Datashare 144

Quantifying concretion distribution in shales of the Vaca Muerta-Quintuco system, Neuquén Basin, Argentina

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Table S1. Dimensions and Spacing of Individual Concretions

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
SaVM	87.5	1	0.4	0.6	–	2.7	1.9	0.67
SaVM	87.5	2	0.24	1	–	6.7	5.9	0.24
SaVM	87.5	3	0.34	0.6	–	6.0	5.5	0.57
SaVM	87.5	4	0.2	0.4	–	4.3	3.9	0.50
SaVM	87.5	5	0.17	0.4	–	0.6	0.2	0.43
SaVM	87.5	6	0.17	0.33	–	5.5	4.8	0.52
SaVM	87.5	7	0.47	1.1	–	3.2	2.3	0.43
SaVM	87.5	8	0.32	0.75	–	–	–	0.43
SaVM	85	1	0.5	2	–	2.0	0.7	0.25
SaVM	85	2	0.1	0.6	–	4.3	3.8	0.17
SaVM	85	3	0.1	0.35	–	0.9	0.5	0.29
SaVM	85	4	0.26	0.5	–	1.6	1.0	0.52
SaVM	85	5	0.23	0.65	–	2.0	1.4	0.35
SaVM	85	6	0.34	0.7	–	1.0	0.5	0.49
SaVM	85	7	0.3	0.31	–	0.5	0.1	0.97
SaVM	85	8	0.3	0.5	–	0.8	0.4	0.60
SaVM	85	9	0.1	0.23	–	1.3	1.0	0.43
SaVM	85	10	0.15	0.4	–	3.9	3.4	0.38
SaVM	85	11	0.1	0.5	–	1.5	1.1	0.20
SaVM	85	12	0.11	0.35	–	1.6	1.2	0.31
SaVM	85	13	0.08	0.45	–	5.2	4.6	0.18
SaVM	85	14	0.12	0.7	–	0.7	0.2	0.17
SaVM	85	15	0.1	0.3	–	–	–	0.33
SaVM	84.5	1	0.25	0.9	–	1.0	0.4	0.28
SaVM	84.5	2	0.12	0.23	–	1.9	1.7	0.52
SaVM	84.5	3	0.14	0.24	–	1.5	1.3	0.58
SaVM	84.5	4	0.1	0.25	–	0.4	0.2	0.40
SaVM	84.5	5	0.1	0.2	–	3.1	2.7	0.50
SaVM	84.5	6	0.29	0.55	–	2.5	2.1	0.53
SaVM	84.5	7	0.1	0.25	–	1.0	0.8	0.40
SaVM	84.5	8	0.15	0.2	–	–	–	0.75
SaVM	84.5	9	0.18	0.6	–	2.8	2.2	0.30
SaVM	84.5	10	0.24	0.55	–	2.3	1.8	0.44
SaVM	84.5	11	0.29	0.5	–	–	–	0.58

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
SaVM	83	1	0.3	1	–	–	–	0.30
SaVM	82	1	0.16	0.38	–	–	–	0.42
SaVM	81	1	0.5	2.65	–	2.6	0.4	0.19
SaVM	81	2	0.4	1.7	–	1.6	0.5	0.24
SaVM	81	3	0.15	0.45	–	1.0	0.7	0.33
SaVM	81	4	0.1	0.2	–	0.4	0.1	0.50
SaVM	81	5	0.15	0.3	–	0.5	0.1	0.50
SaVM	81	6	0.3	0.53	–	1.1	0.4	0.57
SaVM	81	7	0.37	0.9	–	1.7	0.9	0.41
SaVM	81	8	0.3	0.6	–	1.1	0.5	0.50
SaVM	81	9	0.28	0.55	–	0.9	0.4	0.51
SaVM	81	10	0.15	0.5	–	0.8	0.3	0.30
SaVM	81	11	0.3	0.6	–	5.0	4.1	0.50
SaVM	81	12	0.4	1.3	–	1.4	0.3	0.31
SaVM	81	13	0.35	0.8	–	0.8	0.2	0.44
SaVM	81	14	0.26	0.5	–	1.2	0.6	0.52
SaVM	81	15	0.35	0.6	–	1.6	1.0	0.58
SaVM	81	16	0.23	0.55	–	–	–	0.42
SaVM	81	17	0.25	0.8	–	3.7	2.3	0.31
SaVM	81	18	0.5	2.1	–	2.6	1.4	0.24
SaVM	81	19	0.23	0.35	–	0.5	0.1	0.66
SaVM	81	20	0.25	0.4	–	1.5	0.1	0.63
SaVM	81	21	1.2	2.5	–	4.4	2.3	0.48
SaVM	81	22	0.75	1.7	–	2.7	1.5	0.44
SaVM	81	23	0.25	0.54	–	–	–	0.46
SaVM	77.5	1	0.3	0.45	–	5.0	4.3	0.67
SaVM	77.5	2	0.3	0.9	–	3.0	2.3	0.33
SaVM	77.5	3	0.22	0.6	–	6.0	5.4	0.37
SaVM	77.5	4	0.22	0.65	–	–	–	0.34
SaVM	77.5	5	0.16	0.45	–	3.0	2.5	0.36
SaVM	77.5	6	0.15	0.47	–	1.2	0.7	0.32
SaVM	77.5	7	0.2	0.52	–	3.2	2.6	0.38
SaVM	77.5	8	0.21	0.58	–	1.3	0.7	0.36
SaVM	77.5	9	0.15	0.52	–	2.6	1.9	0.29
SaVM	77.5	10	0.23	0.8	–	–	–	0.29
SaVM	77	1	0.18	0.6	–	–	–	0.30
SaVM	76	1	0.55	0.75	–	1.3	0.5	0.73
SaVM	76	2	0.3	0.75	–	3.5	2.9	0.40
SaVM	76	3	0.21	0.5	–	4.0	3.5	0.42
SaVM	76	4	0.26	0.57	–	9.0	8.4	0.46
SaVM	76	5	0.21	0.55	–	5.0	4.5	0.38
SaVM	76	6	0.23	0.47	–	4.2	3.3	0.49
SaVM	76	7	0.37	1.3	–	–	–	0.28
SaVM	76	8	0.16	1.1	–	4.0	3.2	0.15
SaVM	76	9	0.12	0.54	–	1.2	0.7	0.22
SaVM	76	10	0.06	0.37	–	–	–	0.16
SaVM	75	1	0.45	0.8	–	–	–	0.56
SaVM	74	1	0.17	0.6	–	2.0	1.5	0.28
SaVM	74	2	0.22	0.45	–	0.8	0.4	0.49
SaVM	74	3	0.17	0.3	–	–	–	0.57

