#### SPRU EEC-20-001 RCRA ICM REPORT FOR SPRU FACILITY

Attachment 9 Well Decommissioning Documentation

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# ATTACHMENT 9 RCRA ICM REPORT FOR SPRU FACILITY SPRU-AREA WELL CLOSURE REPORT

This report details the disposition of wells on the SPRU Upper Level. It is presented as part of the Interim Corrective Measures Report for the SPRU Upper Level SWMUs.

Wells were closed in accordance with New York State Department of Environmental Conservation requirements set forth in CP-43, *Groundwater Monitoring Well Decommissioning Policy*. They have been dispositioned in two general approaches. The majority of wells, as listed in Table 1, were grouted after removal of the top of the casing. Well decommissioning records (logs) are included with this Attachment. Several wells, listed in Table 2, were definitively within the excavation footprint and are known to have been removed during the demolition and excavation of the SPRU facilities. These wells are considered closed with complete casing recovery.

Three wells (MW-1, MW-2, and MW-24) were located within or near the layback of the excavation. The three wells were within the footprint of the H2 ventilation pad. While no record of their decommissioning is available, at least at some near-surface portion of the casings of those wells would have been removed to enable construction of the concrete pad. It is possible that one or more of the wells may have been entirely removed during the SPRU excavation. This is most likely for MW-24, which was the closest to the main excavation of the three.

Exploratory excavations were conducted to attempt (unsuccessfully) to locate wells MW-26 and MW-27, both of which were 1" PVC, in the vicinity of the French drain. The exploratory digging extended only slightly below the French drain in order to avoid potential impacting the VOC plume. During the excavation looking for MW-6, that 1" PVC well casing was easily removed by the excavator and this is what is believed to have happened to both MW-26 and MW-27.

The five wells that could not be absolutely determined to have been removed, (MW-1, -2, -24, -26, and -27, listed in Table 3), were located in what would be the primary excavation area for the future remediation of the VOC AOC soil contamination. In the event that any of these wells do remain in place, they would be removed during the remediation of the soil. These four wells do not penetrate through the native till, and thus do not connect to deeper groundwater.

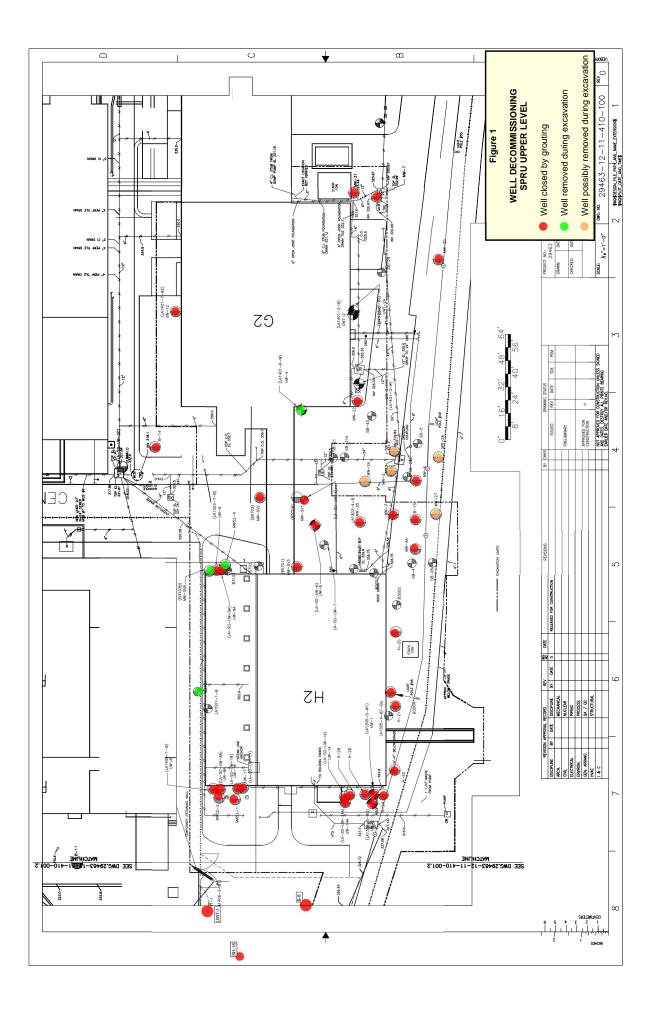
A map is provided as Figure 1 showing the location of the wells and indicating by color code each well's disposition.

Well MW-SV8 was recorded as having been decommissioned in 2010 along with 29 other wells. However, no record can be found of the decommissioning. That well was located at the south end of the H2 Tank Vault, adjacent to MW-52-4, which was removed during the demolition and excavation around the Tank Vaults in 2018. No evidence of MW-SV8 was observed at that time. In the absence of other data, this report considers that MW-SV8 was removed by excavation.

TABLE 1 Decommissioned Monitoring Wells				
B-14	MW-3	UW-12		
B-15	MW-30	UW-14		
B-3004	MW-31	UW-14A		
B-8	MW-4A	UW-17		
H-20	MW52-1	UW-18		
H-21	MW52-2	UW-2		
H-22	MW-6	UW-6		
H-24	MW-7	UW-8		
H-26	MW-SV1	UW-8A		
H-28	MW-SV2	UW-9		
KH-16	MW-SV3	UW-9A		
MW-22	UW-1	UWT-1		
MW-25				

Monitoring Wells	BLE 2 Removed During vation
MW-52-4	MW #3
MW-SV8	UW-4

TABLE 3 Monitoring Wells Possibly Removed		
During Excavation		
MVV-1	MW-26	
MW-2	MW-27	
MW-24		



#### **ATTACHMENT 9**

#### SPRU-AREA WELL CLOSURE REPORT

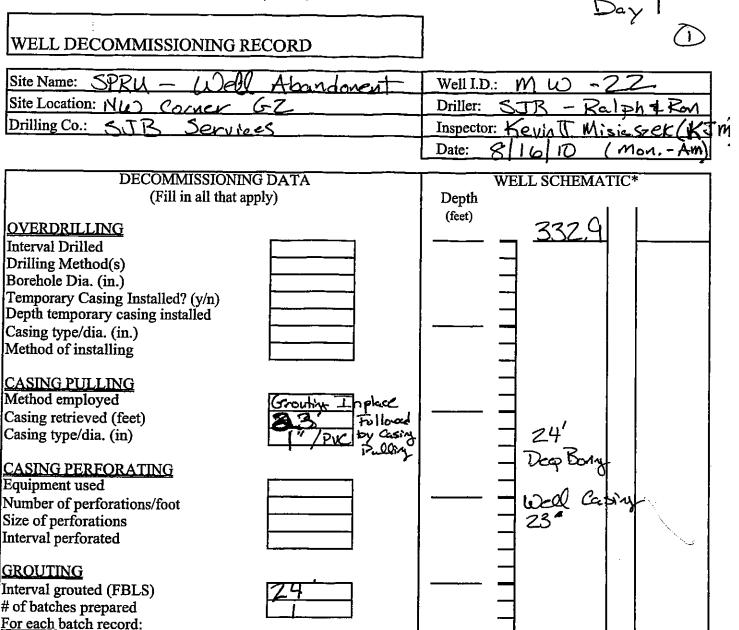
### **ATTACHMENT 9-A**

## **Well Decommissioning Logs**

2010

WELLS MW-22 MW-7 MW-31 UW-12 MW-SV2 MW-SV1 UW-6 MW-SV3 MW-25 MW-4A H-20 B-3004 H-21 H-22 UW-14A UW-14 UW-2 UW-1 H-24 H-26 H-28 MW-52-1 MW-52-2 UW-9A UW-9 UW-8 UW-8A UW-18 UW-17

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COMMENTS: உy' Botton wo/ 2 dfr 200 23 PVC C & Vara osce Drilling Contract

Quantity of water used (gal.) Quantity of cement used (lbs.)

Quantity of bentonite used (lbs.)

Volume of grout prepared (gal.)

Volume of grout used (gal.)

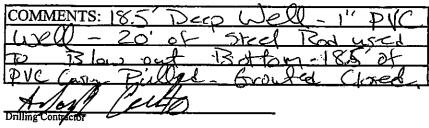
Quantity of calcium chloride used (lbs.)

