

**ATTACHMENT B**  
**HYDRAULIC HEAD MAPPING METHODS**

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# 1 INTRODUCTION

Hydraulic head mapping was completed using topography, geologic subcrop and outcrop locations, and several types of subsurface data sets including:

- water levels that were measured in water wells with up-hole tools such as water level tapes and depth sounders;
- water levels that were measured in water wells with down-hole pressure recorders such as pressure transducers and vibrating wire piezometers; and
- extrapolated pressures collected by industry during drill stem testing.

The data points were divided according to hydrostratigraphic units, screened for quality control and interpreted with respect to topography and geology. Tables B-1 through B-4 summarize measured water levels in the Regional Study Area (RSA) and are divided according to hydrostratigraphic units. Tables B-5 through B-7 summarize pressure data obtained from industry Drill Stem Test (DST data) and are also divided into hydrostratigraphic units.

The following sections provide further background as to the data sources and describes the Quality Assurance/Quality Control (QA/QC) process employed in screening the data.

**Table B-1 Regional Hydraulic Heads: Empress Formation**

Well ID	Well Location	Unit	Ground Surface	Casing Elevation	Perforated Interval [mbKB]		Mid-Point Perforated Interval		Pressure Head [m]	Hydraulic Head [masl]	East_UTM27z12	North_UTM27z12	Reference
					Top	Bottom	Depth [mbgs]	Bottom [masl]					
PW1	12-28-075-06 W4M	Terrace Sand	605.1	606.3	123.4	129.6	126.5	478.6	149.5	628.1	507474	6153435	Matrix 2005
PW2	12-28-075-06 W4M	Terrace Sand	604.4	605.1	123.1	129.2	126.2	478.3	150.0	628.3	507446	6153440	Matrix 2005
WSW 6-19	06-19-077-05 W4M	Terrace Sand	564.3	N/A	101.8	112.8	107.3	457.0	95.8	552.8	514657	6170746	Westwater 2005a
WEPA 00-3-158	16-04-075-05W4M	Terrace Sand	648.2	648.9	155.4	158.8	157.1	491.1	117.2	608.3	518557	6147239	Lemay 2002
1420120	NW-14-078-09 W4M	Terrace Sand	608.0	N/A	90.5	96.6	93.6	514.4	90.0	604.4	481660	6179485	GIC 2006
100/15-27-084-09W4M	15-27-084-09 W4M	Empress Channel Deposits	716.8	717.8	172.5	210.8	191.6	525.2	79.5	604.7	479481	6241219	Petro Canada 2001
WSW 9-17	09-17-076-06 W4M	Empress Channel Deposits	563.6	563.9	127.4	139.6	133.5	430.1	130.2	560.3	507060	6159817	CH2M Gore & Storrie 1998
OBS 9-17	09-17-076-06 W4M	Empress Channel Deposits	563.6	564.4	121.9	139.0	130.5	433.2	127.0	560.2	507060	6159817	CH2M Gore & Storrie 1998
MW06	08-17-076-06 W4M	Empress Channel Deposits	564.6	N/A	137.2	143.3	140.3	424.3	133.1	557.4	507382.2	6159387.1	Westwater 2005b
MW12	07-16-076-06 W4M	Empress Channel Deposits	566.4	N/A	143.9	154.5	149.2	417.2	137.0	554.1	509008.7	6159390.1	Westwater 2005b
MW13	07-16-076-06 W4M	Empress Channel Deposits	566.5	N/A	112.8	118.9	115.9	450.6	103.7	554.3	509008.7	6159390.1	Westwater 2005b
PW04	07-12-071-04 W4M	Empress Channel Deposits	669.2	N/A	191.7	199.3	195.5	473.7	191.3	665.0	533339	6109554	CH2M Gore & Storrie 1999
WSW 11-21	11-21-073-07 W4M	Empress Channel Deposits	728.0	728.6	284.1	293.5	288.8	439.2	213.4	652.6	498614	6132303	Golder 2000
278986	14-31-076-07 W4M	Empress Channel Deposits	566.0	N/A	N/A	N/A	131.0	435.0	119.9	554.9	494840	6165077	GIC 2006
1420099	15-12-077-09 W4M	Empress Channel Deposits	609.0	N/A	116.1	120.7	118.5	490.5	94.9	585.4	483852	6168343	GIC 2006
WSW 6-19	06-19-077-05 W4M	Empress Channel Deposits	563.0	N/A	101.8	112.8	107.3	455.7	119.3	575.0	514374	6170766	MEG 2005
WR99-1-230	07-36-077-15 W4M	Empress Channel Deposits	663.1	663.8	227.5	230.6	229.1	434.0	159.5	593.5	425426	6174704	Lemay 2002

N/A = Not Available.

**Table B-2 Regional Hydraulic Heads: Grand Rapids**

Well ID	Well Location	Formation	Ground Surface	Casing or KB Elevation	Perforated Interval [mbgs]		Mid-Point Perforated Interval		Pressure Head [m]	Hydraulic Head [masl]	Easting UTM NAD 27 Zn 12	Northing UTM NAD 27 Zn 12	Type of Well	Reference
					Top	Bottom	Depth [mbgs or mKB]	Elevation [masl]						
1-23 deviated well	01-23-070-03W4M	Lower Grand Rapids	729.9	734.4	477.0	518.2	497.6	232.3	256.2	488.5	542339	6102435	Water well	Matrix 2005
1-23 vertical well	01-23-070-03W4M	Lower Grand Rapids	730.3	733.6	443.7	515.7	479.7	250.6	235.0	485.6	542168	6102332	Water well	Matrix 2005
13-14 observation well	13-14-070-03W4M	Lower Grand Rapids	736.2	740.8	465.9	505.4	485.7	250.6	244.2	494.7	541141	6101941	Water well	Matrix 2005
1F1/2-26-083-06W4M	02-26-083-06W4M	Lower Grand Rapids	551.2	552.3	172.8	188.1	180.5	370.8	75.3	446.0	510462	6230290	Water well	Matrix 2003a
00/2-26-083-6W4M	02-26-083-06W4M	Lower Grand Rapids	551.5	554.0	180.5	186.5	183.5	368.0	78.1	446.1	510462	6230276	Water well	Matrix 2003a
1F1/2-21-083-07W4M	02-21-083-07W4M	Lower Grand Rapids	690.3	691.3	290.2	305.7	297.9	392.4	61.5	453.9	497381	6228602	Water well	Matrix 2003b
2-21 Obs Well	02-21-083-07W4M	Lower Grand Rapids	690.6	694.2	N/A	N/A	302.3	388.3	62.3	450.6	497367	6228603	Water well	Matrix 2003b
00/12-15-075-06W4M	12-15-075-06W4M	Lower Grand Rapids	629.6	632.6	292.1	316.1	304.1	325.6	167.8	493.4	509113	6150159	Water well	Westwater 2004
12-24E Piezometer	12-24-082-07W4M	Lower Grand Rapids	N/A	652.7	N/A	N/A	278.6	374.1	80.9	455.0	501945	6219727	Vibrating Wire Piezo.	ConocoPhillips 2005
6-26E Piezometer	06-26-083-06W4M	Lower Grand Rapids	N/A	556.4	N/A	N/A	190.7	365.7	83.7	449.4	509974	6230485	Vibrating Wire Piezo.	ConocoPhillips 2005
AA/11-30-083-06W4M/0	11-30-083-06W4M	Lower Grand Rapids	542.2	544.2	N/A	N/A	N/A	N/A	N/A	451.4	503565	6231121	Water well	ConocoPhillips 2005
F1/08-25-083-07W4M/0	08-25-083-07W4M	Lower Grand Rapids	556.0	556.0	180.4	193.2	186.8	369.2	80.6	449.8	502606	6230773	Water well	ConocoPhillips 2005
8-25 Obs Well	08-25-083-07W4M	Lower Grand Rapids	N/A	N/A	189.4	198.7	194.1	N/A	N/A	452.0	502606	6230820	Water well	ConocoPhillips 2005
10-24D Piezometer	10-24-083-06W4M	Lower Grand Rapids	N/A	547.8	N/A	N/A	183.1	364.7	83.0	447.7	512071	6229447	Vibrating Wire Piezo.	ConocoPhillips 2005
1F2/2-18-083-6W4M (obs)	02-18-083-06W4M	Lower Grand Rapids	629.1	632.9	247.9	261.2	254.6	374.6	73.6	448.2	503921	6226807	Water well	Matrix 2003c
1F1/2-18-083-6W4M	02-18-083-06W4M	Lower Grand Rapids	629.1	632.7	236.4	259.4	247.9	381.2	66.3	447.5	503921	6226837	Water well	Matrix 2003c
1F1/4-18-083-6W4M	04-18-083-06W4M	Lower Grand Rapids	633.5	634.5	247.8	263.0	255.4	378.1	69.9	448.0	503110	6226983	Water well	Matrix 2003c
02/4-18-083-6W4M (obs)	04-18-083-06W4M	Lower Grand Rapids	632.4	635.4	254.0	259.0	256.5	375.9	70.8	446.7	503110	6226989	Water well	Matrix 2003c
1F1/1-19-083-6W4M	01-19-083-06W4M	Lower Grand Rapids	606.3	607.3	228.3	250.2	239.3	367.0	79.5	446.6	504335	6228611	Water well	Matrix 2003c
100/1-19-083-6W4M	01-19-083-06W4M	Lower Grand Rapids	606.7	610.1	241.0	246.0	243.5	363.2	83.9	447.1	504325	6228611	Water well	Matrix 2003c
03/12-15-075-06W4M	12-15-075-06W4M	Lower Grand Rapids	629.4	630.8	297.6	314.6	306.1	323.3	169.3	492.6	509163	6150159	Water well	Westwater 2004
WS GR 7-23	07-23-085-06W4M	Lower Grand Rapids	447.0	447.7	61.0	89.9	75.5	371.5	59.8	431.3	510399	6248641	Water well	Aqua Terre Solutions Inc. 2004f
WM GR 7-23	07-23-085-06W4M	Lower Grand Rapids	448.3	448.7	84.0	87.0	85.5	362.8	68.8	431.6	510321	6248621	Water well	Aqua Terre Solutions Inc. 2004f
WM GR 16-27	16-27-084-07W4M	Lower Grand Rapids	504.4	505.3	134.0	140.0	137.0	367.4	85.3	452.7	499430	6241164	Water well	Golder 2005a
WM GR 11-29	11-29-084-06W4M	Lower Grand Rapids	489.8	490.6	88.0	94.0	91.0	398.8	50.1	448.9	505156	6240783	Water well	Golder 2005a
WS GR 1-27	01-27-085-06W4M	Lower Grand Rapids	460.0	460.5	77.9	115.2	96.6	363.5	69.0	432.4	508988	6249805	Water well	Aqua Terre Solutions Inc. 2004d
WM GR 1-27	01-27-085-06W4M	Lower Grand Rapids	457.6	457.9	92.0	95.0	93.5	364.1	68.5	432.5	509058	6249844	Water well	Aqua Terre Solutions Inc. 2004d
WS GR 1-34	01-34-085-06W4M	Lower Grand Rapids	448.0	448.6	59.1	90.2	74.7	373.3	56.7	430.0	509053	6251478	Water well	Aqua Terre Solutions Inc. 2004e
WM GR 1-34	01-34-085-06W4M	Lower Grand Rapids	448.7	449.3	81.0	84.0	82.5	366.2	63.6	429.7	509026	6251402	Water well	Aqua Terre Solutions Inc. 2004e
WM GR 6-19	06-19-085-06W4M	Lower Grand Rapids	494.5	495.1	105.2	111.3	108.3	386.3	58.0	444.2	503508	6248490	Water well	Aqua Terre Solutions Inc. 2004c
WS GR 9-28	09-28-085-06W4M	Lower Grand Rapids	460.2	460.8	67.4	91.8	79.6	380.6	53.4	434.0	507686	6250389	Water well	Aqua Terre Solutions Inc. 2004d
WS GR 10-21	10-21-085-06W4M	Lower Grand Rapids	466.1	466.6	82.5	94.9	88.7	377.4	59.6	437.0	507063	6248736	Water well	Aqua Terre Solutions Inc. 2004g
WM GR 10-21	10-21-085-06W4M	Lower Grand Rapids	467.6	468.2	93.0	96.0	94.5	373.1	64.4	437.5	506983	6248736	Water well	Aqua Terre Solutions Inc. 2004g
WM GR 15-28	15-28-085-06W4M	Lower Grand Rapids	454.3	454.8	88.0	91.0	89.5	364.8	69.4	434.2	507259	6250737	Water well	Aqua Terre Solutions Inc. 2004d
WM GR 16-25	16-25-084-07W4M	Lower Grand Rapids	481.7	482.4	89.0	95.0	92.0	389.7	58.8	448.5	502619	6241197	Water well	Golder 2005a
WM GR 16-29	16-29-085-06W4M	Lower Grand Rapids	464.7	465.7	76.8	79.9	78.4	387.4	49.8	437.1	506006	6250805	Water well	Golder 2004
WM GR 16-33	16-33-085-06W4M	Lower Grand Rapids	446.6	447.6	85.0	88.0	86.5	360.1	69.5	429.6	507655	6252525	Water well	Aqua Terre Solutions Inc. 2004e
MW-08D	01-31-085-06W4M	Lower Grand Rapids	484.0	484.5	95.1	101.2	98.2	385.8	74.0	459.8	504236	6251204	Water well	Aqua Terre Solutions Inc. 2004c
WS GR 16-33	16-33-085-06W4M	Lower Grand Rapids	447.4	447.4	71.5	90.0	80.8	366.6	62.6	429.3	507735	6252525	Water well	Golder 2005b
WS GR 15-28	15-28-085-06W4M	Lower Grand Rapids	452.0	453.0	85.3	100.8	93.1	359.0	74.9	433.9	507189	6250775	Water well	AquaTerre 2004

**Table B-2 Regional Hydraulic Heads: Grand Rapids (continued)**

Well ID	Well Location	Formation	Ground Surface	Casing or KB Elevation	Perforated Interval [mbgs]		Mid-Point Perforated Interval		Pressure Head [m]	Hydraulic Head [masl]	Easting UTM NAD 27 Zn 12	Northing UTM NAD 27 Zn 12	Type of Well	Reference
					Top	Bottom	Depth [mbgs or mKB]	Elevation [masl]						
WS GR 06-18-085-06W4M	06-18-085-06W4M	Lower Grand Rapids	456.3	456.9	72.6	97.3	85.0	371.4	57.9	429.2	513355	6247035	Water well	Golder 2006
WM GR 06-18-085-06W4M	06-18-085-06W4M	Lower Grand Rapids	454.8	455.4	88.4	100.5	94.5	360.3	69.2	429.5	513275	6247036	Water well	Golder 2006
WS GR 09-25-085-06W4M	09-25-085-06W4M	Lower Grand Rapids	455.3	455.9	60.2	94.5	77.4	377.9	45.5	423.3	512278	6250442	Water well	Golder 2006
WM GR 10-25-085-06W4M	10-25-085-06W4M	Lower Grand Rapids	454.0	454.6	57.9	94.5	76.2	377.8	45.4	423.3	512198	6250442	Water well	Golder 2006
WS GR 11-20-085-05W4M	11-20-085-05W4M	Lower Grand Rapids	479.5	480.1	88.4	112.8	100.6	378.9	53.4	432.3	514755	6248753	Water well	Golder 2006
WM GR 11-20-085-05W4M	11-20-085-05W4M	Lower Grand Rapids	479.7	480.3	87.8	112.2	100.0	379.8	52.9	432.6	514753	6248833	Water well	Golder 2006
WS GR 12-19-085-05W4M	12-19-085-05W4M	Lower Grand Rapids	468.6	469.2	90.9	115.6	103.2	365.4	60.7	426.1	512886	6248691	Water well	Golder 2006
WM GR 12-19-085-05W4M	12-19-085-05W4M	Lower Grand Rapids	466.4	467.0	97.5	115.8	106.7	359.7	66.3	426.0	512966	6248692	Water well	Golder 2006
WS GR 10-11-085-06W4M	10-11-085-06W4M	Lower Grand Rapids	472.6	473.2	79.3	109.7	94.5	378.1	58.1	436.2	510570	6245802	Water well	Golder 2006
WM GR 10-11-085-06W4M	10-11-085-06W4M	Lower Grand Rapids	472.5	473.1	94.5	106.7	100.6	371.9	64.4	436.3	510490	6245802	Water well	Golder 2006
WS GR 11-36-085-06W4M	11-36-085-06W4M	Lower Grand Rapids	450.8	451.4	62.5	83.8	73.2	377.6	44.4	422.1	511838	6251940	Water well	Golder 2006
WM GR 11-36-085-06W4M	11-36-085-06W4M	Lower Grand Rapids	449.2	449.8	73.2	85.3	79.2	369.9	53.4	423.4	511758	6251933	Water well	Golder 2006
WS GR 06-08-85-6W4M	06-08-085-06W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	443.2	505259	6245158	Water well	Nexen 2006
WS GR 11-32-84-6W4M	11-32-084-06W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	444.5	505272	6242219	Water well	Nexen 2006
WS GR 11-29-84-6W4M	11-29-084-06W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	445.5	505136	6240841	Water well	Nexen 2006
00/3-32-85-6W4M	03-32-085-06W4M	Lower Grand Rapids	467.1	470.6	N/A	N/A	90.0	380.6	84.3	464.9	505270	6250997	MDT Data	Nexen 2006
Obs Site 10d	09-24-085-09W4M	Lower Grand Rapids	764.0	N/A	354.0	363.0	358.5	405.5	64.5	470.0	483164	6248877	Water well	Hackbarth and Nastasa 1979
Obs Site 11b	16-02-087-09W4M	Lower Grand Rapids	420.0	N/A	29.3	34.1	31.7	388.3	29.3	417.6	480897	6263858	Water well	Hackbarth and Nastasa 1979
WM GR 1-21	01-21-085-06W4M	Lower Grand Rapids	460.4	461.0	82.9	89.0	86.0	374.5	63.1	437.6	507690	6248049	Water well	Aqua Terre Solutions Inc. 2004g
WS GR 6-19	06-19-085-06W4M	Lower Grand Rapids	491.6	492.2	90.6	114.9	102.7	388.8	50.2	439.0	503429	6248476	Water well	Aqua Terre Solutions Inc. 2004a
WM GR 7-36	07-36-085-07W4M	Lower Grand Rapids	494.3	494.9	82.2	85.1	83.7	410.6	56.2	466.8	502246	6251694	Water well	Aqua Terre Solutions Inc. 2004c
WS GR 07-36 (TWW 7-36)	07-36-085-07W4M	Lower Grand Rapids	490.0	490.5	82.0	88.5	85.3	404.8	58.9	463.6	502304	6251741	Water well	Golder 2002
100D0238	09-28-085-06W4M	Lower Grand Rapids	456.9	460.5	N/A	N/A	59.4	397.5	33.8	431.3	507700	6250310	Vibrating Wire Piezo.	Golder 2005b
279404	SE-02-086-07 W4M	Lower Grand Rapids	482.0	482.0	68.6	83.8	76.2	405.8	63.7	469.5	501427	6253089	Water well	GIC 2005
279552	SE-12-086-08 W4M	Lower Grand Rapids	480.0	480.0	73.1	75.6	74.4	405.7	57.3	462.9	493337	6254709	Water well	GIC 2005
58975	08-30-085-06W4M	Upper Grand Rapids	488.0	491.0	N/A	N/A	99.0	389.0	73.1	462.1	504304	6250061	Vibrating Wire Piezo.	Golder 2005b
58977	08-30-085-06W4M	Lower Grand Rapids	488.0	491.0	N/A	N/A	127.0	361.0	101.5	462.5	504304	6250061	Vibrating Wire Piezo.	Golder 2005b
WM GR 06-32	06-32-085-06W4M	Lower Grand Rapids	467.0	N/A	73.0	87.0	80.0	387.0	73.2	460.2	505113	6251674	Water well	Golder 2005b
WM GR 07-26 (MW 7-26D)	07-26-085-07W4M	Lower Grand Rapids	477.8	478.7	66.0	69.0	67.5	410.3	52.4	462.6	500658	6259786	Water well	Golder 2002
WS GR 07-26 (WSW 7-26)	07-26-086-07W4M	Lower Grand Rapids	477.1	480.1	60.2	74.9	67.6	409.6	55.2	464.7	500478	6259812	Water well	Golder 2002
WM GR 08-17	08-17-085-06W4M	Lower Grand Rapids	466.5	467.2	66.0	69.0	67.5	399.0	39.4	438.4	506330	6246686	Water well	Golder 2004
WS GR 08-17	08-17-085-06W4M	Lower Grand Rapids	471.9	474.8	86.5	105.8	96.2	375.8	63.8	439.5	506230	6246686	Water well	Golder 2005b
WM GR 11-2	11-02-086-07W4M	Lower Grand Rapids	490.6	491.3	95.4	100.3	97.9	392.7	76.2	468.9	500355	6253764	Water well	Golder 2005b
WS GR 16-29	16-29-085-06W4M	Lower Grand Rapids	463.9	466.9	67.0	88.0	77.5	386.4	50.3	436.7	506005	6250885	Water well	Golder 2005b
WSW 01-04	NW-06-085-06W4M	Lower Grand Rapids	485.1	N/A	81.3	103.3	92.3	392.9	54.2	447.0	503870	6244179	Water well	Stanley 1982
WSW 05-06	06-32-084-06W4M	Lower Grand Rapids	475.0	N/A	84.6	106.7	95.7	379.4	66.3	445.7	505699	6241952	Water well	Stanley 1982
9-17 test well	09-17-082-12 W4M	Lower Grand Rapids	709	712.16	326	329	328	382	80	462	448071	6218398	Water well	Connacher 2005
1AA/13-22-078-10W4M/0	13-22-078-10 W4M	Lower Grand Rapids	637.2	641.4	280	294	287	350	119	469	470060	6181369	Water well	North American 2006
10-1315	09-24-085-09W4M	Lower Grand Rapids	763.8	N/A	N/A	N/A	N/A	N/A	N/A	469.4	483802	6248862	Water well	ARC 1976
WSW 5-16 (WS GR 5-16)	05-16-085-06W4M	Lower Grand Rapids	471.8	472.6	83.5	101.8	92.7	379.1	60.4	439.5	506507	6154629	Water well	Golder 2002
WSW 8	06-26-085-08W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	465.7	490295	6250065	Water well	Golder 2005b

**Table B-2 Regional Hydraulic Heads: Grand Rapids (continued)**

Well ID	Well Location	Formation	Ground Surface	Casing or KB Elevation	Perforated Interval [mbgs]		Mid-Point Perforated Interval		Pressure Head [m]	Hydraulic Head [masl]	Easting UTM NAD 27 Zn 12	Northing UTM NAD 27 Zn 12	Type of Well	Reference
					Top	Bottom	Depth [mbgs or mKB]	Elevation [masl]						
WSW 11	06-26-085-08W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	459.5	490295	6250065	Water well	Golder 2005b
WSW 12	06-26-085-08W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	453.1	490295	6250065	Water well	Golder 2005b
WSW 16	05-26-085-08W4M	Lower Grand Rapids	N/A	N/A	N/A	N/A	N/A	N/A	N/A	467.4	489838	6250065	Water well	Golder 2005b
00/07-32-075-06W4M	07-32-075-06W4M	Lower Grand Rapids	600.3	604.2	N/A	N/A	256.8	347.4	157.0	504.4	506573	6154413	Water well	Devon 2005
10-23-84-7W4M	10-23-084-07W4M	Lower Grand Rapids	510.9	514.4	N/A	N/A	136.0	378.4	74.4	452.8	500774	6238913	Modular Formation Dynamics Tester Data	Nexen 2006
16-29-85-6W4M	16-29-085-06W4M	Lower Grand Rapids	463.8	466.9	N/A	N/A	69.0	397.9	40.3	438.2	506004	6250680	Modular Formation Dynamics Tester Data	Nexen 2006
16-29-85-6W4M	16-29-085-06W4M	Lower Grand Rapids	463.8	466.9	N/A	N/A	87.0	379.9	57.9	437.8	506004	6250680	Modular Formation Dynamics Tester Data	Nexen 2006
16-29-85-6W4M	16-29-085-06W4M	Lower Grand Rapids	463.8	466.9	N/A	N/A	97.0	369.9	67.9	437.8	506004	6250680	Modular Formation Dynamics Tester Data	Nexen 2006
2-25-85-7W4M	02-25-085-07W4M	Lower Grand Rapids	492.8	495.8	N/A	N/A	86.0	409.8	56.2	466.0	502292	6249465	Modular Formation Dynamics Tester Data	Nexen 2006
2-25-85-7W4M	02-25-085-07W4M	Lower Grand Rapids	492.8	495.8	N/A	N/A	100.0	395.8	69.4	465.2	502292	6249465	Modular Formation Dynamics Tester Data	Nexen 2006
2-25-85-7W4M	02-25-085-07W4M	Lower Grand Rapids	492.8	495.8	N/A	N/A	109.5	386.3	76.7	463.0	502292	6249465	Modular Formation Dynamics Tester Data	Nexen 2006
7-32-84-7W4M	07-32-084-07W4M	Lower Grand Rapids	586.5	588.3	N/A	N/A	222.0	366.3	112.1	478.4	495773	6241766	Modular Formation Dynamics Tester Data	Nexen 2006

UWI = Unique Well Identifier.

KB = Kelly Bushing.

N/A = Not available.

mbgs = metre below ground surface.

masl = metre above sea level.

PID = Production Induced Drawdown Index.

**Table B-3 Regional Hydraulic Heads: Clearwater**

Well ID	Well Location	Unit	Ground Surface	KB/Casing Elevation	Perforated Interval		Mid-Point Perforated Interval		Pressure Head [m]	Hydraulic Head [masl]	Easting UTM NAD 27 Zn 12	Northing UTM NAD 27 Zn 12	Type of Well	References
					Top	Bottom	Depth [mbgs or mKB]	Elevation [masl]						
12-24D Piezometer	12-24-082-07W4M	Upper Clearwater Aquifer	N/A	652.7	N/A	N/A	300.0	352.7	93.2	445.9	501945.28	6219727.44	Vibrating Wire Piezo.	ConocoPhillips 2005
6-26D Piezometer	06-26-083-06W4M	Upper Clearwater Aquifer	N/A	556.4	N/A	N/A	200.9	355.5	90.1	445.6	509973.64	6230484.83	Vibrating Wire Piezo.	ConocoPhillips 2005
WS CLRW 11-28	11-28-084-06W4M	Upper Clearwater Aquifer	489.8	490.3	138.5	160.4	149.5	340.3	102.7	443.0	506691.50	6240765.60	Water well	Aqua Terre Solutions Inc. 2004q
WS CLRW 11-29	11-29-084-06W4M	Upper Clearwater Aquifer	487.1	488.2	126.8	145.6	136.2	350.9	92.7	443.6	505173.30	5240773.50	Water well	Aqua Terre Solutions Inc. 2004p
WS CLRW 03-30	03-30-084-06W4M	Upper Clearwater Aquifer	481.0	481.7	134.6	150.3	142.5	338.6	104.7	443.3	503650.50	6239920.20	Water well	Aqua Terre Solutions Inc. 2004o
WS CLRW 16-30	16-30-084-06W4M	Upper Clearwater Aquifer	488.5	489.4	134.3	152.8	143.6	345.0	98.8	443.8	504381.80	6241238.00	Water well	Aqua Terre Solutions Inc. 2004n
WS CLRW 06-31	06-31-084-06W4M	Upper Clearwater Aquifer	463.4	464.0	111.5	130.0	120.8	342.6	99.8	442.4	503385.00	6241847.50	Water well	Aqua Terre Solutions Inc. 2004l
WS CLRW 05-33	05-33-084-06W4M	Upper Clearwater Aquifer	509.6	510.1	163.8	179.5	171.7	337.9	105.4	443.3	506564.50	6241902.90	Water well	Aqua Terre Solutions Inc. 2004m
WS CLRW 16-25	16-25-084-07W4M	Upper Clearwater Aquifer	482.1	483.0	129.3	150.9	140.1	342.0	101.0	443.0	502605.20	6241182.90	Water well	Aqua Terre Solutions Inc. 2004k
WS CLRW 07-26	07-26-084-07W4M	Upper Clearwater Aquifer	511.4	512.1	164.7	183.5	174.1	337.3	106.3	443.6	500832.50	6240261.30	Water well	Aqua Terre Solutions Inc. 2004j
WS CLRW 16-27	16-27-084-07W4M	Upper Clearwater Aquifer	504.2	505.0	166.3	181.8	174.1	330.2	114.4	444.6	499450.00	6241163.60	Water well	Aqua Terre Solutions Inc. 2004r
WS CLRW 14-35	14-35-084-07W4M	Upper Clearwater Aquifer	486.2	486.2	144.6	160.1	152.4	333.8	109.5	443.3	500213.50	6242786.70	Water well	Aqua Terre Solutions Inc. 2004i
WM CLRW 16-27	16-27-084-07W4M	Upper Clearwater Aquifer	505.1	505.9	165.3	172.0	168.7	336.5	108.2	444.7	499370.30	6241169.00	Water well	Golder 2005c
100D0260	01-21-085-06W4M	Upper Clearwater Aquifer	460.5	464.6	N/A	N/A	119.9	340.6	102.0	442.6	507703.80	6248129.74	Vibrating Wire Piezo.	Golder 2005c
100D0237	09-28-085-06W4M	Upper Clearwater Aquifer	456.9	460.5	N/A	N/A	111.3	345.6	88.4	434.0	507699.75	6250309.73	Vibrating Wire Piezo.	Golder 2005c
MEG S1 HARDY 7-16-77-5W4M	07-16-077-05W4M	Upper Clearwater Aquifer	582.6	586.6	N/A	N/A	N/A	307.2	188.0	495.2	518156.00	6169100.00	Vibrating Wire Piezo.	This Study
MEG HARDY 10-16-77-5W4M	10-16-077-05W4M	Upper Clearwater Aquifer	580.0	584.8	N/A	N/A	N/A	293.9	214.6	508.5	518066.00	6169428.00	Vibrating Wire Piezo.	This Study
58969	08-30-085-06W4M	Upper Clearwater Aquifer	488.0	491.0	N/A	N/A	153.5	334.5	122.4	456.9	504303.82	6250060.78	Vibrating Wire Piezo.	Golder 2005c
00/3-32-85-6W4M	03-32-085-06W4M	Upper Clearwater Aquifer	467.1	470.6	N/A	N/A	120.5	350.1	109.3	459.4	505270.31	6250997.20	Modular Formation Dynamics Tester Data	Nexen 2006
4-21-84-7W4M	04-21-084-07W4M	Upper Clearwater Aquifer	631.2	633.6	N/A	N/A	318.7	314.9	133.1	448.0	496777.18	6238141.79	Modular Formation Dynamics Tester Data	Nexen 2006
8-33-84-7W4M	08-33-084-07W4M	Upper Clearwater Aquifer	512.2	514.5	N/A	N/A	196.0	318.5	126.1	444.6	497997.60	6241749.06	Modular Formation Dynamics Tester Data	Nexen 2006

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KB = Kelly Bushing.

N/A = Not available.

mbgs = metre below ground surface.

masl = metre above sea level.