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
SaVM	71	1	0.6	0.95	–	2.7	1.3	0.63
SaVM	71	2	0.39	1.8	–	5.0	3.2	0.22
SaVM	71	3	0.55	1.85	–	1.8	0.7	0.30
SaVM	71	4	0.2	0.5	–	8.0	7.1	0.40
SaVM	71	5	0.35	1.4	–	–	–	0.25
SaVM	69	1	0.2	0.5	–	2.0	1.5	0.40
SaVM	69	2	0.25	0.47	–	7.0	6.3	0.53
SaVM	69	3	0.4	1	–	1.0	0.1	0.40
SaVM	69	4	0.55	0.8	–	2.0	1.0	0.69
SaVM	69	5	0.15	1.15	–	0.9	0.2	0.13
SaVM	69	6	0.16	0.25	–	2.7	0.7	0.64
SaVM	69	7	0.35	3.7	–	6.1	4.0	0.09
SaVM	69	8	0.25	0.43	–	1.2	0.7	0.58
SaVM	69	9	0.3	0.48	–	1.6	1.2	0.63
SaVM	69	10	0.2	0.25	–	–	–	0.80
SaVM	66	1	0.44	1	–	–	–	0.44
SaVM	63.5	1	0.25	0.6	–	–	–	0.42
SaVM	62.3	1	0.3	1.2	–	1.0	0.3	0.25
SaVM	62.3	2	0.15	0.3	–	3.0	2.6	0.50
SaVM	62.3	3	0.3	0.6	–	5.5	5.0	0.50
SaVM	62.3	4	0.35	0.45	–	2.0	1.3	0.78
SaVM	62.3	5	0.6	0.9	–	3.0	2.4	0.67
SaVM	62.3	6	0.13	0.25	–	2.0	1.2	0.52
SaVM	62.3	7	0.27	1.4	–	3.5	2.7	0.19
SaVM	62.3	8	0.14	0.28	–	1.0	0.8	0.50
SaVM	62.3	9	0.11	0.18	–	0.5	0.2	0.61
SaVM	62.3	10	0.16	0.5	–	0.5	0.1	0.32
SaVM	62.3	11	0.16	0.36	–	2.0	1.7	0.44
SaVM	62.3	12	0.15	0.3	–	1.0	0.7	0.50
SaVM	62.3	13	0.17	0.4	–	0.5	0.1	0.43
SaVM	62.3	14	0.23	0.36	–	2.0	1.7	0.64
SaVM	62.3	15	0.13	0.2	–	1.0	0.4	0.65
SaVM	62.3	16	0.21	0.95	–	1.2	0.1	0.22
SaVM	62.3	17	0.37	1.25	–	3.0	2.3	0.30
SaVM	62.3	18	0.15	0.25	–	1.5	1.2	0.60
SaVM	62.3	19	0.17	0.35	–	2.0	1.8	0.49
SaVM	62.3	20	0.07	0.15	–	4.0	3.2	0.47
SaVM	62.3	21	0.5	1.5	–	–	–	0.33
SaVM	62.3	22	0.24	3.7	–	6.0	3.6	0.06
SaVM	62.3	23	0.19	1.15	–	–	–	0.17
SaVM	61.5	1	0.19	3	–	–	–	0.06
SaVM	60	1	0.18	0.7	–	3.0	2.5	0.26
SaVM	60	2	0.16	0.35	–	3.5	3.1	0.46
SaVM	60	3	0.18	0.4	–	2.0	1.5	0.45
SaVM	60	4	0.17	0.7	–	2.0	1.4	0.24
SaVM	60	5	0.15	0.6	–	1.5	0.8	0.25
SaVM	60	6	0.18	0.85	–	2.0	1.1	0.21
SaVM	60	7	0.18	1	–	–	–	0.18
SaVM	60	8	0.2	0.44	0.4	3.0	2.5	0.45
SaVM	60	9	0.25	0.6	0.5	–	–	0.42

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
SaVM	57.5	1	0.23	0.45	–	6.0	5.5	0.51
SaVM	57.5	2	0.17	0.5	–	3.5	3.0	0.34
SaVM	57.5	3	0.17	0.5	0.45	–	–	0.34
SaVM	55	1	0.26	0.7	–	1.5	1.2	0.37
SaVM	55	2	0.34	0.6	–	35*	34,5*	0.57
SaVM	55	3	0.34	0.44	–	1.5	1.0	0.77
SaVM	55	4	0.2	0.6	–	–	–	0.33
SaVM	55	5	–	0.6	0.55	1.8	1.2	–
SaVM	55	6	–	0.66	0.44	1.0	0.3	–
SaVM	55	7	–	0.7	0.45	1.8	1.0	–
SaVM	55	8	–	1.3	1.2	1.9	1.0	–
SaVM	55	9	–	0.5	0.5	0.8	0.2	–
SaVM	55	10	–	0.8	0.6	–	–	–
SaVM	54	1	0.7	3.25	–	12.0	9.8	0.22
SaVM	54	2	0.35	1.15	–			0.30
SaVM	53.5	1	0.44	0.9	–	4.5	3.7	0.49
SaVM	53.5	2	0.35	0.65	–	1.5	0.9	0.54
SaVM	53.5	3	0.32	0.5	–	3.5	3.0	0.64
SaVM	53.5	4	0.28	0.5	–	1.5	1.0	0.56
SaVM	53.5	5	0.34	0.53	–	4.0	3.3	0.64
SaVM	53.5	6	0.6	0.8	–	2.0	1.5	0.75
SaVM	53.5	7	0.15	0.2	–	2.5	2.0	0.75
SaVM	53.5	8	0.6	0.9	–	2.0	1.4	0.67
SaVM	53.5	9	0.25	0.4	–	10.0	9.6	0.63
SaVM	53.5	10	0.35	0.5	–	–	–	0.70
SaVM	53.5	11	–	0.74	0.62	1.4	0.8	–
SaVM	53.5	12	–	0.48	0.44	–	–	–
SaVM	48	1	0.44	0.93	–	5.0	4.0	0.47
SaVM	48	2	0.36	1.1	–	–	–	0.33
SaVM	43	1	0.29	1.3	–	–	–	0.22
SaVM	42	1	0.32	2.4	–	1.9	0.2	0.13
SaVM	42	2	0.11	1	–	–	–	0.11
PC	204	1	0.48	2.65	–	11.9	10.0	0.18
PC	204	2	0.18	1.2	–	–	–	0.15
PC	194	1	1	1.6	–	11.5	10.0	0.63
PC	194	2	0.8	1.4	–	4.6	2.7	0.57
PC	194	3	0.53	2.3	–	8.6	5.0	0.23
PC	194	4	0.9	4.8	–	7.5	4.6	0.19
PC	194	5	0.45	0.9	–	8.0	7.0	0.50
PC	194	6	0.6	1	–	3.8	3.0	0.60
PC	194	7	0.44	0.5	–	1.8	1.0	0.88
PC	194	8	0.3	1	–	–	–	0.30
PC	174	1	0.53	1	–	3.4	1.6	0.53
PC	174	2	0.45	2.6	–	5.8	3.5	0.17
PC	174	3	0.4	2	–	4.8	3.0	0.20
PC	174	4	0.38	1.6	–	2.5	0.8	0.24
PC	174	5	0.44	1.9	–	11.2	9.7	0.23
PC	174	6	0.4	1	–	7.1	5.5	0.40
PC	174	7	0.68	2.2	–	7.1	5.2	0.31
PC	174	8	0.56	1.5	–	3.8	2.4	0.37

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	174	9	0.55	1.2	–	8.5	7.4	0.46
PC	174	10	0.3	1	–	8.1	6.7	0.30
PC	174	11	0.2	1.7	–	3.9	2.2	0.12
PC	174	12	0.6	1.6	–	5.3	4.0	0.38
PC	174	13	0.6	1	–	8.3	7.1	0.60
PC	174	14	0.34	1.33	–	3.7	2.0	0.26
PC	174	15	0.62	2	–	9.3	7.1	0.31
PC	174	16	0.53	2.43	–	9.4	7.6	0.22
PC	174	17	0.4	1.25	–	9.4	8.0	0.32
PC	174	18	0.4	1.45	–	5.4	4.0	0.28
PC	174	19	0.52	1.3	–	8.9	7.0	0.40
PC	174	20	0.7	2.5	–	3.1	1.0	0.28
PC	174	21	0.52	1.6	–	–	–	0.33
PC	168	1	0.4	2.7	–	4.9	1.4	0.15
PC	168	2	0.75	4.3	–	13.9	9.5	0.17
PC	168	3	0.57	4.6	–	4.2	1.5	0.12
PC	168	4	0.19	0.7	–	6.4	5.8	0.27
PC	168	5	0.2	0.5	–	3.2	1.0	0.40
PC	168	6	0.21	3.9	–	13.6	8.8	0.05
PC	168	7	0.4	5.6	–	5.8	2.5	0.07
PC	168	8	0.22	1	–	12.6	10.4	0.22
PC	168	9	0.25	3.5	–	6.4	3.2	0.07
PC	168	10	0.23	3	–	3.8	1.0	0.08
PC	168	11	0.3	2.5	–	5.4	1.2	0.12
PC	168	12	0.26	5.8	–	5.4	2.0	0.04
PC	168	13	0.18	1	–	2.7	1.4	0.18
PC	168	14	0.22	1.5	–	3.2	0.6	0.15
PC	168	15	0.47	3.7	–	3.5	0.6	0.13
PC	168	16	0.2	2	–	4.4	2.8	0.10
PC	168	17	0.2	1.25	–	6.0	3.6	0.16
PC	168	18	0.26	3.5	–	10.3	6.5	0.07
PC	168	19	0.32	4	–	6.0	1.5	0.08
PC	168	20	0.22	5	–	6.2	3.4	0.04
PC	168	21	0.23	0.55	–	1.6	1.2	0.42
PC	168	22	0.1	0.23	–	2.0	1.7	0.43
PC	168	23	0.12	0.3	–	2.9	2.5	0.40
PC	168	24	0.15	0.45	–	7.6	6.0	0.33
PC	168	25	0.24	2.7	–	3.1	0.4	0.09
PC	168	26	0.18	2.6	–	6.1	3.2	0.07
PC	168	27	0.23	3.25	–	9.5	6.0	0.07
PC	168	28	0.23	3.7	–	2.7	0.6	0.06
PC	168	29	0.19	0.4	–	1.4	1.0	0.48
PC	168	30	0.1	0.4	–	3.7	2.0	0.25
PC	168	31	0.26	3	–	4.9	2.0	0.09
PC	168	32	0.21	2.8	–	3.8	1.5	0.08
PC	168	33	0.21	1.7	–	–	–	0.12
PC	165	1	0.53	3.5	–	21.5	17.3	0.15
PC	165	2	0.54	4.9	–	15.7	11.6	0.11
PC	165	3	0.85	3.3	–	13.3	10.7	0.26
PC	165	4	0.29	2	–	5.3	2.5	0.15