Cement type

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

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Site Name: $S PRU - Would Abandonnent       Well LD: M \cup -7         Site Location: SW Concer Gr.       Driller: S.TR - Relph/Ren         Drilling Co.: STR       Inspector: KTM         Date: R   U_{-}  D (Men - PM)       Date: R   U_{-}  D (Men - PM)         OPERDRILLING       WELL SCHEMATIC*         Interval Drilled       Depth         OVERDRILLING       Borehole Dia. (in.)         Borehole Dia. (in.)       Depth         Method of installing       Iss.         Casing type/dia. (in.)       Iss.         Method of installing       Iss.         Casing type/dia. (in.)       Iss.   $		-
Site Location:       SJR - Ralph/Ren         Drilling Co.:       SJR         Inspector:       KJM         Date:       81116/10         (Fill in all that apply)       Detty         OVERDRILLING       Well SCHEMATIC*         Interval Drilled       Detty         Drilling Method(s)       Detty         Borchole Dia. (in.)       Depth temporary casing installed         Casing type/dia. (in.)       Image: Second S	Site Name: SPRU-Well Abandonnent	Well I.D.: 174)-7
Drilling Co.:       S.T.Z.       Inspector:       K.T.M.         Date:       B1110       (mlon - P.m)         DECOMMISSIONING DATA (Fill in all that apply)       WELL SCHEMATIC*         OVERDRILLING Interval Drilled Drilling Method(s)       Depth (feet)       333.6         Borehole Dia. (in.)       Borehole Dia. (in.)       333.6         Method of installing       Image: State of the state of		Driller: SJR-Relph/Ron
DECOMMISSIONING DATA (Fill in all that apply)       OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing		
DECOMMISSIONING DATA (Fill in all that apply)     WELL SCHEMATIC*       OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.)     Depth (feet)     333.6       Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.)		Date: 8/11/10 (Mon-PM)
(Fill in all that apply)       Depth       OVERDRILLING       Interval Drilled     Image: State of the state of	DECOMORSIONING DATA	
OVERDRILLING     (feet)       Interval Drilled     333.6       Drilling Method(s)     Borehole Dia. (in.)       Borehole Dia. (in.)     Important Casing Installed? (y/n)       Depth temporary casing installed     Important Casing type/dia. (in.)       Method of installing     Important Casing The set / for lowest by       CASING PULLING     Important Casing type/dia. (in.)       Method employed     Grackty In Place / for lowest by       Casing type/dia. (in.)     Important Casing type/dia. (in.)       CASING PULLING     Important Casing type/dia. (in.)       Method employed     Grackty In Place / for lowest by       Casing type/dia. (in.)     Important Casing type/dia. (in.)       CASING PERFORATING     Important Casing type/dia. (in.)       Casing type/dia. (in.)     Important Casing type/dia. (in.)       Number of perforations/foot     Important Casing type/dia. (in.)       Size of perforations     Important Casing type/dia. (in.)       Interval grouted (FBLS)     Important Casing type (Important Casing type)       # of batches prepared     Important Casing type (Important Casing type)       Guantity of cement used (Ibs.)     Important Casing type)       Quantity of bentonite used (Ibs.)     Important Casing type)       Quantity of calcium chloride used (Ibs.)     Important Casing type)       Quantity of calcium chloride used (Ibs.)     Importan		
OVERORILLING         Interval Drilled         Drilling Method(s)         Borehole Dia. (in.)         Depth temporary casing installed? (y/n)         Depth temporary casing installed?         Casing type/dia. (in.)         Method of installing         CASING PULLING         Method employed         Cosing type/dia. (in)         LY         Casing type/dia. (in)         LY         Size of perforations/foot         Size of perforations         Interval perforated         GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of cement used (lbs.)         Quantity of calcium chloride used (lbs.)         Q	(I III III all that apply)	
Drilling Method(s)         Borehole Dia. (in.)         Temporary Casing Installed? (y/n)         Depth temporary casing installed         Casing type/dia. (in.)         Method of installing         CASING PULLING         Method employed         Grouting the point of perforations/foot         Casing type/dia. (in)         LV         Pull         Number of perforations/foot         Size of perforations         Interval perforated         GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (gls.)         Quantity of bentonite used (lbs.)         Cement type         Quantity of calcium chloride used (lbs.)	<u>OVERDRILLING</u>	333.6
Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing CASING PULLING Method employed Grouthe In Place/foilowed by Casing- Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of calcium chloride used (lbs.) Yolume of grout prepared (gal.)		
Temporary Casing Installed? (y/n)         Depth temporary casing installed         Casing type/dia. (in.)         Method of installing         CASING PULLING         Method employed       Groudhe In Place/ to llowed by Casing-         Casing retrieved (feet)       18.5         Casing type/dia. (in)       18.5         Number of perforations/foot       18.5         Size of perforations       18.5         Interval grouted (FBLS)       18.5         # of batche sprepared       19.4         Quantity of water used (lbs.)       9.4         Quantity of bentonite used (lbs.)       9.4         Quantity of calcium chloride used (lbs.)       10         Wolume of grout prepared (gal.)       10 </td <td></td> <td></td>		
Depth temporary casing installed Casing type/dia. (in.) Method of installing CASING PULLING Method employed Growths In Place/Toilowed by Casim Casing retrieved (feet) Casing type/dia. (in) L' PVC CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared Equipment used (BLS) # of batches prepared Quantity of cement used (Ibs.) Quantity of calcium chloride used (Ibs.) Quantity of calcium chloride used (Ibs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (Ibs.) Yolume of grout prepared (gal.) LD		
Casing type/dia. (in.) Method of installing CASING PULLING Method employed Growth in Place/toplowed by Casing Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	Depth temporary casing installed	
Method of installing  CASING PULLING Method employed Gractheria Place/followed by Casin Casing retrieved (feet) IS.S Casing type/dia. (in) IS.S Pully CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Quantity of calcium chloride used (lbs.) Quantity of calcium chloride used (lbs.)		<b></b>
Method employed       Grouthes In Place/toilowed by Casing         Casing retrieved (feet)       18.5         Casing type/dia. (in)       18.5         Equipment used       18.5         Number of perforations/foot       18.5         Size of perforations       18.5         Interval perforations       18.5         Interval perforated       18.5         GROUTING       18.5         Interval grouted (FBLS)       18.5         # of batches prepared       1         For each batch record:       7.8         Quantity of cement used (lbs.)       94         Quantity of bentonite used (lbs.)       7.8         Quantity of bentonite used (lbs.)       94         Quantity of calcium chloride used (lbs.)       3.9         Quantity of calcium chloride used (lbs.)       10         Quantity of grout prepared (gal.)       10		
Method employed       Grouths In Place/toilowed by Casing         Casing retrieved (feet)       18.5         Casing type/dia. (in)       18.5         Equipment used       18.5         Number of perforations/foot       18.5         Size of perforations       18.5         Interval perforations       18.5         Interval perforated       18.5         GROUTING       18.5         Interval grouted (FBLS)       18.5         # of batches prepared       1         For each batch record:       7.8         Quantity of cement used (lbs.)       94         Quantity of bentonite used (lbs.)       94         Quantity of bentonite used (lbs.)       3.9         Quantity of calcium chloride used (lbs.)       10         Quantity of grout prepared (gal.)       10		
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Casing type/dia. (in) $1^{t} P_{VC}$ CASING PERFORATING         Equipment used         Number of perforations/foot         Size of perforations         Interval perforated         GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (gal.)         Quantity of bentonite used (lbs.)         Quantity of calcium chloride used (lbs.)         Volume of grout prepared (gal.)		<b></b>
CASING PERFORATING   Equipment used   Number of perforations/foot   Size of perforations   Interval perforated   GROUTING   Interval grouted (FBLS)   # of batches prepared   For each batch record:   Quantity of water used (gal.)   Quantity of cement used (lbs.)   Quantity of bentonite used (lbs.)   Quantity of calcium chloride used (lbs.)   Volume of grout prepared (gal.)		
Equipment used   Number of perforations/foot   Size of perforations   Interval perforated   GROUTING   Interval grouted (FBLS)   # of batches prepared   For each batch record:   Quantity of water used (gal.)   Quantity of cement used (lbs.)   Quantity of bentonite used (lbs.)   Quantity of calcium chloride used (lbs.)   Volume of grout prepared (gal.)		
Number of perforations/foot   Size of perforations   Interval perforated   GROUTING   Interval grouted (FBLS)   # of batches prepared   For each batch record:   Quantity of water used (gal.)   Quantity of cement used (lbs.)   Quantity of bentonite used (lbs.)   Quantity of calcium chloride used (lbs.)   Volume of grout prepared (gal.)	CASING PERFORATING	
Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)		
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GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (gal.)         Quantity of cement used (lbs.)         Quantity of bentonite used (lbs.)         Quantity of calcium chloride used (lbs.)         Quantity of grout prepared (gal.)		
Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	Interval perforated	
Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Yolume of grout prepared (gal.)	GROUTING	
# of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)		
Quantity of water used (gal.)     7.8       Quantity of cement used (lbs.)     94       Cement type     Type I       Quantity of bentonite used (lbs.)     3.9       Quantity of calcium chloride used (lbs.)		
Quantity of cement used (lbs.)     94       Cement type     Type I       Quantity of bentonite used (lbs.)     3.9       Quantity of calcium chloride used (lbs.)		
Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	Quantity of water used (gal.) 7.8	
Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)		
Quantity of calcium chloride used (lbs.)		
Volume of grout prepared (gal.)		
Volume of grout used (gal.) 4-5 315.		
		315.17



\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

ber Department Representative

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	WELL DECOMMISSIONING RE	CORD					-
$\langle \cdot \rangle$	Site Name: PRI-wpW	bardonment	Well I.I	): 1	M 14 2	-31	
	Site Location: Star Corner	6-7-	Driller:	2	Int	1201	· · · · · · · · · · · · · · · · · · ·
	Drilling Co.:		Inspecto	or: 🗡	evi	A Mia	132CK
			Date:	81		2010	(PM)
	DECOMMISSIONING			WET			
	(Fill in all that app		Depth	WEL	L SC	HEMATI	C*
		<i>,</i> ,	(feet)				1
	OVERDRILLING			_	5	<u>&gt;)`</u> tt	
	Interval Drilled Drilling Method(s)			$\neg$			
	Borehole Dia. (in.)		ľ	-			
	Temporary Casing Installed? (y/n)						
	Depth temporary casing installed						
	Casing type/dia. (in.) Method of installing						
		L,J		-			
	CASING PULLING						
	Method employed	CHOK Boost					]
	Casing retrieved (feet) Casing type/dia. (in)	14.6					
	Casing type/ula. (in)	PVG		-			
$\bigcirc$	CASING PERFORATING			4	15	5	
$\bigcirc$	Equipment used				12	, 3	
	Number of perforations/foot Size of perforations			$\neg$			
	Interval perforated						
				-		1	
	GROUTING						
	Interval grouted (FBLS) # of batches prepared	15.5					
	For each batch record:						
	Quantity of water used (gal.)	2.8					
	Quantity of cement used (lbs.)	94#				ĺ	1 í
	Cement type Quantity of bentonite used (lbs.)	Tope!		_			
	Quantity of calcium chloride used (lbs.)	3.7					
	Volume of grout prepared (gal.)	10	1000				
	Volume of grout used (gal.)	1.5 901	<u>319,9</u>				
	CONMENTS, 15 PT 73 IN A		г				
	COMMENTS: 15,5 Deg Well	- PVC	-			issioning data,	- !
	17.6 - 1500	mue	7		iterval gr	outed, casing le	ert in hole,
I	TAMAY Bat 4	Suchae	well stickup,	, CIU,			
	Vila A ZOLI EIS	566	The	110	$\overline{\mathcal{N}}$	/	<b></b>
$\sim$	Drilling Contractor	-	Department	epresenta	tive		<u></u>
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			]	Degree	Ac
1	WELL DECOMMISSIONING REC	CORD	J		
N)	Site Name: SPRU-Well	Abardoned	Well I.D.U(1)	~ 17	
	Site Location: Ecst Side	- (97	Driller: Rel-	the Real	
	Drilling Co.: 573		Inspector: Kee	10 M	
	-		Date: 8/16	12010 (PM)	
	DECOMMISSIONING	DATA	WELLS	SCHEMATIC*	
	(Fill in all that apply	y)	Depth		
	OVERDRILLING		(feet)		
	Interval Drilled			336.74	
	Drilling Method(s)				
	Borehole Dia. (in.)				
	Temporary Casing Installed? (y/n) Depth temporary casing installed				
	Casing type/dia. (in.)		<b></b>		
	Method of installing				
	CASING BUILT DIC				
	CASING PULLING Method employed	Table Ram			
	Casing retrieved (feet)	10'			
	Casing type/dia. (in)	I" PVC			
$\land \frown$	CASING PERFORATING		,,,,-		
d 💭	Equipment used				
	Number of perforations/foot				
	Size of perforations Interval perforated				
	interval periorated				
	GROUTING				
	Interval grouted (FBLS)				
	# of batches prepared For each batch record:				
	Quantity of water used (gal.)	7.8			
	Quantity of cement used (lbs.)	14			
	Cement type Quantity of bentonite used (lbs.)	Tysel			
	Quantity of calcium chloride used (lbs.)	<u> </u>			
	Volume of grout prepared (gal.)	10			
	Volume of grout used (gal.)	245	<u>325.04</u>		
ļ	COMMENTS: 111' TPER		* Skatch in all mission it is		
	Remyer 10 1' al	CASI M		mmissioning data, including: l grouted, casing left in hole,	
	Blow out Kitow 11	2' of acin	well stickup, etc.	a protitoti, ottomig fort ill litito,	
[	Ariate Growt /	losed of			
	Male POto	_	Kally	1 R	
	Driking Contractor		Department Representative	<u> </u>	
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Department Representative \_\_\_\_\_

