

GENERA FIELD RECORD SHEET

Fumigator David Cossons

Pentarch LOG YARD, EDROM ROAD EDEN

Pine logs with bark for export to India

VESSEL

MINIMUM TEMPERATURE

Puget Sound

10/03/2023 16 DEGREES Min

Row I.D.	length	width	height	volume	JAS	Conc g/m3	bromide	Start	CERT NO.
638	65	3.7	4.8	1154.4	661.397	56	64.6	10/03/2023 15:00	87716
637	65	3.7	4.8	1154.4	662.596	56	64.6	10/03/2023 15:00	87716
416	55	3.7	4.8	976.8	541.575	56	54.7	10/03/2023 15:00	87716
414	55	3.7	4.8	976.8	562.218	56	54.7	10/03/2023 15:00	87716
410	60	3.7	4.8	1065.6	579.378	56	59.7	10/03/2023 15:00	87716
412	55	3.7	4.5	915.75	509.205	56	51.3	10/03/2023 15:00	87716
800	60	3.7	4.8	1065.6	576.578	56	59.7	10/03/2023 15:00	87716
801	60	3.7	4.8	1065.6	575.269	56	59.7	10/03/2023 15:00	87716
421	50	3.7	4.8	888	515.415	56	49.7	10/03/2023 15:00	87716
420	55	3.7	4.8	976.8	566.623	56	54.7	10/03/2023 15:00	87716
411	55	3.7	4.5	915.75	505.422	56	51.3	10/03/2023 15:00	87716
409	55	3.7	4.5	915.75	492.396	56	51.3	10/03/2023 15:00	87716
641	60	3.7	4.8	1065.6	619.001	56	59.7	10/03/2023 15:00	87716
639	60	3.7	4.8	1065.6	630.384	56	59.7	10/03/2023 15:00	87716
643	60	3.7	4.8	1065.6	586.469	56	59.7	10/03/2023 15:00	87716
644	60	3.7	4.8	1065.6	565.908	56	59.7	10/03/2023 15:00	87716
300	55	5.5	4.5	1361.3	763.498	56	76.2	10/03/2023 15:00	87716
642	60	3.7	4.8	1065.6	600.49	56	59.7	10/03/2023 15:00	87716
636	19	3.7	4.5	316.35	177.375	56	17.7	10/03/2023 15:00	87716
635	16	3.7	4.5	266.4	153.266	56	14.9	10/03/2023 15:00	87716
640	21	3.7	4.5	349.65	193.376	56	19.6	10/03/2023 15:00	87716

19693 11037.839 1102.8

Actual Mb used 1102.8



METHYL BROMIDE LOG ROW FUMIGATION LOG

Date: 10/03/2023

Vessel: Puget Sound

Location: EDEN

Exporter: Pentarch

Rate gm3 : 56

Destination: India

Volume: As per Field record sheet

FUMIGATION			CONCENTRATION gm3												
			START			EQUILIBRIUM %	2 HOURS			16 HOURS			FINISH		
Log Row	Time		Front	Middle	Back		Front	Middle	Back	Front	Middle	Back	Front	Middle	Back
1	638-637	14:00	66	62	62	6	44	45	44	31	31	29	26	23	21
2	416-414	13:50	68	64	63	8	44	43	45	35	34	35	27	26	22
3	410-412	14:05	69	66	62	11	37	41	37	29	33	30	27	23	28
4	800-801	14:15	64	68	66	6	41	43	38	32	35	33	27	24	24
5	421-420	14:25	65	61	63	7	42	42	37	30	31	32	24	28	24
6	411-409	14:35	63	67	62	8	45	38	43	30	34	29	27	24	24
7	641-639	14:45	62	67	66	8	43	38	39	29	29	31	25	27	27
8	643-644	14:50	64	63	69	10	42	42	39	35	35	30	21	27	25
9	300	15:00	69	60	64	15	39	37	44	31	29	31	22	23	22
10	642-636-635-640	13:40	68	63	66	8	40	40	42	29	29	30	21	23	26
11															
12															
13															
14															

START DATE 10/03/2023

END DATE 11/03/2023

START TIME 15:00

END TIME 15:00

MIN TEMP °C 16

FUMIGATOR IN CHARGE David Cossons

SIGNATURE *David Cossons*

Fumigation start time is when equilibrium is achieved in the LAST log row

Equilibrium Equation:

Fumigation end time is when ventilation (i.e seal is broken) on FIRST log row

$$\frac{HIGHEST - LOWEST}{LOWEST} \times 100 = \%$$

FOR OPERATION CERTIFICATION PURPOSES

MONITORING SHEET #1 - EXPOSURE PERIOD



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>15:00:00 AM</u>	MB Dosage Rate	<u>56gm3</u>
Start Date	<u>10/03/2023</u>	Wind Direction	<u>SE</u>
Site Diagram	<u>Pentach 1</u>	Wind Speed	<u>17 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	13:00	0	0	0	0	0
15	13:15	0	0	0	0	0
30	13:30	0	0	0	0	0
45	13:45	0	0	0	0	0
60	14:00	0	0	0	0	0
75	14:15	0	0	0	0	0
90	14:30	0	0	0	0	0
105	14:45	0	0	0	0	0
120	15:00	0	0	0	0	0
135	15:15	0	0	0	0	0
150	15:30	0	0	0	0	0
165	15:45	0	0	0	0	0
180	16:00	0	0	0	0	0
210	16:30	0	0	0	0	0

Fumigator: David Cossons

Signature:

Date:

10/03/2023

MONITORING SHEET #2 - VENTILATION



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>15:00</u>	MB Dosage Rate	<u>56gm3</u>
Start Date	<u>11/03/2023</u>	Wind Direction	<u>SSE</u>
Site Diagram	<u>Pentarch 1</u>	Wind Speed	<u>37 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	15:00	0	0	0	0	0
10	15:10	0	0	0	0	0
20	15:20	0	0	0	0	0
30	15:30	0	0.6	0	0	0
40	15:40	0	0	0	0	0
50	15:50	0	0.3	0	0	0
60	16:00	0	2.1	0	0	0
75	16:15	0	0.1	0	0	0
90	16:30	0	1.8	0	0	0
105	16:45	0	0.4	0	0	0
120	17:00	0	0	0	0	0

Discontinue monitoring once MB Concentration level is Zero

David Cossons

Signature:

Date:

11/03/2023

GENERAL SHIP RECORD SHEET

VESSEL	FUMIGATOR	START DATE	TIME	FINISH DATE	TIME
Puget Sound	Glen Richardson	27/03/2023	10:30	28/03/2023	10:30

bromide conc.	Minimum Temp.	WIND greencape ws		WIND greencape ws			
0.056	16	speed	direction	time	speed	direction	time
		19km/h	SW	10:30	12km/h	N	10:30

HATCH	VOLUME	BROMIDE	Air Quality Exposure Period ppm			Air Quality Venting Period ppm		
			Time	north	south	Time	north	south
1	6678.59	374.0	0hrs	0	0	0hrs	0	0
2	9077.99	508.4	1hrs	0	0	0.5hrs	0	0
3	9077.99	508.4	2hrs	0	0	1hrs	0	0
4	9077.99	508.4	4hrs	0	0	1.5hrs	0	0
5	8744.28	489.7	8hrs	0	0	2hrs	0	0
			12hrs	0	0	4hrs	0	0
	42656.84	2388.8				6hrs	0	0
						8hrs	0	0
						12hrs	0	0

South West wind during application. Nil Readings. North to North east Wind during venting (offshore) Nil reading on wharf.