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	165	5	0.3	3.6	–	6.1	1.3	0.08
PC	165	6	0.35	6	–	10.4	4.6	0.06
PC	165	7	0.3	5.6	–	8.3	3.2	0.05
PC	165	8	0.9	4.5	–	13.1	10.5	0.20
PC	165	9	0.52	0.6	–	6.1	4.5	0.87
PC	165	10	0.8	2.6	–	4.2	1.5	0.31
PC	165	11	1	2.75	–	6.1	3.5	0.36
PC	165	12	0.52	2.5	–	8.8	5.6	0.21
PC	165	13	0.75	3.8	–	22.1	17.7	0.20
PC	165	14	1	1.75	–	2.6	1.0	0.57
PC	165	15	0.44	5	–	8.5	5.3	0.09
PC	165	16	0.36	1.4	–	4.1	1.2	0.26
PC	165	17	0.73	4.4	–	3.3	0.0	0.17
PC	165	18	0.28	2.1	–	8.1	5.8	0.13
PC	165	19	0.48	2.6	–	–	–	0.18
PC	160	1	0.38	2	–	3.8	2.1	0.19
PC	160	2	0.36	1.4	–	2.7	1.5	0.26
PC	160	3	0.34	0.9	–	4.5	3.0	0.38
PC	160	4	0.41	2.15	–	3.8	2.5	0.19
PC	160	5	0.4	0.5	–	5.1	2.3	0.80
PC	160	6	0.35	5	–	3.5	0.6	0.07
PC	160	7	0.51	0.8	–	2.8	2.0	0.64
PC	160	8	0.44	0.75	–	1.7	1.2	0.59
PC	160	9	0.26	0.3	–	15.3	13.8	0.87
PC	160	10	0.43	2.8	–	5.8	3.5	0.15
PC	160	11	0.28	1.8	–	2.6	1.2	0.16
PC	160	12	0.17	0.9	–	6.8	5.3	0.19
PC	160	13	0.36	2	–	5.2	2.7	0.18
PC	160	14	0.42	2.9	–	2.4	0.6	0.14
PC	160	15	0.18	0.85	–	8.9	6.9	0.21
PC	160	16	0.5	3.1	–	3.2	1.3	0.16
PC	160	17	0.39	0.65	–	2.1	1.6	0.60
PC	160	18	0.24	0.38	–	2.4	1.6	0.63
PC	160	19	0.35	1.2	–	4.5	3.0	0.29
PC	160	20	0.4	1.85	–	7.2	5.5	0.22
PC	160	21	0.2	1.5	–	7.4	5.0	0.13
PC	160	22	0.64	3.2	–	5.7	2.8	0.20
PC	160	23	0.38	2.7	–	9.3	6.4	0.14
PC	160	24	0.65	3.1	–	5.6	2.8	0.21
PC	160	25	0.41	2.5	–	14.1	12.0	0.16
PC	160	26	0.53	1.65	–	11.6	10.0	0.32
PC	160	27	0.3	1.5	–	9.6	8.0	0.20
PC	160	28	0.32	1.6	–	5.3	4.0	0.20
PC	160	29	0.2	1	–	8.2	7.2	0.20
PC	160	30	0.4	1	–	3.6	2.3	0.40
PC	160	31	0.53	1.65	–	3.6	1.2	0.32
PC	160	32	0.43	3.2	–	5.2	2.2	0.13
PC	160	33	0.45	2.8	–	8.8	6.5	0.16
PC	160	34	0.35	1.8	–	7.1	5.3	0.19
PC	160	35	0.42	1.7	–	1.5	0.0	0.25

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	160	36	0.26	1.2	–	4.0	3.0	0.22
PC	160	37	0.3	0.8	–	2.1	1.0	0.38
PC	160	38	0.3	1.3	–	–	–	0.23
PC	157.5	1	0.42	0.9	–	1.5	0.6	0.47
PC	157.5	2	0.3	0.8	–	2.2	1.3	0.38
PC	157.5	3	0.4	1	–	2.0	0.0	0.40
PC	157.5	4	0.41	2.9	–	2.5	0.6	0.14
PC	157.5	5	0.15	0.9	–	9.0	7.0	0.17
PC	157.5	6	0.53	3.1	–	3.2	1.3	0.17
PC	157.5	7	0.38	0.6	–	2.3	1.8	0.63
PC	157.5	8	0.25	0.33	–	2.3	1.6	0.76
PC	157.5	9	0.33	1	–	4.4	3.0	0.33
PC	157.5	10	0.4	1.85	–	3.7	2.3	0.22
PC	157.5	11	0.38	0.9	–	–	–	0.42
PC	157.5	12	0.32	2.65	–	2.0	0.0	0.12
PC	157.5	13	0.65	1.3	–	15.7	14.1	0.50
PC	157.5	14	0.6	1.9	–	2.5	0.9	0.32
PC	157.5	15	0.55	1.35	–	1.5	0.2	0.41
PC	157.5	16	0.4	1.4	–	9.4	7.8	0.29
PC	157.5	17	0.4	1.7	–	–	–	0.24
PC	153	1	0.31	1	–	5.0	4.0	0.31
PC	153	2	0.18	0.9	–	13.6	10.8	0.20
PC	153	3	0.4	4.8	–	34.2	31.3	0.08
PC	153	4	0.41	0.95	–	1.5	0.6	0.43
PC	153	5	0.4	0.88	–	–	–	0.45
PC	150	1	0.45	1.4	–	6.7	5.0	0.32
PC	150	2	0.38	1.9	–	3.5	1.8	0.20
PC	150	3	0.38	1.5	–	4.3	3.0	0.25
PC	150	4	0.09	1	–	3.6	1.0	0.09
PC	150	5	0.36	4.12	–	2.5	0.0	0.09
PC	150	6	0.26	0.8	–	2.3	1.0	0.33
PC	150	7	0.13	1.7	–	4.4	3.0	0.08
PC	150	8	0.13	1	–	1.2	0.2	0.13
PC	150	9	0.19	1	–	1.7	0.5	0.19
PC	150	10	0.35	1.3	–	1.6	0.5	0.27
PC	150	11	0.42	0.9	–	6.5	5.5	0.47
PC	150	12	0.48	1	–	3.3	2.0	0.48
PC	150	13	0.35	1.5	–	1.8	0.8	0.23
PC	150	14	0.11	0.53	–	3.3	2.4	0.21
PC	150	15	0.24	1.2	–	11.0	9.5	0.20
PC	150	16	0.36	1.75	–	1.8	0.5	0.21
PC	150	17	0.17	0.9	–	10.1	9.5	0.19
PC	150	18	0.18	0.25	–	8.6	6.3	0.72
PC	150	19	0.4	4.35	–	4.2	1.3	0.09
PC	150	20	0.42	1.35	–	5.4	4.5	0.31
PC	150	21	0.2	0.5	–	4.3	3.3	0.40
PC	150	22	0.48	1.5	–	4.3	3.0	0.32
PC	150	23	0.3	1	–	3.2	2.0	0.30
PC	150	24	0.28	1.3	–	6.3	5.0	0.22
PC	150	25	0.47	1.25	–	5.5	3.5	0.38