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·)	WELL DECOMMISSIONING RI	ECORD		Ċ
$\sim$	Site Name: 57Ry - 12 p. Site Location: 62/46 Tunnel Act	I Aban donnet	Well I.D.: MW Driller: Refer	- 5V2-
	Drilling Co.: STB		Inspector:	is Misisste
			Date: 8/17/10	> Tues AM
	DECOMMISSIONIN			HEMATIC*
	(Fill in all that ap	ply)	Depth (feet)	
	OVERDRILLING Interval Drilled	<b></b> _	<u>33</u>	2,29
	Drilling Method(s)		_	
	Borehole Dia. (in.)			
	Temporary Casing Installed? (y/n) Depth temporary casing installed			
	Casing type/dia. (in.)			
	Method of installing			
	CASING PULLING	A Ala la		
	Method employed Casing retrieved (feet)	(3.3 (165)	<b></b>	
	Casing type/dia. (in)	Z"PV		1,1
1	CASING PERFORATING		/0.	.9
( )	Equipment used			
	Number of perforations/foot Size of perforations		- 789	F19~1
	Interval perforated			d.
	GROUTING			
	Interval grouted (FBLS)	18.4	<b></b>	
	# of batches prepared For each batch record:	<u>s</u>	_	
	Quantity of water used (gal.)	7.8		
	Quantity of cement used (lbs.) Cement type	94		
	Quantity of bentonite used (lbs.)	3.9		
	Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	10		
	Volume of grout used (gal.)	9.9 gr	3139-	
	COMMENTS: / K. 4' Daen hal	M. D. M. Press	the Olizanda for all setting a large	
	2" PVC - CASIAS	Grouted Closed	* Sketch in all relevant decommi interval overdrilled, interval gro	
	18.1-5 of Bentante of Botte		well stickup, etc.	
	1. 1. 10 STOD out Bri	moved 10 1905 (5)	N A R	<u>à</u>
$\cap$	Dryling Catractor	- PASIAL	Department Representative	pay
$\cup$	Gen	to alura		
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Day 2

	WELL DECOMMISSIONING RECORD	7
$\sim$	WELL DECOMMINISSIONING RECORD	
$\mathcal{I}$	Site Name: SPRU-Well Hourdonat	Well I.D.: MW-SV-/
	Site Location: GZ/HZ Trance Mid Aras	Driller: Ralph / Ros
	Drilling Co.: S. TR	Inspector: Kerry, Misigscel
		Date: 8/17/10 AM
	DECOMMISSIONING DATA	WELL SCHEMATIC*
	(Fill in all that apply)	Depth
	OVERDRILLING	(feet) <u>331.62</u>
	Interval Drilled	
	Drilling Method(s)	
	Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n) Depth temporary casing installed	
	Casing type/dia. (in.)	<b></b>
	Method of installing	
	CASING PULLING Min & Grouted in place	
	Method employed Fulled Case & Groted is alace	
	Casing retrieved (feet)	
	Casing type/dia. (in)	
-	CASING PERFORATING	
( )	Equipment used	- 16.2
	Number of perforations/foot	
	Size of perforations	
	Interval perforated	
	GROUTING	
	Interval grouted (FBLS)	
	# of batches prepared	
	Quantity of water used (gal.) 7.8	
	Quantity of cement used (lbs.) 94	
	Cement type	
	Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.)	
	Volume of grout prepared (gal.)	
	Volume of grout used (gal.) 7 and 3/5.4	
	COMMENTS: Mac deg Well Horal	* Sketch in all relevant decommissioning data, including:
	Bratolate tron 1.5.3 -> 16.2 1	interval overdrilled, interval grouted, casing left in hole,
1	21 Bill Chsins Grata	well stickup, etc.
l	Blog onto befor Close	fent. L
$\frown$	Drilling Contractor	Department Kepresentative
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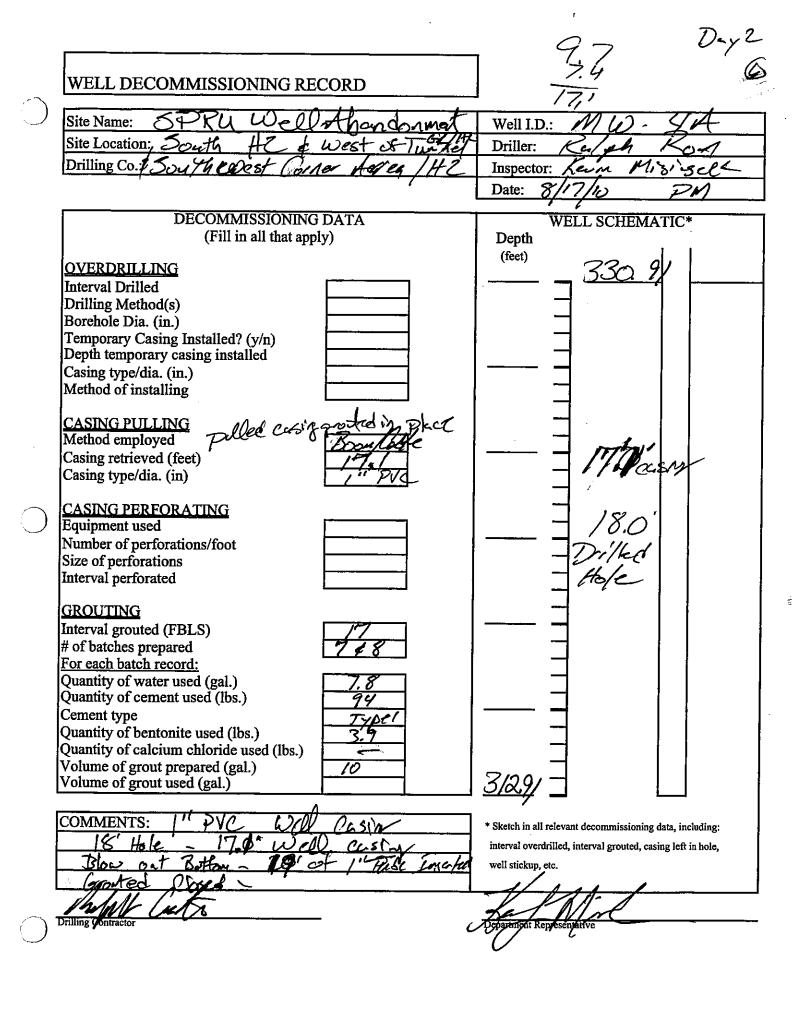
·······	
WELL DECOMMISSIONING RECORD	
Site Name: SPRU-Well Abandonat	Well I.D.: <b>U</b> W - 6
Site Location: OZ/HETmall-west	Driller: Kaloh Rol
Drilling Co.: STB	Inspector: Kein Missingele
	Date: 8/17/10 An
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth
OVERDRILLING	(feet) 33
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING on proufed in Totage	
Method employed Pulled a sin & CAS/C/Acom	·
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	17.8
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	
# of batches prepared	
For each batch record:	
Quantity of water used (gal.) 7.8	
Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.) 3 gal.	
COMMENTS: / PVC. Comme	
Intel 1 2: 1 2 M	* Sketch in all relevant decommissioning data, including:
	interval overdrilled, interval grouted, casing left in hole,
Blew out Bistion Broufed Closed	well stickup, etc.
1.11 Contra Chiser	- Andra
14411 accuts	B-IT work
Drilling Contractor	Department Representative

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Department Representative in

	·	Dey &
_	WELL DECOMMISSIONING RECORD	
$\bigcirc$	Site Name: SPRU-Well Abendonmet Site Location: South HZ	Well I.D.: $M W - 5 V 3$ Driller: $C = M + R = 1$
	Drilling Co.: SJB	Inspector: Kein Misies 240
		Date: 8/17/10 owly PM
	DECOMMISSIONING DATA	WELL SCHEMATIC*
	(Fill in all that apply)	Depth (feet)
	OVERDRILLING	33.0
	Interval Drilled	
	Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n) Depth temporary casing installed	
	Casing type/dia. (in.)	
	Method of installing	
	CASING PULLING Method employed pulled on Gif Coated in the.	
	Method employed Public Cash Cashe/Toor Casing retrieved (feet)	
	Casing type/dia. (in)	
-	CASING PERFORATING	
$\bigcirc$	Equipment used	-aso(
)	Number of perforations/foot Size of perforations	
	Interval perforated	
	GROUTING	
	Interval grouted (FBLS)	
	# of batches prepared	
	For each batch record:         Quantity of water used (gal.)	
	Quantity of cement used (lbs.) $94-94=188$	
	Cement type Quantity of bentonite used (lbs.) $7 \sqrt{r} = 7.8$	
	Quantity of calcium chloride used (lbs.)	
	Volume of grout prepared (gal.)	306.01
	volume of grout used (guil)	
	COMMENTS: 23,5 Feat of Well	* Sketch in all relevant decommissioning data, including:
	2" PVC Well Blow Out Baton	interval overdrilled, interval grouted, casing left in hole,
	23, OF 2" PVC Casi M Record	well stickup, etc.
	With I Browfed Closed	the A-M- 1
1	Drilling Contractor	Department Représentative
	A 4 Bags of Bantous techips used, Vol0 in well Are	$\mathcal{V}$
	VOID in well Are	
	- \\	

