

September 22, 2022

Jaebadiah Gardner GardnerGlobal, Inc. 1409 Post Alley Seattle, Washington

Sandra Matthews Washington State Department of Ecology Northwest Regional Office 15700 Dayton Avenue North Shoreline, Washington

**Re:** Opinion Related to Methane Observations During Subsurface Investigation Skyway Towncenter Redevelopment, Renton Avenue South, Skyway, Washington Project No. 200552

Dear Jaebadiah and Sandra:

Aspect Consulting, LLC (Aspect) prepared this letter summarizing observations related to methane encountered during recent subsurface investigation activities at the Skyway Towncenter Redevelopment property located at 12540 and 12600 Renton Avenue South in Skyway, Washington (the Subject Property). The methane discovery was first documented in our report entitled *Phase II Environmental Site Assessment, Skyway Towncenter Redevelopment, Skyway, Washington* dated August 29, 2022; refer to this report for additional detail on the larger investigation being completed at the Subject Property at that time. This letter provides additional information and Aspect's opinion related to the methane occurrence, as requested during a telephone conversation with Sandra Matthews of Washington State Department of Ecology (Ecology) on September 7, 2022.

Based on the information summarized below, the methane gas identified in well AMW-8D appears to represent a localized condition because it was observed in only one well of the 20-well network at the Subject Property. Because well AMW-8D is located on an undeveloped parcel of the Subject Property and is at least 75 feet away from the nearest building, there does not appear to be an exposure risk to Subject Property occupants that would require immediate action or mitigation. Therefore, the methane condition will be evaluated during the upcoming Remedial Investigation and Feasibility Study (RI/FS) phase of the project.

#### **Initial Discovery**

During drilling and monitoring well installation activities conducted on August 10, 2022, methane gas was observed to be venting from the well casing of a newly installed groundwater monitoring well located approximately 75 feet southeast of the intersection of Renton Ave S and 75th Ave S (AMW-8D; Figure 1). Aspect field representatives measured methane concentrations at the top of the well casing using a Landtec GEM 5000 series multi-gas monitor (GEM monitor). On August 10, 2022, the day of well installation, methane was measured at 75 percent. One week later on August 16, 2022, methane was measured at 69.5 percent. Since the measurement on August 16,

2022, the well casing has remained capped and secured. Other wells at the Subject Property were opened and screened for methane gas using the GEM monitor on August 10, 2022, with none detected.

#### **Subsurface Conditions**

During drilling of well AMW-8D, native glacial deposits were encountered immediately beneath the surface pavement, consisting of very dense till to 24 feet below ground surface (bgs), overlying a 9-foot thick layer of softer organic-rich silt, interpreted to represent lacustrine deposits. Beneath the silt, similar very dense till was encountered beginning at 34 feet bgs and extending to the maximum depth drilled of 41 feet bgs. Groundwater and saturated soil at the AMW-8D location is present at approximately 37 feet bgs in the deeper till unit situated below the lacustrine deposits.

The soft organic-rich silt lacustrine deposits, including lenses of peat, were observed in other borings advanced across the Subject Property at similar depths and ranging in thickness from approximately 1 foot thick to 12 feet thick, and at depths above and below the groundwater table. As indicated above, well AMW-8D was the only well with measurable methane gas in the well casing on August 10, 2022. The following table summarizes the borings, thicknesses, and depths where the lacustrine unit was encountered:

Table 1. Suili	mary of Lacustrine Dep	Josit Occurrence
Location	Depth Encountered	Total Thickness of Unit
AMW-1D	26 feet bgs	At least 5 feet
AMW-3D	17 feet bgs	12 feet
AMW-8D	24 feet bgs	9 feet
AB-17	22 feet bgs	8 feet
AB-18	25 feet bgs	5 feet
HC-15	24 feet bgs	1 foot

Table 1. Summary of Lacustrine Deposit Occurrence

In all locations where lacustrine deposits were observed, till was situated both above and below. The lacustrine deposits appear thickest at the AMW-3D location on the western Subject Property boundary, pinching out in the south and southeast directions and is bounded by wells AMW-9D to the southeast, and AMW-4D and AMW-6D to the south. The horizontal extent to the north, northeast, and west appears to extend off of the Subject Property and has not been identified.

Estimated horizontal and vertical extents of the lacustrine deposits, relative to other geologic units, the groundwater table, and well screen intervals and depths are shown in plan view on Figure 1 and cross section view on Figure 2. Boring and well construction logs are included as Attachment A.

### **Opinion**

The high-organic content and peat lenses in the lacustrine deposits is the assumed source of the methane gas observed in the well casing at AMW-8D, where the full thickness of the lacustrine deposits are exposed to the screened portion of the well. This combination of factors were not

observed at other well locations. Because methane gas was not observed in any other well in the 20 well network at the Subject Property, under current conditions methane gas in the subsurface appears to be localized to the AMW-8D area, which is an undeveloped parcel at the Subject Property and located at least 75 feet away from the nearest building. Based on this and the data available at this time, the methane condition does not appear to represent an exposure risk to Subject Property occupants that requires immediate action or mitigation.

There is potential for the combination of factors observed at well AMW-8D to exist at other uninvestigated areas of the Subject Property. Additionally, the presence of dissolved methane in groundwater has not yet been evaluated. If these conditions exist elsewhere at the Subject Property, there is potential for methane gas to be present. Changes in Subject Property conditions, such as lowering of the groundwater table due to seasonal changes or construction dewatering, could result in changes to the measurable concentrations of methane gas in the subsurface and at existing wells at the Subject Property. These potential conditions should be evaluated as part of the upcoming Remedial Investigation and Feasibility Study (RI/FS) phase of the project.

### Limitations

Work for this project was performed for GardnerGlobal, Inc. (Client), and this letter was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This letter does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Sincerely,