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	150	26	0.15	2.8	–	5.2	2.5	0.05
PC	150	27	0.47	2.6	–	5.6	2.7	0.18
PC	150	28	0.45	3.16	–	2.7	0.8	0.14
PC	150	29	0.43	0.75	–	2.7	2.0	0.57
PC	150	30	0.1	0.7	–	2.9	1.1	0.14
PC	150	31	0.4	2.9	–	6.9	5.0	0.14
PC	150	32	0.3	0.9	–	1.2	0.2	0.33
PC	150	33	0.26	1.2	–	–	–	0.22
PC	147.5	1	0.43	1	–	32.8	30.8	0.43
PC	147.5	2	0.3	3	–	16.5	14.0	0.10
PC	147.5	3	0.29	2	–	24.1	22.0	0.15
PC	147.5	4	0.4	2.15	–	7.9	5.3	0.19
PC	147.5	5	0.36	3	–	4.1	1.5	0.12
PC	147.5	6	0.35	2.2	–	–	–	0.16
PC	144	1	0.45	1.5	–	4.5	3.5	0.30
PC	144	2	0.2	0.4	–	1.6	1.2	0.50
PC	144	3	0.2	0.4	–	5.6	5.0	0.50
PC	144	4	0.3	0.7	–	2.4	1.5	0.43
PC	144	5	0.3	1	–	3.4	2.5	0.30
PC	144	6	0.5	0.8	–	1.4	0.5	0.63
PC	144	7	0.4	1	–	2.0	1.0	0.40
PC	144	8	0.5	1	–	2.2	0.7	0.50
PC	144	9	0.5	2	–	5.0	3.0	0.25
PC	144	10	0.4	2	–	6.8	5.0	0.20
PC	144	11	0.25	1.5	–	10.5	8.5	0.17
PC	144	12	0.6	2.5	–	12.4	10.5	0.24
PC	144	13	0.35	1.2	–	8.1	7.0	0.29
PC	144	14	0.35	1	–	6.2	5.2	0.35
PC	144	15	0.35	1	–	4.3	3.0	0.35
PC	144	16	0.5	1.5	–	1.9	0.5	0.33
PC	144	17	0.45	1.3	–	4.5	3.3	0.35
PC	144	18	0.35	1	–	2.2	0.8	0.35
PC	144	19	0.45	1.7	–	2.6	1.2	0.26
PC	144	20	0.37	1	–	8.5	6.4	0.37
PC	144	21	0.45	3.2	–	9.4	7.5	0.14
PC	144	22	0.3	0.5	–	1.8	1.2	0.60
PC	144	23	1.2	0.6	–	7.7	6.5	2.00
PC	144	24	0.45	1.8	–	7.1	5.5	0.25
PC	144	25	0.45	1.3	–	1.8	1.0	0.35
PC	144	26	0.25	0.38	–	7.9	7.0	0.66
PC	144	27	0.4	1.5	–	1.7	0.5	0.27
PC	144	28	0.3	0.8	–	4.4	3.5	0.38
PC	144	29	0.37	1	–	7.9	7.0	0.37
PC	144	30	0.2	0.7	–	10.9	10.0	0.29
PC	144	31	0.3	1	–	11.0	10.0	0.30
PC	144	32	0.3	1	–	4.7	3.5	0.30
PC	144	33	0.5	1.3	–	5.3	4.0	0.38
PC	144	34	0.35	1.3	–	9.3	7.6	0.27
PC	144	35	0.45	2	–	2.8	1.0	0.23
PC	144	36	0.38	1.6	–	8.7	7.4	0.24

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	144	37	0.33	1	–	2.4	1.0	0.33
PC	144	38	0.36	1.8	–	12.1	9.0	0.20
PC	144	39	0.3	4.3	–	26.0	21.6	0.07
PC	144	40	0.57	4.5	–	9.3	4.5	0.13
PC	144	41	0.34	5	–	5.5	2.0	0.07
PC	144	42	0.56	2	–	6.9	5.0	0.28
PC	144	43	0.6	1.8	–	6.7	5.5	0.33
PC	144	44	0.2	0.65	–	1.1	0.0	0.31
PC	144	45	0.3	1.5	–	5.7	3.4	0.20
PC	144	46	0.6	3	–	3.4	1.8	0.20
PC	144	47	0.15	0.21	–	6.4	4.5	0.71
PC	144	48	0.4	3.6	–	3.9	1.5	0.11
PC	144	49	0.35	1.2	1	8.4	7.0	0.29
PC	144	50	0.58	1.6	–	9.0	7.6	0.36
PC	144	51	0.48	1.15	–	–	–	0.42
PC	144	52	0.53	2.2	–	3.1	1.0	0.24
PC	144	53	0.43	1.9	–	4.9	2.3	0.23
PC	144	54	0.55	3.2	–	3.2	0.5	0.17
PC	144	55	0.4	2.15	–	2.3	1.0	0.19
PC	144	56	0.24	0.5	–	1.1	0.6	0.48
PC	144	57	0.31	0.5	–	–	–	0.62
PC	144	58	0.35	1	–	8.3	6.9	0.35
PC	144	59	0.3	1.8	–	5.4	4.0	0.17
PC	144	60	0.25	1	–	1.9	1.0	0.25
PC	144	61	0.3	0.7	–	4.9	4.0	0.43
PC	144	62	0.4	1	–	5.0	4.0	0.40
PC	144	63	0.3	1	–	7.9	7.0	0.30
PC	144	64	0.3	0.8	–	4.2	3.5	0.38
PC	144	65	0.25	0.6	–	2.6	1.6	0.42
PC	144	66	0.32	1.35	–	3.2	2.0	0.24
PC	144	67	0.4	1	–	1.9	1.0	0.40
PC	144	68	0.27	0.8	–	3.3	2.0	0.34
PC	144	69	0.4	1.7	–	3.5	1.5	0.24
PC	144	70	0.4	2.3	–	3.7	1.5	0.17
PC	144	71	0.4	2	–	4.0	1.6	0.20
PC	144	72	0.35	2.8	–	8.2	6.3	0.13
PC	144	73	0.22	1	–	4.3	2.7	0.22
PC	144	74	0.45	2.1	–	2.7	1.6	0.21
PC	144	75	0.5	1.3	–	1.5	0.8	0.38
PC	144	76	0.5	1	–	1.0	0.5	0.50
PC	144	77	0.6	2	–	5.6	4.6	0.30
PC	144	78	0.4	0.6	–	8.3	8.0	0.67
PC	144	79	0.36	1.2	–	4.9	4.3	0.30
PC	144	80	0.43	2	–	8.3	7.3	0.22
PC	144	81	0.35	1.4	–	–	–	0.25
PC	141	1	0.23	1	–	3.6	0.9	0.23
PC	141	2	0.48	4.4	–	5.0	0.9	0.11
PC	141	3	0.65	3.8	–	8.4	6.0	0.17
PC	141	4	0.32	0.9	–	2.3	0.7	0.36
PC	141	5	0.42	2.2	–	4.3	1.3	0.19

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	141	6	0.5	3.8	–	9.0	6.0	0.13
PC	141	7	0.42	2.2	–	17,1*	15,5*	0.19
PC	141	8	0.3	1	0.7	–	–	0.30
PC	141	9	0.4	5	–	–	–	0.08
PC	137	1	0.4	12	–	11.7	2.0	0.03
PC	137	2	0.7	7.5	–	–	–	0.09
PC	137	3	0.53	8.5	–	8.4	0.5	0.06
PC	137	4	0.5	7.3	–	–	–	0.07
PC	133	1	0.35	3	–	3.6	1.0	0.12
PC	133	2	0.4	2.2	–	–	–	0.18
PC	133	3	0.38	3.2	–	5.6	2.9	0.12
PC	133	4	0.35	2.35	–	4.1	1.4	0.15
PC	133	5	0.46	3	–	4.4	1.8	0.15
PC	133	6	0.3	2.25	–	–	–	0.13
PC	133	7	0.4	3	–	–	–	0.13
PC	130	1	0.63	3.5	–	7.4	3.9	0.18
PC	130	2	0.56	3.5	–	10.1	6.3	0.16
PC	130	3	0.32	4	–	5.4	2.0	0.08
PC	130	4	0.37	2.7	–	13.0	9.0	0.14
PC	130	5	0.58	5.3	–	6.0	2.0	0.11
PC	130	6	0.65	2.7	–	3.6	1.0	0.24
PC	130	7	0.55	2.5	–	4.3	2.0	0.22
PC	130	8	0.46	2	–	3.2	1.5	0.23
PC	130	9	0.5	1.4	–	5.0	3.0	0.36
PC	130	10	0.5	2.5	–	–	–	0.20
PC	130	11	0.5	4.8	–	7.4	4.3	0.10
PC	130	12	0.43	1.5	–	5.4	2.5	0.29
PC	130	13	0.5	4.25	–	7.1	3.9	0.12
PC	130	14	0.36	2.1	–	12.0	10.0	0.17
PC	130	15	0.37	2	–	6.3	3.0	0.19
PC	130	16	0.63	4.6	–	10.8	7.3	0.14
PC	130	17	0.6	2.5	–	–	–	0.24
PC	130	18	0.5	2	–	3.2	1.0	0.25
PC	130	19	0.5	2.3	–	3.2	0.3	0.22
PC	130	20	0.45	3.4	–	4.1	0.3	0.13
PC	130	21	0.3	4.15	–	3.6	0.8	0.07
PC	130	22	0.3	1.6	–	6.5	5.0	0.19
PC	130	23	0.45	1.3	–	–	–	0.35
PC	129	1	0.29	0.85	–	1.3	0.6	0.34
PC	129	2	0.33	0.6	–	4.0	3.2	0.55
PC	129	3	0.29	1	–	5.2	3.0	0.29
PC	129	4	0.24	3.45	–	5.2	1.5	0.07
PC	129	5	0.2	4	–	10.7	8.2	0.05
PC	129	6	0.25	0.9	–	–	–	0.28
PC	129	7	0.2	2.5	–	5.6	3.8	0.08
PC	129	8	0.2	1.1	–	3.9	0.0	0.18
PC	129	9	0.2	6.6	–	6.6	2.0	0.03
PC	129	10	0.24	2.6	–	3.3	1.0	0.09
PC	129	11	0.26	2	–	3.4	1.7	0.13
PC	129	12	0.26	1.35	–	3.3	1.0	0.19

