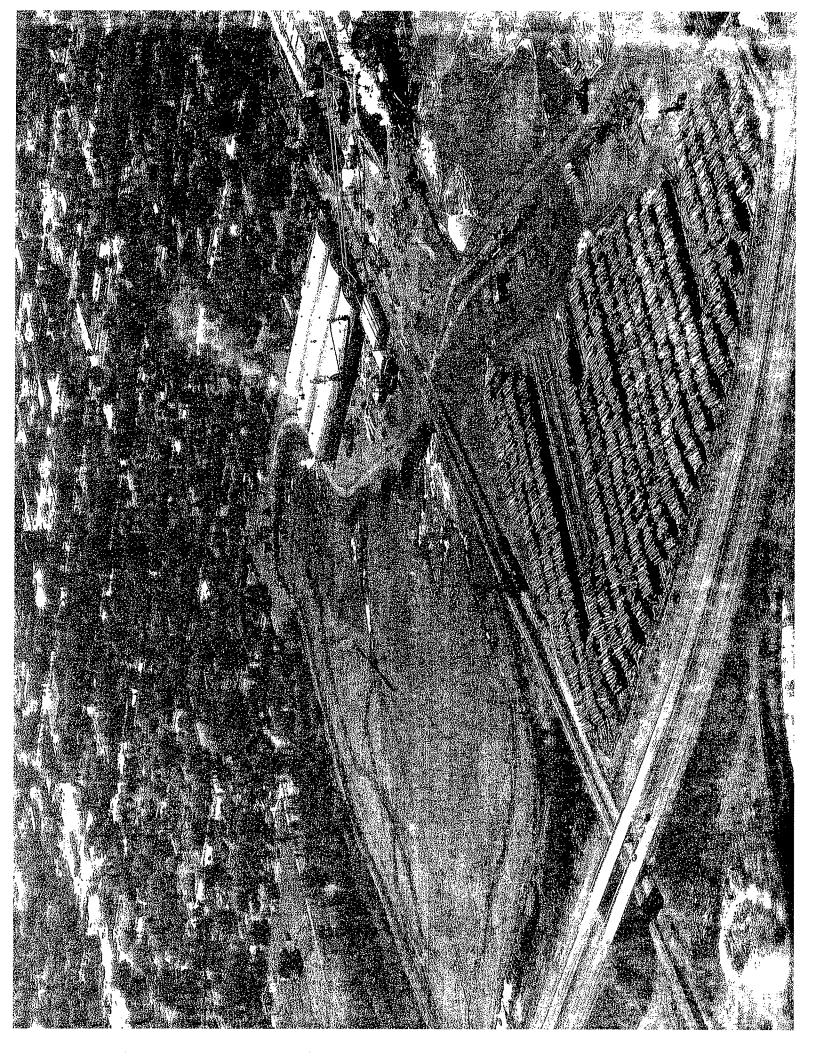
APPENDIX A HISTORICAL PHOTOGRAPHS OF DRAINED SOUTHERN LOG POND





APPENDIX B TEST PIT LOGS AND SOIL BORING LOGS

SOIL CLASSIFICATION

Classification of soils in this report is based on visual field estimates and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates of ASTM D 2488 were used as an information guide. Dual symbols are used to indicate borderline soil classifications.

	MAJOR DIVISIO	NS	SYME GRAPH	LETTER	TYPICAL DESCRIPTIONS
	GRAVEL AND	CLEAN GRAVELS	0.000	GW	WELL-GRADED GRAVELS, GRAVEL - BAND MIXTURES, LITTLE OR NO FINES
COARSE	GRAVELLY SOILS	(LITTLE OR NO FINES)	00000	GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
GRAINED	(MORE THAN 50% OF	GRAVELS WITH FINES	0000	GM	BILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
SOILS	COARSE FRACTION RETAINED ON #4 SIEVE)	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - BAND - CLAY MIXTURES
(MORE THAN 50% OF	SAND AND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MATERIAL IS LARGER THAN #200 SIEVE SIZE)	SANDY	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	(MORE THAN 60% OF	SANDS WITH FINES		SM	SERVITXM THE - GIAS SANNE STILE
	COARSE FRACTION PASSING ON #4 SIEVE)	(APPRECIABLE AMOUNT OF FINES)		,sc	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORDANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SELTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SUIGHT PLASTICITY
FINE GRAINED	SILTS AND CLAYS	(Liquid Limit Less Than 50)		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
SOILS				OL	ORGANIC BILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
(MORE THAN 60% OF				МН	Inorganic Bilts, Micaceous or Diatomaceous fine sand or Bilty Boils
MATERIAL IS SMALLER THAN #200 SIEVE SIZE)	SILTS AND CLAYS	(LIQUID LIMIT GREATER THAN 50)		СН	INORGANIC CLAYS OF HIGH PLASTICITY
				ОН	organic clays of medium to high plasticity, organic silts
HI	GHLY ORGANIC	soils .	77 77 7	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

DENSITY/C	CRISNO		SAMPLING LEGEND				
Soil density/o and is estim	consister nated ba	ncy in borings is re sed on visual obse	lated prim ervations a	arily to the Standand in the standard in the s	ard Penetration Resistance, n the soil description.	AC = Auger Cuttings SS = Split Spoon	
SAND or GRAVEL Density Very loose Loose Medium dense Dense Very dense		Standard penetration Resistance in Blows/ft. 0 - 4 4 - 10 10 - 30 30 - 50 >50		SILT or CLAY Consistency Very soft Soft Medium stiff Stiff Very stiff Hard	Standard penetration Resistance in Blows/ft. 0 - 2 2 - 4 4 - 8 8 - 15 15 - 30 >30	ST = Shelby Tube CB = Core Barrel GP = Geo-Probe RC = Rock Core PT = Packer Permeability Test HA = Hand Auger	
MINOR CO	UTITEN	ents	MOIS	TURE		COMMENTS	
Trace Few Little Some	Few 5 - 15% Little 15 - 25%			-	ble moisture optimum moisture content ole moisture probably	MSL=Mean Sea Level bgs=Below Ground Surface HSA=Hollow Stem Auger TOC=Top of Casing	

WATER LEVEL MEASUREMENT

∑ Depth to water encountered during first sampling event

Depth to water encountered during second sampling event

☑ Depth to water encountered during third sampling event

Note: Water level measurements shown on the logs represent conditions at the time indicated and may not reflect static levels.



DATE	07/06
DWN.	BDT
APPR.	MOS
REVIS.	
PROJEC	CT NO.
001.022	21.00004

FIGURE B-1 CLOSED CITY OF YAKIMA MUNICIPAL LANDFILL YAKIMA, WASHINGTON

S	<u> </u>	P	All .		venue Si	021	TEST PIT NUMBER TE				
SLRT	LJ.	11 ational		one: 42	25.402.8						
			of Yakima			DDO IECT NAME City of Vo	DDO IECT MARKE City of Volding Landell				
i i			MBER 001			PROJECT NAME City of Ya PROJECT LOCATION Yaki					
				_		COMPLETED 1/26/09 GROUND ELEVATION 106:					
1						R Wyser Construction GROUND WATER LEVELS:					
1			DRILLING				TION Dry				
_	AL.			(S)	ဋ			Ê			
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ON	(mdd)			
۵	IN	 -	Ž	S.	GR.			임			
0											
					37.7	WOOD WASTE, brown, organic, intermixed with gravel, m	ioist.				
					1 34			0.6			
ļ .					17. 7. 7.						
					2 7.7						
ļ .					1/2 3/2						
					36.7						
					12 34						
					11.10						
·					4.44						
5					77.7	5.0	1057.5				
					EXIC	SILTY GRAVEL, yellow brown, fine to coarse gravel, roun					
					M'						
·				GM							
						7.0	1055.5				
						SANDT SILT, dark brown, some line- to coarse-grained sa	and, trace graver, moist.				
				ML		*					
						9.0	1053.5				
						MUNICIPAL SOLID WASTE, plastic bags, wire, trash.					
10					\bowtie			0.6			
	1				\bowtie						
					\bowtie						
·	1		1		\bowtie						
					\bowtie						
<u> </u>	1			į	\bowtie		p ^r				
							·				
<u> </u>	1				\bowtie						
					\bowtie	14.0	1048.5				
	اا		ı		XXXX	Test pit completed at 14.0 feet.	1040.0	I			
RE	МΔ	RKS									
Pit 2											
RE Pit 2	/ate	r leve	l at time of	excav	ation.						

SI SLR In	terna	R #	Bothel	l, Wash none: 42	venue SE iington 9802 25,402,8800 8488		
CLIEN	NT _	City of	Yakima			PROJECT NAME City of Yakima Landfill	
PROJ	ECT	NUMI	BER <u>001</u>	.0221	.00004	PROJECT LOCATION Yakima, Washington	
DATE	STA	ARTEC	1/26/09	9	C	OMPLETED 1/26/09 GROUND ELEVATION 1064.84 ft HOLE SIZE	
EXCA	VAT	ION D	RILLING	CONT	RACTOR	Wyser Construction GROUND WATER LEVELS:	
EXCA	VAT	ION D	RILLING	METH	OD Exca	AT TIME OF EXCAVATION Dry	
LOGG	ED	BY B	. Robinso	n	CI	HECKED BY AT END OF	
NOTE	s _					AFTER EXCAVATION	
DEPTH (ff)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
5				GW	0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WOOD WASTE, dark brown, organics, intermixed medium gravel, wood mulch. SANDY GRAVEL, gray, fine to coarse gravel, cobbles (up to 6"), some fine- to coarse-grained sand, dense, moist.	1058.8
_ 10 _					9.0	MUNICIPAL SOLID WASTE, gray, intermixed trash, plastic, glass.	1055.8
-	Ll.			<u> </u>	KXXXX 111.	.0 Test pit completed at 11.0 feet.	1053.8
REI Pit 1		RKS 5'					
SLR GENER	/ate	· level	at time of	excav	/ation.		

SIR 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800	PAGE 1			
SLR International Corp Fax: 425.402.8488				
CLIENT City of Yakima	PROJECT NAME _City of Yakima Landfill			
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington			
DATE STARTED <u>1/26/09</u> COMPLETED <u>1/26/09</u>				
EXCAVATION DRILLING CONTRACTOR Wyser Construction	GROUND WATER LEVELS:			
EXCAVATION DRILLING METHOD Excavator				
LOGGED BY B. Robinson CHECKED BY				
NOTES	AFTER EXCAVATION	·		
O DEPTH INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)		
5 6 6 6 7 7 7 7 7 7 7 7 7 7	n, organic, intermixed gravel and wood debris, bark, moist. 1061. y, fine to coarse gravel, some fine- to coarse-grained sand, cobbles,			
MUNICIPAL SOLID W.	/ASTE, gray, intermixed plastic, trash, gravel, moist, strong metal	0		
10.5	1058.	0.6		
Test pit completed at	10.5 feet.	<u></u>		
REMARKS Pit 15' x 5'				

CT D 22122 20th Avenue SE	TEST PIT NUMBER TP-11 PAGE 1 OF 1		
SLR Bothell, Washington 98021 Telephone: 425.402.8800	PAGE 1 OF 1		
SLR International Corp Fax: 425.402.8488			
CLIENT City of Yakima			
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION Yakima, Washington		
	GROUND ELEVATION 1057.05 ft HOLE SIZE		
EXCAVATION DRILLING CONTRACTOR Wyser Construction			
EXCAVATION DRILLING METHOD Excavator			
LOGGED BY B. Robinson CHECKED BY NOTES			
NOTES	AFTER EXCAVATION		
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION		
SW-SM @ 3.5 feet: Bec 5	comes brown, intermixed trash, plastic, metal. 1051.6 gray, moist to wet, some waste. 1050.1 LID WASTE, gray, some sand, plastic, metal, foam, construction debris.		
REMARKS Pit 10' x 5' Water level at time of excavation.			

22122 20th Avenue SE	TEST PIT NUMBER TP-12 PAGE 1 OF 1
Bothell, Washington 98021 Telephone: 425.402.8800	FAGE 1 OF 1
SLR International Corp Fax: 425.402.8488	
CLIENT City of Yakima	
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington GROUND ELEVATION 1051.47 ft HOLE SIZE
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
O SILTY GRAVEL, light bro	own, fine to coarse gravel, some cobbles, rounded, some fines, little and, dry to damp.
GM Waste and construction	debris below 1'
d D 2.0	ne to medium gravel, moist.
MUNICIPAL SOLID WAS	STE, plastic bags, metal, moist.
├ ┤	
5	,
「	
7.0	1044.5
Test pit completed at 7.0) feet.
REMARKS	
<u>i</u>	

S]		R	Bothe Telep	2 20th Av ell, Wash ohone: 42	ington 9 5.402.8	8021	TEST PIT NUMBER TP-13 PAGE 1 OF 1	
			Corp Fax: of Yakima				PROJECT NAME _City of Yakima Landfill	
PROJ	PROJECT NUMBER _001.0221.00004 DATE STARTED _1/26/09						PROJECT LOCATION Yakima, Washington	
							GROUND WATER LEVELS:	
1						xcavator		
1						CHECKED BY		
1							AFTER EXCAVATION	
	 	· · · · · · · · · · · · · · · · · · ·		- 1	1			
	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
0			,			SILTY GRAVEL, dark	brown, fine to coarse gravel, some fines, some organics.	
				GM		@ 1.5 feet: Becomes	olive gray with little fine- to coarse-grained sand.	
┞ -					13 P	3.0 WOOD WASTE red	fine fragments, damp.	
		:			1, 34,	VVOOD VVASTE, Ted,	me nagments, damp.	
<u> </u>					40.4			
					12 312			
5					31/3			
	1				1/3/			
					34.3			
- -					0 36			
					14.0			
					10 30			
						7.5	1052.	
L -						SAND, olive gray, fine	e- to medium-grained sand, trace silt, trace gravel.	
				1				
-	1			-				
40								
10		- 1		SP				
-								
	$ \ $				1.1			
L.]							
						12.5	1047.	
		_				Test pit completed at	12.5 feet.	
		RKS						
Pit 2	0' x	5'						
ĀΝ	/ate	r level	at time o	f excav	ation.			

C1	Γ	\mathbf{p}	dif		enue SE		TEST PIT NUMBER TP-14 PAGE 1 OF 1		
	ntern:	L L utional (Teleph		5.402.8	800			
			f Yakima				PROJECT NAME _City of Yakima Landfill		
	PROJECT NUMBER 001.0221.00004						PROJECT LOCATION Yakima, Washington		
) 1/26/09						
						OR Wyser Construction			
	EXCAVATION DRILLING METHOD _Excavator LOGGED BY _B. Robinson CHECKED BY								
							AFTER EXCAVATION		
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION		
0				GM			rown, some fines, little sand and organics, moist.		
-					0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.0 WOOD WASTE, bark fr	agments.	1058,9	
L.					11/1	3.0		1056.9	
5				SM		gravel, moist.	y, fine- to medium-grained sand, some fines, little medium to coarse	1054.9	
					77.7	5.5 WOOD WASTE.		1054.4	
- ·	-			SP	N. A	7.5	edium-grained, trace gravel and silt, moist.	1052.4	
	4				77.7	10.0		1051.9	
10	_			SP		SAND, gray, fine- to me	edium-grained, some laminar staining, moist.	1049.9	
'					1	Test pit completed at 1	0.0 feet.		
ספותו ספיסטו שומעס									
Pit	15' x		at time o	f excav	vation.				

SIR formational Grey Fac 425-082600 CULENTEfty drakima	22122 20th Avenue SE	TEST PIT NUMBER TP-15
SIAT International Corp Fax 425 8428 448 842 848 842 848 842 843 843 843 843 843 843 843 843 843 843	Bothell, Washington 98021	PAGE 1 OF 1
PROJECT NUMBER 01:0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 1:26:09 GOMPLETED 1:26:09 GROUND ELEVATION 1045.95 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction EXCAVATION DRILLING METHOD Excavator LOGGED BY B. Robinson CHECKED BY AT TIME OF EXCAVATION T.5.ft / Elev 1038.5.ft AT END OF ATTEM OF EXCAVATION SIZE AT END OF ATTEM OF EXCAVATION SIZE MATERIAL DESCRIPTION MATERIAL DESCRIPTION GW SOLD SANDY GRAVEL, brown, fine to coarse, some cobbles, some fines, little fine- to coarse-grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to wet.		
PROJECT NUMBER 01 0221 00004 PROJECT LOCATION _Yakima, Washington DATE STARTED 1/28/09 COMPLETED 1/28/09 GROUND ELEVATION 1045/93 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR _Wyser Construction	CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
DATE STARTED 1/28/09 COMPLETED 1/28/09 GROUND ELEVATION 1045/95 ft HOLE SIZE EXCAVATION DRILLING METHOD Excavator LOGGED BY B. Robinson OHECKED BY AFTER EXCAVATION ONOTES MATERIAL DESCRIPTION MATERIAL DESCRIPTION MATERIAL DESCRIPTION MATERIAL DESCRIPTION MATERIAL DESCRIPTION OM SANDY GRAVEL, yellow brown, fine to coarse, grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to wet. Test pit completed at 7.5 feet.		
EXCAVATION DRILLING METHOD Excevator LOGGED BY B. Robinson CHECKED BY AT END OF AFTER EXCAVATION 7.5 ft / Elev 1038.5 ft AT END OF AFTER EXCAVATION MATERIAL DESCRIPTION GM COUNTY GRAVEL, brown, fine to coarse, some cobbles, some fines, little fine- to coarse-grained sand. SANDY GRAVEL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to well. Test pit completed at 7.5 feet.		
LOGGED BY B. Robinson CHECKED BY AT END OF AFTER EXCAVATION	EXCAVATION DRILLING CONTRACTOR Wyser Construction	GROUND WATER LEVELS:
NOTES AFTER EXCAVATION — MATERIAL DESCRIPTION MATERIAL DESCRIPTION GM STANDY GRAVEL, brown, fine to coarse, some cobbles, some fines, little fine- to coarse-grained sand. SANDY GRAVEL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to wet. GW Test pit completed at 7.5 feet.	EXCAVATION DRILLING METHOD Excavator	☑ AT TIME OF EXCAVATION 7.5 ft / Elev 1038.5 ft
MATERIAL DESCRIPTION SILTY GRAVEL, brown, fine to coarse, some cobbles, some fines, little fine- to coarse-grained sand. SANDY GRAVEL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to wet. Test pit completed at 7.5 feet.	LOGGED BY B. Robinson CHECKED BY	AT END OF
GM SILTY GRAVEL, brown, fine to coarse, some cobbles, some fines, little fine- to coarse-grained sand. SANDY GRAVEL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to wet. GW Test pit completed at 7.5 feet.	NOTES	AFTER EXCAVATION
SILTY GRAVEL, brown, fine to coarse, some cobbles, some fines, little fine- to coarse-grained sand. SANDY GRAVEL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand, cobbles up to 12", well-rounded, flattened horizontal alignment, moist to wet. GW Test pit completed at 7.5 feet.		MATERIAL DESCRIPTION
SANDY GRAVEL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand, cobbies up to 12°, well-rounded, flattened horizontal alignment, moist to wel. GW Test pit completed at 7.5 feet.	GM SILTY GRAVEL	
GW Test pit completed at 7.5 feet.	SANDY GRAVE	L. yellow brown, fine to coarse gravel, some fine- to coarse-grained sand,
	5 7.5 V	1038.5
REMARKS		red at 7.5 reet.
© ☑ Water level at time of excavation.	REMARKS REMARKS V Water level at time of excavation.	

22122 20th Avenue SE	TEST PIT NUMBER TP-16
Bothell, Washington 98021	PAGE 1 OF 1
Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488	
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
DATE STARTED 1/26/09 COMPLET	TED 1/26/09 GROUND ELEVATION 1048.37 ft HOLE SIZE
EXCAVATION DRILLING CONTRACTOR Wyse	GROUND WATER LEVELS:
EXCAVATION DRILLING METHOD Excavator	AT TIME OF EXCAVATION Dry
LOGGED BY B. Robinson CHECKER	D BY AT END OF
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
GM 600	LTY GRAVEL, brown, fine to coarse gravel, some fines, little fine- to coarse-grained sand, dry damp.
	LTY SAND, light brown, some fines, trace gravel, moist.
5 SM	1041.4
	ANDY GRAVEL, fine to coarse gravel, cobbles (12"), some fine- to coarse-grained sand, wet.
9.0 Te	est pit completed at 9.0 feet.
REMARKS Pit 15' x 5' Municipal solid waste from 4.0 to 7.0 feet in nor	
REMARKS Pit 15' x 5' Municipal solid waste from 4.0 to 7.0 feet in nor \[\sum_{\text{Y}} \sum_{\text{W}} \] Water level at time of excavation.	rth end of test pit.

CT	D	AP	22 20th A			TEST PIT NUMBER TE	
2 T	Λ	Tele	phone: 42	25.402.8		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Oi ;
		d Corp Fax:					
		of Yakima			. 4		
					COMPLETED 4/26/	PROJECT LOCATION Yakima, Washington	
					COMPLETED 1/26/		
						GROUND WATER LEVELS:	
					Excavator		
					CHECKED BY		
NOTES	<u> </u>	T		T		AFTER EXCAVATION	
	INTERVAL	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
0			GM	0000	SILTY GRAVE dry.	EL, dark brown, fine to coarse gravel, some fines, little fine- to coarse-grained sand,	
					1.5 SANDY GRAV	/EL, brown, fine to coarse gravel, some fine- to coarse-grained sand.	1048.4
			GW				
				0000	4.0	light brown, fine- to medium-grained sand, some fines, moist.	1045.9
			SM				
					: 9.0 SANDY GRAV	/EL, yellow brown, fine to coarse gravel, some fine- to coarse-grained sand.	1040.9
40			GW		-	, years steam, and to could grate, come and to course granted cand.	
10						leted at 10.0 feet.	1039.9
10			GW		10.0	leted at 10.0 feet.	10
	ARKS		om 4.0	to 7.0	feet in north end of tes	st pit.	
∑ Wa	ter leve	el at time o	f drillinç	g			

Pit 20' x 5'

Municipal waste below 3.0 feet in north end of test pit.

SLR International Corp Fax: 425,402.8488	TEST PIT NUMBER TP-19 PAGE 1 OF 1
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION Yakima, Washington
DATE STARTED 1/27/09 COMPLETED 1/27/09	
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER EXCAVATION
O DEPTH INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
WOOD WASTE, so WOOD WASTE, so SILTY GRAVEL, bra sand, moist.	ome logs. 1049.5 Town, fine to coarse gravel, rounded, some fines, little fine- to coarse-grained 1046.5 e grey, fine grained, moist
Test pit completed	at 10.0 feet.

REMARKS

SLR GENERAL YAKIMA GPJ GINT US.GDT 4/13/09

Pit 25' x 5' Municipal solid waste at 6.0 feet in north end of test pit.

 $\underline{\underline{\nabla}}$ Water level at time of drilling.

SLR I	ntern	R	Bothe	ll, Wash hone: 42	venue SE ington 98 5.402.88	3021	TEST PIT NUMBER TI	
CLIE	NT _	City	of Yakima				PROJECT NAME City of Yakima Landfill	
							PROJECT LOCATION Yakima, Washington	
EXC	AVA	TION	DRILLING	CONT	RACTO	OR Wyser Construction	GROUND ELEVATION 1055.31 ft HOLE SIZE GROUND WATER LEVELS: AT TIME OF EXCAVATION Dry	
EXCAVATION DRILLING METHOD _Excavator LOGGED BY _B. Robinson CHECKED BY NOTES								
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
0					7 7 7 7 7 7 7 7 7 7 7 7	WOOD WASTE.		
	1				7 / V	2.5		1052.8
- · - ·				GP- GM		SILTY GRAVEL, yello sand, dry to moist.	w brown, fine to coarse gravel, some fines, little fine- to coarse-grained	1050.3
				SM			own, fine sand, some fines, trace gravel.	7000.0
						9.0 Test pit completed at	9.0 feet.	1046.3
RE Pit 4 Mur	MA	RKS						
Pit 4 Mur	45' x	10'		elow 5.	0 feet i	n north end of test pit.		
Ţν	Vate	r leve	el at time o	f drillin	g.			

and the second s		TEST PIT NUMBER TP-21
SLR International Corp Fax: 425.402.8488	on 98021 02.8800	PAGE 1 OF 1
CLIENT City of Yakima	y	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00		PROJECT LOCATION Yakima, Washington
DATE STARTED 1/27/09	COMPLETED _1/27/09	GROUND ELEVATION 1058.27 ft HOLE SIZE
EXCAVATION DRILLING CONTRA	CTOR Wyser Construction	GROUND WATER LEVELS:
EXCAVATION DRILLING METHOD	Excavator	AT TIME OF EXCAVATION Dry
LOGGED BY B. Robinson	CHECKED BY	AT END OF
NOTES		AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S.	LOG	MATERIAL DESCRIPTION
	WOOD WASTE, pieces up	1056.3
GW	pieces of concrete (5" up	ind gray, fine to coarse gravel, some fine- to coarse-grained sand, large to 2'), some asphalt, metal pipes, rotting odor.
REMARKS REMARKS Municipal solid waste below 4.	Test pit completed at 8.0) feet.
ਪੁੱਚ ਪੁੱਚ ਪੁੱਚ ਪੁੱਚ ਪੁੱਚ ਪੁੱਚ ਪੁੱਚ ਪੁੱਚ	vation.	

