Appendix D:

## **BORING LOGS**

Exhibit 20. Well and boring reports near the Lock and Dam	2 Protective Island Project
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Minnesota Unique Well Number	County Da	kota	MIN	NESOTA DEI	PARTMENT	OF HEALTH	Entry Date	02/10/1995
249905	•	scott		L <b>L AND</b> Minnesota St		<b>G REPORT</b> ter 1031	Update Date Received Date	07/11/2018
Well Name Townsh LOCK NO. 2 115	hip Range 17	Dir Section W 21	n Subsec BBAA		Well Depth 312 ft.	Depth Complete 312 ft.	d Date Well	Completed
Elevation 697 ft. Elev.	Method	7.5 minute topo	ographic map	(+/- 5 feet)	Drill Method	Cable Tool	Drill Fluid	
Address					Use public	supply/non-community		Status Active
C/W 1350 LO	CK & DAM R	D HASTING	S MN 55033	3	Well Hydrofr Casing Type		) 🗌 From Joint	То
Stratigraphy Information Geological Material	From	To (ft.)	Color	Hardness	Drive Shoe?	Yes No	Above/Below	0 ft.
GLACIAL DRIFT FRANCONIA IRONTON-GALESVILLE	0 189 263	189 263 305		110100033	Casing Diamo 8 in. To	eter Weight 232 ft. lbs./ft.		
EAU CLAIRE	305	312			-			
					Open Hole Screen?	From 232 ft. J Type	To 312 Make	<u>ft.</u>
					Static Water 1 ft.	Level land surface	Measure	02/03/1995
					Pumping Le	vel (below land surface)		
						r manufacturer	Moo in. above grade	del
					Grouting In	e (Environmental Wells and B formation Well Grouted?	Yes No	X Not Specified
					f	own Source of Contamination set Direction seted upon completion?	Yes 🗌	Type
					Pump Manufacture		Date Installed	
					Model Numb		0 Volt g.p. T	ур
					Abandoned Does propert	y have any not in use and not sealed	l well(s)?	Yes No
					112 TO 120 TO 120	ce granted from the MDH for this v	vell?	Yes No
Remarks					First Bedrock Last Strat Located by Locate Metho	Tunnel CIty/Lone Rock Fr Eau Claire Formation Minnesota Geological	Depth to Bedry Survey	
GAMMA LOGGED AND TV 2	2-3-1995 BY GE	OSHPHERE M	IDWEST.		070	UTM - NAD83, Zone 15, Meter per Verification Informat	rs X 510389	
					Angled Dril	11016		
					Well Contra Minnesota Licensee E	Geological Survey	MGS or Reg. No.	Name of Driller
Minnesota Well Ind	dex Repor	t		24	9905			Printed on 08/16/2019 HE-01205-15

559259		akota escott 02D	WE	NNESOTA DEI L <b>L AND</b> Minnesota St	BORING	G RE	PORT	Entry Date Update Date Received Date	12/14/1995 07/11/2018	
Well Name Township LOCK & DAM 115	Range	Dir Sectio W 21	on Subsect BACB		Well Depth 305 ft.		Depth Completed 305 ft.	Date W 05/22/19	ell Completed	
		7.5 minute top			Drill Method	Nan on	becified Rotary			
	iethoa	7.5 minute top	ographic map	(47- 3 1001)				Drill Fluid Bent	1999-1997-199 27)	
Address					Use public	supply/nc	on-commtransient		Status Activ	ve
C/W 1350 LOCK	& DAM F	RD HASTING	IS MN 5503	3	Well Hydrofra Casing Type		Yes No	From Joint	To	
Stratigraphy Information					Drive Shoe?	Yes	K No	Above/Below	0 ft.	
Geological Material	From	To (ft.)	Color	Hardness	Casing Diame	ter	Weight		Hole Diameter	
SAND	0	38	BROWN	SOFT	10 000 <sup>-0</sup> 100		28.5 lbs./ft.		12 in. To 255	ft
CLAY	38	138	BLUE	MEDIUM	0	200 10.	2010 100.101		8 in. To 305	
CLAY	138	178	RED	MEDIUM					5 m. 16 565	
LOCK	178	185	BLUE	HARD						
			YELLOW							
IMEROCK	185	187		HARD	Open Hole	From	255 ft.	То 305	ft.	
IMEROCK	187	195	YELLOW		Screen?		<u></u> Type	Make		
ANDROCK	195	261	GRN/GRY	MEDIUM		_	* x <sup></sup>			
ANDROCK	261	305	GRN/GRY	MEDIUM						
					Static Water	Lovol				
					10 ft.	land st	urface	Measure	05/22/1995	
					Pumping Lev	el (below	land surface)			
					20 ft.	15 hrs	-	155 g	.p.m.	
					Wellhead Co	mpletion	in an	2007 Sa 1018 1938		
					Pitless adapter	· · · · · · · · · · · · · · · · · · ·		Μ	odel 10.5PS810W	
					Casing I	Protection	Difficient	. above grade	10.5158107	
					Grouting Inf	14		X Yes N	o 🗌 Not Specifie	-d
					Material	Jimation				AI.
					neat cement		Amo 6	Cubic yards	From To 0 ft. 255	ft.
					Nearest Know 60 fe Well disinfed Pump	et cted upon		X Yes	tic tank/drain field Ty No 07/04/1995	уре
					Manufacturer' Model Numbe Length of drop	's name er <u>135</u>	GRUNDFOS 5 <u>S100-6</u> HP 1	1 <u>0</u> Vo		
					Abandoned	<u>, 5, 51</u> 3		or'		
					Does property	have any r	not in use and not sealed v	well(s)?	X Yes	No
					Variance Was a varianc	e granted f	rom the MDH for this we	11? [	Yes	No
					Miscellaneou	IS				
					First Bedrock	Tunne	el CIty/Lone Rock Fm woc Sandstone	Aquifer Depth to Be	Wonewoc drock 187 fl	ł
					Located by			5 000	18/ I	L.
Remarks					Locate Method		finnesota Department PS SA Off (averaged)			
GAMMA LOGGED 6-2-1995.					System	0.	NAD83, Zone 15, Meters		30 Y 4956083	
LOCK N' DAM NO. 3, WELL NO	0.2.				Unique Numb			00.000000000000000000000000000000000000	put Date 08/14/200	00
					Angled Drill	02X- W			08/14/20	50
					Well Contra	ctor				
					Kimmes-Ba Licensee Ba		Lic.	19521 or Reg. No.	MILLER, M. Name of Driller	
Minnesota Well Inde	ex Repoi	rt		55	9259				Printed on 08/10 HE-012	