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	129	13	0.24	3.2	–	12.9	11.0	0.08
PC	129	14	0.13	0.55	–	1.8	1.0	0.24
PC	129	15	0.15	1	–	1.3	0.3	0.15
PC	129	16	0.23	0.9	–	4.1	0.7	0.26
PC	129	17	0.33	5.8	–	–	–	0.06
PC	129	18	0.23	4.2	–	4.9	2.2	0.05
PC	129	19	0.3	1.1	–	1.7	0.2	0.27
PC	129	20	0.17	1.8	–	–	–	0.09
PC	126	1	0.6	6.2	–	–	–	0.10
PC	122	1	0.58	11.2	–	–	–	0.05
PC	118	1	0.6	3.1	–	5.1	1.9	0.19
PC	118	2	0.7	3.25	–	–	–	0.22
PC	118	3	0.65	6.5	–	9.8	4.0	0.10
PC	118	4	0.5	5	–	7.1	2.0	0.10
PC	118	5	1.2	5.2	–	–	–	0.23
PC	118	6	0.55	2.5	–	4.9	1.5	0.22
PC	118	7	0.8	4.2	–	–	–	0.19
PC	96.1	1	0.2	9.5	–	12.0	7.2	0.02
PC	96.1	2	0.16	0.52	–	1.1	0.7	0.31
PC	96.1	3	0.09	0.18	–	7.0	6.9	0.50
PC	96.1	4	0.23	6.5	–	–	–	0.04
PC	77	1	0.7	7.8	–	12.0	5.7	0.09
PC	77	2	0.68	4.75	–	6.0	2.9	0.14
PC	77	3	0.35	1.5	–	–	–	0.23
PC	77	4	0.4	2	–	3.0	0.6	0.20
PC	77	5	0.35	2.8	–	4.0	1.1	0.13
PC	77	6	0.6	3	–	5.0	2.3	0.20
PC	77	7	0.4	2.5	–	7.0	4.3	0.16
PC	77	8	0.45	3	–	2.5	0.5	0.15
PC	77	9	0.5	1	–	3.0	1.0	0.50
PC	77	10	0.62	3	–	10.0	7.7	0.21
PC	77	11	0.35	1.7	–	7.0	3.7	0.21
PC	77	12	0.8	5	–	9.0	4.4	0.16
PC	77	13	0.8	4.2	–	5.2	1.2	0.19
PC	77	14	0.86	3.7	–	5.5	1.8	0.23
PC	77	15	0.6	3.75	–	6.0	2.1	0.16
PC	77	16	0.84	4	–	6.0	3.1	0.21
PC	77	17	0.75	1.8	–	8.0	3.9	0.42
PC	77	18	0.65	6.5	–	7.0	3.1	0.10
PC	77	19	0.65	1.3	–	4.0	1.3	0.50
PC	77	20	1	4.2	–	7.0	3.1	0.24
PC	77	21	0.7	3.55	–	5.0	1.9	0.20
PC	77	22	0.5	2.6	–	8.0	5.6	0.19
PC	77	23	0.7	2.3	–	5.0	3.4	0.30
PC	77	24	0.5	1	–	24*	19,9*	0.50
PC	77	25	1	7.3	–	6.5	1.2	0.14
PC	77	26	0.7	3.3	–	6.0	2.6	0.21
PC	77	27	0.65	3.5	–	10.0	6.8	0.19
PC	77	28	0.4	3	–	–	–	0.13
PC	55	1	0.33	2.5	–	4.0	1.0	0.13

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	55	2	0.3	3.5	–	15.0	11.5	0.09
PC	55	3	0.4	3.5	–	10.0	5.2	0.11
PC	55	4	0.65	6.18	–	22*	17,7*	0.11
PC	55	5	0.37	2.5	–	4.0	2.0	0.15
PC	55	6	0.5	1.5	–	6.0	4.0	0.33
PC	55	7	0.45	2.5	–	12.0	5.9	0.18
PC	55	8	0.6	9.7	–	6.0	0.7	0.06
PC	55	9	0.35	1	–	2.0	0.5	0.35
PC	55	10	0.4	2	–	11.0	7.0	0.20
PC	55	11	0.5	6	–	9.0	3.3	0.08
PC	55	12	0.6	5.5	–	15.0	9.8	0.11
PC	55	13	0.45	5	–	9.0	5.3	0.09
PC	55	14	0.38	2.5	–	4.0	1.0	0.15
PC	55	15	0.6	3.4	–	6.0	3.1	0.18
PC	55	16	0.35	2.5	–	4.0	1.5	0.14
PC	55	17	0.44	2.5	–	6.0	4.0	0.18
PC	55	18	0.38	1.5	–	13.0	10.8	0.25
PC	55	19	0.35	3	–	4.0	0.6	0.12
PC	55	20	0.44	3.8	–	7.4	3.0	0.12
PC	55	21	0.45	5	–	8.0	4.3	0.09
PC	55	22	0.35	2.5	–	6.5	3.0	0.14
PC	55	23	0.45	4.5	–	9.0	5.8	0.10
PC	55	24	0.45	2	–	3.0	0.5	0.23
PC	55	25	0.4	3	–	4.0	1.2	0.13
PC	55	26	0.37	2.7	–	6.0	2.7	0.14
PC	55	27	0.45	4	–	15.0	12.0	0.11
PC	55	28	0.3	2	–	6.0	3.5	0.15
PC	55	29	0.4	3	–	4.6	2.1	0.13
PC	55	30	0.55	2	–	4.0	1.5	0.28
PC	55	31	0.5	3	–	19.0	15.9	0.17
PC	55	32	0.4	3.15	–	7.0	4.8	0.13
PC	55	33	0.33	1.2	–	3.0	1.8	0.28
PC	55	34	0.4	1.3	–	5.0	3.8	0.31
PC	55	35	0.3	1.2	–	2.0	0.4	0.25
PC	55	36	0.35	2	–	4.0	2.3	0.18
PC	55	37	0.35	1.5	–	5.0	3.5	0.23
PC	55	38	0.5	1.5	–	6.4	4.2	0.33
PC	55	39	0.45	3	–	7.0	2.2	0.15
PC	55	40	0.5	6.7	–	6.0	0.5	0.07
PC	55	41	0.65	4.4	–	4.7	0.5	0.15
PC	55	42	0.5	4	–	14.8	11.0	0.13
PC	55	43	0.4	3.5	–	5.0	1.5	0.11
PC	55	44	0.55	3.5	–	5.8	2.0	0.16
PC	55	45	0.65	4	–	5.3	1.5	0.16
PC	55	46	0.5	3.5	–	7.3	2.0	0.14
PC	55	47	0.7	7	–	–	–	0.10
PC	51	1	0.43	1	–	11.0	10.2	0.43
PC	51	2	0.37	0.7	–	38*	37,3*	0.53
PC	51	3	0.2	0.8	–	6.5	5.1	0.25
PC	51	4	0.13	2	–	2.3	0.5	0.07