Bothell,	0th Avenue SE Washington 98021 ne: 425.402.8800	PAGE 1 OF 1
SLR International Corp Fax: 425	5.402.8488	DDO IFOT MARKE City of Valsing Londfill
CLIENT City of Yakima	2004 20004	PROJECT NAME _City of Yakima Landfill PROJECT LOCATION _Yakima, Washington
PROJECT NUMBER 001.0		GROUND ELEVATION 1058.06 ft HOLE SIZE
DATE STARTED 1/27/09		
	CONTRACTOR Wyser Construction	AT THE OF EVOAVATION Do
EXCAVATION DRILLING N	METHOD Excavator CHECKED BY	
NOTES	CHECKED B1	AFTER EXCAVATION
DEPTH (ft) (Tt) (Tt) (Tt) (Tt) (Tt) (Tt) (Tt) (T	U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
	WOOD WASTE, dar Wood Waste	k reddish brown, some intermixed gravel, moist.
	6.0 OH TO CAMP The	gray, fine- to medium-grained sand, some fines, moist, strong odor.
	SM SILTY SAND, Olive	gray, line- to medium-grained sand, some lines, most, strong odor.
	7.5	1050
TP-22 Waste	I (XXXX)	WASTE, plastic bags, metal, foam.
	8.5 Test pit completed	104: 04:9-5-foot
GINT US.GDT 3/18/09		
REMARKS Pit 20' x 5' Water level at time of	f excavation.	
σ		

22122 20th Avenue SE	TEST PIT NUMBER TP-23
Bothell, Washington 98021	PAGE 1 OF 1
SLR International Corp Fax: 425.402.8488	
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
DATE STARTED 1/27/09 COMPLETED 1/27/09	GROUND ELEVATION 1054.00 ft HOLE SIZE
EXCAVATION DRILLING CONTRACTOR Wyser Construction	GROUND WATER LEVELS:
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER EXCAVATION
J 0	
DEPTH (ff) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
0 WOOD WASTE, some fir	ne to coarse gravel, little fine- to coarse-grained sand.
SANDY GRAVEL brown	, fine to coarse gravel, some cobbles, some fine- to coarse-grained
sand, dry to damp.	,
GW .	
3.5	1050.5
MUNICIPAL SOLID WAS	STE, metal, plastics, concrete.
<u> </u>	
5 5.0	1049.0
SILTY SAND, olive gray,	fine- to medium-grained sand, some fines, moist.
SM	
7.5	1046.5
Test pit completed at 7.4	b leet.
809	
1/6	
(S, GD)	
U TAI	
0 2	
REMARKS	
Municipal solid waste pinches out in the south end of the test pit.	
REMARKS Pit 20' x 5' Municipal solid waste pinches out in the south end of the test pit. V Water level at time of excavation.	
ੁੱਧੂ ☑ Water level at time of excavation.	

STR 22122 20th Avenue SE Bothell, Washington 98021	TEST PIT NUMBER TP-24 PAGE 1 OF 1
Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488	
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION Yakima, Washington
	GROUND ELEVATION 1050.72 ft HOLE SIZE
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
coarse-grained sand.	n, fine to coarse gravel, some cobbles, some fines, little fine- to intermixed with municipal solid waste (plastic bags, wire).
	1048.2
SILTY SAND, light olive moist.	ve brown grading to olive gray, fine- to medium-grained sand, some fines,
	1045.2
SANDY GRAVEL, oliv some fine- to coarse-	re brown, fine to coarse gravel, some cobbles, well-rounded to flattened, grained sand, moist.
7.5	1043.2
Test pit completed at	7.5 feet.
PJ GINT US.GDT 3/18/09	
REMARKS Pit 14' x 5' Water level at time of excavation.	
S vvaler level at time of excavation.	

SLR International Corp. Fax: 425,402.8488	TEST PIT NUMBER TP-25 PAGE 1 OF 1
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
DATE STARTED 1/27/09 COMPLETED 1/27/09	
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
wood waste, dry. @ 1.0 foot: Becomes concrete). GM	intermixed with wood waste and municipal solid waste (plastic bags, wire, 1047.5 ASTE, gray, tires, glass, plastic bags, plastic. 1046.0 We brown to olive gray, fine-grained sand, moist. 1045.0 The gray, fine to coarse gravel, cobbles up to 18", well rounded to flattened, grained sand, moist. 1044.5 1044.5 1044.5
REMARKS Pit 25' x 7' Municipal solid waste pinches out in the south end of the test pit.	

 $\underline{\underline{\nabla}}$ Water level at time of excavation.

SLR International Corp Fax: 425.402.8488	TEST PIT NUMBER TP-26 PAGE 1 OF 1
CLIENT City of Yakima	PROJECT NAME _City of Yakima Landfill
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION Yakima, Washington
DATE STARTED 1/27/09 COMPLETED 1/27/09	
EXCAVATION DRILLING CONTRACTOR _Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES STATES OF THE PROPERTY O	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
GM 6 C MUNICIPAL SOLID WA	i, fine to coarse gravel, some fines, little fine- to coarse-grained sand, dry bod, bark, logs (18" diameter), concrete. 1047.2 ASTE, plastic bags, bottles, foam, metal, sand, and gravel. 1046.2 e brown, fine- to medium-grained, some fines. 1044.7 5.5 feet.
REMARKS Pit 30' x 7' Municipal solid waste ends in the south end of the test pit and become	omes thicker in the north end.

 $\underline{\underline{\nabla}}$ Water level at time of excavation.

	7	, market and	4		enue SE	TEST PIT NUMBER TP-2	
S		K *	Teleph	one: 42	ngton 98021 5.402.8800	1	.
			orp Fax: 42				
			Yakima			PROJECT NAME City of Yakima Landfill	
PROJECT NUMBER _001.0221.00004							-
						OMPLETED 1/27/09 GROUND ELEVATION 1056.69 ft HOLE SIZE GROUND WATER LEVELS:	
l .			RILLING			Wyser Construction GROUND WATER LEVELS: avator AT TIME OF EXCAVATION Dry	
1						HECKED BY AT END OF	-
			. Nobiliso			AFTER EXCAVATION	
-	 			T	l		\equiv
o DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
				GM	50000000000000000000000000000000000000		050.2
					9.0	MUNICIPAL SOLID WASTE, metal cans, bottles, plastic, wood.	1047.7
ļ				GW	9.5	coarse-grained sand, moist.	1047.2
000000000000000000000000000000000000000						Test pit completed at 9.5 feet.	
E Pit	30' x	RKS 7' al solid	d waste pi	nches	out in the	e south end of the test pit and becomes thicker in the north end.	

22122 20th Avenue SE	TEST PIT NUMBER TE	
SLR Bothell, Washington 98021 Telephone: 425.402.8800	PAGE 1	OF 1
SLR International Corp Fax: 425.402.8488		
CLIENT City of Yakima		
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION _Yakima, Washington	
DATE STARTED 1/27/09 COMPLETED 1/27/09		
EXCAVATION DRILLING CONTRACTOR Wyser Construction		
EXCAVATION DRILLING METHOD Excavator		
LOGGED BY B. Robinson CHECKED BY		
NOTES	AFTER EXCAVATION	
O DEPTH INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
SILTY GRAVEL,	brown, fine to coarse gravel, some fines, little fine- to coarse-grained np.	
1	logs (up to 18" in diameter) 3'-10' long, intermixed silty sand.	.6
9.5 SANDY GRAVE	LID WASTE, plastic, metal, bags, piping, wire, concrete, moist. 1040 L, olive gray, fine to coarse gravel, cobbles, some fine- to coarse-grained	
GW sand, moist to w	vet.	5.1
REMARKS Pit 50' x 5' Municipal solid waste near the south end of the test pit. V Water level at time of excavation.	ted at 12.5 feet.	

SLR SLR International	22122 20th A' Bothell, Wash Telephone: 42 Corp Fax; 425,402.	nington 98021 25.402.8800	TEST PIT NUMBER TP-29 PAGE 1 OF
CLIENT City of	•		PROJECT NAME _City of Yakima Landfill
	/IBER 001.0221		PROJECT LOCATION Yakima, Washington
		COMPLETED 1/27	
EXCAVATION	DRILLING CONT	TRACTOR Wyser Construc	tion GROUND WATER LEVELS:
EXCAVATION	DRILLING METH	HOD Excavator	AT TIME OF EXCAVATION _Dry
LOGGED BY _	B. Robinson	CHECKED BY	AT END OF
NOTES			AFTER EXCAVATION
DEPTH (ft) (II) INTERVAL TYPE	NAME U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		WOOD WAS dry to moist.	TE, with fine to coarse gravel, some fines, little fine- to coarse-grained sand,
	GM	coarse-grain	/EL, dark grayish brown, fine to coarse gravel, some fines, little fine- to ed sand, moist.
7 7		ο Q ο Q 4.5	1057.0
5		MUNICIPAL	SOLID WASTE dark gray, plastic bags, paper, wood, and wire.
		5.5	1056.0 pleted at 5.5 feet.

REMARKS

00400 0014 A OF	TEST PIT NUMBER TP-30
ST R 22122 20th Avenue SE Bothell, Washington 98021	PAGE 1 OF 1
Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488	
	PROJECT NAME City of Yakima Landfill
CLIENT City of Yakima PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
	GROUND ELEVATION 1062.24 ft HOLE SIZE
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	AT END OF
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
0 1/1/1	
WOOD WASTE.	1061.7
SILTY GRAVEL, fine to with wood waste.	coarse gravel, some fines, little fine- to coarse-grained sand, intermixed
GM 6 0	
@ 3.0 feet: Becomes b	rown.
MUNICIPAL SOLID WA	STE, wire, plastic bags, concrete, and wood.
<u> </u>	
<u> </u>	
	1055.2
Boring completed at 7.0	
60	
REMARKS Pit 35' x 5' Value Va	
<u> </u>	
	And the same of th
REMARKS	
를 Pit 35' x 5'	
☆ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
병 역 又 Water level at time of excavation.	
7 - 1.0.0.1 10.10 to 0.10.1.10	

C	r′.	n	39		venue SE		TEST PIT NUMBER TE	
5		K	Telep	hone: 42	ington 98 25.402.88		PAGE I	Or I
			Corp Fax: 4		8488			
			of Yakima			W		
			IBER _00				PROJECT LOCATION Yakima, Washington	-
						COMPLETED 1/27/09		
EXC	AVA.	TION	DRILLING	CONT	RACTO	OR Wyser Construction		
						xcavator		
LOG	GED	BY _	B. Robins	on		CHECKED BY	AT END OF	
NOTE	ES _			· · · · · ·	1 " " 1		AFTER EXCAVATION	
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
0					34.3	SILTY GRAVEL, fin	e to coarse gravel, some fines, some wood waste.	
				_	FUN!	1.0	ve gray, fine to coarse gravel, some fines, little fine- to coarse-grained sand.	1062.3
				GM		SILTY GRAVEE, OII	ve gray, fille to coarse graver, some filles, little fille- to coarse-grained saild.	
	$ \ $							
						3.5	WASTE, plastic, metal, wire, glass, bottles, and paper.	1059.8
5								
_ ,								
	-							
	1			1				
40								
10	$ \cdot $							
	$ \cdot $							
•	1				\bowtie			
						42.0		10501
	1				M	13.0 SILTY SAND, olive	gray, fine- to medium-grained sand, some fines, loose, wet.	1050.3
				SM				
			+			14.5	-144561	1048.8
						Test pit completed	at 14.0 leet.	·1
	MA 30' ×	RKS : 5'						
Σν	Vate	r leve	at time o	f excav	/ation.			

The second secon		TEST PIT NUMBER TP-32
SLR International Corp Fax: 425.402.8488	98021	PAGE 1 OF 1
CLIENT City of Yakima		PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.0000		PROJECT LOCATION _Yakima, Washington
DATE STARTED 1/28/09		
EXCAVATION DRILLING CONTRAC		
		AT THE OF EVOLVATION D.
EXCAVATION DRILLING METHOD		
LOGGED BY B. Robinson	_ CHECKED BY	
NOTES		AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S.		MATERIAL DESCRIPTION
	GRAVELLY SAND, fine- to	medium-grained sand, some fine to coarse gravel, little fines, little
SP-	wood waste, dry to damp.	
 	SANDY GRAVEL olive gra	y, fine to coarse gravel, well rounded, some cobbles, some fine- to
GW ₽	coarse-grained sand.	
	2.0	own, fine sand, some fines, moist.
SM	5.0 to 6.5 feet: Grades to I	light olive gray. 1056.8
<u> </u>	Test pit completed at 6.5 fe	eet.
REMARKS Pit 30' x 5'	n.	

SLR	22122 20th A Bothell, Was	hington 9802		
SLR International Con	Telephone: 4 rp Fax: 425.402			
CLIENT City of Y	/akima		PROJECT NAME City of Yakima Landfill	
PROJECT NUMBI			PROJECT LOCATION Yakima, Washington	
DATE STARTED	1/28/09	с	OMPLETED 1/28/09 GROUND ELEVATION 1064.15 ft HOLE SIZE	
EXCAVATION DR	ILLING CON	TRACTOR	Wyser Construction GROUND WATER LEVELS:	
EXCAVATION DR	ILLING METI	HOD Exc	avator AT TIME OF EXCAVATION Dry	
LOGGED BY B.	Robinson	с	HECKED BY AT END OF	
NOTES			AFTER EXCAVATION	
DEPTH (ft) INTERVAL TYPE	NAME U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
0		491	SILTY GRAVEL, dark brown, fine to coarse gravel, some fines, little sand and cobbles, some	
5 - TCLP	GP GM TP-33		wood waste. ② 0.5 foot: Becomes olive gray with some fine- to coarse-grained sand, little fines, little construction debris, moist. ② 4.5 feet: Becomes brown with some wood waste.	1058.7
.]				
		9.5	Test pit completed at 9.5 feet.	1054.7
REMARKS Pit 45' x 5'	time of drillir	ng.		

SI	r -	D «	19	20th Av		PAGE	P-34 1 OF 1
		!\	Teleph	none: 42	5.402.88		
l			orp Fax: 4.	25.402.8		PROJECT NAME City of Yakima Landfill	
PRO	JEC	T NUMI	BER <u>001</u>	1.0221.			
DATE	E ST	ARTE	1/28/09	3		COMPLETED 1/28/09 GROUND ELEVATION 1063.54 ft HOLE SIZE	
EXC	٩VA٦	TION D	RILLING	CONT	RACTO	OR Wyser Construction GROUND WATER LEVELS:	
EXC	٩VA٦	TION D	RILLING	METH	OD E	xcavator $\underline{\hspace{2cm}}$ AT TIME OF EXCAVATION 11.0 ft / Elev 1052.5 ft	
LOG	GED	BY E	. Robinso	on		CHECKED BY AT END OF	
NOT	ES _					AFTER EXCAVATION	
DEPTH (ft)	INTERVAL	ТҮРЕ	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	4-1			-	PA10	SILTY GRAVEL, light brown, fine to coarse gravel, some fines, dense, dry to damp.	
						@ 0.5 foot: Becomes light olive gray, with little fine- to coarse-grained sand, medium-dense.	
_	_			GM			1061.0
						2.5 MUNICIPAL SOLID WASTE, construction debris, concrete, and plastic, some gray silty sand.	1001.0
5						10.5	1053.0
						10.5 SANDY SILT, dark olive gray, fine sand, wet. ∑	1000.0
 	1			ML		<u></u>	1052.0
T TANIMA.GPJ GIN1 US.GDJ STOUG	≡M.	ARKS				Test pit completed at 11.5 feet.	
Pit Pit	20'	x 5'	l at time c	of exca	vation.		

22122 20th A	venue SF	TEST PIT NUMBER TP-35
	hington 98021	PAGE 1 OF 1
SLR International Corp Fax: 425.402		
CLIENT City of Yakima		PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.022	1.00004	PROJECT LOCATION _Yakima, Washington
DATE STARTED 1/28/09	COMPLETED 1/28/09	GROUND ELEVATION 1063.46 ft HOLE SIZE
EXCAVATION DRILLING CON	TRACTOR Wyser Construction	ground water levels:
EXCAVATION DRILLING MET	HOD Excavator	AT TIME OF EXCAVATION 9.0 ft / Elev 1054.5 ft
LOGGED BY B. Robinson	CHECKED BY	
NOTES		AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME	GRAPHIC LOG	MATERIAL DESCRIPTION
0	SILTY GRAVEL	, brown, fine to coarse gravel, some fines, little fine- to coarse-grained sand, little
GM	wood waste. @ 0.5 foot: Bed	comes olive gray, with some cobbles, little wood and concrete, damp to moist.
5	5.0	DLID WASTE, construction debris, large rubble, asphalt, wire, plastic, 30% soil,
	moist.	1055.0
SN	$ \frac{1}{\sqrt{\frac{9.0}{9.0}}} \frac{\text{SILTY SAND, o}}{\text{Test pit comple}} $	live gray, fine-grained sand, wet, strong rotting odor. 1054.6
U GINT US.GDT 3/18/09		
REMARKS Pit 15' x 5' Water level at time of exc	avation.	

	/	, and the second second second	22122	20th Av	enue SE		TEST PIT NUMBER TP-36
ISI		R^{\cdot}			ington 98 25.402.88		PAGE 1 OF 1
SLR In	iterna	tional (Corp Fax: 42				
CLIEN	NT	City o	f Yakima				PROJECT NAME City of Yakima Landfill
	PROJECT NUMBER 001.0221.00004 DATE STARTED 1/28/09 COMPLETED 1/28/09						PROJECT LOCATION Yakima, Washington
1							
ı						OR Wyser Construction	
l .			DRILLING				
						CHECKED BY	
NOTE	ES _						AFTER EXCAVATION
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION
0	\vdash					SILTY GRAVEL, brown, fi	ine to coarse gravel, some fines, little fine- to coarse-grained sand,
				GM		damp.	ve gray, with some well-rounded cobbles and concrete, moist.
-	1				35 3	WOOD WASTE, some gra	
					1 71		
<u>-</u>	11				70.7	4.5	1059.2
5						MUNICIPAL SOLID WAS moist.	TE, construction debris, large concrete rubble, ~30-40% soil by volume,
						@ 7.5 feet: Waste becor	
			<u> </u>		***	11.0 Test pit completed at 11.	.0 feet. 1052.7
GFJ GINI US.GDI STIOUS			MARKS				
Pit Pit	15' x		i el at time o	f exca	vation.		

SLR	Bothell, Telepho	0th Avenue SE Washington 9802 ne: 425,402.8800	PAGE 1 O				
SLR Internation	-						
CLIENT City							
PROJECT NU			PROJECT LOCATION Yakima, Washington OMPLETED 1/28/09 GROUND ELEVATION 1064.40 ft HOLE SIZE				
1			OMPLETED 1/28/09 GROUND ELEVATION 1064.40 ft HOLE SIZE Wyser Construction GROUND WATER LEVELS:				
1			vator AT TIME OF EXCAVATION _Dry				
1			HECKED BY AT END OF				
NOTES			AFTER EXCAVATION				
DEPTH (ft) INTERVAL TYPE	NAME	U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION				
			SANDY GRAVEL, dark gray, fine to coarse gravel, some fine- to coarse-grained sand, little fines, very dense, damp. © 1.5 feet: Geotextile fabric. Becomes dark olive gray, with well-rounded gravel and cobbles.				
5		GP- GM 000000000000000000000000000000000000	MUNICIPAL SOLID WASTE, paper, plastic bags, wood, grass clippings, glass, and some silt. (Bulk Sample 3,660 lbs gross)	1059.			
			Test pit completed at 7.0 feet.				
SLR GENERAL YAKIMA GPJ GINT US GDT 4/13/09 BENERAL YAKIMA GPJ GINT US GDT 4/13/09 A STATE OF THE STATE OF T	S	daillia c					

TEST PIT NUMBER TP-38 22122 20th Avenue SE PAGE 1 OF 1 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT _City of Yakima PROJECT NAME City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 1/28/09 COMPLETED 1/28/09 GROUND ELEVATION 1063.92 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: EXCAVATION DRILLING METHOD Excavator AT TIME OF EXCAVATION _Dry LOGGED BY B. Thurber CHECKED BY AT END OF ____ NOTES AFTER EXCAVATION _---GRAPHIC LOG U.S.C.S. INTERVA NAME MATERIAL DESCRIPTION 0 SILTY GRAVEL, dark grayish-brown, fine to coarse gravel, few cobbles, some fines, little sand, @ 1.0 foot: Geotextile fabric. GM 1061.4 MUNICIPAL SOLID WASTE, paper, cardboard, plastic bags, plastic sheeting, tires, cans, glass, wood, and some soil. 5 1057.4 Test pit completed at 6.5 feet.

REMARKS

Pit 15' x 3'

SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/25/09

 $\overline{\underline{V}}$ Water level at time of drilling.

22122 20th Avenue SE	TEST PIT NUMBER TP-39 PAGE 1 OF 1
SLR Bothell, Washington 98021 Telephone: 425.402.8800	TAGE 1 OF 1
SLR International Corp Fax: 425.402.8488	DDG ITOT NAME. Gift of Valving Landfill
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill PROJECT LOCATION Yakima, Washington
PROJECT NUMBER 001.0221.00004 DATE STARTED 1/28/09 COMPLETED 1/28/09	
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	AT TIME OF EXCAVATION Dry
LOGGED BY B. Thurber CHECKED BY	
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
GM SILTY GRAVEL, dark bromoist, little wood waste. @ 1.0 foot: Geotextile fa	
WOOD WASTE, brown, fi	1062.1 ine bark. 1061.6
SILTY GRAVEL, dark bro	ownish gray, fine to coarse gravel with cobbles, some fines, little sand,
GM 6 0 moist, little wood waste.	1060.6
	1056.6
Test pit completed at 8.0	
REMARKS REMARKS Water level at time of excavation.	
REMARKS	
$\frac{\alpha}{\omega}$ Water level at time of excavation.	

SL	R	Bothe Telepi	20th Av II, Wash hone: 42	ington 9 5.402.8	98021	TEST PIT NUMBER PAGE	TP-40 1 OF 1
SLR Interna		•		3488		DDO IECT NAME City of Volving Landfill	
CLIENT _ PROJECT				0000	1	PROJECT NAME _City of Yakima Landfill PROJECT LOCATION _Yakima, Washington	
						GROUND ELEVATION 1064.41 ft HOLE SIZE	4.44
					OR Wyser Construction		***************************************
					Excavator		
LOGGED	BY E	3. Thurbe	r		CHECKED BY	AT END OF	
NOTES _						AFTER EXCAVATION	
O DEPTH (ft) INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
		,,,,		70.7 7.77 77.7	WOOD WASTE, bark and a 2.5'.	chips, shredded wood pieces, pole wood on surface, burried logs to	
			-	144°C	1.5	to coarse gravel, few cobbles, some fines, little sand, moist.	1062.9
├ ┤│			GM	[.h/6	2.0 MUNICIPAL SOLID WAST		1062.4
				XX	2.5	, fine to coarse gravel, some fines, little sand.	1061.9
 			GM	BH.	3.5		1060.9
5						E, plastic, paper, metal, wood.	1058.4
					Test pit completed at 6.0 f	eet.	

 $\underline{\nabla}$ Water level at time of excavation.

TEST PIT NUMBER TP-41 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425,402,8488 PROJECT NAME City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 1/28/09 COMPLETED 1/28/09 GROUND ELEVATION 1065.59 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: AT TIME OF EXCAVATION Dry EXCAVATION DRILLING METHOD Excavator LOGGED BY B. Thurber CHECKED BY AT END OF _---AFTER EXCAVATION _---NOTES GRAPHIC LOG U.S.C.S. INTERVA MATERIAL DESCRIPTION 0 SILTY GRAVEL, light gray to gray, fine to coarse gravel, some fines, little sand, moist. GM 1063.6 WOOD WASTE, reddish brown, shredded bark, soil layers (3" to 6" thick), pungent odor, some small logs. 5 1057.6 SILTY GRAVEL, dark gray, fine to coarse gravel, some fines, little sand, moist. GM 1055.6 10 WOOD WASTE, logs, some chips and silty sand. SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09 REMARKS ∇ Water level at time of excavation.