Minnesota Unique Well Number County Dakota	MINNESOTA DE			рт	Entry Date	09/26/20	02
255874 Quad St Paul Park W Quad ID 102C	<b>ELL AND</b> Minnesota S			K1	Update Date Received Date	07/11/20	18
•	<b>ibsection</b> BADAD	Well Depth 410 ft.	<b>Dep</b> 410	oth Completed ft.	Date We	ll Completed	į.
Elevation 793 ft. Elev. Method 7.5 minute topographic	c map (+/- 5 feet)	Drill Method			Drill Fluid		
ddress		Use dome	stic			Status	Sealed
Vell 1976 NININGER RD HASTINGS MN 550	33	Well Hydrofr Casing Type		Yes No	From Joint	То	
tratigraphy Information		Drive Shoe?	Yes	No	Above/Below	1 ft.	
Geological Material From To (ft.) Color GLACIAL DRIFT 0 410	Hardness	Casing Diam 4 in. To	eter Weigh 407 ft.	t lbs./ft.		Hole Diamete 4 in. To	<b>r</b> 410 ft.
		Open Hole Screen? [	From T	ft. ype	To Make	ft.	
		Static Water 96.5 ft.	• Level land surface		Measure	09/17/2002	
		Pumping Le	vel (below land	surface)			
		Casing	ompletion r manufacturer Protection le (Environmenta		. above grade	odel	
		f		Direction			Туре
		Pump	ected upon compl	APR 43 954	Yesate Installed	No	
		Manufacture Model Numb Length of dro	er	HP ft Capacity	Vol g.p.	t Гур	
		Abandoned	y have any not in u	19400 120 UZ		Yes	No No
		Variance Was a varian Miscellaneo First Bedrock Last Strat		ann fan de geregen geregen geregen geregen.		Yes Quat. buried lrock	D No
Remarks GAMMA LOGGED 9-17-2002. T IS POSSIBLE TO HAVE A SCREEN IN BOTTOM OF WELL. WELL SEALED 10-30-2002 BY 19302.		Located by Locate Metho System Unique Numb Angled Dril	Minneso od Digitiza UTM - NAD83 per Verification	ota Geological S	Map (1:24,000) (1: X 5095:	54 Y 495	55368 /19/2002
		Well Contra Minnesota Licensee F	Geological Surv		MGS or Reg. No.	Name of D	riller
Minnesota Well Index Report	25	55874				Printed	on 08/16/201 HE-01205-1

233923

County Dakota

Quad ID 102D

Prescott

Quad

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Well Name Township R BORING-69 - 115 1		Section	Subsection CDCBDD	Well Depth	Depth Completed		ll Completed		
Elevation 665 ft. Elev. Metho			CDCDDD		144 ft.         04/29/1937           Drill Method         Drill Fluid				
Address	d Survey	/ea					Status	Unimore	
Address					(specify in remarks)		Status	Unknow	
				Well Hydrofr	actured? Yes No	<b>From</b>	То		
				Casing Type		Joint			
Stratigraphy Information	Farmer The		TTandar	Drive Shoe?	Yes No	Above/Below			
		(ft.) Col	or Hardne	ess					
	0 45								
	45 99								
	99 110								
SANDSTONE	116 144	4							
				Open Hole	From ft.	То	ft.		
				Screen?	Туре	Make	It.		
				La constante de					
				Static Wate					
				-17. ft.	land surface	Measure	04/29/1937		
				Pumping Le	vel (below land surface)				
				03121 [0910]					
				Wellhead C	ompletion				
					r manufacturer	Мо	del		
						. above grade	der		
					le (Environmental Wells and Bor				
				Grouting In	formation Well Grouted?	Yes No	X Not S	pecified	
				Nearest Kn	own Source of Contamination				
				N 10 1010 101	eet Direction		7	Туре	
				Pump		Yes	No		
				Manufacture					
				Model Num		Volt			
				Length of dr	op pipe ft Capacity	g.p. 1	Ур		
				Abandoned Does propert	y have any not in use and not sealed v	vel1(s)?	Yes	No	
				Variance		12.00		335	
					ce granted from the MDH for this we	1?	] Yes [	No	
				Miscellaneo	us				
				First Bedrock	Tunnel CIty/Lone Rock Fm	Aquifer			
				Last Strat	Tunnel CIty/Lone Rock Fm	Depth to Bedr	rock 116	ft	
Remarks				Located by	Minnesota Geological S				
ARMY CORP OF ENGINEERS BORD	NG			Locate Meth	Digitized Seale 1.21,00				
				System	UTM - NAD83, Zone 15, Meters	X 51049		- State And Careto	
				-	per Verification Informatio	n from Inp	ut Date 01.	/01/1990	
				Angled Dril	l Hole				
				Well Contra	ictor				
				Licensee I	Business Lic.	or Reg. No.	Name of D	riller	
Minnesota Well Index R	eport			233923				on 08/16/2019	
	-							HE-01205-15	