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	51	5	0.15	1.5	–	2.3	1.2	0.10
PC	51	6	0.31	0.75	–	5.1	4.4	0.41
PC	51	7	0.27	0.7	–	5.6	4.6	0.39
PC	51	8	0.15	1.3	–	–	–	0.12
PC	50	1	0.65	5	–	23.8	18.9	0.13
PC	50	2	0.47	4.8	–	13.0	8.4	0.10
PC	50	3	0.5	4.5	–	–	–	0.11
PC	25.5	1	0.24	0.85	–	–	–	0.28
PC	24.2	1	0.36	1.48	–	–	–	0.24
PC	21.75	1	0.14	5.15	–	–	–	0.03
PC	21.5	1	0.2	1.15	–	–	–	0.17
PC	17.8	1	0.14	0.64	0.53	9.7	9.0	0.22
PC	17.8	2	0.17	0.7	–	1.8	1.0	0.24
PC	17.8	3	0.15	0.85	–	3.1	2.0	0.18
PC	17.8	4	0.12	1.3	–	–	–	0.09
PC	16.6	1	0.16	0.63	–	1.8	1.0	0.25
PC	16.6	2	0.17	1	–	1.1	0.4	0.17
PC	16.6	3	0.15	0.4	–	0.4	0.0	0.38
PC	16.6	4	0.11	0.4	–	–	–	0.28
PC	15	1	0.34	0.67	–	1.0	0.3	0.51
PC	15	2	0.33	0.73	–	1.6	1.0	0.45
PC	15	3	0.22	0.6	–	5.7	5.0	0.37
PC	15	4	0.3	0.77	0.67	1.6	1.0	0.39
PC	15	5	0.15	0.5	0.5	–	–	0.30
PC	9	1	0.22	1.3	–	1.8	0.7	0.17
PC	9	2	0.17	0.9	–	–	–	0.19
PC	9	3	0.24	0.95	–	8.9	8.0	0.25
PC	9	4	0.23	0.75	–	3.8	3.0	0.31
PC	9	5	0.18	0.9	–	3.3	2.5	0.20
PC	9	6	0.19	0.64	–	1.0	0.3	0.30
PC	9	7	0.2	0.72	–	–	–	0.28
PC	7.9	1	0.3	0.65	–	7.6	7.0	0.46
PC	7.9	2	0.25	0.45	–	3.1	2.5	0.56
PC	7.9	3	0.27	0.7	0.5	4.2	3.5	0.39
PC	7.9	4	0.34	0.73	–	1.2	0.7	0.47
PC	7.9	5	0.14	0.35	–	2.6	2.1	0.40
PC	7.9	6	0.4	0.7	0.5	–	–	0.57
PC	5.6	1	0.26	1.6	–	3.1	2.0	0.16
PC	5.6	2	0.15	0.6	–	2.8	2.0	0.25
PC	5.6	3	0.3	0.9	–	4.0	3.0	0.33
PC	5.6	4	0.18	0.4	0.35	0.8	0.1	0.45
PC	5.6	5	0.18	1	–	1.6	0.8	0.18
PC	5.6	6	0.23	0.7	–	2.2	1.5	0.33
PC	5.6	7	0.27	0.76	–	2.5	1.5	0.36
PC	5.6	8	0.19	1.25	–	1.2	0.4	0.15
PC	5.6	9	0.17	0.44	–	1.0	0.4	0.39
PC	5.6	10	0.14	0.4	0.37	0.7	0.1	0.35
PC	5.6	11	0.26	0.8	–	0.7	0.1	0.33
PC	5.6	12	0.14	0.38	0.33	0.6	0.2	0.37
PC	5.6	13	0.17	0.3	0.27	1.6	0.6	0.57

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PC	5.6	14	0.24	1.8	–	1.2	0.1	0.13
PC	5.6	15	0.14	0.4	–	3.2	2.2	0.35
PC	5.6	16	0.26	1.6	–	–	–	0.16
PT	156	1	0.4	3	–	3.5	1.0	0.13
PT	156	2	0.45	2	–	5.3	1.5	0.23
PT	156	3	0.6	5.5	–	15.0	11.0	0.11
PT	156	4	0.35	2.5	–	4.0	1.5	0.14
PT	156	5	0.6	2.5	–	3.3	1.0	0.24
PT	156	6	0.4	2	–	5.3	3.5	0.20
PT	156	7	0.5	1.5	–	9.8	7.0	0.33
PT	156	8	0.55	4	–	8.0	4.5	0.14
PT	156	9	0.45	3	–	4.0	1.5	0.15
PT	156	10	0.4	2	–	8.0	6.0	0.20
PT	156	11	0.45	2	–	6.8	4.0	0.23
PT	156	12	0.45	3.5	–	4.3	2.0	0.13
PT	156	13	0.35	1	–	7.0	5.0	0.35
PT	156	14	0.4	3	–	9.0	5.5	0.13
PT	156	15	0.45	4	–	6.5	3.5	0.11
PT	156	16	0.4	2	–	5.5	3.0	0.20
PT	156	17	0.35	3	–	3.6	1.5	0.12
PT	156	18	0.35	1.2	–	3.9	2.0	0.29
PT	156	19	0.4	2.5	–	7.3	5.0	0.16
PT	156	20	0.35	2	–	4.5	2.0	0.18
PT	156	21	0.35	3	–	8.0	5.5	0.12
PT	156	22	0.35	2	–	9.0	7.0	0.18
PT	156	23	0.4	2	–	2.0	0.5	0.20
PT	156	24	0.35	1	–	4.0	2.0	0.35
PT	156	25	0.4	3	–	6.5	3.5	0.13
PT	156	26	0.5	3	–	12.3	10.0	0.17
PT	156	27	0.4	1.5	–	8.8	7.5	0.27
PT	156	28	0.35	1	–	1.7	0.8	0.35
PT	156	29	0.2	0.8	–	7.9	6.5	0.25
PT	156	30	0.5	2	–	13.0	10.0	0.25
PT	156	31	0.5	4	–	12.8	8.0	0.13
PT	156	32	0.5	5.5	–	8.8	5.0	0.09
PT	156	33	0.35	2	–	4.0	2.0	0.18
PT	156	34	0.4	2	–	4.5	3.0	0.20
PT	156	35	0.3	1	–	2.5	1.0	0.30
PT	156	36	0.6	2	–	2.4	1.0	0.30
PT	156	37	0.3	0.7	–	3.4	2.0	0.43
PT	156	38	0.55	2	–	5.0	3.0	0.28
PT	156	39	0.6	2	–	5.5	3.0	0.30
PT	156	40	0.5	3	–	5.0	2.0	0.17
PT	156	41	0.35	3	–	12.5	10.0	0.12
PT	156	42	0.4	2	–	3.8	1.0	0.20
PT	156	43	0.5	3.5	–	7.0	4.0	0.14
PT	156	44	0.55	2.5	–	4.8	2.5	0.22
PT	156	45	0.45	2	–	4.0	2.0	0.23
PT	156	46	0.4	2	–	6.5	4.0	0.20
PT	156	47	0.45	3	–	9.5	6.5	0.15

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PT	156	48	0.55	3	–	4.5	2.0	0.18
PT	156	49	0.5	2	–	5.0	2.0	0.25
PT	156	50	0.4	4	–	4.0	1.0	0.10
PT	156	51	0.6	2	–	3.8	1.0	0.30
PT	156	52	0.4	3.5	–	4.8	1.5	0.11
PT	156	53	0.4	3	–	6.0	3.0	0.13
PT	156	54	0.45	3	–	4.0	1.0	0.15
PT	156	55	0.5	3	–	7.0	4.0	0.17
PT	156	56	0.6	3	–	7.5	3.0	0.20
PT	156	57	0.65	6	–	9.0	5.0	0.11
PT	156	58	0.5	2	–	6.0	4.0	0.25
PT	156	59	0.4	2	–	7.5	4.0	0.20
PT	156	60	0.5	5	–	6.0	2.5	0.10
PT	156	61	0.4	2	–	15.0	12.0	0.20
PT	156	62	0.6	4	–	6.0	3.0	0.15
PT	156	63	0.4	2	–	6.5	3.0	0.20
PT	156	64	0.6	5	–	9.5	5.0	0.12
PT	156	65	0.5	4	–	13.0	10.0	0.13
PT	156	66	0.35	2	–	11.5	7.0	0.18
PT	156	67	0.6	7	–	6.8	2.0	0.09
PT	156	68	0.35	2.5	–	4.5	2.0	0.14
PT	156	69	0.45	2.5	–	12.8	7.0	0.18
PT	156	70	0.4	9	–	9.0	3.0	0.04
PT	156	71	0.4	3	–	5.8	3.0	0.13
PT	156	72	0.4	2.5	–	3.8	1.0	0.16
PT	156	73	0.4	3	–	5.8	3.0	0.13
PT	156	74	0.4	2.5	–	8.5	4.0	0.16
PT	156	75	0.5	6.5	–	8.8	3.5	0.08
PT	156	76	0.5	4	–	6.0	2.5	0.13
PT	156	77	0.5	3	–	6.8	2.5	0.17
PT	156	78	0.5	5.5	–	8.3	4.0	0.09
PT	156	79	0.5	3	–	8.5	4.5	0.17
PT	156	80	0.4	5	–	5.5	2.0	0.08
PT	156	81	0.35	2	–	7.5	4.5	0.18
PT	156	82	0.5	4	–	5.5	2.0	0.13
PT	156	83	0.5	3	–	–	–	0.17
PT	130	1	0.3	1.5	–	2.0	0.5	0.20
PT	130	2	0.35	1.5	–	7.8	1.0	0.23
PT	130	3	0.5	12	–	10.2	1.2	0.04
PT	130	4	0.4	6	–	4.5	1.0	0.07
PT	130	5	0.3	1	–	2.0	1.0	0.30
PT	130	6	0.4	1	–	1.8	1.0	0.40
PT	130	7	0.25	0.5	–	2.8	1.0	0.50
PT	130	8	0.3	3	–	3.5	1.0	0.10
PT	130	9	0.3	2	–	8.0	1.0	0.15
PT	130	10	0.45	12	–	12.5	1.0	0.04
PT	130	11	0.45	11	–	11.5	2.0	0.04
PT	130	12	0.4	8	–	6.5	1.0	0.05
PT	130	13	0.3	3	–	15.0	5.0	0.10
PT	130	14	0.43	17	–	10.0	1.0	0.03