TEST PIT NUMBER TP-41 PAGE 2 OF 2

SLR Interna			one: 42	ington 98 5.402.88 3488		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CLIENT	City o	f Yakima			PROJECT NAME City of Yakima Landfill	
PROJECT NUMBER _001.0221.00004					PROJECT LOCATION Yakima, Washington	
DEPTH (ft) (T) INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
				7 / S	WOOD WASTE, logs, some chips and silty sand. (continued)	
			l	أشنتا	16.0	1049.6
					Test pit completed at 16 feet.	

REMARKS

 $\overline{\underline{\mathcal{V}}}$ Water level at time of excavation.

SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09

			201	20th Av			TEST PIT NUMBER TP-	
5	L,	K ®	Telepl	II, Washi hone: 42	5.402.88			
			orp Fax: 4	25.402.8			PROJECT NAME City of Yakima Landfill	
			Yakima BER _00	1 0221			PROJECT LOCATION _Yakima, Washington	
***************************************							GROUND ELEVATION 1062.27 ft HOLE SIZE	
1						OR Wyser Construction		
1	CAVATION DRILLING METHOD Excavator							
1						CHECKED BY		
							AFTER EXCAVATION	
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
0	-				24 2 1/ 24/ 25/2	WOOD WASTE, brown, si	lt, sand, gravel, fine bark and wood chips.	
_					745117	2.0	the same more askeles same fines little and maint	1060.3
				GM	600	SILTY GRAVEL, gray, fine	e to coarse gravel, some cobbles, some fines, little sand, moist.	
-	-				9,	3.0 WOOD WASTE brown or	ompact, silty sand, gravel, moist, ~20% soil by volume.	1059.3
					1/ 31/	WOOD WASIE, Blown, Co	ompact, sity said, graver, most, 2070 son by volume.	
-	-				10.7			
_					2.34			
5	\exists				<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>			
					7.76			
-	1				5.36		dish brown to yellowish brown, bark chips, trunk wood, scattered buried	
					<u>iv.</u> 2	logs.		
†	1				11 31			
					71.1.7			
_					1 34			
					7.7. 4			
Ī.	1				2 V 7			
10					12 316			
					7 77 7 7 7 7 7 7 7	1		
					1/ 1/1/			
					71.			
-					1. 1.1.			
					7 1 7	<u>\</u>		
68 -	-				3 4 4			
3/18				1	10 310			
- GDT	-				7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7	<u>.</u>		
SOL					12. 11			1047.5
₹ 15		<u> </u>			1 1111	15.0 Test pit completed at 15.0	D feet.	1047.3
SLR GENERAL YAKIMA GPJ GINT US.GDT 3/18/09	ΞMΑ	RKS						
SLR GEN	Wate	er level	at time c	of exca	vation.			

TEST PIT NUMBER TP-43 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 1/28/09 COMPLETED 1/28/09 GROUND ELEVATION HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: EXCAVATION DRILLING METHOD Excavator AT TIME OF EXCAVATION Dry LOGGED BY B. Thurber CHECKED BY _____ AT END OF _---NOTES AFTER EXCAVATION _---GRAPHIC LOG DEPTH (ft) U.S.C.S. NAME MATERIAL DESCRIPTION WOOD WASTE, dark brown, fine to coarse gravel, fines, sand, moist, (~20% soil by volume). 5 SILTY GRAVEL, gray, fine to coarse gravel, abundant cobbles, some fines, little sand, moist. 10 WOOD WASTE, brown, silt, sand, gravell, chips, shredded wood, logs.

REMARKS

 ∇ Water level at time of excavation.

		22422	noth Au	enue SE	TEST PIT NUMBER TP-43
ST	\mathbf{R}	Bothell	, Washi	ngton 98	PAGE 2 OF 2
SLR Inte	rnational	Telepho Corp Fax: 42		5,402,88 3488	.00
CLIENT	City	of Yakima_		_	PROJECT NAME City of Yakima Landfill
		/IBER <u>001</u>	.0221	00004	PROJECT LOCATION Yakima, Washington
15 DEPTH	TYPE	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
					WOOD WASTE, brown, silt, sand, gravell, chips, shredded wood, logs. (continued) 19.0
				,	Test pit completed at 19.0 feet.

SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09

22122 20th Avenue SE	TEST PIT NUMBER TP-44 PAGE 1 OF 1
SLR Bothell, Washington 98021 Telephone: 425.402.8800	1762 1 51 1
SLR International Corp Fax: 425.402.8488	DDO IFCT MARKE City of Volving Landfill
CLIENT City of Yakima PROJECT NUMBER 001.0221.00004	PROJECT NAME City of Yakima Landfill PROJECT LOCATION Yakima, Washington
DATE STARTED 1/29/09 COMPLETED 1/29/09	
EXCAVATION DRILLING CONTRACTOR Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER EXCAVATION
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
0 0.2 ASPHALT.	
SILTY GRAVEL, browr coarse-grained sand.	i, fine to coarse gravel, well-rounded, some fines, little fine- to
GM OC	
	1061.3
SANDY GRAVEL, olive	gray, fine to coarse gravel, some fine to coarse sand, little fines, moist.
4.5 WOOD WASTE, bark of	thips, moist to wet.
- 5 	1056.3
Test pit completed at 7	
GINT US. GDT 3/18/09	
REMARKS REMARKS Water level at time of excavation.	

SLR 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800	TEST PIT NUMBER TP-45 PAGE 1 OF 1
SLR International Corp Fax: 425.402.8488	
CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
DATE STARTED 1/27/09 COMPLETED 1/29/09	GROUND ELEVATION 1066.08 ft HOLE SIZE
EXCAVATION DRILLING CONTRACTOR Wyser Construction	GROUND WATER LEVELS:
EXCAVATION DRILLING METHOD _Excavator	AT TIME OF EXCAVATION Dry
LOGGED BY B. Robinson CHECKED BY	AT END OF
NOTES	AFTER EXCAVATION
O DEPTH INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
0.3 ASPHALT. ROAD BASE, 3/4" crushe	
	1065.1
I I PYU SILTY GRAVEL, olive gra	ry, fine to coarse gravel, rounded to well-rounded, few cobbles, some grained sand, few metal pieces, moist.
Test pit completed at 6.0	The state of the s
REMARKS Pit 20' x 10'	
型 Y Water level at time of excavation.	

TEST PIT NUMBER TP-46 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington **DATE STARTED** <u>2/11/09</u> **COMPLETED** <u>2/11/09</u> GROUND ELEVATION 1069.76 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: EXCAVATION DRILLING METHOD Excavator AT TIME OF EXCAVATION _Dry LOGGED BY C. Lee CHECKED BY ____ AT END OF _---AFTER EXCAVATION _---NOTES GRAPHIC LOG DEPTH (ft) U.S.C.S. MATERIAL DESCRIPTION 0 WOOD WASTE. 5 10 **REMARKS** Pit 30' x 5'

☑ Water level at time of excavation.

S	L	R^{\supset}	22122 20t Bothell, W	Vashing	ton 98021	TEST PIT NUMBER TP PAGE 2	2 OF 2
SLR I	Intern	utional Corp	Fax: 425.4	402.848	38		
		City of Y				PROJECT NAME City of Yakima Landfill	
PRO	JEC.	r NUMBE	R _001.02	221.00	0004	PROJECT LOCATION Yakima, Washington	
DEPTH (ft)	INTERVAL	TYPE	NAME	U.S.C.S.	LOG	MATERIAL DESCRIPTION	
15 				3. V. S. S. S. S. S. S.		WOOD WASTE. (continued)	
_			_	<u>.</u>	18.	SANDY GRAVEL, gray, fine to coarse, some fine- to coarse-grained sand, moist.	1051.
-			C	gw		SANDY GRAVEL, gray, line to coarse, some line- to coarse-grained sand, moist.	
<u> </u>				<u> </u>	19.	5 Test pit completed at 19.5 feet.	1050.
R P	EM/	ARKS					
GENERAL TAN	t 30' :	x 5'					
ㅗ	Wat	er level at	t time of e	excava	tion.		

TEST PIT NUMBER TP-47 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/11/09 COMPLETED 2/11/09 GROUND ELEVATION 1069.84 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: AT TIME OF EXCAVATION Dry EXCAVATION DRILLING METHOD Excavator LOGGED BY C. Lee CHECKED BY AT END OF _---NOTES _ AFTER EXCAVATION _---GRAPHIC LOG U.S.C.S. INTERVAL MATERIAL DESCRIPTION WOOD WASTE, fine, bark mulch, damp. 5 @ 9.0 feet: Becomes coarse, logs, branches, and bark, damp. 10

REMARKS

Pit 27' x 5'

SLR 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425,402,8800	TEST PIT NUMBER TP-47 PAGE 2 OF 2
SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
20 2 2 3 0 SAND	Y GRAVEL, brown, fine to coarse gravel, some fine- to coarse-grained sand, moist. 1046. 1045.
REMARKS Pit 27' x 5' V Water level at time of excavation.	
$oxed{ar{ar{ar{ar{ar{ar{ar{ar{ar{ar$	

TEST PIT NUMBER TP-48 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME City of Yakima Landfill CLIENT City of Yakima PROJECT LOCATION Yakima, Washington PROJECT NUMBER 001.0221.00004 DATE STARTED 2/11/09 COMPLETED 2/11/09 GROUND ELEVATION 1069.66 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: AT TIME OF EXCAVATION _Dry EXCAVATION DRILLING METHOD Excavator LOGGED BY C. Lee CHECKED BY AT END OF _---AFTER EXCAVATION ---NOTES GRAPHIC LOG DEPTH (ft) INTERVAL U.S.C.S. MATERIAL DESCRIPTION 0 WOOD WASTE, wood chips, some bark, damp. 5 10 YAKIMA.GPJ GINT US.GDT 3/18/09 REMARKS Pit 27' x 5' ∇ Water level at time of excavation. (Continued Next Page)



TEST PIT NUMBER TP-48

PAGE 2 OF 2

PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington MATERIAL DESCRIPTION WOOD WASTE, wood chips, some bark, damp. (continued) WOOD WASTE, wood chips, some bark, damp. (continued)	SLR Internation CLIENT Cit	≀ of Yakima			PROJECT NAME City of Yakima Landfill	
WOOD WASTE, wood chips, some bark, damp. (continued) WOOD WASTE, wood chips, some bark, damp. (continued) WOOD WASTE, wood chips, some bark, damp. (continued)			1.0221.	00004		
WOOD WASTE, wood chips, some bark, damp. (continued)	DEPTH (ft) INTERVAL TYPE	NAME	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	15			A 1. A	MOOD WASTE was deline some half days (continued)	
GW 21.5 SANDY GRAVEL, gray, fine to coarse gravel, some fine- to coarse-grained sand, moist.			GW		SANDY GRAVEL, gray, fine to coarse gravel, some fine- to coarse-grained sand, moist.	1048. 1048.

REMARKS

Pit 27' x 5'

SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09

\bigcirc \mathbf{I}	_		,		enue SE		TEST PIT NUMBER TP-49 PAGE 1 OF 2
51	ار	K	Teleph	none: 42	ington 98021 5.402.8800		FAGE 1 01 2
SLR In	terna	tional Cor		25.402.8	3488		
		City of Y					PROJECT NAME City of Yakima Landfill
					.00004		PROJECT LOCATION Yakima, Washington
						OMPLETED 2/11/09	
						Wyser Construction	GROUND WATER LEVELS: AT TIME OF EXCAVATION _Dry
					OD <u>Exca</u>	HECKED BY	
		ВТ <u>С.</u>			Cr	TECKED B1	AFTER EXCAVATION
NOTE	- -			1			
	4			نن	ပ္		
DEPTH (ft)	RV/	TYPE	NAME	U.S.C.S.	불의		MATERIAL DESCRIPTION
DE)	INTERVAL	6	Ž	U.S	GRAPHIC LOG		
0	-						
					27.77	WOOD WASTE, fine, ba	ark and sawdust, damp.
_					7.57		
					12 × 1		
					<u> </u>		
					4 34		
- -					37 7		
					15 77		
					20.0		
					4. 22		
5	-				<u> </u>		
					4.7		
	$\mid \mid$				4 77	@ 6.0 feet: Becomes c	oarse, logs, branches, bark, damp.
					217 7	9	
	1				7 7 7		
					V VV		
	1				24 3		
					7 77		
	1				<u> </u>		
10					12 21/2		
10	1				24.3		
					5.77		
-	1				16. 31 16		
					34 0		
	1				12 34		
					<u> </u>		
[2.4		
L					77. 7		
					26.4		
15	_				2 34		
	1	DIC			<u> </u>		
15		RKS					
FR)						
~	A 1 - 4 .	ar loval a	at time o	of exca	vation.		

(Continued Next Page)

TEST PIT NUMBER SLR International Corp Fax: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington MATERIAL DESCRIPTION MATERIAL DESCRIPTION WOOD WASTE, fine, bark and sawdust, damp. (continued)	₹ TP-49
PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington MATERIAL DESCRIPTION	GE 2 OF 2
MAME NAME CS.C.S. U.S.C.S. GRAPHIC LOG LOG	
WOOD WASTE fine bark and sawdust damp (continued)	
20 20 20 20 20 20 20 20 20 20	1044 <u>.</u> 1044

Test pit completed at 25.0 feet.

REMARKS

Pit 26' x 5'

SLR GENERAL YAKIMA GPJ GINT US GDT 3/18/09

	shington 98021 425.402.8800	TEST PIT NUMBER TP-50 PAGE 1 OF 1
CLIENT City of Yakima		PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.022		PROJECT LOCATION _Yakima, Washington
DATE STARTED 2/11/09	COMPLETED 2/11/09	GROUND ELEVATION 1069.10 ft HOLE SIZE
EXCAVATION DRILLING CON	ITRACTOR Wyser Construction	GROUND WATER LEVELS:
EXCAVATION DRILLING MET	HOD Excavator	AT TIME OF EXCAVATION _Dry
LOGGED BY C. Lee	CHECKED BY	AT END OF
NOTES		AFTER EXCAVATION
O DEPTH (ft) INTERVAL TYPE NAME U.S.C.S.	GRAPHIC	MATERIAL DESCRIPTION
 - 5	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1062. 1061. 1062. 1061.
REMARKS Pit 18' x 5'	avation.	

22122 20th Avenue SE	TEST PIT NUMBER TP-51				
SLR Bothell, Washington 98021 Telephone: 425.402.8800	7.102 1 0.1				
SLR International Corp Fax: 425.402.8488	DDO IFOT MARKE City of Valsings Landfill				
CLIENT City of Yakima PROJECT NUMBER 001.0221.00004	PROJECT NAME City of Yakima Landfill PROJECT LOCATION Yakima, Washington				
	GROUND ELEVATION 1062.58 ft HOLE SIZE				
EXCAVATION DRILLING CONTRACTOR Wyser Construction					
EXCAVATION DRILLING METHOD Excavator					
LOGGED BY C. Lee CHECKED BY					
NOTES	AFTER EXCAVATION				
DEPTH (ft) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION				
0 31k 3 WOOD WASTE, fine,	bark and sawdust, damp.				
本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本	1057.6				
	r, coarse gravel, moist.				
GM 5 D 6.0	1056.6				
MUNICIPAL SOLID W	VASTE, plastic, metal, glass, paper, yard waste, moist.				
REMARKS Pit 15' x 5'					
$\overline{\Sigma}$ Water level at time of excavation.					

TEST PIT NUMBER TP-52 22122 20th Avenue SE PAGE 1 OF 1 Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp. Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/11/09 COMPLETED 2/11/09 GROUND ELEVATION 1064.43 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: EXCAVATION DRILLING METHOD _ Excavator_ AT TIME OF EXCAVATION Dry LOGGED BY C. Lee CHECKED BY AT END OF ---NOTES AFTER EXCAVATION _---GRAPHIC LOG INTERVA U.S.C.S. MATERIAL DESCRIPTION WOOD WASTE, fine, bark, damp. 1060.4 SILTY GRAVEL, gray, medium to coarse, moist. GM 5 1059.4 MUNICIPAL SOLID WASTE, silty gravel, metal, glass, paper, 50% solid waste by volume. 10 1054.4 Test pit completed at 10.0 feet.

REMARKS

Pit 15' x 5'

abla Water level at time of drilling.

S	L]	R	Bothe	•	enue SE ngton 98021 5,402.8800	PAGE 1 OF 1		
SLR I	nterna	ational	Corp Fax:					
CLIE	NT _	City	of Yakima			PROJECT NAME _City of Yakima Landfill		
PRO	JECT	T NUI	MBER 00	1.0221.0	00004	PROJECT LOCATION _Yakima, Washington		
DATE	STA	ARTE	ED <u>2/11/0</u>	9	COMPLETED 2/11/09	GROUND ELEVATION 1066.08 ft HOLE SIZE		
EXC	VAT	TION	DRILLING	CONTR	RACTOR Wyser Construction			
1					DD Excavator			
					CHECKED BY			
NOTE	ES _		T			AFTER EXCAVATION		
DEPTH (ft)	INTERVAL	TYPE	NAME	GRAPHIC LOG		MATERIAL DESCRIPTION		
5					WOOD WASTE, fine, bark a			
-	-			<u> </u>	6.0 Test pit completed at 6.0 fee	1060.1		
SLR GENERAL COPY YAKIMA.GPJ GINT US.GDT 3/18/09								
AKIMA G								
RE COLA A	75' x	RKS c 5' al so		vas pres	ent from 4.0 to 6.0 feet in the south	ern 60' of the test pit, but not present in the northern end.		
지 고 v	Nate	er leve	el at time o	of excav	ation.			

22122 20th Avenue S Bothell, Washington S		TEST PIT NUMBER TP-54 PAGE 1 OF 1					
Telephone: 425.402.8 SLR International Corp Fax: 425.402.8488							
		PROJECT NAME City of Yakima Landfill					
PROJECT NUMBER 001.0221.00004		PROJECT LOCATION Yakima, Washington					
		GROUND ELEVATION 1070.81 ft HOLE SIZE					
EXCAVATION DRILLING CONTRACT							
EXCAVATION DRILLING METHOD _E							
LOGGED BY C. Lee							
NOTES		AFTER EXCAVATION					
DEPTH (ft) INTERVAL TYPE NAME U.S.C.S. GRAPHIC LOG		MATERIAL DESCRIPTION					
O	WOOD WASTE, fine, ba	1063.8 1062.8 logs and branches, damp.					
Pit 15' x 5' Pit 15' x 5'							
⇒ vvater level at time of excavation	☑ Water level at time of excavation.						

		and the same of th	N 00:	004- 1			TEST PIT NUMBER TP-55
21	r 1	R *	24		enue SE ngton 98		PAGE 1 OF 1
	لانا	L L	Teleph	one: 42	5.402.88		
			Corp Fax: 42				DDO IFOT MARKE City of Volvings Landfill
l .	CLIENT City of Yakima PROJECT NUMBER 001.0221.00004						PROJECT NAME _City of Yakima Landfill
							PROJECT LOCATION Yakima, Washington
							GROUND ELEVATION 1069.59 ft HOLE SIZE
1						Wyser Construction	
						xcavator	
						CHECKED BY	
NOTE	ES _						AFTER EXCAVATION
王	INTERVAL	ш	Щ	S.	GRAPHIC LOG		
DEPTH (ft)	H	TYPE	NAME	U.S.C.S.	[문호]		MATERIAL DESCRIPTION
	Z		_		5		
0	\perp			ļ	32.3	WOOD WASTE, fine, bark a	and countries down
					11.71	VVOOD VVASTE, line, bark a	and sawdust, damp.
L .	11				16.7		
				İ	<u> 10 10 10 10 10 10 10 10 10 10 10 10 10 </u>		
_]	İ			77.7		
					4.34		
L	┧ │				77.7		
					2 24		
]				77. 7		
					3.7.7		
5					1, 34		
					92.9		
					1, 34,	6.0	1063.
] [SM		SILTY SAND, some crushe	d rock, moist.
				Sivi		7.0	1062.
	7				77.77	WOOD WASTE, coarse, lo	gs, branches and bark, damp.
					17.37		
Γ]				12 × 12		
					4/4		
ľ	11				1/3/2		
10					31. 7		
<u> </u>	11				12 34		
					72 9		
 	1				4 34		
					7.7.7		
-	1				4 24		
800					V VV	12.0	1056.
9	ـــــــا		L		17 7.14	Test pit completed at 13.0	
GD. G							
5							
Ď ≰							
<u>.</u>		RKS					
FI PIL	16' x	ם.					
N E E							
ž 又,	\[\frac{\frac{1}{2}}{2} \] Water level at time of excavation.						

2212	2 20th Avenue SE	TEST PIT NUMBER TP-56					
ST R Bothe	ell, Washington 98021 phone: 425.402.8800	PAGE 1 OF 1					
SLR International Corp Fax:							
CLIENT City of Yakima		PROJECT NAME City of Yakima Landfill					
PROJECT NUMBER _00	1.0221.00004						
DATE STARTED _2/11/0	O COMPLETED	<u>2/11/09</u> GROUND ELEVATION <u>1069.22 ft</u> HOLE SIZE					
EXCAVATION DRILLING	CONTRACTOR Wyser Cor	nstruction GROUND WATER LEVELS:					
1	METHOD Excavator						
	CHECKED BY						
NOTES		AFTER EXCAVATION					
O DEPTH (ft) INTERVAL TYPE NAME	U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION					
	7 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	feet: Geotextile fabric. GRAVEL, gray, some crushed rock and cobbles, little municipal solid waste (edge of moist.					
	0 0 11.0	1058.2					
		t completed at 11.0 feet.					
REMARKS Pit 13' x 5' Water level at time of the control of the c							
REMARKS Pit 13' x 5'							
ত ৺ Water level at time of the control of the	of excavation.						

22122 20th Aven		TEST PII NUMBER IP-57 PAGE 1 OF 1				
SLR Bothell, Washing Telephone: 425.4	02.8800					
Sl.R International Corp Fax: 425.402.848						
	2004	PROJECT NAME _City of Yakima Landfill PROJECT LOCATION _Yakima, Washington				
PROJECT NUMBER _001.0221.00		GROUND ELEVATION 1062.81 ft HOLE SIZE				
DATE STARTED 2/11/09	ACTOR Wyser Construction					
EXCAVATION DRILLING METHO		AT THE OF EVOLVATION D				
i	CHECKED BY					
NOTES		AFTER EXCAVATION				
DEPTH (ft) INTERVAL TYPE NAME GRAPHIC LOG		MATERIAL DESCRIPTION				
0 378.3	WOOD WASTE, fine, bark ar	d sawdust damp				
10 10 10 10 10 10 10 10 10 10	13.0	e, logs, branches and stumps, damp.				
E	Test pit completed at 13.0 fo					
S. GD.						
<u>ට</u>						
SUR GENERAL YAKIMA GPJ GINT US GDT 3/18/009 REMARKS Pit 16' x 5' Water level at time of excava	tion					
☑ Water level at time of excavation.						

TEST PIT NUMBER TP-58 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221,00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/12/09 COMPLETED 2/12/09 GROUND ELEVATION 1060.54 ft HOLE SIZE EXCAVATION DRILLING CONTRACTOR Wyser Construction GROUND WATER LEVELS: AT TIME OF EXCAVATION Dry EXCAVATION DRILLING METHOD Excavator LOGGED BY C. Lee CHECKED BY _____ AT END OF _---AFTER EXCAVATION _---NOTES _ GRAPHIC LOG INTERVAL DEPTH (ft) MATERIAL DESCRIPTION 0 WOOD WASTE, fine, bark mulch, damp. 1 34 10 @ 10.0 feet: Becomes coarse, logs, branches, little scrap metal, damp. 3/18/09 SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09 REMARKS Pit 22' x 5'

 Σ Water level at time of excavation.

SLR International Corp Fax: 425.402.8800	TEST PIT NUMBER TP-58 PAGE 2 OF 2
CLIENT _City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.0221.00004	PROJECT LOCATION Yakima, Washington
DEPTH (ft) INTERVAL TYPE TYPE GRAPHIC LOG	MATERIAL DESCRIPTION
3	1043.5
Test pit completed at 17.0	feet.