	· · ·	Dey 2
	WELL DECOMMISSIONING RECORD	
$\mathbb{C}^{2}$	Site Name: SPRU Well Site Location: South H2 - Wast & 6244	Well I.D.: MW-25
	Site Location: South H2 - West of 6-24 H. Drilling Co.: SUR	Inspector: Kern Misiballe
		Date: 8/17/10 DM
	DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
		Depth (feet)
	OVERDRILLING Interval Drilled	
	Drilling Method(s) Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n) Depth temporary casing installed	
	Casing type/dia. (in.)	
	Method of installing	
	CASING PULLING Method employed pulled acting granted in phone Casing retrieved (feet)	
	Casing retrieved (feet)	19.8
f.,		
CO	CASING PERFORATING Equipment used	- 720'
	Number of perforations/foot	- Hole
	Interval perforated	Dritter
	GROUTING Interval grouted (FBLS)	
	# of batches prepared 77	
	For each batch record:         Quantity of water used (gal.)	
	Quantity of cement used (lbs.) 942 Cement type	
	Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.)	
	Volume of grout prepared (gal.)	20014
	volume of grout used (gai.)	
	COMMENTS: 2" FVC Well	* Sketch in all relevant decommissioning data, including:
	Blow out Botton, 1932" PVC	interval overdrilled, interval grouted, casing left in hole, well stickup, etc.
	Crowfeed Close Croing Recover	de la culto a cul
$\langle  \rangle$	Drilling Pontractor 9,2	Department Représentative
1	Druing pontracion - 10.1 Decked for 19,3 DC's - no Mensurme	
	A checker for [1]	ate don't le se ment
	- U - III Mashi Me	readings clean



DAY 3

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WELL DECOMMISSIONING RECORD

$\bigcirc$		
$\bigcirc$	Site Name: SPRU - well Abandonment	Well I.D.: H-ZO
	Site Location: West of H2	Driller: Kalph / Kun
	Drilling Co.: STB	Inspector: Kevin Misiasece
		Date: 8/18/10 Am
	DECOMMISSIONING DATA	WELL SCHEMATIC*
	(Fill in all that apply)	Depth
	OVERDRILLING	(feet) 331.0
	Interval Drilled	- 40,1
	Drilling Method(s) Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n)	
	Depth temporary casing installed	
	Casing type/dia. (in.) Method of installing	
	CASING PULLING	
	Method employed Casing retrieved (feet)	
	Casing type/dia. (in)	
	Linde	
$\bigcirc$	CASING PERFORATING Equipment used	15 360 316
$\bigcirc$	Number of perforations/foot	
	Size of perforations	
	Interval perforated	$\exists u_{n} \alpha'    $
	GROUTING	- 79,7
	Interval grouted (FBLS)	
	# of batches prepared $2 - 9 = 10$	
	For each batch record:       Quantity of water used (gal.)	
	Quantity of cement used (lbs.)	
	Cement type Type 1	
	Quantity of bentonite used (lbs.) <b>2.8</b> Quantity of calcium chloride used (lbs.)	
	Volume of grout prepared (gal.)	
	Volume of grout used (gal.)	2950 290.1
	Open tole inte	
	COMMENTS: Book will - 3" Gray PVC.	* Sketch in all relevant decommissioning data, including:
	36 Voet 1:	interval overdrilled, interval grouted, casing left in hole,
	44' of Stick - 3,1 = 40,9 Deen	well stickup, etc.
	Rebelt Carte Botton and	1.1.1.1
$\bigcirc$	Drilling pontractor	Department Representative
$\bigcirc$	N/4" Steel Pine	
	11/2" steel Pipe 14 Extended about grade Ho Cap of	Deft and Drawed with
	1 MENUCE BURGE HO (ep o)	1 Bottom; Pierced into
	Ganti	11 2.5'
	SILLY	

Day 3 3

WELL DECOMMISSIONING RECORD         Site Name:       SPRU       Well Deccarristion       Well ID:       R-3004         Site Location:       LOcst-side       HZ       Driller:       ZeldA       ZeldA         Drilling Co:       Site Location:       LOcst-side       HZ       Driller:       ZeldA	
Site Location:       Dest-to'ar       HZ       Driller:       KaleA/RC         Drilling Co:       DSB       Inspector:       KarA       Mile is getter         Date:       8/18/10       KarA       Mile is getter         Date:       8/18/10       KarA       Mile is getter         OVERDRILLING       Interval Drilled       Depth       (feet)       S31.0         Drilling Method(s)       Borchole Dia. (in.)       Temporary Casing Installed? (y/n)       Depth       S31.0       Image: S31.0         Depth temporary casing installed?       Gasing type/dia. (in.)       Image: S31.0       Image: S31.0       Image: S31.0         Casing type/dia. (in.)       Image: S31.0       Image: S31.0       Image: S31.0       Image: S31.0         Casing retrieved (feet)       Casing retrieved (feet)       Casing type/dia. (in)       Image: S31.0       Image: S31.0         Casing type/dia. (in)       Image: S31.0       Image: S31.0       Image: S31.0       Image: S31.0         Casing type/dia. (in)       Image: S31.0       Image: S31.0       Image: S31.0       Image: S31.0         Casing type/dia. (in)       Image: S31.0       Image: S31.0       Image: S31.0       Image: S31.0       Image: S31.0         Casing type/dia. (in)       Image: S31.0       Image: S31	
Site Location:       Dest-to'ar       HZ       Driller:       KaleA/RC         Drilling Co:       DSB       Inspector:       KaleA/RC         Date:       B/18/10       Mile is getter         Decommissioning DATA (Fill in all that apply)       Depth (feet)       WELL SCHEMATIC*         OVERDRILLING Interval Drilled       Depth (feet)       S31.0         Driller temporary casing installed? (y/n) Depth temporary casing installed?       S31.0         Method of installing       S31.0         Casing type/dia. (in.)       For the casile         Method employed       For the casile         Casing retrieved (feet)       Casing type/dia. (in)         Casing type/dia. (in)       If to barboc         Mumber of perforations/foot       If to barboc         Size of perforations/foot       If to barboc         Interval grouted (FBLS)       Interval grouted (BLS)         # of batches prepared       Image: Set the case (get)         Quantity of catcium chloride used (lbs.)       Set the case (get)         Quantity of catcium chloride used (lbs.)       Set the case (get)         Quantity of calcium chloride used (lbs.)       Set the case (get)         Quantity of calcium chloride used (lbs.)       Set the case (get)         Quantity of calcium chloride used (lbs.)       <	<u> </u>
Drilling Co:       SGR       Inspector:       function       Maria is generative in the sector in the s	
Date:       5//5//5         DECOMMISSIONING DATA (Fill in all that apply)       WELL SCHEMATIC*         OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.)       Depth (feet)       331.0         Depth temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.)       331.0       331.0         CASING PULLING Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         CASING PERFORATING Equipment used       Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Number of perforations/foot Size of perforations Interval perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         ROUTING Interval perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Wumber of perforations/foot Size of perforations Interval perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Mumber of perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Mumber of perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Mumber of perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (	<u></u>
Date:       5//5//5         DECOMMISSIONING DATA (Fill in all that apply)       WELL SCHEMATIC*         OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.)       Depth (feet)       331.0         Depth temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.)       331.0       331.0         CASING PULLING Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         CASING PERFORATING Equipment used       Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Number of perforations/foot Size of perforations Interval perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         ROUTING Interval perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Wumber of perforations/foot Size of perforations Interval perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Mumber of perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Mumber of perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)         Mumber of perforated       Image: Casing type/dia. (in.)       Image: Casing type/dia. (in.)       Image: Casing type/dia. (	self
(Fill in all that apply)         Depth         OVERDRILLING         Interval Drilled	1
(Fill in all that apply)         Depth         OVERDRILLING         Interval Drilled	
OVERDRILLING       (feet)         Interval Drilled	
OVERDRILLING         Interval Drilled         Drilling Method(s)         Borchole Dia. (in.)         Temporary Casing Installed? (y/n)         Depth temporary casing installed         Casing type/dia. (in.)         Method of installing         CASING PUILLING         Casing retrieved (feet)         Casing type/dia. (in)         Casing type/dia. (in)         Casing retrieved (feet)         Casing type/dia. (in)         Interval perforations/foot         Size of perforations         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (lbs.)         Quantity of bentonite used (lbs.)	
Drilling Method(s)         Borchole Dia. (in.)         Temporary Casing Installed? (y/n)         Depth temporary casing installed         Casing type/dia. (in.)         Method of installing         CASING PULLING         Method employed         Quantity of perforations         Interval grouted (FBLS)         # of batche record:         Quantity of cement used (lbs.)         Quantity of cement used (lbs.)         Quantity of calcium chloride used (lbs.)         Volume of grout prepared (gal.)	
Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing CASING PULLING Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared Guantity of cement used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Temporary Casing Installed? (y/n)         Depth temporary casing installed         Casing type/dia. (in.)         Method of installing         CASING PULLING         Casing retrieved (feet)         Casing type/dia. (in)         Interval perforations/foot         Size of perforations         Interval grouted (FBLS)         # of batchs prepared         For each batch recordi:         Quantity of bentonite used (lb	
Depth temporary casing installed Casing type/dia. (in.) Method of installing CASING PULLING Method employed Pulled Catally around in Place Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of cement used (lbs.) Cement type Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Casing type/dia. (in.) Method of installing CASING PULLING Casing retrieved (feet) Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Method of installing  CASING PULLING Method employed Wilek Cash a crowled in Place Casing retrieved (feet) Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of calcium chloride used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
CASING PUILLING       pullek cashie       growdrd in Place         Method employed       pullek cashie       growdrd in Place         Casing retrieved (feet)       22'         Casing type/dia. (in)       1' 'shrvc         CASING PERFORATING       22'         Equipment used       1' 'shrvc         Number of perforations/foot       5ize of perforated         Interval perforated       1         GROUTING       16         Interval grouted (FBLS)       22         # of batches prepared       16         For each batch record:       16         Quantity of water used (gal.)       7.8         Quantity of calcium chloride used (lbs.)       7.8         Quantity of calcium chloride used (lbs.)       1         Quantity of calcium chloride used (lbs.)       1         Volume of grout prepared (gal.)       1	
Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of bentonite used (lbs.) Cement type Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of bentonite used (lbs.) Cement type Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Casing retrieved (feet) Casing type/dia. (in) CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of bentonite used (lbs.) Cement type Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Casing type/dia. (in)	
CASING PERFORATING       Equipment used       Number of perforations/foot       Size of perforations       Interval perforated       GROUTING       Interval grouted (FBLS)       # of batches prepared       For each batch record:       Quantity of water used (gal.)       Quantity of cement used (lbs.)       Cement type       Quantity of bentonite used (lbs.)       Quantity of calcium chloride used (lbs.)       Volume of grout prepared (gal.)	
Equipment used         Number of perforations/foot         Size of perforations         Interval perforated         GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (gal.)         Quantity of cement used (lbs.)         Cement type         Quantity of bentonite used (lbs.)         Quantity of calcium chloride used (lbs.)         Volume of grout prepared (gal.)	
Number of perforations/foot         Size of perforations         Interval perforated         GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (gal.)         Quantity of cement used (lbs.)         Cement type         Quantity of calcium chloride used (lbs.)         Volume of grout prepared (gal.)	
Size of perforations Interval perforated GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Interval perforated  GROUTING  Interval grouted (FBLS)  # of batches prepared  For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
GROUTING         Interval grouted (FBLS)         # of batches prepared         For each batch record:         Quantity of water used (gal.)         Quantity of cement used (lbs.)         Cement type         Quantity of bentonite used (lbs.)         Quantity of calcium chloride used (lbs.)         Volume of grout prepared (gal.)	
Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
# of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
For each batch record:         Quantity of water used (gal.)         Quantity of cement used (lbs.)         Quantity of bentonite used (lbs.)         Quantity of calcium chloride used (lbs.)         Quantity of grout prepared (gal.)	
Quantity of cement used (lbs.)     94 #       Cement type     Type I       Quantity of bentonite used (lbs.)     3.9       Quantity of calcium chloride used (lbs.)     94 #       Volume of grout prepared (gal.)     94 #	
Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	
Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	I
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	ľ
COMMENTS: 22.0 Per PVC * Sketch in all relevant decommissioning data, includin	ing <sup>.</sup>
interval overdrilled, interval grouted, casing left in hol	
Pullel 22 of 1" Concern well stickup, etc.	,
for antes Cheret	
Whether I want the second seco	
BrillingContractor	
Department Representative	