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PT	130	15	0.2	1	–	2.0	1.0	0.20
PT	130	16	0.2	1	–	1.4	0.3	0.20
PT	130	17	0.23	1.2	–	2.9	0.3	0.19
PT	130	18	0.38	4	–	4.0	1.0	0.10
PT	130	19	0.35	2	–	4.0	2.0	0.18
PT	130	20	0.25	2	–	5.5	2.0	0.13
PT	130	21	0.4	5	–	5.0	1.0	0.08
PT	130	22	0.35	3	–	7.0	3.0	0.12
PT	130	23	0.35	5	–	11.5	2.0	0.07
PT	130	24	0.4	14	–	9.3	1.0	0.03
PT	130	25	0.25	2.5	–	5.8	4.0	0.10
PT	130	26	0.25	1	–	6.8	2.0	0.25
PT	130	27	0.5	8.5	–	10.3	5.0	0.06
PT	130	28	0.3	2	–	4.5	3.0	0.15
PT	130	29	0.2	1	–	4.5	3.0	0.20
PT	130	30	0.2	2	–	4.5	3.0	0.10
PT	130	31	0.25	1	–	5.0	2.0	0.25
PT	130	32	0.4	5	–	6.0	2.0	0.08
PT	130	33	0.35	3	–	3.8	2.0	0.12
PT	130	34	0.25	0.5	–	4.8	3.0	0.50
PT	130	35	0.25	3	–	5.5	3.0	0.08
PT	130	36	0.3	2	–	5.0	2.0	0.15
PT	130	37	0.4	4	–	3.5	1.0	0.10
PT	130	38	0.3	1	–	3.5	2.0	0.30
PT	130	39	0.35	2	–	5.5	4.0	0.18
PT	130	40	0.35	1	–	–	–	0.35
PT	52.5	1	0.35	3	–	6.8	3.0	0.12
PT	52.5	2	0.5	4.5	–	6.3	2.0	0.11
PT	52.5	3	0.5	4	–	7.8	3.0	0.13
PT	52.5	4	0.5	5.5	–	6.3	1.0	0.09
PT	52.5	5	0.45	5	–	9.0	4.0	0.09
PT	52.5	6	0.5	5	–	8.5	3.0	0.10
PT	52.5	7	0.4	6	–	10.0	6.5	0.07
PT	52.5	8	0.25	1	–	5.0	4.0	0.25
PT	52.5	9	0.25	1	–	7.5	5.5	0.25
PT	52.5	10	0.4	3	–	13.0	9.0	0.13
PT	52.5	11	0.5	5	–	10.0	6.0	0.10
PT	52.5	12	0.4	3	–	11.5	6.0	0.13
PT	52.5	13	0.45	8	–	9.5	3.0	0.06
PT	52.5	14	0.4	5	–	5.8	2.5	0.08
PT	52.5	15	0.35	1.5	–	4.3	1.0	0.23
PT	52.5	16	0.4	5	–	6.0	2.0	0.08
PT	52.5	17	0.6	3	–	12.0	9.0	0.20
PT	52.5	18	0.5	3	–	7.5	5.0	0.17
PT	52.5	19	0.3	2	–	6.8	5.0	0.15
PT	52.5	20	0.3	1.5	–	8.8	5.0	0.20
PT	52.5	21	0.5	6	–	8.9	5.0	0.08
PT	52.5	22	0.45	1.8	–	3.9	1.5	0.25
PT	52.5	23	0.35	3	–	9.6	6.0	0.12
PT	52.5	24	0.35	4.2	–	4.1	1.0	0.08

(*continued*)

Table S1. Continued

Section	Level, m	Concretion	Thickness, m	Length, m	Width, m	Center-center Distance, m	Empty Space, m	T/L
PT	52.5	25	0.25	2	–	8.3	6.0	0.13
PT	52.5	26	0.4	2.5	–	4.8	2.0	0.16
PT	52.5	27	0.3	3	–	6.5	4.0	0.10
PT	52.5	28	0.4	2	–	3.3	1.0	0.20
PT	52.5	29	0.3	2.5	–	5.0	3.0	0.12
PT	52.5	30	0.3	1.5	–	7.8	6.0	0.20
PT	52.5	31	0.3	2	–	4.8	3.0	0.15
PT	52.5	32	0.5	1.5	–	10.5	7.0	0.33
PT	52.5	33	0.45	5.5	–	6.0	2.5	0.08
PT	52.5	34	0.4	1.5	–	3.8	2.0	0.27
PT	52.5	35	0.35	2	–	8.8	6.0	0.18
PT	52.5	36	0.4	3.5	–	11.8	7.0	0.11
PT	52.5	37	0.45	6	–	13.8	6.0	0.08
PT	52.5	38	0.5	9.5	–	7.3	1.0	0.05
PT	52.5	39	0.45	3	–	5.5	2.0	0.15
PT	52.5	40	0.5	4	–	4.3	1.5	0.13
PT	52.5	41	0.45	1.5	–	10.8	8.0	0.30
PT	52.5	42	0.3	4	–	–	–	0.08

Abbreviations: – = no measurement; PC = Puerta Curaco; PT = Pampa Tril; SaVM = Sierra de la Vaca Muerta; T/L = thickness/length.
*Outlier (removed in calculation of mean values for Table S2 in the supplementary material available as AAPG Datashare 144 at www.aapg.org/datashare).

