surface in the west area and in the 1981 diamond drill holes. The mgg is found on surface in the western area, in the Invincible decline, in drill core, and in the Dodger development. The mgg has the widest distribution. Moly-bearing veins have only been

found in this type so far. The intrusives have been found both to the north and to the south of the areas described above, but insufficient data is available to determine if the favourable stockwork exists in these extensions. In addition to the above types, the 1981 drilling (which was in the Invincible area) also had significant intersections of a fine-grained porphyry that was thought to be younger than the mgg. Aplite and alaskite dikes have also been observed cutting the stocks. The aplite and alaskite dikes occasionally carry disseminated moly. Except for the stockwork quartz veining, the lamprophyre dikes are thought to be the youngest event within the intrusive. An unusual feature referred to as *black fracture filling* (bff) was first noted in the Invincible decline in the 1970's. Because it was visually distinctive in the poor u/g lighting it was occasionally mistaken for moly, until examined more closely. It occurs as a fine (0.5 mm to 5 mm) fracture filling within the porphyry. There is a halo of lighter colored alteration adjacent to the bff, its extent dependent on the thickness of the bff. Bff appears to be similar in composition to the lamprophyre, but is unique in that it occasionally carries coarse moly. Bff was found in the 1981 drill cores, but has not been identified so far in the Dodger area.

POTENTIAL IN THE INTRUSIVES

As shown by the attached 1:2500 plan, there is a significant area of interest between the Invincible and Dodger drifts. However because the moly stockwork has been observed in nearly all intrusives exposed in the u/g workings to date, the potential is not limited to this specific area. A reasonable initial exploration strategy would be to test the Dodger area first because this is where the best information is currently available. The objective would be to develop trends in Mo grade and other factors that can guide further exploration. There are many easily accessible underground drill sites from which good information could be obtained.

Large volumes are the usual key to successful molybdenum developments. This property certainly has large volume potential at this point. If a zone 300 meters by 600 meters exists north of the Dodger Crosscut, the potential for every 30 meter of vertical dimension is about 16,000,000 tons.

INITIAL PROGRAM

The large potential for molybdenum in Sultan's claims covering the Iron Mountain area, indicates that an exploration program is warranted on this property.

Much geological data on Iron Mountain from the earlier operations is stored at Sultan's Salmo office. This information is a very valuable asset for evaluating and planning an exploration strategy. The data relevant to moly should be extracted and assembled in a summary file, and reviewed to determine the key target areas. Based on this data, an initial program to obtain analyses of the current exposures could be done as soon as snow conditions improve. After evaluating the sampling and mapping data, drilling could be carried out to test the areas of interest.

Summary of initial program: (estimated cost: **\$15,000**).

1. Review and summarize Salmo data file.
2. Map pertinent u/g openings; sample where possible.
3. Drill and blast to obtain clean samples in targeted areas along existing openings.
4. Sample and remap fresh surfaces.
5. Propose drilling as follow-up on above work.

Readers are cautioned that the molybdenum assays quoted in this report are historical in nature and were compiled before the implementation of NI 43-101 reporting standards. The few samples taken by Sultan Minerals Inc during recent exploration of the mine workings confirm the presence of important molybdenum concentrations but are insufficient to confirm the presence of economic deposits of molybdenite.

SURFACE

**VERTICAL SECTION B-B
LOOKING NORTHERLY**

9000E Pre-metric cords

SECTION A-A

DODGER STOCK

Upper surface of intrusive is shown smooth
However, where detail available from mining
it is irregular with apophyses

Dodger 42DrN

EAST DODGER TUNGSTEN AREA

4000 asl

POTENTIAL EXTENSION OF STOCKWORK

EMERALD STOCK

Invincible Decline

SULTAN MINERALS LTD.