Aspect consulting, LLC

Ali Cochrane, LG Senior Geologist

acochrane@aspectconsulting.com

**Dave Cook, LG, CPG** Principal Geologist

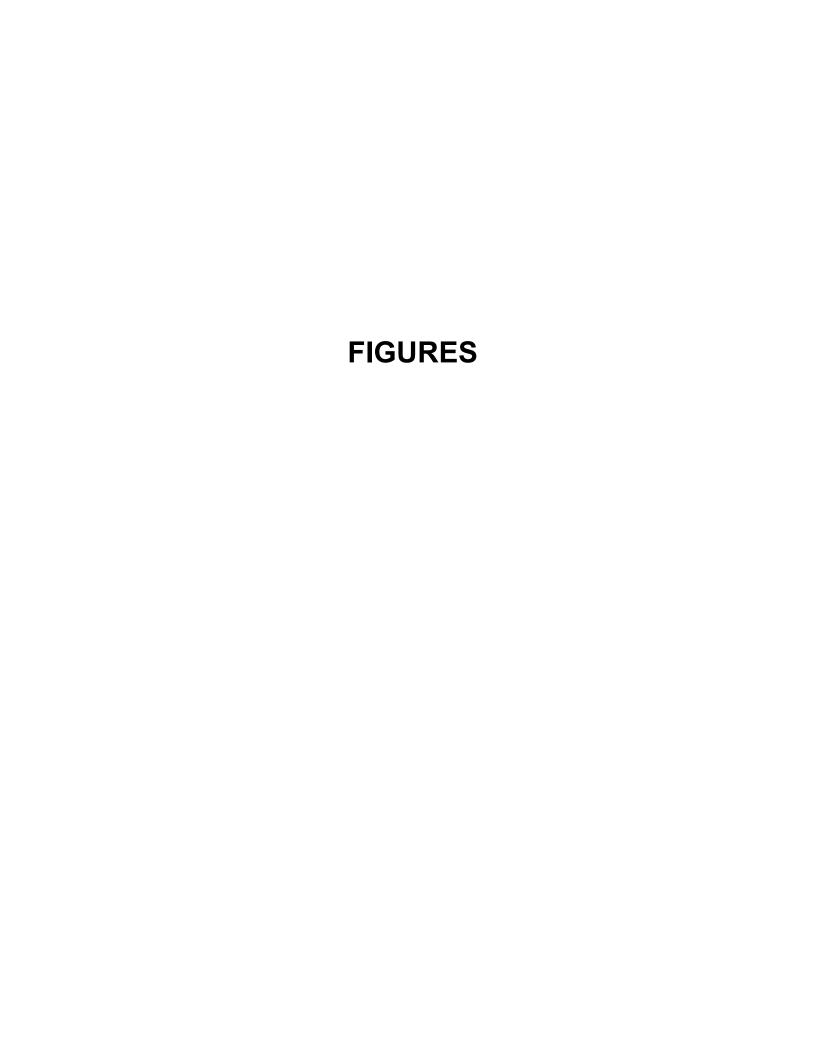
dcook@aspectconsulting.com

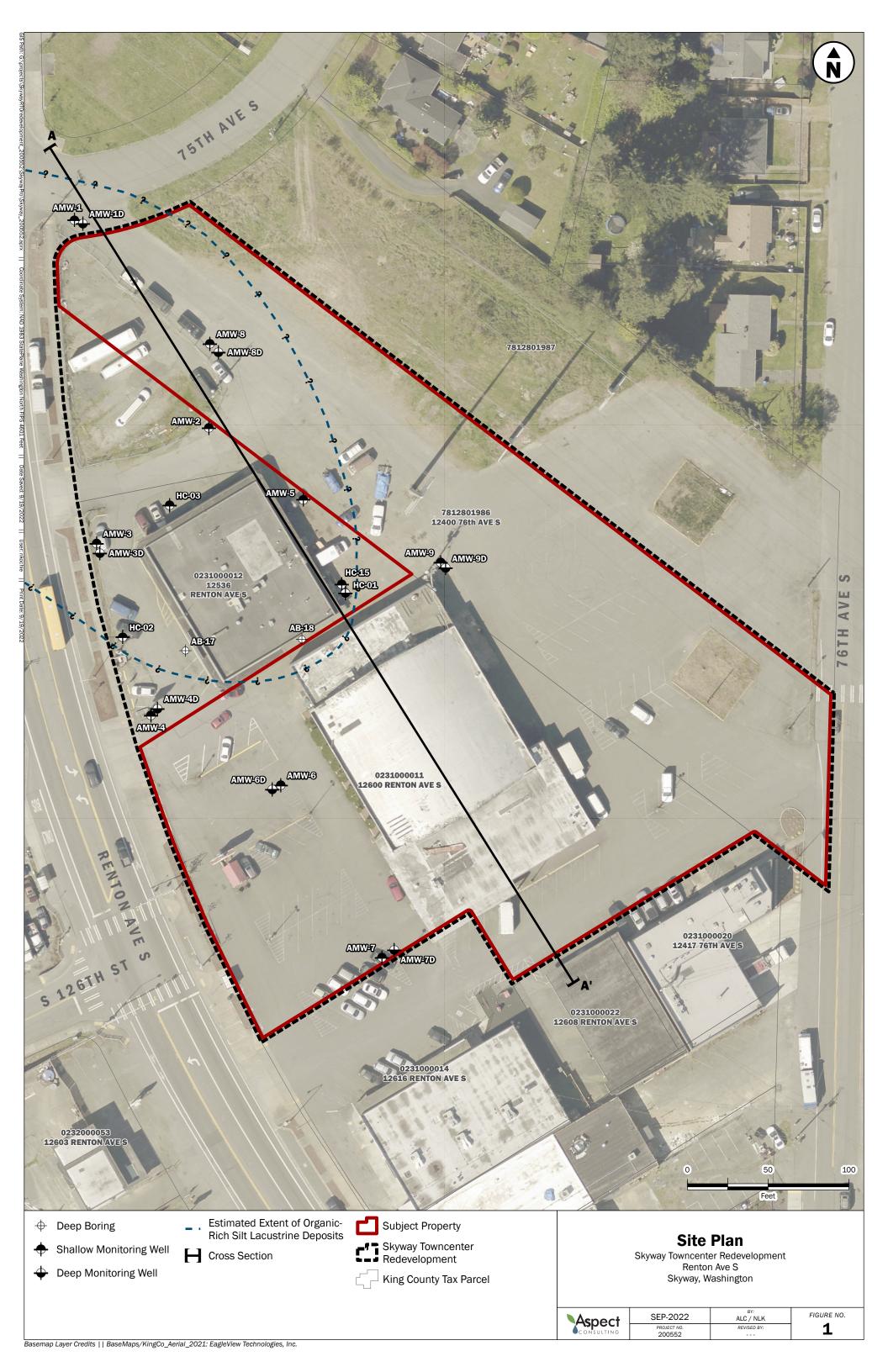
Attachments: Table 1 – Summary of Lacustrine Deposit Occurrence (in text)

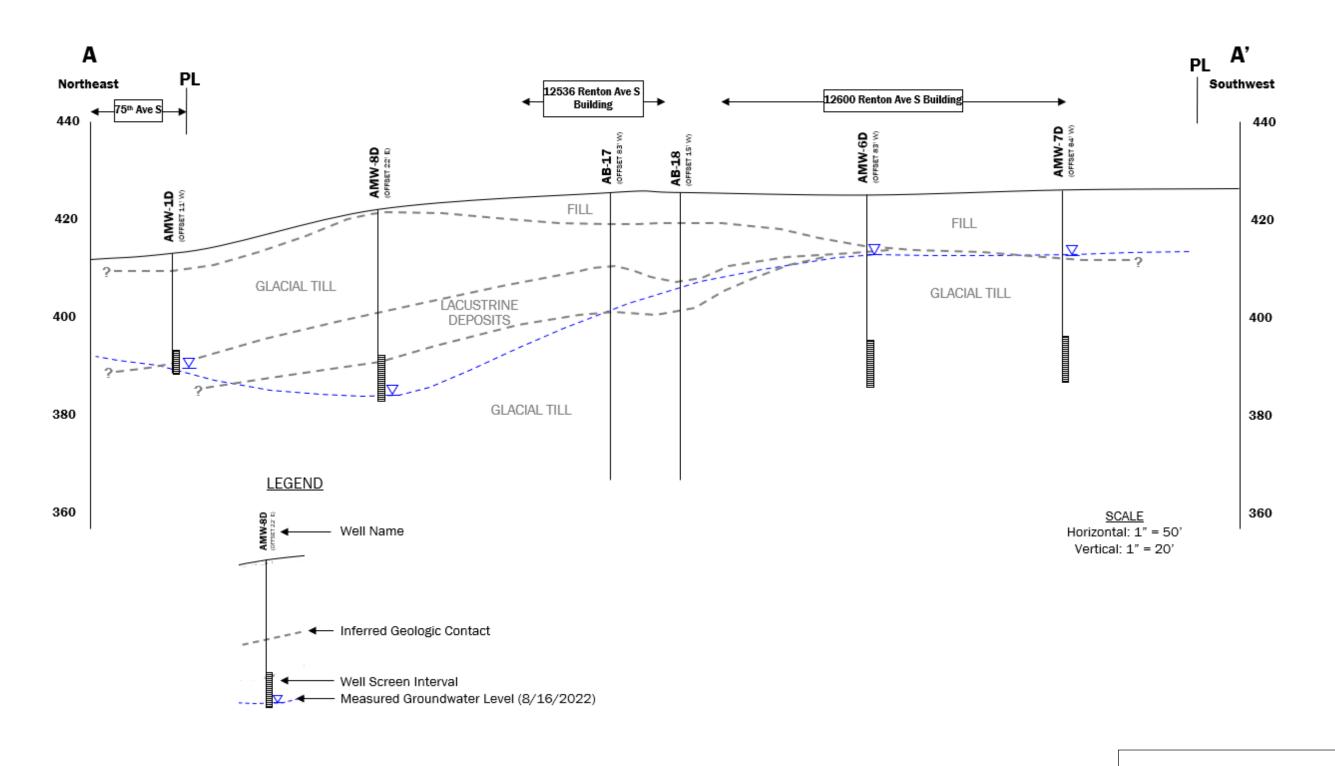
Figure 1 – Site Plan

Figure 2 – Cross Section AA'

