







APPENDIX B: CORE DESCRIPTION OF VELMA

Depth								Facies	Lithology	Structures	Fractures
(ft)	S	VF	F	M	C	VC					
11819											
1"								BBF			N
2"								BBF			N
3"								BBF			N
4"								BBF			N
5"								BBF		slickensides	Y
6"								BBF		slickensides	Y
7"								BBF			N
8"								BBF			N
9"								BBF			N
10"								BBF			N
11"								BBF			N
12"								BBF			N
1"								BBF		slickensides	Y

11820	2"							BBF				N
	3"							BBF				N
	4"							BBF				N
	5"							BBF				N
	6"							BBF				N
	7"							BBF				N
	8"							BBF				N
	9"							BBF		slickensides		Y
	10"							BBF		slickensides		Y
	11"							BBF				N
	12"							BBF				N
		1"							n/a			
	2"							n/a				
	3"							n/a				





11821	4"							n/a				
	5"							n/a				
	6"							n/a				
	7"							n/a				
	8"							n/a				
	9"							n/a				
	10"							n/a				
	11"							n/a				
	12"							n/a				
	1"								BBF		slickensides	Y
	2"								BBF		slickensides	Y
	3"								BBF		slickensides	Y
4"								BBF		slickensides	Y	
5"								BBF			N	



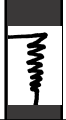










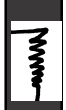
11822	6"						BBF				N
	7"						BIL		continuous, wavy, nonparallel		N
	8"						BIF	faint laminae			N
	9"						BIF				N
	10"						BIF				N
	11"						BIF				N
	12"						BIF				N
	11823	1"						BrM			
2"							BrM				N
3"							BrM				N
4"							BrM				N
5"							BrM				N
6"							BIT		continuous, planar, parallel		N
7"							BIT		continuous, planar, parallel		N



11824	8"							BIT			N
	9"							BIT	noncontinuous, wavy, nonparallel		N
	10"							BIM			N
	11"							BIM			N
	12"							BIM			N
	1"							BrM			N
	2"							BrM			N
	3"							BrM			N
	4"							BrM			N
	5"							BIM			N
	6"							BIM			N
	7"							BIM			N
	8"							BIM			N
	9"							BIM			N






11825	10"						BIM			N
	11"						BIM			N
	12"						BrM			N
	1"						BrM			N
	2"						BrM			N
	3"						BrM			N
	4"						BrM			N
	5"						BrM			N
	6"						BIM			N
	7"						BIM			N
	8"						BIM			N
	9"						BIM			N
	10"						BIM			N
	11"						BIM			N

	12"							BIM				N
11826	1"							BrM				N
	2"							BrM				N
	3"							BrM				N
	4"							BrM				N
	5"							BrM				N
	6"							BIM				N
	7"							BIM				N
	8"							BIM				N
	9"							BIM				N
	10"							BIM				N
	11"							BIM				N
	12"							BIM				N
	1"							BrM				N

11827	2"						BrM			N
	3"						BrM			N
	4"						BrL	single continuous, planar laminae		N
	5"						BIM			N
	6"						BIM			N
	7"						BIM			N
	8"						BIM			N
	9"						BIM			N
	10"						BIL	continuous, wavy, nonparallel		N
	11"						CS			N
	12"						BrM			N
	1"						BrM	slickensides		Y
	2"						BrM	slickensides		Y
	3"						BBL			Y

11829	6"								CL		slickensides	Y
	7"								BIM		slickensides	Y
	8"								BIM		slickensides	Y
	9"								BIM		slickensides	Y
	10"								BIM		slickensides, single coarse laminae	Y
	11"								BIM		slickensides	Y
	12"								BIM		slickensides	Y
	11830	1"								BrM		slickensides
2"									BrM		slickensides	Y
3"									BrM		slickensides	Y
4"									BrM		slickensides	Y
5"									BrM		slickensides	Y
6"									BIM		slickensides	Y
7"									BIM		slickensides	Y










11831	8"								BrM		slickensides	Y
	9"								BrM		slickensides	Y
	10"								BrM		slickensides	Y
	11"								BrM		slickensides	Y
	12"								BrM		slickensides	Y
	1"								n/a			N
	2"								n/a			N
	3"								n/a			N
	4"								n/a			N
	5"								n/a			N
	6"								n/a			N
	7"								n/a			N
8"								n/a			N	
9"								n/a			N	