**JERSEY MOLYBDENUM
SALMO AREA
VERTICAL SECTION B-B**

1: 2500

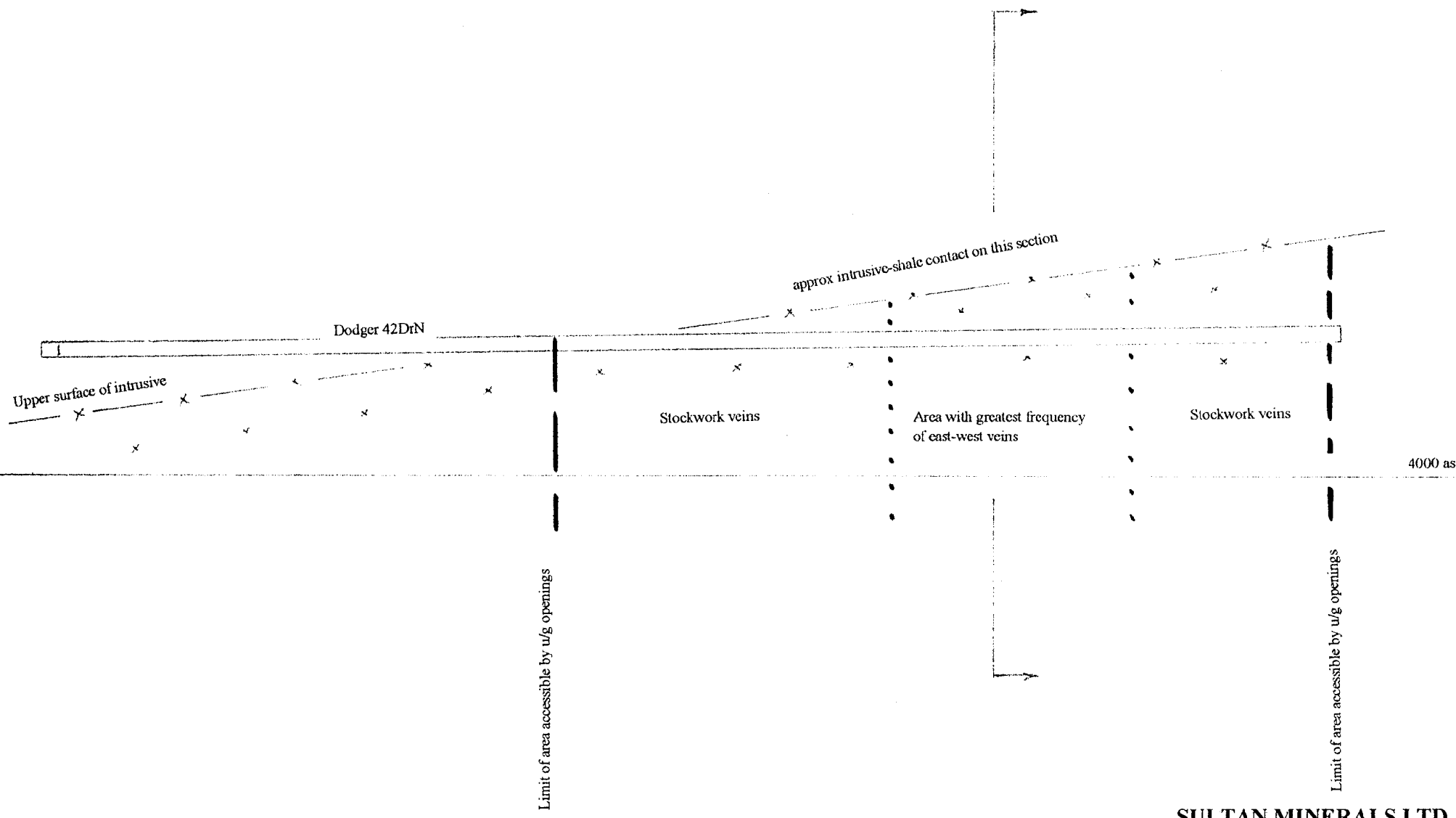
E. Lawrence

February 2005

1: 2500

SURFACE

VERTICAL SECTION A-A
LOOKING WESTERLY



SULTAN MINERALS LTD.

JERSEY MOLYBDENUM
SALMO AREA
VERTICAL SECTION
Through Dodger 42DrN
1: 2500

EMERALD STOCK

INVINCIBLE DECLINE: -10%

PORTAL

EMERALD STOCK

PORTAL

7000E
Pre-metric cords

7000E
Pre-metric cords

DODGER XCE

Intrusive is approx. 120 meters below drift at this point

SECTION B-B

POTENTIAL EXTENSION OF STOCKWORK

POTENTIAL EXTENSION OF STOCKWORK

POTENTIAL EXTENSION OF STOCKWORK

Limit of area accessible by u/g openings

DODGER STOCK

Area with greatest frequency of east-west veins
AREA to be BLASTED and SAMPLED

East Dodger 75XCE

EAST DODGER TUNGSTEN AREA

12.1 m of 0.11%Mo

57.6 m of 0.05% Mo

East Dodger 69XCE

Limit of area accessible by u/g openings

DODGER 42DIN

• ddh 4.44% Mo

• ddh 0.34% Mo

7000N Pre-metric cords

• ddh 0.71% Mo

SULTAN MINERALS LTD

JERSEY MOLYBDENUM
SALMO AREA

PLAN 1:2500

E.LAWRENCE FEBRUARY 05

SECTION A-A



DIAMOND DRILL LOGS

The following table summarizes 392 diamond drill hole intervals where the presence of molybdenite is reported in the Emerald Tungsten Mine logs for holes drilled prior to the mine closure in 1973.