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1-	WELL DECOMMISSIONING RECORD	
$\bigcirc$	Site Name: SPRU- Well Abundanment Site Location: Westside H=2 Drilling Co.: SJB	Well I.D.: H-21 Driller: Relph/1201 Inspector: Kenin Mininseck
		Date: 8/18/10 Am
	DECOMMISSIONING DATA (Fill in all that apply)         OVERDRILLING         Interval Drilled         Drilling Method(s)         Borehole Dia. (in.)         Temporary Casing Installed? (y/n)         Depth temporary casing installed         Casing type/dia. (in.)         Method of installing         CASING PULLING         Casing retrieved (feet)         Casing type/dia. (in)         Casing type/dia. (in)         CASING PERFORATING         Equipment used         Number of perforations/foot         Size of perforations         Interval perforated	WELL SCHEMATIC*
$\bigcirc$	GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Volume of grout used (gal.) COMMENTS: COMMENTS: Comment is place / 36 deep Coll. No cosi of paulled No cosi of paulled	* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

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Day 3 D

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Site Name:		Well I.D.: 4-22		
Site Location: Northwest Side HZ			Driller: Ralph/Roz	
Drilling Co.:		Inspector: Kewin V	Arsieszer	
		Date: 8 18 10	PM	
DECOMMISSIONING		WELL SCHEM	ATIC*	
(Fill in all that app		Depth	AIIC	
	• /	(feet)		
OVERDRILLING				
Interval Drilled				
Drilling Method(s)	·			
Borehole Dia. (in.)				
Temporary Casing Installed? (y/n) Depth temporary casing installed	<u> </u>			
Casing type/dia. (in.)	<u>}</u>	<b></b>		
Method of installing	<b>├</b> ──			
		-		
CASING PULLING				
Method employed	Coront in Phale			
Casing retrieved (feet)				
Casing type/dia. (in)	3" PVC			
CASING PERFORATING		29.0		
Equipment used				
Number of perforations/foot Size of perforations	<u> </u>			
Interval perforated				
	<u> </u>	_		
GROUTING				
Interval grouted (FBLS)	390			
# of batches prepared	13114			
For each batch record:				
Quantity of water used (gal.)	15.6			
Quantity of cement used (lbs.)	188			
Cement type	Type			
Quantity of bentonite used (lbs.)	2.8			
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.) Volume of grout used (gal.)	20	292.0		
volume of grout used (gai.)	20	$\underline{C}$		
COMMENTS: OPEN CRE in	General T			
Rente	(sray 1711	* Sketch in all relevant decommissioning	-	
South in pluce	10 -	interval overdrilled, interval grouted, ca	using left in hole,	
NO CUSING VI		well stickup, etc.		
for groutes C	losed	11 1 MI-		
MALL CATO	_	Kor Mut		
Dniling Contactor	_	Department Representative		
		-		

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Site Name: SPRIA Well Kboy donnet-	Well I.D.: UW-14A
Site Location: North side NZ	Driller: Relph/Ron
Drilling Co.: SJR	Inspector: Kain Misrosect
	Date: 8/18/10 PM
DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
(1 m m an mai appry)	Depth (feet)
OVERDRILLING	(reet) 330.5
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed Casing type/dia. (in.)	
Method of installing	
°	
CASING PULLING Mal Counted in pagee.	
Method employed pulles easily (CABLE/Boon	
Casing retrieved (feet) 7.5	
Casing type/dia. (in)	] 24,2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS) 29.2 # of batches prepared 15	
For each batch record:	
Quantity of water used (gal.)	
Quantity of cement used (lbs.) 94	-
Cement type Type 1	<b></b>
Quantity of bentonite used (lbs.) 3.9	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.) Volume of grout used (gal.)	
COMMENTS: Z4,2' 1' PVC CASHA	
RIDE + Batt R ASUGE	* Sketch in all relevant decommissioning data, including:

as P Botter

Stee Blet Rod Clase 7/0 Drilling Chitractor

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Department Representative

		· · · · · · · · · · · · · · · · · · ·	De	y3
	WELL DECOMMISSIONING RI	ECORD		$\overline{O}$
()	Site Name: SPR& Well	Abardmett	Well I.D.: UW -14	
	Site Location: North Side	HZ	Driller: Relph Ro	1
	Drilling Co.: 533		Inspector: Kewin M.	
	-		Date: 8/18/10	FM
	DECOMMISSIONIN		WELL SCHEMA	
	(Fill in all that ap		Depth	
			(6	
	OVERDRILLING Interval Drilled	<b></b>	(reet) <u>330,7</u>	
	Drilling Method(s)			
	Borehole Dia. (in.)			
	Temporary Casing Installed? (y/n) Depth temporary casing installed			
	Casing type/dia. (in.)			
	Method of installing			
		I ALCO D		
	Method employed Pulled Lossing	brated In Pull		
	Casing retrieved (feet)	24.2	· •	
	Casing type/dia. (in)	Tiple	_ 28.6	
$\sim$	CASING PERFORATING	-		
$-\bigcirc$	Equipment used			
-	Number of perforations/foot		<b>_</b>	
	Size of perforations			
	Interval perforated		_	
	GROUTING			
	Interval grouted (FBLS)	78.6		
	# of batches prepared For each batch record:	L <u>/5</u>		
	Quantity of water used (gal.)	28	-	
	Quantity of cement used (lbs.)	- 94		
	Cement type Quantity of bentonite used (lbs.)	Type/		
	Quantity of calcium chloride used (lbs.)	- 3.9	-	
	Volume of grout prepared (gal.)	10 pml.	-	
	Volume of grout used (gal.)	Sgret	30216	
	COMMENTS: -> Sec 1'-FU			
	used 30 of 1" ote	- lineer	<ul> <li>* Sketch in all relevant decommissioning d interval overdrilled, interval grouted, casin</li> </ul>	-
	Blew out Botton,	Pulla 27.5 Cise		ng lett in noie,
	1 Granted Cla	Sre (	· · · · · · · · · · · · · · · · · · ·	
	Vinterto	· ·	A.M.M.A	
( )	Delling Contractor	_	Bepartment Representative	
	¥),		•	
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Dary 4

$\langle \gamma \rangle$		٠
	Site Name: 5PRU - Weel Abandon and	Well I.D.: UW-Z
	Site Location: North side (NW corn) HZ	Driller: Realph / Tin Vincot
	Drilling Co.: STB	Inspector: Kavin Misiasak
		Date: 8/19/10 AM
	DECOMMISSIONING DATA	WELL SCHEMATIC*
	(Fill in all that apply)	Depth
	OVERDRILLING	(feet)
	Interval Drilled	
	Drilling Method(s)	
	Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n)	
	Casing type/dia. (in.)	<b></b>
	Method of installing	
	Method employed Granded in place Caster Boon	
	Casing retrieved (feet)	
	Casing type/dia. (in)	
_	CASING PERFORATING	_ 27,7'
$\bigcirc$	Equipment used	
$\mathbf{\mathcal{G}}$	Number of perforations/foot	
	Size of perforations	
	Interval perforated	
	GROUTING	
	Interval grouted (FBLS)	
	# of batches prepared	
	For each batch record:       Quantity of water used (gal.)	
	Quantity of cement used (lbs.)	
	Cement type Tisel	
	Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.)	
	Volume of grout prepared (gal.)	
	Volume of grout used (gal.)	302.10
		<b> _ _</b>
	COMMENTS: 2" DVC UCCU	* Sketch in all relevant decommissioning data, including:
	Plant R.H. Sol M	interval overdrilled, interval grouted, casing left in hole,
	15" Stral Arad Black G	well stickup, etc.
	M. Latt Per Provide 12 Mart	A Lila
$\sim$	Drilling Contractor Brake off	Department Kepresentative
$\bigcirc$	DIAL OF.	
	5 D.C.	
	Grantee in place / Clased,	
	Grouted in place/clased, Broated Clased	