	12"							BIM				N
11833	1"							CS	high pyritization, light grey	slickensides, upward fining sequence		Y
	2"							CS	high pyritization, light grey	slickensides, upward fining sequence		Y
	3"							CS	high pyritization, light grey	slickensides, upward fining sequence		Y
	4"							BrM				N
	5"							BrM				N
	6"							BrM				N
	7"							BrM		fossil		N
	8"							BrM		fossil		N
	9"							BIM				N
	10"							BIM				N
	11"							BIM				N
	12"							BIM				N
	1"							BIM				N




11834	2"						BrM				N
	3"						BrM				N
	4"						BrM				N
	5"						BrM				N
	6"						BrM				N
	7"						BIL		single, planar continuous laminae		N
	8"						BIM				Y
	9"						BIM				Y
	10"						BIM		slickensides		N
	11"						BIM		slickensides		Y
	12"						BIM		slickensides		N
	1"						BIL		upward coarsening, slickensides		N
	2"						BIL		upward coarsening		N
	3"						BIL		upward coarsening, slickensides		N

11835	4"							BIM		slickensides	N
	5"							BIM		slickensides	N
	6"							DDFM D		slickensides	Y
	7"							DDFM D		slickensides	Y
	8"							DDFM D			Y
	9"							DDFM D			Y
	10"							DDFM D		slickensides	N
	11"							DDFM D			N
	12"							DDFM D		slickensides	N
	1"							DDFM D			N
	2"							DDFC L			Y
	3"							DDFC L		slickensides	N
4"							DDFM L		slickensides	N	
5"							DDFM L		slickensides	N	

11836	6"							DDFM D		slickensides, flame structure	N
	7"							DDFM D		flame structure	N
	8"							DDFM D			N
	9"							DDFM D			N
	10"							DDFM D			Y
	11"							DDFM D			Y
	12"							DDFM D			Y
11837	1"							DDFM L			Y
	2"							DDFM L		dark spot	Y
	3"							DDFM L		dark spot	N
	4"							DDFM L			N
	5"							DDFM L			Y
	6"							DDFM D			Y
	7"							DDFM D			Y

11839	10"							DDFM D			Y
	11"							DDFM D			Y
	12"							DDFM D			Y
	1"							DDFM D			Y
	2"							DDFM D	few large grains		Y
	3"							DDFM D	few large grains		Y
	4"							DDFM D	few large grains		Y
	5"							DDFM D	few large grains		Y
	6"							DDFC D	few large grains		Y
	7"							DDFC D	few large grains		Y
	8"							DDFC D	few large grains		Y
	9"							DDFC D	few large grains		Y
	10"							DDFM D	few large grains		N
	11"							DDFM D			N

11840	12"								DDFM D				N
	1"								DDFC D				N
	2"								DDFC D				N
	3"								DDFC D				N
	4"								BIF	jumbled		slickensides	Y
	5"								BIF	jumbled		slickensides	Y
	6"								BIF	jumbled		slickensides	Y
	7"								BIF	jumbled		slickensides	Y
	8"								BIF	jumbled		slickensides	Y
	9"								BIF	jumbled		slickensides	Y
	10"								BIL			slickensides, single wavy, continuous white laminae	Y
	11"								BIM				N
	12"								BIM				N
	1"								n/a				











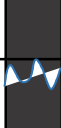
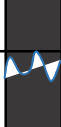
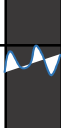

11841	2"							n/a			
	3"							n/a			
	4"							n/a			
	5"							n/a			
	6"							n/a			
	7"							n/a			
	8"							n/a			
	9"							n/a			
	10"							n/a			
	11"							n/a			
	12"							n/a			
	1"								BrM		small, thin, white clasts, slickensides
2"								BrM		small, thin, white clasts, slickensides	Y
3"								BrM		small, thin, white clasts, slickensides	Y










11842	4"							BrM		small, thin, white clasts	N
	5"							BIL		noncontinuous, wavy, nonparallel laminae	N
	6"							BBFD			N
	7"							BBFD			N
	8"							BBFD			N
	9"							BBFD		slickensides	N
	10"							BBFD			N
	11"							BBFD			N
	12"							BBFD			N
	1"							BBF		slickensides	N
	2"							BBF		slickensides	N
	3"							BBF		slickensides	N
4"							BBF		slickensides	N	
5"							BBF		slickensides	N	