**Table B-4 Regional Hydraulic Heads: McMurray**

Well ID	Well Location	Formation	Ground Surface	KB/Casing Elevation	Perforated Interval [mbgs]		Mid-Point Perforated Interval		Pressure Head [m]	Hydraulic Head [masl]	Easting UTM NAD 27 Zn 12	Northing UTM NAD 27 Zn 12	Type of Well	Reference
					Top	Bottom	Depth [mbgs or mKB]	Elevation [masl]						
12-24A Piezometer	12-24-82-7W4M	Lower McMurray	N/A	652.7	N/A	N/A	449.4	203.4	218.7	422.0	501945	6219727	Vibrating Wire Piezo.	ConocoPhillips 2005
6-26A Piezometer	6-26-83-6W4M	Lower McMurray	N/A	556.4	N/A	N/A	338.6	217.8	178.7	396.5	509974	6230485	Vibrating Wire Piezo.	ConocoPhillips 2005
MEG Hardy 10-29	10-29-077-05W4M	Lower McMurray	573.5	576.5	364.1	396.6	380.3	193.2	191.0	384.2	516391	6172789	Water well	Westwater Environmental 2005
102/12-15-075-06W4M	12-15-075-06W4M	Lower McMurray	626.9	630.6	441.8	484.8	463.3	163.6	285.5	449.1	509138	6150135	Water well	Devon 2005
WS McM 11-20-085-05W4M	11-20-085-05W4M	Lower McMurray	479.7	480.3	307.4	335.3	321.3	158.4	161.9	320.3	514754	6248793	Water well	Golder 2006
WS McM 15-28-085-05W4M	15-28-085-05W4M	Lower McMurray	445.0	445.6	205.0	255.0	230.0	215.0	107.6	322.6	516823	6251064	Water well	Golder 2006
WD MCM 10-26	10-26-085-06W4M	Lower McMurray	N/A	N/A	N/A	N/A	N/A	N/A	N/A	320.4	510297	6250354	Water well	Nexen 2006
10-23-84-7W4M	10-23-084-07W4M	Lower McMurray	510.9	514.4	N/A	N/A	318.0	196.4	144.8	341.2	500774	6238913	Modular Formation Dynamics Tester Data	Nexen 2006
3-20-84-7W4M	03-20-084-07W4M	Lower McMurray	685.0	688.4	N/A	N/A	473.5	214.9	146.8	361.7	495479	6238066	Modular Formation Dynamics Tester Data	Nexen 2006
4-21-84-7W4M	04-21-084-07W4M	Lower McMurray	631.2	633.6	N/A	N/A	459.5	174.1	168.2	342.3	496777	6238142	Modular Formation Dynamics Tester Data	Nexen 2006
AA/2-28-84-7W4M	02-28-084-07W4M	Lower McMurray	569.9	572.1	N/A	N/A	377.5	194.6	148.8	343.4	497369	6239619	Modular Formation Dynamics Tester Data	Nexen 2006
Obs Site 10e	9-24-085-09W4M	Lower McMurray	764.0	N/A	460.3	462.8	461.6	302.5	63.0	365.4	483164	6248877	Water well	Hackbarth and Nastasa 1979
Obs Site 10f	9-24-085-09W4M	Lower McMurray	764.0	N/A	514.6	517.1	515.9	248.2	117.3	365.4	483164	6248877	Water well	Hackbarth and Nastasa 1979
WD McM 01-21	00/01-21-085-06W4/0	Lower McMurray	460.1	464.2	237.0	242.0	239.5	220.6	109.4	330.0	507711	6248130	Water well	Golder 2005c
WD McM 09-28	00/09-28-085-06W4/0	Lower McMurray	460.5	464.1	203.3	205.0	204.2	256.4	67.2	323.5	507711	6250398	Water well	Golder 2005c
WD McM 04-22	00/04-22-085-06W4/0	Lower McMurray	460.8	464.0	235.1	241.5	238.3	222.5	107.5	330.0	507910	6248114	Water well	Golder 2005c
64272	02-32-85-06W4M	Lower McMurray	465.9	470.2	N/A	N/A	232.7	N/A	124.0	357.2	505512	6251208	Vibrating Wire Piezo.	Golder 2005c
100D0210	01-21-85-06W4M	Lower McMurray	460.5	464.6	N/A	N/A	238.1	222.4	109.4	331.8	507704	6248130	Vibrating Wire Piezo.	Golder 2005c
100D0209	01-21-85-06W4M	Lower McMurray	460.5	464.6	N/A	N/A	266.8	193.7	141.6	335.3	507704	6248130	Vibrating Wire Piezo.	Golder 2005c
100D0240	09-28-85-06W4M	Lower McMurray	456.9	460.5	N/A	N/A	224.2	232.7	84.3	317.0	507710	6250318	Vibrating Wire Piezo.	Golder 2005c
100D0239	09-28-85-06W4M	Lower McMurray	456.9	460.5	N/A	N/A	210.3	246.6	75.7	322.3	507710	6250318	Vibrating Wire Piezo.	Golder 2005c
58971	08-30-085-06W4M	Lower McMurray	488.0	491.0	N/A	N/A	252.0	236.0	103.5	339.5	504304	6250061	Vibrating Wire Piezo.	Golder 2005c
58974	10-29-85-06W4M	Lower McMurray	471.5	474.5	N/A	N/A	244.0	227.5	109.7	337.2	505379	6250454	Vibrating Wire Piezo.	Golder 2005c
10-1700	11-19-085-08W4M	Lower McMurray	763.5	N/A	N/A	N/A	N/A	N/A	N/A	359.4	483802	6248862	Water well	Golder 2005c
12-20-085-06W4M	12-20-085-06W4M	Lower McMurray	491.2	494.2	N/A	N/A	280.0	214.2	123.8	338.0	504710	6248842	Modular Formation Dynamics Tester Data	Nexen 2006
12-20-085-06W4M	12-20-085-06W4M	Lower McMurray	491.2	494.2	N/A	N/A	286.2	208.0	130.2	338.2	504710	6248842	Modular Formation Dynamics Tester Data	Nexen 2006
14-21-085-06W4M	14-21-085-06W4M	Lower McMurray	464.8	467.8	N/A	N/A	224.0	243.8	84.9	328.7	506744	6249253	Modular Formation Dynamics Tester Data	Nexen 2006
12-26-086-07W4M	12-26-086-07W4M	Lower McMurray	480.7	483.7	N/A	N/A	228.0	255.7	92.3	348.0	499858	6260187	Modular Formation Dynamics Tester Data	Nexen 2006
12-26-086-07W4M	12-26-086-07W4M	Lower McMurray	480.7	483.7	N/A	N/A	231.4	252.3	94.8	347.1	499858	6260187	Modular Formation Dynamics Tester Data	Nexen 2006
13-7-86-6W4M	13-07-086-06W4M	Lower McMurray	465.1	467.6	N/A	N/A	270.0	197.6	142.4	340.0	503111	6255574	Modular Formation Dynamics Tester Data	Nexen 2006
13-7-86-6W4M	13-07-086-06W4M	Lower McMurray	465.1	467.6	N/A	N/A	270.7	196.9	143.7	340.6	503111	6255574	Modular Formation Dynamics Tester Data	Nexen 2006
14-34-84-7W4M	14-34-084-07W4M	Lower McMurray	495.2	497.5	N/A	N/A	296.5	201.0	148.4	349.4	498612	6242601	Modular Formation Dynamics Tester Data	Nexen 2006
14-34-84-7W4M	14-34-084-07W4M	Lower McMurray	495.2	497.5	N/A	N/A	300.5	197.0	152.6	349.6	498612	6242601	Modular Formation Dynamics Tester Data	Nexen 2006
1AA/01-28-078-10W4/00	01-28-078-10 W4M	Lower McMurray	639	643	439	449	444	195.0	241.3	436	469596	6181780	Water well	North American 2006
00/10-33-076-04W4M/0	MEG HARDY 10-33-76-4	Lower McMurray	574.5	577.5	N/A	N/A	392.5	185.0	183.7	368.7	527895	6164658	Vibrating Wire Piezo.	This study
00/02-33-076-04W4M/0	MEG HARDY 2-33-76-4	Lower McMurray	579.7	582.8	N/A	N/A	393.8	189.0	194.4	383.4	527822	6163946	Vibrating Wire Piezo.	This study
AA/16-28-076-04W4M/0	MEG HARDY 16-28-76-4	Lower McMurray	582.7	587.1	N/A	N/A	399.1	188.0	192.9	380.9	528267	6163645	Vibrating Wire Piezo.	This study
15-18-85-6W4M	15-18-085-06W4M	Lower McMurray	461.7	464.4	N/A	N/A	263.8	200.6	162.6	363.2	503844	6247472	Modular Formation Dynamics Tester Data	Nexen 2006
16-29-85-6W4M	16-29-085-06W4M	Lower McMurray	463.8	466.8	N/A	N/A	227.9	238.9	84.9	323.8	506004	6250680	Modular Formation Dynamics Tester Data	Nexen 2006
16-29-85-6W4M	16-29-085-06W4M	Lower McMurray	463.8	466.8	N/A	N/A	233.0	233.8	97.7	331.5	506004	6250680	Modular Formation Dynamics Tester Data	Nexen 2006
8-33-84-7W4M	08-33-084-07W4M	Lower McMurray	512.2	514.5	N/A	N/A	322.0	192.5	146.3	338.8	497998	6241749	Modular Formation Dynamics Tester Data	Nexen 2006
8-33-84-7W4M	08-33-084-07W4M	Lower McMurray	512.2	514.5	N/A	N/A	336.0	178.5	160.0	338.5	497998	6241749	Modular Formation Dynamics Tester Data	Nexen 2006

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KB = Kelly Bushing.

N/A = Not available.

mbgs = metre below ground surface.

masl = metre above sea level.

PID = Production Induced Drawdown Index.