Pit 22' x 5'

SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09

SLR International Corp Fax: 425,402,8488	TEST PIT NUMBER TP-59 PAGE 1 OF 1
CLIENT _City of Yakima	PROJECT NAME City of Yakima Landfill
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION _Yakima, Washington
DATE STARTED _2/12/09 COMPLETED _2/12/09	The state of the s
EXCAVATION DRILLING CONTRACTOR _Wyser Construction	
EXCAVATION DRILLING METHOD Excavator	AT TIME OF EXCAVATION _Dry
LOGGED BY C. Lee CHECKED BY	
NOTES	AFTER EXCAVATION
O DEPTH (f) INTERVAL TYPE U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
GM SILTY GRAVEL, gray, c	noarse, some fines, moist. 1061.6 1069.6 1059.6

Pit 30' \times 5' Municipal solid waste present from 4.0 to 6.0 feet in the western half of the test pit, but not present in the eastern half.

 ∇ Water level at time of drilling.

22122 20th Avenue SE					renue SE		TEST PIT NUMBER TP-60	
151	ST R Bothell, Washington 98021						PAGE 1 OF 1	
SLR I	Telephone: 425,402.8800 SLR International Corp Fax: 425,402.8488							
							OJECT NAME _City of Yakima Landfill	
4	CLIENT City of Yakima PROJECT NUMBER _001.0221.00004						OJECT LOCATION Yakima, Washington	
							COUND ELEVATION 1071.78 ft HOLE SIZE	
l i							COUND WATER LEVELS:	
1			RILLING				AT TIME OF EXCAVATION Dry	
1						CHECKED BY	AT END OF	
1							AFTER EXCAVATION	
	Τ	П		T				
_	 F			(i)	ပ			
DEPTH (ff)	INTERVAL	TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
	IN	-	Ż	Š	GR			
0								
					7.7	WOOD WASTE, fine, damp.		
L	_				7 7 7			
					2.34			
L					77.7			
					4. 44			
_	_				77.7			
					7. 7.7			
-	4				10 89			
					77.7			
5	-				4 34			
					7. 7			
ŀ	4				12 24			
				1	N 90			
F	1				10.7			
					1.7.17			
ŀ	+				77. 7			
					1 7.1		106	
-	1				1000 C		some fine- to coarse-grained sand, little municipal solid waste,	
10				GP	000	moist. 10.0	106	
10	1			-	10 g	WOOD WASTE, coarse, bark, s		
1					7 77			
 	1				1			
					70.7	12.0	• 105	
		<u></u>		•		Test pit completed at 12.0 feet.		
118/08								
DT 3								
US.G								
SLR GENERAL YAKIMA GPJ GINT US.GDT 3/18/09								
GPJ								
WE RE	EM/	RKS						
≸ Pit	18'							
ERAL								
GEN T								
웨 추 /	☑ Water level at time of excavation.							

22122 20th	Avenue SE	TEST PIT NUMBER TP-61				
Bothell, Wa	shington 98021	PAGE 1 OF 1				
Telephone: SLR International Corp Fax: 425.40	425.402.8800 02.8488					
		PROJECT NAME _City of Yakima Landfill				
PROJECT NUMBER 001.022		PROJECT LOCATION Yakima, Washington				
	COMPLETED 2/12/09					
	NTRACTOR Wyser Construction					
EXCAVATION DRILLING MET	THOD Excavator	AT TIME OF EXCAVATION Dry				
LOGGED BY C. Lee	CHECKED BY					
NOTES		AFTER EXCAVATION				
DEPTH (ft) INTERVAL TYPE NAME	GRAPHIC LOG LOG	MATERIAL DESCRIPTION				
	? [©]					
0	<u>과사</u> 첫 WOOD WASTE, fine, bark	and sawdust damp				
	W. W.	and carroact, damp.				
	36 3					
	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]					
+ +	[C: 27]					
	9 k 3					
F	<u>6-34</u>					
	<u> 56</u> 5					
	4 77					
5	<u> </u>					
	(9.8) (4) 					
	<u> </u>	1061.6				
	SILTY GRAVEL, gray, me	dium to coarse, some fines, moist.				
<u> </u>	B B B B B B B B B B B B B B B B B B B	1059.6				
	MUNICIPAL SOLID WAST	E, plastic, paper, glass, soil, moist, strong odor.				
10						
-						
F	12.5	1055.1				
F0/8	Test pit completed at 12.5					
37						
Section						
P. G						
REMARKS	DEMARKS					
REMARKS Pit 16' x 5'						
∀ All Black						
☑ Water level at time of excavation.						

		TEAT BIT AUMBED TO AC
	ashington 98021 : 425.402.8800	TEST PIT NUMBER TP-62 PAGE 1 OF 1
CLIENT City of Yakima		PROJECT NAME City of Yakima Landfill
PROJECT NUMBER 001.022	21.00004	PROJECT LOCATION Yakima, Washington
EXCAVATION DRILLING CON	NTRACTOR Wyser Construction	GROUND WATER LEVELS:
EXCAVATION DRILLING MET	THOD Excavator	AT TIME OF EXCAVATION Dry
LOGGED BY C. Lee	CHECKED BY	AT END OF
NOTES		AFTER EXCAVATION
	POG	MATERIAL DESCRIPTION
0 対象 2 対象 3 対象 4 対象 4 対象 4 対象 5 対象 6 <t< td=""><td>@ 7.0 feet: Becomes coarse, logs</td><td></td></t<>	@ 7.0 feet: Becomes coarse, logs	
	Test pit completed at 12.0 feet.	

Pit 13' x 5'

SLR SLR International	Bothell, Telepho	20th Ave Washin one: 425 5.402.84	gton 986 .402.880	021	TEST PIT NUMBER TP-63 PAGE 1 OF 1			
CLIENT City of	of Yakima				PROJECT NAME _City of Yakima Landfill			
PROJECT NUM	MBER 001.	0221.0	00004		PROJECT LOCATION Yakima, Washington			
DATE STARTE	D 2/12/09			COMPLETED 2/12/09	GROUND WATER LEVELS: AT TIME OF EXCAVATION Dry			
EXCAVATION I	DRILLING C	ONTR	ACTO	R Wyser Construction				
8				cavator				
LOGGED BY _	M. Staton			CHECKED BY	AT END OF			
NOTES					AFTER EXCAVATION			
O DEPTH (ft) INTERVAL TYPE	NAME	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION			
Ŭ				O.5 ASPHALT.		1064.5		
5		SP		GRAVELLY SAND, da cobbles, moist, few w	ark brown to gray, fine- to coarse-grained, some fine to coarse gravel, few cool debris and metal debris.			
				11.0 \@ 11.0 feet: Become	noiet	1054.0		
				Test pit completed at	11.0 feet.	/		
SLR GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09 BENERAL YAKIMA.GPJ GINT US.GDT 3/18/09 A GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09 A GENERAL YAKIMA.GPJ GINT US.GDT 3/18/09								
₩ Vater level	l at time of e	excava	tion.					

BORING NUMBER SB-1 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402,8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/9/09 COMPLETED 2/9/09 GROUND ELEVATION 1053.37 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling ____ GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger ☑ AT TIME OF DRILLING 17.0 ft / Elev 1036.4 ft LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY INTERVA U.S.C.S. NAME MATERIAL DESCRIPTION 0.0 SILTY GRAVEL, brown, fine to coarse, some fines, few bricks, loose dry. @ 3.0 feet: Becomes black, with some municipal solid waste (glass, plastic, D&M 66 12 wood), little sand. GM 5.0 @ 5.0 feet: Becomes very dense. 50/4" D&M 100 7.5 1045.9 WOOD WASTE, loose, moist to wet. D&M 80 6 1044.9 SILT, Black, organic, little municipal solid waste, medium dense, moist to wet. 10.0 OL 60 D&M 21 REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

YAKIMA SOIL BORINGS GPJ GINT US GDT 3/20/09



22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

BORING NUMBER SB-1 PAGE 2 OF 2

CLIENT City	of Yakima					PROJECT NAME Former City of Yakima Landfill			
PROJECT N	JMBER 001	.0221	.00004			PROJECT LOCATION Yakima, Washington			
97 DEPTH 107 (ft) 107 ERVAL 177 PE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION			
D&I	и	5	36			SILT , Black, organic, little municipal solid waste, medium dense, moist to wet. <i>(continued)</i>			
15.0									
D&N	Л	0	11	OL					
17.5						© 17 feet: Becomes wet.			
D&N	1	80	40	GP	18	SANDY GRAVEL, dark olive gray, fine to medium, subrounded to rounded, some angular, some sand, medium dense, wet.	1035.4		
20.0				SP	19	SAND, dark gray, fine- to medium-grained, very dense, wet.	<u>1033.9</u>		
D&N	7	120	50/6"	GW	21.	SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand, trace cobbles, very dense, wet.	1032.9 1032.4		
						Boring completed at 21.0 feet.			

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\ensuremath{\overline{\sum}}$ Water level at time of drilling.

BORING NUMBER SB-2 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington COMPLETED 2/9/09 DATE STARTED 2/9/09 GROUND ELEVATION 1054.95 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger □ AT TIME OF DRILLING 18.0 ft / Elev 1037.0 ft LOGGED BY B. Robinson CHECKED BY AT END OF ---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY INTERVA DEPTH (ft) U.S.C.S. NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, intermixed fine to coarse-grained gravel, loose. 2.5 @2.5 feet: Becomes intermixed with brown silty sand and organics. D&M 5 9 5.0 @ 5.0 feet: Becomes medium dense. D&M 5 18 1048.0 MUNICIPAL SOLID WASTE, dark grey, silt, sand, plastic, glass, and wood 7.5 waste, loose, moist. D&M 30 8 10.0 @ 10 feet: Becomes particle board and painted wood, moist. D&M 10 4

REMARKS

YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 ∇ Water level at time of drilling.



BORING NUMBER SB-2

PAGE 2 OF 2

PROJECT NUMBER _001.0221.00004								PROJECT NAME Former City of Yakima Landfill		
PROJ	ECT	NUN	IBER _001	.0221.	.00004			PROJECT LOCATION _Yakima, Washington		
H_L(#) 12.5	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION		
	\bigvee	D&M		100	12			MUNICIPAL SOLID WASTE, dark grey, silt, sand, plastic, glass, and wood waste, loose, moist. (continued) @ 12.5 feet: Becomes silty sand, olive gray, fine- to medium-grained (60% by volume), paper, glass, wood (40% by volume), moist.	1041.5	
-	/ \ 							SAND , olive gray, fine-grained, some medium-grained rounded gravel, trace silt, loose, moist.		
15.0	\sqcup									
	$\bigvee_{}$	D&M		90	5	SP				
								<u> </u>	1038.0	
17.5								SANDY GRAVEL, olive gray, fine to coarse, well-rounded, fine- to coarse-grained sand, trace silt, medium dense, wet.		
	$\bigvee_{}$	D&M			33	GW		$ar{ar{\Delta}}$		
-				ł			<u></u>	19.5 GRAVELLY SAND, olive gray, fine to coarse, fine to medium well-rounded	<u>1035</u> .5	
20.0								gravel, loose, wet.		
	$\left \right $	D&M		-	8	SP				
<u> </u>	/ <u>\</u>							21.5 Boring completed at 21.5 feet.	1033.5	

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORING NUMBER SB-3 22122 20th Avenue SE Bothell, Washington 98021 PAGE 1 OF 2 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/9/09 COMPLETED 2/9/09 GROUND ELEVATION 1057.91 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING 19.0 ft / Elev 1038.9 ft LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. DEPTH (ft) NTERVA MATERIAL DESCRIPTION 0.0 GRAVELLY SILT, brown, some fine to coarse gravel, intermixed wood waste. ML WOOD WASTE, bark mulch, loose, moist. 2.5 D&M 60 12 5.0 D&M 0 5 1050.9 SILTY SAND, olive gray, fine-grained, some fines, little fine to coarse gravel, 7.5 medium dense to loose, moist. D&M 45 23 10.0 @ 10 feet: Gravel caught in sampler, no recovery. D&M 10 7

REMARKS

D&M

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT

12.5

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

loose, wet.

 $\overline{\underline{V}}$ Water level at time of drilling.

30

9

MUNICIPAL SOLID WASTE, wood, paper, cloth, silty sand (25% by volume),



BORING NUMBER SB-3 PAGE 2 OF 2

CLIE	NT _	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill	
PROJ	IEC.	T NUN	BER 001	.0221.	00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ft)	DEPTH (ft) (ft) (INTERVAL TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE) U.S.C.S. U.S.C.S.					U.S.C.S.	GRAPHIC	MATERIAL DESCRIPTION	
	X							MUNICIPAL SOLID WASTE, wood, paper, cloth, silty sand (25% by volume), loose, wet. (continued)	
15.0	1								
	\bigvee	D&M		100	10	SM		\$15.5 SILTY SAND, olive gray, fine-grained, some fines, some organics, loose, moist.	1042.4
L								SANDY GRAVEL, gray, fine to coarse, some fine to coarse-grained sand,	<u>1040.9</u>
_ 17.5	X	D&M		60	50/4"			rounded, very dense, moist to wet.	
						GW		abla	
20.0		D&M		0	50/4"			@ 20.0 feet: Sampler wet.	
	Y.	20101			30/4				1037.4
i								Donnig Completed at 20.0 leet.	- 1

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\sqrt{2}$ Water level at time of drilling.

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/13/09

BORING NUMBER SB-4 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT LOCATION Yakima, Washington GROUND ELEVATION 1059.17 ft HOLE SIZE 8.5" Diameter PROJECT NUMBER 001.0221.00004 COMPLETED 2/9/09 DATE STARTED 2/9/09 GROUND WATER LEVELS: DRILLING DRILLING CONTRACTOR Cascade Drilling ✓ AT TIME OF DRILLING 17.0 ft / Elev 1042.2 ft DRILLING DRILLING METHOD Hollow Stem Auger AT END OF _---LOGGED BY B. Robinson CHECKED BY AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. MATERIAL DESCRIPTION INTERVAL DEPTH (ft) WOOD WASTE, large pieces of wood up to 12 inches. 0.0 4.34 @ 2.5 feet: Becomes reddish brown, bark mulch, loose, moist. 2.5 100 7 SS @ 5.0 feet: Becomes fine bark mulch, dense. 5.0 50/5" 10 SS 7.5 10 10 SS BORINGS.GPJ GINT US.GDT 3/20/09 @ 10.0 feet: Trace gravel, loose. 1048. 10.0 MUNICIPAL SOLID WASTE, dark gray, paper and yard waste, loose. 40 9 SS

SLR GENERAL YAKIMA SOIL

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.



BORING NUMBER SB-4 PAGE 2 OF 2

SLR 1	nterr	national	l Corp Fax: 4	25.402.	8488				
CLIE	NT	City	of Yakima				· · · · · · · · · · · · · · · · · · ·	PROJECT NAME Former City of Yakima Landfill	
PRO	JEC	T NUI	MBER 00	1.0221	.00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ft)	=	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
		SS		100	13			MUNICIPAL SOLID WASTE, dark gray, paper and yard waste, loose. (continued) @ 12.5 feet: Becomes plastic, paper, and soil (25% by volume). 13.5	1045.7
	/ \ - -							SILTY SAND, fine-grained, some fines, some waste, loose. @ 14.5 feet: Becomes olive gray, some organics, no waste, wet.	
 		SS			14	SM			
17.5	X	SS			50/3"	GW		SANDY GRAVEL, gray, fine to coarse, some fine to coarse-grained sand, very dense, wet.	1042.2
	IL							18.0 Roring complete, refusal at 18.0 foot. Samplar wat	1041.2

Boring complete, refusal at 18.0 feet. Sampler wet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

CT	Т) .	19		enue SE					BORING NUMBER SB-5
S L	1.	<u>(</u>	Teleph	one: 42	ngton 98021 5.402.8800					PAGE 1 OF 2
			Corp Fax: 42							
			f Yakima IBER <u>001</u>							
						MPI F	TED	2/9/09		PROJECT LOCATION Yakima, Washington GROUND ELEVATION 1058.29 ft HOLE SIZE 8.5" Diameter
										GROUND WATER LEVELS:
			LING MET							
LOGGE	DВ	Y _[3. Robinso	n	СН	ECKE	D BY			AT END OF
NOTES										AFTER DRILLING
				%	TS					
O DEPTH O (ft)	INIERVAL	IYPE	NAME	RECOVERY	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG			MATERIAL DESCRIPTION
						<u>GP</u>	77.7	0.3	GRAVEL.	STE, bark mulch, some sand, loose, moist.
2.5							77.77.77.77.77.77.77.77.77.77.77.77.77.			: Plastic sheets in wood waste.
\ \ 	DE	M		80	15		7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.			
5.0	<u> </u>						77. 7 7. 77. 77. 7			
· - X · -	D8	kМ		70	14			6.0	MUNICIPAL by volume)	L SOLID WASTE, wood waste, paper, metal foil, (50% wood waste, loose, wet.
							\bowtie			
7.5	D8	kM		60	7					
10.0	/ D8	кМ		25	7					
12.5	/ / D8	M		25	6					
REMA	7KK	 (S	I	!			XXXX			WATER TO THE PARTY OF THE PARTY
	amp	les	collected b	y usin	g an 18-ind	ch-lon	g, 3.0-	inch ou	utside diame	ter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/13/09

 $\underline{\underline{V}}$ Water level at time of drilling.



PAGE 2 OF 2

PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington NAME OR SCOOL STORY OR S	02.2		City	JI Takiilla						PROJECT NAME Former City of Yakıma Landfill	
MAME NAME NAME NAME NAME NAME NAME NAME	PRO.	JEC	T NUN	/IBER <u>001</u>	.0221	.00004				PROJECT LOCATION _Yakima, Washington	
	DEPTH (ft)	INTERVAL	ТҮРЕ	NAME		BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
MUNICIPAL SOLID WASTE, wood waste, paper, metal foil, (50% wood waste by volume), loose, wet. (continued)		X								MUNICIPAL SOLID WASTE, wood waste, paper, metal foil, (50% wood waste by volume), loose, wet. (continued)	
15.0	_ 									,	
D&M 60 16 16.0		$\left\ \cdot \right\ $	D&M		60	16			16.0		1042.3
SILTY SAND, dark olive gray, fine- to coarse-grained, some fines, medium dense, moist.		$/\!\!/$					SM			SILTY SAND, dark olive gray, fine- to coarse-grained, some fines, medium dense, moist.	
SILTY GRAVEL plive gray fine to coarse, subangular to rounded, some silt	<u> </u>								17.0	SILTY GRAVEL plive gray fine to coarse subangular to rounded some silk	<u> 1041</u> .3
17.5 GW-	17.5	\downarrow					GW-			little fine- to coarse-grained sand, trace cobbles, very dense, moist to wet.	
D&M 100 50/6" GM		X	D&M		100	50/6"			18.5		400-
Boring completed at 18.5 feet.			1					T1.N	10.0	Boring completed at 18.5 feet.	1039.8

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{\sl}}$ Water level at time of drilling.

BORING NUMBER SB-6 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425,402,8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington **DATE STARTED** 2/10/09 **COMPLETED** 2/10/09 GROUND ELEVATION 1060.02 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** ☑ AT TIME OF DRILLING 17.0 ft / Elev 1043.0 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF ---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY INTERVAL U.S.C.S. NAME MATERIAL DESCRIPTION 0.0 GRAVEL 1059.8 WOOD WASTE, bark mulch, soil, 50-60% wood waste by volume, moist. SILTY GRAVEL, dark gray, fine to coarse, rounded, some fines, little fine- to coarse-grained sand, medium dense, moist. 2.5 D&M 90 34 GM 5.0 1054.5 MUNICIPAL SOLID WASTE, plastic, paper, glass, tires, wood, soil (25% by D&M 70 12 volume), loose, moist. 7.5 @ 7.5 feet: Gravel caught in sampler. D&M 60 53 10.0 @ 10 feet: Soil 30-40% by volume. D&M 40 12.5

REMARKS

BORINGS.GPJ GINT US.GDT

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.



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1041.5

CLIE	NT Cit	y of Yakima					PROJECT NAME Former City of Yakima Landfill	
PRO	JECT N	JMBER 00	1.0221	.00004			PROJECT LOCATION Yakima, Washington	
HL(#) 12.5	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	D&	И	40	9			MUNICIPAL SOLID WASTE, plastic, paper, glass, tires, wood, soil (25% by volume), loose, moist. (continued)	
15.0	D&I	И	66	43			SANDY GRAVEL, dark gray, fine to coarse, rounded, some fine- to coarse-grained sand, trace to few fines, dense to very dense, moist.	1044.
17.5	D&I	и		50/4"	GW		☑ @ 17 feet: Becomes wet.	

Boring complete, refusal at 18.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{igspace}$ Water level at time of drilling.

BORING NUMBER SB-7 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT _City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/10/09 _____ COMPLETED 2/10/09 GROUND ELEVATION 1062.05 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger □ AT TIME OF DRILLING 17.0 ft / Elev 1045.1 ft LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME TYPE MATERIAL DESCRIPTION 0.0 WOOD WASTE, bark mulch intermixed with gravel, loose. 2.5 1059.1 SILTY GRAVEL, dark olive gray, fine to coarse, subangular to rounded, some D&M 70 14 fines, little fine- to coarse-grained sand, loose, moist. MUNICIPAL SOLID WASTE, paper, plastic, cloth, wood, soil (<25% by volume), 1058.6 very dense to loose, moist, strong odor. 5.0 D&M 50/4" From 6.0 to 7.0 feet: Drilling through wood. **√**D&M 100 50/3" 10.0 D&M 0 12.5 **REMARKS** SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORINGS.GPJ GINT US.GDT 3/20/09



22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

BORING NUMBER SB-7

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CLIENT City of Yakima

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER 001.0221.00004

PROJECT LOCATION Yakima, Washington

	T		ľ		l			
DEPTH (#) (#) INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	D&M		5	8			MUNICIPAL SOLID WASTE, paper, plastic, cloth, wood, soil (<25% by volume), very dense to loose, moist, strong odor. (continued) @ 12.5 feet: Wood and grass clippings in cuttings.	
15.0	D&M		40	15			@ 15.0 feet: Wood and paper. 16.0 SANDY GRAVEL, olive gray, fine to coarse, rounded, some fine- to	1046.1
17.5	D&M			73	GW		coarse-grained sand, little silt, very dense, moist to wet. ☑ @ 17.0 feet: Becomes wet. @ 17.5 feet: Cobble stuck in sampler, oil sheen on sample.	4042.4
	1						Boring completed at 19.0 feet.	1043.1

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

BORING NUMBER SB-8 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425,402,8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/10/09 _____ COMPLETED 2/10/09 GROUND ELEVATION _1063.18 ft HOLE SIZE _8.5" Diameter **GROUND WATER LEVELS:** DRILLING DRILLING CONTRACTOR Cascade Drilling AT TIME OF DRILLING 18.5 ft / Elev 1044.7 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY ___ AT END OF ---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) RECOVERY GRAPHIC U.S.C.S. NAME 500 MATERIAL DESCRIPTION 0.0 GRAVEL 1062.9 SILTY GRAVEL, olive gray, fine to coarse, subangular to rounded, some fines, little fine- to coarse-grained sand, very dense, damp. From 2.0 to 6.0 feet: Difficult drilling, few wood waste, dense. 2.5 50/4" D&M 80 5.0 GM D&M 100 40 @ 6.0 feet: Becomes dark gray, fine to medium, trace waste (paper and plastic), very loose, moist. 7.5 D&M 66 3 1053.7 MUNICIPAL SOLID WASTE, plastic, paper, glass, ~40% to 50% soil, loose, 10.0 moist D&M 40 6

REMARKS

D&M

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/13/09

12.5

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 ∇ Water level at time of drilling.