hole number	from (feet)	to (feet)	rock type	minerals
D41	156.1	161.3	skarn	WO3, pyrrhotite, molybdenite
D41	190	191.5	granite	molybdenite
D42	442.5	445	skarn	molybdenite, WO3
D42	472.3	477.3	garnetite	WO3, pyrrhotite, molybdenite, powellite
D44	255.5	257.2	granite	molybdenite, pyrite
D44	257.2	258.5	quartz	molybdenite, pyrite
D48	574	576	limestone	pyrrhotite, pyrite
D48	589.8	621	granite	molybdenite
D51	114	114.5	skarn	molybdenite
D52	585	585.6	skarn	molybdenite, WO3
D52	634	634.8	skarn	WO3, molybdenite
D52	634.8	636	garnetite	WO3, molybdenite
D55	166.5	175	limestone	WO3, molybdenite
D56	327	342	granite	molybdenite
D57	121.5	130.5	limestone	molybdenite, pyrrhotite
D59	237.5	240	argillite	WO3, molybdenite
D64	188	190	skarn	WO3, molybdenite
D67	429.7	430.8	granite	WO3, molybdenite
D67	430.8	448	granite	pyrite, molybdenite
D69	580.1	581.2	dolomite	zn, pyrite, molybdenite
D69	700.3	701	skarn	WO3, molybdenite, pyrrhotite
D69	701	717	granite	molybdenite
D70	520.8	532	granite	pyrite, molybdenite, WO3
D71	589	590	granite	molybdenite
D73	779	783	granite	molybdenite
D83	85.4	85.5	granite	molybdenite
D84	343.5	348.9	skarn	WO3, molybdenite
D85	453.6	454.6	granite	molybdenite, WO3
D85	457.5	459	granite	molybdenite
D85	464.1	466.6	granite	molybdenite
D85	466.6	474.8	skarn	WO3, molybdenite, pyrrhotite
D85	474.8	490	granite	pyrite, molybdenite
D86	348.7	349.5	skarn	molybdenite
D86	533.3	537	skarn	WO3, molybdenite, pyrite
D86	550.8	558	granite	molybdenite, pyrrhotite
D87	160.9	161.7	skarn	molybdenite, WO3
D88	146.9	148.3	skarn	molybdenite
DU1	92	98.7	skarn	WO3, pyrrhotite, molybdenite
DU1	107.3	112	skarn	WO3, pyrrhotite, molybdenite
DU2	41.5	42.1	skarn	molybdenite
DU2	85.8	90	skarn	WO3, pyrrhotite, molybdenite
DU2	143.3	144.6	argillite	molybdenite
DU7	173.1	173.8	garnetite	WO3, molybdenite, pyrrhotite
DU7	186	187	granite	molybdenite
DU7	187	189.2	granite	molybdenite
DU7	206.3	206.5	quartz	molybdenite
DU7	212.5	213.9	granite	molybdenite, pyrrhotite
DU7	224	235	granite	molybdenite, WO3
DU10	189.3	191.2	granite	pyrite, molybdenite

DU11	119.3	121.3	skarn	molybdenite
DU12	78	79.2	skarn	WO3, pyrite, molybdenite
DU12	110.1	131	argillite	molybdenite
DU14	194.1	197.2	granite	Fe, Mg, pyrite, molybdenite
DU14	197.2	198.7	skarn	WO3, molybdenite
DU14	201.9	211	granite	pyrite, molybdenite
DU15	112.1	113.1	limestone, skarn	WO3, molybdenite
DU15	128.2	130.4	skarn	WO3, pyrite, molybdenite
DU15	156.6	157	skarn	WO3, molybdenite
DU15	157	161.9	argillite	molybdenite, WO3
DU15	163.7	167.8	argillite	pyrrhotite, pyrite, WO3, molybdenite
DU16	74.3	79	skarn	WO3, molybdenite
DU16	80.5	81.4	skarn	WO3, molybdenite
DU16	144.9	161	granite	pyrrhotite, molybdenite, pyrite
DU17	17.1	19.1	limestone	pyrite, molybdenite
DU17	67.7	69.4	skarn	WO3, molybdenite
DU17	72.5	77.2	skarn	WO3, molybdenite
DU17	77.2	79.5	skarn	WO3, molybdenite
DU17	79.5	83	skarn	WO3, molybdenite
DU19	22.8	26.8	limestone	pyrite, WO3, molybdenite
DU19	27.8	37	limestone	molybdenite, pyrrhotite, WO3
DU19	131.7	133.5	skarn	WO3, molybdenite, pyrite
DU19	133.5	138.5	skarn	WO3, molybdenite
DU20	25	38	limestone	pyrite, pyrrhotite, WO3, molybdenite
DU21	34.8	36	skarn	WO3, molybdenite, pyrite
DU21	164	167	granite	molybdenite
DU22	119.2	119.5	skarn	WO3, molybdenite
DU24	111.3	113.5	skarn	WO3, molybdenite
DU25	141.3	142.8	skarn	molybdenite
DU26	13.3	15.1	skarn	pyrrhotite, molybdenite, WO3
DU26	19.8	21.7	skarn	WO3, pyrrhotite, molybdenite
DU27	42.3	46.1	skarn	WO3, pyrrhotite, molybdenite
DU27	49	49.7	skarn	WO3, molybdenite
DU28	23.7	28.5	skarn	WO3, pyrrhotite, molybdenite
DU29	15.5	18	skarn	WO3, molybdenite
DU29	18	22.1	skarn	WO3, molybdenite
DU32	34	41.7	granite	WO3, molybdenite
DU34	24.8	29.8	skarn	WO3, pyrrhotite, molybdenite
DU34	29.8	32.8	skarn	WO3, molybdenite
DU35	42.1	48.2	limestone	molybdenite
DU37	1.9	5.5	quartz	molybdenite
DU37	13.5	19.7	quartz	molybdenite
DU39	34	35	granite	molybdenite, WO3
DU41	0	8	granite	molybdenite
DU41	93.5	96.9	skarn	pyrrhotite, WO3, molybdenite
DU42	0	13.5	granite	molybdenite
DU45	84.9	92.2	granite	molybdenite, WO3
DU45	101.7	107.5	granite	WO3, molybdenite
DU45	181.8	183.3	skarn	WO3, molybdenite
DU48	25.4	52	granite	molybdenite