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/07-05-070-02W4M/00	Kgrand_rp	546780.8389	6098300.776	665.99	409.50	417.00	413.25	411.51	213.6	466.3	A	0	0
100/07-05-070-02W4M/00	Kgrand_rp	546780.84	6098300.78	665.99	382.01	389.51	385.76	383.99	189.0	469.2	B	0	0
100/07-05-070-02W4M/00	Kgrand_rp	546780.84	6098300.78	665.99	378.99	383.01	381.00	381.00	186.9	471.9	C	0	0
100/05-30-070-03W4M/00	Kgrand_rp	534651.87	6104635.98	671.60	310.99	316.99	313.99	313.00	164.3	521.9	A	0	0
100/07-17-070-03W4M/00	Kgrand_rp	537087.80	6101320.29	690.10	323.00	328.00	325.50	324.19	157.5	522.1	A	0	0
100/11-03-070-03W4M/00	Kgrand_rp	539824.95	6098252.30	666.20	372.01	378.01	375.01	293.19	248.9	540.1	A	0	79
100/05-30-070-03W4M/00	Kgrd_rp_L	534651.87	6104635.98	671.60	399.01	403.01	401.01	401.91	220.4	491.0	B	0	0
100/06-22-070-03W4M/00	Kgrd_rp_L	539728.59	6103044.60	709.00	446.99	451.99	449.49	448.00	249.0	508.5	A	0	0
100/07-02-070-03W4M/00	Kgrd_rp_L	541868.49	6098266.52	709.79	474.00	477.99	475.99	476.01	269.4	503.2	A	0	0
100/07-02-070-03W4M/00	Kgrd_rp_L	541868.49	6098266.52	709.79	469.00	472.99	470.99	471.01	267.4	506.2	A	0	0
100/11-03-070-03W4M/00	Kgrd_rp_L	539824.95	6098252.30	666.20	469.00	477.01	473.01	470.00	262.0	455.2	A	0	0
100/05-25-070-04W4M/00	Kgrand_rp	533077.28	6104617.34	669.80	309.49	313.00	311.25	311.51	153.7	512.3	A	0	0
100/05-25-070-04W4M/00	Kgrand_rp	533077.28	6104617.34	669.80	294.99	298.49	296.74	297.00	154.6	527.6	B	0	0
100/07-16-070-04W4M/00	Kgrand_rp	528815.94	6101253.67	680.50	337.99	341.10	339.55	331.20	164.3	505.3	A	0	7
100/07-16-070-04W4M/00	Kgrand_rp	528815.94	6101253.67	680.50	321.99	328.00	324.99	315.19	163.2	518.7	A	0	7
100/14-28-070-04W4M/00	Kgrand_rp	528453.56	6105186.39	669.19	366.80	373.29	370.04	362.01	227.5	526.6	A	0	5
100/14-28-070-04W4M/00	Kgrand_rp	528453.56	6105186.39	669.19	366.80	373.29	370.04	362.01	227.5	526.7	A	0	5
100/05-14-070-04W4M/00	Kgrd_rp_L	531188.87	6101277.41	669.10	396.52	401.00	398.76	397.49	244.8	515.1	A	0	0
100/05-25-070-04W4M/00	Kgrd_rp_L	533077.28	6104617.34	669.80	398.01	401.51	399.76	399.99	230.9	500.9	B	0	0
100/08-12-070-04W4M/00	Kgrd_rp_L	533974.44	6099708.57	677.39	422.30	425.99	424.15	424.01	240.4	493.7	A	0	0
100/08-33-070-04W4M/00	Kgrd_rp_L	529160.83	6106242.61	663.70	392.00	396.00	394.00	382.31	249.3	519.0	A	0	10
100/10-06-070-04W4M/00	Kgrd_rp_L	525577.17	6098152.49	689.92	414.01	418.00	416.01	414.99	249.3	523.2	A	0	0
100/05-09-070-05W4M/00	Kgrand_rp	518350.23	6099699.41	681.69	323.00	326.41	324.70	325.59	163.8	520.8	B	0	0
100/05-19-070-05W4M/00	Kgrand_rp	515232.85	6102813.61	670.81	313.00	316.20	314.60	304.71	164.0	520.2	A	0	8
100/06-21-070-05W4M/00	Kgrand_rp	518851.96	6102846.35	671.11	316.29	320.01	318.15	318.30	147.1	500.0	A	0	0
100/06-33-070-05W4M/00	Kgrand_rp	518668.16	6106178.52	657.30	294.99	300.50	297.74	285.20	166.8	526.4	A	0	10
100/07-14-070-05W4M/00	Kgrand_rp	522369.45	6101237.86	680.50	325.01	329.00	327.01	315.19	171.5	525.0	A	0	10
100/07-14-070-05W4M/00	Kgrand_rp	522369.45	6101237.86	680.50	310.99	315.01	313.00	301.20	170.3	537.8	A	0	10
100/07-20-070-05W4M/00	Kgrand_rp	517426.81	6102830.55	684.10	321.99	326.99	324.49	312.39	175.9	535.5	A	0	10
100/07-26-070-05W4M/00	Kgrand_rp	522216.22	6104556.69	663.31	300.02	304.01	302.01	302.00	155.9	517.2	A	0	0
100/06-21-070-05W4M/00	Kgrd_rp_L	518851.96	6102846.35	671.11	403.89	407.61	405.75	405.90	227.4	492.7	A	0	0
100/06-21-070-05W4M/00	Kgrd_rp_L	518851.96	6102846.35	671.11	339.91	343.60	341.76	341.90	167.9	497.3	B	0	0
100/05-23-070-06W4M/00	Kgrand_rp	511928.42	6102812.46	660.50	310.99	316.20	313.59	301.39	177.7	524.6	A	0	10
100/06-01-070-06W4M/00	Kgrand_rp	513914.31	6098084.27	681.69	331.01	336.01	333.51	321.99	165.3	513.5	A	0	9
100/07-21-070-06W4M/00	Kgrand_rp	509429.84	6102806.48	641.09	292.49	295.41	293.95	281.61	166.5	513.7	A	0	11
100/08-13-070-06W4M/00	Kgrand_rp	514555.95	6101261.19	686.20	330.01	335.01	332.51	321.99	164.7	518.4	A	0	8
100/09-12-070-06W4M/00	Kgrand_rp	514626.77	6099724.62	678.61	325.01	329.00	327.01	315.19	169.2	520.8	A	0	10
100/10-33-070-06W4M/00	Kgrand_rp	509228.48	6106310.34	641.61	289.99	294.10	292.05	280.20	168.6	518.2	A	0	10
100/07-03-070-08W4M/00	Kgrand_rp	491518.86	6098012.79	643.50	609.51	312.39	460.95	298.49	329.9	512.4	A	0	311
100/06-16-070-09W4M/00	Kgrand_rp	479662.70	6101144.68	604.21	284.50	289.99	287.24	287.61	176.1	493.1	A	0	0
100/06-16-070-09W4M/00	Kgrand_rp	479662.70	6101144.68	604.21	268.01	273.01	270.51	263.50	164.6	498.3	A	0	5
100/11-05-070-09W4M/00	Kgrand_rp	477927.29	6098334.12	661.81	331.41	348.11	339.76	336.59	173.4	495.4	A	0	0
100/11-35-070-09W4M/00	Kgrand_rp	483115.93	6106363.92	619.90	272.00	277.00	274.50	274.90	146.9	492.3	A	0	0
100/13-33-070-09W4M/00	Kgrand_rp	479477.30	6106660.74	604.30	261.00	264.99	263.00	262.31	151.9	493.2	A	0	0
100/13-33-070-09W4M/00	Kgrand_rp	479477.30	6106660.74	604.30	258.50	262.49	260.50	260.09	151.0	494.8	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/03-12-070-10W4M/00	Kgrand_rp	474974.68	6099330.09	629.11	298.00	305.01	301.51	300.02	164.3	491.9	A	0	0
100/04-11-070-10W4M/00	Kgrand_rp	472984.15	6099350.58	618.29	288.01	294.99	291.50	292.49	178.8	505.6	A	0	0
100/06-28-070-10W4M/00	Kgrand_rp	470120.57	6104509.08	634.02	295.99	300.02	298.00	298.49	160.2	496.3	A	0	0
100/07-17-070-10W4M/00	Kgrand_rp	468624.07	6101201.93	646.21	310.01	316.99	313.50	313.00	69.5	402.2	A	0	0
100/07-20-070-10W4M/00	Kgrand_rp	468816.76	6102814.22	653.49	313.00	316.99	315.00	314.19	122.1	460.6	A	0	0
100/07-30-070-10W4M/00	Kgrand_rp	467316.69	6104548.78	652.70	317.69	321.41	319.55	319.00	162.8	496.0	A	0	0
100/09-21-070-10W4M/00	Kgrand_rp	470703.61	6103380.12	651.30	317.51	321.99	319.75	320.01	163.2	494.8	A	0	0
100/11-01-070-10W4M/00	Kgrand_rp	474668.39	6098283.52	647.21	318.00	323.00	320.50	320.01	172.2	498.9	A	0	0
100/13-18-070-10W4M/00	Kgrand_rp	466492.02	6101918.53	635.81	306.29	310.01	308.15	307.79	165.8	493.5	A	0	0
100/14-20-070-10W4M/00	Kgrand_rp	471595.16	6103416.64	643.31	310.01	314.49	312.25	304.50	173.5	504.5	A	0	6
100/14-22-070-10W4M/00	Kgrand_rp	471595.16	6103416.64	648.80	310.01	318.00	314.01	315.50	157.7	492.5	A	0	0
100/14-22-070-10W4M/00	Kgrand_rp	471595.16	6103416.64	648.80	314.01	319.00	316.51	316.69	163.3	495.6	A	0	0
100/05-25-070-11W4M/00	Kgrand_rp	464882.53	6104601.78	631.52	295.29	299.01	297.15	297.61	90.1	424.5	C	0	0
100/07-35-070-11W4M/00	Kgrand_rp	463817.95	6106035.89	625.39	293.49	297.00	295.25	295.50	181.2	511.4	A	0	0
100/07-35-070-11W4M/00	Kgrand_rp	463817.95	6106035.89	625.39	311.99	315.50	313.75	314.01	200.0	511.6	C	0	0
100/08-34-070-11W4M/00	Kgrand_rp	462758.51	6106016.79	626.40	321.90	327.69	324.80	322.51	189.9	491.5	C	0	0
100/08-34-070-11W4M/00	Kgrand_rp	462758.51	6106016.79	626.40	292.61	299.89	296.25	293.19	172.7	502.8	B	0	0
100/10-19-070-11W4M/00	Kgrand_rp	457575.92	6103167.35	616.61	288.01	292.40	290.20	290.90	148.8	475.2	C	0	0
100/10-19-070-11W4M/00	Kgrand_rp	457575.92	6103167.35	616.61	288.01	292.40	290.20	277.19	176.0	502.4	B	0	11
100/14-14-070-11W4M/00	Kgrand_rp	463508.76	6101936.35	632.19	305.01	313.00	309.01	311.29	177.1	500.3	B	0	0
100/07-08-070-12W4M/00	Kgrand_rp	449434.54	6099925.68	595.00	280.39	284.10	282.25	283.50	185.7	498.5	A	0	0
100/05-22-070-13W4M/00	Kgrand_rp	442123.35	6103250.90	584.79	273.50	277.49	275.49	275.51	182.9	492.2	A	0	0
100/09-14-070-13W4M/00	Kgrand_rp	444836.07	6101904.37	590.89	273.01	281.00	277.00	275.91	174.9	488.8	A	0	0
100/11-21-070-14W4M/00	Kgrand_rp	430966.04	6103798.02	626.09	330.01	334.00	332.00	333.00	195.0	489.1	C	0	0
100/06-16-070-15W4M/00	Kgrand_rp	421082.46	6101675.68	568.91	305.01	326.99	316.00	307.00	239.7	492.6	A	0	0
100/06-16-070-15W4M/00	Kgrand_rp	421082.46	6101675.68	568.91	284.99	294.01	289.50	287.00	219.0	498.5	D	0	0
100/06-30-070-15W4M/00	Kgrand_rp	418013.25	6104960.08	576.41	282.22	288.31	285.26	299.31	190.0	481.1	A	-11	0
100/07-17-070-15W4M/00	Kgrand_rp	420055.38	6101801.92	572.29	294.99	305.01	300.00	303.31	219.2	491.5	A	0	0
100/10-05-070-15W4M/00	Kgrand_rp	420185.39	6098922.29	596.59	303.00	315.01	309.01	304.01	205.0	492.6	A	0	0
100/05-11-070-16W4M/00	Kgrand_rp	414497.91	6100438.94	561.20	274.99	282.00	278.50	277.89	205.9	488.6	B	0	0
100/05-11-070-16W4M/00	Kgrand_rp	414497.91	6100438.94	561.20	284.50	288.01	286.25	286.51	219.5	494.5	B	0	0
100/07-27-070-16W4M/00	Kgrand_rp	413668.94	6104997.54	579.70	290.81	294.10	292.46	288.62	216.0	503.2	B	0	2
100/07-35-070-16W4M/00	Kgrand_rp	415327.09	6106775.68	590.09	301.51	307.51	304.51	304.01	213.3	498.9	A	0	0
100/07-35-070-16W4M/00	Kgrand_rp	415327.09	6106775.68	590.09	298.00	300.99	299.50	292.79	219.7	510.3	A	0	5
100/11-23-070-16W4M/00	Kgrand_rp	414758.60	6103813.37	568.61	271.00	282.49	276.74	264.99	218.0	509.8	A	0	6
100/12-01-070-16W4M/00	Kgrand_rp	416137.57	6098850.62	563.52	279.01	285.99	282.50	281.00	189.8	470.8	A	0	0
100/02-24-070-17W4M/00	Kgrand_rp	406914.10	6103387.98	580.31	295.99	300.02	298.00	301.81	208.4	490.8	A	-2	0
100/02-24-070-17W4M/00	Kgrand_rp	406914.10	6103387.98	580.31	299.01	301.51	300.26	293.80	210.9	491.0	A	0	5
100/05-18-070-17W4M/00	Kgrand_rp	398249.57	6102177.82	555.19	308.00	311.99	310.00	310.01	238.3	483.5	B	0	0
100/06-06-070-17W4M/00	Kgrand_rp	398623.56	6098889.71	560.80	296.30	309.10	302.70	307.51	248.1	506.2	D	0	0
100/07-14-070-17W4M/00	Kgrand_rp	405289.21	6102224.38	581.01	303.00	308.00	305.50	291.39	217.2	492.7	A	0	12
100/07-35-070-17W4M/00	Kgrand_rp	405731.89	6106841.42	573.70	289.99	293.01	291.50	290.99	197.9	480.1	A	0	0
100/11-31-070-17W4M/00	Kgrand_rp	398558.84	6107623.46	569.40	310.29	320.01	315.15	312.70	231.9	486.1	B	0	0
100/07-29-070-17W4M/00	Kgrd_rp_L	400746.19	6105420.09	552.21	341.99	346.19	344.09	342.99	268.0	476.1	A	0	0
100/07-24-071-04W4M/00	Kgrand_rp	533564.93	6112743.85	674.80	315.01	332.20	323.61	318.00	160.4	511.6	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/08-08-071-04W4M/00	Kgrand_rp	527108.62	6109520.36	663.49	290.99	294.99	292.99	293.89	156.1	526.6	A	0	0
100/08-08-071-04W4M/00	Kgrand_rp	527108.62	6109520.36	663.49	350.00	309.01	329.51	307.91	201.4	535.4	F	0	42
100/06-02-071-04W4M/00	Kwaseca	531546.36	6107807.96	668.92	324.00	328.00	326.00	326.02	167.0	509.9	B	0	0
100/06-20-071-05W4M/00	Kgrand_rp	516775.37	6112688.89	681.29	320.99	325.01	323.00	323.00	163.7	522.0	A	0	0
100/05-28-071-06W4M/00	Kgrand_rp	507984.69	6114273.58	671.90	317.51	320.50	319.00	318.00	154.6	507.5	A	0	0
100/09-14-071-06W4M/00	Kgrand_rp	512660.91	6111087.25	676.11	321.99	326.02	324.00	324.00	150.7	502.8	C	0	0
100/10-23-071-07W4M/00	Kgrand_rp	502394.77	6112975.06	665.41	309.01	314.01	311.51	310.99	149.5	503.4	A	0	0
100/10-28-071-07W4M/00	Kgrand_rp	499071.47	6114553.62	660.81	303.00	313.00	308.00	293.71	165.4	518.2	A	0	9
100/10-30-071-07W4M/00	Kgrand_rp	495833.74	6114563.26	664.89	308.00	319.00	313.50	311.20	159.7	511.1	A	0	0
100/11-13-071-07W4M/00	Kgrand_rp	503378.34	6111388.79	658.00	300.99	306.51	303.75	301.81	154.1	508.4	A	0	0
100/11-13-071-07W4M/00	Kgrand_rp	503378.34	6111388.79	658.00	304.01	308.00	306.00	301.81	161.6	513.6	C	0	2
100/11-17-071-07W4M/00	Kgrand_rp	496859.36	6111369.70	662.70	308.00	316.99	312.50	309.01	156.3	506.5	A	0	0
100/06-27-071-08W4M/00	Kgrand_rp	490347.43	6114044.31	656.51	307.00	315.01	311.00	308.00	150.7	496.2	A	0	0
100/10-13-071-08W4M/00	Kgrand_rp	494254.06	6111373.42	666.51	313.00	319.00	316.00	314.49	151.6	502.1	A	0	0
100/10-15-071-08W4M/00	Kgrand_rp	491011.46	6111381.01	668.61	315.99	321.99	318.99	317.60	169.9	519.5	A	0	0
100/11-26-071-08W4M/00	Kgrand_rp	492004.39	6114575.18	660.90	300.02	309.01	304.51	301.51	149.9	506.3	A	0	0
100/14-06-071-08W4M/00	Kgrand_rp	485724.97	6108396.85	656.91	305.50	310.71	308.11	298.49	164.7	513.5	A	0	7
100/06-30-071-09W4M/00	Kgrand_rp	475790.18	6114256.66	681.81	333.00	341.99	337.49	339.61	163.0	507.4	A	0	0
100/06-30-071-09W4M/00	Kgrand_rp	475790.18	6114256.66	681.81	354.00	366.00	360.00	355.21	191.4	513.2	A	0	0
100/06-36-071-09W4M/00	Kgrand_rp	483826.91	6115718.05	682.91	335.01	342.99	339.00	336.01	161.1	505.0	A	0	0
100/06-36-071-09W4M/00	Kgrand_rp	483826.91	6115718.05	682.91	325.50	333.51	329.51	326.50	152.8	506.2	A	0	0
100/06-36-071-09W4M/00	Kgrand_rp	483826.91	6115718.05	682.91	346.01	354.00	350.00	347.02	189.2	522.1	A	0	0
100/08-03-071-09W4M/00	Kgrand_rp	481313.18	6107663.12	607.80	260.00	263.50	261.75	262.89	135.9	482.0	A	0	0
100/10-06-071-09W4M/00	Kgrand_rp	476140.29	6108039.48	604.82	263.01	269.99	266.50	266.00	134.6	472.9	A	0	0
100/10-08-071-09W4M/00	Kgrand_rp	477873.08	6109555.14	670.29	382.19	392.00	387.10	388.01	211.8	495.0	A	0	0
100/10-08-071-09W4M/00	Kgrand_rp	477873.08	6109555.14	670.29	316.99	331.59	324.29	320.01	153.2	499.2	A	0	0
100/11-17-071-09W4M/00	Kgrand_rp	477330.10	6111479.76	675.32	326.02	330.01	328.01	320.50	119.8	467.1	A	0	6
100/11-27-071-09W4M/00	Kgrand_rp	480630.45	6114636.90	660.29	308.00	315.01	311.51	311.20	158.7	507.4	A	0	0
100/11-28-071-09W4M/00	Kgrand_rp	479075.70	6124444.93	665.29	333.00	336.01	334.50	334.49	173.6	504.4	B	0	0
100/11-28-071-09W4M/00	Kgrand_rp	479039.45	6114471.63	665.29	320.01	323.00	321.50	321.50	169.1	512.9	A	0	0
100/11-28-071-09W4M/00	Kgrand_rp	479075.70	6124444.93	665.29	311.99	316.99	314.49	315.50	162.5	513.3	A	0	0
100/13-31-071-09W4M/00	Kgrand_rp	475475.95	6116407.32	677.91	335.01	339.00	337.00	336.59	153.3	494.3	A	0	0
100/03-23-071-10W4M/00	Kgrand_rp	472571.70	6112273.31	680.32	336.99	344.00	340.49	337.99	109.3	449.2	A	0	0
100/05-12-071-10W4M/00	Kgrand_rp	473877.16	6109202.87	669.31	327.51	332.51	330.01	330.59	160.5	499.8	A	0	0
100/05-13-071-10W4M/00	Kgrand_rp	473865.40	6110784.31	681.50	343.51	347.50	345.51	337.99	168.0	504.0	A	0	6
100/06-04-071-10W4M/00	Kgrand_rp	469182.30	6107655.96	660.02	321.99	326.02	324.00	323.61	157.8	493.8	A	0	0
100/06-08-071-10W4M/00	Kgrand_rp	467552.97	6109381.35	649.59	320.99	326.50	323.74	323.00	146.4	472.3	B	0	0
100/06-08-071-10W4M/00	Kgrand_rp	467552.97	6109381.35	649.59	315.50	320.99	318.24	317.51	144.0	475.4	B	0	0
100/06-15-071-10W4M/00	Kgrand_rp	471025.05	6110977.73	670.99	329.00	336.99	333.00	329.00	126.5	464.5	A	0	0
100/06-19-071-10W4M/00	Kgrand_rp	466118.73	6112535.91	652.00	357.01	363.99	360.50	359.70	203.9	495.4	A	0	0
100/06-19-071-10W4M/00	Kgrand_rp	466118.73	6112535.91	652.00	313.00	320.01	316.51	317.30	162.8	498.3	A	0	0
100/06-22-071-10W4M/00	Kgrand_rp	470935.60	6112506.28	675.80	365.00	372.50	368.75	369.81	197.4	504.5	A	0	0
100/06-22-071-10W4M/00	Kgrand_rp	470935.60	6112506.28	675.80	336.01	339.00	337.51	337.51	212.0	550.3	A	0	0
100/06-33-071-10W4M/00	Kgrand_rp	469081.47	6115810.66	668.40	324.00	331.01	327.51	325.01	152.2	493.1	A	0	0
100/07-08-071-10W4M/00	Kgrand_rp	468136.02	6109327.06	658.89	318.00	323.00	320.50	321.29	162.1	500.5	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/07-10-071-10W4M/00	Kgrand_rp	471103.56	6109325.73	671.99	334.00	340.01	337.00	338.51	184.9	519.9	A	0	0
100/10-18-071-10W4M/00	Kgrand_rp	466342.69	6111397.96	653.80	315.80	326.11	320.96	317.30	164.1	497.0	A	0	0
100/11-05-071-10W4M/00	Kgrand_rp	467635.71	6108043.08	655.20	327.51	331.99	329.75	330.50	168.8	494.2	A	0	0
100/16-34-071-10W4M/00	Kgrand_rp	471560.30	6116429.56	662.00	321.99	331.99	326.99	315.41	172.7	507.7	D	0	7
100/06-03-071-11W4M/00	Kgrand_rp	460933.37	6107971.06	642.00	314.49	320.01	317.25	317.91	183.6	508.4	A	0	0
100/06-05-071-11W4M/00	Kgrand_rp	457742.90	6107914.49	607.50	269.69	275.69	272.69	272.61	172.9	507.7	A	0	0
100/07-12-071-11W4M/00	Kgrand_rp	464811.95	6109322.04	649.20	306.29	316.99	311.64	307.21	169.7	507.3	A	0	0
100/08-11-071-11W4M/00	Kgrand_rp	463284.17	6109325.47	646.30	341.01	346.50	343.75	341.99	196.9	499.5	A	0	0
100/09-02-071-11W4M/00	Kgrand_rp	463347.56	6108117.47	646.39	315.01	318.49	316.75	316.99	149.1	478.7	A	0	0
100/09-02-071-11W4M/00	Kgrand_rp	463347.56	6108117.47	646.39	315.01	320.99	318.00	316.99	155.0	483.4	A	0	0
100/09-21-071-11W4M/00	Kgrand_rp	460127.21	6113246.65	609.11	273.50	279.50	276.50	274.99	168.9	501.5	A	0	0
100/10-01-071-11W4M/00	Kgrand_rp	464603.77	6108080.61	646.00	367.99	399.99	383.99	371.31	231.7	493.7	A	0	0
100/10-01-071-11W4M/00	Kgrand_rp	464603.77	6108080.61	646.00	315.99	325.01	320.50	321.99	171.0	496.5	A	0	0
100/10-36-071-11W4M/00	Kgrand_rp	464805.18	6116196.38	651.51	307.39	313.21	310.30	309.40	151.9	493.1	A	0	0
100/11-09-071-11W4M/00	Kgrand_rp	459585.76	6109678.02	616.40	274.99	282.00	278.50	277.00	170.0	507.9	A	0	0
100/14-04-071-11W4M/00	Kgrand_rp	459527.81	6108422.09	617.71	279.01	288.01	283.51	279.99	168.0	502.2	A	0	0
100/14-11-071-11W4M/00	Kgrand_rp	462787.52	6110098.60	659.10	323.00	329.00	326.00	313.49	172.1	505.2	A	0	10
100/15-06-071-11W4M/00	Kgrand_rp	456620.75	6108620.84	606.80	269.50	273.50	271.50	271.79	142.2	477.5	B	0	0
100/06-34-071-12W4M/00	Kgrand_rp	451190.29	6115905.53	625.79	297.49	313.91	305.70	298.10	171.1	491.2	A	0	0
100/10-12-071-12W4M/00	Kgrand_rp	455073.02	6109711.26	588.30	254.51	259.51	257.01	256.79	103.9	435.2	A	0	0
100/10-14-071-12W4M/00	Kgrand_rp	453362.31	6111661.99	618.99	289.01	292.61	290.81	291.39	165.4	493.6	A	0	0
100/10-20-071-12W4M/00	Kgrand_rp	448588.40	6113308.33	596.19	270.39	277.40	273.89	276.09	166.3	488.6	A	0	0
100/11-25-071-12W4M/00	Kgrand_rp	454339.89	6114753.56	602.71	268.99	274.99	271.99	267.49	154.1	484.8	A	0	1
100/13-15-071-12W4M/00	Kgrand_rp	451000.57	6111746.36	601.40	272.00	277.00	274.50	274.02	179.7	506.6	A	0	0
100/07-26-071-14W4M/00	Kgrand_rp	433679.47	6114598.68	648.89	326.72	331.59	329.15	329.49	177.8	497.6	A	0	0
100/06-03-071-15W4M/00	Kgrand_rp	421719.46	6108403.01	594.00	291.51	295.50	293.51	294.41	186.3	486.8	A	0	0
100/07-12-071-15W4M/00	Kgrand_rp	425467.63	6110049.48	622.01	315.01	321.50	318.26	319.19	192.8	496.6	A	0	0
100/10-09-071-16W4M/00	Kgrand_rp	410931.78	6110337.74	593.51	290.99	294.01	292.50	280.69	202.7	503.7	A	0	10
100/07-20-072-01W4M/00	Kgrand_rp	556198.51	6122656.24	696.01	377.50	381.49	379.49	378.99	212.7	529.2	B	0	0
100/10-32-072-03W4M/00	Kgrand_rp	536599.02	6125787.59	698.51	365.00	378.01	371.51	366.00	201.8	528.8	A	0	0
100/06-03-072-04W4M/00	Kgrand_rp	529764.54	6117563.35	679.49	300.99	305.01	303.00	302.00	149.4	525.9	A	0	0
100/07-28-072-04W4M/00	Kgrand_rp	528278.85	6124080.68	701.01	341.01	344.61	342.81	341.99	161.1	519.3	A	0	0
100/08-18-072-05W4M/00	Kgrand_rp	515716.10	6120706.44	707.99	341.01	344.00	342.50	342.99	150.5	516.0	A	0	0
100/11-06-072-05W4M/00	Kgrand_rp	514745.12	6117594.91	673.00	310.01	313.49	311.75	311.51	138.7	500.0	A	0	0
100/11-30-072-05W4M/00	Kgrand_rp	514999.44	6124062.57	715.49	341.41	344.61	343.01	342.60	140.8	513.2	B	0	0
100/12-04-072-05W4M/00	Kgrand_rp	517841.32	6117597.37	682.11	317.51	320.50	319.00	319.49	141.1	504.2	A	0	0
100/03-18-072-06W4M/00	Kgrand_rp	505343.85	6120331.27	688.51	320.99	324.49	322.74	322.51	142.6	508.3	A	0	0
100/10-22-072-06W4M/00	Kgrand_rp	510540.14	6122480.59	710.00	340.80	344.79	342.79	341.80	129.3	496.5	D	0	0
100/12-28-072-06W4M/00	Kgrand_rp	507890.23	6124048.65	717.59	349.00	352.99	350.99	351.01	141.3	507.9	A	0	0
100/10-01-072-07W4M/00	Kgrand_rp	504040.36	6117841.57	667.39	305.01	315.99	310.50	305.99	153.6	510.5	A	0	0
100/10-08-072-07W4M/00	Kgrand_rp	497424.17	6119331.69	674.49	319.00	324.00	321.50	319.80	155.2	508.2	A	0	0
100/10-16-072-07W4M/00	Kgrand_rp	499166.96	6121122.70	702.20	341.50	351.01	346.25	342.50	156.5	512.4	A	0	0
100/10-17-072-07W4M/00	Kgrand_rp	497486.26	6121128.90	693.21	330.01	336.99	333.50	331.01	148.0	507.8	A	0	0
100/10-25-072-07W4M/00	Kgrand_rp	504000.82	6124283.81	722.32	352.01	358.99	355.50	354.00	149.9	516.7	A	0	0
100/10-36-072-07W4M/00	Kgrand_rp	503935.25	6125846.20	742.19	388.01	394.99	391.50	388.80	156.8	507.5	G	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/10-36-072-07W4M/00	Kgrand_rp	503935.25	6125846.20	742.19	370.00	377.01	373.50	370.79	149.6	518.3	A	0	0
100/11-30-072-07W4M/00	Kgrand_rp	495272.26	6124324.59	684.31	318.00	333.00	325.50	319.49	156.8	515.6	A	0	0
100/11-31-072-07W4M/00	Kgrand_rp	495274.56	6125882.58	686.02	316.99	323.00	320.00	317.82	160.0	526.1	C	0	0
100/10-01-072-08W4M/00	Kgrand_rp	494303.82	6117874.55	680.01	320.01	330.01	325.01	320.99	156.5	511.5	A	0	0
100/10-05-072-08W4M/00	Kgrand_rp	487741.54	6117887.82	667.30	310.01	316.99	313.50	311.60	161.2	515.0	A	0	0
100/10-15-072-08W4M/00	Kgrand_rp	490935.82	6121153.03	687.11	323.00	326.02	324.51	325.01	149.8	512.4	B	0	0
100/10-15-072-08W4M/00	Kgrand_rp	490935.82	6121153.03	687.11	326.99	330.01	328.50	328.00	154.7	513.3	A	0	0
100/10-17-072-08W4M/00	Kgrand_rp	487652.01	6121158.73	667.00	330.01	344.00	337.00	331.50	172.8	502.8	A	0	0
100/10-17-072-08W4M/00	Kgrand_rp	487652.01	6121158.73	667.00	311.99	326.02	319.00	313.49	156.6	504.5	A	0	0
100/10-19-072-08W4M/00	Kgrand_rp	486092.62	6122735.81	677.91	320.99	324.00	322.49	321.90	161.8	517.2	A	0	0
100/11-25-072-08W4M/00	Kgrand_rp	493625.19	6124332.22	685.10	320.01	330.01	325.01	320.99	168.2	528.3	A	0	0
100/11-26-072-08W4M/00	Kgrand_rp	492000.36	6124342.64	683.30	320.01	331.99	326.00	320.99	168.4	525.7	D	0	0
100/02-06-072-09W4M/00	Kgrand_rp	476362.29	6117159.27	681.02	337.99	341.41	339.70	340.01	131.8	473.1	A	0	0
100/03-04-072-09W4M/00	Kgrand_rp	479042.36	6117114.65	670.01	323.00	326.99	324.99	324.00	163.6	508.6	A	0	0
100/03-04-072-09W4M/00	Kgrand_rp	479042.36	6117114.65	670.01	315.99	320.01	318.00	316.99	157.3	509.3	B	0	0
100/03-19-072-09W4M/00	Kgrand_rp	475892.65	6121861.43	663.31	310.01	315.50	312.76	313.09	151.8	502.3	C	0	0
100/03-19-072-09W4M/00	Kgrand_rp	475892.65	6121861.43	663.31	330.01	336.01	333.01	333.70	172.9	503.2	A	0	0
100/03-19-072-09W4M/00	Kgrand_rp	475892.65	6121861.43	663.31	319.00	323.00	321.00	320.32	161.0	503.3	A	0	0
100/06-09-072-09W4M/00	Kgrand_rp	479054.37	6118849.54	681.50	339.00	349.00	344.00	346.59	174.5	512.0	C	0	0
100/06-09-072-09W4M/00	Kgrand_rp	479054.37	6118849.54	681.50	325.01	331.99	328.50	329.61	159.8	512.8	A	0	0
100/06-11-072-09W4M/00	Kgrand_rp	482222.29	6118860.20	679.89	328.00	334.00	331.00	328.91	149.3	498.2	A	0	0
100/06-30-072-09W4M/00	Kgrand_rp	475885.86	6124000.41	665.99	313.00	325.01	319.00	314.89	163.5	510.5	A	0	0
100/07-17-072-09W4M/00	Kgrand_rp	478027.58	6120543.83	668.70	318.79	324.89	321.84	310.90	171.8	518.7	A	0	8
100/07-17-072-09W4M/00	Kgrand_rp	478027.58	6120543.83	668.70	309.10	316.41	312.76	301.11	169.2	525.2	B	0	8
100/10-08-072-09W4M/00	Kgrand_rp	477929.60	6119514.92	674.19	316.99	324.61	320.80	320.01	159.5	512.9	A	0	0
100/10-15-072-09W4M/00	Kgrand_rp	481177.82	6121165.90	685.59	325.01	333.00	329.00	326.99	158.8	515.4	A	0	0
100/10-25-072-09W4M/00	Kgrand_rp	484422.76	6124386.18	685.50	323.00	326.99	324.99	325.01	148.0	508.5	A	0	0
100/11-01-072-09W4M/00	Kgrand_rp	483874.48	6117945.81	660.72	310.01	318.00	314.01	310.90	164.2	510.9	A	0	0
100/11-01-072-09W4M/00	Kgrand_rp	483874.48	6117945.81	660.72	333.00	341.01	337.00	333.91	188.6	512.4	A	0	0
100/11-28-072-09W4M/00	Kgrand_rp	479075.70	6124444.93	668.22	334.00	350.49	342.25	338.69	176.7	502.6	A	0	0
100/11-28-072-09W4M/00	Kgrand_rp	479075.70	6124444.93	668.22	310.50	313.00	311.75	311.11	156.8	513.3	C	0	0
100/11-28-072-09W4M/00	Kgrand_rp	479075.70	6124444.93	668.22	310.50	318.00	314.25	315.59	162.5	516.5	A	0	0
100/11-32-072-09W4M/00	Kgrand_rp	477435.69	6125957.59	663.61	331.01	336.01	333.51	333.00	181.0	511.1	A	0	0
100/03-13-072-10W4M/00	Kgrand_rp	474196.42	6120357.47	668.09	320.99	326.50	323.74	324.40	144.7	489.0	A	0	0
100/04-16-072-10W4M/00	Kgrand_rp	469049.07	6120477.20	657.09	315.99	319.00	317.50	317.51	157.0	496.6	A	0	0
100/06-24-072-10W4M/00	Kgrand_rp	474073.42	6122164.38	673.09	345.00	366.00	355.50	354.79	200.3	517.9	A	0	0
100/06-28-072-10W4M/00	Kgrand_rp	469118.73	6123809.82	663.00	313.00	315.99	314.49	314.49	159.3	507.8	A	0	0
100/06-32-072-10W4M/00	Kgrand_rp	467601.66	6125550.09	665.59	315.01	320.01	317.51	310.01	131.8	479.9	A	0	5
100/07-35-072-10W4M/00	Kgrand_rp	473027.22	6125450.29	672.39	344.00	352.01	348.01	349.21	225.5	549.8	B	0	0
100/09-21-072-10W4M/00	Kgrand_rp	469986.53	6122722.13	665.59	315.99	320.99	318.49	317.51	160.7	507.8	A	0	0
100/11-09-072-10W4M/00	Kgrand_rp	469157.88	6119568.33	661.39	309.40	324.89	317.15	310.90	148.6	492.9	A	0	0
100/11-10-072-10W4M/00	Kgrand_rp	470804.82	6119553.85	666.81	358.11	376.40	367.25	360.91	184.1	483.6	A	0	0
100/14-01-072-10W4M/00	Kgrand_rp	474195.58	6118133.96	668.09	318.00	321.50	319.75	320.01	154.4	502.7	A	0	0
100/07-13-072-11W4M/00	Kgrand_rp	464828.22	6120790.22	653.89	310.01	315.99	313.00	302.00	162.2	503.1	A	0	8
100/07-24-072-11W4M/00	Kgrand_rp	464835.51	6122190.19	658.31	326.02	331.99	329.00	327.51	163.9	493.2	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/07-24-072-11W4M/00	Kgrand_rp	464835.51	6122190.19	658.31	309.01	319.00	314.01	310.01	213.2	557.5	D	0	0
100/08-01-072-12W4M/00	Kgrand_rp	455400.17	6117717.63	628.90	299.01	307.00	303.00	300.02	155.0	480.9	B	0	0
100/11-03-072-12W4M/00	Kgrand_rp	451200.49	6118107.93	624.20	352.99	364.21	358.60	355.40	236.1	501.7	A	0	0
100/06-27-072-13W4M/00	Kgrand_rp	441574.78	6124146.39	660.81	333.00	336.99	334.99	336.01	161.9	487.7	A	0	0
100/06-27-072-13W4M/00	Kgrand_rp	441574.78	6124146.39	660.81	323.52	327.51	325.51	326.02	153.0	488.3	A	0	0
100/06-30-072-13W4M/00	Kgrand_rp	436866.14	6124105.25	652.70	318.49	325.50	321.99	319.61	160.9	491.6	A	0	0
100/08-29-072-13W4M/00	Kgrand_rp	439330.96	6124093.07	655.50	324.49	330.50	327.49	326.81	155.9	484.0	B	0	0
100/10-17-072-13W4M/00	Kgrand_rp	438772.24	6121515.24	645.90	321.29	333.51	327.40	331.59	167.7	486.2	A	0	0
100/10-20-072-13W4M/00	Kgrand_rp	438701.56	6122842.92	647.92	311.99	329.49	320.74	314.01	152.0	479.2	A	0	0
100/10-32-072-13W4M/00	Kgrand_rp	438755.33	6126316.99	659.89	279.81	331.01	305.41	283.50	268.5	623.0	A	0	0
100/07-27-072-16W4M/00	Kgrand_rp	412774.30	6124569.71	586.41	271.30	278.89	275.10	275.81	176.0	487.3	C	0	0
100/11-30-072-17W4M/00	Kgrand_rp	397499.60	6125578.14	585.19	292.00	309.71	300.85	298.70	188.3	472.6	A	0	0
100/09-12-073-01W4M/00	Kgrand_rp	563123.02	6129542.21	669.50	363.99	372.01	368.00	365.00	233.7	535.2	C	0	0
100/07-06-073-04W4M/00	Kgrand_rp	525097.05	6127294.44	719.21	354.30	357.50	355.90	355.49	155.4	518.7	A	0	0
100/10-16-073-04W4M/00	Kgrand_rp	528288.28	6130851.57	704.70	340.01	360.00	350.00	341.01	168.4	523.1	D	0	0
100/10-19-073-05W4M/00	Kgrand_rp	515344.05	6132435.86	665.72	283.50	289.59	286.54	284.99	140.9	520.0	C	0	0
100/11-16-073-05W4M/00	Kgrand_rp	518168.32	6130798.40	687.81	297.00	300.02	298.51	298.49	124.7	514.0	D	0	0
100/12-04-073-05W4M/00	Kgrand_rp	517935.06	6127291.89	691.20	326.81	330.01	328.41	328.30	151.1	513.9	B	0	0
100/08-02-073-06W4M/00	Kgrand_rp	512536.13	6127254.39	707.02	325.80	329.49	327.65	326.99	139.3	518.7	A	0	0
100/09-26-073-06W4M/00	Kgrand_rp	512274.35	6133935.32	666.20	282.00	293.01	287.50	283.01	149.1	527.8	C	0	0
100/11-32-073-06W4M/00	Kgrand_rp	506607.69	6135596.96	650.69	281.00	285.99	283.50	283.10	138.4	505.6	A	0	0
100/11-34-073-06W4M/00	Kgrand_rp	509887.01	6135657.62	646.21	258.50	267.62	263.06	261.49	137.6	520.8	A	0	0
100/05-25-073-07W4M/00	Kgrand_rp	503249.23	6133586.71	675.41	316.99	325.01	321.00	323.21	148.3	502.7	A	0	0
100/06-31-073-07W4M/00	Kgrand_rp	495369.31	6135064.72	733.29	367.32	378.01	372.66	368.81	158.0	518.6	C	0	0
100/07-34-073-07W4M/00	Kgrand_rp	500588.88	6135224.81	708.69	326.11	335.31	330.71	328.00	154.8	532.8	C	0	0
100/10-15-073-07W4M/00	Kgrand_rp	500704.95	6130793.39	734.20	356.01	361.01	358.51	357.50	137.9	513.6	A	0	0
100/10-20-073-07W4M/00	Kgrand_rp	497595.41	6132404.30	728.50	347.99	355.00	351.50	348.69	151.0	528.0	A	0	0
100/11-21-073-07W4M/00	Kgrand_rp	498515.12	6132368.29	733.81	355.00	361.01	358.00	355.79	150.2	526.0	A	0	0
100/05-26-073-08W4M/00	Kgrand_rp	491842.74	6133618.64	713.81	335.01	339.00	337.00	336.99	142.8	519.6	A	0	0
100/10-04-073-08W4M/00	Kgrand_rp	489252.73	6127504.53	696.01	331.01	336.99	334.00	331.81	169.0	531.1	A	0	0
100/10-05-073-08W4M/00	Kgrand_rp	487775.95	6127585.15	700.71	336.99	342.50	339.75	340.01	150.1	511.1	A	0	0
100/10-13-073-08W4M/00	Kgrand_rp	494307.09	6130798.11	696.41	326.02	334.00	330.01	328.00	154.9	521.3	A	0	0
100/10-14-073-08W4M/00	Kgrand_rp	492478.84	6130685.11	707.72	336.99	344.00	340.49	337.90	162.9	530.1	A	0	0
100/10-16-073-08W4M/00	Kgrand_rp	489297.94	6130705.02	722.01	376.00	385.51	380.76	378.81	172.9	514.2	A	0	0
100/10-33-073-08W4M/00	Kgrand_rp	489345.51	6135690.57	700.01	326.02	331.99	329.00	326.90	137.3	508.3	A	0	0
100/11-29-073-08W4M/00	Kgrand_rp	487168.68	6134066.00	689.49	312.70	324.00	318.35	314.62	122.8	493.9	A	0	0
100/11-29-073-08W4M/00	Kgrand_rp	487168.68	6134066.00	689.49	311.81	320.01	315.91	313.61	128.3	501.9	A	0	0
1AA/06-35-073-08W4M/00	Kgrand_rp	492022.21	6135032.77	701.32	320.01	335.31	327.66	322.51	150.7	524.4	A	0	0
100/06-11-073-09W4M/00	Kgrand_rp	482260.00	6128586.49	685.89	352.01	358.99	355.50	352.90	163.0	493.4	A	0	0
100/08-08-073-09W4M/00	Kgrand_rp	478085.41	6128882.30	665.90	310.99	316.99	313.99	314.19	150.8	502.7	A	0	0
100/08-08-073-09W4M/00	Kgrand_rp	478085.41	6128882.30	665.90	305.01	309.01	307.01	299.19	155.1	514.0	B	0	6
100/08-08-073-09W4M/00	Kgrand_rp	478085.41	6128882.30	665.90	310.01	314.01	312.01	303.61	162.5	516.3	A	0	6
100/10-01-073-09W4M/00	Kgrand_rp	484466.36	6127576.61	685.89	328.00	334.00	331.00	330.01	142.9	497.8	A	0	0
100/10-03-073-09W4M/00	Kgrand_rp	481225.43	6127594.74	682.30	326.02	333.00	329.51	328.00	146.3	499.1	A	0	0
100/10-17-073-09W4M/00	Kgrand_rp	477880.20	6130754.08	668.70	358.42	366.40	362.41	360.31	169.7	476.0	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/10-17-073-09W4M/00	Kgrand_rp	477880.20	6130754.08	668.70	334.70	342.60	338.65	336.50	151.0	481.1	A	0	0
100/10-17-073-09W4M/00	Kgrand_rp	477880.20	6130754.08	668.70	304.80	312.70	308.75	306.60	202.0	562.0	D	0	0
100/11-21-073-09W4M/00	Kgrand_rp	479113.09	6132357.31	664.80	300.02	313.00	306.51	302.00	156.5	514.8	A	0	0
100/11-23-073-09W4M/00	Kgrand_rp	482354.99	6132342.06	654.50	320.01	331.01	325.51	321.99	165.8	494.8	A	0	0
100/11-31-073-09W4M/00	Kgrand_rp	475893.53	6135651.17	659.41	293.01	298.00	295.50	294.01	162.9	526.8	A	0	0
100/11-31-073-09W4M/00	Kgrand_rp	475893.53	6135651.17	659.41	300.99	305.99	303.49	301.30	181.0	536.9	C	0	0
100/16-33-073-09W4M/00	Kgrand_rp	479807.16	6135853.00	658.89	294.01	297.00	295.50	294.89	163.8	527.2	A	0	0
100/09-29-073-10W4M/00	Kgrand_rp	468660.77	6134063.96	661.11	307.00	310.99	308.99	309.01	197.2	549.3	A	0	0
100/09-32-073-10W4M/00	Kgrand_rp	468444.16	6135695.92	662.52	307.00	315.01	311.00	311.69	170.7	522.2	A	0	0
100/10-06-073-10W4M/00	Kgrand_rp	466570.80	6127687.85	665.11	311.51	324.89	318.20	322.21	157.2	504.1	A	0	0
100/10-14-073-10W4M/00	Kgrand_rp	473083.82	6130782.91	663.89	362.99	378.99	370.99	364.82	199.5	492.4	A	0	0
100/12-22-073-10W4M/00	Kgrand_rp	470659.17	6132213.94	664.71	307.00	310.01	308.50	307.61	157.1	513.3	B	0	0
100/12-22-073-10W4M/00	Kgrand_rp	470659.17	6132213.94	664.71	330.01	336.01	333.01	332.69	194.4	526.1	A	0	0
100/10-28-073-11W4M/00	Kgrand_rp	460188.34	6134113.30	663.49	307.79	320.01	313.90	309.40	118.7	468.3	C	0	0
100/10-32-073-11W4M/00	Kgrand_rp	458288.41	6135910.44	647.40	351.40	355.70	353.55	352.99	183.1	476.9	A	0	0
100/10-32-073-11W4M/00	Kgrand_rp	458288.41	6135910.44	647.40	300.20	306.29	303.25	301.81	134.6	478.8	A	0	0
100/14-25-073-11W4M/00	Kgrand_rp	464676.79	6134624.90	657.61	333.00	337.99	335.49	336.29	150.1	472.2	C	0	0
100/11-31-073-12W4M/00	Kgrand_rp	446601.70	6135760.35	660.41	302.00	307.00	304.50	303.49	122.5	478.4	A	0	0
100/11-31-073-12W4M/00	Kgrand_rp	446601.70	6135760.35	660.41	313.00	316.99	315.00	314.01	142.0	487.4	A	0	0
100/08-11-073-13W4M/00	Kgrand_rp	444003.41	6129166.88	669.50	320.50	325.50	323.00	323.21	141.5	488.0	A	0	0
100/11-30-073-13W4M/00	Kgrand_rp	436773.75	6134260.72	676.11	329.00	339.00	334.00	336.29	142.0	484.1	A	0	0
100/13-17-073-13W4M/00	Kgrand_rp	437902.93	6131712.55	676.20	335.01	341.01	338.01	336.01	149.9	488.1	A	0	0
100/06-32-073-14W4M/00	Kgrand_rp	428777.67	6135831.68	697.60	355.00	361.01	358.00	357.01	145.5	485.1	A	0	0
100/07-20-073-14W4M/00	Kgrand_rp	428957.86	6132449.47	673.31	335.89	335.70	345.80	343.51	157.3	484.8	A	0	0
100/10-08-073-14W4M/00	Kgrand_rp	429108.75	6129632.08	652.30	316.99	322.51	319.75	321.60	156.3	488.8	A	0	0
100/10-10-073-14W4M/00	Kgrand_rp	432426.84	6129686.99	663.89	329.22	367.32	348.27	323.70	160.9	476.5	D	0	6
100/10-10-073-14W4M/00	Kgrand_rp	432426.84	6129686.99	663.89	329.22	383.99	356.60	323.70	175.2	482.4	A	0	6
100/07-13-073-15W4M/00	Kgrand_rp	425925.64	6130822.94	648.40	308.00	313.49	310.74	314.01	150.1	487.8	B	-1	0
100/07-23-073-15W4M/00	Kgrand_rp	424172.79	6132690.40	641.30	299.01	305.99	302.50	304.01	151.3	490.1	A	0	0
100/10-25-073-15W4M/00	Kgrand_rp	425728.32	6134375.92	657.91	318.00	323.00	320.50	320.01	160.7	498.1	D	0	0
100/11-26-073-15W4M/00	Kgrand_rp	423696.84	6134410.56	645.69	305.01	310.01	307.51	307.91	149.8	488.0	A	0	0
100/11-32-073-17W4M/00	Kgrand_rp	399409.77	6136846.46	579.40	249.91	257.31	253.61	252.41	139.1	464.9	B	0	0
100/11-29-074-01W4M/00	Kgrand_rp	555277.18	6144047.56	697.11	345.00	361.01	353.01	377.01	153.7	497.8	A	-16	0
100/07-19-074-04W4M/00	Kgrand_rp	525041.69	6141621.54	653.49	258.01	263.01	260.51	258.99	151.5	544.5	A	0	0
100/10-08-074-04W4M/00	Kgrand_rp	526654.64	6138885.46	617.80	237.99	242.59	240.29	239.60	164.4	542.0	B	0	0
100/07-05-074-05W4M/00	Kgrand_rp	517025.36	6136763.33	642.49	272.80	282.89	277.84	276.09	156.5	521.2	A	0	0
100/08-21-074-05W4M/00	Kgrand_rp	519000.32	6141660.33	656.51	283.80	294.71	289.26	286.79	158.0	525.3	A	0	0
100/10-17-074-05W4M/00	Kgrand_rp	517053.03	6140583.99	651.51	276.00	285.99	281.00	277.00	152.6	523.1	A	0	0
100/11-30-074-05W4M/00	Kgrand_rp	514852.66	6143665.41	690.10	310.90	319.10	315.00	312.12	160.3	535.4	A	0	0
100/11-34-074-05W4M/00	Kgrand_rp	519693.65	6145428.32	667.00	268.99	281.00	274.99	277.70	155.6	547.6	A	0	0
100/16-01-074-05W4M/00	Kgrand_rp	523731.51	6137485.42	626.40	250.52	257.89	254.20	251.49	157.5	529.7	A	0	0
100/10-07-074-06W4M/00	Kgrand_rp	505610.86	6138936.43	657.09	286.51	291.39	288.95	289.01	153.2	521.4	A	0	0
100/10-07-074-06W4M/00	Kgrand_rp	505610.86	6138936.43	657.09	271.91	275.51	273.71	274.29	145.5	528.8	A	0	0
100/10-13-074-06W4M/00	Kgrand_rp	513724.97	6140293.03	631.91	243.81	247.50	245.65	236.50	153.0	539.3	A	0	7
100/10-29-074-06W4M/00	Kgrand_rp	507299.08	6143696.48	633.71	257.89	264.60	261.24	259.69	148.1	520.6	A	0	0