66

8



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CLIENT City of Yakima P	ROJECT NAME Former City of Yakima Landfill
PROJECT NUMBER <u>001.0221.00004</u> P	ROJECT LOCATION Yakima, Washington
DEPTH (ft) INTERVAL TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE) U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
moist (continu	SOLID WASTE, plastic, paper, glass, ~40% to 50% soil, loose, ued)
0 15.0 feet:	Tire caught in sampler.
17.0 SILTY SAND	, olive gray, fine-grained sand, some fines, trace organics, loose,
17.5 moist. SM	1044.
19.0 sand, mediur	VEL, dark olive gray, fine to coarse, some fine- to coarse-grained n dense, wet. 1044.: eted at 19.0 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

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BORING NUMBER SB-9

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CLIENT City of Yakima	PROJECT NAME Former City of Yakima Landfill	
PROJECT NUMBER <u>001.0221.00004</u>	PROJECT LOCATION Yakima, Washington	
DATE STARTED _2/10/09		
DRILLING DRILLING CONTRACTOR Cascade Drilling		
DRILLING DRILLING METHOD Hollow Stem Auger		
LOGGED BY B. Robinson CHECKED BY	AT END OF	
NOTES	AFTER DRILLING	
DEPTH (f) INTERVAL TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE) U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION	
	WASTE, bark mulch and branches.	
D&M 60 16 GP-GM SILTY G	GRAVEL, grayish brown, fine to coarse, angular to rounded, some silt, et o coarse-grained sand, medium dense, moist, few concrete rubble.	
	PAL SOLID WASTE, metal, glass, paper, ~25% soil, loose.	
D&M 50 7		
D&M 70 14	et: Becomes wood and concrete, (cobble caught in sampler).	
-	AND, dark olive brown, fine- to medium-grained, little wood waste,	
10.0 loose, m	noist, strong odor.	
12.5 @ 12.5 f	feet: decreased wood waste.	
REMARKS SS = Samples collected by using an 18-inch-long, 3.0-inch outside diar a 24-inch drop.	meter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with	
$ar{oldsymbol{ol}oldsymbol{oldsymbol{oldsymbol{oldsymbol{ol}ol}}}}}}}}}}}}}}}}}$		



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CLIENT City of Yakima

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER _001.0221.00004

PROJECT LOCATION Yakima, Washington

	,							
DEPTH (ft)	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
-							SILTY SAND, dark olive brown, fine- to medium-grained, little wood waste, loose, moist, strong odor. (continued)	
15.0							@14.5 feet: Becomes olive brown, fine-grained, trace to few wood and bark, moist.	
	D&M		100	3	SM			
17.5					SIVI		♥ @17 feet: Becomes olive gray, fine- to medium-grained, trace wood, wet.	
	D&M		100	6				
20.0						X .	19.5 SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand,	_1043.2
/	D&M			37	GW		rounded to well rounded, few cobbles, medium dense, wet.	
 	Y	l	I		i	, –	21.5 Boring completed at 21.5 feet	1041.2

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

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BORING NUMBER SB-10

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CLIEN	r <u>Cit</u>	of Yakima					PROJECT NAME Former City of Yakima Landfill
PROJE	CT N	JMBER 00	1.0221.	00004			PROJECT LOCATION Yakima, Washington
DATES	STAR	ED _2/10/09	9	COI	MPLE	TED 2/10/0	9 GROUND ELEVATION 1063.96 ft HOLE SIZE 8.5" Diameter
DRILLI	NG DI	RILLING CO	NTRAC	TOR Cas	cade	Drilling	GROUND WATER LEVELS:
DRILLI	NG DI	RILLING ME	THOD _	Hollow Ste	em Au	ıger	∑ AT TIME OF DRILLING 17.0 ft / Elev 1047.0 ft
LOGGE	ED BY	B. Robinso	on	СНЕ	ECKE	D BY	AT END OF
NOTES	·	***************************************					AFTER DRILLING
DEPTH (ft)	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0				Δ		200 3 200 3 200 3 200 3 300 3	WOOD WASTE, bark mulch, trace fine- to medium-grained gravel, dense, moist.
 	D&	м	100	41		3.5	SILTY GRAVEL, olive gray, fine to coarse, well-rounded, some fines, little fine-to coarse-grained sand, damp, few concrete rubble. From 4.0 to 6.0 feet: Difficult drilling.
5.0	D&	vi	70	14	GM	6.0	MUNICIPAL SOLID WASTE, paper, glass, loose, wood.
7.5	D&	и	70	6		7.0	SILTY GRAVEL, dark olive gray, fine to coarse, some silt, little fine- to coarse-grained sand, loose to very loose, moist.
10.0	/ D&	И	50	12	GW- GM		@ 10.0 feet: Little wood and plastic.
12.5	D&	и	100	5	-	13.5	1050
REM	NDV	<u> </u>					
SS = a 24-i	Samp nch di	es collected			ch-lor	ng, 3.0-inch c	outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with
- <u>x</u> - vv2	ici iei	er at time of	arming	•			



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SLK	ntern	ationai	Corp Fax: 4	25.402.8	3488				
CLIE	NT .	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill	
PRO	JEC	T NUN	IBER <u>001</u>	1.0221	.00004			PROJECT LOCATION Yakima, Washington	
DEPTH (#)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	X							MUNICIPAL SOLID WASTE, glass, paper, wood, 25% soil, very loose.	
15.0	\bigvee	D&M		40	5			@ 15 feet: Becomes silty sand (75% by volume), and solid waste.	
17.5								17.0 ∑ SANDY GRAVEL, olive gray, fine to coarse, well-rounded, few cobbles, fine- to coarse-grained sand, very dense, wet.	1047.0
		D&M		90	72	GW		19.0	1045.0

Boring completed at 19.0 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\mathcal{Q}}$ Water level at time of drilling.

BORING NUMBER SB-11 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/10/09 COMPLETED 2/10/09 GROUND ELEVATION 1064.00 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY B. Robinson CHECKED BY AT END OF _---**NOTES** AFTER DRILLING ---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME TYPE MATERIAL DESCRIPTION 0.0 WOOD WASTE. ww 1062.0 SILTY GRAVEL, grayish brown, fine to coarse, rounded, some fines, little fine-2.5 to coarse-grained sand, medium dense. D&M 80 40 GM MUNICIPAL SOLID WASTE, glass, paper, cloth, plastic, little silty sand (25% by volume), medium dense to loose. 5.0 D&M 70 40 7.5 @ 7.5 feet: Becomes 75% soil by volume, strong odor. D&M 75 11 <u>10.</u>0 @ 10.0 feet: Tire tube caught in sampler. D&M 10 11

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

waste (linoleum), very loose, moist.

GM

 ∇ Water level at time of drilling.

SILTY GRAVEL, dark olive brown, fine to coarse, rounded, some fines, few



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SILTY SAND, olive brown, fine-grained, little wood waste, medium dense, moist 36 SM @ 16.0 feet: Becomes olive gray, fine- to medium-grained, no waste. 17.0 SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, moist.	CLIENT City of Yakima					PROJECT NAME Former City of Yakima	Landfill
SILTY GRAVEL, dark olive brown, fine to coarse, rounded, some fines, few waste (linoleum), very loose, moist. (continued) 15.0 D&M 36 SM @ 16.0 feet: Becomes olive gray, fine- to medium-grained, no waste. 17.5 SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, moist.	PROJECT NUMBER _001	1.0221.	00004			PROJECT LOCATION Yakima, Washing	ton
SILTY GRAVEL, dark olive brown, fine to coarse, rounded, some fines, few waste (linoleum), very loose, moist. (continued) 15.0 D&M 36 SM @ 16.0 feet: Becomes olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, moist. SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, moist.		1 . !	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTIO	N
SILTY SAND, olive brown, fine-grained, little wood waste, medium dense, moist 36 SM @ 16.0 feet: Becomes olive gray, fine- to medium-grained, no waste. 17.5 SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, moist.		100	4	GM		SILTY GRAVEL, dark olive brown, fine to coarse, rour waste (linoleum), very loose, moist. (continued)	ded, some fines, few
@ 16.0 feet: Becomes olive gray, fine- to medium-grained, no waste. 17.0	15.0	_				SILTY SAND, olive brown, fine-grained, little wood wa	ste, medium dense, moist
SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, moist.	D&M		36	SM		@ 16.0 feet: Becomes olive gray, fine- to medium-gra	
	17.5					SANDY GRAVEL, olive gray, fine to coarse, well-roun coarse-grained sand, moist.	ded, some fine- to
/\	D&M		50/6"	GW			
Boring completed at 18.5 feet.					P	Boring completed at 18.5 feet	1045.5

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\underline{\underline{\nabla}}$ Water level at time of drilling.

BORING NUMBER SB-12 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/10/09 COMPLETED 2/10/09 GROUND ELEVATION 1063.26 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** □ AT TIME OF DRILLING 18.0 ft / Elev 1045.3 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF ---**NOTES** AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY NTERVAL U.S.C.S. NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, little fine- to coarse-grained sand, little silt, few fine gravel. 2.5 1060.3 MUNICIPAL SOLID WASTE, loose. D&M 90 11 5.0 @ 5 feet: Wood caught in shoe. D&M 5 40 7.5 @ 7.5 feet: Glass, paper, plastic, grass clippings, some silty sand (50% by volume), very dense. 50/5" D&M 50 10.0 @ 10.0 feet: Roofing material. D&M 100 85

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT

12.5

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

Water level at time of drilling.



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CLIENT City of Yakima	<u>a</u>				PROJECT NAME Former City of Yakima Landfill	
PROJECT NUMBER 0	01.0221	.00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ft) INTERVAL TYPE	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
D&M	80	6			MUNICIPAL SOLID WASTE, loose. (continued) @ 12.5 feet: Glass, paper, plastic, wood, silty fine gravel (50% by volume), very loose.	
15.0 D&M	70	36			@ 15.0 feet: Metal, plastic, wood, silty fine gravel (25% by volume), medium dense.	
17.5			_		@ 17.5 feet: Cobble caught in sampler.	1045
D&M D&M D&M D&M D&M	5	50/6"	GW	21.5	SANDY GRAVEL, olive gray, fine to coarse, well-rounded, fine- to coarse-grained sand, trace silt, dense, wet.	
1					Boring completed at 21.5 feet.	

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

SLR International Corp Fax: 425.402.8488

BORING NUMBER SB-13

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CLIENT	City	of Yakima					PROJECT NAME Former City of Yakima Landfill
PROJE	CT NUI	MBER 001	.0221.0	00004			PROJECT LOCATION Yakima, Washington
DATE S	TARTE	D 2/11/09		COI	MPLE:	TED 2	/11/09 GROUND ELEVATION 1060.65 ft HOLE SIZE 8.5" Diameter
DRILLI	NG DRI	LLING CON	TRAC	TOR <u>Cas</u>	cade [Drilling	GROUND WATER LEVELS:
DRILLI	NG DRI	LLING MET	HOD _	Hollow Ste	m Au	ger	AT TIME OF DRILLING
LOGGE	D BY _	B. Robinso	<u>n</u>	СНІ	ECKE	BY _	AT END OF
NOTES							AFTER DRILLING
O DEPTH (ft)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
2.5							WOOD WASTE, little gravel, little silt, few sand, moist. 3.0
5.0	D&M	SB13-S1	75	12			MUNICIPAL SOLID WASTE, paper, grass, glass, ~10% soil, loose, moist.
\ \ 	D&M	SB13-S2	75	15			
			,			₩	
7.5	D&M		80	27			@ 7.5 feet: Paper, plastic, grass clippings, soil (<5% by volume), medium dense.
10.0			,			\bowtie	
 	D&M		40	40			@ 10.0 feet: Glass, grass clippings, soil (25% by volume), medium dense.
	:						
12.5				 		 	

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

SLR International Corp Fax: 425.402.8488

BORING NUMBER SB-13

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	PROJECT NAME Former City of Yakima Landfill	
PROJECT NUMBER _001.0221.00004	PROJECT LOCATION Yakima, Washington	
DEPTH (ff) INTERVAL TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE) U.S.C.S.	GRAPHIC CRAPHIC LOG	
D&M 20 9	MUNICIPAL SOLID WASTE, paper, grass, glass, ~10% soil, loose, moist. (continued)	
15.0 D&M 10 16	@ 15.0 feet: Becomes silty sand (70% by volume), and 30% wood, medium dense.	
17.5 D&M 15 39	Waste: Sand and gravel (70% by volume), plastic sheeting. SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand, medium dense, moist to wet.	1042.
	From 19.0 to 23.0 feet: Difficult drilling.	
22.5	23.0 Boring completed at 23.0 feet.	1037.7

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORING NUMBER SB-14 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/11/09</u> COMPLETED <u>2/11/09</u> GROUND ELEVATION 1060.74 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: ☑ AT TIME OF DRILLING 21.0 ft / Elev 1039.7 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA MATERIAL DESCRIPTION 0.0 SILTY GRAVEL, fine to coarse, some fines, some wood waste, medium dense to loose. 2.5 GM 0 D&M 39 5.0 @ 5.0 feet: Becomes dark ofive brown, little fine- to coarse-grained sand, few municipal waste, loose, moist. SB14-D&M S1A, 80 6 1054.7 SB14-S1B MUNICIPAL SOLID WASTE, soil, wood, paper, plastic, glass, very loose. 7.5 @ 7.5 feet: Plastic caught in sampler. D&M 0 4 10.0 @ 10.0 feet: Paper, plastic, glass, soil, medium dense, moist. D&M SB14-S2 40 30

REMARKS

YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SLR GENERAL

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.



22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

BORING NUMBER SB-14

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CLIENT _(City of Yakima					PROJECT NAME Former City of Yakima Landfill	
PROJECT	NUMBER 00	.0221	.00004			PROJECT LOCATION Yakima, Washington	
To DEPTH (ft) (ft) (INTERVAL	TYPE	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	M&0	10	13			MUNICIPAL SOLID WASTE, soil, wood, paper, plastic, glass, very loose. (continued) @ 12.5 feet: Wood, glass, paper, very moist. Wood caught in sampler, limited recovery.	
15.0).)&M	5	8			@ 15 feet: Paper, loose.	
17.5	&M SB14-S3	40	13			@ 17.5 feet: Metal can, plastic, wood, fabric, soil (10% by volume), moist, loose. SANDY GRAVEL, olive gray, fine to coarse, well-rounded, fine- to coarse-grained sand, moist.	1042.7
20.0 D	&M SB14-S4	80	34	GW		@ 21 feet: Becomes wet.	
				<u> </u>	. •	21.5 Boring completed at 21.5 feet.	1039.2

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\mathcal{Q}}$ Water level at time of drilling.

BORING NUMBER SB-15 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/11/09 COMPLETED 2/11/09 GROUND ELEVATION 1058.77 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING 21.0 ft / Elev 1037.8 ft LOGGED BY B. Robinson CHECKED BY AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, bark mulch. 1058.3 SILTY GRAVEL, dark brown, medium to coarse, well-rounded, some silt, little fine- to medium-grained sand, few cobbles, medium dense, damp. 2.5 D&M SB15-S1 60 32 GM @ 4.5 feet: Becomes olive gray, some fines, little sand, loose, moist to wet. 5.0 D&M SB15-S2 33 9 1051.8 MUNICIPAL SOLID WASTE, styrofoam, plastic, wood, silty sand (40% by 7.5 volume) D&M SB15-S3 10 10.0 @ 10.0 feet: Tires, plastic, wood, soil (20% by volume), loose. D&M SB15-S4 30

REMARKS

BORINGS GPJ GINT US GDT 4/13/09

-R SB LOG

12.5

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

D&M SB15-S5

45

30

@ 12.5 feet; Paper, grass, wood, glass, plastic, medium dense.



PAGE 2 OF 2

CLIENT	_City c	of Yakima					PROJECT NAME Former City of Yakima Landfill	
PROJEC	CT NUM	MBER 001.	.0221.	00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ft) INTERVAL	ТҮРЕ	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
							MUNICIPAL SOLID WASTE, styrofoam, plastic, wood, silty sand (40% by volume) (continued)	
15.0	D&M		0	14			@ 15.0 feet: No recovery.	
			 .		-			
17.5 \ \	D&M		<5	9			@ 17.5 feet: No recovery, piece of wood blocking sampler.	
20.0							19.5	1039.3
	D&M		20	38	SM		21.0 \(\sum_{\text{CANDY CDAYEL - like core first 4}} \)	1037.8
	\				GW		SANDY GRAVEL, olive gray, fine to coarse, rounded, some fine- to coarse-grained sand, medium dense, wet.	1037.3
1							Boring completed at 21.5 feet.	

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORING NUMBER SB-16 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/11/09</u> COMPLETED <u>2/11/09</u> GROUND ELEVATION 1056.25 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** AT TIME OF DRILLING 17.0 ft / Elev 1039.3 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY _B. Robinson CHECKED BY ____ AT END OF ---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY NTERVA U.S.C.S. NAME MATERIAL DESCRIPTION 0.0 SANDY GRAVEL, dark olive brown, fine to coarse, well-rounded, some fines, little fine- to coarse-grained sand, few cobbles, medium dense, damp. GW 1054.3 SILTY GRAVEL, olive gray, medium to coarse, some fines, little fine- to 2.5 medium-grained sand, medium dense, moist. D&M SB16-S1 40 32 1051.8 MUNICIPAL SOLID WASTE, wood, grass, paper, glass, plastic, metal, loose. 5.0 D&M 0 9 7.5 D&M SB16-S2 33 3 10.0 D&M 15 2 REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

✓ Water level at time of drilling.

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT



PAGE 2 OF 2

CLIENT City of Yakima		PROJECT NAME Former City of Yakima Landfill
PROJECT NUMBER 001.0221.00004		PROJECT LOCATION _Yakima, Washington
TYPE TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
D&M 0 10		MUNICIPAL SOLID WASTE, wood, grass, paper, glass, plastic, metal, loose. (continued)
15.0		
D&M SB16-S3 40 43		
	💥	17.0 <u>V</u>
17.5		SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to coarse-grained sand, medium dense, wet.
D&M SB16-S4 90 33		
20.0	GW	
D&M SB16-S5 66 26		
		21.5 1034 Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

BORING NUMBER SB-17 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425,402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/11/09 COMPLETED 2/11/09 GROUND ELEVATION 1053.21 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING ---LOGGED BY B. Robinson CHECKED BY AT END OF ---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME MATERIAL DESCRIPTION 0.0 GRAVELLY SILT, brown, fine to coarse, subangular to well-rounded gravel, some fines, little sand, organic, few construction debris, stiff, dry. 2.5 ML D&M 25 14 5.0 SB17-S1 D&M 30 8 SB17-S2 1047.2 MUNICIPAL SOLID WASTE, glass, plastic, loose. 7.5 @ 7.5 feet: Gravel, silt, paper, plastic, and glass, very dense. SB17-S3 D&M 40 50/5"

REMARKS

D&M

0

50/1'

GP

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORINGS.GPJ GINT US.GDT

10.0

SANDY GRAVEL, olive gray with orange staining, fine to coarse, well-rounded, some fine- to coarse-grained sand, few cobbles, damp.

@ 10.0 feet: Plastic sheet on outside of sampler, no recovery.



PAGE 2 OF 2

CLIENT City o	n rakima					PROJECT NAME Former City of Yakima Landfill	
PROJECT NUM	MBER 001.	0221.	00004			PROJECT LOCATION Yakima, Washington	
972 DEPTH (ft) INTERVAL TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
\\ D&M	SB17-S4	100	50/5"			SANDY GRAVEL, olive gray with orange staining, fine to coarse, well-rounded, some fine- to coarse-grained sand, few cobbles, damp. (continued)	
15.0 D&M	SB17-S5	20	50/5"	GP			
					60 (16	Boring completed at 16 feet.	1037.2
						boning completed at 10 feet.	

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SLR Inter	R	Bothell,	Washir one: 425	ngton 98021 5,402,8800 488			PAGE 1 OF
CLIENT	City c	f Yakima					PROJECT NAME Former City of Yakima Landfill
PROJEC	CT NUN	BER 001	0221.	00004			PROJECT LOCATION Yakima, Washington
DATE S	TARTE	D 2/12/09		coi	MPLE.	TED _2	2/09 GROUND ELEVATION 1064.27 ft HOLE SIZE 8.5" Diameter
DRILLIN	IG DRIL	LING CON	TRAC	TOR Cas	cade [Orilling	GROUND WATER LEVELS:
DRILLIN	IG DRIL	LING MET	HOD _	Hollow Ste	m Au	ger	AT TIME OF DRILLING
							AT END OF
NOTES							AFTER DRILLING
DEPTH (ft)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
2.5							WOOD WASTE, reddish brown, bark mulch.
	D&M	SB18-S1	100	12			
5.0	D&M	SB18-S2	100	17	•	₹ ₹ ₹ ₹ ₹ ₹	0 105 MUNICIPAL SOLID WASTE, silty gravel (90% by volume), glass, metal,
7.5							medium dense, moist. @ 7.5 feet: Gravelly sand (60% by volume), paper, wood, glass, plastic, moist.
10.0	D&M	SB18-S3	50	24			@ 10.0 feet: Soil (10% by volume), paper, wood, plastic, very dense, moist.
. <u> </u>	D&M	SB18-S4	70	50/4"			& 10.0 1001. Out (10 / by Volume), paper, wood, plastic, very defise, filost.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.



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1041.3

SLR In	tern	ational	Telepho Corp Fax: 42		488 488					
CLIEN	۱T ِ	City c	f Yakima						PROJECT NAME Former City of Yakima Landfill	
PROJ	EC.	T NUN	IBER _001	0221.	00004				PROJECT LOCATION _Yakima, Washington	
12.5	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	
	$\left\{ \left\langle \cdot \right\rangle \right\}$	D&M	SB18-S5	35	14				MUNICIPAL SOLID WASTE, silty gravel (90% by volume), glass, metal, medium dense, moist. (continued) @ 12.5 feet: Soil (25% by volume), tires, plastic, wood, loose, moist.	
	M	D&M	SB18-S6	45	8				@ 15 feet: Soil (10% by volume), plastic, tires, loose, moist to wet.	
 17.5 		D&M	SB18-S7	33	54			19.0	@ 17.5 feet: Silty sand (50% by volume), paper, metal, moist.	1045.3
20.0		D&M	SB18-S8	100	67	SM		19,5	SILTY SAND, fine-grained, some silt, organic, dense, moist. SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand, few cobbles, dense.	1044.8
						1	[5 .	ł		

Boring completed at 23.0 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

SLR GENERAL YAKIMA SOIL BORINGS GPJ GINT US.GDT 3/20/09

22.5

BORING NUMBER SB-19 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT LOCATION Yakima, Washington PROJECT NUMBER 001.0221.00004 GROUND ELEVATION 1060.86 ft HOLE SIZE 8.5" Diameter COMPLETED 2/12/09 DATE STARTED 2/12/09 DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** ✓ AT TIME OF DRILLING 18.5 ft / Elev 1042.4 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY INTERVAL U.S.C.S. NAME TYPE MATERIAL DESCRIPTION 0.0 WOOD WASTE, some fine to medium gravel, loose. 2.5 D&M SB19-S1 80 11 5.0 1055.4 SILTY SAND, olive gray, fine-grained, some fines, little wood, few bricks. SB19-5.5-D&M 85 10 SM

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 12.5 **REMARKS**

7.5

10.0

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

waste and soil, very loose.

D&M SB19-S2

D&M SB19-S3

60

60

5

3

MUNICIPAL SOLID WASTE, Soil (50% by volume), plastic, wood, layers of

@ 10.0 feet: Silty sand layer 8" thick, wood, plastic, glass, very loose, moist.

1053.9



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CLIENT City of Yakima

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER 001.0221.00004

PROJECT LOCATION Yakima, Washington

DEPTH (ft)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
	D&M	SB19-S4	10	12			MUNICIPAL SOLID WASTE, Soil (50% by volume), plastic, wood, layers of waste and soil, very loose. <i>(continued)</i> @12.5 feet: Soil and decomposable (80% by volume), plastic, loose, moist.
15.0	D&M	SB19-S5	40	18			@ 15.0 feet: soil, wood, paper, glass, plastic, medium dense, moist.
17.5	/						@ 17.5 feet: soil, wood, metal, dense, moist. 18.0 1042
	D&M	SB19-S6	90	44	GP		SANDY GRAVEL, olive gray, fine to coarse, well-rounded, some fine- to
20.0	D&M	SB19-S7	20	32		0000	20.5 1040 Roring completed at 20.5 feet

Boring completed at 20.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

BORING NUMBER SB-20 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington _____ COMPLETED _2/12/09 DATE STARTED _2/12/09 GROUND ELEVATION 1062.25 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** AT TIME OF DRILLING 18.5 ft / Elev 1043.8 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY __ AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVAL NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, fine, trace fine to medium gravel, medium dense, moist. 2.5 D&M SB20-S1 100 16 1057.8 SILTY SAND, gray, little fine- to coarse-grained, some fines, fine to coarse 5.0 gravel, rounded, trace glass and plastic, medium dense, moist. D&M SB20-S2 SM 80 19 1055.3 MUNICIPAL SOLID WASTE, Soil (25% by volume), glass, plastic, metal, wood, 7.5 medium dense, moist. D&M SB20-S3 66 16 10.0 @ 10.0 feet: Paper, yard waste, soil, very loose, moist.