233924

County Dakota

Quad

Prescott

MINNESOTA DEPAI	RTMENT OF HEALTH
WELL AND B	<b>ORING REPORT</b>

Minnesota Statutes Chapter 1031

 Entry Date
 03/19/2003

 Update Date
 11/08/2005

 Received Date
 1

Qu	ad ID 102	D		Minnesota S	tatutes Chap	ter 1031		Received Dat	te	
Well Name Township	Range	Dir Sectio		ection	Well Depth		epth Completed		Vell Completed	a
BORING-68 - 115	17	W 16	CDC	CAB	119 ft. Drill Method	11	19 ft.	05/20/1	.937	
Elevation 666 ft. Elev. Me	anoa ;	Surveyed			2	· · · · · · · · · · · · · · · · · · ·	1 N	Drill Fluid	Status	Unimers
Address					10000000000	specify in rem		_	Status	Unknow
					Well Hydrofra		Yes No	<b>From</b>	То	
Stratigraphy Information					Casing Type Drive Shoe?	Yes	No	Joint Above/Below		
Geological Material	From	To (ft.)	Color	Hardness	DITVE SHOE.			ADUVE/ DEIUW		
MEDIUM SAND	0	42								
SILT, SOME CLAY,	42	57								
CLAY & SILT, TRACE	57	100								
MEDIUM SAND,	100	111								
CLAY & SILT, TRACE	111	116					2007	(19))		
CLAY, TRACE SILT,	116	119			Open Hole	From	ft.	To	ft.	
					Screen?		Туре	Make		
					Static Water 19.5 ft.	Level land surfac	ce	Measure	05/20/1937	
					Pumping Le	vel (below lan	d surface)			
					Wellhead Co Pitless adapter			Ν	Model	
						Protection e (Environmer	12 in 12 in 12 in 12 in 12	1. above grade rings ONLY)		
					fe	wn Source of eet cted upon com	Contamination Direction poletion?	Yes	□ No	Туре
					Pump Manufacturer	Not I	C	ate Installed		
					Model Numb Length of dro		HP ft Capacity	Vo g.p.	olt Typ	
					Abandoned		use and not sealed		T Yes	No No
					Variance	. 10	1. 10000 (	110	Nec	
					Miscellaneo		the MDH for this we		Yes	No
					First Bedrock Last Strat Located by	clay/sand/	silt-no peb.	Aquifer Depth to B	edrock	ft
Remarks					Locate Metho		esota Geological S zed - scale 1:24,00		itizing Table)	
ARMY CORP OF ENGINEERS BC	ORING.				System		83, Zone 15, Meters Informatic	X 510	476 Y 49:	56370 /01/1990
					Angled Drill	Hole		to de sener (padares	9 - Sere	
					Well Contra	ctor				
					Licensee B	usiness	Lic.	or Reg. No.	Name of D	Priller
Minnesota Well Index	Repor	t		23	3924				Printed	on 08/16/2019 HE-01205-15