**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/11-31-074-06W4M/00	Kgrand_rp	505178.61	6145115.74	636.21	248.99	261.00	255.00	250.00	142.7	523.9	A	0	0
100/06-24-074-07W4M/00	Kgrand_rp	503488.27	6141626.30	667.79	332.51	340.19	336.35	335.89	167.7	499.2	A	0	0
100/10-25-074-07W4M/00	Kgrand_rp	504012.39	6143681.13	650.41	277.40	283.50	280.45	280.39	145.5	515.5	C	0	0
100/11-23-074-07W4M/00	Kgrand_rp	501977.83	6142042.69	665.72	300.99	305.01	303.00	290.99	52.5	415.2	A	0	10
100/11-23-074-07W4M/00	Kgrand_rp	501977.83	6142042.69	665.72	293.49	297.49	295.49	294.50	129.7	500.0	A	0	0
100/11-23-074-07W4M/00	Kgrand_rp	501977.83	6142042.69	665.72	278.01	282.00	280.01	279.01	144.4	530.1	C	0	0
100/12-29-074-07W4M/00	Kgrand_rp	496753.68	6143546.95	678.70	305.99	313.00	309.49	310.71	146.3	515.5	A	0	0
100/06-30-074-08W4M/00	Kgrand_rp	485606.38	6143190.90	677.60	299.89	307.79	303.84	303.61	138.8	512.6	A	0	0
100/06-30-074-08W4M/00	Kgrand_rp	485606.38	6143190.90	677.60	300.50	306.29	303.40	302.39	140.8	515.0	A	0	0
100/10-02-074-08W4M/00	Kgrand_rp	492629.43	6137266.37	701.80	319.00	325.01	322.01	319.89	152.8	532.6	A	0	0
100/10-11-074-08W4M/00	Kgrand_rp	492623.15	6138813.28	716.50	363.99	367.99	365.99	367.01	155.7	506.2	A	0	0
100/10-11-074-08W4M/00	Kgrand_rp	492623.15	6138813.28	716.50	339.00	341.99	340.49	335.01	134.7	510.7	A	0	4
100/11-10-074-08W4M/00	Kgrand_rp	490414.00	6138836.45	695.80	314.01	320.99	317.50	315.01	138.9	517.2	A	0	0
100/11-26-074-08W4M/00	Kgrand_rp	491993.27	6143517.42	695.19	341.50	346.50	344.00	342.50	146.7	497.9	A	0	0
100/07-27-074-09W4M/00	Kgrand_rp	481240.85	6143148.36	665.41	345.00	350.49	347.75	346.59	169.4	487.1	A	0	0
100/07-27-074-09W4M/00	Kgrand_rp	481240.85	6143148.36	665.41	289.59	296.30	292.94	291.12	129.5	502.0	A	0	0
100/07-27-074-09W4M/00	Kgrand_rp	481240.85	6143148.36	665.41	298.70	304.80	301.75	300.20	144.4	508.1	A	0	0
100/10-14-074-09W4M/00	Kgrand_rp	482909.34	6140514.02	659.01	302.00	305.99	303.99	302.79	156.5	511.5	A	0	0
100/10-34-074-09W4M/00	Kgrand_rp	481272.44	6145366.23	675.50	293.01	299.01	296.01	294.19	111.2	490.7	A	0	0
100/11-08-074-09W4M/00	Kgrand_rp	477506.67	6139008.05	669.62	326.11	335.31	330.71	328.61	167.1	506.0	B	0	0
100/11-28-074-09W4M/00	Kgrand_rp	479134.36	6143810.00	668.40	289.01	298.00	293.51	290.99	136.2	511.1	C	0	0
100/11-28-074-09W4M/00	Kgrand_rp	479134.36	6143810.00	668.40	289.01	325.01	307.01	295.99	151.7	513.0	C	0	0
100/09-34-074-10W4M/00	Kgrand_rp	471681.54	6145199.38	678.30	329.00	341.01	335.01	331.01	155.8	499.1	A	0	0
100/12-08-074-10W4M/00	Kgrand_rp	467518.60	6138949.02	662.30	311.99	316.51	314.25	315.10	160.9	509.0	A	0	0
100/12-08-074-10W4M/00	Kgrand_rp	467518.60	6138949.02	662.30	289.01	305.99	297.50	294.01	250.6	615.4	A	0	0
100/05-31-074-11W4M/00	Kgrand_rp	455870.96	6145024.61	660.02	293.01	295.99	294.50	298.00	109.5	475.0	A	-2	0
100/06-08-074-11W4M/00	Kgrand_rp	457873.01	6138475.28	664.80	304.19	322.51	313.35	310.29	142.9	494.4	A	0	0
100/06-05-074-12W4M/00	Kgrand_rp	448151.07	6137060.76	664.59	303.00	307.00	305.00	305.01	116.2	475.8	A	0	0
100/10-03-074-12W4M/00	Kgrand_rp	452083.33	6137529.38	663.89	303.61	312.70	308.15	306.29	139.0	494.7	A	0	0
100/13-01-074-12W4M/00	Kgrand_rp	454564.91	6137614.41	666.90	394.99	399.99	397.49	396.00	215.2	484.6	C	0	0
100/13-01-074-12W4M/00	Kgrand_rp	454564.91	6137614.41	666.90	302.00	315.01	308.50	302.79	144.0	502.4	A	0	0
100/13-01-074-12W4M/00	Kgrand_rp	454564.91	6137614.41	666.90	302.00	315.01	308.50	302.70	144.1	502.5	C	0	0
100/14-18-074-12W4M/00	Kgrand_rp	446688.09	6141224.11	682.91	320.01	324.49	322.25	326.29	128.1	488.7	A	-2	0
100/11-26-074-14W4M/00	Kgrand_rp	433568.83	6144074.89	774.50	446.81	450.80	448.80	436.20	153.0	478.7	A	0	11
100/06-08-074-15W4M/00	Kgrand_rp	418888.30	6139084.68	651.69	303.31	315.50	309.40	310.01	137.6	479.9	A	0	0
100/10-06-074-15W4M/00	Kgrand_rp	417808.06	6137931.41	637.00	291.12	300.81	295.96	299.89	146.3	487.3	A	0	0
100/11-04-074-15W4M/00	Kgrand_rp	420497.44	6137879.89	641.70	295.50	299.50	297.50	289.50	145.0	489.2	G	0	6
100/11-07-074-15W4M/00	Kgrand_rp	417346.40	6139370.45	641.91	296.60	299.89	298.25	298.40	133.5	477.1	A	0	0
100/06-24-074-17W4M/00	Kgrand_rp	406023.77	6142511.79	602.59	260.60	271.30	265.95	255.09	138.2	474.9	A	0	6
100/06-25-074-17W4M/00	Kgrand_rp	405996.64	6144117.69	616.31	283.50	286.51	285.00	278.31	147.9	479.2	A	0	5
100/07-09-074-17W4M/00	Kgrand_rp	401500.68	6139676.01	575.71	237.99	243.99	240.99	241.71	145.9	480.6	B	0	0
100/07-21-074-17W4M/00	Kgrand_rp	401836.92	6142821.34	582.90	231.01	243.99	237.50	247.89	115.9	461.3	A	-4	0
100/07-22-074-17W4M/00	Kgrand_rp	403385.00	6142588.94	589.79	246.89	261.49	254.19	234.70	151.3	486.9	C	0	12
100/10-10-074-17W4M/00	Kgrand_rp	403232.99	6139761.22	577.90	237.71	246.89	242.30	245.09	140.9	476.5	A	0	0
100/10-10-074-17W4M/00	Kgrand_rp	403232.99	6139761.22	577.90	246.89	256.00	251.45	254.20	156.8	483.2	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/12-03-074-17W4M/00	Kgrand_rp	402342.54	6138063.07	574.09	238.99	245.00	242.00	241.01	145.4	477.4	B	0	0
100/12-03-074-17W4M/00	Kgrand_rp	402342.54	6138063.07	574.09	256.00	262.01	259.00	258.01	164.2	479.3	A	0	0
100/16-27-075-04W4M/00	Kgrand_rp	529799.54	6153799.88	598.99	246.00	252.50	249.25	248.69	228.3	578.0	A	0	0
100/08-09-075-05W4M/00	Kgrand_rp	518396.68	6148263.95	623.20	261.00	266.00	263.50	263.90	150.9	510.5	A	0	0
100/12-30-075-05W4M/00	Kgrand_rp	514230.14	6153217.60	620.79	258.99	263.01	261.00	261.92	137.5	497.3	A	0	0
100/01-30-075-06W4M/00	Kgrand_rp	505444.27	6152741.61	618.81	220.01	224.49	222.25	222.90	119.6	516.2	A	0	0
100/04-11-075-06W4M/00	Kgrand_rp	510885.62	6147812.69	632.19	257.01	262.01	259.51	259.90	130.6	503.3	A	0	0
100/06-08-075-06W4M/00	Kgrand_rp	506179.57	6147974.94	648.62	258.01	262.01	260.01	258.90	152.4	541.0	B	0	0
100/06-10-075-06W4M/00	Kgrand_rp	509428.39	6147948.43	647.40	271.30	280.39	275.84	273.71	142.7	514.3	A	0	0
100/07-07-075-06W4M/00	Kgrand_rp	505242.82	6148019.35	623.99	236.01	238.99	237.50	229.21	160.5	547.0	A	0	7
1AA/06-31-075-06W4M/00	Kgrand_rp	504599.30	6154738.31	611.10	236.01	240.00	238.00	237.99	134.7	507.8	C	0	0
1AA/01-28-075-06W4M/00	Kgrd_rp_L	508797.48	6152738.15	622.71	288.01	295.99	292.00	289.99	161.4	492.1	C	0	0
1AA/06-31-075-06W4M/00	Kgrd_rp_L	504599.30	6154738.31	611.10	267.01	277.00	272.00	268.99	162.8	501.9	C	0	0
100/06-29-075-07W4M/00	Kgrand_rp	496356.47	6152837.69	671.81	265.21	273.71	269.46	258.20	136.6	538.9	A	0	7
100/07-13-075-07W4M/00	Kgrand_rp	503521.09	6149642.46	645.60	263.99	268.99	266.49	264.99	149.4	528.6	A	0	0
100/10-10-075-07W4M/00	Kgrand_rp	500224.35	6148555.98	660.02	292.00	295.99	294.00	292.91	139.8	505.8	C	0	0
100/10-10-075-07W4M/00	Kgrand_rp	500224.35	6148555.98	660.02	273.01	279.01	276.01	274.02	146.4	530.4	C	0	0
100/10-11-075-07W4M/00	Kgrand_rp	501887.68	6148585.32	648.01	274.29	281.91	278.10	274.29	136.1	506.0	A	0	0
100/06-04-075-08W4M/00	Kgrand_rp	488438.21	6146428.86	713.81	336.99	340.01	338.50	331.01	135.0	510.3	A	0	6
100/11-18-075-08W4M/00	Kgrand_rp	484926.10	6149994.10	665.01	271.49	277.70	274.60	272.71	113.1	503.6	B	0	0
100/10-01-075-09W4M/00	Kgrand_rp	483836.06	6146837.33	680.19	294.99	302.30	298.64	296.21	110.2	491.7	A	0	0
100/10-34-075-09W4M/00	Kgrand_rp	480676.53	6154953.20	677.21	272.00	292.00	282.00	280.20	113.8	509.0	A	0	0
100/11-24-075-09W4M/00	Kgrand_rp	483234.61	6151915.55	677.30	331.01	344.39	337.70	341.99	144.1	483.7	A	0	0
100/11-24-075-09W4M/00	Kgrand_rp	483234.61	6151915.55	677.30	286.51	293.19	289.85	290.20	125.2	512.6	D	0	0
100/12-19-075-09W4M/00	Kgrand_rp	474917.57	6151779.35	681.90	289.99	294.99	292.49	292.00	125.3	514.7	A	0	0
100/02-34-075-11W4M/00	Kgrand_rp	460893.87	6154307.04	656.51	274.02	295.69	284.85	272.49	122.9	494.6	A	0	2
100/06-14-075-13W4M/00	Kgrand_rp	442673.49	6150022.91	696.99	321.99	326.02	324.00	324.19	103.7	476.7	C	0	0
100/15-06-075-13W4M/00	Kgrand_rp	436389.54	6147601.69	745.39	383.99	394.02	389.00	379.29	131.0	487.4	B	0	5
100/05-12-075-14W4M/00	Kgrand_rp	434012.02	6148390.29	759.72	399.99	407.00	403.50	402.70	128.0	484.2	A	0	0
100/06-27-075-14W4M/00	Kgrand_rp	431123.67	6153630.54	756.21	402.31	405.42	403.86	402.92	116.2	468.6	A	0	0
100/06-31-075-14W4M/00	Kgrand_rp	426060.58	6155118.84	733.29	367.01	371.19	369.10	369.39	117.8	482.0	A	0	0
100/06-31-075-14W4M/00	Kgrand_rp	426060.58	6155118.84	733.29	367.01	371.19	369.10	369.39	118.2	482.4	A	0	0
100/06-32-075-14W4M/00	Kgrand_rp	427789.61	6155084.46	742.19	399.29	402.31	400.80	400.51	134.5	475.9	A	0	0
100/11-11-075-14W4M/00	Kgrand_rp	432832.97	6148842.25	767.79	418.19	425.50	421.84	422.09	132.6	478.5	A	0	0
100/11-29-075-14W4M/00	Kgrand_rp	427843.05	6154111.83	745.91	375.00	386.49	380.74	382.31	111.1	476.3	A	0	0
100/11-33-075-14W4M/00	Kgrand_rp	429375.44	6155604.06	726.01	362.71	371.19	366.95	366.40	116.7	475.7	A	0	0
100/06-36-075-15W4M/00	Kgrand_rp	424486.03	6155106.72	732.10	368.81	372.50	370.65	370.30	116.5	478.0	A	0	0
100/06-36-075-15W4M/00	Kgrand_rp	424486.03	6155106.72	732.10	360.91	368.81	364.86	366.10	121.9	489.1	A	0	0
100/10-08-075-15W4M/00	Kgrand_rp	418552.45	6149102.67	704.61	355.00	360.00	357.50	349.79	137.2	484.3	G	0	5
100/10-08-075-15W4M/00	Kgrand_rp	418552.45	6149102.67	704.61	347.02	354.00	350.51	347.99	132.1	486.2	A	0	0
100/10-25-075-15W4M/00	Kgrand_rp	425107.87	6154148.77	744.69	399.99	404.99	402.49	402.61	131.6	473.8	A	0	0
100/06-06-075-16W4M/00	Kgrand_rp	406320.39	6147370.41	646.79	299.31	317.60	308.46	330.01	120.8	459.2	B	-12	0
100/06-23-075-16W4M/00	Kgrand_rp	412970.59	6152273.26	732.80	371.49	390.51	381.00	372.31	130.6	482.4	C	0	0
100/07-05-075-16W4M/00	Kgrand_rp	408627.29	6147320.74	669.01	320.59	326.72	323.65	324.61	125.3	470.7	A	0	0
100/07-24-075-16W4M/00	Kgrand_rp	415265.32	6152025.76	729.11	374.91	383.99	379.45	382.19	120.5	470.2	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/12-17-075-17W4M/00	Kgrand_rp	398126.31	6151282.31	619.20	294.01	298.00	296.01	295.99	148.9	472.1	B	0	0
100/16-36-075-17W4M/00	Kgrand_rp	405847.55	6156367.96	729.39	383.99	395.60	389.79	389.20	139.2	478.8	B	0	0
100/08-24-076-02W4M/00	Kgrand_rp	552714.65	6161339.12	633.71	240.79	268.80	254.80	234.70	187.2	566.1	A	0	6
100/11-09-076-02W4M/00	Kgrand_rp	546941.87	6158623.31	658.49	282.00	289.99	285.99	287.79	185.4	557.9	D	0	0
100/06-25-076-05W4M/00	Kgrand_rp	522387.76	6162631.41	597.11	205.01	211.01	208.01	208.00	156.5	545.6	A	0	0
100/07-18-076-05W4M/00	Kgrand_rp	514912.58	6159337.56	573.30	164.99	173.01	169.00	167.00	183.9	588.2	A	0	0
100/10-08-076-05W4M/00	Kgrand_rp	516463.82	6158227.97	581.90	195.01	205.01	200.01	196.99	182.2	564.1	A	0	0
100/07-18-076-05W4M/00	Kgrd_rp_L	514912.58	6159337.56	573.30	210.01	217.99	214.00	211.01	164.5	523.8	A	0	0
100/10-05-076-05W4M/00	Kgrd_rp_L	516499.11	6156724.55	615.70	249.91	259.11	254.51	252.41	156.2	517.4	A	0	0
100/07-19-076-06W4M/00	Kgrand_rp	505131.62	6160932.24	570.31	240.21	243.81	242.01	242.01	181.0	509.3	A	0	0
100/07-28-076-06W4M/00	Kgrand_rp	508390.99	6162556.57	563.91	221.01	225.61	223.31	214.00	180.7	521.3	C	0	7
100/11-03-076-06W4M/00	Kgrand_rp	509420.35	6156691.38	594.39	189.01	208.79	198.90	196.29	128.8	524.3	D	0	0
100/11-03-076-06W4M/00	Kgrand_rp	509420.35	6156691.38	594.39	189.01	208.79	198.90	196.29	130.7	526.2	A	0	0
100/10-14-076-07W4M/00	Kgrand_rp	501871.46	6159904.64	595.31	178.61	198.09	188.35	171.60	150.7	557.7	A	0	7
100/11-32-076-07W4M/00	Kgrd_rp_L	496467.12	6164767.99	559.00	221.01	224.61	222.81	222.81	184.9	521.1	A	0	0
100/06-17-076-10W4M/00	Kgrand_rp	466983.82	6159690.40	671.60	290.99	303.00	297.00	301.51	103.5	478.1	A	0	0
100/06-17-076-10W4M/00	Kgrand_rp	466983.82	6159690.40	671.60	279.01	285.99	282.50	284.41	96.5	485.6	A	0	0
100/08-10-076-10W4M/00	Kgrand_rp	471038.21	6157917.72	670.20	268.99	274.02	271.50	269.99	97.1	495.8	A	0	0
100/10-01-076-10W4M/00	Kgrand_rp	474067.17	6156842.56	683.52	284.99	293.01	289.00	287.00	86.7	481.2	A	0	0
100/10-24-076-10W4M/00	Kgrand_rp	474156.08	6161644.37	659.80	283.01	287.00	285.00	284.99	115.1	489.9	C	0	0
100/12-13-076-10W4M/00	Kgrand_rp	473362.08	6160080.99	665.99	277.00	289.99	283.50	278.01	109.6	492.1	A	0	0
100/14-04-076-10W4M/00	Kgrand_rp	468716.96	6156974.32	665.50	269.99	274.99	272.49	272.00	102.0	495.1	A	0	0
100/10-24-076-10W4M/00	Kgrd_rp_L	474156.08	6161644.37	659.80	298.00	313.00	305.50	300.02	131.5	485.8	A	0	0
100/10-32-076-12W4M/00	Kgrand_rp	448147.96	6165042.99	690.40	301.81	308.49	305.15	304.19	92.3	477.6	A	0	0
100/06-18-076-13W4M/00	Kgrand_rp	436211.51	6159864.77	683.91	316.99	325.01	321.00	323.61	116.8	479.7	A	0	0
100/10-14-076-13W4M/00	Kgrand_rp	443190.74	6159989.03	720.00	340.01	347.02	343.51	334.79	115.1	491.5	A	0	5
100/06-18-076-13W4M/00	Kgrd_rp_L	436211.51	6159864.77	683.91	350.00	357.99	354.00	356.31	145.6	475.5	A	0	0
100/06-05-076-14W4M/00	Kgrand_rp	427771.67	6156906.95	730.91	360.31	364.51	362.41	360.61	110.5	479.0	B	0	0
100/06-05-076-14W4M/00	Kgrand_rp	427771.67	6156906.95	730.91	364.51	368.81	366.66	366.10	115.3	479.6	A	0	0
100/10-30-076-14W4M/00	Kgrand_rp	426617.69	6163681.77	685.80	313.91	318.79	316.35	315.80	101.1	470.6	B	0	0
100/10-30-076-14W4M/00	Kgrand_rp	426617.69	6163681.77	685.80	301.11	305.99	303.55	303.00	94.6	476.8	C	0	0
100/11-10-076-14W4M/00	Kgrand_rp	431091.52	6158812.56	698.30	329.00	333.00	331.00	323.91	112.4	479.7	C	0	5
100/06-14-076-15W4M/00	Kgrand_rp	422922.68	6160036.27	716.31	346.31	352.29	349.30	347.50	146.8	513.8	D	0	0
100/07-05-076-15W4M/00	Kgrand_rp	418610.71	6156838.20	766.91	409.71	413.31	411.51	411.51	120.3	475.7	A	0	0
100/07-05-076-15W4M/00	Kgrand_rp	418610.71	6156838.20	766.91	413.89	417.61	415.75	411.51	128.4	479.6	D	0	2
100/07-06-076-15W4M/00	Kgrand_rp	417062.32	6156782.62	745.21	389.51	393.19	391.35	391.70	122.8	476.6	C	0	0
100/07-08-076-15W4M/00	Kgrand_rp	418597.60	6158408.04	739.29	367.99	372.01	370.00	370.00	116.5	485.8	A	0	0
100/10-30-076-15W4M/00	Kgrand_rp	417186.70	6164018.32	692.69	320.99	330.01	325.50	323.00	101.4	468.6	A	0	0
100/11-10-076-15W4M/00	Kgrand_rp	421261.62	6159080.67	718.69	346.31	365.79	356.05	350.80	119.7	482.4	B	0	0
100/16-07-076-15W4M/00	Kgrand_rp	417227.99	6159270.83	722.10	352.01	355.00	353.51	353.11	111.9	480.5	B	0	0
100/07-22-076-16W4M/00	Kgrand_rp	412194.25	6161882.57	722.99	350.49	371.19	360.84	359.39	107.1	469.2	C	0	0
100/08-32-076-16W4M/00	Kgrand_rp	409176.53	6165335.19	684.22	326.99	331.01	329.00	328.51	120.0	475.2	A	0	0
100/06-08-076-17W4M/00	Kgrand_rp	398417.76	6159136.86	664.19	305.01	320.01	312.51	308.09	127.3	479.0	A	0	0
100/06-28-076-17W4M/00	Kgrand_rp	400281.81	6163778.94	695.71	345.31	348.11	346.71	339.61	150.1	499.1	D	0	6
100/06-29-076-17W4M/00	Kgrand_rp	398524.42	6163788.20	698.30	335.31	355.09	345.20	342.90	132.0	485.1	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/10-20-076-17W4M/00	Kgrand_rp	399162.88	6162697.93	711.41	347.50	362.71	355.11	349.00	131.2	487.5	D	0	0
100/11-27-076-17W4M/00	Kgrand_rp	401906.12	6164272.14	716.59	353.60	371.89	362.74	361.80	121.4	475.3	D	0	0
100/10-20-077-08W4M/00	Kgrd_rp_L	487306.80	6171353.52	567.20	209.70	213.39	211.55	121.31	227.4	583.0	A	0	88
100/07-29-077-09W4M/00	Kgrand_rp	477342.58	6172326.56	582.81	167.61	173.71	170.66	170.11	72.5	484.7	A	0	0
100/10-22-077-09W4M/00	Kgrd_rp_L	480607.22	6171170.04	585.80	211.50	222.50	217.00	213.39	116.1	484.9	A	0	0
100/15-23-077-09W4M/00	Kgrd_rp_L	482406.08	6171655.45	591.59	240.79	246.89	243.84	242.29	127.1	474.8	A	0	0
100/10-14-077-10W4M/00	Kgrand_rp	472645.38	6169738.04	634.99	224.00	232.01	228.01	230.09	89.1	496.1	D	0	0
100/11-19-077-10W4M/00	Kgrand_rp	465632.20	6171374.75	695.80	315.99	320.01	318.00	318.00	101.5	479.3	A	0	0
100/09-11-077-11W4M/00	Kgrand_rp	462964.81	6167930.75	681.60	290.99	298.00	294.50	293.01	87.6	474.7	A	0	0
100/06-11-077-13W4M/00	Kgrand_rp	442649.82	6167817.54	681.20	287.09	294.41	290.75	289.59	98.1	488.5	A	0	0
100/07-10-077-14W4M/00	Kgrand_rp	431796.00	6167901.25	671.81	289.99	294.01	292.00	290.99	99.8	479.6	B	0	0
100/07-10-077-14W4M/00	Kgrand_rp	431796.00	6167901.25	671.81	284.01	288.01	286.01	284.99	94.9	480.7	B	0	0
100/07-28-077-14W4M/00	Kgrand_rp	430189.68	6172766.55	677.39	288.01	300.02	294.01	296.69	99.4	482.7	D	0	0
100/10-23-077-14W4M/00	Kgrand_rp	433356.31	6171656.19	668.31	277.00	287.00	282.00	279.01	99.7	486.0	A	0	0
100/11-17-077-14W4M/00	Kgrand_rp	428024.00	6170222.60	680.59	304.80	310.29	307.54	306.29	102.7	475.7	B	0	0
100/04-24-077-15W4M/00	Kgrand_rp	424681.10	6171131.72	683.30	308.49	312.51	310.50	309.49	87.9	460.7	B	0	0
100/04-24-077-15W4M/00	Kgrand_rp	424681.10	6171131.72	683.30	297.49	301.51	299.50	298.00	88.6	472.4	B	0	0
100/07-11-077-15W4M/00	Kgrand_rp	423557.31	6168015.46	653.80	258.81	272.31	265.56	269.81	82.6	470.9	B	0	0
100/07-21-077-15W4M/00	Kgrand_rp	420396.51	6171608.57	689.79	300.99	311.99	306.49	290.90	103.6	486.9	A	0	10
100/07-22-077-15W4M/00	Kgrand_rp	422179.79	6171345.96	693.70	307.00	313.00	310.00	310.50	87.1	470.8	B	0	0
100/10-20-077-15W4M/00	Kgrand_rp	418944.68	6171998.23	694.49	309.01	316.99	313.00	315.29	100.1	481.6	B	0	0
100/10-27-077-15W4M/00	Kgrand_rp	421938.90	6173557.72	673.70	285.99	302.00	294.00	289.99	89.8	469.5	A	0	0
100/10-20-077-15W4M/00	Kgrd_rp_L	418944.68	6171998.23	694.49	366.49	368.99	367.74	359.51	159.5	486.2	C	0	7
100/10-27-077-15W4M/00	Kgrd_rp_L	421938.90	6173557.72	673.70	325.01	334.00	329.51	331.99	124.1	468.3	A	0	0
100/10-27-077-15W4M/00	Kgrd_rp_L	421938.90	6173557.72	673.70	345.00	355.00	350.00	352.99	146.5	470.2	A	0	0
100/07-09-077-16W4M/00	Kgrand_rp	410773.28	6168602.01	684.31	310.01	319.00	314.51	311.99	111.2	481.0	A	0	0
100/07-19-077-16W4M/00	Kgrand_rp	407552.30	6171619.26	628.90	251.00	273.01	262.01	252.01	102.6	469.5	A	0	0
100/09-04-077-16W4M/00	Kgrand_rp	410859.25	6167078.42	699.30	337.51	356.50	347.00	339.00	115.9	468.2	A	0	0
100/11-31-077-16W4M/00	Kgrand_rp	406984.93	6175477.79	597.11	182.91	224.30	203.61	190.81	90.5	484.0	A	0	0
100/03-25-077-16W4M/00	Kgrd_rp_L	415114.10	6172929.43	686.50	337.99	340.19	339.09	330.31	132.6	480.0	A	0	8
100/09-04-077-16W4M/00	Kgrd_rp_L	410859.25	6167078.42	699.30	366.00	378.99	372.50	367.50	143.8	470.6	A	0	0
100/11-31-077-16W4M/00	Kgrd_rp_L	406984.93	6175477.79	597.11	260.60	276.09	268.35	272.19	122.6	451.4	A	0	0
100/10-10-077-17W4M/00	Kgrd_rp_L	402457.77	6168995.89	626.09	288.01	300.20	294.10	299.31	143.8	475.8	C	0	0
100/11-05-078-06W4M/00	Kgrand_rp	506207.70	6176167.38	592.99	164.99	172.49	168.74	166.51	71.3	495.6	A	0	0
100/06-11-078-07W4M/00	Kgrand_rp	501252.57	6177115.81	536.82	126.49	141.70	134.10	119.79	90.7	493.4	A	0	7
100/06-16-078-07W4M/00	Kgrand_rp	498000.40	6178742.10	548.92	166.70	170.41	168.55	169.19	97.3	477.6	A	0	0
100/07-29-078-07W4M/00	Kgrand_rp	496985.27	6181966.89	548.61	160.29	189.01	174.65	153.59	88.7	462.6	A	0	7
100/11-17-078-07W4M/00	Kgrand_rp	496469.53	6179378.56	545.59	191.99	195.71	193.85	195.10	120.7	472.4	A	0	0
100/07-33-078-09W4M/00	Kgrand_rp	479100.10	6183577.59	662.00	288.62	292.30	290.46	291.39	111.0	482.6	A	0	0
100/07-09-078-10W4M/00	Kgrand_rp	469385.70	6177277.83	641.30	227.99	232.59	230.29	231.01	72.6	483.6	A	0	0
100/10-18-078-10W4M/00	Kgrand_rp	466134.70	6179471.14	666.29	303.61	309.10	306.36	305.99	114.5	474.4	A	0	0
100/10-33-078-11W4M/00	Kgrand_rp	459684.19	6184371.12	699.70	313.00	318.00	315.50	313.00	80.7	464.9	A	0	0
100/10-33-078-11W4M/00	Kgrand_rp	459684.19	6184371.12	699.70	308.00	313.00	310.50	309.01	80.1	469.3	C	0	0
100/10-18-078-12W4M/00	Kgrand_rp	446609.72	6179632.50	676.41	265.21	269.41	267.31	266.70	77.3	486.4	D	0	0
100/06-28-078-13W4M/00	Kgrand_rp	439569.42	6182412.78	671.20	294.50	299.50	297.00	296.51	98.5	472.7	A	0	0

**Table B-5 Grand Rapids Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval (mbKB)		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/06-28-078-13W4M/00	Kgrand_rp	439569.42	6182412.78	671.20	268.01	273.01	270.51	269.99	80.8	481.5	A	0	0
100/11-25-078-13W4M/00	Kgrand_rp	444677.07	6182719.85	672.39	277.40	281.00	279.20	279.20	83.7	476.9	D	0	0
100/07-06-078-14W4M/00	Kgrand_rp	427029.35	6176148.90	673.61	295.20	300.99	298.10	298.10	90.6	466.1	A	0	0
100/06-10-078-15W4M/00	Kgrand_rp	421565.19	6177831.33	635.51	256.00	260.00	258.00	257.01	91.2	468.7	A	0	0
100/06-12-078-15W4M/00	Kgrand_rp	424912.68	6177775.62	624.20	235.49	243.51	239.50	236.50	87.1	471.8	B	0	0
100/10-33-078-15W4M/00	Kgrd_rp_L	420490.51	6184614.75	655.11	300.99	309.01	305.00	303.00	118.2	468.4	D	0	0
100/09-25-078-16W4M/00	Kgrand_rp	416132.76	6183359.72	627.71	263.01	267.01	265.01	264.99	97.8	460.5	A	0	0
100/10-15-078-16W4M/00	Kgrand_rp	412548.13	6180247.56	614.20	184.40	241.40	212.90	191.69	94.1	495.4	A	0	0
100/05-19-079-02W4M/00	Kgrand_rp	543087.65	6190447.09	524.59	117.99	128.99	123.49	120.00	98.6	499.7	A	0	0
100/06-03-079-04W4M/00	Kgrand_rp	528678.68	6185534.11	552.91	207.30	216.41	211.85	210.31	145.3	486.4	A	0	0
100/11-02-079-07W4M/00	Kgrand_rp	500965.57	6185899.12	550.41	146.00	151.49	148.74	148.01	61.5	463.2	A	0	0
100/11-02-079-07W4M/00	Kgrand_rp	500965.57	6185899.12	550.41	146.00	151.49	148.74	148.01	91.9	493.6	C	0	0
100/08-19-079-09W4M/00	Kgrand_rp	475344.95	6190344.19	678.70	252.01	256.00	254.01	253.99	52.9	477.6	A	0	0
100/07-26-079-10W4M/00	Kgrand_rp	471994.75	6191798.09	682.82	259.11	263.71	261.41	260.60	55.9	477.3	A	0	0
100/06-31-079-12W4M/00	Kgrand_rp	445484.05	6193913.98	685.31	263.01	273.01	268.01	264.99	68.2	485.5	A	0	0
100/07-22-079-12W4M/00	Kgrand_rp	450446.92	6190290.26	692.29	295.99	300.99	298.49	299.01	77.9	471.7	A	0	0
100/07-22-079-12W4M/00	Kgrand_rp	450446.92	6190290.26	692.29	268.99	274.02	271.50	272.00	61.3	482.1	A	0	0
100/07-28-079-12W4M/00	Kgrand_rp	449152.58	6191972.64	687.81	281.00	284.99	282.99	283.01	71.5	476.4	D	0	0
100/07-28-079-12W4M/00	Kgrand_rp	449152.58	6191972.64	687.81	262.49	266.40	264.45	264.51	59.4	482.8	A	0	0
100/07-01-079-13W4M/00	Kgrand_rp	444096.59	6185809.42	682.82	278.89	291.12	285.00	281.91	78.4	476.2	D	0	0
100/16-18-079-13W4M/00	Kgrand_rp	436475.39	6189746.79	685.01	276.52	279.50	278.01	271.09	70.1	477.1	A	0	5
100/12-23-079-14W4M/00	Kgrand_rp	431918.25	6190928.03	699.21	284.01	297.00	290.51	285.11	65.6	474.3	A	0	0
100/14-30-079-14W4M/00	Kgrand_rp	425740.12	6193113.44	659.31	291.51	294.99	293.25	293.71	87.2	453.3	C	0	0
100/14-30-079-14W4M/00	Kgrand_rp	425740.12	6193113.44	659.31	258.99	262.49	260.74	261.21	59.3	457.9	C	0	0
100/14-30-079-14W4M/00	Kgrd_rp_L	425740.12	6193113.44	659.31	304.50	308.00	306.25	306.69	100.9	454.0	C	0	0
100/06-28-079-15W4M/00	Kgrand_rp	419231.93	6192545.32	623.01	234.70	239.30	237.00	236.80	70.1	456.1	A	0	0
100/11-09-079-15W4M/00	Kgrand_rp	419131.30	6187888.27	630.69	258.99	264.99	261.99	263.10	93.8	462.5	A	0	0
100/15-10-079-15W4M/00	Kgrand_rp	421169.96	6188258.18	641.30	247.01	260.79	253.90	248.11	73.6	461.0	A	0	0
100/06-28-079-15W4M/00	Kgrd_rp_L	419231.93	6192545.32	623.01	269.69	275.81	272.75	273.41	99.8	450.0	A	0	0
100/10-07-079-15W4M/00	Kgrd_rp_L	416411.14	6188235.98	610.52	256.00	268.01	262.01	257.01	109.1	457.6	A	0	0
100/06-10-079-17W4M/00	Kgrand_rp	401097.77	6188039.37	559.31	181.11	201.20	191.16	189.31	72.2	440.4	A	0	0
100/06-10-079-17W4M/00	Kgrd_rp_L	401097.77	6188039.37	559.31	217.60	233.51	225.55	212.11	111.9	445.7	A	0	5
100/12-11-080-12W4M/00	Kgrand_rp	451592.38	6197150.51	685.41	258.99	269.99	264.49	261.00	68.4	489.3	A	0	0
100/08-21-080-15W4M/00	Kgrand_rp	420202.72	6200510.42	576.99	156.00	189.01	172.50	158.01	43.9	448.4	E	0	0
100/11-29-081-12W4M/00	Kgrand_rp	447378.75	6212128.71	736.00	303.00	308.00	305.50	292.00	65.1	495.6	A	0	11
100/11-26-082-12W4M/00	Kgrand_rp	451974.90	6221401.66	744.29	298.00	310.10	304.05	300.02	44.2	484.5	A	0	0
100/06-10-082-13W4M/00	Kgrand_rp	440636.12	6216359.65	634.02	198.70	222.50	210.60	202.69	59.1	482.6	D	0	0
100/10-21-082-13W4M/00	Kgrand_rp	439735.98	6220240.43	596.80	164.99	180.99	172.99	165.99	58.6	482.4	A	0	0
100/10-15-082-14W4M/00	Kgrand_rp	431597.35	6218601.39	589.09	151.00	156.00	153.50	153.01	19.3	454.8	A	0	0
100/07-32-083-06W4M/00	Kgrd_rp_L	505542.98	6232228.70	530.29	144.99	154.99	149.99	153.10	68.4	448.7	C	0	0
100/07-21-083-07W4M/00	Kgrand_rp	497359.29	6229197.37	678.70	224.00	227.20	225.60	226.01	34.7	487.8	C	0	0
100/11-31-083-09W4M/00	Kgrd_rp_L	473971.37	6232933.27	716.31	300.50	304.19	302.35	302.39	52.0	465.9	A	0	0
100/14-16-083-10W4M/00	Kgrand_rp	467400.10	6228379.15	735.00	284.50	288.49	286.50	285.99	69.0	517.5	A	0	0
100/03-13-083-10W4M/00	Kgrd_rp_L	472337.36	6227151.17	717.59	305.50	307.51	306.51	298.00	59.9	471.0	A	0	7
100/02-02-083-11W4M/00	Kgrand_rp	461554.56	6224037.68	736.49	299.01	303.00	301.01	300.99	60.0	495.5	A	0	0
100/07-20-084-09W4M/00	Kgrand_rp	476339.60	6238844.32	701.99	268.29	286.70	277.49	269.99	53.0	477.5	A	0	0
100/11-10-084-10W4M/00	Kgrd_rp_L	469162.98	6236121.97	662.00	238.42	242.01	240.21	240.21	50.7	472.5	A	0	0

Data point eliminated due to depth of pressure recorder.  
 Data point eliminated due to Hydro-Fax QC.  
 Anomalous pressure data point eliminated.

