

AAPG Datashare XXX Supplemental Material 4:
Regional Core Data for the Red River “B” Dolostone Flow Unit
By David M. Petty

This Datashare Supplement is a summary of publicly available routine core analysis data for the Red River “B” flow unit in the North Dakota, Montana and South Dakota portion of the Williston Basin.

Porosity (Φ), air permeability (Ka), and net porosity thickness (H) are for samples with porosity >6%.

Samples labeled as fractured were excluded from permeability data.

M = Red River “B” consists partially or entirely of Massive dolostone in this well.

ICC = Incomplete Core Coverage for the Red River “B” flow unit in this well. ID = Insufficient Data

State	Well location (T-R-Sec.)	NDIC or API #	H (ft)	Avg. Φ (%)	Max Φ (%)	Avg. Ka (md)	Max Ka (md)	Avg. Depth (ft TVD)
ND	129N-103W-6	11451	9	15.2	23.3	3.7	13.	9,280
ND	129N-104W-11	13830	10	14.0	18.6	1.8	5.6	9,270
ND	129N-104W-30	10327	10	16.4	21.4	4.5	7.7	9,090
ND	129N-104W-31	10182	19	14.0	21.6	6.6	25.	8,950
ND	129N-105W-9	14127	10	16.9	20.9	3.2	14.3	8,915
ND	129N-106W, 4	3312	10	16.4	22.0	1.3	5.2	8,240
ND	129N-106W-9	6113	17	13.9	22.4	3.5	30.	8,160
ND	129N-106W-9	6161	11	16.4	25.2	1.4	5.2	8,140
ND	129N-106W-15	14521	7	11.0	14.4	0.25	0.4	8,280
ND	129N-106W-23	6203	12	13.6	21.8	3.1	16.	8,450
ND	130N-103W-17	15463	11	17.1	23.5	4.9	42.	9,510
ND	130N-104W-18	13918	13	15.0	23.5	3.4	9.	9,250
ND	130N-104W-24	4932	11	17.7	27.6	14.4	37.	9,470
ND	130N-104W-31	13841	14	14.3	19.2	9.7	64.	9,175
ND	130N-105W-27	14491	ICC	-	-	-	-	9,385
ND	130N-106W-7	3542	12	13.2	18.9	3.2	16	8,450
ND	130N-106W-8	4135	11	17.5	23.1	3.6	8.2	8,445
ND	130N-106W-9	14070	10	17.6	24.0	13.	36.	8,470
ND	130N-106W-18	4057	11	19.2	25.2	4.2	21	8,415
ND	130N-106W-30	3514	10	16.0	21.5	2.1	7.9	8,310
ND	130N-106W-30	12155	10	17.1	22.3	5.0	17.	8,255
ND	130N-107W-3	2961	18	12.4	21.5	5.2	18	8,220
ND	130N-107W-10	2761	12	16.0	22.0	5.7	13.8	8,220
ND	130N-R107W-12	3362	9	14.6	24.3	5.4	16.1	8,335
ND	130N-107W-13	3046	15	15.6	24.2	6.3	20.	8,280
ND	131N-104W-18	14075	10	18.4	27.4	13.5	56.	9,465
ND	131N-104W-21	4669	9	16.0	22.0	13.2	38.	9,650
ND	131N-105W-15	5070	7	16.4	26.6	4.4	13.	9,265
ND	131N-105W-22	13965	10	18.5	24.8	12.6	38.	9,225
ND	131N-106W-11	15829	ICC	-	29.7	-	109.	8,928
ND	131N-106W-16	13928	11	18.4	24.9	11.7	29.	8,880