DU49	20.5	43.2	argillite	pyrrhotite, molybdenite
DU55	0.4	0.8	skarn	WO3, molybdenite
DU56	33.5	34.6	skarn	WO3, molybdenite
DU58	66.6	72	granite	molybdenite
DU63	61.1	66	skarn	WO3, molybdenite
DU65	39	40	skarn	WO3, molybdenite, pyrrhotite
DU69	29.8	31.5	skarn	WO3, molybdenite
DU69	32	35	skarn	WO3, molybdenite
DU71	24.2	28.7	skarn	WO3, moly
J84	208	211	skarn	molybdenite, WO3
J86	284	285	skarn	WO3, molybdenite
J88	182	186	skarn	WO3, molybdenite
J89	30.5	33	skarn	molybdenite
J91	307.5	323	skarn	molybdenite
J92	58.5	61	skarn	molybdenite
J117	279.3	291	skarn	pyrrhotite, WO3, molybdenite
J122	155	158	skarn	molybdenite
J122	352.3	354	skarn	WO3, molybdenite
J133	438	438.3	limestone	molybdenite
J133	474	484	skarn	molybdenite
J138	388	389	skarn	molybdenite, WO3
J138	389	392	granite	molybdenite, WO3
J144	207	214.5	skarn	WO3, molybdenite, pyrrhotite
J144	237	253.2	limestone	WO3, pyrrhotite, molybdenite
J158	463.5	468.5	skarn	WO3, molybdenite
J160	503.3	504	skarn	molybdenite, WO3
J160	536	540	limestone	molybdenite
J161	471.5	484	skarn	molybdenite
J162	393	399	skarn , argillite	molybdenite
J166	440	441.5	skarn	molybdenite
J167	484	486.5	skarn	molybdenite
J174	525	544	skarn	molybdenite, WO3
J178	656	668.3	limestone	pyrite, zn ore, molybdenite
J188	130	132	skarn	molybdenite
J227	83	90	skarn	molybdenite
DP1	8.6	9.3	quartz vein	molybdenite
DU213	110.5	112	skarn	Moly, WO3
DU301	145.8	146.4	quartz	wo3, molybdenite
DU301	173.9	177.9	gametite	garnet, molybdenite, wo3
DU301	177.9	180	gametite	garnet, molybdenite, wo3
DU301	184	189.9	skarn	molybdenite
DU301	194.3	196	skarn	molybdenite,wo3
DU305	28	38	Granite	molybdenite
DU306	6.1	10	skarn	WO3, molybdenite
DU306	11.4	12.4	skarn	WO3, molybdenite
DU316	0	27	Granite	pyrite, moly
DU316	27	52	Granite	pyrite, moly
DU316	52	73.6	Granite	pyrite, moly
DU318	3.7	28	Granite	molybdenite
DU323	160.6	161.4	Granite	WO3 , molybdenite

