APPENDIX D:

Well Completion Report

Location SF ¼ SF ¼ Sec 22 Two 113N Rg 48M	/ www.a. Offer Tell Device O
Location <u>SE ¼ SE ¼ Sec 22</u> Twp <u>113N</u> Rg <u>48V</u>	
County Deuel North	Business Name: Address: 215 S. Cascade St.
Notin	Address: 215 S. Cascade St. City, State, Zip: Fergus Falls MN 56537
Please mark well	City, State, Zip: Fergus Falls IVIN 50037
	WELLLOC
x	WELL LOG: DEPTH
W	FORMATION FROM TO
	Top Soil 0 3
ţ 	Clay Brown 3 15 Clay Blue 15 51
Well Completion Date	
June 23, 2017	
Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?	
50 ft. from Cattle Grazing (identify source	
PROPOSED USE:	Gravel Coarse Med 64 67 Continued on next page.
Domestic/Stock Municipal	
METHOD OF DRILLING:	
Rotary	If flowing: closed in pressure PSI GPM flow through Inch pipe
	Controlled by Valve Reducers Other
CASING DATA: Steel ✓ Plastic Other	Reduced flow rate GPM
If other describe	Can well be completely shut in?
PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER SDR 17.0 LB/FT 5.00 IN 0.0 FT 580.0 FT 8.75 IN	Oan wen be completely shut in?
SDR 80.0 LB/FT 5.00 IN 580.0 FT 612.0 FT 8.75 IN	WELL TEST DATA:
LB/FT IN FT FT IN	Pumped Describe:
GROUTING DATA: Grout Type No. of Sacks Grout Weight From To	Bailed
Bentonite 57 Lb/gal 0.0 Ft 610.0 Ft	Other
Lb/gal Ft Ft	Pumping Level Below Land Surface
Describe grouting procedure tremie piped	
tionile piped	Ft. After Hrs. pumped GPM
SCREEN: Perforated pipe Manufactured	If pump installed, pump rate: GPM
Diameter 5.00 Inches Length 60.0 Feet	REMARKS GPS: N44 34 48.2
Material PVC	W96 33 42.6
Slot Size016 Set From0.0 Feet to60.0 Feet	
Other information	
· •	This well was drilled under license # 475 and this
WAS A PACKER OR SEAL USED? Yes ✓ No	This well was drilled under license # 475 and this report is true and accurate.
If so, what material? Describe packer(s) and location	Drilling firm: Thein Well Company
Describe packer(s) and location	Signature of License Representative:
DISINFECTION: Was well disinfected upon completion?	Wil wash.
Yes, How? Chlorinated	Butter
Lab to which waterNo, Why Not? quality sample sent for analysis	Signature of Well Owner or Equitable Property Holder:
deems aguine agus ior guaranas	Ilack Thouse
	9/11/1-
	Date: 9/11/17

Location ¼ ¼ Sec Twp Re	.g	Well Owner: Otter Tail Power Compa	iny	
		Business Name:		
County North		Address: 215 S. Cascade St.		
Please mark well location with an "X"		City, State, Zip: Fergus Falls	MN 5	6537
]	WELL LOG:	DE	EPTH
w	-E	FORMATION	FROM	то
		Clay Brown	67	82
ļ <u>i</u> i	-	Clay Blue	82	103
	1	Gravel	103	106
Well Completion Date		Sandy Blue Clay	106	177
1 Mile	_j	Clay Brown	177	186
•	•	Clay Brown w/ sand layers	186	192
Distance to nearest potential pollution source (septic tank, abandoned well, feed lo		Sand Med.	192	196
ft. from(identify : PROPOSED USE:	source)	Clay Brown	196	211
Domestic/Stock Municipal Business Test hol	les	Continued on next page		
Irrigation Industrial Institutional Monitori	ring well	STATIC WATER LEVEL		FEET
METHOD OF DRILLING:		If flowing: closed in pressure		PSI
		GPM flow through		Inch pipe
CACINO DATA		Controlled by Valve Reducers Other	г	
CASING DATA: Steel Plastic C	Other	Reduced flow rate		GPM
PIPEWEIGHT DIAMETER FROM TO HOLE DIAME	TED	Can well be completely shut in?		