Attachment A – Boring and Well Construction Logs







## **Cross Section AA'**

Skyway Towncenter Redevelopment Renton Avenue South Skyway, Washington

<b>Schect</b>	AUG-2022	ALC	FIGURE NO.
CONSULTING	PROJECT NO. 200552	REVISED BY:	2

# **ATTACHMENT A**

**Boring and Well Construction Logs** 

	<u> Asnact</u>	-	Skyw	ay Redevelo	<u>pment - 20</u>	0552		Environmental Ex	ploration Lo	og
7	<b>Aspect</b>		4 ~	Project Address & Site	•			Coordinates (Lat,Lon WGS84)	Exploration Num	
U	CONSULTING			and 75th Ave S, Sky			mart	47.4919, -122.2399	AB-17	7
	Contractor	Equ	uipment		Sampling Metho	d		Ground Surface Elev. (NAVD88)		•
	AEC	TSI	150 CC	Autoham	mer; 140 lb ham	mer; 30"	drop	424'		
	Operator	Explorati	ion Method	/(s) V	/ork Start/Completion	n Dates	<u> </u>	Top of Casing Elev. (NAVD88)	Depth to Water (Bel	low (
	Dan Rider		uous Cor		2/11/2022			NA NA	35' (ATD)	
		1			2/11/2022	1		11/7		$\top$
pth et)	Elev. Exploration (feet) Completio	n Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type		Description		D
T	Concre	ete					ASPHA	ALT; Road Surface		$\prod$
	Hand Hand Hand Hand Hand Hand Hand Hand	led with ad bentonite		AB-17-12.5 NWTPH-Gx, NWTPH-Dx, VOCs, PAHs, RCRA 8 Metals AB-17-20 VOCs	PID=6.1 SPT=9, 12, 19 PID=1.0 SPT=3, 7, 9 PID=0.3 SPT=2, 3, 7 PID=2.5 SPT=13, 19, 22 SPT=33, 50/6 PID=3.4		SILTYS	GLACIAL DEPOSITS  GLACIAL DEPOSITS  SAND (SM); very dense, slightly stic fines; fine to medium sand; for oarse gravel.	d; few subangular	
T							SILT (N	ML); loose, slightly moist, dark b	rown; non-plastic	
	Legend									
	-	 			vel ATD			oration Log Key for explanation	Explorati	or
Type	Continuous cor		)T\		<del>-</del>		of symbo	IS	Log	
Š	Split Barrel 2" >	K 1.375" (SP	'1)	Water			I oddod h	w. BD	LUG AB 47	
- S				S -			Logged b	9. DU 1 by: MyA 2022 04 12	AB-17	
	I			1			Approved	by: MvA, 2022.04.12	Sheet 1 of 3	

	Δ	spect	,	Skywa	<b>Ay Redevelo</b> Project Address & Site	pment - 20	0552		Environmental Ex	ploration Lo	og
7		NSULTING			<i>Project Address &amp; Site</i> Ind 75th Ave S, Sky				Coordinates (Lat,Lon WGS84) 47.4919, -122.2399	Exploration Num	
		ontractor		n Ave S a iipment		way, vvA, in fror Sampling Metho		ıııall	47.4919, -122.2399 Ground Surface Elev. (NAVD88)	AB-17	7
					A4 - 1-	, •		l duc:-			
		AEC Docator		150 CC on Method(		nmer; 140 lb ham Vork Start/Completion		arop	424' Top of Casing Elev. (NAVD88)	Depth to Water (Belo	0141
		perator									OW
	Da	an Rider	Contin	uous Core		2/11/2022			NA	35' (ATD)	_
epth	Elev. (feet)	Exploration N Completion		Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Materia Type	I	Description		
225	-400 400 	Completion	Details	Type/ID	Lab Test(s)	PID=0.0  SPT=2, 6, 7 PID=0.0  PID=0.0	Type	fines. (c	WITH GRAVEL (SP); medium dis; fine to medium sand; trace sul	ense, moist, grey;	
335	- -390 - -	<b>⊉</b> 2/11/2	022		AB-17-35 VOCs	PID=0.0 SPT=1, 3, 3 PID=0.0			nes wet. nes moist.		
40	-385 -					PID=0.0 SPT=5,8, 18 PID=0.0					
45-	380				AB-17-45 VOCs	SPT=3, 3, 6 PID=0.0			Ţ		
Sample Type	Leg	end Continuous core Split Barrel 2" X		T) :	W dater Fe e e e e e e e e e e e e e e e e e e e	vel ATD		of symbo		Exploration Log	01
Sa				;	≶ <b>-</b>			Logged by Approve	by: BD d by: MvA, 2022.04.12	AB-17	
					I			, who	~ ~ j. 18187 1, LULL.UT. 1L	Sheet 2 of 3	3

	Acnost		OKY W	ay Redevelo	pinent - 20	0332		Environmental Exploration		og
7	<b>Aspect</b>			Project Address & Site	•			Coordinates (Lat,Lon WGS84)	Exploration Num	nber
	CONSULTING			and 75th Ave S, Sky			mart	47.4919, -122.2399	AB-17	7
-	Contractor	Equ	uipment		Sampling Metho	od	_	Ground Surface Elev. (NAVD88)		•
	AEC	TSI	150 CC	Autohan	nmer; 140 lb ham	mer; 30"	drop	424'		
	Operator	Explorati	on Method(		Vork Start/Completio			Top of Casing Elev. (NAVD88)	Depth to Water (Bel	low (
	Dan Rider	Continu	uous Core	e	2/11/2022			NA	35' (ATD)	
nth				Analytical		Motorial			1 (2)	D
et)	Elev. (feet) Exploration No Completion		Sample Type/ID	Sample Ńumber & Lab Test(s)	Field Tests	Material Type		Description		
	370 Completion 370 365	DetailS			SPT=3, 3, 6  PID=0.0  SPT=6, 7, 11 PID=0.0  SPT=4, 5, 5 PID=0.0  SPT=8, 7, 12 PID=0.0	Туре	SILTY non-plas gravel.  SAND medium	WITH GRAVEL (SP); medium os; fine to medium sand; trace su continued)  SAND WITH GRAVEL (SM); loc stic fines; medium to coarse sand (SP); loose, moist, brown; trace round sand.	bangular fine ose, moist, brown; d; subangular fine	_
-	360						8-inch o	o odor observed or sheen observ uter conductor casing advanced vith bentonite plug		  -  -
†										+
+										+
+										+
Type	Legend  ☐ Continuous core  ☑ Split Barrel 2" X		)T)	Mater Le evel ∑ Water Le	vel ATD		See Exploof symbol		Exploration Log AB-17	OI