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

D&M SB20-S4

33

5



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Size international Corp	rax. 425.402.0400	U		
CLIENT City of Yak	kima		PROJECT NAME Former City of Yakima Landfill	
PROJECT NUMBER	001.0221.000	004	PROJECT LOCATION Yakima, Washington	
DEPTH (ft) INTERVAL TYPE	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE) U.S.C.S.	MATERIAL DESCRIPTION	
D&M SB2	20-S5 66	12	MUNICIPAL SOLID WASTE, Soil (25% by volume), glass, plastic, metal, wood, medium dense, moist. (continued) @ 12.5 feet: Decomposable (90% by volume), paper, plastic, glass, loose, moist.	
15.0 D&M SB2	20-S6 33	18	@ 15.0 feet: Paper, medium dense. 15.5 SANDY GRAVEL, gray, fine to coarse, some fine- to medium-grained sand, little fines, moist.	046.8
17.5 D&M SB2	20-S7 30	36/6" GW	$ar{ar{ar{ar{ar{ar{ar{ar{ar{ar{$	
20.0 D&M SB2	20-S8 66	36	20.5 Boring completed at 20.5 feet.	<u>041.</u>

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{\mathcal{Y}}}$ Water level at time of drilling.

BORING NUMBER SB-21 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/12/09 COMPLETED 2/12/09 GROUND ELEVATION 1063.80 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** □ AT TIME OF DRILLING 19.0 ft / Elev 1044.8 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY __ AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. **NTERVA** NAME TYPE MATERIAL DESCRIPTION 0.0 WOOD WASTE, fine, bark and sawdust, few fine to medium gravel, loose to medium dense, damp. 2.5 D&M SB21-S1 100 6 5.0 D&M SB21-S2 100 16 7.5 D&M SB21-S3 100 24 1055.3 SILTY SAND, gray, fine- to coarse-grained, some fines, little fine to coarse gravel, few cobbles, medium dense, moist. SM MUNICIPAL SOLID WASTE. 10.0 @ 10.0 feet: Soil/decomposable (95% by volume), paper, very loose.

REMARKS

12.5

BORINGS, GPJ GINT US, GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

✓ Water level at time of drilling.

D&M SB21-S4

5



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CL	IENT	City	of Y	akima
\sim L	. []	CILV	UI 1	anıııa

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER _001.0221.00004

PROJECT LOCATION Yakima, Washington

DEPTH (ft) (n) INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	D&M	SB21-S5	15	8			MUNICIPAL SOLID WASTE. (continued) @ 12.5 feet: Soil/decomposable (90% by volume), paper, loose.	
15.0	D&M	SB21-S6	80	7			@ 15 feet: Soil (35% by volume), paper, wood, plastic, glass, loose.	
17.5	D&M	SB21-S7	50	13			@17.5 feet: Soil/decomposable (60% by volume), wood, plastic, metal, loose.	
20.0	D&M	SB21-19- 19.4'	100	50/5"			19.0 ♥ WOOD WASTE, sludge, trace municipal solid waste, mostly decomposed, very dense, wet. GRAVELLY SAND, gray, fine- to coarse-grained, some fine to coarse gravel, few cobbles and silt, medium dense, wet.	1044.8 1044.3
	D&M	SB21-S8	100	36	SP		21.5 Roring completed at 21.5 feet	1042.3

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORING NUMBER SB-22 22122 20th Avenue SE Bothell, Washington 98021 PAGE 1 OF 2 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/13/09</u> COMPLETED <u>2/13/09</u> GROUND ELEVATION 1058.85 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING 17.0 ft / Elev 1041.9 ft LOGGED BY C. Lee CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. DEPTH (ft) NTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, some gravel. SILTY GRAVEL, gray, fine to coarse, some silt, little fine- to coarse-grained sand, moist. GM 1057.1 MUNICIPAL SOLID WASTE, soil/decomposable (95% by volume), plastic, glass, moist, layers of gray silty sand with few coarse gravel, loose. 2.5 D&M SB22-S1 66 5.0 D&M SB22-S2 20 4 1051.9 SANDY SILT, gray, fine-grained, trace municipal solid waste, trace cobbles. 7.5 medium stiff to hard, moist. D&M SB22-S3 33 10 10.0 @10.0 feet: No municipal solid waste. ML D&M SB22-S4 6

REMARKS

D&M

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

@13 feet: Becomes wet.

✓ Water level at time of drilling.



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CLIE	NT _	City o	of Yakima						PROJECT NAME Former City of Yakima Landfill	
PRO.	JECT	r NUN	/IBER <u>001</u>	.0221.	.00004				PROJECT LOCATION Yakima, Washington	
DEPTH (ff)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC	POO	MATERIAL DESCRIPTION	
	M						П	П	SANDY SILT, gray, fine-grained, trace municipal solid waste, trace cobbles, medium stiff to hard, moist. (continued)	
15.0		D&M		80	58	ML			17.0 ▽	1041.:
17.5	M	D&M		80	43		00000	SOOLS	SANDY GRAVEL, gray, medium to coarse, some fine- to coarse-grained sand, few cobbles, dense, wet.	
20.0		D&M		80	55	GM	20000000		20.5 Boring completed at 20.5 feet	1038,4
1									Boring completed at 20.5 feet.	

REMARKS

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/13/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{Y}}$ Water level at time of drilling.

BORING NUMBER SB-23 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/13/09</u> COMPLETED <u>2/13/09</u> GROUND ELEVATION 1059.30 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING 17.0 ft / Elev 1042.3 ft LOGGED BY C. Lee CHECKED BY AT END OF _---NOTES _ AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG U.S.C.S. RECOVERY INTERVA NAME MATERIAL DESCRIPTION 0.0 SAND, brown, fine-grained, some fine to medium gravel, loose, damp. SP 2.5 1056.3 MUNICIPAL SOLID WASTE, soil/decomposable (95% by volume), glass, D&M SB23-S1 55 6 plastic, paper, loose to very loose, moist. 5.0 @ 5 feet: Soil/decomposable (65% by volume), plastic, glass, paper. D&M SB23-S2 50 4 1052.3 SILTY SAND, gray, fine-grained, some fines, little fine gravel, loose, moist. 7.5 D&M SB23-S3 100 14 YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09 SM <u>10.</u>0 D&M SB23-S4 60

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.



PAGE 2 OF 2

CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington BLOW COUNTS PER FOOT (N VALUE) RECOVERY % GRAPHIC LOG U.S.C.S. INTERVA NAME TYPE MATERIAL DESCRIPTION 12.5 SILTY SAND, gray, fine-grained, some fines, little fine gravel, loose, moist. (continued) D&M SB23-S5 100 15 SM 1044.8 SANDY GRAVEL, gray, fine to coarse, some medium- to coarse-grained sand, 15.0 few cobbles, medium dense to dense, moist. D&M SB23-S6 100 33 $\bar{\Delta}$ 17.5 GW @17.5 feet: increased cobbles, becomes wet. D&M SB23-S7 60 88 D&M 51 20.0 1038.8

Boring completed at 20.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

BORING NUMBER SB-24 22122 20th Avenue SE Bothell, Washington 98021 PAGE 1 OF 2 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT _City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/13/09 COMPLETED 2/13/09 GROUND ELEVATION 1058.79 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY C. Lee CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA VAME MATERIAL DESCRIPTION 0.0 SAND, dark brown, fine-grained, moist. SP _____1057.3 WOOD WASTE, mixed with gray, fine-grained silty sand, little fine gravel, few cobbles, loose to medium dense, moist. <u>2.</u>5 D&M SB24-S1 85 3 5.0 D&M SB24-S2 66 8 _1051.8 MUNICIPAL SOLID WASTE, soil/decomposable (40% by volume), wood, 7.5 plastic, cloth/fiber, layers of brown, fine-grained sand with few cobbles, loose to medium dense, moist. D&M SB24-S3 85 R 10.0 @ 10.0 feet: Plastic, paper, wood, soil/decomposable (10% by volume), loose, moist. D&M SB24-S4 66 14

REMARKS

GINT US.GDT

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.



SLR	L Interr	${f R}$ national	Bothel	I, Wash none: 42	venue SE ington 98021 5.402.8800 8488			PAGE 2 OF	
CLI	ENT	City	of Yakima					PROJECT NAME Former City of Yakima Landfill	
PRC	JEC	T NUM	/IBER 001	.0221	.00004		<u> </u>	PROJECT LOCATION _Yakima, Washington	
H DEPTH	=	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
-		D&M	SB24-S5	10	21			MUNICIPAL SOLID WASTE, soil/decomposable (40% by volume), wood, plastic, cloth/fiber, layers of brown, fine-grained sand with few cobbles, loose to medium dense, moist. (continued) @12.5 feet: Soil/decomposable (95% by volume), plastic, medium dense, moist. @ 13.5 feet: Becomes wet.	
<u>ا</u>	1							314.5 SILTY SAND, gray, fine-grained, dense, moist, trace municipal solid waste.	<u>44.3</u>
15.C		D&M	SB24-S6	15	49	SM		18.0	40.5

Boring completed, refusal at 18.0 feet. Drill action indicated presence of large

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

BORING NUMBER SB-25 PAGE 1 OF 2

SLR Interi	${f R}$ national	Bothell	l, Washi ione: 42	enue SE ington 98021 5.402.8800 3488			BORING NUMBER SB-25 PAGE 1 OF 2
		of Yakima					PROJECT NAME _Former City of Yakima Landfill
i		MBER 001	.0221.				PROJECT LOCATION Yakima, Washington
		D 2/13/09			MPLE	TED 2/13/	GROUND ELEVATION 1058.01 ft HOLE SIZE 8.5" Diameter
DRILLIN	G DRI	LLING CON	ITRAC				GROUND WATER LEVELS:
							AT TIME OF DRILLING Dry
l							AT END OF
NOTES							AFTER DRILLING
O DEPTH (ft) (ft)	ТҮРЕ	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
					SP	1.5	SAND, brown, fine-grained, moist. SILTY SAND, dark brown, fine-grained, some fines, little medium-grained
2.5	D&M	SB25-S1	15	8			gravel, little wood waste, loose to very loose, moist.
5.0	D&M	SB25-S2	10	5	SM		
7.5						<u>∷[:]7.</u> 0_	MUNICIPAL SOLID WASTE, Fiber, plastic, glass, soil/decomposable (10% by volume), loose, moist.
 	D&M	SB25-S3	15	8			
10.0				nu .			@ 10.0 feet: Fiber, paper, soil/decomposable (25% by volume), loose, moist.
	D&M	SB24-S4	25	15			
12.5	Daw	SB25-S5		17			@ 12.5 feet: Fabric, soil/decomposable (25% by volume), medium dense, moist.
REMAI SS = Sa a 24-inci	RKS mples	collected b		17 g an 18-ind	ch-long	g, 3.0-inch	outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/13/09



BORING NUMBER SB-25 PAGE 2 OF 2

SLR In			Telepho Corp Fax: 42		5.402.8800 3488							
CLIE	CLIENT City of Yakima								PROJECT NAME Former City of Yakima Landfill			
PROJ	JECT	NUN	MBER 001.	.0221.	00004				PROJECT LOCATION Yakima, Washington			
DEPTH (ff) INTERVAL TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE) U.S.C.S. GRAPHIC LOG							GRAPHIC LOG		MATERIAL DESCRIPTION			
	X							14.5	MUNICIPAL SOLID WASTE , Fiber, plastic, glass, soil/decomposable (10% by volume), loose, moist. <i>(continued)</i>	1043,5		
15.0	X _I	D&M			50/5"	sw		15.5	GRAVELLY SAND, gray, fine to coarse, some fine- to coarse-grained gravel, very dense, moist.	1042.5		
									Boring completed, refusal at 15.5 feet.			

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488

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PAGE 1 OF 2

CLIENT	City	of Yakima					PROJECT NAME Former City of Yakima Landfill						
PROJE	CT NUI	IBER 001	.0221.	00004			PROJECT LOCATION _Yakima, Washington						
DATE S	TARTE	D 2/13/09		coi	MPLE.	TED _2	2/13/09 GROUND ELEVATION 1058.50 ft HOLE SIZE 8.5" Diameter						
DRILLIN	IG DRI	LLING CON	TRAC	TOR Cas	cade I	<u> Drilling</u>	GROUND WATER LEVELS:						
DRILLIN	IG DRI	LLING MET	HOD	Hollow Ste	m Au	ger	✓ AT TIME OF DRILLING 14.5 ft / Elev 1044.0 ft						
1							AT END OF						
NOTES	_					_	AFTER DRILLING						
<u> </u>		I		T	r								
O DEPTH O (ft)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION						
- - - -					SP		SAND, brown, fine-grained, little fine to medium gravel, moist. 1.5 SILTY SAND, gray, fine-grained, some fines, little fine to coarse gravel, trace						
2.5	/						municipal solid waste, loose, moist.						
	D&M	SB26-S1	50	6	SM		4.5						
5.0							4.5						
	D&M	SB26-S2	50	6									
7.5													
	D&M	SB26-S3	75	8			@ 7.5 feet: Soil (50% by volume), wood, plastic, loose, moist.						
	\ 												
- 10.0 12.5 REM/ SS = S a 24-in	D&M	SB26-S4	66	4			@10.0 feet: Soil (75% by volume), wood, plastic, moist.						
12.5													
DESA		l			J	* X X X X							
SS = S a 24-in	Sample	s collected	by usii	ng an 18-in	ch-lon	g, 3.0-	inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with						
☑ Wat	☑ Water level at time of drilling.												

PAGE 2 OF 2

SLKI	nern	ational	Corp Fax: 42	25.402.8	3488					
CLIE	NT .	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill		
PRO.	JEC	T NUN	/IBER 001	.0221	.00004			PROJECT LOCATION Yakima, Washington		
(H) DEPTH 12.5	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG			
		D&M	SB26-S5	33	10			MUNICIPAL SOLID WASTE, Soil (60% by volume), wood, plastic, loose, moist. (continued) @12.5 feet: Soil (50% by volume), paper, plastic, glass.		
15.0								14.5 ♥ SANDY GRAVEL, gray, fine to coarse, some medium- to coarse-grained sand, little cobbles, very dense, wet.	_1044.0	
	M	D&M	SB26-S6	100	50/5"			india addition, vary dance, view		
17.5						GW				
	M	D&M		0	50/4"					
	18.5 1040.0 Boring completed, refusal at 18.5 feet.									

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{\ \ }}$ Water level at time of drilling.

SIRI	Ĺ	\mathbf{R}	Bothell	, Washi one: 42	enue SE ngton 98021 5.402.8800			BORING NUMBER SB-27 PAGE 1 OF 2
			of Yakima	25,402,0				PROJECT NAME Former City of Yakima Landfill
			/IBER 001	.0221.				PROJECT LOCATION _Yakima, Washington
—	•					MPLE	TED 2	2/17/09 GROUND ELEVATION 1063.45 ft HOLE SIZE 8.5" Diameter
								GROUND WATER LEVELS:
								AT TIME OF DRILLING Dry
								AT END OF
			0. 200					AFTER DRILLING
O DEPTH (ft)		TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
- · · · · · · · · · · · · · · · · · · ·								WOOD WASTE, few fine gravel, very dense.
	<u>X</u>	D&M	SB27-S1	100	50/5"		* 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
5.0							<u>1</u> 11 11 11 11 11 11 11 11 11 11 11 11 1	MUNICIPAL SOLID WASTE, Soil/decomposable (90% by volume), plastic, glass, wood, paper, medium dense to very loose, moist.
	<u>}</u> 	D&M	SB27-S2	80	21			
7.5 		D&M	SB27-S3	50	33			@ 7.5 feet: Wood, soil/decomposable (30% by volume), paper, plastic, glass, moist.
		D&M	SB27-S4	66	10			@ 10.0 feet: Paper, soil/decomposable (40% by volume), plastic, glass, loose, moist.
ss	= Sa	RKS	s collected	by usi	ng an 18-in	ch-lor	ng, 3.0-	inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with
Z V			l at time of	drilling	l.			

REMARKS



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CLIENT City	of Yakima		······································			PROJECT NAME Former City of Yakima Landfill	
PROJECT NUI	MBER 001	.0221	.00004			PROJECT LOCATION Yakima, Washington	
G. T. DEPTH (ft) (ft) INTERVAL TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
						@ 12.5 feet: Plastic, glass, very loose.	1050
D&M	SB27-S5	100	4			SILTY SAND, gray, fine-grained, some fines, some bark, very loose to very dense, wet.	1050.
15.0 D&M	SB27-S6	100	50/5"	SM			
17.5 D&M	SB27-S7	66	50/6"			17.0	1046.
20.0				GW			
D&M		0	50/6"			20.5	1043.0
					_	Boring completed at 20.5 feet.	

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REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{\ \ }}$ Water level at time of drilling.

BORING NUMBER SB-28 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425.402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/18/09</u> COMPLETED <u>2/18/09</u> GROUND ELEVATION 1060.00 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** AT TIME OF DRILLING 13.5 ft / Elev 1046.5 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES _ AFTER DRILLING _---LOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY INTERVAL U.S.C.S. NAME MATERIAL DESCRIPTION WOOD WASTE, bark mulch, some fine to coarse gravel, dry to damp. 1057.0 SILTY GRAVEL, dark gray, fine to coarse, some silt, little fine- to coarse-grained D&M 70 19 sand, medium dense, moist, odor. GW-5.0 1054.5 MUNICIPAL SOLID WASTE, Wood, paper, glass, loose to dense. 66 D&M 10 7.5 @ 7.5 feet: Wood, paper, soil/decomposable (10% by volume), medium dense. D&M 40 16 10.0 @ 10.0 feet: Cobble caught in sampler, trace municipal solid waste in sampler. dense D&M 30 SANDY GRAVEL, olive gray, fine to coarse, well-rounded to flatened, some fine-to coarse-grained sand, medium dense, moist to wet. 12.5 00 GP 22 D&M 40 REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

GINT US.GDT 4/13/09

BORINGS.GPJ



PAGE 2 OF 2

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UL.	. []	CILV	UI I	anıııa

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER 001.0221.00004

PROJECT LOCATION Yakima, Washington

DEPTH (ft) INTERVAL TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
				GP 60	4.0

Boring completed at 14.0 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

BORING NUMBER SB-29 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/19/09 COMPLETED 2/19/09 GROUND ELEVATION 1068.95 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, bark mulch and wood fragments, trace fine to medium gravel, loose to medium dense, moist.

PAGE 1 OF 2

1062.0

1061.0

<u>10.0</u> @ 10.0 feet: Plastic caught in sampler.

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT

2.5

5.0

7.5

D&M SB29-S1

D&M SB29-S2

D&M

D&M

100

85

80

5

14

21

22

26

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

MUNICIPAL SOLID WASTE, gravel, paper, plastic.

WOOD WASTE, bark and sawdust, medium dense, moist.

☑ Water level at time of drilling.



PAGE 2 OF 2

1047.5

CLIENT	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill	
PROJEC	T NUN	MBER 001.	0221.	00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ff)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	D&M	SB29-S3	60	23		7.77 7.77 7.77	WOOD WASTE, bark and sawdust, medium dense, moist. (continued)	
15.0						1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
- -	D&M	SB29-S4	60	16		7. 7.7. 7. 7.7. 7. 7.7.		
17.5						7 77 7 77 7 7 7 7		
	D&M		33	34		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
20.0						70.7 7.77 7.77		
- - -	D&M	SB29-S5	66	31	Me	74.7 74.7		1048.0

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

Boring completed at 21.5 feet.

 $\overline{\underline{V}}$ Water level at time of drilling.

SLR GENERAL YAKIMA SOIL BORINGS GPJ GINT US GDT 3/20/09

BORING NUMBER SB-30 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425,402.8800 SLR International Corp Fax: 425.402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/19/09 COMPLETED 2/19/09 GROUND ELEVATION 1066.98 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR <u>Cascade Drilling</u> GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, mulch and woodchips, some sand, some fine to medium gravel, medium dense, dry to damp. 2.5 D&M SB30-S1 17 90 5.0 @ 5.0 feet: Little silty sand. D&M SB30-S2 80 35 7.5 1059.0 MUNICIPAL SOLID WASTE, olive gray silty sand, plastic, paper, loose. D&M 80 12 WOOD WASTE, loose to medium dense. 10.0 D&M 33 7

REMARKS

BORINGS, GPJ GINT US, GDT

SLR GENERAL

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.



22122 20th Avenue SE

BORING NUMBER SB-30

1046.5

1045.5

SLR Int			one: 42	5.402.8800 3488			TAGE 2 OF 2
CLIEN	T City	of Yakima					PROJECT NAME Former City of Yakima Landfill
PROJE	ECT NU	MBER 001	.0221.	.00004			PROJECT LOCATION Yakima, Washington
(#) 12.5	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
	D&M	SB30-S3	66	9			WOOD WASTE, loose to medium dense. (continued)
 15.0						7.7.7	
_	D&N		50	40		7 7 7 7 7 7 7 7 7	@ 16.0 feet: 4" piece of wood in sampler.

SANDY SILT, olive brown to olive gray, some fine- to medium-grained sand, trace gravel, stiff, moist.

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

Water level at time of drilling.

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

17.5

20.0

D&M

D&M

SB30-S4

30

100

16

12

ML

BORING NUMBER SB-31 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402,8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/19/09</u> COMPLETED <u>2/19/09</u> GROUND ELEVATION 1063.77 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING _Dry LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME MATERIAL DESCRIPTION 0.0 SILTY GRAVEL, dark brown, fine to coarse, angular to rounded, little fine- to coarse-grained sand, little wood waste, dense, moist. GM From 2.0 to 2.5 feet: Wet. 2.5 D&M SB31-S1 100 43 1060.3 WOOD WASTE. 1059.3 SILTY GRAVEL, olive gray, fine to coarse, rounded, trace glass, very dense to 5.0 medium dense. D&M 50 50/4" GM 7.5 D&M 5 13 1055.3 MUNICIPAL SOLID WASTE, medium dense. 10.0

REMARKS

D&M

D&M

0

30

24

19

BORINGS.GPJ GINT US.GDT 4/13/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

wet, sheen on sample.

@ 12.0 feet: Becomes wet.

✓ Water level at time of drilling.

@12.5 feet: Wood, paper, silty sand (25% by volume), plastic, medium dense,



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			of Yakima						PROJECT NAME Former City of Yakima Landfill	
PRO	JEC	T NUI	MBER 001	.0221.	.00004				PROJECT LOCATION Yakima, Washington	
DEPTH (ft)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	(N VALUE)	GRAPHIC LOG		MATERIAL DESCRIPTION	
	X							\$	MUNICIPAL SOLID WASTE, medium dense. (continued)	
15.0								14.5	SILTY SAND, grayish brown, fine-grained, some fines, moist, layers of bark.	1049.3
		D&M	SB31-S2	100	7	SM				
17.5		D&M			50/5"			18.0	@ 17.5 feet: Broken cobble in sampler, no recovery.	1045.8
						-			Boring completed at 18.0 feet.	15,70.0

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\underline{\underline{\vee}}$ Water level at time of drilling.

BORING NUMBER SB-32 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT LOCATION Yakima, Washington PROJECT NUMBER 001.0221.00004 DATE STARTED 2/19/09 _____ COMPLETED 2/19/09 GROUND ELEVATION _1062.60 ft HOLE SIZE _8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY B. Robinson CHECKED BY AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, little gravel, moist. 2.5 1059.6 SILTY GRAVEL, olive gray, fine to coarse, rounded, some fines, little sand, D&M SB32-S1 100 36 medium dense, damp 1059.1 MUNICIPAL SOLID WASTE, paper and decomposables (70% by volume), some silty sand, loose to medium dense. 5.0 @ 5.0 feet: Soil/decomposable (95% by volume), metal, glass, loose. D&M SB32-S2 66 8 7.5 @ 7.5 feet: Wood in sampler shoe, no recovery, medium dense. 28 D&M 10 10.0 @ 10.0 feet: Cobble in sampler, no recovery, medium dense.

REMARKS

D&M

16

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 ∇ Water level at time of drilling.



22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

BORING NUMBER SB-32

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	CLIEN	NT _	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill
L	PROJ	EC1	NUN	/IBER <u>001</u>	.0221.	.00004			PROJECT LOCATION Yakima, Washington
1	(H) (T) 12.5	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
-	-	M	D&M		0	50/5"			MUNICIPAL SOLID WASTE, paper and decomposables (70% by volume), some silty sand, loose to medium dense. (continued) @ 12.5 feet: Wood fragment in sampler, no recovery, very dense.
	- 15.0								@ 15.0 feet: Soil/decomposable (50% by volume), wood, paper, very dense.
	-		M&C	SB32-S3	10	78			17.0
ľ	17.5								SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand, very dense, damp.
	-	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	D&M		30	61	GW		
r	·				l				Boring completed at 19.0 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\mathcal{Y}}$ Water level at time of drilling.

