

**APPENDIX E**  
**WELL DEVELOPMENT RECORDS**

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT No.:** 002012  
**DATE OF WELL DEVELOPMENT:** October 12, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Grundfos Pump  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-16D  
**WELL TYPE (diameter/material):** 2-inch steel  
**MEASURING POINT ELEVATION:** Top of steel  
**STATIC WATER DEPTH:** 45.75 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 84.05 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 38.3 ft.  
**SCREENED INTERVAL:** 70-80 ft. bgs  
**WELL VOLUME:** 6.12 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

	UNITS	1	2	3	4	5	TOTAL/ AVERAGE	
<b>VOLUME PURGED (volume/total volume):</b>	gal.	Pumped Dry 5 Times						25
<b>FIELD pH:</b>						6.93		
<b>FIELD TEMPERATURE:</b>	°C					12.15		
<b>FIELD CONDUCTIVITY:</b>	mS					0.973		
<b>CLARITY/TURBIDITY VALUES:</b>	NTU					>2,000		
<b>COLOR:</b>						Cloudy		
<b>ODOR:</b>						--		
<b>COMMENTS:</b>								

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT NO.:** 002012  
**DATE OF WELL DEVELOPMENT:** October 12, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Grundfos Pump  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-16B  
**WELL TYPE (diameter/material)** 2-inch steel  
**MEASURING POINT ELEVATION:** Top of steel  
**STATIC WATER DEPTH:** 45.6 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 163.7 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 18.89 ft.  
**SCREENED INTERVAL:** 150-160 ft. bgs  
**WELL VOLUME:** 18.89 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>
<b>VOLUME PURGED (volume/total volume):</b>	gal.	180	200	220	240	
<b>FIELD pH:</b>		7.36	7.38	7.38	7.38	
<b>FIELD TEMPERATURE:</b>	° C	10.64	10.62	10.62	10.62	
<b>FIELD CONDUCTIVITY:</b>	mS	0.928	0.928	0.928	0.928	
<b>CLARITY/TURBIDITY VALUES:</b>	NTU	8.0	7.8	7.3	7.3	
<b>COLOR:</b>		Clear	Clear	Clear	Clear	
<b>ODOR:</b>		--	--	--	--	
<b>COMMENTS:</b>						

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT NO.:** 002012  
**DATE OF WELL DEVELOPMENT:** October 12, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Grundfos Pump  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-17A  
**WELL TYPE (diameter/material)** 2-inch steel  
**MEASURING POINT ELEVATION:** Top of steel  
**STATIC WATER DEPTH:** 21.9 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 107.5 ft **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 85.6 ft.  
**SCREENED INTERVAL:** 95-105 ft bgs  
**WELL VOLUME:** 13.69 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>
<b>VOLUME PURGED (volume/total volume):</b>	140	154	168	182	196	196
<b>FIELD pH:</b>	6.44	6.69	6.96	6.96	6.98	
<b>FIELD TEMPERATURE:</b>	°C 10.59	10.58	10.58	10.58	10.58	
<b>FIELD CONDUCTIVITY:</b>	mS 0.915	0.914	0.911	0.911	0.910	
<b>CLARITY/TURBIDITY VALUES:</b>	NTU 12	12	8.9	8.7	8.7	
<b>COLOR:</b>	Clear	Clear	Clear	Clear	Clear	
<b>ODOR:</b>	--	--	--	--	--	
<b>COMMENTS:</b>						

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT NO.:** 002012  
**DATE OF WELL DEVELOPMENT:** October 11, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Grundfos  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-17B  
**WELL TYPE (diameter/material)** 2-inch steel  
**MEASURING POINT ELEVATION:** Top of steel  
**STATIC WATER DEPTH:** 27.75 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 191.0 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 163.0 ft.  
**SCREENED INTERVAL:** 180-190 ft. bgs.  
**WELL VOLUME:** 26.0 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>
<b>VOLUME PURGED (volume/total volume):</b>	200	225	250			250
<b>FIELD pH:</b>	7.33	7.33	7.34			
<b>FIELD TEMPERATURE:</b>	°C 10.95	10.94	10.95			
<b>FIELD CONDUCTIVITY:</b>	mS 0.867	0.866	0.866			
<b>CLARITY/TURBIDITY VALUES:</b>	NTU 17	17	16			
<b>COLOR:</b>	Clear	Clear	Clear			
<b>ODOR:</b>	--	--	--			
<b>COMMENTS:</b>						

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT No.:** 002012  
**DATE OF WELL DEVELOPMENT:** October 11, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Large Submersible Pump  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-17L  
**WELL TYPE (diameter/material):** 4-inch steel  
**MEASURING POINT ELEVATION:** Top of casing  
**STATIC WATER DEPTH:** 31.8 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 290.0 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 258.0 ft.  
**SCREENED INTERVAL:** Open hole from 250-290 ft. bgs.  
**WELL VOLUME:** 165.0 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>
<b>VOLUME PURGED (volume/total volume):</b>	800	950	1,100			1,100
<b>FIELD pH:</b>	6.94	6.94	6.94			
<b>FIELD TEMPERATURE:</b>	° C 9.71	9.73	9.73			
<b>FIELD CONDUCTIVITY:</b>	mS 0.719	0.719	0.719			
<b>CLARITY/TURBIDITY VALUES:</b>	NTU 7.7	7.7	7.6			
<b>COLOR:</b>	Clear	Clear	Clear			
<b>ODOR:</b>	--	--	--			
<b>COMMENTS:</b>						