LB/FT IN FT FT	IN		•	
LB/FT IN FT FT	— _{IN}	WELL TEST DATA:		
LB/FT IN FT FT	IN	Pumped Describe:		
GROUTING DATA: Grout Type No. of Sacks Grout Weight From To		Bailed		
Lb/gal Ft	Ft	Other	Philadelphia - openio	and the second second second
Lb/gal Ft	Ft	Pumping Level Below Land Surface		
Describe grouting procedure		Ft. After Hrs. pumped		3PM
		Ft. After Hrs. pumped		SPM
SCREEN: Perforated pipe Manufactured		If pump installed, pump rate:	G	SPM
Dispussors I wantulactured	eet	REMARKS		
Material				
Slot Size Set From Feet to Feet				
Other information				
•	-			
WAS A PACKER OR SEAL USED? Yes No		This well was drilled under license # 47 report is true and accurate.	5	and this
If so, what material?				
Describe packer(s) and location		Drilling firm: Thein Well Company		
DISINFECTION: Was well disinfected upon completion?		Signature of License Representative		
Yes, How?		pour of the		
Lab to which water No, Why Not?		Signature of Well Owner or Equitable Property Holder	r:	
quality sample sent for analysis		M1 /	-	
		Marke Showa		
		Date: 9/11/17		
The same of the sa				

		,								02	
Location	_ 1/4 1/4	Sec	c Twp	F	₹g	Well Owner:	Otter	Tail Power Com	npany		
						Business Name					
County			Nor	th		Address:		. Cascade St.			
	se mark well on with an "X"			1		City, State, Zip:	Fergu	s Falls	MN	56537	
		Γ		<u>-</u>		WELL LOG:				DEPTH	
		w	- 1	<u> </u>	_ E		FORMA	ATION	FRO		,
				! !		Clay Blue fev	w thin s	sand layers	21	1 25	51
		<u> </u>				Sand Med.			25	1 25	5
		İ		ļ		Clay Blue Sa	ındy		25	5 29	6
Well Completion	Date	L	<u> </u>	1	لــا	Sand			29	6 29	8
		M	 1 Mil	e ——	Ð	Clay Blue			29	8 30	9
		- •				Rocks & San	d		30	9 31	5
Distance to nearest po ft. fr		urce (se	eptic tank, abandor			Sandy Brown	Clay		31	5 33	6
PROPOSED US				(Identify	y source	Gravel			33	6 39	0
Domestic/Stoc		oal [Business	Test he	oles	Continued on	next p	oage.			-
Irrigation	Industri	al [Institutional	Monito	oring wel	STATIC WATER	LEVEL			FEET	H-1000 Contracts
METHOD OF DE	RILLING:					If flowing: closed	in pressu	ıre		PSI	
						GPM flow		through		Inch pipe	е
CASING DATA:						Controlled by	Valve	Reducers C	Other		
If other describe	Steel		Plastic	Ц	Other	Reduced flow rate	е			GPM	
	METER FRO	MC	то	HOLE DIAM	FTFR	Can well be comp	oletely sh	ut in?			
LB/FT	IN	FT	FT		IN						
LB/FT	IN	FT.	FT		IN	WELL TEST DA	ATA:	STATES AND CHILDREN WORLD P. SPECIFICATION CONTRACT		dest a despite broken splage spring 1 . Mr 2004 Section	
LB/FT	IN	FT	FT		IN	Pumped De	escribe:				
GROUTING DAT Grout Type No.	A: of Sacks Grou	t Weig	ht From	To	0	Bailed	***************************************				
		Lb/(-t	Ft	Other				Alternative and among the con-	
		Lb/o	galF	=t	Ft	Pumping Level Be					
Describe grouting p	rocedure						After			GPM	
							After	Hrs. pumped		GPM	
SCREEN:	Perforated	nine	I M:	anufactured		If pump installed,	pump rat	e:		_ GPM	
Diameter	Inche		Length		eet	REMARKS					
Material											
Slot Size	Set From _		Feet to	Fee	et	•					
Other information											
			*		-						
WAS A PACKER If so, what material?	OR SEAL US	ED?	Yes	No		This well was drille report is true and a		license #	475	and thi	is
Describe packer(s) a	nd location					Drilling firm: The		The first of the same and the same same same same same same same sam			
DIONIFFOR						Signature of Licens	e Repre	sentative:			
DISINFECTION:	Yes, Ho	w? _	upon completion	?		fst		Men			
Lab to which water	No, Why	Not?	dre vande dre't hat het he with References					Equitable Property Ho	older:		
quality sample sent for	or analysis					Marke		Thomas			
						· jack		Showe			_
						Date: 9	/11/	17	-		

Location 1/4 1/4	Sec Twp	D	O4 T-1D						
	Sec Twp _	Rg	Well Owner: Otter Tail Power Comp	pany					
County	Norti	h	Business Name: Address: 215 S. Cascade St.						
