



Heidelberg Materials

TYTHERINGTON QUARRY: 6 MILLION TONNES ADDITIONAL RESERVES

Environmental Statement: Appendix 7A Baseline





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PROJECT NO. 62282762

OUR REF. NO. 6MT ES / APPENDIX 7A BASELINE

DATE: MAY 2024

WSP

Canon Court West

Abbey Lawn

Shrewsbury

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WSP.com

Attended Survey Results: ST1 and ST2

Location	Measurement ID	Period (D: Day, E: Evening, N: Night)	Start Date & Time	Duration (mm:ss)	Local Weather			Subjective Audibility (0 - 4) 0: Inaudible, 1: Just Audible 2: Audible, 3: Significant source 4: Dominant				Measured Sound Pressure Level, dB				No. of Pauses	Noise Environment Comments (Including reasons for pausing, audible noise sources etc.)
					Wind speed, m/s	Wind dir.	Cloud, oktas	Industry	Wind in flora	Road	Other	L _{Aeq,T}	L _{A10,T}	L _{A90,T}	L _{Amax,T}		
ST1	2	D	11/04/2024 12:17	15:00	0-2	SW	7		1	4	1	64	66	62	73		M5 dominant. Birds. Occasional car on Itchington Road.
ST1	5	D	19/04/2024 09:46	15:00	0.9-3.9	NW	8	1	1	4	1	58	59	55	69		M5 dominant. Wind. Birds. Quarry just audible.
ST1	9	D	23/04/2024 07:32	15:00	0-0.5		4			4	1	68	70	65	74		M5 dominant. Birds. Local vehicle movements.
ST1	10	E	24/04/2024 20:42	15:00	0		6			4	1	64	66	62	72		M5 dominant. Birds. Occasional car on Itchington Road.
ST1	12	E	24/04/2024 21:54	15:00	0					4		61	63	58	72		M5 dominant.
ST1	7	N	23/04/2024 06:38	15:00	0.5-1		6			4	1	67	69	65	73		M5 dominant. Birds.
ST1	15	N	24/04/2024 23:32	15:00	0-0.5		1			4		59	61	55	67		M5 dominant.
ST2	1	D	11/04/2024 11:46	15:00	1-1.5	SW	8			4	2	58	60	56	63	1	M5 dominant. Bird calls. Pause for resident talking. Ground slightly wet.
ST2	3	D	11/04/2024 12:57	02:30	0-0.5		6	2		4	2	58	60	56	72		M5 dominant. Birds. Blast at quarry - audible above road traffic noise.
ST2	4	D	19/04/2024 09:13	15:00	0.5-4.5	WNW	7		1	4	1	61	63	59	73	1	M5 dominant. Birds. Wind noise. Pause for local vehicle movement.
ST2	8	D	23/04/2024 07:04	15:00	0.5-1.5		6			4	2	60	62	59	72		M5 dominant. Birds.
ST2	11	E	24/04/2024 21:12	15:00	0		7			4		52	54	48	59		M5 dominant.
ST2	13	E	24/04/2024 22:32	15:00	0-0.5		5			4		51	54	45	59		M5 dominant. Occasional dog bark in nearby house.
ST2	6	N	23/04/2024 06:11	15:00	0.5-1.7	NE	6			4	2	60	62	58	68		M5 dominant. Birds. Train.
ST2	14	N	24/04/2024 23:04	15:00	0-0.5		2			4		49	53	42	59		M5 dominant.

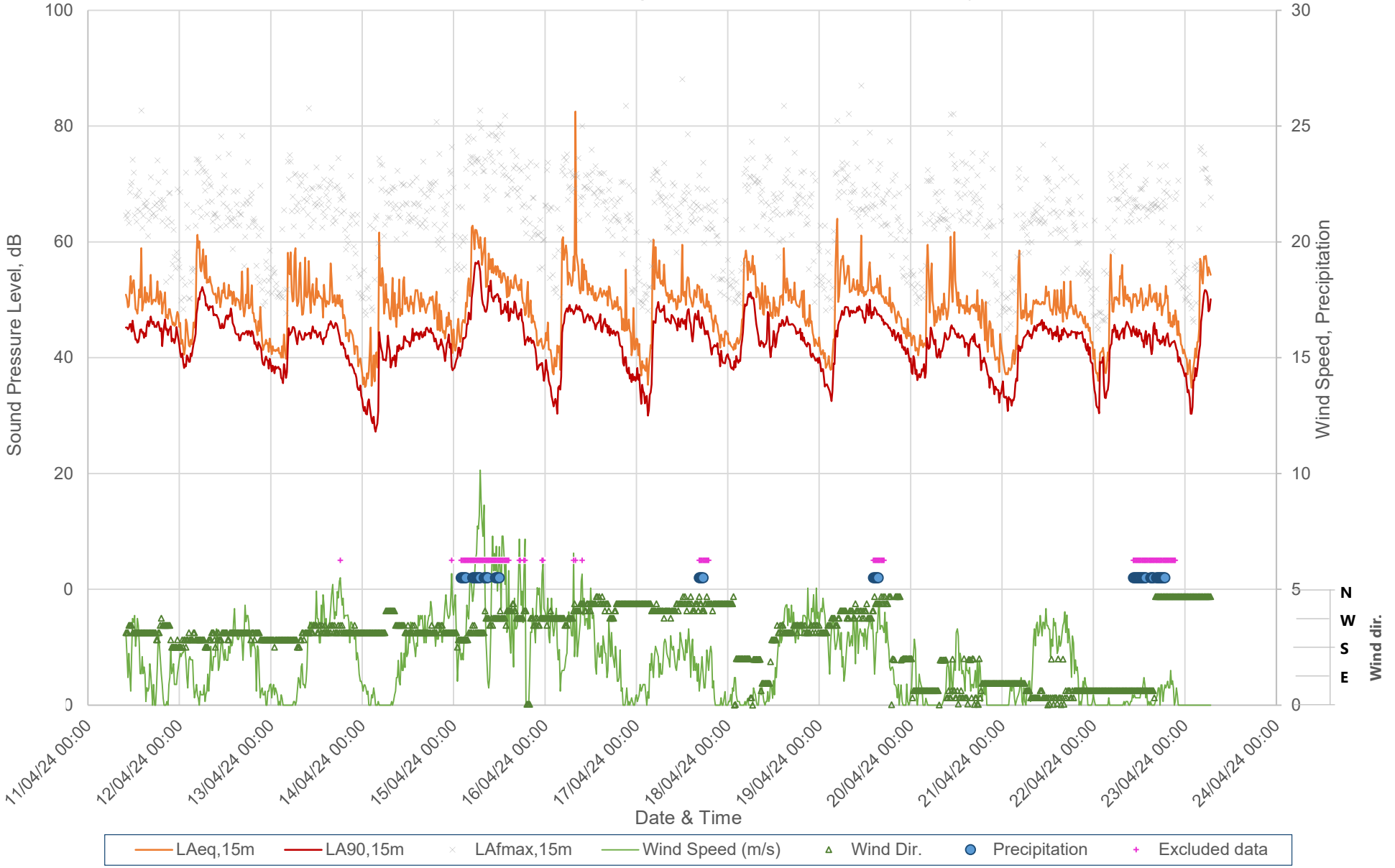
Summary: Averages of measured sound levels