GENERA FIELD RECORD SHEET

Fumigator Tate Nolan

Pentarch LOG YARD, EDROM ROAD EDEN

Pine logs with bark for export to India

VESSEL

MINIMUM TEMPERATURE

African Marqaux

16/06/2023 12 DEGREES Min

Row I.D.	length	width	height	volume	JAS	Conc g/m3	bromide	Start	CERT NO.
812	55	3.7	4.8	976.8	540.982	64	62.5	16/06/2023 11:00	87729
813	55	3.7	4.8	976.8	531.906	64	62.5	16/06/2023 11:00	87729
308	58	3.7	4.8	1030.1	563.81	64	65.9	16/06/2023 11:00	87729
306	58	3.7	4.8	1030.1	574.496	64	65.9	16/06/2023 11:00	87729
305	60	3.7	4.8	1065.6	595.33	64	68.2	16/06/2023 11:00	87729
304	60	3.7	4.8	1065.6	584.079	64	68.2	16/06/2023 11:00	87729
424	55	3.7	4.8	976.8	536.221	64	62.5	16/06/2023 11:00	87729
426	50	3.7	4.8	888	483.3	64	56.8	16/06/2023 11:00	87729
806	55	3.7	4.8	976.8	560.95	64	62.5	16/06/2023 11:00	87729
809	55	3.7	4.8	976.8	542.715	64	62.5	16/06/2023 11:00	87729
611	65	3.7	4.8	1154.4	634.11	64	73.9	16/06/2023 11:00	87729
610	65	3.7	4.8	1154.4	661.461	64	73.9	16/06/2023 11:00	87729
606	60	3.7	4.8	1065.6	606.979	64	68.2	16/06/2023 11:00	87729
608	60	3.7	4.8	1065.6	611.619	64	68.2	16/06/2023 11:00	87729
811	55	3.7	4.8	976.8	532.916	64	62.5	16/06/2023 11:00	87729
808	55	3.7	4.8	976.8	500.612	64	62.5	16/06/2023 11:00	87729
303	55	5.5	3.5	1058.8	560.354	64	67.8	16/06/2023 11:00	87729

17416 9621.84

1114.6

Actual Mb used 1114.6



METHYL BROMIDE LOG ROW FUMIGATION LOG

Date: 16/06/2023

Vessel: African Marquax

Location: EDEN

Exporter: Pentarch

Rate gm3 : 64

Destination: India

Volume: As per Field record sheet

FUMIGATION			CONCENTRATION gm3												
			START			EQUILIBRIUM %	2 HOURS			16 HOURS			FINISH		
Log Row	Time		Front	Middle	Back		Front	Middle	Back	Front	Middle	Back	Front	Middle	Back
1	812-813	9:45	72	78	75	8	57	46	59	29	31	36	22	22	27
2	308-306	9:05	79	77	73	8	55	45	53	33	35	35	24	25	25
3	305-304	10:40	76	71	71	7	58	54	51	29	33	31	22	26	24
4	426-424	9:30	75	76	78	4	42	50	51	30	36	35	24	27	26
5	806-809	9:55	77	75	74	4	54	48	43	28	36	31	22	22	27
6	610-611	10:15	70	75	72	7	52	54	54	30	28	29	25	25	27
7	608-606	11:00	74	69	79	14	47	55	52	31	32	28	25	23	24
8	811-808	9:35	70	70	79	13	42	47	53	34	33	28	27	27	23
9	303	9:15	71	74	76	7	53	45	57	36	28	36	23	24	25
10															
11															
12															
13															
14															

START DATE 16/06/2023

END DATE 17/06/2023

START TIME 11:00

END TIME 11:00

MIN TEMP °C 12

FUMIGATOR IN CHARGE Tate Nolan

SIGNATURE

Fumigation start time is when equilibrium is achieved in the LAST log row

Equilibrium Equation:

Fumigation end time is when ventilation (i.e seal is broken) on FIRST log row

$$\frac{HIGHEST - LOWEST}{LOWEST} \times 100 = \%$$

FOR OPERATION CERTIFICATION PURPOSES

MONITORING SHEET #1 - EXPOSURE PERIOD



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>11:00</u>	MB Dosage Rate	<u>64gm3</u>
Start Date	<u>16/06/2023</u>	Wind Direction	<u>WNW</u>
Site Diagram	<u>Pentach 1</u>	Wind Speed	<u>4 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	11:00	0	0	0	0	0
15	11:15	0	0	0	0	0
30	11:30	0	0	0	0	0
45	11:45	0	0	0	0	0
60	12:00	0	0	0.2	0	0
75	12:15	0	0	0.2	0	0
90	12:30	0	0	0	0	0
105	12:45	0	0	0	0	0
120	13:00	0	0	0	0	0
135	13:15	0	0	0	0	0
150	13:30	0	0	0	0	0
165	13:45	0	0	0	0	0
180	14:00	0	0	0	0	0
210	14:30	0	0	0	0	0

Tate Nolan

Signature:

Date:

16/06/2023

MONITORING SHEET #2 - VENTILATION



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>11:00</u>	MB Dosage Rate	<u>64gm3</u>
Start Date	<u>17/03/2023</u>	Wind Direction	<u>W</u>
Site Diagram	<u>Pentarch 1</u>	Wind Speed	<u>22kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	11:00	0	0	0	0	0
10	11:10	0	0	0	0	0
20	11:20	0	0	0	0	0
30	11:30	0	0	0	0	0
40	11:40	0	0	1.6	0	0
50	11:50	0	0	1.3	0	0
60	12:00	0	0	0.6	0	0
75	12:15	0	0	0	0	0
90	12:30	0	0	0.4	0	0
105	12:45	0	0	0	0	0
120	13:00	0	0	0	0	0

Discontinue monitoring once MB Concentration level is Zero

Tate Nolan

Signature:

Date:

17/03/2023

GENERA SHIP RECORD SHEET

VESSEL	FUMIGATOR	START DATE	TIME	FINISH DATE	TIME
African Marquax	Glen Richardson	29/06/2023	11:00	30/06/2023	11:00

bromide conc.	Minimum Temp.	WIND greencape ws		WIND greencape ws			
0.064	12	speed	direction	time	speed	direction	time
		41km/h	WSW	11:00	46km/h	WSW	11:00

HATCH	VOLUME	BROMIDE	Air Quality Exposure Period ppm			Air Quality Venting Period ppm		
			Time	north	south	Time	north	south
1	9235	591.0	0hrs	0	0	0hrs	0	0
2	10358	662.9	1hrs	0	0	0.5hrs	1.8	0
3	10390	665.0	2hrs	0	0	1hrs	2.9	0
4	10390	665.0	4hrs	0	0	1.5hrs	0.5	0
5	9383	600.5	8hrs	0	0	2hrs	0	0
			12hrs	0	0	4hrs	0	0
	49756.00	3184.4				6hrs	0	0
						8hrs	0	0
						12hrs	0	0

Strong South West wind during application. Nil Readings. Also Strong South West Wind during venting.

GENERA FIELD RECORD SHEET

Fumigator Tate Nolan

Pentarch LOG YARD, EDROM ROAD EDEN

Pine logs with bark for export to India

VESSEL

MINIMUM TEMPERATURE

Illovo River

07&08/09/2023 11 DEGREES Min

Concentration

64

Row I.D.	length	width	height	volume	JAS	Conc g/m3	bromide	Start	CERT NO.
429	60	3.7	4.8	1065.6	609.659	64	68.2	7/09/2023 13:00	87738
432	60	3.7	4.5	999	548.23	64	63.9	7/09/2023 13:00	87738
332	60	3.7	4.8	1065.6	627.737	64	68.2	8/09/2023 11:00	87739
337	60	3.7	4.8	1065.6	627.634	64	68.2	8/09/2023 11:00	87739
338	60	3.7	4.8	1065.6	596.616	64	68.2	8/09/2023 11:00	87739
341	60	3.7	4.5	999	581.55	64	63.9	8/09/2023 11:00	87739
428	55	3.7	4.5	915.75	479.734	64	58.6	7/09/2023 13:00	87738
431	55	3.7	4.5	915.75	487.019	64	58.6	7/09/2023 13:00	87738
335	60	3.7	4.5	999	532.44	64	63.9	7/09/2023 13:00	87738
331	60	3.7	4.5	999	575.202	64	63.9	7/09/2023 13:00	87738
327	60	3.7	4.5	999	548.703	64	63.9	7/09/2023 13:00	87738
324	60	3.7	4.5	999	542.858	64	63.9	7/09/2023 13:00	87738
433	55	3.7	4.5	915.75	516.754	64	58.6	7/09/2023 13:00	87738
430	60	3.7	4.5	999	547.131	64	63.9	7/09/2023 13:00	87738
334	60	3.7	4.5	999	576.966	64	63.9	7/09/2023 13:00	87738
328	60	3.7	4.8	1065.6	601.548	64	68.2	7/09/2023 13:00	87738
330	60	3.7	4.8	1065.6	603.009	64	68.2	7/09/2023 13:00	87738
325	60	3.7	4.8	1065.6	597.495	64	68.2	7/09/2023 13:00	87738
326	60	5.5	4.8	1584	875.734	56	88.7	7/09/2023 13:00	87738
329	60	5.5	4.8	1584	862.7	56	88.7	7/09/2023 13:00	87738