DU323	161.4	162	Granite	molybdenite
DU325	56	75.5	argillite	molybdenite
DU326	34.1	37	Granite	molybdenite
DU326	37	38.2	Quartz	pyrite
DU326	38.2	40.8	skarn	WO3, pyrrhotite
DU326	40.8	55	Granite	pyrrhotite, molybdenite
DU328	81	108	Granite	molybdenite
DU328	108	135	Granite	molybdenite
DU328	135	152	Granite	molybdenite
DU329	0	2.9	Granite	molybdenite, WO3
DU330	110	122	Granite	molybdenite, WO3
DU332	3.2	4	Garnetite	WO3, molybdenite
DU336	54.9	78.4	Granite	molybdenite
DU337	30.9	31.9	Granite	pyrite, WO, molybdenite
DU338	69.7	73.8	Quartz	molybdenite, WO3
DU338	142	149.1	limestone	molybdenite
DU343	0	27	Granite	molybdenite
DU343	27	53	Granite	molybdenite
DU345	0	28	Granite	molybdenite
DU345	28	55	Granite	molybdenite
DU346	53	79	Granite	molybdenite
DU347	49.5	53	argillite	pyrite, molybdenite
DU347	112.6	113.3	Quartz	molybdenite
DU348	50.5	74.5	argillite	molybdenite
DU348	117.6	118.2	limestone	pyrite, pyrrhotite, molybdenite, WO3
DU348	119.9	120.9	skarn	WO3 , pyrrhotite, molybdenite
DU348	120.9	121.7	skarn	pyrrhotite, molybdenite
DU352	50	58.9	Granite	molybdenite
DU353	0	27	Granite	molybdenite
DU354	109.4	111	skarn	WO3 , pyrrhotite, molybdenite
DU355	0	26	Granite	molybdenite
DU355	55.5	60.5	Granite	molybdenite
DU356	80	88.5	argillite	WO3, pyrite, molybdenite
DU357	111	113.6	limestone	pyrrhotite, molybdenite or Pb
DU357	113.6	116.7	limestone	molybdenite
DU357	135	137	limestone	molybdenite, WO3
DU358	0	26	Granite	molybdenite, pyrite
DU358	107	116.5	argillite	py, pyrrhotite, molybdenite, WO3
DU358	128.1	128.7	Quartz	pyrrhotite, molybdenite, pyrite
DU360	63.9	65.3	limestone	WO3 , molybdenite
DU360	65.9	66.4	argillite	Moly, pyrite, WO3
DU371	120	128	Granite	molybdenite, WO3
DU372	92.1	93.5	limestone	molybdenite, WO3
DU372	98.9	100.2	Quartz	molybdenite, pyrrhotite, pyrite
DU376	90	98	Granite	pyrite, arsenopyrite, molybdenite
DU377	113.1	114.2	Quartz	molybdenite
DU379	51	71	Granite	pyrite, molybdenite
DU380	44	59	Granite	molybdenite
DU381	0	30	Granite	molybdenite
DU382	55.5	61	? very heavy pyrr	pyrrhotite, WO3, molybdenite

DU383	0	55	Granite	molybdenite
DU385	0	45	Granite	pyrite, molybdenite
DU386	70	77	Granite	molybdenite
DU393	49	61	Granite	molybdenite
DU394	11	76.5	Granite	molybdenite
DU394	132	133.5	Granite	molybdenite
DU394	179.5	181	skarn	molybdenite
DU396	78	80	Granite	molybdenite
DU403	28.5	110	Granite	pyrite, molybdenite
DU404	31.5	43	Granite	pyrite, molybdenite
DU407	0	45	Granite	molybdenite
DU407	89	91	Quartz	molybdenite
DU409	86	95	Granite	molybdenite
DU432	0	18	argillite	molybdenite
DU434	0	90.5	Granite	molybdenite
DU434	140.7	142	limestone	molybdenite
DU441	157	160	argillite	molybdenite
DU493	0	160.1	Granite	molybdenite
DU508	243.8	244.7	argillite	molybdenite
DU508	349.7	353	Granite	molybdenite
DU512	351.6	352.4	Granite	pyrite, molybdenite
DU523	351.5	354	Granite	molybdenite
DU523	354	361	Granite	molybdenite
DU523	361	363.7	Granite	molybdenite
DU523	363.7	364.6	Granite	molybdenite
DU531	51.3	57.6	skarn	WO3, molybdenite
DU531	76.9	78	argillite	molybdenite
DU531	78	85.1	argillite	molybdenite
DU531	87.2	96.4	argillite	molybdenite
DU531	98.1	109	argillite	WO3, molybdenite
DU531	123.4	129.7	skarn	WO3, molybdenite, pyrrhotite
DU531	149	154	skarn	pyrite, molybdenite, WO3
DU542	115.5	115.9	Granite	WO3, molybdenite
DU542	115.9	117.5	Granite	molybdenite
DU545	32.3	40.9	skarn	WO3, molybdenite
DU545	79.5	108	granite	WO3, molybdenite
DU563	8.6	8.8	skarn	molybdenite
DU579	37.3	40.3	skarn	WO3, molybdenite
DU580	8	10.4	argillite	molybdenite
DU580	10.4	11.4	argillite	molybdenite
DU580	11.4	12.2	argillite	molybdenite
DU580	12.2	14.1	Granite	WO3, molybdenite
DU580	14.1	15.7	Granite	molybdenite
DU580	16.2	26	Granite	molybdenite
DU581	9.5	11	argillite	molybdenite
DU581	12	15	Granite	molybdenite
DU587	31.6	33.1	limestone	WO3, molybdenite
DU591	15.9	17.3	skarn	WO3, molybdenite
DU595	34.9	37	skarn	molybdenite
DU601	71.8	73.1	skarn	WO3, molybdenite