233925

County Dakota

Quad ID 102D

Quad

Prescott

MINNESOTA DE	PARTMENT OF HEALTH
WELL AND	<b>BORING REPORT</b>

Minnesota Statutes Chapter 1031

 Entry Date
 03/19/2003

 Update Date
 11/08/2005

 Received Date
 1

Elevation       655 ft.       Elev. Method       Surveyed       Drill Method       Drill Fluid         Address       Use       other (specify in remarks)       Status       Unknow         Well Hydrofractured?       Yes       No       From       To         Stratigraphy Information       From       To (ft.)       Color       Hardness         SeeWer SLUDGE &       0       7       No       Above/Below       Image: Color Sint Sint Sint Sint Sint Sint Sint Sint	Well Name         Township         Range           BORING-67 -         115         17		Subsection CDCCAD	Well Depth 107 ft.	Depth Completed 107 ft.	<b>Date Wel</b> 04/26/193	l Completed	
Address			CD C C C C	Tank Contraction (Contraction)				
With Rysdor assure?     Yes     No     Prom     To       Geological Material     Prom     To (R.)     Color     Hardness       SKratigraphy Information     Open     To (R.)     Color     Hardness       SKratigraphy Information     Open     To (R.)     Color     Hardness       SKRAIN SOME SET 4     7     28     Color     No     Above/Relaw       COARE SAND, SOME SET 4     7     28     Color     No     Above/Relaw       COARE SAND, SOME GRAVEL     105     107     No     Above/Relaw     Make       CLAY, SME GRAVEL     105     107     State Water Level     No     Meane     04/26/197       CLAY, SME GRAVEL     105     107     No     Meane     04/26/197       Pamping Level (below land surface)     Weil and surface     No     Not Specified       Verified adopter domesticator     118 in shore and the surface     No     Not Specified       Weil divincted upon completion     118 in shore and the surface     No     Not Specified       Nearest Known Source of Contamination     Weil divincted upon completion     Type     No       Nearest Known Source of Contamination     No     Not Specified       Nearest Known Source of Contamination     Weil dininteet to upon completion     Type <td< td=""><td></td><td>Surveyed</td><td></td><td>Use other</td><td>specify in remarks)</td><td></td><td>Status</td><td>Unknow</td></td<>		Surveyed		Use other	specify in remarks)		Status	Unknow
Strategraphy Information     From     To (L)     Color     Joint     Joint       Orelogical Muterial     From     To (L)     Color     Joint     Joint       Strategraphy Information     0     7     Strategraphy Information     Drive Shoef?     No     Above.Bledow       Strategraphy Information     0     7     Strategraphy Information     0     To     Above.Bledow       Strategraphy Information     0     7     Strategraphy Information     0     Above.Bledow       Strategraphy Information     0     7     Strategraphy Information     0     Above.Bledow       Strategraphy Information     0     105     07     No     Above.Bledow       CANX & SULT, RACE     28     9     Open Information     Constrategraphy Information     Make       State Water Level     -2     Type     Make     Make       State Water Level     -2     Type     Make       State Water Level     -2     Type     Make       State Water Level     -2     Type     Make       Creating Type     Welliced Completion     12 in shove grade     Model       The above Societion     12 in shove grade     Type     No       Remarks     Keliner Above Societion     12 in shove grade     N								
Stratigraphy Information     From     To (fL) Color     Hardness       SEMER SUDDER &     0     7       MAND SOME DT &     7       MAND SOME SUT &     7       CLAY & SILT TRACE     28       DCAY & SILT TRACE     28       DCAY & SILT TRACE     10       DCAY & SILT TRACE     28       DCAY & SILT TRACE     10       DCAY & SILT TRACE     10       DCAY & SILT TRACE     28       DCAY & SILT TRACE     10       DCAY & SILT TRACE     10       DCAY & SILT TRACE     10       DCAY & SILT TRACE     28       DCAY & SILT TRACE     10       DCAY & SILT TRACE     10 <td></td> <td></td> <td></td> <td>The second s</td> <td>100 110</td> <td></td> <td>То</td> <td></td>				The second s	100 110		То	
Geological Material     From     From <t< td=""><td>64</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	64							
SERVER SULDOR & 0     7       MissNop SOME SIT & 7     28       CAAY & SULT, TRACE     28       93     101       CLAY & SULT, TRACE     28       93     101       CLAY & SULT, TRACE     28       93     101       CLAY & SULT, TRACE     105       105     107       Static Water Level       ***********************************		To (ft ) Colo	r Hardness	Drive shoe:		Above/Below		
M. SAND SOME SULT & 7 28 OCAY & SULT, TRACE 28 93 COARSE SAND, SOME 93 101 CLAY & SULT, TRACE 28 93 COARSE SAND, SOME 93 101 CLAY & SULT 101 105 CLAY, SOME GRAVEL 105 107 State Water Level 		3 2						
CLAY & SILT, TRACE     28     93       ODARS ES AND, SOME     99     101       CLAY & SILT     100     105       CLAY, SOME ORAVEL     105     107         Streen?     Type     Make         Static Water Level     -28. ft. land surface)       Vettined Completion     Measure     04/26/1937         Pumping Level (below lund surface)     Weillered Completion       Weillered Completion     Model       Casting Protection     12 in above grade       Advector     Direction       Weill distreted upon completion?     Yes       Weill distreted upon completion?     Yes       Weill distreted upon completion?     Yes       Nearest Known Source of Contamination     Type       Minecode Completion     Type       Nearest Known Source of Contamination     Type       Nearest Known Source of Contamination     Type       Not Specified     Direction       Stradictiver + nume     No X       Not Specified     Direction       Statistered upon onpletion?     Yes       No     No       No     X       No     X       No     X       No     X       No     X       No     X    <	DEFENSIVE ALL DEFENSIVE ALL							
CLAY & SILT [10] 105 CLAY, SOME GRAVEL 105 107 Deen Hole From n. To n. Streen? ] Type Make Statk Water Level -28. ft. land surface Measure 04/26/1937 Pumping Level (below land surface) Wellhead Completion Differend and definition with the surface of the	CLAY & SILT, TRACE 28	93						
CLAY, SOME GRAVEL 105 107  Open Hole From ft. To ft. Server? JYpe Make  State Water Level -28. ft. land surface Measure 04/26/1937  Pumping Level (below land surface)  Wellfhead Completion Hite-as adjoir monifector Model Completion Hite-as adjoir monifector Model Completion Hite-as adjoir monifector Wellfhead Completion Hite-as adjoir monifector Well and Borings DNE.Y)  Growting Information Well context No X Not Specified Not X Not	COARSE SAND, SOME 93	101						
CLAP, SUME URAVEL     105     107       Streer?     Type     Make       Stafic Water Level     .38. ft.     Ind surface       .38. ft.     Ind surface     Measure       04/26/1937     Pamping Level (below land surface)       Wellhead Completion     12. in. above grade       Research Completion     12. in. above grade       Research Completion     12. in. above grade       Research Completion     Well Staff Conviounced       Well disinfected upon completion?     Not X       Not Specified     Not motion       Well disinfected upon completion?     Yes       No Installed     Due Installed       Mandeture vanue     HP       Model     Coparity       Mandeture vanue     HP       Volt     Leight of one pipe 1       Coparity     gp.       Type     No       Water street water     HP       Volt     Leight of one the ADH for this well?       Volt     Coparity       Remarks     No       ADM CORP. OF ENGINEERS BORDNO.     No       Well Contractor     Lic, or Reg. No.       No     Vell Contractor       Licensee Business     Lic, or Reg. No.       Well Contractor     Licensee Business       Well Coutractor     Lice	CLAY & SILT 101	105			V— 923	94	87	