**Table B-6 Clearwater Formation Regional Hydraulic Heads From Drill Stem Tests**

Unique Well Identifier	Formation	UTM Co-ordinates [Zone 12; NAD 27]		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/05-30-070-03W4M/00	Kclwtr_ss	534651.87	6104635.98	671.60	412.00	415.99	414.00	414.90	230.1	487.7	A	0	0
100/06-15-070-03W4M/00	Kclwtr_ss	539882.39	6101339.93	707.72	465.49	469.52	467.50	467.29	74.4	314.6	E	0	0
100/06-15-070-03W4M/00	Kclwtr_ss	539882.39	6101339.93	707.72	476.50	480.49	478.49	477.29	264.4	493.6	A	0	0
100/06-22-070-03W4M/00	Kclwtr_ss	539728.59	6103044.60	709.00	458.51	464.52	461.51	459.49	230.9	478.4	C	0	0
100/07-02-070-03W4M/00	Kclwtr_ss	541868.49	6098266.52	709.79	483.51	487.50	485.50	485.49	272.3	496.6	C	0	0
100/11-03-070-03W4M/00	Kclwtr_ss	539824.95	6098252.30	666.20	480.49	488.50	484.50	481.49	298.8	480.5	D	0	0
100/05-14-070-04W4M/00	Kclwtr_ss	531188.87	6101277.41	669.10	422.00	426.51	424.25	423.00	253.6	498.4	B	0	0
100/05-25-070-04W4M/00	Kclwtr_ss	533077.28	6104617.34	669.80	410.51	414.01	412.26	412.49	232.3	489.9	A	0	0
100/05-35-070-04W4M/00	Kclwtr_ss	531460.32	6106261.58	669.01	409.99	415.99	412.99	412.79	231.2	487.2	B	0	0
100/05-35-070-04W4M/00	Klloyd_ss	531460.32	6106261.58	669.01	399.99	405.99	402.99	402.79	230.2	496.2	A	0	0
100/06-21-070-05W4M/00	Kclwtr_ss	518851.96	6102846.35	671.11	418.31	422.00	420.15	420.29	232.4	483.3	A	0	0
100/06-19-070-13W4M/00	Kclwtr_ss	437451.61	6103047.94	619.90	431.99	441.99	436.99	441.02	301.6	484.5	A	0	0
100/03-17-071-03W4M/00	Kclearwtr	536084.68	6110568.97	678.70	419.50	423.49	421.49	422.30	231.0	488.2	A	0	0
100/03-17-071-03W4M/00	Kclearwtr	536084.68	6110568.97	678.70	408.01	412.00	410.00	410.81	230.1	498.8	C	0	0
100/06-02-071-04W4M/00	Kclwtr_ss	531546.36	6107807.96	668.92	404.99	409.01	407.00	407.00	232.7	494.6	A	0	0
100/07-12-071-04W4M/00	Kclwtr_ss	533338.42	6109553.75	672.60	409.99	417.00	413.49	412.00	245.1	504.2	A	0	0
100/07-12-071-04W4M/00	Kclwtr_ss	533338.42	6109553.75	672.60	394.99	402.00	398.50	397.00	243.0	517.1	A	0	0
100/06-02-071-04W4M/00	Klloyd_ss	531546.36	6107807.96	668.92	393.50	397.49	395.49	394.99	233.1	506.6	A	0	0
100/05-05-072-04W4M/00	Kclwtr_ss	525805.78	6117570.85	677.21	414.01	417.00	415.50	415.99	231.2	492.9	A	0	0
100/11-15-072-13W4M/00	Kclearwtr	441609.31	6121362.34	656.82	428.49	432.79	430.64	430.99	271.2	497.4	A	0	0
100/15-17-072-14W4M/00	Kclearwtr	428893.11	6121770.62	618.01	403.01	418.00	410.51	404.01	255.3	462.8	A	0	0
100/10-20-072-14W4M/00	Kclwtr_ss	429132.17	6123237.14	608.41	393.19	403.89	398.54	395.60	267.3	477.2	A	0	0
100/09-12-073-01W4M/00	Kclearwtr	563123.02	6129542.21	669.50	414.01	418.00	416.01	414.99	215.2	468.7	C	0	0
100/02-16-073-03W4M/00	Kclwtr_ss	538080.93	6130241.75	692.51	446.02	450.01	448.01	448.91	241.6	486.1	A	0	0
100/11-10-073-03W4M/00	Kclwtr_ss	539535.51	6129041.43	717.50	467.41	471.01	469.21	469.00	242.3	490.6	A	0	0
100/07-06-073-04W4M/00	Kclearwtr	525097.05	6127294.44	719.21	449.79	453.00	451.39	451.01	227.3	495.1	A	0	0
100/10-16-073-04W4M/00	Kclearwtr	528288.28	6130851.57	704.70	430.99	445.01	438.00	431.99	230.7	497.4	A	0	0
100/10-14-073-05W4M/00	Kclwtr_ss	521736.54	6130881.27	687.39	407.00	415.50	411.25	409.01	216.2	492.3	A	0	0
100/10-08-074-04W4M/00	Kclearwtr	526654.64	6138885.46	617.80	326.11	330.71	328.41	327.69	214.4	503.8	A	0	0
100/11-30-074-05W4M/00	Kclearwtr	514852.66	6143665.41	690.10	405.69	413.89	409.79	406.91	219.1	499.4	A	0	0
100/16-01-074-05W4M/00	Kclwtr_ss	523731.51	6137485.42	626.40	341.71	346.89	344.30	339.91	220.4	502.5	A	0	2
100/06-24-074-07W4M/00	Kclwtr_ss	503488.27	6141626.30	667.79	396.21	403.89	400.05	399.59	236.1	503.9	C	0	0
100/09-13-075-04W4M/00	Kclearwtr	533144.81	6150253.56	617.40	368.99	375.09	372.04	371.00	238.5	483.9	B	0	0
100/04-34-075-05W4M/00	Kclwtr_ss	519037.91	6154298.67	621.61	342.50	348.51	345.51	344.70	172.8	448.9	C	0	0
1AA/06-31-075-06W4M/00	Kclwtr_ss	504599.30	6154738.31	611.10	320.99	326.02	323.50	323.00	138.4	426.0	C	0	0
100/07-06-076-04W4M/00	Kclwtr_ss	524445.91	6156411.10	633.80	373.02	378.01	375.51	375.00	242.4	500.7	B	0	0
100/13-10-076-04W4M/00	Kclwtr_ss	528562.95	6158828.83	603.11	335.01	341.99	338.50	337.90	225.0	489.6	C	0	0
100/13-17-076-04W4M/00	Kclwtr_ss	525268.16	6160306.59	626.40	351.01	355.00	353.01	345.61	197.1	470.5	A	0	5
100/04-19-076-05W4M/00	Kclwtr_ss	514158.91	6160797.44	575.31	303.49	308.49	305.99	306.29	216.8	486.1	A	0	0
100/07-18-076-05W4M/00	Kclwtr_ss	514912.58	6159337.56	573.30	298.00	305.99	302.00	299.01	217.1	488.4	A	0	0
100/09-20-076-05W4M/00	Kclwtr_ss	516909.04	6161321.37	576.99	310.01	315.99	313.00	311.99	233.8	497.8	B	0	0
100/06-26-076-06W4M/00	Kclwtr_ss	511002.18	6162550.11	570.01	262.10	271.30	266.70	262.10	201.0	504.4	A	0	0
100/07-28-076-06W4M/00	Kclwtr_ss	508390.99	6162556.57	563.91	242.59	255.39	248.99	235.61	203.8	518.8	D	0	7
100/11-14-076-06W4M/00	Kclwtr_ss	511142.13	6159785.98	570.01	260.60	265.79	263.20	248.41	204.5	511.3	C	0	12

**Table B-6 Clearwater Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates [Zone 12; NAD 27]		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/15-02-076-06W4M/00	Kclwtr_ss	511647.98	6156829.17	585.00	310.01	315.99	313.00	311.99	222.0	494.1	D	0	0
100/15-02-076-06W4M/00	Kclwtr_ss	511647.98	6156829.17	585.00	284.99	290.99	287.99	287.00	197.8	494.8	A	0	0
100/10-14-076-07W4M/00	Kclwtr_ss	501871.46	6159904.64	595.31	277.40	288.01	282.70	270.69	201.9	514.5	A	0	7
100/10-32-076-08W4M/00	Kclwtr_ss	487185.84	6164837.66	618.11	301.81	313.91	307.86	294.71	204.5	514.8	A	0	7
100/11-21-076-08W4M/00	Kclwtr_ss	488128.09	6161477.31	646.79	380.39	385.30	382.85	381.92	233.1	497.0	A	0	0
100/07-32-076-15W4M/00	Kclwtr_ss	418857.15	6164915.41	684.10	396.00	407.00	401.50	404.29	183.0	465.6	A	0	0
100/07-25-077-06W4M/00	Kclearwtr	512964.31	6172576.32	568.79	241.01	245.00	243.00	242.01	175.5	501.3	A	0	0
100/06-16-077-06W4M/00	Kclwtr_ss	507766.53	6169028.18	569.40	265.21	268.80	267.01	265.79	193.4	495.8	A	0	0
100/06-16-077-06W4M/00	Kclwtr_ss	507766.53	6169028.18	569.40	238.99	259.11	249.05	247.50	181.3	501.7	A	0	0
100/06-16-077-06W4M/00	Kclwtr_ss	507766.53	6169028.18	569.40	265.21	286.51	275.86	258.81	210.3	503.9	A	0	6
100/10-03-077-06W4M/00	Kclwtr_ss	510012.51	6166399.56	561.11	273.71	277.40	275.56	276.52	199.8	485.4	A	0	0
100/06-24-077-07W4M/00	Kclwtr_ss	502837.67	6170723.86	567.20	254.81	266.40	260.60	257.89	199.3	505.9	A	0	0
100/06-27-077-07W4M/00	Kclwtr_ss	499873.66	6172263.23	561.69	251.19	255.39	253.29	253.02	190.2	498.6	A	0	0
100/11-15-077-07W4M/00	Kclwtr_ss	499651.57	6169618.92	571.20	259.11	266.70	262.91	261.49	194.7	503.0	A	0	0
100/10-03-077-08W4M/00	Kclwtr_ss	490498.63	6166428.47	586.41	256.00	263.71	259.86	258.50	185.8	512.4	B	0	0
100/10-13-077-08W4M/00	Kclwtr_ss	493623.10	6169535.65	557.21	242.29	251.49	246.89	244.79	197.8	508.1	A	0	0
100/10-22-077-09W4M/00	Kclwtr_ss	480607.22	6171170.04	585.80	289.59	303.31	296.45	291.39	205.6	494.9	A	0	0
100/10-22-077-09W4M/00	Kclwtr_ss	480607.22	6171170.04	585.80	275.81	290.51	283.16	277.09	204.7	507.3	B	0	0
100/11-06-077-09W4M/00	Kclwtr_ss	475214.17	6166554.12	631.00	324.00	330.01	327.01	327.60	205.8	509.7	A	0	0
100/11-18-077-09W4M/00	Kclwtr_ss	475214.42	6169701.55	619.69	303.89	318.79	311.34	306.29	198.7	507.1	A	0	0
100/02-25-077-10W4M/00	Kclwtr_ss	474195.52	6172145.94	613.59	308.00	314.49	311.25	310.01	171.1	473.5	A	0	0
100/05-17-077-10W4M/00	Kclwtr_ss	466977.01	6169375.48	694.00	391.00	394.99	393.00	393.01	111.2	412.2	A	0	0
100/11-14-078-06W4M/00	Kclwtr_ss	510980.51	6179132.78	596.31	289.99	297.61	293.80	291.51	193.0	495.5	A	0	0
100/06-11-078-07W4M/00	Kclwtr_ss	501252.57	6177115.81	536.82	222.50	231.59	227.05	215.49	203.6	513.3	A	0	7
100/06-16-078-07W4M/00	Kclwtr_ss	498000.40	6178742.10	548.92	235.92	252.71	244.31	238.42	199.9	504.5	A	0	0
100/06-16-078-07W4M/00	Kclwtr_ss	498000.40	6178742.10	548.92	214.00	217.60	215.80	216.41	175.2	508.4	A	0	0
100/07-35-078-07W4M/00	Kclwtr_ss	501821.21	6183573.32	544.40	235.92	239.60	237.76	239.60	191.2	497.8	A	0	0
100/07-35-078-07W4M/00	Kclwtr_ss	501821.21	6183573.32	544.40	215.19	218.79	216.99	215.19	174.5	501.9	A	0	0
100/07-35-078-07W4M/00	Kclwtr_ss	501821.21	6183573.32	544.40	221.29	224.91	223.10	224.30	194.8	516.1	A	0	0
100/10-27-078-07W4M/00	Kclwtr_ss	499966.77	6182677.01	552.12	242.01	246.00	244.01	243.99	190.6	498.7	A	0	0
100/11-17-078-07W4M/00	Kclwtr_ss	496469.53	6179378.56	545.59	249.91	253.59	251.75	253.02	205.4	499.2	A	0	0
100/10-01-078-08W4M/00	Kclearwtr	493825.36	6176012.63	558.40	251.80	255.39	253.59	254.20	191.8	496.6	A	0	0
100/10-01-078-08W4M/00	Kclearwtr	493825.36	6176012.63	558.40	249.30	253.02	251.16	251.80	196.6	503.8	B	0	0
100/02-30-078-08W4M/00	Kclwtr_ss	485583.02	6181811.68	592.72	279.99	288.01	284.00	282.00	186.7	495.4	B	0	0
100/10-13-078-08W4M/00	Kclwtr_ss	493744.02	6179279.24	529.99	219.79	223.39	221.59	221.59	193.3	501.7	B	0	0
100/10-21-078-08W4M/00	Kclwtr_ss	488736.88	6180749.51	570.01	259.69	263.29	261.49	262.10	191.8	500.3	B	0	0
100/10-35-078-08W4MM/00	Kclwtr_ss	492026.48	6184089.99	569.40	264.60	270.11	267.36	266.09	197.7	499.7	B	0	0
100/10-35-078-08W4M/00	Kclwtr_ss	492026.48	6184089.99	569.40	253.02	258.50	255.76	256.00	187.8	501.4	A	0	0
100/07-11-078-09W4M/00	Kclwtr_ss	482218.56	6177151.95	600.49	291.39	296.30	293.84	293.19	204.0	510.6	A	0	0
100/07-33-078-09W4M/00	Kclwtr_ss	479100.10	6183577.59	662.00	350.49	355.40	352.94	352.99	197.5	506.6	B	0	0
100/10-09-078-09W4M/00	Kclwtr_ss	479012.01	6177663.73	602.59	303.61	308.21	305.91	305.11	194.9	491.6	C	0	0
100/10-09-078-09W4M/00	Kclwtr_ss	479012.01	6177663.73	602.59	294.10	298.70	296.40	295.99	190.4	496.6	A	0	0
100/10-27-078-09W4M/00	Kclwtr_ss	480762.26	6182620.55	629.11	320.01	325.19	322.60	321.60	198.6	505.1	C	0	0
100/10-11-078-10W4M/00	Kclwtr_ss	472513.88	6177698.81	622.10	313.91	318.21	316.06	315.50	188.5	494.5	C	0	0

**Table B-6 Clearwater Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates [Zone 12; NAD 27]		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/10-33-078-11W4M/00	Kclearwtr	459684.19	6184371.12	699.70	372.01	377.01	374.51	373.02	157.3	482.5	A	0	0
100/10-32-078-12W4M/00	Kclwtr_ss	448313.79	6184493.81	679.61	361.01	365.00	363.00	362.50	168.0	484.6	A	0	0
100/10-32-078-12W4M/00	Kclwtr_ss	448313.79	6184493.81	679.61	381.00	384.99	383.00	382.49	205.1	501.7	B	0	0
100/16-11-079-03W4M/00	Kclwtr_ss	540761.47	6187978.14	528.80	235.00	253.02	244.01	236.40	274.8	559.5	A	0	0
100/06-34-079-06W4M/00	Kclwtr_ss	508889.27	6193289.29	506.30	189.01	201.81	195.41	195.99	191.1	502.0	C	0	0
100/06-34-079-06W4M/00	Kclwtr_ss	508889.27	6193289.29	506.30	207.30	219.49	213.39	216.99	212.9	505.9	C	0	0
100/11-02-079-07W4M/00	Kclwtr_ss	500965.57	6185899.12	550.41	237.01	242.50	239.76	238.99	176.6	487.3	A	0	0
100/10-12-079-08W4M/00	Kclwtr_ss	493126.90	6187444.78	572.51	267.01	272.00	269.50	268.01	201.2	504.2	A	0	0
100/10-12-079-08W4M/00	Kclwtr_ss	493126.90	6187444.78	572.51	256.00	260.00	258.00	257.01	194.5	509.0	A	0	0
100/06-03-079-09W4M/00	Kclearwtr	479572.43	6185361.66	658.10	355.40	364.21	359.80	361.19	200.2	498.5	B	0	0
100/08-19-079-09W4M/00	Kclwtr_ss	475344.95	6190344.19	678.70	367.99	372.01	370.00	370.00	191.5	500.2	B	0	0
100/08-19-079-09W4M/00	Kclwtr_ss	475344.95	6190344.19	678.70	376.00	388.99	382.49	378.01	205.6	501.8	B	0	0
100/06-06-080-09W4M/00	Kclwtr_ss	474891.79	6195206.12	705.49	399.99	404.01	402.00	402.00	201.9	505.3	B	0	0
100/10-06-083-05W4M/00	Kclwtr_ss	513817.77	6224563.07	491.00	123.41	129.51	126.46	127.10	88.5	453.1	C	0	0
100/07-21-083-06W4M/00	Kclwtr_ss	507237.59	6229017.91	575.80	220.01	231.01	225.51	221.01	105.6	455.9	A	0	0
100/07-32-083-06W4M/00	Kclwtr_ss	505542.98	6232228.70	530.29	174.99	185.01	180.00	182.79	100.5	450.7	C	0	0
100/07-16-083-09W4M/00	Kclwtr_ss	477778.96	6227470.07	736.70	365.79	371.61	368.70	370.30	91.0	459.0	A	0	0
100/10-01-083-09W4M/00	Kclwtr_ss	482853.95	6224482.72	728.50	359.09	362.99	361.04	352.72	98.4	465.8	A	0	6
100/11-31-083-09W4M/00	Kclwtr_ss	473971.37	6232933.27	716.31	344.39	348.11	346.25	346.31	84.2	454.3	A	0	0
100/03-13-083-10W4M/00	Kclwtr_ss	472337.36	6227151.17	717.59	347.99	351.01	349.50	353.60	90.2	458.3	A	-3	0
100/10-32-083-15W4M/00	Kclwtr_ss	417582.59	6233557.91	547.39	189.01	192.91	190.96	191.41	72.3	428.7	A	0	0
100/07-34-083-16W4M/00	Kclearwtr	411067.80	6232997.20	529.50	180.11	181.39	180.75	174.19	88.4	437.1	A	0	6
100/11-25-083-17W4M/00	Kclwtr_ss	403848.38	6232229.46	513.89	187.09	222.81	204.95	189.01	121.5	430.5	A	0	0
100/06-03-084-09W4M/00	Kclearwtr	479130.95	6233891.11	736.09	364.51	368.81	366.66	357.50	94.3	463.8	A	0	7
100/07-20-084-09W4M/00	Kclearwtr	476339.60	6238844.32	701.99	329.00	337.99	333.50	334.00	81.7	450.1	D	0	0
100/08-07-084-09W4M/00	Kclearwtr	474934.27	6235734.66	711.41	332.20	342.90	337.55	341.10	89.2	463.1	A	0	0
100/10-13-084-11W4M/00	Kclwtr_ss	463075.00	6237595.08	618.99	247.50	253.02	250.26	250.52	85.5	454.2	C	0	0
100/04-02-084-15W4M/00	Kclearwtr	421696.16	6234377.82	555.80	194.49	197.51	196.00	195.50	81.6	441.4	B	0	0
100/04-26-084-15W4M/00	Kclwtr_ss	421812.12	6240832.89	530.81	168.01	173.01	170.51	170.99	80.8	441.1	A	0	0
100/03-02-084-17W4M/00	Kclearwtr	402507.75	6234772.90	546.11	248.50	252.50	250.50	250.00	125.7	421.3	C	0	0
100/01-03-085-15W4M/00	Kclwtr_ss	421120.04	6244096.55	531.91	190.99	195.01	193.00	192.79	105.8	444.7	A	0	0

- Data point eliminated due to depth of pressure recorder.
- Data point eliminated due to Hydro-Fax QC.
- Anomalous pressure data point eliminated.