ÐΛ	cnast	3	okyway	Redevelo	pment - 20	0332		Environmental Exploration L		
	spect		-		Specific Location			Coordinates (Lat,Lon WGS84)	Exploration Num	nber
	ONSULTING			75th Ave S, Sk	yway, WA, middl		way	47.4919, -122.2396	AB-18	2
	Contractor	Equi	ipment		Sampling Metho	od		Ground Surface Elev. (NAVD88)		
	AEC	TSI 1	50 CC		nmer; 140 lb ham		drop	427'		
	Operator	Exploration	n Method(s)	V	Work Start/Completion	n Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Beld	ow (
	Dan Rider	Continu	ous Core		2/9/2022 to 2/10	2022		NA	31' (ATD)	
epth Elev	v. Exploration N	lotes and	Sample Sample	Analytical mple Number &	Field Tests	Material		Description	, ,	D
eet) (feet	t) Completion		Type/ID	Lab Test(s)		Туре	ASPHA	LT; Road Surface		-
-425 -426 -426 -415 -415 -416 -416 -416 -416 -416	Backfills Backfills of the chips.	ed with dibentonite		AB-18-2 NWTPH-Gx, TPH-Dx, VOCs AHs, RCRA 8 Metals	PID=3.5 SPT=2, 2, 3 PID=0.5 SPT=3, 3, 4 PID=0.3 SPT=18/2 PID=1.2 SPT=4, 17, 24 SPT=50/5 PID=0.0		SANDY slightly r sand; su	FILL WITH SILT (SW-SM); loose, sligtic fines; fine sand; few subang  GLACIAL DEPOSITS SILT WITH GRAVEL (ML); menoist, light grey; non-plastic fine bangular fine gravel.  SAND (SM); very dense, slightly tic fines; fine to medium sand; parse gravel.  SAND (SM); medium dense, medium sand; parse gravel.	Sedium dense, ss; fine to medium  y moist, grey; few subangular	
Le	egend									
	Continuous core	 e 6" ID			evel ATD		See Explo	pration Log Key for explanation	Exploration	on
	Split Barrel 2" X		T) Je je				-		Log	
T Z Imm	Grab sample	(01 1	Water	3			Logged b		AB-18	
n IIO	JI OI AU SAITIPIE			i .				by: MvA, 2022.04.12		

	Δα	nect		Skywa	ay Redevelo	opment - 20	0552		Environmental Ex		
7		spect			Project Address & Sit	•	٠٠ - ١٠		Coordinates (Lat,Lon WGS84)	Exploration Num	
•		NSULTING			and 75th Ave S, Si	kyway, WA, middle		way	47.4919, -122.2396	<b>AB-18</b>	3
		ontractor		quipment		Sampling Metho			Ground Surface Elev. (NAVD88)		-
		AEC	TS	I 150 CC	Autoha	mmer; 140 lb hamı	ner; 30"	drop	427'		
	С	perator	Explora	tion Method	(s)	Work Start/Completion	Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Belo	ow (
	Da	n Rider	Conti	nuous Cor	e	2/9/2022 to 2/10/2	2022		NA	31' (ATD)	
pth	Elev.	Exploration N	lotes and	Sample	Analytical	Field Tests	Material		Description	, ,	D
et)	(feet)	Completion		Type/ID	Sample Ńumber & Lab Test(s)	rieiu iests	Туре		•		
	400					SPT=9, 4, 17 PID=0.0 PID=3.2 SPT=50/3 PID=0.8		SILT (Magnets)	SAND (SM); medium dense, motic fines; fine to medium sand; finel. (continued)  ML); loose, slightly moist, dark bit with the same and t	race subangular rown; non-plastic	
+	395	√ 2/9/24	022		AB-18-33 VOCs	PID=26.2		gravel.  Becom		pangular line	
35+						SPT=8, 12, 16 PID=0.0					T
+	390					PID=0.0					  -  -
40 -	385				AB-18-39 VOCs	PID=0.0 SPT=3, 17, 12 PID=0.0			SAND WITH GRAVEL (SM); lo tic fines; medium to coarse san		+
45-						SPT=8, 11, 16 PID=0.0					
	Leg				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	aval ATD		See Explo	oration Log Key for explanation		_
۳ <u>و</u>		Continuous core				evel ATD		of symbol		Exploration	or
Sample Type		Split Barrel 2" X	1.375" (S	PT)	Water			Locacell	ve BD	Log	
o ⊢		Grab sample			د ≥			Logged b	y: BD l by: MvA, 2022.04.12	AB-18	
	1				1			~hhi o∧ec	1 Dy. 1818M, 2022.04.12	Sheet 2 of 3	,

	Aspect	;	Skywa	ay Redevelo	opment - 20	0552		Environmental Ex		
7	<b>Aspect</b>	_		Project Address & Si	•			Coordinates (Lat,Lon WGS84)	Exploration Nun	nber
•	CONSULTING			and 75th Ave S, S	kyway, WA, middle		way	47.4919, -122.2396	AB-18	3
	Contractor	· ·	uipment		Sampling Metho			Ground Surface Elev. (NAVD88)		_
	AEC		150 CC		mmer; 140 lb ham		drop	427'		
	Operator	Explorati	ion Method(	(s)	Work Start/Completion	Dates	7	Top of Casing Elev. (NAVD88)	Depth to Water (Be	low (
	Dan Rider	Contin	uous Core		2/9/2022 to 2/10/	2022		NA	31' (ATD)	
pth et)	Elev. (feet) Exploration Completic	Notes and n Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type		Description		D
50	-375			AB-18-49 VOCs	PID=0.0  SPT=7, 12, 19 PID=0.0  SPT=9, 18, 22 PID=0.0  SPT=11, 21, 27		SAND ( medium  Bottom c  Note: No 8-inch ou	SAND WITH GRAVEL (SM); loc ic fines; medium to coarse san ontinued)  SP); loose, moist, brown; trace ound sand.  f exploration at 61.5 ft. bgs.  odor observed or sheen observater conductor casing advanced the bentonite plug	d; subangular fine fines; fine to	$^{+}$
Sample	Legend  Continuous co Split Barrel 2" Grab sample	re 6" ID X 1.375" (SP	PT)	Water L Level ∑ Water L	evel ATD		of symbol		Explorati Log AB-18 Sheet 3 of 3	

	Δc	ne	100		Skyw	ay Red	evelo	pment - 20 Specific Location	0552	2	Monitoring V		,									
X		he	ect								Coordinates (SPN NAD83 ft)	Exploration Nun										
		n S U L ntractor	TING		Ave S ar	nd /5th Ave	S, Skyw	ray, WA, North co Sampling Metho		property	E:1292600 N:182870 Ground Surface Elev. (NAVD88)	<b>│ AMW-</b> 1	ID									
		AEC			150 CC		Autobon	nmer; 140 lb ham		)" drop	415.872'	Ecology Well Ta	ag N									
		perator			ion Method			Nork Start/Completio		ulop	Top of Casing Elev. (NAVD88)	BNW-217 Depth to Water (Be										
		n Rider	-	1	uous Co		•	2/8/2022			415.392'	24.51' (Stati										
epth E			ploration N		Sample	Analyti		Field Tests	Mater	al	Description	24.01 (Oldin	De									
eet) (fe			ompletion	Details	Type/ID	Sample Nu Lab Tes	st(s)	Field Tests	Туре	;			(									
- 4 - - - 5 -	415		3/8 inch	n bentonite				PID=0.0 PID=0.0 SPT=10, 33, 15		SILTY non-plase subange	ALT; Road Surface  FILL  SAND (SM); dense, slightly mois stic fines; fine to medium sand; fular gravel.  SAND (SM); dense, slightly mois stic fines; fine to medium sand; fular gravel.	ew fine	+									
4	Casing, 2 inch diam Sch 40 PVC											Casing, 2 Inch diam, Sch 40 PVC					PID=0.0 SPT=29, 50/6		moist, li	GLACIAL DEPOSITS SAND WITH GRAVEL (SM); vei ght brown; non-plastic fines; fine oarse subangular gravel.	ry dense, slightly	+
10 + 4	405		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA			AMW-1 NWTPI	H-Gx,	PID=0.0 SPT=24, 31, 50/6 SPT=50/4 PID=0.0		SAND	(SP); medium dense, moist, bro	own; trace fines;										
15- - 4	400		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		24	NWTPH-D	x, VOCs	SPT=50/3 PID=0.0		fine to n	nedium sand; trace fine subangu	ılar gravel.	† -									
+	* * * * * * * * * * * * * * * * * * * *		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA					PID=0.0					+									
20 +	395	***********	2/12 sili	ica sand	<del>2</del> 23	AMW-1 NWTPH NWTPH-D	H-Gx,	SPT=7, 6, 10 PID=0.0					+:									
mple ype		Continu		e 6" ID (1.375" (SF	PT)	.   -		ater Level evel ATD	1	of symbo		Explorati Log AMW-1I										