Static Water Level       12.8. ft. land surface       Measure       64/26/1937         2.8. ft. land surface       Measure       64/26/1937         Pumping Level (below land surface)       Model       12.in above grade         Wellhead Completion       12.in above grade       Model         Casing Protection       12.in above grade       Model         Casing Protection       12.in above grade       Model         Casing Protection       Vell casing Protection       Not Specified         Remarks       Nearest Known Source of Contamination       Type         Well distincted upon completion?       Yes       Not Specified         Miscellaneous       HP       Volt       Volt         Longth of deep pip       To fistalled       Date Installed         Most Subter       HP       Volt       Volt         Longth of deep pip       To capacity g.p.       Type         Variance       Well Standowice       Applifer         Last Stat       Digitized - statel 2000 or langer Objeting Toble)       States         System UTX-* Ababaz zeo 15.244002 or langer Objeting Toble)       States       Minecola Objeting Toble)         System UTX-* Ababaz zeo 15.244002 or langer Objeting Toble)       Notellaneous       Information from       Input Date <t< td=""><td>CLAY, SOME GRAVEL 105</td><td>107</td><td></td><td>•</td><td></td><td></td><td>ft.</td><td></td></t<>	CLAY, SOME GRAVEL 105	107		•			ft.	
-28. ft.       land surface       Measure       04/26/1937         Pumping Level (below land surface)       Model       Model       Model         Casing Protection       12 in above grade       Model       Model         Casing Protection       12 in above grade       Model       Model         Casing Protection       12 in above grade       Not Specified         Wellhead Completion       Verified       Well disinfected upon completion?       Yes       No         Remarks       Model Sumber       HP       Volt       Volt       No         Abandoned       Does property have any not in use and not scaled witk(s)?       Yes       No         Variance       Ware state state       Applier       No         Mandoured       Does property have any not in use and not scaled witk(s)?       Yes       No         Variance       Ware state state       Applier       No         Remarks       State       Displicited - scale 124,000 or larger (Digitizing Table)       System       UTM - States - States       Xates - States       Xates - Xate				Screen?	Iype	маке		
Pumping Level (below land surface)         Wellhead Completion         Hiers adopter mandfacturer       Model         Casing Protection       12 in. above grade         At-grade (Environmental Wells and Borings ONLY)       Growthat         Growting Information       Well fromted?         Vell disinfected upon completion?       Yes         Nearest Known Source of Contamination       Type         Well disinfected upon completion?       Yes         Well disinfected upon completion?       Yes         Well disinfecter wante       Model         Model Sumber       HP         Volt       Length of drop pipe         ft capacity g.p.       Type         Abandoned       Does property hare any not in use undnot sealed well(r)?       Yes         Variance       Variance       Applifer       No         Variance       Minnestot Cological Survey       No         Minnestot Rev Port Engineers Boringe.       Statista       pebbly sand'slivelay       Does proper type on larger (Digitzing Table)         System       UTM '>ADPS, Zone 15, Moters       X 510507       Y 195371         Daigee Sumber Vertication       Information from Input Date       01/01/1990         Angel Drill Hole       Well Contractor       Licensee Business       <				1777 TO 1778 T		98525		
Wellhead Completion         Pilless dayter mandiciarer       Model         Casing Protection       12 in above grade         Ar-grade (Environmental Wells and Borings ONLY)       Grouting Information         Well contact       Well contact         Press       No         Means       Nearest Known Source of Contamination         Feet       Direction         Well disinfected upon completion?       Yes         Pump       No Installed         Manufacturer's name       Model Vanibre         HP       Volt         Length of drop tips       fl. Capacity       g.p.         Variance       wave avained grant from the MDH for this wdf?       Yes       No         Ware a variance granted from the MDH for this wdf?       Yes       No         Miscellaneous       Aquifer       frid Betook:       ft.       ft.         ABMY CORP OF ENGINEERS BORING.       Veil Contractor       Licensee Business       Lic. or Reg. No.       Name of Driller         Well Contractor       Licensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015				-28. ft.	land surface	Measure	04/26/1937	
Pites adptor maintfacture       Model         Casing Protection       12 in above grade (Environmental Wells and Borings ONLY)         Ar-grade (Environmental Wells and Borings ONLY)         Grouting Information       Well Groated?         Yes       No         Kearest Known Source of Contamination         feet       Direction         Type         Well disinfected upon completion?       Yes         Pump       Not Installed         Mauntcherry anne         Model Number       HP         Yot       Yes         No         Variance         Was a variance granted from the MDH for this well?       Yes         Na a variance granted from the MDH for this well?       Yes         Was a variance granted from the MDH for this well?       Yes         Was a variance granted from the MDH for this well?       Yes         Noat State       Anguifer         Loasted by       Minecial Geological Survey         Loasted by       Minecil asses       X S S S S S S S S S S S S S S S				Pumping Le	vel (below land surface)			
Remarks         Remarks         Construction         Remarks         Ansersest Borging.         Dates Borging.         Dates Borging.         Dates Borging.         Dates Borging.         Dates Borging.         Dates Borging.         Display State         Dates Borging.         Display State         Displa				Wellhead C	ompletion			
Image: Strate Control of Contamination         Image: Strate Strate Strate         Image: Strate Stra				Pitless adapter			del	
Nearest Known Source of Contamination         feet       Direction         Type         Well disinfected upon completion?       Yes         No         Pump       No Installed         Manufacture's mare         Model Number       HP         Volt       Length of drop pipe         Does properly have any not in use and not sealed well(s)?       Yes         No       Variance         West variance granted from the MDH for this well?       Yes         No       Variance         West variance granted from the MDH for this well?       Yes         No       Miscellaneous         First Bedoock       Aquifer         Located by       Minnesota Geological Survey         Located by       Minnesota Geological Survey         Locate Method       Dighized - scale 1:24,000 or larger (Digitizing Table)         System       UTM - NADBA Zone 15, Meters X \$10507         System       UTM - NADBA Zone 15, Meters X \$10507         Vell Contractor       Licensee Business         Lice. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925								
feet       Direction       Type         Well disinfected upon completion?       Yes       No         Pump       No Installed       Date Installed         Manufacturer's name       Model Number       HP       Volt         Length of drop pipe       ft       Capacity       g.p.       Type         Abandoned       Does property have any not in use and not sealed well(s)?       Yes       No         Variance       Was a variance granted from the MDH for this well?       Yes       No         Wastastrater       Prist Bedrock       Aquifer       Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)       System       UTM-NAD83, Zone 15, Meters       X 510507       Y 4956371         Urique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Vell Contractor       Vell Contractor         Licensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 087/62015							X Not Sp	ecified