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Pany	Y	$\bigcirc$
		S

WELL DECOMMUNISSIONING RECORD		
Site Name: SPRU - Well About	den met Well I	LD.: 12W-1
Site Location: NW come/ Northand	e HZ Driller	
Drilling Co.: SJB	Inspec	
	Date:	8/19/10 MM
DECOMMISSIONING DATA		WELL SCHEMATIC*
(Fill in all that apply)	Depth	
OVERDRILLING	(feet)	
Interval Drilled	—   <u> </u>	330.51
Drilling Method(s)		
Borehole Dia. (in.)		
Temporary Casing Installed? (y/n)		
Depth temporary casing installed		
Casing type/dia. (in.)		
Method of installing		
Method employed	ोर्स्य	
Casing retrieved (feet)		
Casing type/dia. (in)		
CASING PERFORATING		
Equipment used		
Number of perforations/foot		
Size of perforations		
Interval perforated		
GROUTING		
	<i></i>	<b></b>
# of batches prepared	a	
For each batch record:		
Quantity of water used (gal.)	<b>-</b>	
Quantity of cement used (lbs.)		
Cement type	<del>,</del> , , , , , , , , , , , , , , , , , ,	~
Quantity of bentonite used (lbs.)		
Quantity of calcium chloride used (lbs.)		
Volume of grout prepared (gal.)		
Volume of grout used (gal.)		2, 79
COMMENTS: 2" DUC CHSM	- * Sketch in	all relevant decommissioning data, including:
Z7.6 Deep	interval ov	verdrilled, interval grouted, casing left in hole,
Ken out Botton W/2	well sticku	up, etc.
1.5" STEL/Rood Blew	ant Bottom	
14/11 Buts 201	871 N	1 this has
Brilling Jontractor 200 PVC Recover	Department	t Representative
FVU	Ceriny "	/
Rooming	d.	
I YELOVA		

Day 4 3

	WELL DECOMMISSIONING RECORD	·
1		]
$\bigcirc$	Site Name: SPRU/Well Abon deprivent	Well I.D.: H - 24
	Site Location: Northsice (NW orner) HZ	Driller: R. Jah Bar Time
	Drilling Co.: STB	
		Inspector:
		Date: 6 14/10 Art.
	DECOMMISSIONING DATA	
	(Fill in all that apply)	WELL SCHEMATIC* Depth
	(I'm m an mat uppry)	(feet)
	OVERDRILLING	(1001) 231
	Interval Drilled	
	Drilling Method(s)	
	Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n)	
	Depth temporary casing installed	
	Casing type/dia. (in.)	
	Method of installing	
	CASING PULLING	
	Casing retrieved (feet)	│─── <b>─</b> ┥
	Casing type/dia. (in)	
,		
15	CASING PERFORATING	- 41.0'
$\bigcirc$	Equipment used	
	Number of perforations/foot	
	Size of perforations	
	Interval perforated	
	GROUTING	
	Interval grouted (FBLS)	—— <b>—</b>
	# of batches prepared	
	For each batch record:	
	Quantity of water used (gal.)	
	Quantity of cement used (lbs.)	
	Cement type	
	Quantity of bentonite used (lbs.)	
	Quantity of calcium chloride used (lbs.)	
	Volume of grout used (gal.)	200 00
	Open end, well	
	COMMENTS: 3" DILC - to Remilety	×
		* Sketch in all relevant decommissioning data, including:
	(Sout is Place Clother Report	interval overdrilled, interval grouted, casing left in hole,
	Linger Class	well stickup, etc.
	ALL L ATTACK	
	YIMMA COUCOP	Yen I Manska
( )	Drilling Othfractor	Department Refresentative
		~

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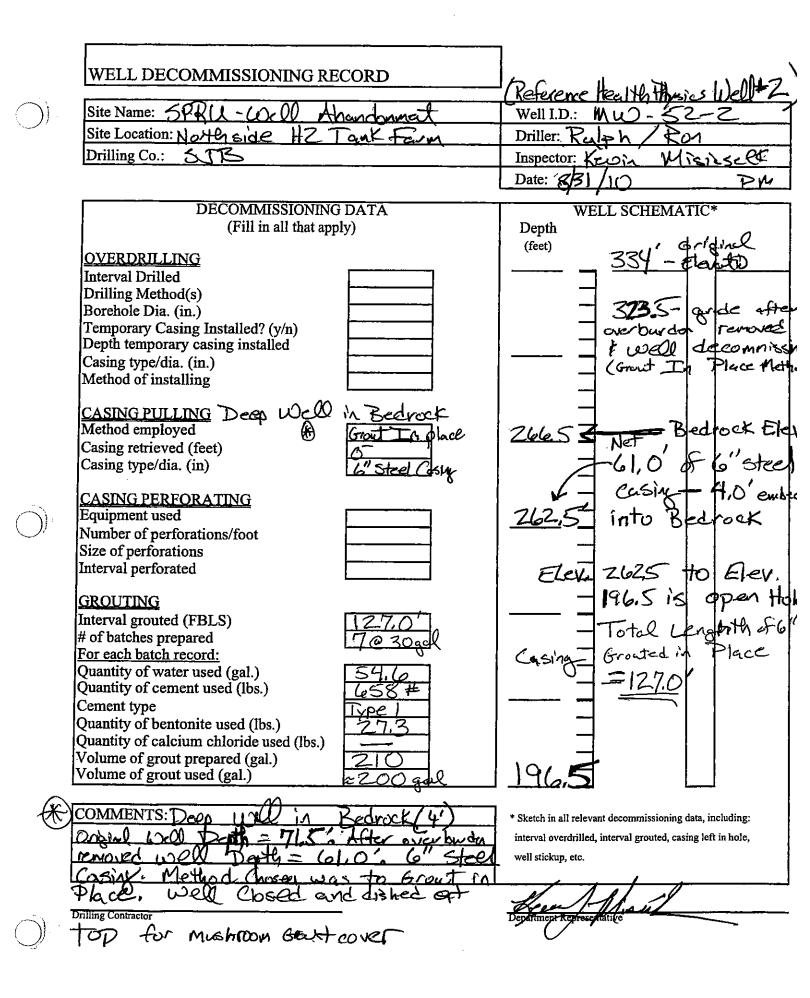
χ.

Day	4	<b>(</b> 4 <b>)</b>

			7	/	
	WELL DECOMMISSIONING REC	ORD			
$\bigcirc$	Site Name: SPRU Well A	undernat	Well I.D.:	H-26	
	Site Location: Northsolde (NW 00		Driller:	P. Jule	7
	Drilling Co.: STB			Nales /	Jun 1
			Inspector:	Keesin /W	1712 JOC
			Date:	3/19/10	4.M
	DECOMMISSIONING I	DATA	WF	ELL SCHEMATI	C*
	(Fill in all that apply	)	Depth		7
	OVEDDBULLBIG		(feet)		
	OVERDRILLING Interval Drilled		i	33.0	· .
	Drilling Method(s)				
	Borehole Dia. (in.)	<u> </u>	_		
	Temporary Casing Installed? (y/n)				
	Depth temporary casing installed				
	Casing type/dia. (in.)		·		
	Method of installing				
•			_		
	CASING PULLING				
	Method employed Grand in place	Grostic 86C			
	Casing remeved (reer)	0-		4	
	Casing type/dia. (in)	3"PVE	_	$ 0\rangle$	
$\sim$	CASING PERFORATING				
$\bigcirc$	Equipment used	·			
-	Number of perforations/foot				
	Size of perforations		_		
	Interval perforated				
	GROUTING		_		
	Interval grouted (FBLS)			Í	
	# of batches prepared	70.5			
	For each batch record:				
	Quantity of water used (gal.)	15/2			
	Quantity of cement used (lbs.)	188	-		
	Cement type	TAL			
	Quantity of bentonite used (lbs.)	178	_		
	Quantity of calcium chloride used (lbs.)			l l	
	Volume of grout prepared (gal.)	20			1 1
	Volume of grout used (gal.)	20	24,0		
	Open en				
	COMMENTS: 40.5 2 4	Ve cusing		nt decommissioning data,	· · · · · · · · · · · · · · · · · · ·
	Of reavery arout	22 in plue		interval grouted, casing l	eft in hole,
	S Atthouse Charles	100 04	well stickup, etc.	^	
	well glorg out a		- <u></u> -	Rita	
$\sim$	Drilling Contractor	Grouted	Keen!	V Minor	<u>//</u>
$\bigcirc$	ΛΛ	Closer	•Department Represen		
	1. 200	() sec A			

	·	Day 4
	WELL DECOMMISSIONING RECORD	
$\bigcirc$	Site Name: SPRIL Will Abarbarent	Well I.D.: A-28
	Site Location: North side HZ new Drilling Co.: STR Slury.	Inspector: Kersin Mixics of
	Bldy	Date: 8/19/20 AM
	DECOMMISSIONING DATA	WELL SCHEMATIC*
	(Fill in all that apply)	Depth
	OVERDRILLING	(feet) 331.5
	Interval Drilled Drilling Method(s)	
	Borehole Dia. (in.)	
	Temporary Casing Installed? (y/n)	
	Depth temporary casing installed Casing type/dia. (in.)	
	Method of installing	
	CASING PULLING	
	Method employed Grout in Place Grout in the	
	Casing type/dia. (in)	- 70.5
$\sim$	CASING PERFORATING	
$\langle . \rangle$	Equipment used	
	Number of perforations/foot	
	Interval perforated	
	GROUTING	
	Interval grouted (FBLS) 90.5	
	# of batches prepared <b>Z2473</b> For each batch record:	
	Quantity of water used (gal.)	
	Quantity of cement used (lbs.)	
	Cement type Quantity of bentonite used (lbs.)	
	Quantity of calcium chloride used (lbs.)	
	Volume of grout prepared (gal.)COVolume of grout used (gal.)CO	~~~~~
	COMMENTS: 40.5 F 3" PVC Contr	* Sketch in all relevant decommissioning data, including:
	Open End well O Decovery	interval overdrilled, interval grouted, casing left in hole, well stickup, etc.
	1 Grange Cosed / well Closed	
	Mallatt Cauto	ben Man
()	Draining Contractor	Pepartment Representative

	Duy 5 (1)
WELL DECOMMISSIONING RECORD	ton
	Reference Hea Hu Physics Well#
Site Name: SPRU-Well Abandonment	Well I.D.: Mw .52-1
Site Location: Northside/ HZ Jank Far	Driller: Ralph/Ron
Drilling Co.: SJR	Inspector: Kenig Missinger
	Date: 8/31/10 Am
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth
	(feet) Original
OVERDRILLING	<u>337.0</u> - <del>dieuti</del> s
Interval Drilled Drilling Method(s)	
Borehole Dia. (in.)	- 323,5 - grade
Temporary Casing Installed? (y/n)	- When over burd
Depth temporary casing installed	- removed & groutin
Casing type/dia. (in.)	in place occu
Method of installing	- 10.5 of Pipe CU
CASING PULLING Method employed Growt In Place -	-38.7 Dep
Method employed Growt in Higher-	
Casing type/dia. (in)	well,
CASING PERFORATING	9 - Net 28,2 of - Well to Grout.
Equipment used	- Well To Gout.
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	
# of batches prepared $\mathbb{Z}_{\mathcal{B}} = \mathbb{A}_{\mathcal{C}}^{\mathcal{A}}$	
For each batch record:	*
Quantity of water used (gal.) 31.2	
Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	20574
volume of grout used (gal.)	
COMMENTS: Police 1000 datta 287 - Chithe	
SHARE WE AN GOLD JOIN OF THE	
verturden suil removed on turk firm 10.5	interval overdrilled, interval grouted, casing left in hole,
" stell Grain cut: Top of Wells 37	23.5 well stickup, etc.
when well closed. Method chosen is	
o growt in place, well closed	and fen Allin
milling Contractor	Bepartment Representative
dished at top for mushroom gre	
cover.	