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT NO.:** 002012  
**DATE OF WELL DEVELOPMENT:** December 20, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Grundfos Pump/Airlift  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-19B  
**WELL TYPE (diameter/material)** 2-inch steel  
**MEASURING POINT ELEVATION:** Top of steel casing  
**STATIC WATER DEPTH:** 29.4 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 199.4 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 170.0 ft.  
**SCREENED INTERVAL:** 190-200 ft. bgs.  
**WELL VOLUME:** 27.2 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>	
<b>VOLUME PURGED (volume/total volume):</b>	gal.	150	180	210	240	270	270
<b>FIELD pH:</b>		7.40	7.45	7.49	7.50	7.51	
<b>FIELD TEMPERATURE:</b>	° C	9.0	9.5	9.8	9.8	9.7	
<b>FIELD CONDUCTIVITY:</b>	mS	387	382	379	376	376	
<b>CLARITY/TURBIDITY VALUES:</b>	NTU	18.4	12.0	16.7	11.2	20.1	
<b>COLOR:</b>		Clear	Clear	Clear	Clear	Clear	
<b>ODOR:</b>		--	--	--	--	--	
<b>COMMENTS:</b>							

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT NO.:** 002012  
**DATE OF WELL DEVELOPMENT:** December 21, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Airlift/Grundfos Pump  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** MW-19L  
**WELL TYPE (diameter/material):** 4-inch steel  
**MEASURING POINT ELEVATION:** Top of steel  
**STATIC WATER DEPTH:** 37.8 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 267.0 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 229.0 ft.  
**SCREENED INTERVAL:** Open hole 255-267 ft. bgs.  
**WELL VOLUME:** 149.0 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>
<b>VOLUME PURGED (volume/total volume):</b> gal.	945	1,080	1,215	1,350	1,485	1,485
<b>FIELD pH:</b>	7.30	7.59	7.63	7.64	7.64	
<b>FIELD TEMPERATURE:</b> ° C	9.4	9.3	9.3	9.3	9.3	
<b>FIELD CONDUCTIVITY:</b> mS	355	349	346	347	347	
<b>CLARITY/TURBIDITY VALUES:</b> NTU	29	24	24	21	21	
<b>COLOR:</b>	Clear	Clear	Clear	Clear	Clear	
<b>ODOR:</b>	--	--	--	--	--	
<b>COMMENTS:</b>						

**COPIES TO:** \_\_\_\_\_

## WELL DEVELOPMENT AND STABILIZATION FORM

**PROJECT NAME:** Highway 96 **PROJECT No.:** 002012  
**DATE OF WELL DEVELOPMENT:** October 17, 2005 - October 19, 2005  
**DEVELOPMENT CREW MEMBERS:** R. Aamot/Boart Longyear  
**PURGING METHOD:** Smeal Truck  
**SAMPLE NO.:** \_\_\_\_\_  
**SAMPLE TIME:** \_\_\_\_\_

**WELL INFORMATION**

**WELL NUMBER:** EW-2  
**WELL TYPE (diameter/material):** 6-inch steel  
**MEASURING POINT ELEVATION:** Top of casing  
**STATIC WATER DEPTH:** 41.5 ft. **ELEVATION:** \_\_\_\_\_  
**BOTTOM DEPTH:** 137.5 ft. **ELEVATION:** \_\_\_\_\_  
**WATER COLUMN LENGTH:** 96 ft.  
**SCREENED INTERVAL:** 120-130 ft. bgs.  
**WELL VOLUME:** 141 gal.

Note: For 2-inch diameter well: 1 foot = 0.14 gallons (imp) or 0.16 gallons (us)  
 1 meter = 2 liters

<i>UNITS</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL/ AVERAGE</i>
<b>VOLUME PURGED (volume/total volume):</b>	gal.	4,500	4,700	4,900		
<b>FIELD pH:</b>		7.38	7.39	7.40		
<b>FIELD TEMPERATURE:</b>	° C	9.92	9.93	9.92		
<b>FIELD CONDUCTIVITY:</b>	mS	824	822	822		
<b>CLARITY/TURBIDITY VALUES:</b>	NTU	2.82	2.20	2.76		
<b>COLOR:</b>		Clear	Clear	Clear		
<b>ODOR:</b>		--	--	--		
<b>COMMENTS:</b>						

**COPIES TO:** \* Well kept pumping dry - Aqua Clear was added to the well 3 times. Each time Aqua Clear was added, it was allowed 1/2 day to sit. After the third time, the well stopped pumping dry.