		·	Address: 215 S. Cascade St. City, State, Zip: Fergus Falls	MN 5653	27				
Please mark well location with an "X"			City, State, Zip. 1. Sigus 1. dilis	IVIN SOSE					
	-		WELL LOG:	DEPTH					
	w	-	FORMATION						
	VV	E	Clay Blue w/ sand & gravel layers	390	то 392				
			Clay & Sand Layers	392	416				
			Gravel Fine	416	418				
Well Completion Date	<u> </u>	<u> </u>	Clay	418	436				
	⋈ 1 Mile		Sand w/ clay layers	436	441				
	_ N	4	Clay Brown thin sand layers	441	451				
Distance to nearest potential pollution so	urce (septic tank, abandon		Sand a few brown clay layers	451	461				
ft. from		(identify source	Clay Brown soft	461	465				
PROPOSED USE: Domestic/Stock Municip	pal Business	Test holes	Continued on next page.						
Irrigation Industria		Monitoring we		FEE	ET				
METHOD OF DRILLING:			If flowing: closed in pressure	PSI	1				
•			GPM flow through		h pipe				
CACINO DATA			Controlled by Valve Reducers Oth	ner					
CASING DATA: Steel If other describe	Plastic	Other	Reduced flow rate	GPN	M				
PIPEWEIGHT DIAMETER FRO	OM TO	HOLE DIAMETER	Can well be completely shut in?						
LB/FT IN	FT FT	IN							
LB/FT IN	FT FT	IN	WELL TEST DATA:	The same are the particular and the same and the same and					
LB/FT IN	FT FT	IN	Pumped Describe:						
GROUTING DATA: Grout Type No. of Sacks Grout	t Weight From	То	Bailed						
	Lb/gal Ft		Other	Commence of the state of the st					
	Lb/gal Ft	Ft	Pumping Level Below Land Surface						
Describe grouting procedure			Ft. After Hrs. pumped	GPM					
			Ft. After Hrs. pumped	GPM					
SCREEN: Perforated	pipe Ma	nufactured	If pump installed, pump rate:	GPM					
Diameter Inche	• •	Feet	REMARKS						
Material									
Slot Size Set From	Feet to	Feet							
Other information									
	•	ļ							
WAS A PACKER OR SEAL USI	ED? Yes	No	This well was drilled under license #4 report is true and accurate.	175 ar	nd this				
If so, what material?									
Describe packer(s) and location			Drilling firm: Thein Well Company Signature of License Representative:						
DISINFECTION: Was well disinfe	ected upon completion?		Oignature of License Representative.						
Yes, Hov		ĺ	Wil will	· . · · . · · . · · · · · · · · · · · ·					
Lab to which water No, Why	Not?		Signature of Well Owner of Equitable Property Hold	ler:					
quality sample sent for analysis	; ;		Mark Thoma						
	:	· Distance							
	The Collection of the Collecti	5	Date: 9/11/17						

Location	1/4	1/4	Sec	Т	wp		Rg	Well Owner:	Otter	Tail Power Con	nnany	
				'			. `s	Business Name			inputity	
County				i	North			Address:		. Cascade St.	1, 1	
	lease mark v	اامیر	⁻ Г	T	T		7	City, State, Zip:	Fergu	s Falls	MN	56537
· · · · · · · · · · · · · · · · · · ·	cation with a		L.			; 						
			Γ'	!	7			WELL LOG:				DEPTH
		,	wL				E		FORMA	ATION	FROM	1 то
				1 1 1		! ! !		Sand			465	5 467
			-	· ·				Clay Brown			467	7 471
				į		i		Sand w/ thin	clay la	yers	47	1 473
Well Comple	tion Date			<u> </u>		1		Clay Blue			473	506
			kt-	1	Mile		-DI	Clay w/ some	e sand	layers	506	526
			•				•	Shale			526	556
Distance to neare	st potential pollu ft. from	ition sour	ce (se	ptic tank, aba	andone			Clay Dide	1500		556	561
PROPOSED						(luenti	fy source	Shale			561	572
Domestic/		/Junicipa	ai [Business	3	Test I	holes	Continued on	next p	oage		
Irrigation		ndustrial		Institutio	nal	Monit	toring wel	STATIC WATER	RLEVEL			FEET
METHOD OF	DRILLING:							If flowing: closed	in pressi	ıre		PSI
								GPM flow		through		Inch pipe
0.101110.5.11							_	Controlled by	Valve	Reducers	Other	
CASING DA	<u> </u>	Steel		Plas	tic	L_	Other	Reduced flow rat	e			GPM
PIPEWEIGHT	DIAMETER	FRO		ТО	1	HOLE DIA	METED	Can well be com	pletely sh	ut in?		