Location	Period	Average measured sound levels*, dB	
		L _{Aeq,T}	L _{A90,T}
ST1	Day	65	61
	Evening	63	60
	Night**	65	60
ST2	Day	60	55
	Evening	51	46
	Night**	57	50

* - L_{Aeq,T} sound levels - logarithmic average, L_{A90,T} sound levels - arithmetic average

** - 2300-0000 and 0600-0700 hrs

Baseline Monitoring Results: LT1 - Time History



Summary of measured sound levels at LT1

Summary of measured sound levels at LT1: Sundays

	Background Sound Level, dB L _{A90,T}			Ambient Sound Level, dB LAeq,T			Maximum Sound Level, dB L _{Afmax,T}		
	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
Range	38 - 47	39 - 45	27 - 45	45 - 54	43 - 51	35 - 62	55 - 77	53 - 81	45 - 74
25th %ile	43	42	32	48	45	38	64	56	50
Median	44	43	35	49	47	41	66	62	57
75th %ile	45	44	42	50	48	48	69	66	65
Arithmetic Avg	44	43	36	49	47	43	66	62	58
Log Avg	-	-	-	50	47	49	-	-	-

Summary of measured sound levels at LT1: Weekdays only

	Background Sound Level, dB L _{A90,T}			Ambient Sound Level, dB LAeq,T			Maximum Sound Level, dB L _{Afmax,T}		
	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
Range	40 - 50	36 - 47	30 - 52	47 - 61	40 - 55	35 - 64	56 - 88	49 - 84	45 - 81
25th %ile	45	40	36	50	45	41	65	58	52
Median	46	42	40	51	46	43	67	63	59
75th %ile	47	43	46	52	48	53	70	67	69
Arithmetic Avg	46	42	41	51	46	46	68	63	60
Log Avg	-	-	-	52	47	52	-	-	-

Summary of measured sound levels at LT1: Weekends only

	Background Sound Level, dB L _{A90,T}			Ambient Sound Level, dB LAeq,T			Maximum Sound Level, dB L _{Afmax,T}		
	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
Range	38 - 47	34 - 45	27 - 45	45 - 62	40 - 51	35 - 62	55 - 83	50 - 81	45 - 75
25th %ile	43	38	34	48	44	40	64	56	51
Median	44	41	38	49	45	42	67	62	55
75th %ile	45	43	42	51	47	48	70	65	65
Arithmetic Avg	44	40	38	50	45	44	67	62	58
Log Avg	-	-	-	51	46	50	-	-	-

Summary of measured sound levels at LT1: Sunday night-time periods of interest

	Background Sound Level, dB L _{A90,T}			Ambient Sound Level, dB LAeq,T			Maximum Sound Level, dB L _{Afmax,T}		
	Sunday 2300 - 0000 hrs	Sunday 0000 - 0600 hrs	Sunday 0600 - 0700 hrs	Sunday 2300 - 0000 hrs	Sunday 0000 - 0600 hrs	Sunday 0600 - 0700 hrs	Sunday 2300 - 0000 hrs	Sunday 0000 - 0600 hrs	Sunday 0600 - 0700 hrs
Range	38 - 42	27 - 44	40 - 45	41 - 46	35 - 62	46 - 53	49 - 72	45 - 74	60 - 71
25th %ile	39	31	41	43	37	48	50	50	62
Median	39	33	44	43	40	49	52	54	64
75th %ile	42	40	44	45	47	50	63	64	67
Arithmetic Avg	40	35	43	44	42	49	57	57	65
Log Avg	-	-	-	44	49	50	-	-	-

LT1 Short Summary

Period	Average measured sound levels, per period, dB*					
	Day		Evening		Night	
	L _{Aeq,T}	L _{A90,T}	L _{Aeq,T}	L _{A90,T}	L _{Aeq,T}	L _{A90,T}
Weekdays	52	46	47	42	52	41
Sunday	50	44	47	43	49	36
Sunday (0600-0700 hrs)	-	-	-	-	50	43
Sunday (2300-0000 hrs)	-	-	-	-	44	40

* - L_{Aeq,T} sound levels - logarithmic average, L_{A90,T} sound levels - arithmetic average



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