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S	Ĺ	R	Bothell Teleph	II, Washi hone: 42	venue SE hington 98021 25.402.8800				BORING NUMBER SB-33 PAGE 1 OF 2
			l Corp Fax: 42	25.402.8					
l .			of Yakima						PROJECT NAME Former City of Yakima Landfill
			MBER 001					2/40/0	PROJECT LOCATION Yakima, Washington
									GROUND ELEVATION 1063.90 ft HOLE SIZE 8.5" Diameter
ŀ									GROUND WATER LEVELS:
									AT TIME OF DRILLING
NOTE			B. Robinso	<u>n</u>	Слі	EUNE	DB1.		AT END OF
NO.	<u>-</u> 5_					_			AFTER DRILLING
O DEPTH	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC		MATERIAL DESCRIPTION
2.5							7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		WOOD WASTE, bark, wood mulch, some fine to coarse gravel, medium dense, moist.
 		D&M	SB33-S1	100	16		7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7		
5.0	X	D&M	SB33-S2	80	50/5"			5.5	SILTY GRAVEL, olive gray, well-rounded, little cobbles, little silt, dense to
7.5			:			GP- GM	000000		medium dense, moist.
· -	\bigvee	D&M		20	36	Giv.			
ل م		1	1		1 1			9.5	MUNICIPAL SOLID WASTE, Soil (60% by volume), wood, paper, metal, plastic,
10.0		D&M	SB33-S3	40	4				loose to medium dense.
12.5	M	D&M	SB33-S4	33	7				@ 12.5 feet: Soil (50% by volume), paper, metal, plastic, rubber.
		DIC					XXXX	<u> </u>	The state of the s

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with

SLR SB LOG YAKIMA SOIL BORINGS, GPJ GINT US.GDT 4/13/09

a 24-inch drop.



CLIENT City of Yakima	3				PROJECT NAME Former City of Yakima Landfill	
PROJECT NUMBER 00	01.0221	.00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ft) INTERVAL TYPE NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
					MUNICIPAL SOLID WASTE, Soil (60% by volume), wood, paper, metal, plastic, loose to medium dense. (continued)	
15.0 D&M SB33-S	5 33	33			@ 15.0 feet: Soil/decomposable (90% by volume), glass, plastic.	
17.5 D&M	5	23			@ 17.5 feet: Tire caught in sampler, no recovery.	
20.0			GW	19.5	SANDY GRAVEL observed on sampler, no recovery. @ 20.0 feet: Very difficult drilling.	1044.4
D&M	0	63		21.5	Boring completed at 21.5 feet	1042.4

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/13/09

BORING NUMBER SB-34 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER _001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/20/09 ___ COMPLETED 2/20/09 GROUND ELEVATION 1061.41 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** ☑ AT TIME OF DRILLING 18.0 ft / Elev 1043.4 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA NAME TYPE MATERIAL DESCRIPTION 0.0 WOOD WASTE, wood chips, mulch, some fine to medium gravel. 2.5 1058.4 SILTY GRAVEL, olive brown, fine to coarse, well-rounded, some fines, little fine-D&M SB34-S1 100 50 to coarse-grained sand, dense. GW-5.0 1055.9 WOOD WASTE, mulch. D&M 80 31 1055.4 SILTY GRAVEL, olive gray, angular to rounded, some fines, little sand, dense, 1054.4 MUNICIPAL SOLID WASTE, Soil/decomposable (95% by volume), glass, 7.5 plastic, loose to very dense, moist. D&M 40 9 10.0 @ 10.0 feet: Soil/decomposable (50% by volume), bricks, metal, plastic, medium

REMARKS

BORINGS.GPJ GINT US.GDT

12.5

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

SB31-S2

55

50

19

50/6"

D&M

Гр&м

@ 12.5 feet: Soil/decomposable (90% by volume), glass.

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CLIE	NT _	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill	
PRO	JECT	NUN	IBER <u>001</u>	.0221	.00004			PROJECT LOCATION Yakima, Washington	
DEPTH (ft)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
15.0								MUNICIPAL SOLID WASTE , Soil/decomposable (95% by volume), glass, plastic, loose to very dense, moist. <i>(continued)</i>	
		D&M		0	19				
17.5	-\/\(\bar{\chi}\)	M&C		20	50/6"			@ 17.5 feet: Metal and large cobble caught in sampler, limited recovery. SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand,	1043.4
20.0						GW		few cobbles, dense, wet.	
		D&M		20	39			21.5	1039.9
						•		Boring completed at 21.5 feet	1000.0

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\sqrt{2}$ Water level at time of drilling.

SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

a 24-inch drop.

BORING NUMBER SB-35

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CLIENT City of Yakima	PROJECT NAME Former City of Yakima Landfill
PROJECT NUMBER <u>001.0221.00004</u>	PROJECT LOCATION Yakima, Washington
DATE STARTED 2/20/09 COMPLETED 2/20/09	GROUND ELEVATION 1060.03 ft HOLE SIZE 8.5" Diameter
DRILLING DRILLING CONTRACTOR Cascade Drilling	GROUND WATER LEVELS:
DRILLING DRILLING METHOD Hollow Stem Auger	∡ AT TIME OF DRILLING 18.0 ft / Elev 1042.0 ft
LOGGED BY B. Robinson CHECKED BY	
NOTES	AFTER DRILLING
BLOW COUNTS PER FOOT (N VALUE) U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION
0.0	VASTE, mulch, wood chips and bark, trace gravel.
D&M SB35-S1 90 15	
D&M 10 50/5"	∋t∶ Broken cobble in sampler, limited recovery.
	bi. Broken dobble in sampler, illinited recovery.
<u> </u>	1053.5
GM GM SILTY G	RAVEL, based on cuttings.
	AL SOLID WASTE, Soil/decomposable (90% by volume), glass,
	noist, medium dense to loose.
10.0 mg10.0 fe	et: No recovery.
0 23 D&M	
12.5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
REMARKS SS = Samples collected by using an 18-inch-long, 3.0-inch outside diar	neter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with



22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

BORING NUMBER SB-35

			of Yakima			-		PROJECT NAME Former City of Yakima Landfill	
PRO	JECT	NUN	IBER 001	.0221.	.00004			PROJECT LOCATION Yakima, Washington	
HL(#)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
		M&0	SB35-S2	66	6			MUNICIPAL SOLID WASTE, Soil/decomposable (90% by volume), glass, plastic, moist, medium dense to loose. (continued) @ 12.5 feet: Soil/decomposable (90% by volume), paper, plastic, glass, moist.	
15.0	1								
		M&C		20	10			@ 15 feet: Soil/decomposable (80% by volume), paper, wood, plastic, metal, glass, moist.	
47.5									
17.5									
		M&(SB35-S3	80	38			18.0 ♥ SANDY GRAVEL, olive gray, fine to coarse, rounded, some fine- to coarse-grained sand, trace silt, medium dense, wet.	1042.0
20.0						GW			
		&M		50	27			, 21.5	1038.5
			1			L		141.7	1038.3

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 ∇ Water level at time of drilling.

SIR Description of the second

SLR It	atern	ational	Corp Fax: 42		3488				
CLIE	NT .	City o	of Yakima						PROJECT NAME Former City of Yakima Landfill
PRO	JEC	T NUN	BER <u>001</u>	.0221.					PROJECT LOCATION Yakima, Washington
DATE	ST	ARTE	D 2/20/09		CO	MPLE	TED _	2/20/09	GROUND ELEVATION 1059.20 ft HOLE SIZE 8.5" Diameter
DRIL	LIN	3 DRII	LING CON	TRAC	TOR Cas	cade I	Drilling	1	GROUND WATER LEVELS:
DRILI	LIN	G DRIL	LING MET	HOD .	Hollow Ste	em Au	ger		AT TIME OF DRILLING
LOG	GED	BY _	B. Robinso	n	CHE	ECKE	D BY		AT END OF
NOTE	ES _								AFTER DRILLING
o DEPTH	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION
2.5									WOOD WASTE, some silt, some sand, loose, moist.
 		D&M		90	8		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
5.0	$\frac{1}{2}$	D&M	SB36-S1	100	20	ML	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	6.0	SANDY SILT, olive gray, some fine-grained sand, stiff, damp.
_						IVIL		7.0	
 7.5									MUNICIPAL SOLID WASTE, Soil/decomposable (90% by volume), glass, plastic, loose to medium dense.
		D&M	SB36-S2	30	8				p.ast.s ₁ 10000 to modium donot.
10.0		D&M		0	4				@ 10.0 feet: No recovery.
12.5									@12.5 feet: Soil/decomposable (100% by volume), loose.

REMARKS

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6

SLR SB LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/25/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.



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	CLIENT	Γ <u>City</u>	of Yakima					PROJECT NAME Former City of Yakima Landfill	
	PROJE	CT NU	WBER 001	.0221.	.00004			PROJECT LOCATION Yakima, Washington	
	DEPTH (ft)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
								MUNICIPAL SOLID WASTE, Soil/decomposable (90% by volume), glass, plastic, loose to medium dense. (continued)	
	15.0							@ 15.0 feet: Soil/decomposable (100% by volume), medium dense.	
	 -	D&M	SB36-S3	30	19			e vere veer com accomposable (100% by volume), medium dense.	
	17.5						17.0	SILTY SAND, olive gray, fine-grained, some fines, little wood, very dense, moist.	_1042.2
		D&M		20	50/5"	O IVI	18.0		1041.2
١								Boring completed, refusal at 18.0 feet.	

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

SLR SB LOG YAKIMA SOIL BORINGS. GPJ GINT US. GDT 3/25/09

$ C_1 $	r /		M		enue SE			BORING NUMBER SB-37
$ \mathcal{O} $	L	K	Teleph	one: 42	ngton 98021 5.402.8800			TAGE 1 OF 2
			Corp Fax: 42					
1			of Yakima					PROJECT NAME Former City of Yakima Landfill
					00004			
								2/20/09 GROUND ELEVATION 1063.93 ft HOLE SIZE 8.5" Diameter
								GROUND WATER LEVELS:
								AT TIME OF DRILLING Dry
ľ						ECKE	DBY _	AT END OF
NOTE	:5_		1	<u> </u>			1	AFTER DRILLING
O DEPTH (ft)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
 2.5							7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	WOOD WASTE, wood mulch and bark, some fine- to coarse-grained sand, some fine to coarse gravel, medium dense.
		D&M	SB37-S1	100	21		77 77 77 77 77 77 77 77 77 77 77 77 77	
5.0 	\\	D&M	SB37-S2	100	12			5.5 SANDY SILT, olive gray, some fine- to coarse-grained sand, little fine to coarse gravel, few wood and bark, stiff, moist.
_	V					ML		
								7.01056.
7.5	1							MUNICIPAL SOLID WASTE, soil/decomposable (80% by volume), gravel, glass, plastic, medium dense, moist.
 	<u> </u>	D&M		20	18			
10.0 		D&M		0	19			@ 10.0 feet: No recovery.
 12.5								
SS = a 24	= Sa -ind	ch drop	s collected o.			ch-lon	ıg, 3.0	inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with
予N	/ate	er leve	I at time of	drilling				



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NT .	City	of Yakima						PROJECT NAME Former City of Yakima Landfill	
JEC	TNUN	/IBER _001	.0221.	.00004				PROJECT LOCATION Yakima, Washington	
=	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC		MATERIAL DESCRIPTION	
\bigvee	D&M	SB37-S3	30	19			XXXXXXXX	MUNICIPAL SOLID WASTE, soil/decomposable (80% by volume), gravel, glass, plastic, medium dense, moist. (continued) @12.5 feet: soil/decomposable (50% by volume), paper, metal, glass, medium dense, moist.	
							14.5	SANDY SILT, olive gray, some fine- to coarse-grained sand, few wood, soft, moist.	1049.4
$\frac{1}{}$	D&M	SB37-S4	100	5	ML				
X	D&M		100	50/5"		000		SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand, few cobbles, well rounded, very dense, moist.	1046.9
					GP				
X	D&M		50	50/5"		· 0°		Boring completed at 20.5 feet.	1043.4
	INTERVAL	M&D W&D WAD WAS DAMED WITH TABLE WAS DAMED WAS DAMED WITH TABLE WAS DAMED WITH TABLE WAS DAMED WITH TABLE WAS DAMED WITH TABLE WAS DAMED WITH TABLE WAS DAMED WITH TABLE WAS DAMED WAS DAM	D&M SB37-S3 D&M SB37-S4	D&M SB37-S4 100 D&M 100	D&M SB37-S4 100 5 D&M SB37-S4 100 5 D&M SB37-S4 100 5	D&M SB37-S4 100 5 ML CP CP	D&M SB37-S3 SB37-S4 SB37-S3 SB37-S4 SB37-S3 SB37-S4 D&M SB37-S4 100 50/5" GP OO OO OO OO OO OO OO OO OO OO OO OO O	Dam SB37-S3 30 19 SANDY SILT, olive gray, some fine- to coarse-grained sand, few wood, soft, moist. Dam SB37-S4 100 5 ML Dam SB37-S4 100 5 Dam SB37-S4 100 100 100 100 100 100 100	

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\underline{\underline{\vee}}$ Water level at time of drilling.

BORING NUMBER SB-38 22122 20th Avenue SE CT D

Bothell, Washington 98021

SLR Inter			one: 425	5.402.8800 488			
		of Yakima					PROJECT NAME Former City of Yakima Landfill
PROJEC	CT NUN	BER <u>001.</u>					PROJECT LOCATION Yakima, Washington
DATE S	TARTE	D 2/20/09		cor	VIPLE.	ΓED _2	20/09 GROUND ELEVATION 1062.63 ft HOLE SIZE 8.5" Diameter
DRILLIN	IG DRIL	LING CON	TRAC	TOR Case	cade [Orilling	GROUND WATER LEVELS:
DRILLIN	IG DRIL	LING MET	HOD _	Hollow Ste	<u>m Au</u>	ger	<u> </u>
LOGGE	D BY _	3. Robinsor	<u>n</u>	CHE	ECKE) BY _	AT END OF
NOTES							AFTER DRILLING
O DEPTH (ft)	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
2.5							WOOD WASTE, woodchips and bark mulch, some sand and gravel, loose to medium dense, moist.
\ \ 	D&M		100	13		77 77 77 77 77 77 77 77 77 77 77 77 77	
5.0	D&M		33	43		7 7 7 7 7 7 7 7 7	.0 GRAVELLY SILT, olive gray, fine to medium gravel, angular to rounded, little sand, hard, moist.
7.5	D&M		20	50/0"	ML		Salid, Hard, Holst.
10.0	D&M		60	6			MUNICIPAL SOLID WASTE silty gravel, plastic, tires, metal, soil/decomposable (<5% by volume), loose, moist.
	ARKS						

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

SLR GENERAL YAKIMA SOIL BORINGS GPJ GINT US GDT 3/20/09



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CLIENT City of Yakima

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER 001.0221.00004

PROJECT LOCATION Yakima, Washington

(J) 12.5	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	\bigvee	D&M	SB38-S1	80	8			MUNICIPAL SOLID WASTE silty gravel, plastic, tires, metal, soil/decomposable (<5% by volume), loose, moist. (continued) @ 12.5 feet: soil/decomposable (80% by volume), plastic, metal, moist.	
 15.0									
	\bigvee	D&M	:	10	8				
 17.5								17.0 SANDY GRAVEL, olive gray, fine to coarse, some fine- to coarse-grained sand, very dense, moist to wet, cobbles.	4 <u>5</u> .6
	\bigvee	D&M	SB38-S2	50	42			@ 18.5 feet: Becomes wet.	
						GW		-	
20.0	\bigvee	D&M			14				
	\bigvee	DOM			17			21.5)41.1

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\underline{V}}$ Water level at time of drilling.

BORING NUMBER SB-39 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/23/09 COMPLETED 2/23/09 GROUND ELEVATION 1061.64 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: ✓ AT TIME OF DRILLING 19.5 ft / Elev 1042.1 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY AT END OF _---NOTES _ AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVAL NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, trace fine gravel, very dense. 2.5 D&M SB39-S1 100 50/6" 1 34 1057.1 GRAVELLY SILT, gray, some fine gravel, little fine-grained sand, trace wood 5.0 waste, stiff, moist. D&M SB39-S2 50 14 ML 1054.6 MUNICIPAL SOLID WASTE, very loose to loose. 7.5 @ 7.5 feet: No recovery, waste in cuttings. D&M 0 10 10.0 @ 10.0 feet: Wood, soil/decomposable (20% by volume), plastic, glass, very

REMARKS

SLR GENERAL YAKIMA SOIL BORINGS GPJ GINT US GDT 3/20/09

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

D&M SB39-S3

10

4



22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

BORING NUMBER SB-39

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1040.1

SLR I	ntern	ational	Corp Fax: 42	5.402.8	3488			
CLIE	NT _	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill
PRO.	JEC.	T NUN	IBER 001	.0221.	.00004			PROJECT LOCATION Yakima, Washington
HL(#) 12.5	=	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		D&M	SB39-S4	10	13			MUNICIPAL SOLID WASTE, very loose to loose. (continued) @ 12.5 feet: Soil/decomposable (40% by volume), wood, plastic, loose.
		D&M		0	15	_		@ 15 feet: No recovery, waste in cuttings.
17.5						-		17.0
- ·		D&M	SB39-S5	50	81			
20.0						SP		☑ @ 19.5 feet: Becomes wet.
		D&M		60	62			

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

BORING NUMBER SB-40 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/23/09</u> COMPLETED <u>2/23/09</u> GROUND ELEVATION 1060.15 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: AT TIME OF DRILLING 19.5 ft / Elev 1040.7 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY _____ AT END OF ---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE, trace fine gravel, moist. 2.5 D&M SB40-S1 80 49 1056.7 GRAVELLY SILT, gray, some fine gravel, few cobbles, little fine to medium sand, hard, moist. ML 1055.7 MUNICIPAL SOLID WASTE, very dense to loose. 5.0 @ 5.0 feet: No recovery, waste in cuttings. √D&M 50/4" 0 7.5 @ 7.5 feet: No recovery, waste in cuttings, steel can blocking sampler. D&M 0 50/5"

REMARKS

BORINGS.GPJ GINT US.GDT

SLR GENERAL YAKIMA SOIL

10.0

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 ∇ Water level at time of drilling.

D&M SB40-S2

10

13

@ 10.0 feet: Metal, wood, soil/decomposable (20% by volume), loose.



BORING NUMBER SB-40

PAGE 2 OF 2

CLIENT City of Yakima		PROJECT NAME Former City of Yakima Landfill									
PROJECT NUMBER 001.0221	.00004	PROJECT LOCATION Yakima, Washington									
G.T. DEPTH G.T. (ft) INTERVAL TYPE NAME RECOVERY %	BLOW COUNTS PER FOOT (N VALUE) U.S.C.S.	MATERIAL DESCRIPTION									
D&M SB40-S3 33	8	MUNICIPAL SOLID WASTE, very dense to loose. (continued) @ 12.5 feet: Wood, soil/decomposable (40% by volume), plastic, glass, loose.									
		14.5 1045.7									
15.0		SANDY SILT, gray, some fine-grained sand, medium stiff, moist.									
D&M SB40-S4 50	9 ML										
17.5											
D&M SB40-S5 100	27	SANDY GRAVEL, gray, fine to medium, some fine to medium sand, little silt, medium dense, moist.									
20.0	GW	@ 19.5 feet: Becomes wet.									
D&M 70	24										
	21.5 Boring completed at 21.5 feet.										

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

 $\overline{\mathcal{Y}}$ Water level at time of drilling.

BORING NUMBER SB-41 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425,402,8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington GROUND ELEVATION 1064.60 ft HOLE SIZE 8.5" Diameter DATE STARTED <u>2/23/09</u> COMPLETED <u>2/23/09</u> DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY C. Lee CHECKED BY __ AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA NAME MATERIAL DESCRIPTION 0.0 WOOD WASTE. 1063.1 SILTY SAND, gray, fine-grained, some fines, little fine gravel, medium dense, 2.5 D&M SB41-S1 66 20 SM 5.0 D&M SB41-S2 33 22 1057.6 MUNICIPAL SOLID WASTE, medium dense to loose. 7.5 @ 7.5 feet: No recovery, waste in cuttings. D&M 0 13 10.0 @ 10.0 feet: No recovery, waste in cuttings, gas venting from auger stem.

REMARKS

D&M

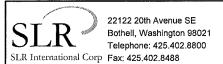
0

17

SLR GENERAL YAKIMA SOIL BORINGS.GPJ GINT US.GDT

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

Water level at time of drilling.



BORING NUMBER SB-41

PAGE 2 OF 2

LIENT	City of Yakima	PROJECT NAME	Former City of Yakima Landfi
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PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington

(H) 12.5	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	
	D&M	SB41-S3	20	6			MUNICIPAL SOLID WASTE, medium dense to loose. (continued) @ 12.5 feet: soil/decomposable (40% by volume), wood, plastic, loose.	
15.0								
	D&M		0	13				
17.5							@ 17.5 feet: No recovery, drilling action indicated municipal solid waste, loose.	
	D&W		0	15		19.5		1045.1
20.0						XXXX 19.3	SILTY SAND, gray, fine-grained, some fines, little fine to medium gravel, dense, moist.	1045.1
	D&N	SB41-S4	30	55	SM	21.5	Paring completed at 24.5 feet	1043.1

Boring completed at 21.5 feet.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

WELL NUMBER MW-11 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800

PAGE 1 OF 2

CLIENT	Γ_(City of Ya	kima					PROJECT NAME Former City of Yakima Landfill				
PROJE	СТ	NUMBER	R <u>001.</u>	0221.	00004	*****		PROJECT LOCATION Yakima, Washington				
DATE S	STA	RTED 2	2/16/09		cor	VIPLE.	TED 2/16/	/09 GROUND ELEVATION 1063.19 ft HOL	E SIZE 8.5" Diameter			
DRILLI	NG	DRILLIN	G CON	TRAC	TOR Case	cade I	Drilling	GROUND WATER LEVELS:				
DRILLI	NG	DRILLIN	G METI	HOD	Hollow Ste	m Au	ger	AT TIME OF DRILLING 15.5 ft / Elev 10	047.7 ft			
LOGGE	ED I	BY C. L	ee		CHE	CKE	D BY	AT END OF				
NOTES	;			***************************************					AFTER DRILLING			
	T			%	ဟ							
O DEPTH O (ft)	INIERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM			
							12. 14.12	WOOD WASTE medium dense.				
2.5	\\\ c	D&M MW	/11-S1	100	29			@ 4.5 feet: Some gray silt, few fine gravel.	Goncrete Hydrated bentonite chips 2"-diameter			
 7.5	X C	M&C	/11-S2	100	50/4"		70 27 27 27 27 27 27 27 27 27 27 27 27 27		Sch. 40 PVC blank riser			
		D&M		0	24		14 24 14 14 14 14 14 14 14 14 14 14 14 14 14					
10.0	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	D&M		0	43		7. 27. 2 7. 27. 2 7. 27. 2 7. 27. 2 7. 27. 3		16x30 Colorado silica sand pack			
							711. 7	@ 12.0 feet: Driller comment - drilled through a log.				
12.5	+					-	1/2 1/2	@ 12.5 feet: Some gray fine-grained sand.				
	X		,,,,,,,,,		0.5		7.7.7	· · · · · · · · · · · · · · · · · · ·				
/	<u> </u>	NM M&C	/11-S3	30	25	<u> </u>	<u> </u>					
* = Sc	IAF Sar oil s	RKS nples col	lected l	by usi	ng an 18-in hemical or	ch-lor geote	ng, 3.0-inch	n outside diameter Dames & Moore split-barrel sampler driven alysis.	by a 300 lb. wireline hamm			

SLR International Corp Fax: 425.402.8488



WELL NUMBER MW-11

PAGE 2 OF 2

screen

End cap

1041.2

SLR International Corp Fax: 425.402.8488 **CLIENT** City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington LOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVAI DEPTH (ft) NAME MATERIAL DESCRIPTION WELL DIAGRAM WOOD WASTE medium dense. (continued) 17.31, V 6 · V 14.5 1048.7 GRAVELLY SAND, gray, fine- to medium-grained, 15.0 some fine to medium gravel, some fractured cobbles up to 3"-diameter, very dense, moist to wet. D&M MW11-S4 50/4" 100 2"-diameter Sch. 40 PVC 0.020"-slotted

Boring completed at 22.0 feet.

@ 19.0 feet: Sand becomes fine-grained.