	taget		Skyw	ay Redevelo Project Address & Site	pment - 20	0552		Monitoring V	Well Log	
Осо	Spect INSULTING	Renton	Ave S an	Project Address & Site d 75th Ave S, Skyw	ay, WA, North co	rner of p	roperty	Coordinates (SPN NAD83 ft) E:1292600 N:182870	Exploration Number   AMW-1	
	ontractor AEC		uipment 150 CC	Autobon	Sampling Methon nmer; 140 lb ham		dron	Ground Surface Elev. (NAVD88) 415.872'	Ecology Well Ta	
	Operator		on Method		Nork Start/Completion	-	urop	Top of Casing Elev. (NAVD88)	BNW-217 Depth to Water (Beld	ow GS)
	an Rider		uous Cor		2/8/2022			415.392' 24.51' (St		
Depth Elev.	Exploration N		Sample Type/ID	Analytical Sample Number &	Field Tests	Material Type		Description		Depth (ft)
Depth Elev. (feet) (feet) (feet) 390 - 385 - 380	Completion	2022 2022 2 inch diam, PVC, 0.0020 is	Type/ID	Amalyucan Sample Number & Lab Test(s)  AMW-1D-26 NWTPH-Gx, NWTPH-Dx, VOCs	SPT=4, 5, 4 PID=0.0	Material Type	SAND fine to n (continue)  Become  SILT (I fines.	(SP); medium dense, moist, bronedium sand; trace fine subangu	ved at any depth.	-25 -30 -35
40- 375 - 45-										-40 -40 - - -45
mple ype	gend Continuous core Split Barrel 2" X Grab sample		PT)	ate	ater Level evel ATD	<u> </u>	of symbo		Exploration Log AMW-1D Sheet 2 of 2	)

	Δc	no	<b>~</b> +		Skyw	ay R	edevelo	pment - 20	0552	2	Monitoring V		
		pe		_		•		Specific Location			Coordinates (SPN NAD83 ft)	Exploration Nu	
•		TSUL1	ING		on Ave S uipment	and /5t	th Ave S, Sky	way, WA, Adjace Sampling Metho		AMVV-3	E:1292600 N:182670 Ground Surface Elev. (NAVD88)	- AMW-	3D
		AEC			150 CC		Autobox	nmer; 140 lb ham		O" drop	421.742'	Ecology Well T	ag N
		erator			ion Metho			Vork Start/Completio		•	Top of Casing Elev. (NAVD88)	BDA-299 Depth to Water (Be	elow (
		Rider			uous Co		•	2/14/2022			421.392'	9.96' (Stati	
epth			oloration N		Sample	A	nalytical	Field Tests	Mater	rial	Description	0.00 (Ctati	, <sub>D</sub>
	(feet)	Ċ	ompletion	Details	Type/ID	Janip	le Ňumber & b Test(s)	Field Tests	Тур	е	·		
5	410		concrete Casing, Sch 40 F			NW	IW-3D-2 /TPH-Gx, H-Dx, VOCs	SPT=4, 9, 22 PID=0.0  PID=0.0  SPT=10, 33, 15  PID=0.0  SPT=29, 50/6  SPT=24, 31, 50/6  SPT=50/4 PID=0.0  SPT=50/3 PID=0.0  SPT=50/3 PID=0.0		SAND Moist, be fine grave	GLACIAL DEPOSITS SAND WITH GRAVEL (SM); ver ght brown; non-plastic fines; fine ght brown; non-plastic fines; fine oarse subangular gravel.	d; few subangular y dense, slightly e to medium sand;	
Sample	Lege	ontinu	ous core rrel 2" X mple	e 6" ID 1.375" (SF	PT)	Water		ater Level		of symbo		Explorati Log AMW-3 Sheet 1 of	D

	Δ	snect		Skyw	ay Redevel	opment - 20	0552		Monitoring \		
	СО	SPECT ONSULTING Contractor		n Ave S uipment	Project Address & Si and 75th Ave S, SI			1W-3	Coordinates (SPN NAD83 ft) E:1292600 N:182670 Ground Surface Elev. (NAVD88)	Exploration Numb  AMW-3I	D
		AEC	l	150 CC		mmer; 140 lb han		drop	421.742'	Ecology Well Tag BDA-299	J No.
		<i>Operator</i> an Rider	Exploration Continu	on Method uous Co		Work Start/Completion 2/14/2022			Top of Casing Elev. (NAVD88) 421.392'	Depth to Water (Below 9.96' (Static)	
Depth (feet)	Elev. (feet)	Exploration N	lotes and Details	Sample Type/ID	Campic Number &	Field Tests	Materia Type		I Description	, ,	Dept (ft)
25-	395		2 inch diam, PVC, 0.0020 ts	The state of the s	AMW-3D-28 NWTPH-Gx, NWTPH-Dx, VOC	SPT=4, 5, 4 PID=0.0 PID=0.0	iyye	fines. (c	(SP); loose, slightly moist, dark bontinued)	trace fines, fine to	-25
- - 35-	390							Note: No 8-inch o	of exploration at 30 ft. bgs.  o odor observed or sheen observet conductor casing advanced with bentonite plug	ved at any depth. I to 15 feet and	-35
-	385										<del>-</del> -
40-	_										-40 -
- - 45-	380										_ _ _ _ _45
Sample 40-		gend Continuous core Split Barrel 2" X Grab sample		Т)	Water Level	/ater Level		of symbo		Exploratio Log AMW-3D Sheet 2 of 2	'n

	Ac	no	<b>~</b> +		Skyw	ay R	edevelo	pment - 20	0552		Monitoring V		
	4	pe	CI			•		Specific Location			Coordinates (SPN NAD83 ft)	Exploration Num	ber
_		SULT tractor	ING		on Ave S uipment	and 75	th Ave S, Sky	way, WA, Adjace Sampling Metho		1W-4	E:1292700 N:182570 Ground Surface Elev. (NAVD88)	AMW-4	D
							A 4 . 1				, ,	Ecology Well Ta	
		EC			150 CC ion Metho			mer; 140 lb hami fork Start/Completion		drop	422.542' Top of Casing Elev. (NAVD88)	BNW-215 Depth to Water (Bel	
		erator					VV	·	Dales				
		Rider			uous Co		Analytical	2/10/2022	T		422.074'	8.9' (Static)	Т
	Elev. (feet)	Expl Co	oration Not mpletion D	tes and etails	Sample Type/ID	Samp	ole Number & ab Test(s)	Field Tests	Materia Type		Description		D
		$\overline{}$	Monumen concrete	it, flush, in					ا ا ا ا	ASPHA	ALT; Road Surface		
- - - 5 -	415		Sch 40 PN 3/8 inch b	inch diam, /C		NV NWTF	//W-4D-2 VTPH-Gx, PH-Dx, VOCs. PAHs	SPT=16, 18, 27 PID=4.9 PID=0.3 SPT=26, 50/3			FILL WITH SILT (SW-SM); medium of rown; non-plastic fines; fine sandel.		+ + + + + + + + + + + + + + + + + + + +
-	415		<u>√</u> 8/16/20:	22		NV NWTF	MW-4D-7 VTPH-Gx, PH-Dx, VOCs, RA 8 Metals	PID=0.7 SPT=17, 31, 50/1		light bro	GLACIAL DEPOSITS SAND WITH GRAVEL (SM); det wn; non-plastic fines; fine to coa subangular gravel.	nse, slightly moist,	+
- 10	-							PID=1.0 SPT=50/5					
-	l LÞ	al Dal						SPT=20, 50/2 PID=0.3					
15- - -			2/12 silica	a sand				SPT=50/3 PID=0.6		-			
- 20 - -	405				<b>P</b>			SPT=50/4 PID=0.9		SAND	(SP); medium dense, wet, grey; sand.	trace fines; fine to	
-	100									·			+
	400 Legei	自山 nd								-			
Sample	_	ontinuo		 6" ID .375" (SF	PT)	Water Level	▼ Static Wa	ter Level		of symbo		Exploration Log AMW-4E	)