DU601	119.5	125	skarn	WO3, molybdenite
DU606	39.4	47.1	skarn	molybdenite
DU627	2	12.9	skarn	molybdenite
DU628	0	19.7	skarn	molybdenite
DU629	1.7	5.1	skarn	molybdenite
DU629	238.4	242.3	skarn	WO3, molybdenite
DU632	35.7	36.3	skarn	WO3, molybdenite
DU633	118.6	120.7	skarn	WO3, molybdenite
DU633	239.6	240.2	skarn	molybdenite
DU658	15	16	skarn	molybdenite
DU668	11.7	17	skarn	WO3, molybdenite
DU668	17	21.7	skarn	WO3, molybdenite
DU668	21.7	28.7	skarn	WO3, molybdenite
DU668	28.7	31	skarn	WO3, molybdenite
DU668	61.7	68.9	skarn	WO3, molybdenite
D1	164	165.6	skarn	molybdenite, WO3
D6	381	382	skarn	WO3, molybdenite
D7	439	441	dolomite	zn, pyrrhotite, molybdenite
D8	127	132	argillite	molybdenite
D9	56	64	skarn	molybdenite, WO3
D10	162	162.6	quartz	molybdenite
D10	375.3	385.6	skarn	molybdenite
D10	385.11	386	skarn	molybdenite, WO3
D16	451.8	455.8	skarn	pyrrhotite, molybdenite, WO3
D17	742	748	skarn	pyrrhotite, pyrite, WO3, molybdenite
D20	332	336	skarn	molybdenite, pyrrhotite
D22	737.5	742.8	limestone	pyrite, pyrrhotite, molybdenite
D22	781.7	782.1	skarn	WO3, pyrrhotite, molybdenite, pyrite
D22	782.1	783.7	granite	molybdenite, pyrite
D22	783.7	790	granite	molybdenite, pyrrhotite, pyrite, WO3
D23	725.7	727.2	skarn	WO3, pyrite, pyrrhotite, molybdenite
D23	727.2	734.9	skarn	WO3, pyrite, pyrrhotite, molybdenite
D23	739	739.5	granite	molybdenite
D24	704.5	710	granite	molybdenite, pyrrhotite
D26	705.3	707.1	skarn	WO3, molybdenite, pyrrhotite
D27	17.5	41.5	limestone	WO3, pyrrhotite, molybdenite
D27	57.5	60.5	limestone	WO3, molybdenite, pyrrhotite, pyrite
D27	74.5	77.3	limestone	WO3, pyrrhotite, pyrite, molybdenite
D27	110.2	113	granite	molybdenite
D27	113	125	granite	molybdenite, pyrite
D28	46	48	argillite	WO3, molybdenite, pyrrhotite
D29	32	42	skarn	pyrrhotite, WO3, molybdenite
D30	76.5	80.8	granite	pyrite, molybdenite
D30	132.5	133.5	skarn	molybdenite, pyrite
D30	133.5	135.5	skarn	molybdenite, pyrite
D30	135.5	136	Quartz vein	WO3, molybdenite
D30	145.5	146.5	granite	molybdenite
D31	52	52.6	skarn	molybdenite
D31	141	144	quartz	molybdenite
D31	171	182	granite	molybdenite