LB/FT	IN	11101	FT		FT '	IOLL DIA	IN					
LB/FT	IN		FT		FT		 IN	WELL TEST D	ATA:		and the second s	
LB/FT	IN		FT		FT		IN	Pumped De	escribe:			
GROUTING I		0 4				_	_	Bailed				
Grout Type	No. of Sacks	Grout	vveign Lb/g		m Ft		Γο Ft	Other				
			Lb/g		−¦'		— ' t	Pumping Level Be	elow Lan	d Surface		and the second of the second o
Describe grouti	ng procedure		- ~					Ft.	After	Hrs. pumped		GPM
								Ft	After	Hrs. pumped		GPM
					=			If pump installed,	pump rat	e:		GPM
SCREEN:	Perf	orated p		L	Man	ufactured		REMARKS	·			
Diameter		Inches	; L	Length _			Feet					
Material Slot Size	Cot E	·				T-						
	Set F	10111		Feet to	·	FE	eet					
Other information	n											
							or constitution	This well was drille	ed under	license #		and this
WAS A PACK		AL USE	:D?	Yes	L	No		report is true and a				
If so, what mate Describe packer								Drilling firm:	2			
Posoline hacker	(S) and localit	Z11						Signature of Licen	se Repre	sentative:		
DISINFECTIO		l disinfe		pon comple	etion?			Bot	MI.	Men	10	
Lab to which wa	一	o, Why I	_					Signature of Well C	Owner or	Equitable Property F	lolder:	
quality sample s							1	20				
								Flast	~	Trona		
								Date: 9	/11/	17		

										11-02
Location			Se	c Twp		Rg	Well Owner: O	tter Tail Power C	Company	•
							Business Name:			
County				No-	orth		Address: 2	t.		
	Please m						City, State, Zip: Fe	ergus Falls	MN	56573
	location v	vith an "X"	-	!						
	•						WELL LOG:			DEPTH
			w			—— E	F	ORMATION	FROM	1 то
				i	1		Shale		56	1 57
			+				Clay Blue Pebb	ly	572	2 61
			İ	į	į		Sand		615	61
Well Com	pletion Dat	e	L				Clay		617	61
			M	<u></u> 1 Mi	le	—	Sand		618	61
Dietanas to							Clay		619	62
Distance to ne	earest potentia ft. from	l pollution sou	ırce (se	eptic tank, abando		-	Joanu		621	623
PROPOSI						entify source	Clay		623	625
Domes	tic/Stock	Municip	al [Business	Пте	est holes	Continued on ne	ext page		
Irrigatio	L	Industria	ı [Institutional	M	onitoring we	STATIC WATER LE	VEL		FEET
METHOD	OF DRILL	ING:					If flowing: closed in p	ressure		PSI
							GPM flow	through		Inch pipe
CASING D) A T A .						Controlled by Va	lve Reducers	Other	,
If other desc		Steel		Plastic		Other	Reduced flow rate		<u> </u>	GPM
PIPEWEIGHT		ER FRO		ТО	HOLE	DIAMETER	Can well be complete	elv shut in?	· · · · · · · · · · · · · · · · · · ·	_
LB/F1		IN	··· FT		HOLL L	IN	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		
LB/F7	Г	IN	FT	FT		IN	WELL TEST DATA	\ :		
LB/FT		IN	FT	FT		IN	Pumped Descri	be:		THE PARTY OF THE P
GROUTING Grout Type		acks Grout	Weiat	nt From		То	Bailed			
71			Lb/g		Ft	Ft	Other			
			_ Lb/g		Ft —	Ft	Pumping Level Below	Land Surface	The second section of the second seco	The Management and State . The series of the
Describe gro	uting proced	lure	_	***************************************	-		Ft. Afte	r Hrs. pumpe	d	_GPM
							Ft. After	Hrs. pumpe	d	_GPM
SCREEN:		Domforeste el co	•	F7			If pump installed, pum	p rate:		GPM
Diameter	الــا	Perforated p	•	M: _ength	anufactur		REMARKS			
/laterial						_ Feet				
Slot Size	S	Set From		Feet to		Feet				
 Other informa										
				•						
VAS A PAC	KED OD 9	SEAL HOE	- D2	Yes			This well was drilled ur	ider license #	475	and this
so, what ma		DEAL USE	יט	res	∐ No		report is true and accur			
escribe pack		cation					Drilling firm: Thein V	Vell Company		
		·····	_				Signature of License R	epresentative;		
ISINFECTI	ON: Was			pon completion	?		Bole	James Jen		
	누	∐Yes, How	_	a to a conference of the transport						
ab to which w ality sample		_No, Why N	vot?				Signature of Well Owne		/ Holder:	
cample	SOIR IOI AIIC	nysis] :				Mark	Thona		
			***			-				
							Date: <u>9/11</u>	117		

	4.	4.7							~			·	
Location			Sec	·	Гwр 	F	₹g	Well Owner:	Otter	Tail Power (Company	у	
								Business Name					· · · · · · · · · · · · · · · · · · ·
County					North	I		Address:		. Cascade S	St.		