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Site Name: SPRU - Well Alfordonmat	Well I.D .: UW-9A (LA-500W-
Site Location: HZ Tank Form / South End	Driller: ADT
Drilling Co.: ADT	Inspector: Adrian Bilar
	Date: $08 - 09$
DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC* Depth
(I III III all that apply)	(feat)
OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n) Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed Grow In Place	
Casing retrieved (feet)	
Casing type/dia. (in)	12.87 300
CASING PERFORATING	4
Equipment used	
Number of perforations/foot	<b></b>
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	<b>_</b> _
# of batches prepared	
For each batch record:	
Quantity of water used (gal.)	
Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.) Volume of grout used (gal.)	319.87
volume of grout used (gal.)	
COMMENTS:	* Skatch in all relevant decommissioning data including
	* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole,
TANK Form Overhunden Suit	well stickup, etc.
Excoveted / Well Closed &	ны мен менц, не.
Revould	· · · · · · · · · · · · · · · · · · ·

Drilling Contractor

Department Representative

WELL	DECOMMISSIONING RECORD

Site Name: SPRU-Well Abandonment	Well I.D.: Uw- 9
Site Location: HZ Tank Form / South End	Driller: ADT
Drilling Co.: A DT	Inspector: Adrian Bilger
	Date: 08/04
DECOMMISSIONING DATA	
(Fill in all that apply)	WELL SCHEMATIC* Depth
	(feet)
OVERDRILLING	
Interval Drilled Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.) Method of installing	
CASING PULLING	
Method employed Grant In Pace	
Casing retrieved (feet)	
CASING PERFORATING	
Equipment used	<u>24,9</u> Z 25,0
Number of perforations/foot	
Interval perforated	
GROUTING	
Interval grouted (FBLS) 23.01 # of batches prepared	
For each batch record:	
Quantity of water used (gal.)	
Quantity of cement used (lbs.)	<b></b>
Cement type Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	2
Volume of grout used (gal.)	307.79
COMMENTS:	
	* Sketch in all relevant decommissioning data, including:
Well Closed / Growled In Mace	interval overdrilled, interval grouted, casing left in hole, well stickup, etc.
	101 Storup, 00.

Department Representative

WELL DECOMMISSIONING RE	CORD	
Site Name: SPRU Well	Abandonment	Well I.D.: UW - 8
Site Location: HZ TANK From	/ North End	Driller: AD.T
Drilling Co.: ADT		Inspector: Adrian Rilger
		Date:
DECOMMISSIONING		· · · · · · · · · · · · · · · · · · ·
(Fill in all that app		WELL SCHEMATIC*
	-))	(feet)
<u>OVERDRILLING</u>		331.3Z
Interval Drilled		
Drilling Method(s)		
Borehole Dia. (in.)		
Cemporary Casing Installed? (y/n) Depth temporary casing installed		
Casing type/dia. (in.)		
Aethod of installing		
ioniou of mouning		
ASING PULLING		
lethod employed	Grant In Place	
Casing retrieved (feet)	0	
Casing type/dia. (in)	I" PVC	
CASING PERFORATING		
Equipment used		27.2 7 27.0
lumber of perforations/foot		
ize of perforations		
nterval perforated		
ROUTING		
iterval grouted (FBLS)		
of batches prepared		
or each batch record:		
uantity of water used (gal.)		
uantity of cement used (lbs.)		
ement type		
uantity of bentonite used (lbs.)		
uantity of calcium chloride used (lbs.)		
olume of grout prepared (gal.) olume of grout used (gal.)		3147
orume of grout used (gal.)	<u></u>	
OMMENTS: (1) POU Choud	C + T m	* 01
MININIS. WELL MORE	Grout In Place	
<i>L</i>		interval overdrilled, interval grouted, casing left in hole,
· · · · · · · · · · · · · · · · · · ·		well stickup, etc.

Department Representative

	WELL	DECOM	<b><i>IISSIONIN</i></b>	G RECORD
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Site Name: SPRU-Well Aboun dommant	Well I.D.: UW - 8A
Site Location: HZ Tunk Form - North End	Driller: ADT
Drilling Co.: ADT	Inspector: Adrian Bilger
	Date: $08/09$
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth (feet)
<u>OVERDRILLING</u>	<u>331.73</u>
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n) Depth temporary casing installed	
Casing type/dia. (in.)	<b></b>
Method of installing	
CASING PULLING	
Method employed (scont In Place	
Casing retrieved (feet) Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	13,07 13,0
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	
# of batches prepared	
For each batch record:	
Quantity of water used (gal.) Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	<u>318.75</u>
COMMENTS: Well ased/Granted TA	* Sketch in all relevant decommissioning data, including:
Place-	interval overdrilled, interval grouted, casing left in hole,
Well Kemand as part of Tank	well stickup, etc.
+Arm Soll Overburden Remain	L

Department Representative

WELL DECOMMISSIONING RECORD	]
Site Name: SPRU - Well Abundonmet	Well I.D.: ()4)-18
Site Location: H2 TANK FARM / North En	
Drilling Co.: A DT	Inspector: Adrian Bilder
	Date: $0 \% / 09$
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth
<u>OVERDRILLING</u>	(feet) <u>332,19</u>
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
CASING PULLING	
Method employed Grout To Pace	
Casing retrieved (feet)	
Casing type/dia. (in)	
	18.0
CASING PERFORATING Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
nterval grouted (FBLS)	
of batches prepared	
For each batch record: Quantity of water used (gal.)	
Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Juantity of calcium chloride used (lbs.)	
/olume of grout prepared (gal.)	
Volume of grout used (gal.)	$\neg 214^{1}1$
	_
COMMENTS: Well Closed Grout. In	* Sketch in all relevant decommissioning data, including:
Place	interval overdrilled, interval grouted, casing left in hole,
	well stickup, etc.

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Drilling Contractor

Department Representative

WELL DECOMMISSIONING RECORD	
Site Name: SPRU Well Abandanci	t Well I.D.: ()W - 17
Site Location: HZ Tank Facen North End	Driller: ADT
Drilling Co.: ATDT	
	Date: 08/09
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth
	(feet)
OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n) Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed Grant In Place	
Casing retrieved (feet)	
Casing type/dia. (in) $1^{\prime\prime}$ PVC	
CASING PERFORATING	
Equipment used	728.0'
Number of perforations/foot	<b>-</b>
Size of perforations	
nterval perforated	
ROUTING	
nterval grouted (FBLS)	
of batches prepared	
For each batch record:	
Quantity of water used (gal.)	
Sement type	
Juantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	304.3
OMMENTS: 1 DROD Closed Growted Th	* Sketch in all relevant decommissioning data, including:
OMMENTS: WELL (losed Grouted In	
Place.	interval overdrilled, interval grouted, casing left in hole,
	well stickup, etc.

Department Representative

### ATTACHMENT 9

#### SPRU-AREA WELL CLOSURE REPORT

## **ATTACHMENT 9-B**

# Well Decommissioning Logs

2011

<u>WELLS</u>

B-8 UWT-1

Site Name: KAPL - SPRU Project	Well I.D.: UkiT-L
Site Location: Niekanna, Kly	Driller: R. Ciccatui
Drilling Co.: SJB Sorvices, Inc.	Inspector: J. Vincent
	Date: Collin

DECOMMISSIONING			CHEMATIC*
(Fill in all that app OVERDRILLING	oly)	Depth 4'x5' (feet) Rb	Stell - TPIC
Interval Drilled		D - (2,2)	High H
Drilling Method(s)		-	
Borehole Dia. (in.)			4 911
Temporary Casing Installed? (y/n)			PVC
Depth temporary casing installed			
Casing type/dia. (in.) Method of installing		<u> </u>	
Method of histaning			
CASING PULLING			
Method employed	Pierce + Pull		
Casing retrieved (feet)	18.0'	10-	11.0
Casing type/dia. (in)	2" PVC		
CASING PERFORATING			
Equipment used			Quarte
Number of perforations/foot		15-	1
Size of perforations			16.D
Interval perforated			B.o.H. @16.2'
GROUTING			
Interval grouted (FBLS)	A-11 21		Alter Strates
# of batches prepared	16,6		
For each batch record:			
Quantity of water used (gal.)	100010		
Quantity of cement used (lbs.)	94165	75	
Cement type	Type I/T		
Quantity of bentonite used (lbs.)	5165	_	
Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	± 20 gals		
Volume of grout used (gal.)	- 20 gals		· ·
	-10 96151		
COMMENTS: Removed 4" Pro (	asing (noisted)	* Sketch in all relevant decom	missioning data, including
	Tools place bentoute	interval overdrilled, interval	
	Femoved 2" PVC	well stickup, etc.	- ,
will an en de damage Frankling	a hale data a		1

4 topped

groat to 4 **Drilling Contractor** 

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offwi

Sc

JP rices .nc. 4 to 4' below grade for near future excavation of conduit trench through this area. Jason Litwiller 6-1-11