feet       Direction       Type         Well disinfected upon completion?       Yes       No         Pump       No Installed       Date Installed         Manufacturer's name       Model Number       HP       Volt         Length of drop pipe       ft       Capacity       g.p.       Type         Abandoned       Does property have any not in use and not sealed well(s)?       Yes       No         Variance       Was a variance granted from the MDH for this well?       Yes       No         Wastastrater       Prist Bedrock       Aquifer       Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)       System       UTM-NAD83, Zone 15, Meters       X 510507       Y 4956371         Urique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Vell Contractor       Vell Contractor         Licensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 087/62015				Nearest Kno	wn Source of Contamination			
Manufacturer's name         Model Number       HP       Volt         Length of drop pipe       ft       Capacity       g.p.       Typ         Abandoned       Does property have any not in use and not sealed well(s)?       Yes       No         Variance       Was a variance granted from the MDH for this well?       Yes       No         Was a variance granted from the MDH for this well?       Yes       No         Miscellameous       First Bedrock       Aquifer         Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Located by       Minnesota Geological Survey         Located by       Minnesota Geological Survey       Located by       Minnesota Geological Survey         Located by       Minnesota Geological Survey       Olyoon or larger (Digitizing Table)       System         System       UTM -NADAS Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Icc. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015				fe	et Direction	Yes	No	Туре
Model Number     HP     Volt       Length of drop pipe     ft     Capacity     g.p.     Typ       Abandoned     Does property have any not in use and not sealed well(s)?     Yes     No       Variance     Was a variance granted from the MDH for this well?     Yes     No       Miscellaneous     First Bedrock     Aquifer     Last Start     pebbly sand/silt/clay     Depth to Bedrock     ft       Remarks     ARMY CORP OF ENGINEERS BORING.     Minesota Geological Survey     Located My     Minesota Geological Survey       Located Method     Digitized - scale 1:24,000 or larger (Digitizing Table)     System     UTM - NAD83, Zone 15, Meters     X 510507     Y 4956371       Unique Number Verification     Information from     Input Date     01/01/1990       Angled Drill Hole     Well Contractor     Uic ensee Business     Lic. or Reg. No.     Name of Driller				Pump	Not Installed D	ate Installed	<u></u>	
Length of drop pipe       ft       Capacity       g.p.       Typ         Abandoned       Does property have any not in use and not sealed well(s)?       Yes       No         Wariance       Was a variance granted from the MDH for this well?       Yes       No         Miscellaneous       First Bedrock       Aquifer       Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)         System       UTM - NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Vell Contractor       Ticensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015       Printed on 08/16/2015						Volt		
Abandoned       Does property have any not in use and not sealed well(s)?       Yes       No         Variance       Was a variance granted from the MDH for this well?       Yes       No         Wass a variance granted from the MDH for this well?       Yes       No         Histollaneous       First Bedrock       Aquifer         Last Strat       pebbly sand/sill/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)         System       UTM - NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Uicensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015								
Variance       Variance         Was a variance granted from the MDH for this well?       Yes         Was a variance granted from the MDH for this well?       Yes         Miscellaneous       First Bedrock       Aquifer         Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)         System       UTM - NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Vell Contractor       Vell Contractor       Vell Contractor         Licensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015				Abandoned		01		
Was a variance granted from the MDH for this well?       Yes       No         Miscellaneous       First Bedrock       Aquifer         Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Located by       Minnesota Geological Survey         Located by       Minnesota Geological Survey       Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)         System       UTM · NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Vell Contractor       Vell Contractor         Licensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015				Does propert	have any not in use and not sealed	well(s)?	Yes	No No
Remarks       Aquifer         ARMY CORP OF ENGINEERS BORING.       Hiscellaneous         First Bedrock       Aquifer         Last Strat       pebbly sand/silt/clay       Depth to Bedrock       ft         Located by       Minnesota Geological Survey       Locate/dow       ft         Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)       System       UTM - NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Vell Contractor       Vell Contractor         Licensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015					e granted from the MDH for this we	11?	Yes	No
Image: second				Miscellaneo	15			
Remarks         ARMY CORP OF ENGINEERS BORING.         Located by       Minnesota Geological Survey         Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)         System       UTM - NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Iccensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015				1111 C		and States and an	2	0
Remarks         ARMY CORP OF ENGINEERS BORING.         Locate Method       Digitized - scale 1:24,000 or larger (Digitizing Table)         System       UTM · NAD83, Zone 15, Meters       X 510507       Y 4956371         Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Vell Contractor       Iccensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015							ock	tt
ARMY CORP OF ENGINEERS BORING. System UTM · NAD83, Zone 15, Meters X 510507 Y 4956371 Unique Number Verification Information from Input Date 01/01/1990 Angled Drill Hole Well Contractor Licensee Business Lic. or Reg. No. Name of Driller Minnesota Well Index Report 233925 Printed on 08/16/2015	Remarks			V.000000000000000000000000			ving Table)	
Unique Number Verification       Information from       Input Date       01/01/1990         Angled Drill Hole       Well Contractor       Incensee Business       Lic. or Reg. No.       Name of Driller         Minnesota Well Index Report       233925       Printed on 08/16/2015	ARMY CORP OF ENGINEERS BORING.				Digitized Seale 1.21,00		1.2	6371
Angled Drill Hole         Well Contractor         Licensee Business       Lic. or Reg. No.         Name of Driller         233925         Printed on 08/16/2015				08 C.R. • 1902 C.P. 07 21 107	2 2	52000		
Licensee Business     Lic. or Reg. No.     Name of Driller       Minnesota Well Index Report     233925     Printed on 08/16/2015				Angled Dril	Hole	en man sevel Die ad Nation 2014		1999 - 1992 - 1992 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 -
Licensee Business     Lic. or Reg. No.     Name of Driller       Minnesota Well Index Report     233925     Printed on 08/16/2015								
Minnesota Well Index Report 233925 Printed on 08/16/2015				Well Contra	ctor			
Minnesota Well Index Report				Licensee E	usiness Lic.	or Reg. No.	Name of Dr	iller
	Minnesota Well Index Repor	t	23.	3925				