**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/06-15-070-03W4M/00	Kmcm_a1sq	539882.39	6101339.93	707.72	497.01	501.00	499.00	498.99	78.2	286.9	E	0	0
100/07-03-070-08W4M/00	Kmcmurray	491518.86	6098012.79	643.50	454.49	457.41	455.95	445.01	263.0	450.6	A	0	9
100/07-32-070-09W4M/00	Kmcmurray	478612.38	6106038.28	602.10	425.99	430.01	428.00	428.49	257.5	431.6	A	0	0
100/11-35-070-09W4M/00	Kmcmurray	483115.93	6106363.92	619.90	423.00	428.00	425.50	425.90	244.2	438.6	C	0	0
100/06-28-070-10W4M/00	Kmcmurray	470120.57	6104509.08	634.02	461.01	465.00	463.01	463.51	266.6	437.6	C	0	0
100/06-28-070-10W4M/00	Kmcmurray	470120.57	6104509.08	634.02	467.50	471.01	469.26	470.49	296.8	461.6	C	0	0
100/07-20-070-10W4M/00	Kmcmurray	468816.76	6102814.22	653.49	483.99	487.99	485.99	485.21	265.5	433.0	B	0	0
100/14-22-070-10W4M/00	Kmcmurray	471595.16	6103416.64	648.80	492.01	495.00	493.50	492.59	274.9	430.2	A	0	0
100/06-07-070-11W4M/00	Kmcmurray	456899.16	6099804.00	603.81	434.89	454.21	444.55	438.30	255.1	414.3	A	0	0
100/06-16-070-11W4M/00	Kmcmurray	460087.76	6101216.67	647.40	471.19	498.72	484.95	472.72	323.3	485.8	D	0	0
100/11-08-070-11W4M/00	Kmcmurray	458669.06	6099987.60	645.29	491.00	496.00	493.50	493.29	271.4	423.2	D	0	0
100/11-20-070-11W4M/00	Kmcmurray	458471.88	6103106.62	639.90	477.01	480.49	478.75	479.91	254.0	415.2	A	0	0
100/11-20-070-11W4M/00	Kmcmurray	458471.88	6103106.62	639.90	461.99	465.49	463.74	463.91	242.1	418.3	A	0	0
100/06-10-070-12W4M/00	Kmcmurray	451910.48	6099893.88	605.00	443.52	463.30	453.41	445.31	256.2	407.8	B	0	0
100/07-08-070-12W4M/00	Kmcmurray	449434.54	6099925.68	595.00	449.89	453.51	451.70	452.90	253.4	396.7	C	0	0
100/07-08-070-12W4M/00	Kmcmurray	449434.54	6099925.68	595.00	440.71	444.40	442.56	443.79	245.2	397.6	B	0	0
100/07-16-070-12W4M/00	Kmcmurray	451022.56	6101440.46	607.50	452.60	467.02	459.81	455.40	246.2	393.9	A	0	0
100/07-16-070-12W4M/00	Kmcmurray	451022.56	6101440.46	607.50	437.39	451.41	444.40	444.70	246.7	409.8	A	0	0
100/10-04-070-12W4M/00	Kmcmurray	450747.89	6098661.20	604.39	437.69	450.50	444.09	439.80	249.1	409.4	A	0	0
100/10-27-070-12W4M/00	Kmcmurray	452621.29	6105147.00	592.81	427.00	437.39	432.19	434.31	250.9	411.5	A	0	0
100/11-21-070-12W4M/00	Kmcmurray	450320.67	6103177.69	582.20	402.31	432.79	417.55	404.20	244.5	409.2	C	0	0
100/11-22-070-12W4M/00	Kmcmurray	451940.58	6103164.40	598.90	433.09	441.11	437.10	437.11	244.1	406.0	B	0	0
100/11-25-070-12W4M/00	Kmcmurray	455549.45	6104991.09	601.01	448.51	452.51	450.51	449.49	250.2	400.7	A	0	0
100/11-25-070-12W4M/00	Kmcmurray	455549.45	6104991.09	601.01	420.99	428.00	424.50	422.00	244.7	421.2	A	0	0
100/01-01-070-13W4M/00	Kmcmurray	446373.44	6097738.86	581.59	432.79	434.62	433.70	426.69	259.4	407.3	D	0	6
100/06-05-070-13W4M/00	Kmcmurray	438986.97	6098140.76	580.89	435.99	440.50	438.24	438.70	219.0	361.6	B	0	0
100/06-08-070-13W4M/00	Kmcmurray	438961.11	6099803.88	602.01	458.39	462.11	460.25	460.62	260.0	401.8	B	0	0
100/06-11-070-13W4M/00	Kmcmurray	443803.80	6099823.80	583.30	431.99	441.02	436.51	436.99	238.5	385.3	A	0	0
100/06-13-070-13W4M/00	Kmcmurray	445462.76	6101333.53	583.91	431.99	451.99	441.99	440.19	249.6	391.5	A	0	0
100/06-19-070-13W4M/00	Kmcmurray	437451.61	6103047.94	619.90	534.01	538.00	536.01	540.59	279.7	363.6	A	-3	0
100/06-19-070-13W4M/00	Kmcmurray	437451.61	6103047.94	619.90	486.01	503.50	494.75	506.09	257.5	382.6	A	-3	0
100/09-14-070-13W4M/00	Kmcmurray	444836.07	6101904.37	590.89	445.01	456.01	450.51	448.00	240.7	381.1	A	0	0
100/09-14-070-13W4M/00	Kmcmurray	444836.07	6101904.37	590.89	438.00	449.00	443.50	441.02	235.5	382.9	A	0	0
100/10-01-070-13W4M/00	Kmcmurray	446073.38	6098517.07	583.21	430.01	438.00	434.01	432.91	181.2	330.4	A	0	0
100/06-16-070-14W4M/00	Kmcmurray	431038.71	6101433.97	593.20	467.99	482.01	475.00	470.31	247.2	365.4	C	0	0
100/07-08-070-14W4M/00	Kmcmurray	429877.37	6099901.63	580.62	461.80	472.41	467.11	470.61	260.9	374.4	C	0	0
100/11-21-070-14W4M/00	Kmcmurray	430966.04	6103798.02	626.09	503.50	508.50	506.00	506.40	243.6	363.7	B	0	0
100/06-16-070-15W4M/00	Kmcmurray	421082.46	6101675.68	568.91	460.01	472.01	466.01	461.99	261.2	364.1	A	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/06-35-070-15W4M/00	Kmcmurray	424602.97	6106586.84	572.60	433.40	444.00	438.70	441.81	239.2	373.1	A	0	0
100/07-21-070-16W4M/00	Kmcmurray	412069.14	6103459.28	580.62	482.20	488.90	485.55	485.49	266.0	361.1	C	0	0
100/07-27-070-16W4M/00	Kmcmurray	413668.94	6104997.54	579.70	449.61	466.31	457.96	454.49	250.9	372.7	B	0	0
100/07-35-070-16W4M/00	Kmcmurray	415327.09	6106775.68	590.09	451.99	477.01	464.50	456.81	250.7	376.3	B	0	0
100/08-34-070-16W4M/00	Kmcmurray	413950.65	6106888.87	592.41	464.00	475.00	469.50	472.50	264.7	387.6	D	0	0
100/12-01-070-16W4M/00	Kmcmurray	416137.57	6098850.62	563.52	444.00	451.01	447.51	446.02	205.5	321.5	E	0	0
100/02-24-070-17W4M/00	Kmcmurray	406914.10	6103387.98	580.31	477.01	479.51	478.26	471.80	265.2	367.3	A	0	5
100/07-09-070-17W4M/00	Kmcmurray	402344.51	6100341.95	545.29	428.49	440.41	434.45	430.99	258.4	369.2	B	0	0
100/07-14-070-17W4M/00	Kmcmurray	405289.21	6102224.38	581.01	467.99	474.00	470.99	472.20	255.0	365.0	B	0	0
100/07-29-070-17W4M/00	Kmcmurray	400746.19	6105420.09	552.21	428.00	434.19	431.10	430.01	234.8	356.0	A	0	0
100/07-35-070-17W4M/00	Kmcmurray	405731.89	6106841.42	573.70	460.01	463.51	461.76	461.01	222.3	334.3	A	0	0
100/06-02-071-04W4M/00	Kmcmurray	531546.36	6107807.96	668.92	431.99	435.99	433.99	435.01	224.1	459.0	A	0	0
100/10-28-071-07W4M/00	Kmcmrry_c	499071.47	6114553.62	660.81	470.00	474.00	472.00	460.71	263.2	452.0	A	0	9
100/12-09-071-08W4M/00	Kmcmurray	488365.04	6109798.02	666.20	464.00	471.01	467.50	466.89	238.4	437.1	A	0	0
100/06-30-071-09W4M/00	Kmcmurray	475790.18	6114256.66	681.81	493.02	507.01	500.01	495.21	248.5	430.3	A	0	0
100/11-28-071-09W4M/00	Kmcmurray	479075.70	6124444.93	665.29	480.00	482.99	481.49	481.49	242.4	426.2	C	0	0
100/13-31-071-09W4M/00	Kmcmurray	475475.95	6116407.32	677.91	477.99	482.01	480.00	479.51	233.0	430.9	A	0	0
100/06-04-071-10W4M/00	Kmcmurray	469182.30	6107655.96	660.02	501.00	504.99	503.00	502.62	262.6	419.6	A	0	0
100/06-33-071-10W4M/00	Kmcmurray	469081.47	6115810.66	668.40	495.79	499.69	497.74	497.59	252.7	423.4	D	0	0
100/07-08-071-10W4M/00	Kmcmurray	468136.02	6109327.06	658.89	481.01	486.01	483.51	484.30	250.2	425.6	A	0	0
100/10-18-071-10W4M/00	Kmcmurray	466342.69	6111397.96	653.80	468.81	479.12	473.97	470.31	246.1	425.9	A	0	0
100/10-18-071-10W4M/00	Kmcmurray	466342.69	6111397.96	653.80	489.51	499.90	494.71	491.00	318.1	477.2	F	0	0
100/11-05-071-10W4M/00	Kmcmurray	467635.71	6108043.08	655.20	477.99	481.01	479.50	479.51	242.4	418.1	B	0	0
100/06-05-071-11W4M/00	Kmcmurray	457742.90	6107914.49	607.50	427.00	433.00	430.00	430.01	250.1	427.6	C	0	0
100/06-05-071-11W4M/00	Kmcmurray	457742.90	6107914.49	607.50	436.99	443.00	440.00	440.01	272.7	440.2	E	0	0
100/09-21-071-11W4M/00	Kmcmurray	460127.21	6113246.65	609.11	430.50	436.51	433.50	433.00	246.4	422.0	A	0	0
100/10-01-071-11W4M/00	Kmcmurray	464603.77	6108080.61	646.00	467.02	488.99	478.00	470.40	252.9	420.9	B	0	0
100/06-27-071-12W4M/00	Kmcmurray	451208.96	6114299.36	611.49	453.21	463.21	458.21	464.70	247.2	400.4	A	-1	0
100/06-34-071-12W4M/00	Kmcmurray	451190.29	6115905.53	625.79	482.80	486.49	484.65	483.41	255.7	396.8	A	0	0
100/07-17-071-12W4M/00	Kmcmurray	448288.60	6110975.74	609.21	459.00	461.99	460.49	451.81	270.3	419.0	D	0	7
100/10-12-071-12W4M/00	Kmcmurray	455073.02	6109711.26	588.30	420.99	430.99	425.99	423.31	246.6	408.9	A	0	0
100/10-12-071-12W4M/00	Kmcmurray	455073.02	6109711.26	588.30	410.51	420.50	415.50	412.79	242.2	415.0	A	0	0
100/10-14-071-12W4M/00	Kmcmurray	453362.31	6111661.99	618.99	443.52	466.31	454.92	445.89	253.5	417.5	D	0	0
100/10-20-071-12W4M/00	Kmcmurray	448588.40	6113308.33	596.19	433.09	440.10	436.60	439.49	240.1	399.7	A	0	0
100/10-30-071-12W4M/00	Kmcmurray	446872.81	6114925.58	646.51	503.01	514.02	508.51	513.01	256.2	394.2	A	0	0
100/10-30-071-12W4M/00	Kmcmurray	446872.81	6114925.58	646.51	493.99	503.01	498.50	502.01	250.3	398.3	B	0	0
100/10-30-071-12W4M/00	Kmcmurray	446872.81	6114925.58	646.51	482.01	490.00	486.01	487.99	319.5	480.0	D	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/11-25-071-12W4M/00	Kmcmurray	454339.89	6114753.56	602.71	454.00	460.01	457.00	452.51	260.2	405.9	A	0	1
100/11-25-071-12W4M/00	Kmcmurray	454339.89	6114753.56	602.71	436.99	443.00	440.00	435.59	244.9	407.6	B	0	1
100/11-01-071-13W4M/00	Kmcmurray	444638.91	6108503.25	587.90	433.00	448.51	440.76	435.29	243.6	390.7	C	0	0
100/11-18-071-13W4M/00	Kmcmurray	436564.35	6111640.51	647.40	498.01	524.29	511.15	503.50	263.2	399.4	B	0	0
100/05-19-071-14W4M/00	Kmcmurray	426169.79	6113086.45	630.39	481.49	486.49	483.99	483.51	472.2	618.6	F	0	0
100/06-15-071-14W4M/00	Kmcmurray	431505.97	6111290.34	662.30	529.99	539.19	534.59	535.50	238.9	366.6	A	0	0
100/06-15-071-14W4M/00	Kmcmurray	431505.97	6111290.34	662.30	514.81	520.90	517.86	517.61	240.6	385.1	B	0	0
100/07-20-071-14W4M/00	Kmcmurray	428861.63	6113008.07	642.49	490.70	501.40	496.05	498.72	73.4	219.8	F	0	0
100/07-20-071-14W4M/00	Kmcmurray	428861.63	6113008.07	642.49	493.81	535.81	514.81	497.71	230.7	358.4	A	0	0
100/07-26-071-14W4M/00	Kmcmurray	433679.47	6114598.68	648.89	513.59	522.70	518.15	520.90	232.2	362.9	B	0	0
100/07-26-071-14W4M/00	Kmcmurray	433679.47	6114598.68	648.89	487.71	513.59	500.65	492.59	249.7	397.9	C	0	0
100/07-33-071-14W4M/00	Kmcmurray	430570.43	6116125.39	653.80	498.29	515.39	506.84	503.81	235.4	382.3	D	0	0
100/11-22-071-14W4M/00	Kmcmurray	431530.19	6113567.22	649.20	526.39	528.19	527.29	521.51	231.5	353.4	A	0	5
100/11-22-071-14W4M/00	Kmcmurray	431530.19	6113567.22	649.20	497.71	521.21	509.46	499.60	241.2	380.9	A	0	0
100/11-30-071-14W4M/00	Kmcmurray	426784.15	6115138.79	671.81	524.99	529.99	527.49	528.62	200.9	345.3	C	0	0
102/13-29-071-14W4M/00	Kmcmurray	427813.96	6115362.36	645.90	506.00	511.00	508.50	507.49	180.1	317.5	A	0	0
102/13-29-071-14W4M/00	Kmcmurray	427813.96	6115362.36	645.90	500.00	504.99	502.49	501.49	214.2	357.7	A	0	0
100/06-03-071-15W4M/00	Kmcmurray	421719.46	6108403.01	594.00	464.00	467.99	465.99	466.89	218.7	346.7	A	0	0
100/07-05-071-15W4M/00	Kmcmurray	419078.30	6108302.17	606.19	470.00	480.00	475.00	478.60	231.8	363.0	B	0	0
100/08-19-071-15W4M/00	Kmcmurray	417889.18	6113286.17	605.61	467.02	475.00	471.01	459.21	230.3	364.9	C	0	8
100/10-10-071-15W4M/00	Kmcmurray	422255.61	6110462.83	623.29	481.62	497.71	489.66	486.19	228.0	361.7	A	0	0
100/10-30-071-15W4M/00	Kmcmurray	417493.25	6115371.70	596.19	445.01	457.51	451.26	446.81	233.8	378.7	A	0	0
100/10-36-071-15W4M/00	Kmcmurray	425770.58	6116541.37	608.11	465.00	472.99	469.00	472.01	191.5	330.6	A	0	0
100/10-36-071-15W4M/00	Kmcmurray	425770.58	6116541.37	608.11	475.00	485.00	480.00	475.00	261.0	389.1	D	0	0
100/11-01-071-15W4M/00	Kmcmurray	424865.69	6108541.39	584.39	440.01	446.99	443.50	429.31	245.8	386.7	B	0	11
100/11-02-071-15W4M/00	Kmcmurray	423533.58	6108572.96	572.69	434.01	439.00	436.51	436.60	233.7	369.9	B	0	0
100/11-25-071-15W4M/00	Kmcmurray	425303.95	6115299.21	630.51	492.01	496.49	494.25	493.99	169.2	305.5	A	0	0
100/11-35-071-15W4M/00	Kmcmurray	423537.01	6116854.19	598.29	459.49	463.51	461.50	461.01	197.4	334.2	A	0	0
100/12-28-071-15W4M/00	Kmcmurray	419844.42	6115160.59	611.00	461.99	477.99	469.99	464.00	226.9	367.9	C	0	0
100/10-15-071-16W4M/00	Kmcmurray	412302.99	6112182.84	600.09	456.99	476.01	466.50	459.00	256.4	390.0	D	0	0
100/11-06-071-16W4M/00	Kmcmurray	407011.19	6108896.19	580.71	464.00	470.00	467.00	468.20	235.7	349.4	A	0	0
100/11-08-071-16W4M/00	Kmcmurray	408571.66	6110756.28	584.70	450.01	462.99	456.50	451.81	288.2	416.4	D	0	0
100/11-36-071-17W4M/00	Kmcmurray	405481.88	6117203.96	583.39	436.51	449.61	443.06	437.11	235.0	375.3	B	0	0
100/07-27-072-03W4M/00	Kmcmurray	539712.33	6124118.33	696.10	491.00	495.00	493.00	493.02	219.0	422.1	A	0	0
100/07-27-072-03W4M/00	Kmcmurray	539712.33	6124118.33	696.10	487.01	491.00	489.01	488.99	220.2	427.3	A	0	0
100/10-15-072-03W4M/00	Kmcmurray	540013.27	6121053.84	693.60	487.01	491.00	489.01	488.99	219.3	423.9	A	0	0
100/10-15-072-03W4M/00	Kmcmurray	540013.27	6121053.84	693.60	482.01	486.01	484.01	483.99	220.1	429.7	A	0	0
100/10-32-072-03W4M/00	Kmcmurray	536599.02	6125787.59	698.51	486.01	492.50	489.25	487.01	239.4	448.7	A	0	0
100/12-36-072-03W4M/00	Kmcmurray	542095.82	6125836.44	701.99	492.01	496.00	494.01	493.02	237.7	445.7	A	0	0
100/10-01-072-07W4M/00	Kmcmrny_c	504040.36	6117841.57	667.39	467.99	474.51	471.25	469.00	241.9	438.0	C	0	0
100/10-27-072-08W4M/00	Kmcm_c_ch	491016.07	6124348.98	691.01	521.00	530.99	525.99	522.49	260.7	425.8	A	0	0
100/02-06-072-09W4M/00	Kmcmurray	476362.29	6117159.27	681.02	492.50	498.11	495.30	493.99	248.6	434.4	C	0	0
100/03-04-072-09W4M/00	Kmcmurray	479042.36	6117114.65	670.01	466.01	470.00	468.01	467.02	236.6	438.7	B	0	0
100/03-19-072-09W4M/00	Kmcmurray	475892.65	6121861.43	663.31	460.01	467.02	463.51	464.61	228.0	427.8	D	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/06-09-072-09W4M/00	Kmcmurray	479054.37	6118849.54	681.50	476.01	481.01	478.51	478.60	231.1	434.1	B	0	0
100/06-30-072-09W4M/00	Kmcmurray	475885.86	6124000.41	665.99	464.00	467.99	465.99	465.61	235.4	435.4	A	0	0
100/07-17-072-09W4M/00	Kmcmurray	478027.58	6120543.83	668.70	460.19	469.39	464.79	466.59	226.4	430.3	A	0	0
100/11-28-072-09W4M/00	Kmcmurray	479075.70	6124444.93	668.22	478.51	480.49	479.50	479.12	247.8	436.6	A	0	0
100/03-04-072-10W4M/00	Kmcmurray	469058.96	6117240.87	659.19	498.01	504.99	501.50	500.00	263.0	420.7	A	0	0
100/03-04-072-10W4M/00	Kmcmurray	469058.96	6117240.87	659.19	470.00	483.99	477.00	472.01	239.4	421.6	A	0	0
100/06-24-072-10W4M/00	Kmcmurray	474073.42	6122164.38	673.09	472.01	477.99	475.00	476.19	227.0	425.1	A	0	0
100/06-24-072-10W4M/00	Kmcmurray	474073.42	6122164.38	673.09	486.01	490.00	488.00	488.20	246.7	431.8	A	0	0
100/06-28-072-10W4M/00	Kmcmurray	469118.73	6123809.82	663.00	472.01	475.00	473.51	473.51	234.8	424.3	C	0	0
100/07-27-072-10W4M/00	Kmcmurray	471373.24	6123839.19	672.12	467.02	479.79	473.40	470.31	224.0	422.7	B	0	0
100/07-35-072-10W4M/00	Kmcmurray	473027.22	6125450.29	672.39	498.99	503.99	501.49	501.09	246.5	417.4	A	0	0
100/07-35-072-10W4M/00	Kmcmurray	473027.22	6125450.29	672.39	472.01	478.99	475.50	475.70	232.0	428.9	C	0	0
100/09-21-072-10W4M/00	Kmcmurray	469986.53	6122722.13	665.59	470.49	475.49	472.99	472.01	232.6	425.2	B	0	0
100/10-23-072-10W4M/00	Kmcmurray	473055.45	6122779.20	672.12	469.39	481.62	475.50	474.00	232.2	428.8	B	0	0
100/10-32-072-10W4M/00	Kmcmurray	468187.82	6126048.87	669.31	475.49	482.80	479.15	480.09	237.8	428.0	A	0	0
100/14-01-072-10W4M/00	Kmcmurray	474195.58	6118133.96	668.09	475.00	490.00	482.50	476.01	234.6	420.2	A	0	0
100/06-02-072-11W4M/00	Kmcmurray	462570.31	6117687.01	625.21	453.00	457.99	455.49	458.51	235.5	405.2	A	-1	0
100/08-01-072-12W4M/00	Kmcmurray	455400.17	6117717.63	628.90	467.99	476.01	472.00	469.00	242.0	398.9	A	0	0
100/08-30-072-12W4M/00	Kmcmurray	447384.80	6124094.73	632.61	459.00	464.00	461.50	461.01	206.2	377.3	E	0	0
100/11-06-072-12W4M/00	Kmcmurray	446543.80	6118122.60	624.60	490.00	493.02	491.51	490.61	271.9	405.0	D	0	0
100/10-17-072-13W4M/00	Kmcmurray	438772.24	6121515.24	645.90	482.20	506.61	494.40	486.49	238.2	389.7	A	0	0
100/10-20-072-13W4M/00	Kmcmurray	438701.56	6122842.92	647.92	483.99	501.49	492.74	486.01	229.8	385.0	A	0	0
100/10-32-072-13W4M/00	Kmcmurray	438755.33	6126316.99	659.89	487.71	526.70	507.20	490.09	241.5	394.1	A	0	0
100/11-15-072-13W4M/00	Kmcmurray	441609.31	6121362.34	656.82	494.39	503.50	498.94	502.01	252.0	409.9	A	0	0
100/10-01-072-14W4M/00	Kmcmurray	435392.76	6118213.00	655.29	521.51	524.90	523.21	522.70	236.6	368.7	D	0	0
100/10-20-072-14W4M/00	Kmcmurray	429132.17	6123237.14	608.41	441.99	469.39	455.69	446.50	236.3	389.1	A	0	0
100/11-12-072-14W4M/00	Kmcmurray	434895.76	6119955.46	620.91	460.19	469.39	464.79	466.01	233.7	389.9	C	0	0
100/15-17-072-14W4M/00	Kmcmurray	428893.11	6121770.62	618.01	465.00	480.00	472.50	465.80	227.7	373.3	B	0	0
100/06-01-072-15W4M/00	Kmcmurray	425184.80	6117792.27	599.30	451.99	459.00	455.49	461.99	138.0	281.8	A	-3	0
100/06-01-072-15W4M/00	Kmcmurray	425184.80	6117792.27	599.30	440.01	446.99	443.50	441.99	212.5	368.3	B	0	0
100/07-27-072-15W4M/00	Kmcmurray	422591.34	6124396.21	594.39	441.99	454.21	448.10	442.60	223.7	370.0	B	0	0
100/07-27-072-15W4M/00	Kmcmurray	422591.34	6124396.21	594.39	432.79	442.60	437.69	433.40	228.5	385.2	B	0	0
100/10-09-072-15W4M/00	Kmcmurray	420848.55	6120242.82	610.52	452.29	472.41	462.35	457.81	213.4	361.6	C	0	0
100/10-16-072-15W4M/00	Kmcmurray	420874.22	6121788.47	597.71	429.80	454.21	442.01	421.81	243.1	398.8	B	0	8
100/10-20-072-15W4M/00	Kmcmurray	419165.36	6123267.47	584.30	422.09	440.41	431.25	439.19	222.2	375.3	B	0	0
100/11-14-072-15W4M/00	Kmcmurray	423521.95	6121742.02	607.50	446.20	462.69	454.44	449.89	220.0	373.1	B	0	0
100/11-17-072-15W4M/00	Kmcmurray	418617.88	6121847.12	596.19	435.29	443.79	439.54	434.31	232.9	389.6	A	0	1
100/11-32-072-15W4M/00	Kmcmurray	418821.16	6126586.43	577.99	413.01	426.90	419.95	415.81	221.8	379.9	C	0	0
100/06-03-072-16W4M/00	Kmcmurray	412005.62	6118023.89	575.19	417.61	421.81	419.71	412.40	79.0	234.5	E	0	5
100/06-06-072-16W4M/00	Kmcmurray	407137.59	6118207.64	582.81	426.69	433.40	430.04	432.51	231.5	384.3	A	0	0
100/06-22-072-16W4M/00	Kmcmurray	412194.41	6123056.12	582.81	419.10	437.39	428.25	425.81	228.3	382.9	B	0	0
100/06-31-072-16W4M/00	Kmcmurray	407240.40	6126218.37	578.51	422.52	435.90	429.21	425.20	233.3	382.6	C	0	0
100/07-02-072-16W4M/00	Kmcmurray	414216.73	6118057.42	590.70	434.89	437.69	436.29	428.92	218.3	372.7	B	0	6
100/07-07-072-16W4M/00	Kmcmurray	407780.15	6119808.39	596.80	441.99	447.81	444.90	445.89	236.0	387.9	B	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/07-10-072-16W4M/00	Kmcmurray	412661.49	6119744.13	575.19	411.51	423.70	417.61	418.19	231.0	388.6	A	0	0
100/10-13-072-16W4M/00	Kmcmurray	415729.43	6121913.32	577.60	420.59	426.69	423.64	423.70	228.9	382.8	B	0	0
100/11-09-072-16W4M/00	Kmcmurray	410443.24	6120358.29	582.20	422.52	431.29	426.90	428.92	228.5	383.8	D	0	0
100/13-16-072-16W4M/00	Kmcmurray	410377.65	6122181.90	582.11	414.50	427.00	420.75	417.52	182.0	343.3	B	0	0
100/10-17-072-17W4M/00	Kmcmurray	399572.40	6122119.59	595.00	448.09	452.29	450.19	451.11	242.8	387.6	D	0	0
100/10-23-072-17W4M/00	Kmcmurray	404588.30	6123708.72	563.91	408.40	415.69	412.05	413.01	220.4	372.2	B	0	0
100/11-25-072-17W4M/00	Kmcmurray	405690.19	6125316.00	593.42	434.31	437.11	435.71	430.99	212.7	370.4	B	0	3
100/11-30-072-17W4M/00	Kmcmurray	397499.60	6125578.14	585.19	437.11	454.21	445.66	442.60	228.2	367.7	B	0	0
100/09-12-073-01W4M/00	Kmcmurray	563123.02	6129542.21	669.50	459.00	462.99	461.00	460.01	221.0	429.5	A	0	0
100/07-26-073-03W4M/00	Kmcmurray	541512.13	6133866.31	685.50	480.49	485.00	482.74	483.41	224.0	426.8	A	0	0
100/11-10-073-03W4M/00	Kmcmurray	539535.51	6129041.43	717.50	515.39	518.59	516.99	517.00	225.8	426.3	A	0	0
100/06-06-073-06W4M/00	Kmcmry_ch	505030.73	6127223.91	730.00	524.01	537.00	530.51	524.99	246.3	445.8	C	0	0
100/10-34-073-08W4M/00	Kmcmurray	491085.44	6135734.56	703.69	482.01	492.01	487.01	482.99	221.8	438.5	A	0	0
100/06-32-073-09W4M/00	Kmcm_a2sq	477500.15	6135368.92	659.50	443.00	449.00	446.00	446.59	216.7	430.2	A	0	0
100/16-33-073-09W4M/00	Kmcmry_c	479807.16	6135853.00	658.89	456.01	459.49	457.75	457.69	231.5	432.6	A	0	0
100/11-23-073-09W4M/00	Kmcmry_ch	482354.99	6132342.06	654.50	446.99	476.01	461.50	446.99	232.1	425.1	A	0	0
100/11-31-073-09W4M/00	Kmcmry_ch	475893.53	6135651.17	659.41	462.99	465.00	464.00	463.30	236.8	432.2	C	0	0
100/08-08-073-09W4M/00	Kmcmurray	478085.41	6128882.30	665.90	453.00	461.99	457.49	457.81	235.1	443.5	B	0	0
100/10-17-073-09W4M/00	Kmcmurray	477880.20	6130754.08	668.70	462.11	470.00	466.06	463.91	225.4	428.1	A	0	0
100/10-17-073-09W4M/00	Kmcmurray	477880.20	6130754.08	668.70	452.60	460.89	456.74	454.49	218.5	430.5	A	0	0
100/09-32-073-10W4M/00	Kmcm_a_ch	468444.16	6135695.92	662.52	456.01	464.00	460.01	450.31	232.7	435.2	B	0	6
100/09-29-073-10W4M/00	Kmcmurray	468660.77	6134063.96	661.11	472.01	477.99	475.00	474.00	232.0	418.1	A	0	0
100/09-29-073-10W4M/00	Kmcmurray	468660.77	6134063.96	661.11	472.01	477.99	475.00	474.00	237.4	423.5	D	0	0
100/12-22-073-10W4M/00	Kmcmurray	470659.17	6132213.94	664.71	461.01	464.00	462.50	461.59	226.3	428.5	A	0	0
100/14-25-073-11W4M/00	Kmcmurray	464676.79	6134624.90	657.61	482.01	485.49	483.75	483.69	250.4	424.3	A	0	0
100/11-31-073-12W4M/00	Kmcmurray	446601.70	6135760.35	660.41	467.99	488.99	478.49	485.00	216.8	398.7	A	0	0
100/08-11-073-13W4M/00	Kmcmurray	444003.41	6129166.88	669.50	482.99	487.99	485.49	485.70	226.0	410.0	A	0	0
100/10-17-073-13W4M/00	Kmcmurray	438938.91	6131282.96	671.51	490.70	516.91	503.81	494.69	217.8	385.5	D	0	0
100/10-17-073-13W4M/00	Kmcmurray	438938.91	6131282.96	671.51	490.70	508.99	499.84	497.40	220.9	392.5	B	0	0
100/11-30-073-13W4M/00	Kmcmurray	436773.75	6134260.72	676.11	514.02	525.99	520.01	515.51	227.4	383.5	A	0	0
100/13-17-073-13W4M/00	Kmcmurray	437902.93	6131712.55	676.20	508.99	514.99	511.99	509.99	214.7	378.9	A	0	0
100/04-08-073-14W4M/00	Kmcmurray	428375.22	6129029.48	647.49	470.00	500.00	485.00	470.80	223.6	386.1	B	0	0
100/06-06-073-14W4M/00	Kmcmurray	427012.52	6127526.83	620.61	444.40	473.39	458.89	451.71	235.7	397.4	A	0	0
100/06-35-073-14W4M/00	Kmcmurray	433490.67	6135532.19	686.72	501.09	538.89	519.99	505.70	218.7	385.5	B	0	0
100/07-20-073-14W4M/00	Kmcmurray	428957.86	6132449.47	673.31	490.70	515.11	502.91	495.00	225.2	395.6	A	0	0
100/10-08-073-14W4M/00	Kmcmurray	429108.75	6129632.08	652.30	478.51	485.21	481.86	484.30	227.2	397.7	C	0	0
100/10-10-073-14W4M/00	Kmcmurray	432426.84	6129686.99	663.89	490.70	506.61	498.65	491.31	231.5	396.8	A	0	0
100/06-24-073-15W4M/00	Kmcmurray	425283.98	6132665.90	652.00	512.00	518.59	515.30	513.71	199.3	336.0	A	0	0
100/06-24-073-15W4M/00	Kmcmurray	425283.98	6132665.90	652.00	504.99	511.00	508.00	506.70	214.5	358.5	B	0	0
100/07-02-073-15W4M/00	Kmcmurray	424235.31	6127596.88	608.41	440.41	451.71	446.06	449.61	237.0	399.3	B	0	0
100/07-23-073-15W4M/00	Kmcmurray	424172.79	6132690.40	641.30	471.01	477.99	474.50	476.01	228.7	395.5	B	0	0
100/07-36-073-15W4M/00	Kmcmurray	426089.58	6135875.88	672.21	525.51	535.99	530.75	530.69	187.5	329.0	C	0	0
100/08-35-073-15W4M/00	Kmcmurray	424721.83	6135902.34	656.60	516.00	524.99	520.49	518.31	190.0	326.2	C	0	0
100/10-01-073-15W4M/00	Kmcmurray	425883.19	6128175.61	629.11	469.39	480.09	474.74	478.20	224.7	379.0	A	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/10-25-073-15W4M/00	Kmcmurray	425728.32	6134375.92	657.91	513.50	518.50	516.00	514.99	203.4	345.3	A	0	0
100/10-25-073-15W4M/00	Kmcmurray	425728.32	6134375.92	657.91	482.99	487.99	485.49	485.00	226.3	398.7	A	0	0
100/11-26-073-15W4M/00	Kmcmurray	423696.84	6134410.56	645.69	502.49	507.49	504.99	504.99	209.5	350.2	B	0	0
100/11-26-073-15W4M/00	Kmcmurray	423696.84	6134410.56	645.69	475.00	480.00	477.50	477.90	225.1	393.3	A	0	0
100/11-32-073-15W4M/00	Kmcmurray	418964.86	6136388.33	631.21	455.71	481.62	468.66	457.51	221.9	384.4	A	0	0
100/11-35-073-15W4M/00	Kmcmurray	423731.60	6136349.00	660.20	490.79	515.39	503.09	495.09	235.4	392.5	A	0	0
100/07-21-073-16W4M/00	Kmcmurray	411285.19	6132919.26	574.40	427.00	436.99	431.99	433.40	226.0	368.4	A	0	0
100/07-21-073-16W4M/00	Kmcmurray	411285.19	6132919.26	574.40	410.51	419.01	414.76	414.50	225.0	384.7	A	0	0
100/07-33-073-16W4M/00	Kmcmurray	411371.66	6135929.84	590.00	425.99	436.99	431.49	420.02	213.5	372.1	D	0	6
100/08-09-073-16W4M/00	Kmcmurray	411724.96	6129711.14	574.00	413.01	420.02	416.51	414.99	222.6	380.1	A	0	0
100/10-36-073-16W4M/00	Kmcmurray	416257.43	6136439.99	611.70	442.60	477.01	459.81	447.81	236.3	388.2	A	0	0
100/11-08-073-16W4M/00	Kmcmurray	409014.01	6130105.61	575.19	414.50	424.31	419.41	417.91	230.1	385.8	A	0	0
100/11-18-073-16W4M/00	Kmcmurray	407387.60	6131546.49	575.01	414.01	420.99	417.50	403.01	234.1	391.6	A	0	11
100/06-01-073-17W4M/00	Kmcmurray	405715.78	6127949.36	581.59	425.20	430.41	427.80	427.91	189.7	343.5	E	0	0
100/06-24-073-17W4M/00	Kmcmurray	406086.45	6132776.24	574.49	411.51	423.70	417.61	413.89	230.5	387.3	A	0	0
100/06-34-073-17W4M/00	Kmcmurray	402716.33	6136358.18	575.89	414.01	424.01	419.01	415.99	212.0	368.8	B	0	0
100/10-06-073-17W4M/00	Kmcmurray	398196.94	6128727.14	585.19	426.69	435.90	431.29	431.29	229.5	383.4	D	0	0
100/10-13-073-17W4M/00	Kmcmurray	406219.74	6131820.48	575.80	411.51	415.11	413.31	413.61	238.0	400.4	B	0	0
100/10-15-073-17W4M/00	Kmcmurray	403200.13	6131842.17	578.91	435.01	444.00	439.51	441.81	222.1	361.5	A	0	0
100/10-09-074-07W4M/00	Kmcmry_ch	499036.65	6138811.66	696.20	511.79	524.90	518.34	513.32	281.7	459.5	D	0	0
100/10-11-074-08W4M/00	Kmcm_c_ch	492623.15	6138813.28	716.50	529.99	534.01	532.00	530.99	265.3	449.8	A	0	0
100/06-30-074-08W4M/00	Kmcmrry_c	485606.38	6143190.90	677.60	471.80	475.49	473.65	473.69	231.7	435.7	D	0	0
100/11-08-074-09W4M/00	Kmcm_a2sq	477506.67	6139008.05	669.62	448.09	457.20	452.64	450.50	220.8	437.8	C	0	0
100/11-28-074-09W4M/00	Kmcm_a2sq	479134.36	6143810.00	668.40	440.01	449.00	444.51	441.02	206.1	430.0	D	0	0
100/07-27-074-09W4M/00	Kmcmry_ch	481240.85	6143148.36	665.41	445.01	451.11	448.06	446.50	208.7	426.1	E	0	0
100/11-08-074-09W4M/00	Kmcmry_ch	477506.67	6139008.05	669.62	463.91	472.99	468.45	478.51	230.2	431.3	C	-6	0
100/09-34-074-10W4M/00	Kmcm_a2sq	471681.54	6145199.38	678.30	455.01	467.02	461.01	456.99	224.3	441.6	B	0	0
100/12-08-074-10W4M/00	Kmcm_b1sq	467518.60	6138949.02	662.30	464.00	469.00	466.50	467.41	253.8	449.6	D	0	0
100/05-31-074-11W4M/00	Kmcmry_ch	455870.96	6145024.61	660.02	486.01	503.99	495.00	505.70	232.9	397.9	A	-2	0
100/07-33-074-11W4M/00	Kmcmry_ch	460057.28	6145107.04	660.50	422.79	470.61	446.70	412.09	343.9	557.7	A	0	11
100/06-08-074-11W4M/00	Kmcmurray	457873.01	6138475.28	664.80	467.60	476.71	472.15	474.30	248.6	441.2	C	0	0
100/06-05-074-12W4M/00	Kmcmry_ch	448151.07	6137060.76	664.59	498.01	503.99	501.00	498.99	251.5	415.1	C	0	0
100/13-01-074-12W4M/00	Kmcmry_ch	454564.91	6137614.41	666.90	481.01	493.99	487.50	482.01	244.7	424.1	C	0	0
100/06-33-074-13W4M/00	Kmcmurray	440077.65	6145151.27	735.21	568.09	577.29	572.69	570.59	232.4	394.9	B	0	0
100/06-33-074-13W4M/00	Kmcmurray	440077.65	6145151.27	735.21	550.50	559.61	555.06	552.91	220.7	400.9	B	0	0
100/06-33-074-13W4M/00	Kmcmurray	440077.65	6145151.27	735.21	550.81	559.89	555.35	552.60	223.4	403.3	A	0	0
100/07-20-074-13W4M/00	Kmcmurray	439011.16	6142051.63	732.41	545.99	576.01	561.00	550.01	255.7	427.1	A	0	0
100/07-20-074-13W4M/00	Kmcmurray	439011.16	6142051.63	732.41	545.99	565.01	555.50	550.20	265.5	442.4	B	0	0
100/10-17-074-13W4M/00	Kmcmurray	438870.01	6140730.19	726.89	540.99	551.99	546.49	550.20	212.3	392.7	A	0	0
100/10-17-074-13W4M/00	Kmcmurray	438870.01	6140730.19	726.89	557.51	566.99	562.25	565.19	229.2	393.8	A	0	0
100/11-06-074-13W4M/00	Kmcmurray	436713.93	6137650.78	698.21	523.01	540.02	531.51	528.01	217.2	383.9	A	0	0
100/05-20-074-14W4M/00	Kmcmurray	428638.13	6142168.54	728.20	543.00	564.49	553.75	545.29	207.3	381.7	A	0	0
100/06-23-074-14W4M/00	Kmcmurray	433587.67	6142093.35	774.50	603.99	607.01	605.50	605.00	215.6	384.6	A	0	0
100/06-27-074-14W4M/00	Kmcmurray	432006.10	6143642.40	773.89	585.19	603.51	594.35	592.50	228.3	407.8	C	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/07-10-074-14W4M/00	Kmcmurray	432256.40	6139092.74	725.79	560.01	568.00	564.00	562.30	212.1	373.9	C	0	0
100/11-28-074-14W4M/00	Kmcmurray	430350.69	6144332.79	763.80	594.39	598.60	596.50	596.50	211.3	378.6	A	0	0
100/11-28-074-14W4M/00	Kmcmurray	430350.69	6144332.79	763.80	575.49	591.89	583.69	588.30	234.2	414.3	B	0	0
100/06-08-074-15W4M/00	Kmcmurray	418888.30	6139084.68	651.69	500.51	509.29	504.90	506.91	216.6	363.4	B	0	0
100/06-08-074-15W4M/00	Kmcmurray	418888.30	6139084.68	651.69	477.01	499.29	488.15	483.69	211.8	375.3	B	0	0
100/07-11-074-15W4M/00	Kmcmurray	424342.46	6139214.78	691.90	544.50	549.59	547.04	546.51	176.5	321.3	A	0	0
100/09-04-074-15W4M/00	Kmcmurray	421639.65	6137926.23	654.90	497.01	517.00	507.01	498.99	193.8	341.7	A	0	0
100/09-04-074-15W4M/00	Kmcmurray	421639.65	6137926.23	654.90	472.01	492.01	482.01	474.00	204.2	377.1	B	0	0
100/09-32-074-15W4M/00	Kmcmurray	420117.78	6145942.62	720.00	548.00	565.01	556.51	551.60	176.1	339.6	D	0	0
100/10-06-074-15W4M/00	Kmcmurray	417808.06	6137931.41	637.00	477.01	499.90	488.46	498.99	244.9	393.5	B	0	0
100/11-03-074-15W4M/00	Kmcmurray	422246.25	6137896.57	660.81	464.79	517.89	491.34	486.49	222.9	392.4	A	0	0
100/11-04-074-15W4M/00	Kmcmurray	420497.44	6137879.89	641.70	460.01	470.00	465.00	467.50	223.5	400.2	A	0	0
100/11-36-074-15W4M/00	Kmcmurray	425617.91	6145856.18	751.00	571.50	597.41	584.46	574.92	224.1	390.7	B	0	0
100/11-14-074-16W4M/00	Kmcmurray	414122.67	6141347.88	637.31	469.39	487.71	478.55	470.89	209.6	368.3	C	0	0
100/11-22-074-16W4M/00	Kmcmurray	412578.94	6142956.76	648.62	471.19	485.49	478.34	476.10	208.6	378.9	A	0	0
100/11-28-074-16W4M/00	Kmcmurray	411026.07	6144558.62	652.61	480.09	500.21	490.15	474.61	196.6	359.1	D	0	5
100/06-24-074-17W4M/00	Kmcmurray	406023.77	6142511.79	602.59	426.69	443.52	435.10	421.20	208.7	376.1	A	0	5
100/07-09-074-17W4M/00	Kmcmurray	401500.68	6139676.01	575.71	409.99	428.00	418.99	415.99	169.8	326.5	D	0	0
100/07-14-074-17W4M/00	Kmcmurray	405061.87	6140833.59	587.99	410.60	430.99	420.79	419.10	203.7	370.9	A	0	0
100/07-22-074-17W4M/00	Kmcmurray	403385.00	6142588.94	589.79	417.61	426.11	421.86	420.59	206.5	374.4	A	0	0
100/07-26-074-17W4M/00	Kmcmurray	405043.00	6144158.20	613.02	435.90	450.80	443.35	436.51	207.3	377.0	A	0	0
100/10-10-074-17W4M/00	Kmcmurray	403232.99	6139761.22	577.90	409.99	416.39	413.19	413.89	201.2	365.9	B	0	0
100/10-16-074-17W4M/00	Kmcmurray	401818.54	6141599.36	578.21	406.91	419.10	413.01	414.19	199.7	364.9	B	0	0
100/09-13-075-04W4M/00	Kmcm_a1sq	533144.81	6150253.56	617.40	397.00	403.10	400.05	399.01	209.6	426.9	B	0	0
100/16-27-075-04W4M/00	Kmcmry_ch	529799.54	6153799.88	598.99	400.51	408.49	404.50	403.19	105.6	300.1	E	0	0
1AA/03-28-075-06W4M/00	Kmcmurray	507756.98	6152738.42	613.90	430.99	440.01	435.50	433.00	266.1	444.5	C	0	0
100/11-08-075-08W4M/00	Kmcm_a2sq	486472.25	6148419.88	669.31	440.01	450.01	445.01	433.91	343.8	568.1	E	0	6
100/11-24-075-09W4M/00	Kmcm_a2sq	483234.61	6151915.55	677.30	448.09	457.20	452.64	453.21	221.5	446.2	G	0	0
100/11-18-075-12W4M/00	Kmcm_b1sq	445795.03	6150588.76	688.70	495.00	500.00	497.50	498.29	212.7	403.9	B	0	0
100/06-25-075-12W4M/00	Kmcmrry_c	453903.60	6153086.09	673.31	472.41	490.70	481.55	465.10	226.6	418.4	G	0	7
100/10-30-075-12W4M/00	Kmcmry_ch	446295.96	6153782.54	697.99	500.00	506.00	503.00	503.99	215.8	410.8	A	0	0
100/07-12-075-13W4M/00	Kmcm_b1sq	444589.37	6148368.86	685.19	493.20	496.80	495.00	482.50	210.8	401.0	B	0	11
100/07-24-075-13W4M/00	Kmcm_b1sq	444528.58	6151663.07	702.90	506.00	511.09	508.55	508.41	210.1	404.4	C	0	0
100/13-36-075-13W4M/00	Kmcm_b1sq	443930.20	6155598.57	715.40	519.02	529.01	524.01	521.61	209.1	400.5	C	0	0
100/07-12-075-13W4M/00	Kmcmrry_c	444589.37	6148368.86	685.19	499.29	502.89	501.09	504.69	219.1	403.2	B	-2	0
100/07-12-075-13W4M/00	Kmcmrry_c	444589.37	6148368.86	685.19	499.29	502.89	501.09	504.69	223.0	407.1	D	-2	0
100/06-28-075-13W4M/00	Kmcmurray	439160.69	6153253.50	726.19	560.01	566.99	563.50	563.61	239.7	402.4	C	0	0
100/06-28-075-13W4M/00	Kmcmurray	439160.69	6153253.50	726.19	519.99	544.01	532.00	521.61	211.5	405.7	A	0	0
100/05-12-075-14W4M/00	Kmcmurray	434012.02	6148390.29	759.72	575.01	587.02	581.01	576.99	218.0	396.7	A	0	0
100/06-30-075-14W4M/00	Kmcmurray	426195.93	6153671.72	754.41	562.11	575.80	568.96	566.02	208.2	393.6	A	0	0
100/06-31-075-14W4M/00	Kmcmurray	426060.58	6155118.84	733.29	538.31	552.30	545.30	541.60	198.3	386.3	A	0	0
100/06-32-075-14W4M/00	Kmcmurray	427789.61	6155084.46	742.19	546.20	561.41	553.81	549.59	213.8	402.2	A	0	0
100/07-03-075-14W4M/00	Kmcmurray	431284.13	6146890.46	777.79	595.00	617.01	606.01	596.31	226.1	397.9	A	0	0
100/08-05-075-14W4M/00	Kmcmurray	428567.24	6147236.53	780.11	606.01	612.01	609.01	608.90	184.7	355.8	A	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [m bKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/11-11-075-14W4M/00	Kmcmurray	432832.97	6148842.25	767.79	584.30	598.60	591.45	584.61	209.1	385.5	B	0	0
100/11-29-075-14W4M/00	Kmcmurray	427843.05	6154111.83	745.91	561.02	569.00	565.01	566.50	188.6	369.5	A	0	0
100/11-33-075-14W4M/00	Kmcmurray	429375.44	6155604.06	726.01	530.41	545.59	538.00	531.91	207.1	395.1	A	0	0
100/12-34-075-14W4M/00	Kmcmurray	430864.23	6155477.93	723.20	529.99	544.01	537.00	532.61	310.5	496.7	D	0	0
100/07-20-075-15W4M/00	Kmcmurray	418524.78	6151971.84	725.70	542.52	560.80	551.66	546.51	197.8	371.8	D	0	0
100/07-26-075-15W4M/00	Kmcmurray	423230.65	6153747.09	762.00	566.90	589.21	578.05	569.40	202.2	386.2	A	0	0
100/10-08-075-15W4M/00	Kmcmurray	418552.45	6149102.67	704.61	519.02	524.01	521.51	522.00	196.6	379.7	A	0	0
100/10-13-075-15W4M/00	Kmcmurray	425137.47	6150626.30	812.11	637.00	641.00	639.00	639.72	142.2	315.4	A	0	0
100/11-29-075-15W4M/00	Kmcmurray	417956.43	6154213.25	763.50	573.00	586.71	579.85	576.10	215.0	398.7	D	0	0
100/11-35-075-15W4M/00	Kmcmurray	422838.47	6155718.69	748.32	552.30	568.09	560.19	555.99	209.4	397.5	A	0	0
100/06-08-075-16W4M/00	Kmcmurray	407973.29	6148950.82	678.49	512.10	524.90	518.50	520.60	190.8	350.8	D	0	0
100/06-23-075-16W4M/00	Kmcmurray	412970.59	6152273.26	732.80	547.00	570.01	558.50	550.99	181.0	355.3	A	0	0
100/07-03-075-16W4M/00	Kmcmurray	411908.28	6147243.76	671.51	486.80	512.40	499.60	491.00	203.8	375.7	B	0	0
100/07-17-075-16W4M/00	Kmcmurray	408702.00	6150549.83	688.51	519.41	536.39	527.90	524.90	200.2	360.8	B	0	0
100/07-22-075-16W4M/00	Kmcmurray	411990.17	6152118.03	728.20	535.20	560.80	548.00	539.80	211.6	391.8	A	0	0
100/07-25-075-16W4M/00	Kmcmurray	415199.13	6153798.14	745.51	550.50	570.01	560.25	557.51	201.6	386.9	A	0	0
100/11-02-075-17W4M/00	Kmcmurray	403391.32	6148034.97	631.52	485.00	487.99	486.49	475.79	192.7	337.8	C	0	9
100/06-19-076-03W4M/00	Kmcmry_ch	534095.57	6161293.55	613.99	399.01	402.70	400.86	401.00	189.6	402.8	B	0	0
100/14-29-076-03W4M/00	Kmcmurray	535434.40	6163586.88	599.12	365.00	372.50	368.75	367.01	186.9	417.3	A	0	0
100/13-17-076-04W4M/00	Kmcm_a1sq	525268.16	6160306.59	626.40	373.50	380.00	376.75	368.11	193.3	442.9	A	0	5
100/13-10-076-04W4M/00	Kmcmry_ch	528562.95	6158828.83	603.11	362.99	367.50	365.24	365.91	164.2	402.1	C	0	0
100/13-10-076-04W4M/00	Kmcmry_ch	528562.95	6158828.83	603.11	377.01	389.99	383.50	379.90	199.1	418.7	A	0	0
100/13-14-076-04W4M/00	Kmcmry_ch	530139.96	6160467.64	604.82	371.00	380.00	375.50	373.02	203.7	433.0	G	0	0
100/13-14-076-04W4M/00	Kmcmry_ch	530139.96	6160467.64	604.82	367.99	371.00	369.49	370.00	198.3	433.6	A	0	0
100/13-14-076-04W4M/00	Kmcmry_ch	530139.96	6160467.64	604.82	371.00	380.00	375.50	361.89	226.9	456.2	G	0	9
100/13-17-076-04W4M/00	Kmcmry_ch	525268.16	6160306.59	626.40	384.99	391.49	388.24	389.20	220.4	458.5	A	0	0
100/06-25-076-05W4M/00	Kmcm_b1sq	522387.76	6162631.41	597.11	354.00	360.00	357.00	355.00	193.0	433.1	A	0	0
100/10-05-076-05W4M/00	Kmcmry_ch	516499.11	6156724.55	615.70	361.19	374.91	368.05	363.60	201.0	448.6	A	0	0
100/10-08-076-05W4M/00	Kmcmry_ch	516463.82	6158227.97	581.90	380.00	389.99	384.99	382.01	218.9	415.8	B	0	0
100/07-28-076-06W4M/00	Kmcm_a1sq	508390.99	6162556.57	563.91	298.70	305.99	302.35	291.69	199.7	461.3	A	0	7
100/15-02-076-06W4M/00	Kmcm_b1sq	511647.98	6156829.17	585.00	345.00	351.01	348.01	347.02	201.1	438.1	A	0	0
100/11-03-076-06W4M/00	Kmcmry_ch	509420.35	6156691.38	594.39	353.60	362.71	358.16	360.61	203.1	439.4	A	0	0
100/10-24-076-10W4M/00	Kmcmry_ch	474156.08	6161644.37	659.80	425.99	441.02	433.50	428.00	163.0	389.3	C	0	0
100/12-13-076-10W4M/00	Kmcmry_ch	473362.08	6160080.99	665.99	433.00	450.01	441.50	434.01	516.1	740.6	B	0	0
100/07-17-076-11W4M/00	Kmcmrry_c	457828.99	6159513.02	671.51	469.39	478.51	473.95	470.31	213.6	411.1	B	0	0
100/10-14-076-13W4M/00	Kmcm_c_ch	443190.74	6159989.03	720.00	534.99	540.99	537.99	529.80	214.4	396.4	C	0	5
100/10-14-076-13W4M/00	Kmcmrry_c	443190.74	6159989.03	720.00	517.00	528.01	522.50	511.79	221.1	418.6	A	0	5
100/11-12-076-13W4M/00	Kmcmrry_c	444139.93	6158633.37	731.89	528.01	537.00	532.50	529.99	207.4	406.8	B	0	0
100/06-18-076-13W4M/00	Kmcmurray	436211.51	6159864.77	683.91	492.01	511.00	501.50	500.00	212.7	395.1	D	0	0
100/05-35-076-14W4M/00	Kmcmurray	432637.58	6164928.41	667.30	470.00	485.00	477.50	472.50	208.7	398.5	G	0	0
100/10-30-076-14W4M/00	Kmcmurray	426617.69	6163681.77	685.80	518.80	523.59	521.19	520.60	209.5	374.2	A	0	0
100/10-30-076-14W4M/00	Kmcmurray	426617.69	6163681.77	685.80	508.71	513.59	511.15	510.51	199.8	374.5	B	0	0
100/10-30-076-14W4M/00	Kmcmurray	426617.69	6163681.77	685.80	492.59	497.40	495.00	495.00	206.0	396.8	B	0	0
100/11-18-076-14W4M/00	Kmcmurray	426255.85	6160528.75	698.60	530.41	534.59	532.50	532.79	194.0	360.1	B	0	0