Department Representative

Site Name: KAPL - SPRU Project	Well I.D.: <b>B-B</b>
Site Location: Niskanuna, Aly	Driller: R. Ciccater
Drilling Co.: STB Survices, Inc.	Inspector: J. Vincent
	Date: 6/1/11

DECOMMISSIONING		WE	LL SCHEMA	TIC*
(Fill in all that appl	y)	Depth	4'x5' - J	
		(feet)	Steel 9	
<u>OVERDRILLING</u>			(Z.O'HAA)	
Interval Drilled		<u>\</u>		
Drilling Method(s)			}	
Borehole Dia. (in.)			(	1
Temporary Casing Installed? (y/n)				
Depth temporary casing installed		-		= Z"PVC
Casing type/dia. (in.)				- 2 PVC
Method of installing				
CASING PULLING				
Method employed				
Casing retrieved (feet)				
Casing type/dia. (in)				
CASING PERFORATING				
Equipment used	[]			
Number of perforations/foot		15		
Size of perforations		_		
Interval perforated				
1	L			
GROUTING				
Interval grouted (FBLS)		2o		
# of batches prepared				
For each batch record:				
Quantity of water used (gal.)	10 gals			
Quantity of cement used (lbs.)	94 bs			
Cement type	TIT	25		
Quantity of bentonite used (lbs.)	6165			
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)	= 2:0 ads			
Volume of grout used (gal.)		7.		
			12	.W.@ 30.3'
COMMENTS: Example b (2) = 4	A	* Sketch in all releve	D.O ant decommissioning	
COMMENTS: Excavate to 5,3 BGS	6 · · · · · · · · · · · · · · · · · · ·		-	
sempred 4 pro casing 4 upper 7.3	F 2" PVC well cabing	*	, interval grouted, cas	ing left in hole,
	a tremie hose to	well sticknp, etc.		
tog of 2" PVC and ever Flowed in	to excavation.			

SJB Services, Inc.

Department Representative

#### **ATTACHMENT 9**

#### SPRU-AREA WELL CLOSURE REPORT

## **ATTACHMENT 9-C**

# Well Decommissioning Logs

#### 2019

<u>WELLS</u>

KH-16 B-14 B-15 MW-6 MW-3 MW-30

Site Name: KAPL	Well I.D.: #/ KH-16
Site Location: Niskayuna NY	Driller: Zade Fordley
Drilling Co.: Cascale	Inspector: Jesse wolfe
	Date: 6-13-14

DECOMMISSIONING		1	WELL SCHEMATIC*	
(Fill in all that app	oly)	Depth		
	• /	(feet)	2 <sup>U</sup> well	
<u>OVERDRILLING</u>			4	
Interval Drilled			·····	
Drilling Method(s)				
Borehole Dia. (in.)				
Temporary Casing Installed? (y/n)		3	Remove	
Depth temporary casing installed		5	- 2	
Casing type/dia. (in.)	$\lambda''$			
Method of installing			$\neg$	
		ļ		
CASING PULLING			- Groved	
Method employed		10	- Ciover	
Casing retrieved (feet)			- in	
Casing type/dia. (in)				
		ļ	- Funct /	
CASING PERFORATING		ĺ	-	
Equipment used		15		
Number of perforations/foot			$\neg$	
Size of perforations			-	
Interval perforated	· · · · · · · · · · · · · · · · · · ·			
-	L		-1/	
GROUTING		20		{
Interval grouted (FBLS)	0'-24'		-	
# of batches prepared	1		-1 $1$	
For each batch record:	·		$\neg$	
Quantity of water used (gal.)	3.5		- /	
Quantity of cement used (lbs.)	23	24		
Cement type	Portland	-		
Quantity of bentonite used (lbs.)	1			
Quantity of calcium chloride used (lbs.)			$\neg$	l
Volume of grout prepared (gal.)				
Volume of grout used (gal.)	5			
COMMENTS:		* Skatah in all	alouant descent in the task of the	
		oketon in all r	elevant decommissioning data, including	;:

interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Site Name: KAPL	Well I.D.: #2 B-14
Site Location: NISbayuna, NY	Driller: Zuck Fordley
Drilling Co.: Cascade	Inspector: Jesse Wolfe
	Date: 6-13-19

DECOMMISSIONING			WELL SCHEMA	TIC*
(Fill in all that app	ly)	Depth	2" well	
		(feet)	a wan	
<u>OVERDRILLING</u>		0		
Interval Drilled	•			
Drilling Method(s)				henough
Borehole Dia. (in.)		2		
Temporary Casing Installed? (y/n)		ب ا		
Depth temporary casing installed		10		
Casing type/dia. (in.)				
Method of installing				
Ŭ			- Gouted	
CASING PULLING				
Method employed		20		
Casing retrieved (feet)			Grouted in place	
Casing type/dia. (in)				
			-	
CASING PERFORATING				
Equipment used		30	—	
Number of perforations/foot				
Size of perforations				
Interval perforated			<del></del>	
			—	
GROUTING		HD	-	
Interval grouted (FBLS)	0-40'			Cinta
# of batches prepared				
For each batch record:				
Quantity of water used (gal.)	\$15			
Quantity of cement used (lbs.)	47		_	
Cement type	fortland			
Quantity of bentonite used (lbs.)	2			
Quantity of calcium chloride used (lbs.)				G
Volume of grout prepared (gal.)	9			4
Volume of grout used (gal.)	8			Ego I
	·			
COMMENTS				

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Site Name: LAPL	Well I.D.: #3 B-15
Site Location: Mistayina NY	Driller: Fordley
Drilling Co.: Cascade	Inspector: Jesse wolfe
	Date: 6-13-19

DECOMMISSIONING			WELL SCHEMATIC*
(Fill in all that app	ely)	Depth	2" well is
		(feet)	2 way Th
OVERDRILLING		()	Kmere
Interval Drilled			
Drilling Method(s)			
Borehole Dia. (in.)		5	
Temporary Casing Installed? (y/n)		_	
Depth temporary casing installed		10	
Casing type/dia. (in.)		<u>^</u>	
Method of installing		5	- anouted /
CASING PULLING			
Method employed		20	Grouted in place
Casing retrieved (feet)			
Casing type/dia. (in)			
CASING PERFORATING			
Equipment used		30	
Number of perforations/foot		·····	
Size of perforations			
Interval perforated			7 1/1 1
GROUTING		21	
Interval grouted (FBLS)	<u> </u>	40	
# of batches prepared	0'-40'		
For each batch record:			
Quantity of water used (gal.)			
Quantity of cement used (lbs.)	47		
Cement type	Portland		
Quantity of bentonite used (lbs.)	2		
Quantity of calcium chloride used (lbs.)			
Volume of grout prepared (gal.)	9		
Volume of grout used (gal.)	8		
COMMENTS:		* Skatah in all	relevant decommissioning data, including:
		oreign in all	cievant decommissioning data, including:

interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Site Name: KAPL	Well I.D.: # 4 MW-6
Site Location: NISbayung NY	Driller: Zade Fordlay
Drilling Co.: Cascade	Inspector: Jesse wolfe
	Date: 6-13-19

DECOMMISSIONING	DATA	V V	VELL SCHEMA	TIC*
(Fill in all that app	ly)	Depth		
	• •	(feet)	1" well	
OVERDRILLING		0		
Interval Drilled				┨_/────
Drilling Method(s)				AP 1
Borehole Dia. (in.)				24
Temporary Casing Installed? (y/n)		-		and the second s
Depth temporary casing installed		5		2
Casing type/dia. (in.)				1
Method of installing		-		
			Grouted	
CASING PULLING		-		
Method employed		10		
Casing retrieved (feet)			Growted in place	
Casing type/dia. (in)		-	- pour	
CASING PERFORATING		-		
Equipment used		_15 -		
Number of perforations/foot		•		
Size of perforations		-		
Interval perforated		18-		
<u>GROUTING</u>		10-		24
Interval grouted (FBLS)				
# of batches prepared	0-18	-		
For each batch record:		-	_	3
Quantity of water used (gal.)	3	-	_	3
Quantity of cement used (lbs.)	20	-	_	
Cement type	Costland			
Quantity of bentonite used (lbs.)	1000 ung	-		MMM
Quantity of calcium chloride used (lbs.)		-		6
Volume of grout prepared (gal.)	4	-		3
Volume of grout used (gal.)	2.5	_		2
COMMENTS:		* Skatah in all rai		

Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

FIGURE 3	
WELL DECOMMISSIONING RECORD	
Circle Let D L	A
Site Name: THPL	Well I.D.: MW - 3
Site Location: NISKA, YUNA NJY.	Driller: Roser Boley
Drilling Co.: Cascade	Inspector:
	Date: 6-28-19
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth
OVEDDDILLDIC	(feet) / S
OVERDRILLING Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
Research and the second s	
CASING PERFORATING	
Equipment used Number of perforations/foot	
Size of perforations	
Interval perforated	
Lawrence and the second s	
GROUTING	
Interval grouted (FBLS) [894.	
# of batches prepared	
For each batch record:       Quantity of water used (gal.)	
Quantity of water used (gal.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.) $\frac{2!/2}{2}$	
COMMENTS: (inch, PUC Removed	* Sketch in all relevant decommissioning data, including:
Boar hole grouted to surface	interval overdrilled, interval grouted, casing left in hole,
	well stickup, etc.
May Duley	- 26
Drilling Contractor	Department Representative

EVOLUDE A	1
FIGURE 3	5
WELL DECOMMISSIONING RECORD	
Site Name: KAPL	WILLIAM AND
	Well I.D.: /1/1-30
Site Location: Niska yaara	Driller: Rover Bulley
Drilling Co.: Coscade Technical Services	Inspector:
	Date: 6-28-19
DECOMMISSIONING DATA	WELL SCHEMATIC*
(Fill in all that apply)	Depth
OVERDRILLING	(feet)
Interval Drilled	
Drilling Method(s) Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
0	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS) /8 PF # of batches prepared	
For each batch record:	
Quantity of water used (gal.)	
Quantity of cement used (lbs.)	
Cement type	And a second secon
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	-
Volume of grout prepared (gal.)	
Volume of grout used (gal.) $2/\nu$	
COMMENTS: [ IN PUC Reproved	* Sketch in all relevant decommissioning data, including:
Boar hole growted to surface	interval overdrilled, interval grouted, casing left in hole,
0	well stickup, etc.
Kover Suler	al
Drilling Confractor	Department Representative