233926

County Dakota

Quad ID 102D

Quad

Prescott

## MINNESOTA DEPARTMENT OF HEALTH WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

 Entry Date
 03/19/2003

 Update Date
 07/11/2018

 Received Date

Well Name         Township         Range         Dir Section         Subsection           BORING-119 -         115         17         W 21         BBAAAB	Well Dep 152 ft.	h Depth Completed Date Well Completed 152 ft. 08/10/1937					
Elevation 685 ft. Elev. Method Surveyed		152 п. 152 п. 08/10/1937 Drill Method Drill Fluid					
Address	Use ot	er (specify in remarks) Status Unknow					
	Casing T						
Stratigraphy Information Geological Material From To (ft.) Color Ha	urdness						
SAND 0 6	nuness						
CLAY & SILT 6 29							
SILT 29 32							
CLAY & SILT 32 43							
SAND 43 57		12 V= V01 V=0 A					
SILT 57 60	Open Ho						
CLAY & SILT 60 65	Screen?	Type Make					
SILT 65 72							
CLAY & SILT 72 111							
SAND 111 124	Static W	ter Level					
CLAY 124 139	-1.9 f	land surface Measure 08/10/1937					
CLAY & SILT 139 146	<b>D</b>						
CLAY 146 152	Pumping	Level (below land surface)					
SAND 152 152							
		Completion					
		pter manufacturer Model					
		ng Protection 12 in. above grade rade (Environmental Wells and Borings ONLY)					
		Information Well Grouted? Yes No Not Specified					
	Nearest	nown Source of Contamination					
	XX7 11 1	feet Direction Type					
		nfected upon completion? Yes No					
	Pump	Not Installed Date Installed					
	Model N						
		drop pipe ft Capacity g.p. Typ					
	Abandor						
	Does pro	erty have any not in use and not sealed well(s)?					
	Variance						
	Was a va	iance granted from the MDH for this well? Yes No					
	Miscella	22 2224					
	First Bed						
	Last Stra Located I	sand Depth to Bedrock ft Minnesota Geological Survey					
Remarks	Locate M						
ARMY CORP OF ENGINEERS BORING.	System	UTM - NAD83, Zone 15, Meters X 510353 Y 4956270					
	Unique N	mber Verification Information from Input Date 01/01/1990					
	Angled I	rill Hole					
	×.						
	Well Co	tractor					
	Licens	e Business Lic. or Reg. No. Name of Driller					
Minnesote Well Index Depart	233926	Printed on 08/16/2019					
Minnesota Well Index Report		HE-01205-15					