21366 11938.719

1342.1

Actual Mb used 1342.1

MONITORING SHEET #1 - EXPOSURE PERIOD



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>13:00:00</u>	MB Dosage Rate	<u>64gm3</u>
Start Date	<u>7/09/2023</u>	Wind Direction	<u>NNE</u>
Site Diagram	<u>Pentach 1</u>	Wind Speed	<u>13 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	13:00:00	0	0	0	0	0
15	13:15:00	0	0	0	0	0
30	13:30:00	0	0	0	0	0
45	13:45:00	0	0	0	0	0
60	14:00:00	0	0	0	0	0
75	14:15:00	0	0	0	0	0
90	14:30:00	0	0	0	0	0
105	14:45:00	0	0	0	0	0
120	15:00:00	0	0	0	0	0
135	15:15:00	0	0	0	0	0
150	15:30:00	0	0	0	0	0
165	15:45:00	0	0	0	0	0
180	16:00:00	0	0	0	0	0
210	16:15:00	0	0	0	0	0

Tate Nolan

Signature:

Date:

7/09/2023

MONITORING SHEET #1 - EXPOSURE PERIOD



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>11:00:00</u>	MB Dosage Rate	<u>64gm3</u>
Start Date	<u>8/09/2023</u>	Wind Direction	<u>N</u>
Site Diagram	<u>Pentach 1</u>	Wind Speed	<u>25 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	11:00:00	0	0	0	0	0
15	11:15:00	0	0	0	0	0
30	11:30:00	0	0	0	0	0
45	11:45:00	0	0	0	0	0
60	12:00:00	0	0	0	0	0
75	12:15:00	0	0	0	0	0
90	12:30:00	0	0	0	0	0
105	12:45:00	0	0	0	0	0
120	13:00:00	0	0	0	0	0
135	13:15:00	0	0	0	0	0
150	13:30:00	0	0	0	0	0
165	13:45:00	0	0	0	0	0
180	14:00:00	0	0	0	0	0
210	14:15:00	0	0	0	0	0

Tate Nolan

Signature:

Date:

8/09/2023

MONITORING SHEET #2 - VENTILATION



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>7:30:00</u>	MB Dosage Rate	<u>64gm3</u>
Start Date	<u>10/09/2023</u>	Wind Direction	<u>WNW</u>
Site Diagram	<u>Pentarch 1</u>	Wind Speed	<u>7kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	7:30:00	0	0	0	0	0
10	7:45:00	0	0	0	0	0
20	8:00:00	0	0	2.8	0	0
30	8:15:00	0	0	0	0	0
40	8:30:00	0	0	0	0	0
50	8:45:00	0	0	0	1.6	0
60	9:00:00	0	0	0	0.6	0
75	9:15:00	0	0	0	0	0
90	9:30:00	0	0	0	0	0
105	9:45:00	0	0	0	0	0
120	10:00:00	0	0	0	0	0

Discontinue monitoring once MB Concentration level is Zero

Tate Nolan

Signature:

Date:

10/09/2023



METHYL BROMIDE LOG ROW FUMIGATION LOG

Date: 7/09/2023

Vessel: Illovo River

Location: EDEN

Exporter: Pentarch

Rate gm3 : 64

Destination: India

Volume: As per Field record sheet

FUMIGATION			CONCENTRATION gm3												
			START			EQUILIBRIUM %	2 HOURS			16 HOURS			FINISH		
Log Row	Time		Front	Middle	Back		Front	Middle	Back	Front	Middle	Back	Front	Middle	Back
1	429-432	11:30	74	77	77	4	52	48	46	28	35	35	24	22	26
2	326	11:50	74	73	73	1	49	50	51	29	33	32	27	22	23
3	329	12:00	79	77	77	3	58	45	58	31	28	29	27	22	24
4	428-431	12:15	76	71	75	7	50	46	44	35	31	29	27	25	27
5	334-328	12:30	69	79	70	14	56	59	46	33	33	28	27	22	27
6	330-325	12:40	75	76	73	4	57	45	53	29	34	32	27	25	26
7	335-331	12:45	74	71	76	7	46	50	42	31	35	33	27	22	26
8	327-324	12:55	75	70	77	10	53	45	49	30	34	32	25	26	26
9	433-430	13:00	72	76	78	8	51	54	43	33	35	30	24	23	25
10															
11															
12															
13															
14															