11843	6"									BBF		slickensides	N
	7"									BIL		slickensides, faint, continuous, planar dark laminae	N
	8"									BIM			N
	9"									BIM			N
	10"									BIM		slickensides	N
	11"									BIM		slickensides	N
	12"									BIM		slickensides	N
	11844	1"									BrM		small, thin, white clasts
2"										BrM		small, thin, white clasts	N
3"										BrM		small, thin, white clasts	N
4"										BrM		small, thin, white clasts	N
5"										BIM		small, thin, white clasts	N
6"										BIM		small, thin, white clasts	N
7"										BIL		dark, continuous, planar, nonparallel laminae, single white noncontinuous planar laminae	N

11846	10"								N	nodule with nucleus		slickensides	Y
	11"								BrF			slickensides	Y
	12"								BrF			slickensides	Y
	1"								BrF			slickensides	Y
	2"								BrF			slickensides	Y
	3"								BrF			slickensides	Y
	4"								BBFD			slickensides	Y
	5"								BBFD			slickensides	Y
	6"								BBFD			slickensides	Y
	7"								BBFD			slickensides	Y
	8"								BBFD	pyrite/apatite		slickensides	Y
	9"								BBFD			slickensides	Y
	10"								BBFD			slickensides	Y
	11"								BBFD			slickensides	Y

11847	12"							BBFD		slickensides	Y
	1"							BrF		slickensides	Y
	2"							BrF		slickensides	Y
	3"							BrF		slickensides	Y
	4"							BrF			N
	5"							BBF			N
	6"							BBF			N
	7"							BBF		skeletal fragments	N
	8"							BBF		skeletal fragments	N
	9"							BBF		skeletal fragments, skeletal laminae	N
	10"							BBF	small nodule	skeletal fragments	N
	11"							BBF		skeletal fragments, slickensides	N
	12"							BBF		single white, continuous, wavy laminae, slickensides	N
	1"							BrF		slickensides	N

11848	2"							BrF		slickensides	N
	3"							BrF		slickensides	N
	4"							BrF			N
	5"							BrL		continuous, planar, parallel laminae	N
	6"							BIM	higher clay content		N
	7"							BBFD			N
	8"							BBFD	increasing brown		N
	9"							BBFD	increasing brown		N
	10"							BBFD	increasing brown		N
	11"							BBFD	increasing brown		N
	12"							BBFD	increasing brown		N
	1"							BBF			N
	2"							BBF			N
	3"							BBF			N

11849	4"							BBF				N
	5"							BBF				N
	6"							BBF				N
	7"							BBF				N
	8"							BBF				N
	9"							BBF				N
	10"							BBF				N
	11"							BBF				N
	12"							BBF		fossils		N
	1"							n/a				
	2"							n/a				
	3"							n/a				
4"							n/a					
5"							n/a					

11850	6"							n/a			
	7"							n/a			
	8"							n/a			
	9"							n/a			
	10"							n/a			
	11"							n/a			
	12"							n/a			
	11851	1"							BBF		slickensides
2"								BBF		slickensides	Y
3"								BBF		slickensides	Y
4"								BBF		slickensides	Y
5"								BBF		slickensides	Y
6"								BBF		slickensides	Y
7"								BBF		slickensides	Y

11852	8"							BBF		slickensides	Y
	9"							BBF		slickensides	Y
	10"							BIL		slickensides, continuous, parallel, wavy	Y
	11"							BBF			N
	12"							BBF			N
	1"							BBF		slickensides	Y
	2"							BBF			N
	3"							BBF		slickensides	Y
	4"							BBF			N
	5"							BBFD	darker(more black)		N
	6"							BBFD	darker(more black)		N
	7"							BBFD	darker(more black)		N
	8"							BBFD	darker(more black)		N
	9"							N	nodule		N

11853	10"						BBF	jumbled			N
	11"						BBF	jumbled			N
	12"						BBF	jumbled			N
	1"						BrF				N
	2"						BrF				N
	3"						BrF				N
	4"						BrF				N
	5"						BrF				N
	6"						BrF				N
	7"						BBFD				N
	8"						BBFD				N
9"						BBFD				N	
10"						BBFD				N	
11"						BBFD				N	

	12"							n/a				
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