Vone et	Skyway	Redevelo	pment - 200	0552		Monitoring V	Vell Log	
Aspect	Proje	ect Address & Site	Specific Location			Coordinates (SPN NAD83 ft)	Exploration Nun	nber
<b>OCONSULTING</b>	Renton Ave S and 7	5th Ave S, Sky			W-4	E:1292700 N:182570	AMW-4	וח
Contractor	Equipment		Sampling Method	d		Ground Surface Elev. (NAVD88)		
AEC	TSI 150 CC		nmer; 140 lb hamr	-	drop	422.542'	Ecology Well Ta BNW-215	ay ivo
Operator	Exploration Method(s)	V	Vork Start/Completion	Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Bel	low G
Dan Rider	Continuous Core		2/10/2022			422.074'	8.9' (Static	)
oth Elev. Exploration N et) (feet) Completion		Analytical mple Number & Lab Test(s)	Field Tests	Material Type		Description		Dep (fi
et) (feet) Completion	Details Type/ID 2 inch diam, PVC, 0.0020 ts	MW-4D-30 VOCs	PID=0.0  SPT=9, 15, 20 PID=0.0  SPT=3, 7, 11 PID=0.0		Bottom of Note: No	(SP); medium dense, wet, grey; sand. (continued)  of exploration at 30 ft. bgs.  o odor observed or sheen observater conductor casing advanced with bentonite plug	ved at any depth.	(f
†								+
5-								-4
Legend  Continuous core Split Barrel 2" X Grab sample		▼ Static Wa	ater Level	,	of symbol Loaaed b		Explorati Log AMW-4I	)

	۸.	n			Skyw	ay Redev	/elc	pment - 200	<u>55</u>	<u>52</u>		Monitoring V	Vell Log	
	<b>N</b>	spe				Project Address	& Site	e Specific Location				Coordinates (SPN NAD83 ft)	Exploration Num	ber
•		NSUL1	IING		on Ave S uipment	and 75th Ave	S, S	kyway, WA, NW That Sampling Method	ai p	rop	erty	E:1292800 N:182520 (est)  Ground Surface Elev. (NAVD88)	AMW-6	D
				· '	'	A	4 - 1	, 0		00"	Lateran	, , ,	Ecology Well Ta	
		ade Drilli	ing	1	ME 85 ion Method			mmer; 300 lb hammer  Work Start/Completion D			drop	425.487' (est) Top of Casing Elev. (NAVD88)	BNE-670  Depth to Water (Bel	
		perator		8.5" OE	X 4.25"	ID		•	Jale	:5		, , , ,	1 '	
	vves	Kenned	ау	Hollow-	Stem Au	ger   Analytical		8/8/2022				424.0961' (est)	11.78' (Stati	C)
	Elev. (feet)		oloration Nompletion		Sample Type/ID	Sample Number	er & )	Field Tests		eria ⁄pe	I	Description		De (
	425		concrete	ent, flush, in				Blows (non-SPT)=4, 4, 5			ASPHA	ALT; road surface, very dense		
_	-		Casing, Sch 40	2 inch diam, PVS				PID=0.4 Sheen=No sheen			fine to m	FILL  SAND WITH GRAVEL (SM); loc nedium sand; fine subrounded to no odor; wood fibers and brick de	subangular	_
5 -								Blows (non-SPT)=2, 2, 3 PID=0.5 Sheen=No sheen Blows (non-SPT)=5, 5, 7						-
	420					AMW-6D-6 NWTPH-G		5, 7						
					Ŏ.	NWTPH-Dx, F 8, VOCs by 8 PAHs		PID=0.6 Sheen=No sheen			-			+
_			3/8 inch chips	bentonite				Blows (non-SPT)=11, 22, 24 PID=0.0 Sheen=No sheen			Becom	es dense and gray; trace fine sເ	ibrounded gravel.	-
10-	- 415 -		<b>▼</b> 8/16/2	2022	0			Blows (non-SPT)=100/6 PID=0.0 Sheen=No sheen	,		brown; le	GLACIAL DEPOSITS SILT WITH GRAVEL (ML); hat ow plasticity; fine to medium sar ded gravel; oxidation staining pr	rd, slightly moist, nd; fine to coarse	
_						AMW-6D-1 VOCs by 82		Blows (non-SPT)=28, 30, 32 PID=0.6 Sheen=No sheen						-
15-	- 410							Blows (non-SPT)=27, 30, 30 PID=0.0						+
-								Sheen=No sheen		<del>/</del>	SILTY fine san	SAND (SM); very dense, slightly d; trace fine subrounded gravel.	/ moist, dark gray;	+
- 20 - - -	405							Blows (non-SPT)=29, 50/6 PID=0.0 Sheen=No sheen			Becom	es very moist; fine to medium sa	and.	+:
Sample Type				Recovery 2.375"		Water Level	tic W	ater Level			of symbo		Exploration Log AMW-6I Sheet 1 of 2	)

	Δα	ne	<b>C</b> +	•	<b>SKyw</b>	ay Redevelo	opment - 20	J552		Monitoring V		
7	7	spe				Project Address & Sit	•			Coordinates (SPN NAD83 ft)	Exploration Num	nber
	co	NSULT	ING	Rent	on Ave S	and 75th Ave S, S			erty	E:1292800 N:182520 (est)	AMW-6	<u>;</u> [
	Co	ontractor		Equ	uipment		Sampling Metho	d		Ground Surface Elev. (NAVD88)		
(	วลรดร	ade Drilli	na	C	ИЕ 85	Autobai	mmer; 300 lb hamr	ner: 30"	dron	425.487' (est)	Ecology Well Ta BNE-670	
		perator	9		on Method		Work Start/Completion		чор	Top of Casing Elev. (NAVD88)	Depth to Water (Beld	
		•		8.5" OD	X 4.25"	ÌĎ	•	Dulos				
	Wes	Kenned	ly	Hollow-	Stem Aug	ger	8/8/2022	1		424.0961' (est)	11.78' (Statio	c)
pth	Elev.	Exn	loration N	lotes and	Sample	Analytical Sample Number &	Field Tests	Material		Description		0
et)	(feet)		ompletion		Type/ID	Lab Test(s)	i iciu iesis	Туре		·		
									SILTY	SAND (SM); very dense, slightly	/ moist, dark gray;	
									fine san	d; trace fine subrounded gravel.	(continued)	
Ť		3 8							-			Ť
									SAND	WITH SILT (SP-SM); very dens	e wet brown fine	$\dashv$
5+		3 🛭					Blows (non-SPT)=22			Im sand; no odor.	o, wor, brown, mio	´
	400						Blows (non-SPT)=22 24, 27 PID=0.0		CANID	(0)4()	·	$\perp$
+							Sheen=No sheen		no odor	(SW); very dense, wet, brown; f subrounded to rounded sand.	ine to coarse sand	',
								*****	110 0001,	subrodrided to rounded saird.		
1								*****	1			1
		3 8							1			
								,	1			
+	Ì								1			†
									1			
+			2/12 sili	ca sand				*****	1			ł
	ŀ							******		(05)		4
չ ↓	İ								odor.	(SP); dense, wet, brown; fine to	medium sand, no	1
	395						Blows (non-SPT)=19 21, 26		ouoi.			
	555						PID=0.0 Sheen=No sheen		1			
T							Chech No sheen					1
					Ŭ l							
+												+
	ŀ											
+									-			1
	ļ	: 目:										
	[											
†	ļ								1			1
		· 目:										
5+			Screen, Sch 40	2 inch diam, PVS, .01 inch			Blows (non-SPT)=17		Becom	es very dense		t
	390		slot	,			29, 30 PID=0.0			50 very 4055		
+	ŀ					AMW-6D-35.0	Sheen=No sheen					ł
	ŀ					VOCs by 8260			-			
1	į											1
	į											
	[								]			
†												†
+	ŀ											+
	Į											
0 +	Ī		bottom	сар			DI (		1			
	385						Blows (non-SPT)=19 26, 30	<b> </b>				
1							PID=0.0 Sheen=No sheen					
T												_ [
	İ		•						Bottom (	of exploration at 41.5 ft. bgs.		٦
+											alamaha 40 ta 1	t
										o odor or sheen observed at any nductor casing advanced to 11 f		
+										tonite plug	oot and scaled	+
										, ,		
1												1
_												
5+												†
	380											
	Leg	end					1					_
			Sample	Recovery		▼ Static W	/ater Level			oration Log Key for explanation	Exploration	0
Type	<b>n</b>	Split Bar		-		Water Level			of symbo	15	Log	-
⋰⋝	<b></b> '	-piit Dai	. 5. 5 /			Ns			Logged b	y: DRB	AMW-6D	)
-						-				Í by: ALC, 2022.08.25	AIIIII-OE	_