<u>State</u>	<u>Well location</u> (T-R-Sec.)	<u>NDIC or API #</u>	<u>H</u> (ft)	<u>Avg. Φ</u> (%)	<u>Max Φ</u> (%)	<u>Avg. K_a</u> (md)	<u>Max K_a</u> (md)	<u>Avg. Depth</u> (ft TVD)
ND	131N-106W-24	13756	14	16.5	23.0	6.1	11	8,855
ND	131N-106W-31	13998	7	16.2	25.1	7.0	17	8,665
ND	131N-107W-35	3144	11	14.3	27.1	5.0	18.	8,370
ND	132N-105W-15	14581	ICC	-	23.9	-	23.	9,565
ND	132N-106W-10	13931	11	18.1	25.3	8.5	37.	9,210
ND	132N-106W-26	13772	8	19.0	27.9	6.7	13.	9,115
ND	132N-106W-29	14182	ICC	-	-	-	-	9,008
ND	132N-106W-32	13749	ICC	-	24.8	-	16.	-
ND	132N-107W-12	13970	9	17.2	24.5	4.0	11.	8,930
ND	132N-107W-36	13872	8	14.6	21.6	5.0	8.5	8,890
ND	133N-97W-25	8010	9	18.5	20.5	17.2	64.	10,130
ND	136N-96W-14	7876	6	16.6	22.8	3.5	9.4	11,050
ND	136N-101W-8	4119	10	18.9	28.1	6.3	20.	11,235
ND	136N-101W-23	4241	8	24.7	27.3	19.8	36.	11,375
ND	139N-106W-10	6861	5	22.7	27.0	10.4	33.	11,165
ND	141N-104W-31	6513	0	-	-	-	-	11,875
ND	141N-105W-3	22569	12	15.8	22.5	4.3	15.9	11,790
ND	142N-99W-3	7618	12	10.8	14.2	0.5	1.2	13,350
ND	142N-103W-3	7255	23	12.7	22.0	3.1	34.	12,410
ND	144N-102W-19	8070	18	14.7	20.4	2.5	12.	12,530
ND	145N-100W-25	7501	10	12.5	19.1	1.8	4.1	13,440
ND	145N-103W-17	7218	15	8.0	9.9	0.2	0.8	12,820
ND	145N-103W-29	6544	11	14.0	16.7	1.3	3.3	12,640
ND	146N-80W-31	8711	3	9.2	10.3	0.04	0.07	7,770
ND	147N-96W-10	9103	4	7.3	8.6	ID	ID	13,770
ND	147N-101W-22	6718	9	13.8	20.7	3.1	9.7	13,085
ND	148N-96W, 10	2400	ICC	-	-	-	-	14,045
ND	148N-102W-16	5836	3	9.6	12.0	1.0	1.6	13,550
ND	149N-80W-26	8993	18	22.3	33.1	14.	44.	7,780
ND	149N-95W-3	9676	10	9.0	11.5	0.2	0.4	14,235
ND	149N-104W-31	5821	6	9.1	13.7	1.2	6.	12,440
ND	150N-95W-7	8083	ICC	-	-	-	-	13,810
ND	150N-95W-10	10247	ICC	-	19.4	ID	ID	13,825
ND	150N-104W-14	7971	4	7.5	9.9	0.4	1.1	12,885
ND	151N-80W-22	8803	11	15.3	26.1	1.1	5.2	7,740
ND	151N-89W-23	14815	0	-	-	-	-	12,120
ND	151N-90W-36	8559	15	8.5	12.0	1.7	9.7	12,640
ND	151N-95W-30	8339	8	8.1	10.0	1.0	5.0	13,760
ND	152N-95W-1	2373	6	8.8	11.4	0.2	0.5	13,180
ND	152N-101W-6	6501	2	7.0	7.1	0.2	0.2	13,475
ND	153N-94W-30	12589	2	8.7	9.5	0.02	0.02	13,485
ND	153N-101W-20	10431	1	8.0	8.0	0.7	0.7	13,070