**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [m bKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/11-18-076-14W4M/00	Kmcmurray	426255.85	6160528.75	698.60	521.21	527.31	524.26	523.59	204.7	379.0	B	0	0
100/11-18-076-14W4M/00	Kmcmurray	426255.85	6160528.75	698.60	510.21	516.30	513.25	512.71	200.4	385.7	B	0	0
100/11-18-076-14W4M/00	Kmcmurray	426255.85	6160528.75	698.60	506.61	512.71	509.66	508.99	200.6	389.5	C	0	0
100/11-18-076-14W4M/00	Kmcmurray	426255.85	6160528.75	698.60	499.90	506.00	502.95	502.31	203.7	399.3	D	0	0
100/06-02-076-15W4M/00	Kmcmurray	422996.45	6156986.03	716.59	515.11	537.70	526.41	516.91	213.7	403.8	B	0	0
100/06-13-076-15W4M/00	Kmcmurray	424509.12	6160070.96	691.59	501.09	515.69	508.39	502.89	191.2	374.4	A	0	0
100/06-14-076-15W4M/00	Kmcmurray	422922.68	6160036.27	716.31	553.21	556.90	555.06	554.40	201.3	362.6	B	0	0
100/06-14-076-15W4M/00	Kmcmurray	422922.68	6160036.27	716.31	549.19	553.49	551.34	550.50	201.0	366.0	B	0	0
100/06-14-076-15W4M/00	Kmcmurray	422922.68	6160036.27	716.31	544.40	548.61	546.51	545.59	203.6	373.4	B	0	0
100/07-06-076-15W4M/00	Kmcmurray	417062.32	6156782.62	745.21	553.49	579.40	566.44	556.60	223.6	402.3	D	0	0
100/07-08-076-15W4M/00	Kmcmurray	418597.60	6158408.04	739.29	571.99	576.01	574.00	574.00	195.2	360.5	B	0	0
100/07-15-076-15W4M/00	Kmcmurray	421787.87	6160259.00	711.31	524.99	529.01	527.00	514.90	211.1	395.4	B	0	10
100/07-32-076-15W4M/00	Kmcmurray	418857.15	6164915.41	684.10	482.99	512.00	497.50	477.29	219.2	405.8	A	0	6
100/10-26-076-15W4M/00	Kmcmurray	423690.01	6163790.88	691.99	514.99	522.00	518.50	517.00	195.2	368.7	A	0	0
100/10-36-076-15W4M/00	Kmcmurray	425168.51	6165402.78	684.89	475.49	512.10	493.79	481.01	208.4	399.5	A	0	0
100/11-10-076-15W4M/00	Kmcmurray	421261.62	6159080.67	718.69	518.19	556.29	537.24	525.81	210.5	392.0	B	0	0
100/11-23-076-15W4M/00	Kmcmurray	423073.85	6162143.06	693.39	506.00	531.91	518.95	511.49	209.7	384.1	B	0	0
100/16-07-076-15W4M/00	Kmcmurray	417227.99	6159270.83	722.10	544.01	549.01	546.51	545.11	210.4	386.0	B	0	0
100/06-02-076-16W4M/00	Kmcmurray	413107.09	6156928.28	791.90	637.61	644.99	641.30	639.20	218.9	369.5	A	0	0
100/06-02-076-16W4M/00	Kmcmurray	413107.09	6156928.28	791.90	604.69	620.91	612.80	608.69	215.9	395.0	C	0	0
100/10-26-076-16W4M/00	Kmcmurray	413909.43	6163706.47	718.90	538.00	555.01	546.51	529.01	224.7	397.1	A	0	9
100/11-24-076-16W4M/00	Kmcmurray	414761.10	6162078.95	704.91	555.01	561.50	558.26	559.61	234.0	380.6	B	0	0
100/11-28-076-16W4M/00	Kmcmurray	409980.35	6163810.09	703.39	518.50	523.01	520.75	521.39	204.9	387.6	A	0	0
100/06-28-076-17W4M/00	Kmcmurray	400281.81	6163778.94	695.71	512.19	518.01	515.10	504.69	211.4	392.0	A	0	7
100/06-29-076-17W4M/00	Kmcmurray	398524.42	6163788.20	698.30	512.10	527.31	519.70	516.00	199.2	377.8	A	0	0
100/07-33-076-17W4M/00	Kmcmurray	400853.32	6165221.07	708.30	537.00	551.99	544.50	540.29	192.1	355.9	B	0	0
100/07-33-076-17W4M/00	Kmcmurray	400853.32	6165221.07	708.30	524.99	537.00	530.99	535.50	180.4	357.7	B	0	0
100/11-27-076-17W4M/00	Kmcmurray	401906.12	6164272.14	716.59	538.89	543.22	541.05	541.30	192.1	367.6	A	0	0
100/06-03-077-03W4M/00	Kmcmurray	538826.44	6166112.11	590.61	365.00	372.01	368.50	367.80	205.2	427.3	D	0	0
100/09-06-077-04W4M/00	Kmcm_a1sq	524830.04	6166417.48	579.79	329.00	331.99	330.50	334.00	185.6	434.9	A	-2	0
100/02-18-077-04W4M/00	Kmcmry_ch	524412.99	6168846.92	583.60	351.19	355.21	353.20	352.99	195.1	425.5	A	0	0
100/01-07-077-05W4M/00	Kmcmry_ch	515029.46	6167145.14	578.91	330.01	335.01	332.51	333.00	167.6	414.0	A	0	0
100/05-03-077-05W4M/00	Kmcmry_ch	518982.27	6165950.77	570.31	321.99	330.01	326.00	327.39	200.8	445.1	A	0	0
100/10-22-077-09W4M/00	Kmcmry_ch	480607.22	6171170.04	585.80	328.00	347.50	337.75	329.79	207.6	455.7	B	0	0
100/10-14-077-10W4M/00	Kmcm_a2sq	472645.38	6169738.04	634.99	387.80	396.30	392.05	394.02	210.6	453.5	B	0	0
100/05-17-077-10W4M/00	Kmcmry_ch	466977.01	6169375.48	694.00	470.00	480.00	475.00	476.71	212.9	431.9	C	0	0
100/10-14-077-10W4M/00	Kmcmry_ch	472645.38	6169738.04	634.99	408.01	429.01	418.51	415.29	218.8	435.3	A	0	0
100/10-22-077-11W4M/00	Kmcmry_ch	461082.48	6171425.23	690.40	473.69	479.51	476.60	476.10	214.7	428.5	C	0	0
100/10-22-077-11W4M/00	Kmcmry_ch	461082.48	6171425.23	690.40	466.59	472.41	469.50	469.09	216.4	437.3	A	0	0
100/14-27-077-13W4M/00	Kmcmry_ch	441285.80	6173452.25	666.29	441.50	448.00	444.75	443.91	197.6	419.2	C	0	0
100/07-07-077-14W4M/00	Kmcmurray	426776.53	6168195.16	660.02	451.99	470.00	461.00	453.51	198.2	397.2	B	0	0
100/07-10-077-14W4M/00	Kmcmurray	431796.00	6167901.25	671.81	474.00	477.99	475.99	475.00	217.5	413.3	B	0	0
100/07-10-077-14W4M/00	Kmcmurray	431796.00	6167901.25	671.81	468.51	472.50	470.51	470.00	212.9	414.2	B	0	0
100/07-10-077-14W4M/00	Kmcmurray	431796.00	6167901.25	671.81	461.01	465.00	463.01	461.99	213.2	422.0	C	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/07-28-077-14W4M/00	Kmcmurray	430189.68	6172766.55	677.39	480.00	492.50	486.25	482.01	207.8	398.9	A	0	0
100/10-23-077-14W4M/00	Kmcmurray	433356.31	6171656.19	668.31	464.00	472.01	468.01	466.01	196.1	396.4	B	0	0
100/11-17-077-14W4M/00	Kmcmurray	428024.00	6170222.60	680.59	485.21	490.70	487.96	486.80	204.1	396.8	A	0	0
100/04-24-077-15W4M/00	Kmcmurray	424681.10	6171131.72	683.30	489.51	495.00	492.25	490.00	203.8	394.9	B	0	0
100/06-04-077-15W4M/00	Kmcmurray	419752.58	6166547.52	675.41	504.42	516.61	510.51	506.61	203.3	368.2	A	0	0
100/06-04-077-15W4M/00	Kmcmurray	419752.58	6166547.52	675.41	475.49	502.89	489.19	481.62	204.7	390.9	D	0	0
100/07-36-077-15W4M/00	Kmcmurray	425434.82	6174674.24	665.41	467.99	490.00	478.99	469.00	214.7	401.1	B	0	0
100/10-06-077-15W4M/00	Kmcmurray	417211.86	6167207.20	707.29	509.99	528.01	519.00	512.00	205.4	393.7	C	0	0
100/10-13-077-15W4M/00	Kmcmurray	425398.81	6170032.94	678.40	496.00	507.40	501.70	503.71	216.8	393.5	B	0	0
100/10-13-077-15W4M/00	Kmcmurray	425398.81	6170032.94	678.40	480.00	487.01	483.51	483.29	244.7	439.5	A	0	0
100/10-20-077-15W4M/00	Kmcmurray	418944.68	6171998.23	694.49	498.01	509.99	504.00	508.99	191.5	382.0	B	0	0
100/10-27-077-15W4M/00	Kmcmurray	421938.90	6173557.72	673.70	477.99	487.99	482.99	472.50	206.9	397.6	B	0	5
100/11-10-077-15W4M/00	Kmcmurray	421480.00	6168701.31	668.92	469.00	486.01	477.50	470.00	189.3	380.7	B	0	0
100/07-09-077-16W4M/00	Kmcmurray	410773.28	6168602.01	684.31	497.01	502.01	499.51	498.99	218.0	402.8	F	0	0
100/07-19-077-16W4M/00	Kmcmurray	407552.30	6171619.26	628.90	435.01	443.00	439.00	435.99	188.7	378.6	B	0	0
100/07-19-077-16W4M/00	Kmcmurray	407552.30	6171619.26	628.90	434.40	438.00	436.20	435.41	191.0	383.7	B	0	0
100/07-32-078-03W4M/00	Kmcmurray	535736.90	6184022.71	553.00	299.01	307.00	303.00	288.01	188.7	438.7	C	0	11
100/07-32-078-03W4M/00	Kmcmurray	535736.90	6184022.71	553.00	288.01	295.99	292.00	277.00	188.7	449.7	A	0	11
100/16-26-078-03W4M/00	Kmcmurray	541014.82	6183038.70	546.11	297.00	303.00	300.00	299.01	172.7	418.8	D	0	0
100/06-22-078-04W4M/00	Kmcmurray	528758.93	6180697.60	558.49	287.00	320.50	303.75	291.39	241.8	496.6	B	0	0
100/06-30-078-05W4M/00	Kmcmry_ch	514509.29	6181966.69	556.29	305.01	309.49	307.25	305.99	179.6	428.7	A	0	0
100/14-24-078-05W4M/00	Kmcmurray	522321.04	6181161.73	569.09	309.49	314.49	311.99	310.99	169.0	426.1	B	0	0
100/10-08-078-06W4M/00	Kmcm_a_ch	506481.48	6177451.00	582.60	321.99	325.01	323.50	324.49	167.6	426.7	A	0	0
100/06-11-078-07W4M/00	Kmcmry_ch	501252.57	6177115.81	536.82	257.31	304.80	281.06	250.21	243.5	499.2	A	0	7
100/02-30-078-08W4M/00	Kmcm_a1sq	485583.02	6181811.68	592.72	324.00	331.99	328.00	326.02	183.3	448.0	C	0	0
100/07-33-078-09W4M/00	Kmcmry_ch	479100.10	6183577.59	662.00	394.41	403.59	399.00	396.79	199.6	462.6	B	0	0
100/10-18-078-10W4M/00	Kmcm_a2sq	466134.70	6179471.14	666.29	415.11	420.59	417.85	417.61	203.6	452.0	B	0	0
100/06-31-078-10W4M/00	Kmcm_b1sq	465585.07	6184000.90	676.41	423.09	440.10	431.60	429.49	208.6	453.4	A	0	0
100/06-31-078-10W4M/00	Kmcm_b1sq	465585.07	6184000.90	676.41	423.09	440.10	431.60	424.59	219.7	464.5	A	0	0
100/07-35-078-10W4M/00	Kmcmrry_c	472544.82	6183886.77	661.39	406.60	437.11	421.86	408.10	209.2	448.7	D	0	0
100/10-33-078-11W4M/00	Kmcmry_ch	459684.19	6184371.12	699.70	464.00	469.00	466.50	465.00	225.8	459.0	C	0	0
100/10-32-078-12W4M/00	Kmcm_a2sq	448313.79	6184493.81	679.61	427.00	430.99	428.99	428.49	191.8	442.4	A	0	0
100/10-32-078-12W4M/00	Kmcmrry_c	448313.79	6184493.81	679.61	435.01	439.00	437.01	436.51	181.1	423.7	B	0	0
100/06-28-078-13W4M/00	Kmcmurray	439569.42	6182412.78	671.20	446.99	451.99	449.49	449.00	197.4	419.1	B	0	0
100/06-34-078-13W4M/00	Kmcmurray	441308.07	6184034.10	668.00	448.00	453.00	450.50	450.01	185.8	403.3	B	0	0
100/07-14-078-13W4M/00	Kmcmurray	443436.19	6179318.66	685.50	453.21	465.71	459.46	455.71	200.8	426.9	B	0	0
100/11-25-078-13W4M/00	Kmcmurray	444677.07	6182719.85	672.39	440.71	444.40	442.56	442.60	193.1	422.9	B	0	0
100/10-11-078-14W4M/00	Kmcmurray	433631.64	6178289.55	685.89	462.99	482.99	472.99	465.00	214.8	427.7	B	0	0
100/06-10-078-15W4M/00	Kmcmurray	421565.19	6177831.33	635.51	430.01	434.01	432.01	430.99	194.2	397.7	A	0	0
100/06-12-078-15W4M/00	Kmcmurray	424912.68	6177775.62	624.20	421.51	427.51	424.51	422.52	184.2	383.9	B	0	0
100/06-12-078-15W4M/00	Kmcmurray	424912.68	6177775.62	624.20	412.00	418.00	415.00	413.01	193.8	403.0	B	0	0
100/06-21-078-15W4M/00	Kmcmurray	420293.71	6181337.69	639.29	428.00	433.00	430.50	430.01	185.8	394.6	A	0	0
100/07-03-078-15W4M/00	Kmcmurray	421986.08	6176366.59	584.30	383.01	389.99	386.50	377.50	206.1	403.9	A	0	6
100/07-20-078-15W4M/00	Kmcmurray	418830.99	6181304.64	643.31	434.01	453.00	443.50	436.90	157.6	357.4	A	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/10-24-078-15W4M/00	Kmcmurray	425431.42	6181401.24	660.81	433.00	441.99	437.50	434.49	205.8	429.2	B	0	0
100/10-33-078-15W4M/00	Kmcmurray	420490.51	6184614.75	655.11	446.02	454.00	450.01	448.00	182.1	387.2	A	0	0
100/12-16-078-15W4M/00	Kmcmurray	419680.03	6180082.14	634.41	427.51	431.99	429.75	429.80	96.4	301.0	A	0	0
100/12-28-078-15W4M/00	Kmcmurray	419954.28	6183111.73	660.50	454.00	459.00	456.50	456.01	179.3	383.3	A	0	0
100/05-19-079-02W4M/00	Kmcmurray	543087.65	6190447.09	524.59	257.01	263.01	260.01	258.99	147.3	411.9	A	0	0
100/07-35-079-04W4M/00	Kmcmurray	530744.12	6193401.58	479.12	214.92	230.09	222.50	216.99	177.8	434.4	A	0	0
100/10-33-079-04W4M/00	Kmcmurray	527442.77	6193757.81	474.00	215.19	226.80	221.00	217.60	172.5	425.5	A	0	0
100/06-26-079-05W4M/00	Kmcmurray	520550.63	6191917.68	485.40	230.00	235.00	232.50	232.20	162.1	415.0	C	0	0
100/07-14-079-05W4M/00	Kmcmurray	521041.97	6188666.80	494.81	237.01	247.01	242.01	238.99	167.8	420.6	B	0	0
100/10-16-079-06W4M/00	Kmcm_a2sq	507754.83	6188952.11	491.40	230.00	238.99	234.50	217.99	185.9	442.8	A	0	12
100/06-34-079-06W4M/00	Kmcmry_ch	508889.27	6193289.29	506.30	259.11	265.21	262.16	264.29	187.8	432.0	A	0	0
100/06-34-079-06W4M/00	Kmcmry_ch	508889.27	6193289.29	506.30	234.70	251.19	242.94	239.60	186.0	449.4	A	0	0
100/11-08-079-06W4M/00	Kmcmry_ch	505617.62	6187145.82	510.51	243.99	256.00	250.00	245.70	165.0	425.5	A	0	0
100/11-22-079-06W4M/00	Kmcmurray	508897.77	6190673.83	479.12	221.29	228.60	224.94	226.80	181.0	435.2	A	0	0
100/11-13-079-07W4M/00	Kmcm_a_ch	502508.25	6189107.28	536.11	269.99	274.02	272.00	267.40	167.8	431.9	A	0	3
100/11-33-079-07W4M/00	Kmcm_a_ch	497418.13	6193749.49	593.51	319.00	322.51	320.76	319.00	180.6	453.4	A	0	0
100/10-11-079-07W4M/00	Kmcm_a2sq	501133.16	6187200.20	553.70	284.01	293.01	288.51	291.21	166.1	431.3	A	0	0
100/10-25-079-07W4M/00	Kmcm_a2sq	502868.16	6192113.61	569.31	289.99	305.01	297.50	292.00	170.0	441.8	A	0	0
100/11-08-079-07W4M/00	Kmcm_b1sq	495996.90	6187441.19	572.11	298.49	307.00	302.74	302.09	175.9	445.3	B	0	0
100/10-31-079-08W4M/00	Kmcm_b1sq	484941.23	6193846.15	673.91	400.51	410.90	405.71	407.49	197.8	466.0	B	0	0
100/10-31-079-08W4M/00	Kmcmrry_c	484941.23	6193846.15	673.91	397.80	419.10	408.45	405.42	197.2	462.7	A	0	0
100/08-13-079-09W4M/00	Kmcm_a2sq	483788.44	6188471.31	630.11	360.00	363.51	361.75	383.29	166.4	434.8	C	-20	0
100/08-13-079-09W4M/00	Kmcm_c_ch	483788.44	6188471.31	630.11	381.00	384.51	382.75	383.29	205.1	452.5	C	0	0
100/07-26-079-10W4M/00	Kmcm_a1sq	471994.75	6191798.09	682.82	422.09	426.69	424.39	423.70	208.5	466.9	C	0	0
100/12-36-079-11W4M/00	Kmcmry_ch	462700.47	6193807.05	686.02	424.01	440.01	432.01	425.99	214.4	468.4	B	0	0
100/07-22-079-12W4M/00	Kmcm_a2sq	450446.92	6190290.26	692.29	435.01	439.00	437.01	436.81	190.8	446.1	B	0	0
100/11-18-079-12W4M/00	Kmcm_a2sq	445088.00	6189465.49	711.31	464.00	470.00	467.00	465.49	189.3	433.6	C	0	0
100/07-28-079-12W4M/00	Kmcm_c_ch	449152.58	6191972.64	687.81	462.99	466.89	464.94	465.00	183.3	406.2	B	0	0
100/11-18-079-12W4M/00	Kmcm_c_ch	445088.00	6189465.49	711.31	488.99	495.00	491.99	490.52	184.4	403.7	B	0	0
100/11-18-079-12W4M/00	Kmcmrry_c	445088.00	6189465.49	711.31	477.01	482.99	480.00	478.51	189.1	420.5	A	0	0
100/06-31-079-12W4M/00	Kmcmry_ch	445484.05	6193913.98	685.31	431.99	450.01	441.00	434.01	195.8	440.1	B	0	0
100/11-32-079-12W4M/00	Kmcmry_ch	446762.49	6194051.67	687.91	461.01	469.00	465.00	464.00	188.3	411.2	A	0	0
100/02-29-079-13W4M/00	Kmcmurray	437531.41	6191761.79	699.00	482.99	485.00	483.99	476.01	189.1	404.1	A	0	7
100/02-29-079-13W4M/00	Kmcmurray	437531.41	6191761.79	699.00	472.01	476.01	474.01	474.00	185.4	410.4	A	0	0
100/05-31-079-13W4M/00	Kmcmurray	435118.67	6193733.03	697.29	481.01	487.99	484.50	486.01	191.3	404.1	A	0	0
100/16-18-079-13W4M/00	Kmcmurray	436475.39	6189746.79	685.01	456.99	461.99	459.49	451.59	189.2	414.7	A	0	5
100/14-07-079-14W4M/00	Kmcmurray	425688.86	6188553.53	687.69	456.01	477.01	466.51	457.99	227.4	448.6	B	0	0
100/14-30-079-14W4M/00	Kmcmurray	425740.12	6193113.44	659.31	425.50	429.01	427.25	427.70	185.9	417.9	C	0	0
100/03-31-079-15W4M/00	Kmcmurray	416058.86	6193785.74	591.10	371.00	377.01	374.01	373.69	55.1	272.2	E	0	0
100/07-23-079-15W4M/00	Kmcmurray	422811.32	6190646.56	646.12	422.00	441.99	431.99	425.01	182.9	397.0	A	0	0
100/09-03-079-15W4M/00	Kmcmurray	421628.47	6186276.13	659.80	445.01	450.01	447.51	447.30	152.4	364.7	C	0	0
100/09-24-079-15W4M/00	Kmcmurray	424899.72	6191345.69	663.89	436.99	461.01	449.00	439.00	186.7	401.6	A	0	0
100/10-20-079-15W4M/00	Kmcmurray	417815.03	6191365.21	611.89	388.01	408.01	398.01	390.30	179.5	393.4	C	0	0
100/11-35-079-15W4M/00	Kmcmurray	422347.30	6194378.59	634.50	418.00	427.00	422.50	420.02	257.8	469.8	F	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/15-10-079-15W4M/00	Kmcmurray	421169.96	6188258.18	641.30	430.99	448.79	439.89	432.12	198.0	399.4	A	0	0
100/10-01-079-16W4M/00	Kmcmurray	414598.34	6186633.68	606.61	396.79	401.70	399.24	398.71	177.9	385.3	A	0	0
100/05-33-079-17W4M/00	Kmcmurray	399206.76	6194674.25	557.82	358.11	388.01	373.06	367.01	174.3	359.1	B	0	0
100/10-27-080-06W4M/00	Kmcmry_ch	509346.67	6201892.46	512.10	247.50	262.71	255.10	249.91	166.7	423.7	A	0	0
100/11-34-080-06W4M/00	Kmcmry_ch	509123.48	6203523.62	513.50	237.01	257.01	247.01	238.99	169.3	435.8	G	0	0
100/10-11-080-07W4M/00	Kmcmry_ch	501271.23	6196942.02	583.21	315.01	329.00	322.01	316.69	168.4	429.6	A	0	0
100/11-25-080-07W4M/00	Kmcmry_ch	502335.52	6201706.00	537.52	268.01	279.99	274.00	270.91	89.5	353.1	A	0	0
100/09-01-080-08W4M/00	Kmcmurray	493653.75	6195612.04	622.10	388.59	397.80	393.19	388.59	222.5	451.4	B	0	0
100/09-01-080-08W4M/00	Kmcmurray	493653.75	6195612.04	622.10	371.89	390.11	381.00	371.89	229.8	470.9	C	0	0
100/09-01-080-08W4M/00	Kmcmurray	493653.75	6195612.04	622.10	345.61	353.60	349.61	345.61	204.9	477.4	B	0	0
100/09-01-080-08W4M/00	Kmcmurray	493653.75	6195612.04	622.10	353.60	371.89	362.74	353.60	221.3	480.7	B	0	0
100/06-08-080-09W4M/00	Kmcm_a2sq	476282.51	6196597.30	704.09	436.81	441.41	439.11	439.49	194.7	459.6	B	0	0
100/10-11-080-09W4M/00	Kmcm_b1sq	481524.25	6197179.42	715.22	440.01	448.00	444.00	444.70	200.8	472.0	B	0	0
100/06-08-080-09W4M/00	Kmcmrry_c	476282.51	6196597.30	704.09	441.99	454.21	448.10	445.01	206.3	462.3	B	0	0
100/15-03-080-10W4M/00	Kmcm_b1sq	470211.25	6195878.02	697.69	430.99	443.00	436.99	433.00	203.5	464.2	A	0	0
100/15-10-080-10W4M/00	Kmcmry_ch	470187.05	6197446.42	699.21	448.00	453.00	450.50	451.81	204.5	453.2	A	0	0
100/15-10-080-10W4M/00	Kmcmry_ch	470187.05	6197446.42	699.21	451.99	460.01	456.00	457.51	212.9	456.1	A	0	0
100/08-18-080-11W4M/00	Kmcmry_ch	456138.86	6198430.98	692.60	427.00	436.99	431.99	429.01	204.4	465.0	A	0	0
100/05-14-080-12W4M/00	Kmcmry_ch	451608.50	6198478.23	689.70	441.99	451.99	446.99	441.99	207.6	450.3	C	0	0
100/08-02-080-13W4M/00	Kmcmurray	442949.99	6195579.57	692.69	444.00	451.01	447.51	448.39	207.2	452.4	B	0	0
100/01-27-080-14W4M/00	Kmcmurray	431584.59	6201758.90	667.09	440.50	448.00	444.25	445.50	181.4	404.3	A	0	0
100/07-14-080-14W4M/00	Kmcmurray	432782.24	6198942.68	690.59	467.99	475.00	471.50	472.50	186.4	405.5	A	0	0
100/07-15-080-14W4M/00	Kmcmurray	431249.71	6198963.46	678.61	451.99	472.99	462.49	459.49	212.5	428.6	A	0	0
100/07-17-080-14W4M/00	Kmcmurray	427755.63	6199023.81	650.51	425.01	435.01	430.01	427.70	176.8	397.3	A	0	0
100/10-13-080-14W4M/00	Kmcmurray	434458.60	6199052.73	697.99	476.50	482.59	479.54	479.51	157.1	375.6	A	0	0
100/10-13-080-14W4M/00	Kmcmurray	434458.60	6199052.73	697.99	464.00	470.09	467.05	467.02	162.0	393.0	A	0	0
100/14-09-080-14W4M/00	Kmcmurray	429255.60	6198081.72	665.41	435.99	446.11	441.05	439.00	185.8	410.2	C	0	0
100/14-09-080-14W4M/00	Kmcmurray	429255.60	6198081.72	665.41	425.01	435.10	430.06	428.00	185.1	420.4	A	0	0
100/04-35-080-15W4M/00	Kmcmurray	422418.89	6203304.35	583.39	337.99	347.99	342.99	340.31	206.9	447.3	C	0	0
100/08-21-080-15W4M/00	Kmcmurray	420202.72	6200510.42	576.99	345.00	378.01	361.51	347.02	181.8	397.3	A	0	0
100/09-25-080-15W4M/00	Kmcmurray	424937.01	6202458.28	610.39	381.00	386.00	383.50	383.90	94.0	320.9	B	0	0
100/11-33-080-15W4M/00	Kmcmurray	419376.89	6204191.73	574.21	346.01	356.89	351.45	347.81	189.4	412.2	C	0	0
100/11-36-080-15W4M/00	Kmcmurray	424229.50	6204162.76	584.21	337.99	347.02	342.50	340.62	168.7	410.4	A	0	0
100/11-29-081-08W4M/00	Kmcmry_ch	486101.62	6211731.37	712.01	423.70	437.39	430.55	410.29	192.2	473.7	B	0	13
100/16-15-081-08W4M/00	Kmcmry_ch	490141.33	6208676.16	734.60	455.01	467.99	461.50	456.01	184.9	458.0	A	0	0
100/02-14-081-09W4M/00	Kmcm_a2sq	481525.10	6207584.82	715.09	431.60	438.30	434.95	426.69	199.3	479.4	A	0	5
100/09-29-081-09W4M/00	Kmcm_a2sq	477287.02	6211532.92	709.00	416.39	431.60	423.99	411.60	206.7	491.7	C	0	5
100/13-09-081-09W4M/00	Kmcm_b1sq	477769.77	6207188.52	701.99	418.19	428.21	423.20	413.61	201.7	480.5	A	0	5
100/10-23-081-09W4M/00	Kmcmry_ch	481671.19	6209972.71	712.59	428.49	435.29	431.89	432.51	200.0	480.7	B	0	0
100/03-03-081-10W4M/00	Kmcm_a1sq	469867.28	6204455.09	698.21	420.02	423.00	421.51	425.59	205.4	482.1	B	-3	0
100/07-22-081-10W4M/00	Kmcmry_ch	470145.63	6209505.19	711.41	446.99	453.00	449.99	448.51	198.0	459.4	A	0	0
100/10-16-081-12W4M/00	Kmcmrry_c	449017.08	6208559.28	729.60	472.99	480.00	476.50	476.01	65.2	318.3	E	0	0
100/07-16-081-13W4M/00	Kmcmurray	439501.80	6208578.92	689.40	448.00	454.00	451.00	450.01	189.1	427.5	C	0	0
100/09-21-081-13W4M/00	Kmcmurray	439984.18	6210265.27	679.80	431.99	440.01	436.00	434.01	199.8	443.6	A	0	0