ı	Please ma	ark well				!		City, State, Zip:	Fergu	s Falls	M	IN 5	6573
I	ocation w	rith an "X"	L										
				. !		į į		WELL LOG:			_	DI	≣PTH
			wL			i	_ E		FORMA	ATION		FROM	то
				1 !		į	-	Clay				623	625
			L.		_	¦		Sandstone w	√ sand	lavers		625	646
				į		į		Sand med fir	The same of the sa			646	672
Well Compl	letion Dat	e	L	<u> </u>		l I		Clay	A CONTRACTOR OF THE CONTRACTOR			672	678
			•					Clay		· · · · · · · · · · · · · · · · · · ·		012	070
			M		1 Mile		- 14						
Distance to near	rest potentia	l pollution sou	urce (se	eptic tank, al	pandone	ed well, feed	lot, etc.)?						
	ft. from						y source)						
PROPOSEI													
Domestic Irrigation	,	Municip Industria	-	Busines		Test h							
METHOD O			21	Institution	onai	IVIONITO	oring wel	STATIC WATER	R LEVEL				FEET
METHOD C	, DIVILL	ing.						If flowing: closed	in press				PSI
								GPM flow		through			Inch pipe
CASING DA	ATA:	Steel		При	stic		045	Controlled by	Valve	Reducers	Other		
If other descri				<u> </u>	ISUC	٠ ـــا	Other	Reduced flow rat	te	*****			GPM
PIPEWEIGHT	DIAMET	ER FRO	 OM	то		HOLE DIAM	//ETER	Can well be com	pletely sh	nut in?			
LB/FT		_ IN	FT		FT		IN						
LB/FT		_ IN	FT		FT		IN	WELL TEST D	ATA:	The second of the second			
LB/FT	D.1.7.1	IN	FT		FT		IN	Pumped D	escribe:				
GROUTING Grout Type		acks Grou	t Weial	ht Fr	om	т	O	Bailed					
3 1			Lb/g		 Ft		Ft	Other		AND THE PARTY OF T	The state of the s		
	***************************************		Lb/g	gal	— _{Ft}	-	— Ft	Pumping Level B	elow Lan	d Surface			
Describe grou	iting proce	dure	_					Ft.	After	Hrs. pum	ped		GPM
								Ft.	After	Hrs. pump	ped		GPM
SCREEN:					_			If pump installed,	pump ra	te:			GPM
		Perforated		<u>.</u> L	Mar	nufactured		REMARKS					
Diameter Material		Inche	38	Length			Feet						
Slot Size		Set From		Feet	to	Fe							
-		_											
Other informat	uon												
								This well was drill	led under	license #	475	5	and this
WAS A PAC		SEAL US	ED?	Yes	L	No		report is true and				-	
If so, what mat Describe pack		ncation						Drilling firm: The	ein We	I Company			
Dogotine hack	orto, and it	Joanon						Signature of Licer					
DISINFECTION	ON: Wa	s well disinf	ected ı	upon comp	letion?	, ,,,,,		6/./	1.6	M.			
	[Yes, Ho	w?					Astra	100	/pers			
Lab to which w	-	No, Why	/ Not?					Signature of Well	Owner or	Equitable Prope	erty Holder:		
quality sample	sent for ar	nalysis						Mil	/ _	Varia			
								· · jaux		*****			
								Date:	1/11/	17	-		