Table S2. Concretion Data per Level

Section	Level (m)	Seq	Cycle Set Analysis	Sequence Analysis	Number of Measurements			Added Space (m)	Scanline Length (m)	Mean Length	Std Dev	Mean Thick.	Std Dev	Mean Space	Std Dev	Mean Dist	Std Dev	Mean T/L	Std Dev	DIL
					Thick.	Length	Spacing													
PC	204	5	R	T	2	2	1	21	34.9	1.93	1.03	0.33	0.21					0.17	0.02	0.11
PC	194	4	R	TOP	8	8	7	8	54.8	1.69	1.37	0.63	0.25	4.76	3.00	6.50	3.32	0.49	0.23	0.25
PC	174	4	R	R	21	21	20	6	135.9	1.63	0.51	0.48	0.13	4.79	2.67	6.43	2.60	0.32	0.12	0.25
PC	168	4	R	R	33	33	32	6	184.8	2.49	1.65	0.26	0.13	3.02	2.71	5.52	3.28	0.17	0.13	0.44
PC	165	4	R	R	19	19	18	9	179.6	3.31	1.48	0.58	0.25	5.98	5.40	9.30	5.79	0.23	0.20	0.35
PC	160	4	R	R	38	38	37	4	212.2	1.75	1.01	0.37	0.11	3.83	3.21	5.58	3.34	0.29	0.19	0.31
PC	157.5	4	R	~MFS	17	17	15	14	81	1.45	0.81	0.40	0.12	2.83	3.91	4.26	4.01	0.35	0.18	0.30
PC	153	4	T	~MFS	5	5	4	15	70.2	1.71	1.73	0.34	0.10	11.67	13.77	13.56	14.67	0.30	0.16	0.12
PC	150	4	R	T	33	33	32	11	150.3	1.52	0.98	0.31	0.13	2.79	2.47	4.31	2.46	0.26	0.15	0.33
PC	147.5	4	R	T	6	6	5	13	100	2.23	0.74	0.36	0.05	14.72	12.00	17.07	11.72	0.19	0.12	0.13
PC	144	4	T	T	81	81	78	–	431.8	1.49	0.93	0.39	0.14	3.99	3.44	5.42	3.75	0.34	0.23	0.28
PC	141	4	T	T	9	9	7	21	76.6	2.70	1.59	0.41	0.12	2.63	2.62	5.41	2.70	0.20	0.09	0.32
PC	137	4	R	T	4	4	2	34	71.8	8.83	2.18	0.53	0.12	1.23	1.03	10.05	2.33	0.06	0.02	0.49
PC	133	4	T	T	7	7	4	26	52.1	2.71	0.43	0.38	0.05	1.76	0.80	4.43	0.86	0.14	0.02	0.36
PC	130	4	R	T	23	23	20	13	148.5	2.90	1.17	0.48	0.11	3.44	2.81	6.36	3.00	0.19	0.08	0.45
PC	129	4	R	T	20	20	17	18	105	2.28	1.76	0.24	0.05	2.44	2.95	4.64	3.12	0.17	0.13	0.43
PC	126	4	*	*	1	1	0	4	10.2											
PC	122	4	*	*	1	1	0	4	15.2											
PC	118	3	R	TOP	7	7	4	10	49.2	4.25	1.41	0.71	0.24	2.35	1.12	6.69	2.27	0.18	0.06	0.60
PC	96.1	3	R	R	4	4	3	4	35.5	4.18	4.59	0.17	0.06	4.92	3.66	6.68	5.48	0.22	0.23	0.47
PC	77	3	R	~MFS	28	28	26	11	199.9	3.36	1.73	0.63	0.19	3.00	1.91	6.31	2.32	0.22	0.12	0.47
PC	55	2	R	TOP	47	47	46	8	355.3	3.31	1.76	0.45	0.10	3.86	3.62	7.12	3.94	0.16	0.07	0.44
PC	51	2	R	R	8	8	7	6	77.9	1.09	0.47	0.25	0.11	4.31	3.43	5.45	3.22	0.29	0.18	0.11
PC	50	2	R	R	3	3	2	31	72.6	4.77	0.25	0.54	0.10	13.63	7.46	18.40	7.64	0.11	0.02	0.20
PC	25.5	2	*	*	1	1	0	4	4.85											
PC	24.2	2	*	*	1	1	0	4	5.48											
PC	21.75	2	*	*	1	1	0	4	9.15											
PC	21.5	2	*	*	1	1	0	4	5.15											
PC	17.8	2	T	T	4	4	3	4	19.5	0.87	0.30	0.15	0.02	4.00	1.36	4.84	4.23	0.18	0.07	0.18
PC	16.6	2	T	T	4	4	3	4	7.8	0.61	0.28	0.15	0.03	0.47	0.50	1.11	0.70	0.27	0.08	0.31
PC	15	2	R	T	5	5	4	4	14.5	0.65	0.11	0.27	0.08	1.81	2.15	2.48	2.15	0.40	0.08	0.23
PC	9	1	T	R	7	7	5	4	24.6	0.88	0.22	0.20	0.03	2.90	3.08	3.74	3.07	0.24	0.06	0.25
PC	7.9	1	T	R	6	6	5	4	23.4	0.60	0.16	0.28	0.09	3.16	2.37	3.74	2.38	0.47	0.08	0.15
PC	5.6	1	R	MFS	16	16	15	4	32.3	0.83	0.49	0.21	0.05	1.00	0.95	1.81	1.08	0.30	0.12	0.41

(*continued*)

Table S2. Continued

Section	Level (m)	Seq	Cycle Set Analysis	Sequence Analysis	Number of Measurements			Added Space (m)	Scanline Length (m)	Mean Length	Std Dev	Mean Thick.	Std Dev	Mean Space	Std Dev	Mean Dist	Std Dev	Mean T/L	Std Dev	DIL
					Thick.	Length	Spacing													
PT	156	4	R	∼MFS	83	83	82	–	552	2.92	1.45	0.45	0.09	3.78	2.62	6.70	2.99	0.18	0.07	0.44
PT	130	4	R	T	40	40	39	–	230.5	3.93	4.08	0.33	0.08	1.88	1.20	5.88	3.28	0.16	0.12	0.68
PT	52.5	2	R	TOP	42	42	41	–	321.5	3.51	1.92	0.40	0.09	4.07	2.30	7.59	2.72	0.14	0.07	0.46
SaVM	87.5	2	R	MFS	8	8	7	4	33.7	0.65	0.28	0.29	0.11	3.50	2.00	4.14	2.14	0.47	0.13	0.17
SaVM	85	2	T	∼MFS	15	15	14	4.5	32.8	0.57	0.42	0.19	0.12	1.41	1.44	1.94	1.45	0.38	0.21	0.27
SaVM	84.5	2	T	∼MFS	11	11	9	4	21.6	0.41	0.23	0.18	0.08	1.46	0.86	1.83	0.92	0.48	0.14	0.21
SaVM	83	2	*	*	1	1	0	4	5											
SaVM	82	2	*	*	1	1	0	4	4.38											
SaVM	81	2	R	T	23	23	21	4	43.1	0.92	0.71	0.35	0.23	0.85	0.99	1.75	1.29	0.44	0.13	0.49
SaVM	77.5	2	R	T	10	10	8	4	30.3	0.59	0.15	0.21	0.05	2.55	1.62	3.14	1.66	0.37	0.11	0.20
SaVM	77	2	*	*	1	1	0	4	4.6											
SaVM	76	2	R	T	10	10	8	–	33.9	0.69	0.30	0.25	0.14	3.37	2.47	4.02	2.45	0.37	0.18	0.20
SaVM	75	2	*	*	1	1	0	4	4.8											
SaVM	74	2	T	T	3	3	2	6	9.2	0.45	0.15	0.19	0.03	0.94	0.76	1.39	0.87	0.45	0.15	0.15
SaVM	71	2	T	T	5	5	4	–	18.7	1.30	0.58	0.42	0.16	3.05	2.87	4.38	2.76	0.36	0.17	0.35
SaVM	69	2	R	T	10	10	9	–	24.7	0.90	1.03	0.28	0.12	1.74	2.05	2.70	2.25	0.49	0.23	0.37
SaVM	66	2	*	*	1	1	0	4	5											
SaVM	63.5	2	*	*	1	1	0	14	15											
SaVM	62.3	2	T	T	23	23	21	9	59	0.74	0.78	0.23	0.13	1.57	1.32	2.20	1.56	0.44	0.18	0.29
SaVM	61.5	2	*	*	1	1	0	4	7											
SaVM	60	2	T	T	9	9	7	4	22.4	0.63	0.21	0.18	0.03	1.82	0.87	2.43	0.73	0.32	0.12	0.25
SaVM	57.5	2	T	T	3	3	2	–	10	0.48	0.03	0.19	0.03	4.28	1.77	4.75	1.77	0.40	0.10	0.15
SaVM	55	2	R	T	4	10	8	17	64.2	0.69	0.24	0.29	0.07	0.83	0.43	1.48	0.43	0.51	0.20	0.11
SaVM	54	2	R	T	2	2	1	23.3	37.5	2.20	1.48	0.53	0.25					0.26	0.06	0.12
SaVM	53.5	2	R	T	10	12	10	23	57.2	0.59	0.21	0.37	0.14	2.71	2.62	3.29	2.60	0.64	0.09	0.12
SaVM	48	2	*	*	2	2	1	30	36											
SaVM	43	2	*	*	1	1	0	4	5.3											
SaVM	42	2	*	*	2	2	1	4	7.6											

Total levels = 62; excluded levels (*) = 16; quantified levels for T-R analysis = 46. Spacing measurements refer to both center–center distance and empty space (space). Added space (per level) = additional empty space measured to either end of each scanline. Scanline length = concretion length + empty space + added space.

Abbreviations for sections: PC = Puerta Curaco; PT = Pampa Tril; SaVM = Sierra de la Vaca Muerta.

Abbreviations for cycle set and sequence (seq) analysis: MFS = maximum flooding surface; ∼MFS = concretion levels that occur near the MFS; R = regressive except uppermost part; T = transgressive; TOP = uppermost part of regressive.

Other abbreviations: – = no measurement; DIL = density index per level.; Std Dev = standard deviation; thick. = thickness; T/L = thickness/length.

* Not considered in calculation of DIL or in cycle set or sequence.