233927

County Dakota

Prescott

Quad

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 03/19/2003 Update Date 11/08/2005 Received Date

Quad ID 102D	Minnesola	Statutes Chapter 1031 Received Date					
	section	Well Depth Depth Completed Date Well Completed					
	BDAC	157 ft. 157 ft. 07/29/1937					
Elevation 681 ft. Elev. Method Surveyed		Drill Method Drill Fluid					
Address		Use other (specify in remarks) Status Un					
		Well Hydrofractured? Yes No From To					
		Casing Type Joint					
Stratigraphy Information		Drive Shoe? Yes No Above/Below					
Geological Material From To (ft.) Color	Hardness						
SILT 0 3							
CLAY & SILT 3 14							
SAND 14 16							
SILT 16 18							
CLAY & SILT 18 31							
SAND 31 52		Open Hole From ft. To ft.					
SILT 52 61		Screen? Type Make					
CLAY & SILT 61 109							
SAND 109 121							
CLAY 121 139		Static Water Level					
CLAY & SILT 139 157		-6.3 ft. land surface Measure 07/29/1937					
		Pumping Level (below land surface)					
		Wellhead Completion					
		Pitless adapter manufacturer Model					
		Casing Protection 12 in. above grade					
		At-grade (Environmental Wells and Borings ONLY)         Grouting Information       Well Grouted?         Yes       No         X       Not Special					
		Nearest Known Source of Contamination					
		feet Direction					
		Well disinfected upon completion? Yes No					
		Pump Not Installed Date Installed Manufacturer's name					
		Model Number HP Volt					
		Length of drop pipe ft Capacity g.p. Typ					
		Abandoned					
		Does property have any not in use and not sealed well(s)?					
		Variance Was a variance granted from the MDH for this well? Yes No					
		Was a variance granted from the MDH for this well?					
		Miscellaneous					
		First Bedrock Aquifer					
		Last Strat         silt+clay         Depth to Bedrock           Located by         Minnesota Geological Survey					
Remarks		Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)					
ARMY CORP OF ENGINEERS BORING.		System UTM - NAD83, Zone 15, Meters X 510143 Y 495654					
		Unique Number Verification Information from Input Date 01/01/J					
		Angled Drill Hole					
		Wall Contractor					
		Well Contractor					
		Licensee Business Lic. or Reg. No. Name of Driller					
Minnesota Well Index Report	2.	233927 Printed on 08 HE-C					

233928

County Dakota

Quad ID 102D

Prescott

Quad

MINNESOTA DE	PARTMENT OF HEALTH
WELL AND	<b>BORING REPORT</b>

Minnesota Statutes Chapter 1031

 Entry Date
 03/19/2003

 Update Date
 07/11/2018

 Received Date

	Range	Dir Secti			Well Depth		epth Completed		ell Completed	a.
BORING-117 - 115 17 W 21 BABCDD			)	147 ft. 147 ft. 08/00/1937						
Elevation 683 ft. Elev. Meth	od ș	Surveyed			Drill Method			Drill Fluid		12
Address					Use other (	specify in rem	arks)		Status	Unknow
					Well Hydrofra	ctured?	Yes No	From	То	
					Casing Type			Joint		
Stratigraphy Information	From	To (ft.)	Calar I	Iardness	Drive Shoe?	Yes	No	Above/Below		
Geological Material SAND	From 0	10 (n.) 12	Color H	1al uliess						
CLAY & SILT	12	20								
SAND	20	20 60								
SILT	20 60	69								
CLAY & SILT	69	75								
SAND	75	75			Open Hole	From	ft.	То	ft.	
CLAY & SILT	77	116			Screen?	1	Туре	Make		
SAND	116	110								
CLAY	127	127								
CLAY & SILT	136	147								
CLAT & SILT	150	147			Static Water	Level				
					Pumping Lev	el (below lan	d surface)			
					Wellhead Co					
					Pitless adapter		□		odel	
						Protection	ntal Wells and Bo	. above grade		
					Grouting Inf		Well Grouted?	Yes N	n 🗌 Not S	Specified
					Nearest Kno	wn Source of	Contamination			
					feet     Direction     Type       Well disinfected upon completion?     Yes     No					
					Pump Manufacturer		nstalled D	ate Installed		
					Model Numbe		HP	Vol	lt	
					Length of dro		ft Capacity		тур	
					Abandoned	v 786 786	102.045 Part 63	0.		
					Does property	have any not in	use and not sealed	well(s)?	Yes	No
					Variance		1. 10000 (11)	110	Xar	
					Was a variance Miscellaneou	sest <del>e</del> on all the sentences and set	he MDH for this we	41? 	Yes	No
					First Bedrock	13		Aquifer		
					Last Strat	silt+clay		Depth to Be	drock	ft
					Located by		esota Geological S			0.22
Remarks					Locate Metho		zed - scale 1:24,00	ana S. ana an	izing Table)	
ARMY CORP OF ENGINEERS BORING.					System		83, Zone 15, Meters	~ . ~		56115
					Unique Numb	er Verification	Informatio	on from In	put Date 01	l/01/1990
					Angled Drill	Hole				
					-					
					Well Contra	ctor				
					Licensee B	usiness	Lic,	or Reg. No.	Name of D	Driller
Minnesota Well Index F	Report	t		233	928				Printed	on 08/16/2019
										HE-01205-15