	Aspo	261		Skywa	ay Redevelo	pment - 20	0552		Monitoring V		
Y					Project Address & Site	•			Coordinates (SPN NAD83 ft)	Exploration Nun	nber
	CONSU				and 75th Ave S, S			erty	E:1292800 N:182410 (est)	AMW-7	D
_	Contracto		,	ipment		Sampling Metho			Ground Surface Elev. (NAVD88)		
Ca	ascade Dr	•		1E 85		nmer; 300 lb hami	-	' drop	426.049' (est)	Ecology Well Ta BNE-672	la
	Operator		Exploration 8.5" OD Hollow-S	) i ivietnod( X 4.25" l	(s) ID	Work Start/Completion	ı Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Be	
V	Nes Kenn	edy	Hollow-S	tem Aug	ger Analytical	8/9/2022			425.546' (est)	12.25' (Stati	c)
Depth E feet) (fe	lev. E	xploration N Completion	Details	Sample Type/ID	Sample Number & Lab Test(s)	Field Tests	Materia Type		Description		D
		Concrete	ent, flush, in e 2 inch diam, PVC					ASPHA	ALT; road surface, very dense		4
5 - 4 - 4 - 10 - 4 - 4 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	▼ 8/16/2		<b>■</b>	AMW-7D-6.0 NWTPH-Gx, NWTPH-Dx, RCR/ 8, VOCs by 8260, PAHs AMW-7D-11.0 NWTPH-Gx, NWTPH-Dx, VOCs by 8260	Blows (non-SPT)=6 7, 7 PID=0.2 Sheen=No sheen Blows (non-SPT)=4 3, 4 PID=0.6 Sheen=No sheen		Becomincrease  Becomincrease  SAND \ ot medic	es loose, moist, brown; wood fib	ases.  silt content  ers present; iron  nse, moist, gray; fine	
<u>o</u> _	Legend No So		-		Mater Mater	ater Level	<u> </u>	of symbo		Explorati Log AMW-7I	)

	Λ.	n			Skyw	ay Redeve	elopment - 20	10552		Monitoring V		
		spe				Project Address &	Site Specific Location			Coordinates (SPN NAD83 ft)	Exploration Num	nber
•		NSUL1	IING			and 75th Ave S	S, Skyway, WA, SW		erty	E:1292800 N:182410 (est)	AMW-7	ď
		ontractor		· .	uipment	_	Sampling Meth			Ground Surface Elev. (NAVD88)	Ecology Well Ta	
		ade Drill	ıng		ME 85		hammer; 300 lb han		' drop	426.049' (est)	BNE-672	•
		perator		8.5" OE	ion Method X 4.25"	ÌĎ	Work Start/Completion	u Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Belo	
Т		Kenned	-	Hollow-	Stem Au	ger Analytical	8/9/2022		1	425.546' (est)	12.25' (Statio	Ť
	Elev. (feet)		oloration N ompletion		Sample Type/ID	Sample Number Lab Test(s)	& Field Tests	Material Type		Description		De
35	400		2/12 siliu	2 ich diam, PVC, .01 inch		AMW-7D-31. VOCs by 826 RCRA 8	Blows (non-SPT)= 20, 21 PiD=0.0 Sheen=No sheet  Blows (non-SPT)= 18, 18 PiD=0.0 Sheen=No sheet	17.	SILTY fine to n	SAND WITH GRAVEL (SM); do coarse sand; fine to coarse subro so without gravel at 21ft; silt contied)  WITH SILT (SP-SM); dense, must and with white grains; trace fir ided gravel.  SAND (SM); medium dense, must medium sand with white grains.	punded gravel; ent increases.  Dist, gray; fine to the to coarse  Dist, light brown;	_
									outer co	onductor casing advanced to 15 intonite plug	feet and sealed	
												I
5+												
Type			Sample rrel 3" X	Recovery 2.375"		Water Level	Water Level	<b>'</b>	of symbo		Exploration Log	

	۸.	·n^	<b>~</b> +	,	Skyw	ay F	Redevelo	pment - 20	0552		Monitoring V		
	<b>N</b>	spe				•		Specific Location			Coordinates (SPN NAD83 ft)	Exploration Nun	
		NSULT ontractor	ING		nton Ave iipment	e S and	1 /5th Ave S,	Skyway, WA, SE Sampling Metho		<i>I</i> -1	E:1292700 N:182810 (est)  Ground Surface Elev. (NAVD88)	- AMW-8	
		ade Drilli	na		лр.лол. ЛЕ 55		Autohan	nmer; 140 lb ham		" drop	422.474' (est)	Ecology Well Ta BNE-674	ag No
		perator	9	Exploration	on Metho	d(s)		Vork Start/Completion		<u>а. ър</u>	Top of Casing Elev. (NAVD88)	Depth to Water (Bel	low G
	Wes	Kenned	ly	8.5" OD Hollow-S	X 4.25' Stem Au	ger ID		8/10/2022			NA	37.89' (Stati	c)
Depth (feet)	Elev. (feet)	Exp Co	loration No	otes and Details	Sample Type/ID	Sam	Analytical ple Number & .ab Test(s)	Field Tests	Materia Type	al	Description		De (1
		1_1		ent, flush, in			ab rest(e)			ASPHA	ALT; road surface, very dense		
5 -	420			e 2 inch diam, PVC bentonite		NV NWTF	MW-8D-5.0 MTPH-Gx, PH-Dx, RCRA DCs by 8260, PAHs	Blows (non-SPT)=3 50/6 PID=0.0 Sheen=No sheen  Blows (non-SPT)=50/6 PID=0.0 Sheen=No sheen  Blows (non-SPT)=100/6 PID=0.0 Sheen=No sheen		SILTY significant strength of the strength of	GLACIAL DEPOSITS SAND WITH GRAVEL (SM); de ine to medium sand with trace of subrounded to subangular grave nes very dense	nse, slightly moist, coarse sand; trace l; no odor.	
15-	- 410 -							Blows (non-SPT)=100/6 PID=0.0 Sheen=No sheen Blows (non-SPT)=70/6 PID=0.0			nes brown, slightly moist		- - - -1
20 -	405							Blows (non-SPT)=3 50/6 PID=0.0 Sheen=No sheen	6.	SAND	WITH SILT (SP-SM); dense, m sand; no odor; oxidation stainin	oist, gray; fine to g present at 20.5ft	
Sample	Leg			Recovery 2.375"		Water Level	▼ Static Wa	ater Level	<u> </u>	of symbo		Explorati Log AMW-8I	)