**Table B-7 McMurray Formation Regional Hydraulic Heads From Drill Stem Tests (continued)**

Unique Well Identifier	Formation	UTM Co-ordinates (Zone 12; NAD 27)		KB Elevation [masl]	Perforated Interval [mbKB]		Mid-Point Perforated Interval [mbKB]	Recorder Depth [mbKB]	Pressure Head [m]	Freshwater Hydraulic Head [masl]	Hydro-Fax QC	QC Recorder Elevation	
		Easting	Northing		Top	Bottom						Below Perfs [m]	Above Perfs [m]
100/06-15-081-15W4M/00	Kmcmurray	420910.40	6208772.24	570.19	316.99	325.01	321.00	319.00	160.0	409.2	A	0	0
100/10-06-082-08W4M/00	Kmcmry_ch	485066.53	6214988.16	716.59	432.79	445.01	438.90	443.21	198.6	476.3	A	0	0
100/07-17-082-10W4M/00	Kmcm_a2sq	467113.36	6217927.45	705.49	420.50	422.52	421.51	425.11	214.3	498.3	A	-3	0
100/03-30-082-10W4M/00	Kmcmry_ch	465100.63	6220534.55	708.39	420.02	446.02	433.02	424.40	230.2	505.6	A	0	0
100/06-12-082-12W4M/00	Kmcm_c_ch	453600.61	6216489.44	760.42	517.00	523.01	520.01	508.01	237.0	477.5	C	0	9
100/03-18-082-12W4M/00	Kmcmry_ch	445723.27	6217519.03	680.80	409.99	424.01	417.00	412.91	183.9	447.7	A	0	0
100/07-08-082-12W4M/00	Kmcmry_ch	447518.11	6216449.26	738.41	465.89	483.99	474.94	468.91	207.5	470.9	A	0	0
100/06-06-082-13W4M/00	Kmcmurray	435737.89	6214875.02	601.10	332.51	350.49	341.50	333.09	186.7	446.2	B	0	0
100/06-10-082-13W4M/00	Kmcmurray	440636.12	6216359.65	634.02	371.89	378.01	374.95	366.10	206.7	465.8	C	0	6
100/10-03-082-13W4M/00	Kmcmurray	441166.53	6215191.33	669.80	414.01	420.99	417.50	415.99	214.3	466.6	A	0	0
100/06-09-083-03W4M/00	Kmcmurray	536066.59	6225725.56	480.40	226.80	233.51	230.16	228.60	152.9	403.1	G	0	0
100/06-09-083-03W4M/00	Kmcmurray	536066.59	6225725.56	480.40	201.20	213.39	207.30	203.00	140.4	413.5	A	0	0
100/06-09-083-03W4M/00	Kmcmurray	536066.59	6225725.56	480.40	198.09	204.80	201.44	199.89	142.3	421.3	A	0	0
100/08-21-083-05W4M/00	Kmcmry_ch	517326.31	6229040.21	499.90	247.50	251.49	249.49	248.99	105.9	356.3	A	0	0
100/02-32-083-06W4M/00	Kmcmurray	505367.60	6231697.56	567.60	276.79	294.80	285.80	279.81	105.1	386.9	A	0	0
100/10-31-083-06W4M/00	Kmcmurray	503732.11	6232457.13	549.19	268.19	280.39	274.29	269.69	107.3	382.2	A	0	0
100/07-24-083-07W4M/00	Kmcmurray	502357.93	6229024.68	598.90	310.01	318.00	314.01	316.41	135.4	420.3	A	0	0
100/10-22-083-08W4M/00	Kmcmry_ch	489222.28	6229595.24	735.21	449.61	469.39	459.50	459.30	158.5	434.2	A	0	0
100/14-16-083-10W4M/00	Kmcm_a2sq	467400.10	6228379.15	735.00	446.50	450.50	448.50	448.00	276.1	562.6	D	0	0
100/11-20-083-14W4M/00	Kmcmurray	426755.54	6230030.90	554.10	270.39	281.00	275.69	273.41	143.8	422.2	A	0	0
100/10-15-083-15W4M/00	Kmcmurray	420608.61	6228548.60	548.40	270.69	275.51	273.10	272.49	115.5	390.7	F	0	0
100/10-32-083-15W4M/00	Kmcmurray	417582.59	6233557.91	547.39	266.40	270.39	268.39	268.80	124.1	403.1	C	0	0
100/10-32-083-15W4M/00	Kmcmurray	417582.59	6233557.91	547.39	261.79	265.79	263.79	264.29	126.8	410.5	A	0	0
100/07-17-083-17W4M/00	Kmcmurray	397717.89	6228539.20	547.09	278.89	306.29	292.59	284.10	133.5	387.9	B	0	0
100/11-34-083-17W4M/00	Kmcmurray	400599.54	6233916.11	532.49	265.79	292.61	279.20	269.41	139.1	392.4	C	0	0
100/10-32-084-04W4M/00	Kmcmurray	525082.77	6242307.43	463.21	152.00	174.01	163.01	154.50	124.4	424.6	A	0	0
100/06-32-084-06W4M/00	Kmcm_a1sq	505135.63	6242070.80	480.61	195.99	204.00	200.00	196.99	79.3	359.9	B	0	0
100/06-32-084-06W4M/00	Kmcmry_ch	505135.63	6242070.80	480.61	204.00	211.99	208.00	205.01	79.7	352.3	A	0	0
100/10-29-084-06W4M/00	Kmcmry_ch	505580.17	6240752.40	494.91	198.00	217.99	208.00	199.00	92.5	379.4	A	0	0
100/10-29-084-06W4M/00	Kmcmry_ch	505580.17	6240752.40	494.91	200.01	220.01	210.01	200.99	95.8	380.6	A	0	0
100/10-34-084-06W4M/00	Kmcmry_ch	508624.04	6242520.55	510.21	212.99	230.00	221.50	215.19	86.8	375.5	A	0	0
100/04-30-084-14W4M/00	Kmcmurray	425058.46	6240746.71	544.71	247.01	253.02	250.01	250.61	127.5	422.2	A	0	0
100/15-31-084-14W4M/00	Kmcmurray	425901.28	6243265.81	533.71	234.00	242.01	238.00	239.70	135.2	430.9	C	0	0
100/10-01-084-16W4M/00	Kmcmurray	414306.78	6235234.53	531.91	253.59	260.00	256.79	255.39	129.6	404.7	D	0	0
100/09-09-085-05W4M/00	Kmcmurray	517234.96	6245627.66	478.60	187.51	190.99	189.25	190.01	67.3	356.7	A	0	0
100/10-02-085-06W4M/00	Kmcmry_ch	510485.86	6243835.90	481.19	184.01	200.99	192.50	185.81	89.1	377.8	A	0	0
100/10-06-085-06W4M/00	Kmcmry_ch	503852.45	6243997.25	485.91	195.99	208.00	201.99	198.00	81.4	365.4	A	0	0
100/11-05-085-06W4M/00	Kmcmry_ch	504976.89	6244010.66	480.70	206.99	216.99	211.99	208.51	84.7	353.4	A	0	0
100/12-23-085-06W4M/00	Kmcmry_ch	509718.06	6248702.60	460.19	174.01	177.49	175.75	176.51	73.8	358.2	A	0	0
100/01-03-085-15W4M/00	Kmcmurray	421120.04	6244096.55	531.91	237.01	241.01	239.01	238.90	127.9	420.8	B	0	0
100/07-20-086-06W4M/00	Kmcm_a1sq	505436.57	6258177.18	453.51	143.01	147.01	145.01	144.99	29.5	338.0	A	0	0
100/07-20-086-06W4M/00	Kmcmry_ch	505436.57	6258177.18	453.51	159.50	184.01	171.76	161.51	122.7	404.5	D	0	0
100/05-02-086-07W4M/00	Kmcm_a1sq	499724.28	6253355.22	481.80	170.99	177.00	174.00	164.01	55.4	363.2	B	0	7
100/06-08-086-16W4M/00	Kmcmurray	407525.93	6255744.05	501.70	203.61	221.29	212.45	209.70	82.9	372.2	D	0	0
100/11-11-090-12W4M/00	Kmcmurray	450996.44	6294349.38	529.99	206.01	225.00	215.51	201.20	45.2	359.7	D	0	5

- Data point eliminated due to depth of pressure recorder.
- Data point eliminated due to Hydro-Fax QC.
- Anomalous pressure data point eliminated.

## **2 REGIONAL MEASURED WATER WELL DATA**

Regional water well data was obtained by reviewing the following data sources:

- Alberta Research Council (ARC) reports;
- Alberta Geological Survey (AGS) reports;
- Alberta Environment’s Groundwater Information Centre water well database; and
- published Environmental Impact Assessments (EIAs) and hydrogeological assessments for projects in the study area.

The specific data source for each of the water level measurements is included in the presented tables. These data were considered “hard” and therefore no data points were eliminated.

### 3 INDUSTRY PRESSURE DATA USE FOR HYDROGEOLOGIC INVESTIGATIONS

Pressure measurements obtained by the oil and gas industry are a valuable data source for hydrogeologic investigations due to the regional distribution and large number of available pressures. For the purposes of this investigation, equivalent hydraulic heads ( $h_{equiv}$ ) were obtained from the drill stem tests according to the following equation:

Equation B-1

$$h_{equiv} = h_z + h_p$$

Where:  $h_z$  = elevation of Kelly bushing (KB) less depth of pressure recorder [masl]

$h_p$  = recorded extrapolated pressure [m of freshwater head]

It is common practice for industry to conduct more than one test on the same production zone. When this occurs multiple extrapolated pressures for the same zone are available. The duplicate pressures are referred to as first extrapolated pressure, second extrapolated pressure, and so on. For the purposes of this investigation the first extrapolated pressure was used to calculate the equivalent hydraulic head values. If the first extrapolated pressure was unavailable but a second extrapolated pressure was obtained the second extrapolated pressure was used to determine the equivalent hydraulic heads.

Errors in the extrapolated hydraulic head data set can arise for several reasons including:

- assigned hydrostratigraphic unit;
- elevation of pressure recorder; and
- inaccurate fluid pressures.

These sources of error are discussed in the following sections.

### **3.1 ASSIGNED HYDROSTRATIGRAPHIC UNIT**

Included in the DST data held by the Energy Resources Conservation Board (ERCB) is the reported formation that the test was completed in. To facilitate interpretations of hydraulic head, the pressure data was separated into three groups according to regional hydrostratigraphy and the reported formation on the test. The three hydrostratigraphic units were: Grand Rapids, Clearwater and McMurray. With respect to characterizing horizontal groundwater flow, two sources of error are commonly associated with this data.

The first source of error occurs when the perforated and tested interval does not correlate to the reported formation and therefore the assigned hydrostratigraphic formation. Due to the large number of DSTs included in this investigation, the validity of the reported formation was not confirmed. If an anomalous pressure is assigned to a given hydrostratigraphic unit because the wrong formation was reported this pressure may still get removed from the data set as per the process described in Section 3.3.

A second source of data uncertainty occurs when a vertical gradient is present in the formation. This can complicate the interpretations of horizontal flow because pressure measurements from different depths cannot easily be compared. For instance in Township 78 Range 10 the Grand Rapids Formation can be divided into two hydrostratigraphic units (Upper and Lower) separated by shale. Since the hydraulic head values in these units decrease with depth, posting pressures from the Upper Grand Rapids and Lower Grand Rapids on the same map of horizontal groundwater flow is a source of data uncertainty with respect to mapping horizontal groundwater flow.

### **3.2 ELEVATION OF PRESSURE RECORDER**

Implicit in the above described method of converting pressures to hydraulic heads is the assumption that the well bore is filled with freshwater. If the fluid in the well bore is of a different density (gas or drilling mud) then the accuracy of the calculated equivalent hydraulic head is dependant on the depth of the pressure recorder. For instance if the well bore is filled with drilling mud (greater density than water) and the recorder is placed above the perforated interval, then the equivalent hydraulic head of the formation would be underestimated by Equation B-1.

Fortunately, the recorder is most commonly placed within the perforated interval and this source of error is not an issue. Occasionally the recorder is placed above



or below the perforated interval and therefore introduces a potential source of error.

The DST data set was therefore screened to confirm whether the pressure recorder was located within the perforated interval. For well tests where the pressure recorder was located above or below the perforated interval the magnitude of the separation was recorded in the tables in the column labelled “QC Recorder Elevation” (Tables B-5 through B-7). For the purposes of this investigation, if the pressure recorder was installed more than 10 m above or below the perforated interval those data pressures were discounted.

### **3.3 INACCURATE FLUID PRESSURES**

Fluid pressures measured by DSTs may not reflect true undisturbed formation pressures for a variety of reasons including:

- mechanical error/failure during the test;
- inaccurate or incomplete recording of test data;
- formation pressure modification during drilling (eg., supercharge);
- improper extrapolation of the pressure test data; and
- Pressure Induced Drawdown (PID).

To reduce these sources of error in the data set, the pressures were screened for a QC code and anomalous pressure data was eliminated. A set of DST pressure quality codes has been developed for use in the Western Canadian Sedimentary Basin by the Canadian Institute of Formation Evaluation Ltd. (CIFE 1980). These codes are summarized in Table B-8 and were developed based on a review of the reported mechanical operations during the test and the pressure build-up curve. For the purposes of this study, only DSTs of A, B, C and D quality were used. When interpreting the results a higher weighting was given to test measurements of A and B quality.

The next stage of data culling was “bust elimination”. Initial contour maps of hydraulic head were scrutinized for anomalous high and low pressures. If there was no hydrogeological reason for the closures, the anomalous data point in the centre of the closure was not used as a control point for the hydraulic head mapping.

### **3.4 SUMMARY OF DRILL STEM TEST DATA**

The initial pressure data set consisted of 1,221 DST pressures from across the region. Approximately 8% of the initial DST pressure data points were eliminated, leaving 1,128 DST pressure values. Table B-9 summarizes the number of data points in the initial data set and screened data set for the Grand Rapids, Clearwater and McMurray units.

**Table B-8 Pressure/Recovery Chart Quality Codes**

Quality Code	Quality Rating	Test Characteristics
A	high quality	Test mechanically sound, both shut-in pressures have stabilized.
B	requires extrapolation	Slight mechanical difficulties, shut-in pressures not fully stabilized but pressures have been extrapolated and should be accurate.
C	requires extrapolation, use with caution	Some mechanical difficulties apparent, shut-in pressures not fully stabilized, but pressures have been extrapolated thus are questionable.
D	test results questionable	Test not mechanically sound, and pressures have not stabilized enough to obtain reasonable extrapolation. Results questionable.
E	low permeability, low pressure, low quality	Low permeability, low pressure, but problems encountered throughout test and/or unable to extrapolate. Pressure should NOT be used.
F	low permeability, high pressure, low quality	Low permeability, high pressure but problems encountered throughout test and/or unable to extrapolate. Pressure should NOT be used.
G	misrun, low quality	Severe mechanical difficulties: packer failure, tool failure, plugged tool. Pressures invalid if present.

**Table B-9 Summary Of Drill Stem Test Quality Control**

Unit	Total Pressure Measurements	Hydro-Fax QC	Recorder Depth	Anomalous Pressure Measurement	Total Eliminated	Percent Eliminated
Grand Rapids	542	5	23	9	37	7%
Clearwater	119	1	1	1	3	3%
McMurray	560	24	10	19	53	9%
<b>Total</b>	<b>1,221</b>	<b>30</b>	<b>34</b>	<b>29</b>	<b>93</b>	<b>8%</b>

## 4 INTERPRETATION OF HYDRAULIC HEADS

One hundred and seventy-eight hydraulic head measurements and 1,128 interpreted DST pressures were obtained for four hydrostratigraphic units as summarized in Table B-10. Hydraulic head values were then posted in plan view for the Empress, Grand Rapids, Clearwater and McMurray units. Hydraulic head contours were then hand drawn based on: hydraulic head values, known geology and physiographic conditions, and hydraulic gradients in the overlying and underlying aquifers.

**Table B-10 Summary Of Drill Stem Test and Hydraulic Head Data By Formation**

Hydrostratigraphic Unit	Number of DST Data	Number of Reported Hydraulic Head Measurements
Empress	0	17
Grand Rapids	505	93
Clearwater	116	21
McMurray	507	47
<b>Total</b>	<b>1,128</b>	<b>178</b>

## 5 REFERENCES

- Aqua Terre Solutions Inc. 2004a. "Groundwater Supply Investigation at Nexencan Newby WS GR 6-19-85-6 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. January 2004.
- Aqua Terre Solutions Inc. 2004b. "Monitoring Well Installations at Nexen WM GR Newby 7-36-85-7 W4M and Nexen WM QS Newby 7-36-85-7 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. January 2004.
- Aqua Terre Solutions Inc. 2004c. "Groundwater Supply Investigation at Nexencan Newby WS GR 15-25-85-7 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. October 2004.
- Aqua Terre Solutions Inc. 2004d. "Groundwater Supply Investigation at Nexencan Newby WS GR 1-27-85-6 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004e. "Groundwater Supply Investigation at Nexencan WS CLRW Newby 5-33-84-6." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004f. "Groundwater Supply Investigation at Nexencan Newby WS GR 7-23-85-6 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004g. "Groundwater Supply Investigation at Nexencan Newby WS GR 10-21-85-6 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004h. "Groundwater Supply Investigation at Nexencan Newby WS GR 8-1-86-7 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004i. "Groundwater Supply Investigation at Nexencan WS CLRW 14-35-84-7 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004j. "Groundwater Supply Investigation at Nexencan WS CLRW RESDELN 7-26-84-7." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.

- Aqua Terre Solutions Inc. 2004k. "Groundwater Supply Investigation at Nexencan WS CLRW RESDELN 16-25-84-7." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004l. "Groundwater Supply Investigation at Nexencan WS CLRW Newby 6-31-84-6." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004m. "Groundwater Supply Investigation at Nexencan Newby WS GR 1-34-85-6 W4M." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004n. "Groundwater Supply Investigation at Nexencan WS CLRW Newby 16-30-84-6." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004o. "Groundwater Supply Investigation at Nexencan WS CLRW Newby 3-30-84-6." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004p. "Groundwater Supply Investigation at Nexencan WS CLRW Newby 11-29-84-6." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004q. "Groundwater Supply Investigation at Nexencan WS CLRW Newby 11-28-84-6." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- Aqua Terre Solutions Inc. 2004r. "Groundwater Supply Investigation at Nexencan WS CLRW RESDELN 16-27-84-7." Prepared for Nexen Canada Ltd., Calgary, AB. November 2004.
- ARC (Alberta Research Council). 1976. Groundwater Observation Well Network: Athabaska Oil Sands Area. Information Serie 69. Research Council of Alberta.
- Barson, D. 1993. The Hydrogeological Characterization of Oilfields in North-Central Alberta for Exploration Purposes. Ph.D. Thesis (unpublished), University of Alberta. Edmonton, AB.

- Barson, D. Bachu, S. and P. Esslinger. 2001. Flow systems in the Mannville Group in the east-central Athabasca area and implications for steam-assisted gravity drainage (SAGD) operations for in-situ bitumen production. Bulletin of Canadian Petroleum Geology, vol 49, no. 3, p. 376-392.
- CIFE (Canadian Institute of Formation Evaluation). 1980. "A Breakthrough in the Reliability Accessibility And Application of Drill Stem Test And Pressure Data in Petroleum And Basinal Analysis." CIFE. Calgary, AB.
- Connacher. 2005. "Application for Approval of the Great Divide Project" August 2005.
- ConocoPhillips. 2005. Pressure data collected by ConocoPhillips and provided to Matrix Solutions Inc. November, 2005.
- Devon Canada Corporation, 2005. Pressure monitoring data collected from Devon Monitoring location at 7-32-075-06W4M and submitted to Matrix Solutions Inc. on October 24, 2005.
- Devon Corporation Canada. 2005. Pressure data from March 2004. Sent to Matrix Solutions Inc. October, 2005.
- Driscoll, F.G. 1986. "Groundwater and Wells, 2nd Edition." Johnson Filtration Systems Inc. St. Paul, MN.
- GIC. 2005. Alberta Environment, Alberta Groundwater Data on CD-ROM, Groundwater Information Center, April 2003; updates from Alberta Environment Groundwater Information Center, June 2005.
- Golder (Golder Associates Ltd.). 2000. "Long Lake Project Application for Approval to Alberta Energy and Utilities Board and to Alberta Environment." Prepared for OPTI Canada Inc., Calgary, AB. December 2000.
- Golder. 2002. "Groundwater Supply Investigation Test Water Well TWW 7-36, WSW 7-26 and WSW 5-16." Submitted to OPTI Canada Inc., Calgary, AB. January 2002.
- Golder. 2004. "Long Lake SAGD Pilot Project Annual Groundwater Monitoring Disposing Wells (EUB Approval No. 9151)." Prepared for Nexen Canada Ltd., Calgary, AB. April 2004.

- Golder. 2004. "Long Lake SAGD Pilot Project Annual Groundwater Monitoring Disposing Wells (EUB Approval No. 9151)." Prepared for Nexen Canada Ltd., Calgary, AB. April 2004.
- Golder. 2005a. "Long Lake Project 2005 Groundwater Supply Investigation Clearwater Formation Kinosis Region." Prepared for Nexen Canada Ltd., Calgary, AB. September 2005.
- Golder. 2005b. "Long Lake Project Groundwater Flow Model Update and Calibration." Prepared for Nexen Canada Ltd., Calgary, AB. November 2005.
- Golder. 2005c. "Long Lake Project Groundwater Flow Model Update and Calibration." Prepared for Nexen Canada Ltd., Calgary, AB. November 2005.
- Golder. 2005. "Long Lake Project Groundwater Flow Model Update and Calibration." Prepared for Nexen Canada Ltd., Calgary, AB. November 2005.
- Golder. 2006. "Nexen Long Lake Project: Winter 05-06 Source / Monitoring Well Drilling and Testing Summary" Prepared for Nexen Canada Ltd., Calgary, AB.
- Hackbarth, D.A. and N. Nastasa, 1979. "The Hydrogeology of the Athabasca Oil Sands Area, Alberta." Alberta Research Council, Bulletin 38, Edmonton, AB.
- Matrix (Matrix Solutions Inc.). 2003a. "Groundwater Supply Well Testing and Evaluation Surmont In-Situ Oil Sands Project, 02-26-083-06W4M". Prepared for ConocoPhillips Canada Resources Corp. Calgary, AB. October 2003.
- Matrix. 2003b. "Groundwater Supply Well Testing and Evaluation Surmont In-Situ Oil Sands Project, 02-21-083-07W4M". Prepared for ConocoPhillips Canada Resources Corp. Calgary, AB. October 2003.
- Matrix. 2003c. "Groundwater Supply Well Testing and Evaluation Surmont In-Situ Oil Sands Project, 02-18-083-06W4M, 04-18-083-06W4M, 01-19-083-06W4M". Prepared for ConocoPhillips Canada Resources Corp. Calgary, AB. August 2003.



Matrix. 2005. "Groundwater Supply Investigation Foster Creek In-Situ Oil Sands Project". Prepared for EnCana Corporation. Calgary, AB. August, 2005.

Nexen. 2006. "Long Lake - All Pressures to Data." Internal map.

North American Oil Sands Corporation (North American). 2006. "Application for Approval of Leismer Demonstration Project." Submitted to the Alberta Energy and Utilities Board and Alberta Environment. May 2006.

Stanley (Stanley Associates Engineering). 1982. Cheecham II Thermal Project, Water Source Well. Prepared for Suncor Inc.

Westwater Environmental. 2004. "Grand Rapids Formation Unit C Pumping Test Analysis Source Well 12C and Observation Well 12D2 Kirby, 12-15-75-6 W4M", Prepared for Devon Canada, September, 2004, Calgary AB.

Westwater Environmental. 2005. "Christina Lake Regional Project Hydrogeology Environmental Setting Report." Prepared for MEG Energy Corporation. Calgary, AB. February, 2005.