D32	663	713	granite	pyrrhotite, pyrite, molybdenite, WO3
D33	79.7	80.7	skarn	WO3, molybdenite, pyrrhotite
D35	644.3	645.6	skarn	pyrite, molybdenite, pyrrhotite, WO3
D36	13.5	14	skarn	pyrrhotite, WO3, molybdenite
D36	14	14.6	skarn	WO3, molybdenite, pyrrhotite
D38	178.7	179.4	skarn	molybdenite, WO3, pyrrhotite
D38	213	214	granite	molybdenite, pyrite
JU8	48	53	skarn	pyrrhotite, molly
JU23	22.3	29	skarn	pyrite, pyrrhotite, molly
JU27	0	15	limestone	pyrrhotite, molly
JU58	19	20	skarn	molly, pyrrhotite
JU175	119.5	121	skarn	molly
JU199	38.3	51.5	skarn	molly
JU212	12.8	16	limestone	molly
JU212	17.1	25	limestone	pyrrhotite, zn, pb, molly, pyrrhotite, pyrite
JU266	14.0	15.4	skarn	molly
JU270	197.0	208.0	argillite	molly
JU275	64.5	67.0	limestone	molly
JU293	26.2	29.5	skarn	pyrrhotite, molly, W
JU298	33.0	46.5	skarn	molly
JU459A	19	20.5	dolomite	molly
JU575	61.5	61.8	dolomite	pyrite, pyrrhotite, zn, molly
JU579A	21	28	skarn	molly
JU760	28	30	skarn, quartz	molly
JU828	70	70.3	skarn	molly
JU1056	120.3	121.8	limestone	molly
JU1442	56	59.5	skarn	molybdenite
JU1490	35.5	38	dolomite	pyrite, zn, molybdenite
JU1538	103.3	104	limestone	pyrite, molybdenite, zn
JU1539	105	106	limestone	pyrite, pyrrhotite, molybdenite
JU2404	0	17	skarn	molybdenite
JU3234	456	477.5	granite	molybdenite, WO3
JU3444	283	296.2	granite	molybdenite
JU3444	308.2	314.8	granite	molybdenite
JU3444	386.5	401.8	skarn, argillite	molybdenite
JU3453	204.6	209.6	skarn	WO3, molybdenite
JU3453	226.9	235.6	skarn	WO3, molybdenite
JU3481	17.4	18.6	skarn	pyrrhotite, molybdenite
JU3501	200.5	212	skarn	WO3, molybdenite
JU3528	26.8	33	granite	molybdenite
JU3532	232.4	235.5	skarn	WO3, molybdenite
JU3532	238	242	quartz	molybdenite
JU3532	242	242.5	skarn	molybdenite
JU3534	2	154.4	granite	WO3, molybdenite
JU3539	4.4	6	granite	WO3, molybdenite
JU3547	33.6	34.5	granite	molybdenite
JU3547	329.4	358	granite	molybdenite
JU3550	12	14.7	granite	WO3, molybdenite
JU3552	102	104.8	granite	molybdenite
JU3552	104.8	112	granite	molybdenite

JU3553	2.1	47.7	granite	pyrite, molybdenite, WO3
JU3553	94.3	147.1	granite	molybdenite
JU3553	226	276.4	granite	WO3, molybdenite
F5	17	20	skarn	pyrite, powellite, WO3, molybdenite
F5	59	62	granite	granite, molybdenite
F17	141.7	143.2	granite	molybdenite
F25	12.8	20	skarn	WO3, pyrite, pyrrhotite, molybdenite
F28	15	19	granite	pyrite, molybdenite
F31	31.6	34.3	quartz	WO3, pyrite, molybdenite
F34	28.5	44	granite	pyrite, molybdenite
F34	45.5	48	granite	molybdenite, pyrite, WO3
F34	74.5	76	granite	WO3, pyrite, pyrrhotite, molybdenite
F34	111.7	113	quartz	WO3, molybdenite, WO3
F37	31	34	granite	WO3, pyrrhotite, molybdenite, pyrite
F39	31	32.2	granite	molybdenite
F44	17	44	granite	molybdenite, pyrrhotite
F45	0	36.5	granite	molybdenite
F45	59.7	67.6	granite	pyrite, molybdenite
F45	67.6	68.7	quartz	pyrite, molybdenite
F47	18.5	28.5	granite	pyrite, molybdenite
F48	56.5	59	granite	molybdenite
F50	0	36.4	granite	pyrite, WO3, molybdenite
F50	36.4	41.1	granite	molybdenite
F51	61	71.7	granite	pyrite, molybdenite
F52	41.3	83	granite	molybdenite, pyrite
F52	105.5	135.5	granite	pyrite, molybdenite
F52	154.5	160.5	granite	pyrite, molybdenite
F54	61.5	86	granite	pyrite, molybdenite
F62	2.9	3.7	granite	molybdenite
F62	29	30	granite	molybdenite
F62	30	33	granite	molybdenite
F65	0	21.1	skarn	molybdenite, pyrrhotite
F65	21.1	22.5	skarn	pyrrhotite, molybdenite
F66	0	22	granite	molybdenite
F80	46	51	granite	powellite, molybdenite, pyrite
F106	72	73.7	skarn	molybdenite
TK2	81.5	120	argillite	molybdenite, pyrite
TK3	17.4	18.6	skarn	WO3, molybdenite
TK3	18.6	19.1	skarn	WO3, molybdenite
TK3	21.7	25	skarn	WO3, molybdenite
TK3	50.5	54	skarn	molybdenite
TK5	51.1	78.5	granite	molybdenite

MOLYBDENUM ASSAYS FROM DRILL LOGS

The following table summarizes pertinent drill hole information and molybdenum assays for 45 molybdenite bearing drill sections that were assayed for molybdenum during the 35-year life of the Emerald Tungsten Mine.