	٨.	· m -	<b></b>		Skyv	vay F	Redevelo	pment - 20	0552		Monitoring \		
7	4		ect			Projec	ct Address & Sit	e Specific Location			Coordinates (SPN NAD83 ft)	Exploration Nun	nber
(		NSUL				e S and	75th Ave S,	Skyway, WA, SE		/-1	E:1292700 N:182810 (est)	AMW-8	ח
		ontractor			uipment			Sampling Meth	od		Ground Surface Elev. (NAVD88)	Ecology Well Ta	
(		ade Dril	ling	_	ME 55			mmer; 140 lb ham		" drop	422.474' (est)	BNE-674	-
		perator		Explorate 8.5" OE	X 4.25	ī" ÌĎ		Work Start/Completic	n Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Bel	
ı	Wes	Kenne	edy	Hollow-	Stem A	uger	A lust	8/10/2022			NA	37.89' (Stati	c)
	Elev. (feet)		ploration N Completion		Sampl Type/II	e  Sam	Analytical ple Number & .ab Test(s)	Field Tests	Materia Type		Description		D
	-									medi (cont	ND WITH SILT (SP-SM); dense, m um sand; no odor; oxidation stainir iinued)	ng present at 20.5ft	
25-	-		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA					Blows (non-SPT)=2 50/6 PID=0.0 Sheen=No sheer		SIL	T (ML); hard, moist, gray; trace fi	ne sand; no odor.	-: -:
0-	395		2/12 sili	ca sand				Blows (non-SPT)=4 50/6 PID=0.0 Sheen=No sheer	11,	ft; 0.	comes gray black; 0.5-inch sand ler 5-inch wood debris with black color I at 31.5ft.	nse present at 30.5 ation and burnt	+
5-	390		Screen, Sch 40	2 inch diam, PVC, .01 inch				Blows (non-SPT)=100/6 PID=0.0 Sheen=No sheer			ND WITH SILT (SP-SM); very dens fine to medium sand; no odor.	se, very moist to	  -  -  -
0-	385		▼ 8/16/2			NV NWTI	W-8D-40.0 WTPH-Dx, PH-Gx, VOC: by 8260	PID=0.0	33.	Bec	comes dense		-
45-	- 380 -							Sheen=No sheer		Note:	om of exploration at 41 ft. bgs.  : No odor or sheen observed at any conductor casing advanced to 10 bentonite plug	/ depth. 8-inch feet and sealed	+
Type			Sample arrel 3" X	Recovery 2.375"		Water	▼ Static W	ater Level		of syn	Exploration Log Key for explanation inbols ed by: DRB oved by: ALC, 2022.08.25	Explorati Log AMW-8I Sheet 2 of 2	)

	۸.	n			Skyw	ay R	edevelo	opment - 200	)55 <u>2</u>	2	Monitoring V		
		spe				-		e Specific Location			Coordinates (SPN NAD83 ft)	Exploration Num	ber
•		NSUL	TING			and 7	5th Ave S, S	Skyway, WA, NE Th		perty	E:1292900 N:182660 (est)	AMW-9	D
	Co	ontractor		Eq	uipment			Sampling Method	1		Ground Surface Elev. (NAVD88)	Ecology Well Ta	
	Casca	ade Drill	ing	CI	ME 85		Autohar	mmer; 300 lb hamn	ner; 30	)" drop	426.986' (est)	BNE-676	y IV
	С	perator			ion Method			Work Start/Completion	Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Beld	ow G
	Wes	Kenne	dy	8.5" OE Hollow-	) X 4.25" Stem Au	ger UU		8/11/2022			426.524' (est)	13.31' (Statio	c)
epth	Elev. (feet)		ploration N		Sample Type/ID	Samp	nalytical le Number &	Field Tests	Materi Type		Description		De
.501)	(1001)	<u>3 1</u>	Monume	ent, flush, in	, ype/iD	La	ab Test(s)		, ype		ALT; road surface, very dense		+
			Concrete	2 inch diam, PVC							FILL		$\dashv$
_	- - 425		Sch 40	PVC				Blows (non-SPT)=17 11, 12 PID=0.0 Sheen=No sheen		moist, li	SAND WITH GRAVEL (SM); me ght brown; fine to coarse sand; fided to subangular gravel; brick of t concentration increses with dep	ine to coarse debris present; no	† †
_	_							Blows (non-SPT)=7, 6, 4 PID=0.0 Sheen=No sheen		Becom	es loose, gray brown; iron oxide	staining present.	_
5 -	-							Blows (non-SPT)=7, 22, 24 PID=0.0 Sheen=No sheen			GLACIAL DEPOSITS SAND WITH GRAVEL (SM); der arse gravel with socketing oberve	nse, slightly moist;	+
-	- 420 -						W-9D-7.5 Ss by 8260	Blows (non-SPT)=37 50/6 PID=0.3 Sheen=No sheen					+
10-	_							Blows (non-SPT)=37 50/6 PID=0.1 Sheen=No sheen		<b>N</b>	nes very dense, moist, gray VITH SAND (ML); hard, moist, g	ray; trace gravel;	+
-	LE		<b>▼</b> 8/16/2	2022				Blows (non-SPT)=16 23, 24 PID=0.2 Sheen=No sheen		SILTY moist, g	stic; fractured layers. SAND WITH GRAVEL (SM); ve ray brown; fine to medium sand; ided to subangular gravel.		/
- 15-	_							Blows (non-SPT)=22 24, 26 PID=0.0 Sheen=No sheen					
-	- 410 -		3/8 inch chips	bentonite						SILT V subrour	VITH SAND (ML); hard, moist, g ided to subangular gravel; conso	ray; fine to coarse lidated material.	+
- 20 - -	_				0		V-9D-21.0 Ss by 8260	Blows (non-SPT)=17 20, 21 PID=0.3 Sheen=No sheen		coarse s	WITH SILT (SP-SM); dense, mosand; fine to coarse gravel. WITH SAND (ML); hard, moist, gose present; trace gravel.		+
Sample	Leg	end No Soil	Sample	Recovery 2.375"		Water Level	▼ Static W	ater Level		See Expl of symbo	oration Log Key for explanation	Exploration Log	
Saı	•	-				Le 🤅				Logged to Approve	by: DRB d by: ALC, 2022.08.25	AMW-9D Sheet 1 of 2	

	cno	<b>~</b> +		Skyw	ay Redevelo	pment - 200	)55 <u>2</u>		Monitoring V		
	spe		_		Project Address & Site	•			Coordinates (SPN NAD83 ft)	Exploration Nun	nber
	ONSULT	ING			and 75th Ave S, S			erty	E:1292900 N:182660 (est)	AMW-9	n
(	Contractor		Equ	ipment		Sampling Metho	d		Ground Surface Elev. (NAVD88)		
Caso	cade Drillin	ng	CN	1E 85	Autohar	nmer; 300 lb hamr	ner; 30"	drop	426.986' (est)	Ecology Well Ta BNE-676	ay IV
	Operator		Exploration	on Method	(s) I	Nork Start/Completion	Dates		Top of Casing Elev. (NAVD88)	Depth to Water (Bel	low G
We	s Kennedy	,	8.5" OD Hollow-S	X 4.25" Stem Auc	ger	8/11/2022			426.524' (est)	13.31' (Stati	c)
pth Elev.	T	oration Not		Sample	Analytical		Material			1 (	De
et) (feet)		mpletion D		Type/ID	Sample Ňumber & Lab Test(s)	Field Tests	Туре		Description		
5 - 400 - 400 - 395 - 390 - 385 - 385 - 5 - 5		2/12 silica Screen, 2 Sch 40 PN slot	inch diam, /C, .01 inch		AMW-9D-40.0 VOCs by 8260	Blows (non-SPT)=17 20, 20 PID=0.0 Sheen=No sheen  Blows (non-SPT)=14 16, 20 PID=0.0 Sheen=No sheen		SAND medium trace fin	WITH SILT (SP-SM); dense, most and, trace fine to coarse gravel.  WITH SILT (SP-SM); dense, most and; small 3-inch silty lense of e gravel.  Of exploration at 41.5 ft. bgs. or odor or sheen observed at any notice plug	oist, gray; fine to oserved at 31ft;	
Le	gend No Soil S Split Barr		-		Water Level Tevel ▼ Static W	ater Level		of symbo		Explorati Log AMW-9I	on O