<u>State</u>	<u>Well location</u> (T-R-Sec.)	<u>NDIC or API #</u>	<u>H</u> (ft)	<u>Avg. Φ</u> (%)	<u>Max Φ</u> (%)	<u>Avg. Ka</u> (md)	<u>Max Ka</u> (md)	<u>Avg. Depth</u> (ft TVD)
ND	154N-95W-18	13667	8	9.2	11.4	ID	ID	13,895
ND	154N-95W-33	7607	7	8.3	9.5	0.9	4.1	13,030
ND	155N-101W-5	6642	0	-	-	-	-	13,380
ND	156N-100W-27	10646	1	6.1	6.1	0.02	0.02	13,535
ND	158N-95W-12	12119	6	7.9	9.9	0.06	0.2	12,620
ND	158N-97W-27	9800	6	17.5	22.9	1.5	3.7	13,355
ND	162N-96W-16	6798	0	-	-	-	-	11,190
MT	2N-61E-5	25-011-21208	8	11.5	16.4	0.34	0.81	9,060
MT	3N-61E-31	25-025-21217	9	8.9	13.9	1.3	9.1	9,170
MT	5N-59E-19	25-025-05088	M	-	21.1	-	114.	9,650
MT	6N-61E-26	25-025-21697	IC	-	24.2	-	20.2	8,755
MT	7N-60E-12	25-025-05232	9	14.2	20.6	2.9	6.	9,265
MT	7N-61E-29	25-025-22227	9	15.1	21.0	4.1	11.2	9,085
MT	10N-58E-5	25-025-21358	19	15.6	22.2	8.7	110.	9,050
MT	11N-58E-31	25-025-21293	IC	-	18.9	-	16.	9,080
MT	14N-58E-27	25-109-21143	15	13.4	20.8	5.6	11.	10,590
MT	34N-58E-36	25-091-21107	2	7.9	9.1	0.2	0.4	11,180
MT	37N-57E-8	25-091-05167	7	11.1	12.5	0.6	1.3	10,260
SD	12N-22E-4	40-041-05056	M	-	13.6	-	225.	5,040
SD	12N-22E-4	40-041-20004	M	-	21.4	-	22.9	4,990
SD	12N-22E-4	40-041-20008	M	-	17.5	-	632.	5,050
SD	12N-22E-6	40-041-20014	M	-	-	-	-	5,150
SD	12N-22E-8	40-041-20011	M	-	28.0	-	2,370.	5,075
SD	12N-22E-17	40-041-20019	M	-	28.0	-	2,250.	5,090
SD	13N-22E-30	40-041-20022	7	12.1	22.0	4.8	14.5	5,085
SD	17N-25E-15	40-041-20030	ICC	-	28.9	-	327.	4,920
SD	19N-7E-11	40-063-20096	4	19.4	25.8	4.8	6.6	8,110
SD	19N-16E-24	40-105-20016	9	17.8	24.0	18.4	48.	7,135
SD	20N-4E-2	40-063-20090	17	18.5	22.6	8.8	59.	8,460
SD	20N-4E-4	40-063-20205	12	18.4	26.6	2.0	6.0	8,500
SD	20N-4E-5	40-063-20174	17	19.5	25.9	11.0	28.	8,380
SD	20N-4E-12	40-063-20142	19	19.9	24.1	4.4	13.	8,410
SD	20N-4E-14	40-063-20127	18	17.2	22.5	3.5	23.	8,480
SD	20N-4E-20	40-063-20209	18	19.5	27.6	6.4	22.	8,320
SD	21N-3E-36	40-063-20189	16	17.6	25.8	6.0	43.	8,410
SD	21N-4E-5	40-063-20123	15	18.8	30.8	17.6	138.	8,600
SD	21N-3E-5	40-063-05058	ICC	-	21.1	-	38.	8,580
SD	21N-4E-6	40-063-20230	6	20.0	23.1	8.2	17.	8,610
SD	21N-4E-10	40-063-20268	ICC	-	25.3	-	45.	8,675
SD	21N-4E-18	40-063-20185	17	19.2	25.4	11.5	75.	8,570

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SD	21N-5E-9	40-063-20772	ICC	-	25.6	-	35.	8,675
SD	21N-19E-26	40-031-20021	19	21.0	38.5	60.1	237.	6,750
SD	22N-3E-1	40-063-20385	12	17.4	21.6	4.7	24.	8,960
SD	22N-3E-26	40-063-20418	15	19.0	24.9	3.0	9.3	8,670
SD	22N-4E-17	40-063-20391	17	17.9	25.0	8.8	25	8,910
SD	22N-16E-16	40-063-20769	4	17.9	21.4	5.9	9.6	8,970
SD	22N-21E-18	40-031-20022	16	19.6	32.8	34.5	234	6,520
SD	23N-2E-23	40-063-20136	13	16.9	26.1	ID	ID	8,470
SD	23N-3E-23	40-063-20392	11	16.9	27.4	4.8	34	8,920
SD	23N-3E-34	40-063-05070	13	14.4	22.6	ID	ID	8,865