HOLE #	LATITUDE	DEPARTURE	ELEVATION	AZIMUTH	DIP	FROM (FT)	TO (FT)	WIDTH (FT)	Mo or MoS ₂	WO ₃	mo in log	lithology
D84	9100	9675	4910	90	-73	343.5	348.9	5.4	0.029	0.06	Mo	skarn
D86	9100	9675	4910	90	-58	453.6	454.8	1.2	1.000	1.19	Mo	limestone
D86						457.5	459.0	1.5	0.100	0.27	Mo	limestone
D86						491.0	495.8	4.8	0.110	0.34	Mo	limestone
D86						533.3	537.0	3.7	0.056	2.00	Mo	skarn
DU7	9513	9346.5	4597.5	90	-70	186.0	187.0	1.0	0.260	0.05	Mo	granite
DU7						212.5	213.2	0.7	0.200		MoS ₂	granite
DU16	9459	9323	4598.5	270	-80	79.0	79.7	0.7	0.100	0.08	Mo	skarn
DU16						80.5	81.4	0.9	0.100	0.04	Mo	skarn
DU17	9459	9322	4598.5	270	-54	77.2	79.5	2.3	0.140	0.64	Mo	skarn
DU19	9595	9406.7	4597.2	90	-62	131.7	133.5	1.8	0.100	0.06	Mo	skarn
DU19						133.5	138.5	5.0	0.150	0.07	Mo	skarn
DU19						138.5	143.3	4.8	0.100	0.06	Mo	skarn
DU27	9413.2	9302.5	4441	105	70	17.5	18.0	0.5	0.500	1.50	Mo	argillite
DU27						19.8	20.7	0.9	0.130	2.98	Mo	skarn
DU45	9305.8	9344.7	4436.6	269	49	87.7	88.7	1.0	0.480	0.48	Mo	granite
DU45						105.4	107.4	2.0	1.250	0.27	Mo	granite
DU508	6845	8824.9	4233.6	90	-35	243.8	244.7	0.9	0.100		molly	argillite
DU512	6613	8837	4255	MISSING	-72	329.0	339.0	10.0	0.112	2.22	molybdenite	argillite
DU512						351.6	352.4	0.8	3.200		molybdenite	granite
DU523	6709.2	8859.2	4268.3	90	-56	351.5	354.0	2.5	0.080		molybdenite	granite
DU523						354.0	361.0	7.0	0.220		molybdenite	granite
DU523						361.0	363.7	2.7	20.800		molybdenite	granite

DU523						363.7	364.6	0.9	0.300		molybdenite	granite	
DU531	6931	8965	4160	90	-59	76.9	78.0	1.1	0.560		molybdenite	argillite	
DU531						149.0	154.0	5.0	0.340	0.25	molybdenite	skam/granite contact	
DU550	7425	9177	4192	270	90	52.4	54.2	1.8	0.059	1.80	molybdenite	skam	
DU550						59.7	60.8	1.1	0.088	2.08	molybdenite	skam	
DU550						68.5	71.0	2.5	0.025	1.77	molybdenite	argillite	
DU554	7425	9119	4192	90	-80	71.2	72.0	0.8	0.002	1.80	molybdenite	argillite	
DU554						83.0	86.0	3.0	0.121	2.08	molybdenite	argillite	
DU554						86.0	87.2	1.2	0.049	1.77	molybdenite	argillite	
DU557	7524	9106	4206	270	-79	20.8	23.5	2.7	0.032	0.81	molybdenite	skam	
DU557						25.7	26.4	0.7	0.043	3.08	molybdenite	skam	
DU569	7325	9122	4185	90	-67	18.7	20.7	2.0	0.032	0.15	molybdenite	argillite	
DU576	7176	9095.5	4181.3	90	50	10.5	12.7	2.2	0.070	1.95	molybdenite	skam	
DU576						37.1	39.5	2.4	0.097	2.23	molybdenite	skam	
DU576						39.5	41.2	1.7	0.043	1.92	molybdenite	skam	
DU580	6896.8	9110.9	4094.7	270	-71	10.4	11.4	1.0	2.020		Mo	granite	
JU3532	6957	8857.2	4337.5	90	-50	235.5	238.0	2.5	1.000		Mo	skam	
JU3532						238.0	242.0	4.0	0.600		Mo	quartz	
JU3532						242.0	242.5	0.5	0.200		Mo	skam	
JU3547	6846	8823.9	4233.6	90	-43	33.6	34.5	0.9	0.193		Mo	granite	
JU3552	6805.1	8813.4	4233.3	90	-54	102.0	104.8	2.8	0.122		Mo	granite	
JU3552						104.8	112.0	7.2	0.600		Mo	granite	