START DATE 7/09/2023

END DATE 8/09/2023

START TIME 13:00

END TIME 13:00

MIN TEMP °C 14

FUMIGATOR IN CHARGE Tate Nolan

SIGNATURE

Fumigation start time is when equilibrium is achieved in the LAST log row

Equilibrium Equation:

Fumigation end time is when ventilation (i.e seal is broken) on FIRST log row

$$\frac{HIGHEST - LOWEST}{LOWEST} \times 100 = \%$$

FOR OPERATION CERTIFICATION PURPOSES



METHYL BROMIDE LOG ROW FUMIGATION LOG

Date: 8/09/2023

Vessel: Illovo River

Location: EDEN

Exporter: Pentarch

Rate gm3 : 64

Destination: India

Volume: As per Field record sheet

FUMIGATION			CONCENTRATION gm3												
			START			EQUILIBRIUM %	2 HOURS			16 HOURS			FINISH		
	Log Row	Time	Front	Middle	Back		Front	Middle	Back	Front	Middle	Back	Front	Middle	Back
1	332-337	10:50	70	73	77	10	54	57	52	30	30	35	22	27	23
2	338-341	10:00	77	78	70	11	54	58	53	36	36	29	27	24	24
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															

START DATE 8/09/2023

END DATE 9/09/2023

START TIME 11:00

END TIME 11:00

MIN TEMP °C 12

FUMIGATOR IN CHARGE Tate Nolan

SIGNATURE

Fumigation start time is when equilibrium is achieved in the LAST log row

Equilibrium Equation:

Fumigation end time is when ventilation (i.e seal is broken) on FIRST log row

$$\frac{HIGHEST - LOWEST}{LOWEST} \times 100 = \%$$

FOR OPERATION CERTIFICATION PURPOSES

GENERA SHIP RECORD SHEET

VESSEL	FUMIGATOR	START DATE	TIME	FINISH DATE	TIME
Illovo River	Glen Richardson	21/09/2023	22:30	22/09/2023	22:30

bromide conc.	Minimum Temp.	WIND greencape ws		WIND greencape ws			
0.064	11	speed	direction	time	speed	direction	time
		32km/h	WSW	22:30	15km/h	W	22:30

HATCH	VOLUME	BROMIDE	Air Quality Exposure Period ppm			Air Quality Venting Period ppm		
			Time	north	south	Time	north	south
1	7762	496.8	0hrs	0	0	0hrs	0	0
2	10013	640.8	1hrs	0	0	0.5hrs	0	0.6
3	10047	643.0	2hrs	0	0	1hrs	0	1.4
4	10035	642.2	4hrs	0	0	1.5hrs	0	0
5	9513	608.8	8hrs	0	0	2hrs	0	0.4
			12hrs	0	0	4hrs	0	0
	47370.00	3031.7				6hrs	0	0
						8hrs	0	0
						12hrs	0	0

South West wind during application. Nil Readings. Moderate West Wind during venting resulting in some small readings on the Berth.

GENERA FIELD RECORD SHEET

Fumigator Tate Nolan

Pentarch LOG YARD, EDROM ROAD EDEN

Pine logs with bark for export to India

VESSEL

MINIMUM TEMPERATURE

DL Tulip

23&24/11/2023 16 DEGREES Min

Concentration

56

Row I.D.	length	width	height	volume	JAS	Conc g/m3	bromide	Start	CERT NO.	
357	60	3.7	4.8	1065.6	568.79	56	59.7	23/11/2023 17:00	87744	
352	60	3.7	4.8	1065.6	585.603	56	59.7	23/11/2023 17:00	87744	
358	60	3.7	5	1110	621.116	56	62.2	23/11/2023 17:00	87744	
354	60	3.7	5	1110	606.343	56	62.2	23/11/2023 17:00	87744	
353	60	3.7	4.8	1065.6	586.975	56	59.7	23/11/2023 17:00	87744	
349	60	3.7	4.8	1065.6	598.716	56	59.7	23/11/2023 17:00	87744	
350	60	3.7	5	1110	668.337	56	62.2	23/11/2023 17:00	87744	
356	60	3.7	5	1110	628.766	56	62.2	23/11/2023 17:00	87744	
342	60	3.7	5	1110	631.808	56	62.2	23/11/2023 17:00	87744	
345	60	3.7	5	1110	649.692	56	62.2	23/11/2023 17:00	87744	
439	60	3.7	4.8	1065.6	553.689	56	59.7	23/11/2023 17:00	87744	
438	60	3.7	4.8	1065.6	572.575	56	59.7	23/11/2023 17:00	87744	
443	60	3.7	4.5	999	542	56	55.9	23/11/2023 17:00	87744	
444	60	3.7	4.5	999	534.96	56	55.9	23/11/2023 17:00	87744	
440	60	3.7	4.5	999	540.795	56	55.9	23/11/2023 17:00	87744	
430	60	3.7	4.5	999	547.131	56	55.9	23/11/2023 17:00	87744	
441	60	3.7	4.5	999	538.425	56	55.9	24/11/2023 10:00	87745	
442	55	3.7	4.5	915.75	480.175	56	51.3	24/11/2023 10:00	87745	
300	50	5.5	4	1100	592.51	56	61.6	24/11/2023 10:00	87745	
				20064	11048.406			1123.6		
Actual Mb used		1123.6								

MONITORING SHEET #1 - EXPOSURE PERIOD



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>17:00:00</u>	MB Dosage Rate	<u>56gm3</u>
Start Date	<u>23/11/2023</u>	Wind Direction	<u>SSE</u>
Site Diagram	<u>Pentach 1</u>	Wind Speed	<u>19 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	17:00:00	0	0	0	0	0
15	17:15:00	0	0	0	0	0
30	17:30:00	0	0	0	0	0
45	17:45:00	0	0	0	0	0
60	18:00:00	0	0	0	0	0
75	18:15:00	0	0	0	0	0
90	18:30:00	0	0	0	0	0
105	18:45:00	0	0	0	0	0
120	19:00:00	0	0	0	0	0
135	19:15:00	0	0	0	0	0
150	19:30:00	0	0	0	0	0
165	19:45:00	0	0	0	0	0
180	20:00:00	0	0	0	0	0
210	20:15:00	0	0	0	0	0

Tate Nolan

Signature:

Date:

23/11/2023

MONITORING SHEET #1 - EXPOSURE PERIOD



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>10:00:00</u>	MB Dosage Rate	<u>56gm3</u>
Start Date	<u>24/11/2023</u>	Wind Direction	<u>ENE</u>
Site Diagram	<u>Pentach 1</u>	Wind Speed	<u>24 kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	10:00:00	0	0	0	0	0
15	10:15:00	0	0	0	0	0
30	10:30:00	0	0	0	0	0
45	10:45:00	0	0	0	0	0
60	11:00:00	0	0	0	0	0
75	11:15:00	0	0	0	0	0
90	11:30:00	0	0	0	0	0
105	11:45:00	0	0	0	0	0
120	12:00:00	0	0	0	0	0
135	12:15:00	0	0	0	0	0
150	12:30:00	0	0	0	0	0
165	12:45:00	0	0	0	0	0
180	13:00:00	0	0	0	0	0
210	13:15:00	0	0	0	0	0

Tate Nolan

Signature:

Date:

24/11/2023

MONITORING SHEET #2 - VENTILATION



Location	<u>Pentarch Log Yard, Edrom</u>	Job Description	<u>Pine Logs with Bark</u>
Start Time	<u>7:30:00</u>	MB Dosage Rate	<u>56gm3</u>
Start Date	<u>26/11/2023</u>	Wind Direction	<u>W</u>
Site Diagram	<u>Pentarch 1</u>	Wind Speed	<u>9kmph</u>

	TIME	M1	M2	M3	M4	M5
START TIME (+mins)	7:30:00	0	0	0	0	0
10	7:45:00	0	0	0	0	0
20	8:00:00	0	0		0	0
30	8:15:00	0	0	1.2	0	0
40	8:30:00	0	0	0.6	0	0
50	8:45:00	0	0	0.8	0	0
60	9:00:00	0	0	0.2	0	0
75	9:15:00	0	0	0	0.4	0
90	9:30:00	0	0	0	0.3	0
105	9:45:00	0	0	0	0	0
120	10:00:00	0	0	0	0	0

Discontinue monitoring once MB Concentration level is Zero

Tate Nolan

Signature:

Date:

26/11/2023



METHYL BROMIDE LOG ROW FUMIGATION LOG

Date: 23/11/2023

Vessel: DL Tulip

Location: EDEN

Exporter: Pentarch

Rate gm3 : 56

Destination: India

Volume: As per Field record sheet

FUMIGATION			CONCENTRATION gm3												
			START			EQUILIBRIUM %	2 HOURS - 19:00			16 HOURS - 09:00			FINISH		
	Log Row	Time	Front	Middle	Back		Front	Middle	Back	Front	Middle	Back	Front	Middle	Back
1	352-357	16:25	64	67	61	10	43	44	41	34	35	29	27	27	24
2	358-354	16:15	60	60	61	2	42	37	45	30	32	35	21	21	27
3	353-349	16:30	63	60	66	10	37	43	45	30	30	28	27	27	27
4	350-356	16:35	63	65	68	8	37	40	42	29	29	28	24	26	23
5	342-345	16:45	62	68	64	10	43	39	38	31	34	32	26	28	26
6	439-438	16:50	69	65	62	11	41	37	43	33	35	35	24	22	24
7	443-444	16:00	66	64	65	3	37	43	43	32	29	34	25	24	25
8	440-430	15:50	69	60	69	15	43	37	42	32	33	28	23	26	24
9															
10															
11															
12															
13															
14															

START DATE 23/11/2023

END DATE 24/11/2023

START TIME 17:00:00 PM

END TIME 17:00:00 PM

MIN TEMP °C 19

FUMIGATOR IN CHARGE Tate Nolan

SIGNATURE

Fumigation start time is when equilibrium is achieved in the LAST log row

Equilibrium Equation:

Fumigation end time is when ventilation (i.e seal is broken) on FIRST log row

$$\frac{HIGHEST - LOWEST}{LOWEST} \times 100 = \%$$

FOR OPERATION CERTIFICATION PURPOSES



METHYL BROMIDE LOG ROW FUMIGATION LOG

Date: 24/11/2023

Vessel: DL Tulip

Location: EDEN

Exporter: Pentarch

Rate gm3 : 56

Destination: India

Volume: As per Field record sheet

FUMIGATION			CONCENTRATION gm3												
			START			EQUILIBRIUM %	2 HOURS - 12:00			16 HOURS - 02:00			FINISH		
Log Row	Time		Front	Middle	Back		Front	Middle	Back	Front	Middle	Back	Front	Middle	Back
1	441-442	9:35	69	63	61	13	44	41	43	33	34	35	27	24	26
2	300	9:55	63	61	62	3	37	44	42	34	33	30	25	23	21
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															

START DATE 24/11/2023

END DATE 25/11/2023

START TIME 10:00

END TIME 10:00

MIN TEMP °C 18

FUMIGATOR IN CHARGE Tate Nolan

SIGNATURE

Fumigation start time is when equilibrium is achieved in the LAST log row

Equilibrium Equation:

Fumigation end time is when ventilation (i.e seal is broken) on FIRST log row

$$\frac{HIGHEST - LOWEST}{LOWEST} \times 100 = \%$$

FOR OPERATION CERTIFICATION PURPOSES

GENERA SHIP RECORD SHEET

VESSEL	FUMIGATOR	START DATE	TIME	FINISH DATE	TIME
DI Tulip	Mark Wesierski	10/12/2023	7:00	11/12/2023	7:00
bromide conc.	Minimum Temp.	WIND greencape ws		WIND greencape ws	
0.056	19	speed	direction	time	
		13km/h	W	7:00	
		speed	direction	time	
		4km/h	N	7:00	

HATCH	VOLUME	BROMIDE	Air Quality Exposure Period ppm			Air Quality Venting Period ppm		
			Time	north	south	Time	north	south
1	7742.8	433.6	0hrs	0	0	0hrs	0	0
2	9764.7	546.8	1hrs	0	0	0.5hrs	0	2.4
3	9809.6	549.3	2hrs	0	0	1hrs	0	0
4	9821.3	550.0	4hrs	0	0	1.5hrs	0	0
5	9146.4	512.2	8hrs	0	0	2hrs	0	0
			12hrs	0	0	4hrs	0	0
	46284.80	2591.9				6hrs	0	0
						8hrs	0	0
						12hrs	0	0

West wind during application. Nil Readings. During venting winds switched to SE resulting in some small readings initially on the Berth then breeze offshore.