WELL COMPLETION DETAILS:

D&M MW11-S5

100

50/5"

66

+2.8 to 0 feet: 2"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

0 to 6 feet: 2"-diameter Sch. 40 PVC blank riser.

6 to 20.8 feet: 2"-diameter Sch. 40 PVC 0.020"-slotted screen.

20.8 to 21.1 feet: 2"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

D&M

2 to 4 feet: Hydrated bentonite chips. 4 to 22 feet: 16x30 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. * = Soil sample submitted for chemical or geotechnical analysis.

 $\overline{\underline{V}}$ Water level at time of drilling.

SLR MW LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

<u>17.5</u>

20.0

WELL NUMBER MW-12 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/16/09 COMPLETED 2/16/09 GROUND ELEVATION 1065.73 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING 12.5 ft / Elev 1053.2 ft LOGGED BY C. Lee CHECKED BY AT END OF ----AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA NAME MATERIAL DESCRIPTION WELL DIAGRAM 0.0 SAND, brownish gray, fine-grained, loose to very dense, moist to wet. Concrete 2.5 D&M MW12-S1 60 13 Hvdrated bentonite chips @ 4.5 feet: Becomes gravelly, medium to coarse, few 5.0 cobbles, little silt, very dense. 2"-diameter Sch. 40 PVC D&M MW12-S2 100 50/6" blank riser SP 7.5 D&M MW12-S3 100 50/5" 16x30 Colorado 10.0 silica sand pack D&M MW12-S4 66 57

REMARKS

D&M

SLR MW LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT 3/20/09

12.5

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. * = Soil sample submitted for chemical or geotechnical analysis.

② @ 12.5 feet: Becomes wet.

✓ Water level at time of drilling.

0

26

PAGE 2 OF 2

CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA DEPTH (ft) NAME MATERIAL DESCRIPTION WELL DIAGRAM SAND, brownish gray, fine-grained, loose to very dense, moist to wet. (continued) @ 14.0 feet: Becomes gray, fine-grained with no SP 15.0 gravel, medium dense wet. D&M MW12-S5* 80 16 16,0 1049.7 SANDY GRAVEL brown, fine to coarse, rounded. $^{\circ}$ \bigcirc $^{\circ}$ some fine- to medium-grained sand, some cobbles, 2"-diameter 000 0 few fines, medium dense, wet. Sch. 40 PVC 0.020"-slotted @ 17.0 feet: Gravel becomes fine. 17.5 screen D&M MW12-S6 50 38 GP @ 19.5 feet: Gravel becomes fine to medium. 20.0 D&M MW12-S7 66 35 End cap 1043.7

WELL COMPLETION DETAILS:

SLR International Corp Fax: 425.402.8488

+2.8 to 0 feet: 2"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

Boring completed at 22.0 feet.

0 to 6.2 feet: 2"-diameter Sch. 40 PVC blank riser.

6.2 to 21 feet: 2"-diameter Sch. 40 PVC 0.020"-slotted screen.

21 to 21.2 feet: 2"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 4 feet: Hydrated bentonite chips. 4 to 22 feet: 16x30 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. * = Soil sample submitted for chemical or geotechnical analysis.

Water level at time of drilling.

SIRIO	rtern	R ational	Bothell,	Washi	enue SE ngton 98021 5,402.8800				VVLL	PAGE 1 OF 2		
			of Yakima						PROJECT NAME Former City of Yakima	Landfill		
I.			BER <u>001.</u>						PROJECT LOCATION Yakima, Washingt	on		
DATE	ST	ARTE	D 2/17/09		cor	MPLE.	TED _2	2/17/09	GROUND ELEVATION 1063.56 ft	HOLE SIZE 8.5" Diameter		
DRILL	LINC	G DRII	LING CON	TRAC	TOR Case	cade I	Orilling		GROUND WATER LEVELS:			
DRILI	JINC	3 DRIL	LING METI	HOD .	Hollow Ste	m Au	ger					
LOGO	SED	BY _	C. Lee		CHE	ECKE	DBY_		AT END OF			
NOTE	S_								AFTER DRILLING			
o DEPTH (ft)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	WELL DIAGRAM		
									own, fine-grained, little fine to coarse dium dense, damp to wet.	→ Concrete		
		D&M	MW13-S1	33	26			@ 4.0 feel cobbles u	t: Gravel becomes predominantly fine, few o to 3"-diameter, becomes moist.	Hydrated bentonite chips		
<u>5.0</u>		D&M	MW13-S2		18	SP				2"-diameter Sch. 40 PVC blank riser		
7.5						58		@ 7.0 fee <u>∇</u>	t: Cobbles increase to some, becomes wet.			
-		D&M	MW13-S3	30	14							
									t: Gravel increases to some and becomes o coarse, trace silt, wet.	+ 16x30 Colorado silica sand		
		D&M	MW13-S4	50	13					pack		
12.5	 											
	$\frac{1}{N}$	D&M	MW13-S5	80	14			13.5		1050.1		
SS	= Sa	RKS ample samp		oy usi d for c	ng an 18-in hemical or	ch-lor geote	ng, 3.0- chnica	-inch outside diam Il analysis.	eter Dames & Moore split-barrel sampler dr	iven by a 300 lb. wireline hamme		
□ ∨ v		·	I at time of			-		-				

REMARKS



WELL NUMBER MW-13

PAGE 2 OF 2

End cap

1042.1

PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington LOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. DEPTH (ft) INTERVA NAME MATERIAL DESCRIPTION WELL DIAGRAM ORGANIC SOIL, dark brown, high-plasticity, stiff, wet, little wood bark. CL 1049.1 SILTY SAND, brownish gray, fine-grained, little silt, 15.0 loose to medium dense, wet, little to some wood bark. D&M MW13-S6* 100 8 2"-diameter Sch. 40 PVC SP-0.020"-slotted SM @ 17.0 feet: Becomes dark brown, some silt, little fine screen 17.5 to coarse gravel, medium dense, wet, trace wood D&M MW13-S7* 80 35 1044.1 SAND, brown, fine- to medium-grained, some gravel, 20.0 some cobbles, dense, wet. SP D&M|MW13-S8| 66 51

Boring complete at 21.5 feet.

WELL COMPLETION DETAILS:

+2.6 to 0 feet: 2"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

0 to 6.2 feet: 2"-diameter Sch. 40 PVC blank riser.

6.2 to 21 feet: 2"-diameter Sch. 40 PVC 0.020"-slotted screen.

21 to 21.3 feet: 2"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 4 feet: Hydrated bentonite chips. 4 to 21.5 feet: 16x30 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

* = Soil sample submitted for chemical or geotechnical analysis.

 $\overline{\underline{V}}$ Water level at time of drilling.

CLIE	NT _	City o	f Yakima					PROJECT NAME Former City of Yakima Landfill	
PRO.	JEC.	T NUN	IBER _001	.0221.	00004			PROJECT LOCATION Yakima, Washington	
DATE	ST	ARTE	D <u>2/17/09</u>		cor			17/09 GROUND ELEVATION 1063.52 ft HOLE S	IZE 8.5" Diameter
DRIL	LINC	3 DRIL	LING CON	TRAC	TOR Case	cade [Drilling	GROUND WATER LEVELS:	
DRIL	LINC	3 DRIL	LING MET	HOD _	Hollow Ste	m Au	ger	∇ AT TIME OF DRILLING 7.5 ft / Elev 1056.0) ft
								AT END OF	
NOTE	ES _							AFTER DRILLING	
O DEPTH O (ft)	INTERVAL	ТҮРЕ	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM
						GM		SILTY GRAVEL, dark gray, fine to coarse, some fines, little sand, rounded, moist, some wood waste. 2.0 to 8.0 feet: No wood waste.	Hydrated bentonite chips 1"-diameter Sch. 40 PVC blank riser 2x12 Colorado
 	\bigvee	D&M		15	21			5.0 to 8.0 feet: Little fine- to coarse-grained medium-dense sand.	colorado silica sand pack
7.5	$\left\{ \left(\left\{ \right\} \right\} \right\} \right\}$	D&M		0	13				Sch. 40 PVC 0.020"-slotted screen

SOIL VAPOR PROBE COMPLETION DETAILS:

+3.3 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

Boring completed at 8.0 feet.

0 to 4 feet: 1"-diameter Sch. 40 PVC blank riser.

4 to 7.8 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

7.8 to 7.9 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 3.5 feet: Hydrated bentonite chips. 3.5 to 8 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

☑ Water level at time of drilling.

PROBE NUMBER GP-5 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp. Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED <u>2/17/09</u> COMPLETED <u>2/17/09</u> GROUND ELEVATION 1063.51 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: ☑ AT TIME OF DRILLING 17.0 ft / Elev 1046.5 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF _---AFTER DRILLING _---**NOTES** BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME TYPE MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 SILTY SAND, dark brown, some silt, little fine to medium well-rounded gravel, moist, organic, wood waste. Concrete SM 2.5 @ 3.0 feet: Becomes light olive brown, fine-grained, 60 D&M 21 medium-dense sand, no gravel. Hydrated bentonite chips 1059.0 SANDY SILT, olive gray, some fine-grained sand, trace organics, 1/2" lenses of brown organics, stiff. 5.0 M&D GP5-S1 100 11 ML @ 7.0 feet: Becomes moist to wet and grades to 1"-diameter 7.5 SILTY SAND. Sch. 40 PVC blank riser 1055.5 SANDY GRAVEL, olive gray, fine to coarse, rounded D&M GP5-S2 80 39 to well-rounded, some medium- to coarse-grained sand, dense, damp. 10.0 2x12 Colorado silica sand GP5-S3 53 GW D&M 45 pack 12.5 @ 12.5 feet: Broken cobble in sampler, no recovery. 1"-diameter D&M 20 50/6" Sch. 40 PVC

REMARKS

YAKIMA SOIL BORINGS.GPJ GINT US.GDT

SLR GP LOG

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

PAGE 2 OF 2

CLIEN	NT .	City o	of Yakima						PROJECT NAME Former City of Yakima	Landfil	1		
PROJ	JEC	T NUN	IBER 001	.0221.	00004				PROJECT LOCATION Yakima, Washingt	.on			
DEPTH (ft)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION		PROBE DIAGRAM		
						GW	X	14.5	SANDY GRAVEL, olive gray, fine to coarse, rounded to well-rounded, some medium- to coarse-grained sand, dense, damp. (continued) SAND, olive gray, medium-grained, trace	<u> 1049</u> .0	<u> </u>	0.020"-slotted screen -End cap	
15.0		D&M	GP5-S4	90	11	SP		16.0	coarse-grained sand, trace fine gravel, loose, moist. SANDY GRAVEL, light olive brown, fine to coarse,	1047.5	5		
17.5						GW		Ā	well-rounded, some fine- to coarse-grained sand, very dense, moist. @ 17.0 feet: Becomes wet.				
	X	D&M		90	50/6"	<u> </u>		18.0	@ 17.5 feet: Broken cobble in sampler, no recovery.	1045.5	5		
1									Boring completed at 18.0 feet.				

SOIL VAPOR PROBE COMPLETION DETAILS:

+3.1 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

0 to 9.7 feet: 1"-diameter Sch. 40 PVC blank riser.

9.7 to 14.2 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

14.2 to 14.5 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 9 feet: Hydrated bentonite chips. 9 to 18 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

Water level at time of drilling.

BORINGS.GPJ GINT US.GDT

SLR GP LOG YAKIMA SOIL

1044.3

PAGE 2 OF 2

Native slough

CLIENT City of Yakima	PROJECT NAME Former City of Yakima Landfill PROJECT LOCATION _Yakima, Washington			
PROJECT NUMBER 001.0221.00004				
DEPTH (ft) INTERVAL TYPE NAME RECOVERY % BLOW COUNTS PER FOOT (N VALUE) U.S.C.S. GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM		

SAND, gray, fine-grained, medium-dense, moist. (continued)
Boring completed at 14.0 feet.

SOIL VAPOR PROBE COMPLETION DETAILS:

+3.1 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

no recovery.

0 to 6.8 feet: 1"-diameter Sch. 40 PVC blank riser.

6.8 to 11.6 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

SP

11.6 to 11.9 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 5.5 feet: Hydrated bentonite chips. 5.5 to 12.5 feet: 2x12 Colorado silica sand. 12.5 to 13 feet: Hydrated bentonite chips.

13 to 14 feet: Native slough.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. autohammer with a 24-inch drop.

abla Water level at time of drilling.

S	SI LR In	terna	R Itional	Bothell	, Washi one: 42	enue SE ngton 98021 5.402.8800 3488			PROBE NUMBER GP-7 PAGE 1 OF 1	
c	LIEN	ΙΤ	City o	of Yakima					PROJECT NAME Former City of Yakima Landfill	
P	ROJ	EC1	NUN	/IBER _001	.0221.	00004			PROJECT LOCATION Yakima, Washington	
	ATE	STA	ARTE	D 2/18/09)	cor	VIPLE	TED _2	2/18/09 GROUND ELEVATION 1045.54 ft HOLE SIZE 8.5" Diameter	
	RILL	ING	DRII	LLING CON	ITRAC	TOR Cas	cade I	Orilling	GROUND WATER LEVELS:	
	RILL	ING	DRII	LLING MET	HOD	Hollow Ste	m Au	ger	✓ AT TIME OF DRILLING 7.0 ft / Elev 1038.5 ft	
_	oge	ED	BY _	B. Robinso	n	CH	ECKE	D BY _	AT END OF	
N	OTE	s_							AFTER DRILLING	
		INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION PROBE DIAGRAM	
	0.0					50/2"	GW		SANDY GRAVEL, brown, fine to coarse, some fine- to coarse-grained sand, little silt, very dense, moist. Hydrated bentonite chips 1"-diameter Sch. 40 PVC blank riser 2x12 Colorado silica sand pack 1"-diameter Sch. 40 PVC 0.020"-slotted screen End cap @ 6.5 feet: Becomes olive gray. @ 7.0 feet: Becomes wet. @ 7.5 feet: Orange-brown staining, trace silt, broken	
Boring completed at 8.5 feet. SOIL VAPOR PROBE COMPLETION DETAILS: +3 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards. 0 to 3.6 feet: 1"-diameter Sch. 40 PVC blank riser. 3.6 to 6 feet: 1"-diameter Sch. 40 PVC o.020"-slotted screen. 6 to 6.2 feet: 1"-diameter Sch. 40 PVC end cap. 0 to 2 feet: Concrete. 2 to 3 feet: Pydrated bentonite chips. 3 to 7.5 feet: 2x12 Colorado silica sand. 7.5 to 8.5 feet: Native slough. REMARKS SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline har										
ILR GP	Žν	/ate	r leve	at time of	drilling	g				

REMARKS

6.5 to 6.6 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 3 feet: Hydrated bentonite chips. 3 to 9 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

 \sum Water level at time of drilling.

PAGE 1 OF 1

CLIEN	IT _	City c	of Yakima					PROJECT NAME Former City of Yakima Landfill				
PROJ	ECT	r NUN	BER 001	.0221.	00004			PROJECT LOCATION Yakima, Washington				
DATE	STA	ARTE	D <u>2/18/09</u>		cor	VIPLE:	red _2	/18/09 GROUND ELEVATION 1048.09 ft HOLE SIZE 8.5	i" Diameter			
DRILL	ING	DRIL	LING CON	TRAC	TOR Case	cade [Drilling	GROUND WATER LEVELS:	GROUND WATER LEVELS:			
DRILL	ING	DRIL	LING MET	HOD	Hollow Ste	m Au	ger	AT TIME OF DRILLING 7.0 ft / Elev 1041.1 ft	AT TIME OF DRILLING 7.0 ft / Elev 1041.1 ft			
LOGG	ED	BY _	B. Robinso	n	CHE	ECKE	BY _	AT END OF				
NOTE	s _							AFTER DRILLING				
O DEPTH (ft)	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG		BE DIAGRAM			
 							7. 7.7 7. 7.7 7. 7.7 7. 7.7	GRAVELLY SAND, brown, medium- to	≺ Concrete			
- <u>-</u> 2.5 _	M	D&M	GP9-S1	75	22	SP		coarse-grained, fine to medium gravel, medium-dense, damp.	Hydrated bentonite chips 1"-diameter Sch. 40 PVC blank riser			
 5.0			~				. 3.	4.5 SANDY GRAVEL, brown, fine to coarse, well-rounded to flattened, medium- to coarse-grained	2x12 Colorado silica sand			
_	X	D&M		90	50/6"]		sand, very dense, damp, cobble in sampler.	pack			
 						GW		@ 6.0 feet: Grades to olive gray. ☑ @ 7.0 feet: Becomes wet.	1"-diameter Sch. 40 PVC 0.020"-slotted screen End cap			
7.5	X	D&M	-1·· 1/2	90	50/6"			8.0 1040.1	Native slough			
_	·							Boring completed at 8.0 feet				

SOIL VAPOR PROBE COMPLETION DETAILS:

+3 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

0 to 4.2 feet: 1"-diameter Sch. 40 PVC blank riser. 4.2 to 6.8 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

6.8 to 6.9 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 3 feet: Hydrated bentonite chips. 3 to 7.5 feet: 2x12 silica sand. 7.5 to 8 feet: Native slough.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

Water level at time of drilling.

SI.R In	iterna	R	Bothell,	Washi one: 42	enue SE ngton 98021 5.402.8800		, , , , , ,		PI	ROBE N		R GP-10 PAGE 1 OF 2
1			of Yakima						PROJECT NAME Former City of Y	akima Landfill		
	-		/IBER 001						PROJECT LOCATION Yakima, Wa			
						MPLE	TED	2/18/09				
									GROUND WATER LEVELS:			
										ft / Elev 1052	.4 ft	
									AFTER DRILLING			
O DEPTH	INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC		MATERIAL DESCRIPTION			E DIAGRAM
0.0						CD	501	0.3 ASPHAL		1065.1		
 2.5								SILTY G	ASE RAVEL, dark brown, fine to coarse, sor ood waste, medium-dense, moist.	1064.8 ne		⋖ Concrete
		D&M	GP10-S1	80	18	GM						- Hydrated
						L			GRAVEL, olive brown, fine to coarse, fi			bentonite chips
5.0		D&M	GP10-S2	40	31			to coarse moist.	-grained sand, cobbles, medium-dens	9,		Cimpo
 7.5	X	D&M		0	50/6"							- 1"-diameter Sch. 40 PVC blank riser
	-					GW					1	⊢2x12 Colorado silica sand pack
10.0		D&M		0	37			@ 10.0 fo	eet: Difficult drilling.			- 1"-diameter Sch. 40 PVC 0.020"-slotted screen
12.5									eet: Becomes wet. Impleted at 13.0 feet.	1052.3		−End cap
I		RKS ample		by usi	ng an 18-in	ch-lor	ng, 3.0		neter Dames & Moore split-barrel sam	pler driven by	a 300 lb. w	vireline hammer.
Žν	√ate	r leve	l at time of	drilling).							



PAGE 2 OF 2

SLR International Corp Fax: 425.402.8408

CLIENT City of Yakima

PROJECT NAME Former City of Yakima Landfill

PROJECT NUMBER _001.0221.00004

PROJECT LOCATION Yakima, Washington

DEPTH
(ft)
INTERVAL
TYPE

NAME

BLOW COUNTS PER FOOT (N VALUE) U.S.C.S.

MATERIAL DESCRIPTION

PROBE DIAGRAM

SOIL VAPOR PROBE COMPLETION DETAILS:

RECOVERY

+3 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

0 to 7.4 feet: 1"-diameter Sch. 40 PVC blank riser.

7.4 to 12.2 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

12.2 to 12.5 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 6.5 feet: Hydrated bentonite chips. 6.5 to 13 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

 $\sqrt{2}$ Water level at time of drilling.

SLR GP LOG YAKIMA SOIL BORINGS, GPJ GINT US, GDT 3/25/09

PROBE NUMBER GP-11 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425,402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington COMPLETED 2/19/09 GROUND ELEVATION 1065.58 ft HOLE SIZE 8.5" Diameter DATE STARTED 2/19/09 DRILLING DRILLING CONTRACTOR Cascade Drilling **GROUND WATER LEVELS:** DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY B. Robinson CHECKED BY _____ AT END OF _---NOTES AFTER DRILLING _---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY INTERVAL U.S.C.S. NAME MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 WOOD WASTE, bark mulch, some silty sand, little gravel. **Concrete** 2.5 1061.6 Hydrated SILTY SAND, fine- to coarse-grained, some silt, little bentonite fine to coarse well-rounded gravel, few wood waste, chips medium dense, moist. 5.0 D&M 90 22 SM "-diameter Sch. 40 PVC 7.5 blank riser 1057.1 WOOD WASTE, reddish brown, bark mulch and wood chips, moist. 10.0 SLR GP LOG YAKIMA SOIL BORINGS.GPJ GINT US.GDT D&M 80 38 2x12 Colorado silica sand pack 12.5 1"-diameter Sch. 40 PVC **REMARKS** SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

 \sum Water level at time of drilling.

PAGE 2 OF 2

		of Yakima VIBER 001	.0221.	.00004			PROJECT NAME Former City of Yakima Landfil PROJECT LOCATION Yakima, Washington	PROJECT NAME Former City of Yakima Landfill PROJECT LOCATION Yakima, Washington		
		T	1		1					
DEPTH (ft)	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM		
15.0						17 - 34 17 17 - 34 17 17 - 34 17	WOOD WASTE, reddish brown, bark mulch and wood chips, moist. (continued)	0.020"-slotted screen		
	D&M			50/5"		71/7	@ 15.0 feet: Piece of wood caught in sampler, no 15.5 recovery moist	End cap		

SOIL VAPOR PROBE COMPLETION DETAILS:

+2.8 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

Boring completed at 15.5 feet.

recovery, moist.

0 to 10.3 feet: 1"-diameter Sch. 40 PVC blank riser.

10.3 to 15 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

15 to 15.4 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

2 to 9 feet: Hydrated bentonite chips. 9 to 15.5 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

PROBE NUMBER GP-12 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT LOCATION Yakima, Washington PROJECT NUMBER 001.0221.00004 DATE STARTED 2/19/09 COMPLETED 2/19/09 GROUND ELEVATION 1062.34 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR _Cascade Drilling **GROUND WATER LEVELS:** AT TIME OF DRILLING 17.5 ft / Elev 1044.8 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY B. Robinson CHECKED BY AT END OF ---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVAL NAME PROBE DIAGRAM MATERIAL DESCRIPTION 0.0 WOOD WASTE, bark mulch, moist. 10.7 Concrete 2.5 1059.3 SILTY SAND, olive gray, fine- to coarse-grained, D&M GP12-S1 90 39 little fine to coarse rounded gravel, medium-dense, moist. Hydrated bentonite chips 5.0 5.0 to 10.0 feet: Little wood waste. D&M GP12-S2 80 25 7.5 1"-diameter SP-Sch. 40 PVC 10 D&M 5 SM blank riser <u>10.</u>0 @ 10.0 feet: Becomes dark olive brown, some wood 4/13/09 waste, cobble caught in sampler. 2x12 Colorado YAKIMA SOIL BORINGS.GPJ GINT US.GDT D&M 40 18 silica sand pack 12.5 @ 12.5 feet: No recovery. Cuttings indicate silty sand with some gravel. 1"-diameter Sch. 40 PVC 0 18 D&M REMARKS SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. SLR GP I \sum Water level at time of drilling. (Continued Next Page)

1043.3

Native slough

PAGE 2 OF 2

CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington LOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA DEPTH (ft) NAME MATERIAL DESCRIPTION PROBE DIAGRAM 0.020"-slotted SILTY SAND, olive gray, fine- to coarse-grained, screen little fine to coarse rounded gravel, medium-dense, moist. (continued) 15.0 D&M 5 36 End cap SP-SM

Boring completed at 19.5 feet, sandy gravel in end of sampler shoe.

@ 17.0 feet: Becomes olive gray, fine-grained, moist

SOIL VAPOR PROBE COMPLETION DETAILS:

100

+3.1 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

☑ to wet, trace organics. @ 17.5 feet: Becomes wet.

0 to 10.9 feet: 1"-diameter Sch. 40 PVC blank riser.

10.9 to 15.7 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

38

15.7 to 16.0 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 2 feet: Concrete.

D&M

17.5

2 to 10 feet: Hydrated bentonite chips. 10 to 18.5 feet: 2x12 Colorado silica sand.

GP12-S3

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 2/23/09 COMPLETED 2/23/09 GROUND ELEVATION 1062.49 ft HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY C. Lee CHECKED BY AT END OF NOTES AFTER DRILLING HLAND AND AND AND AND AND AND AND AND AND			
DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING Dry LOGGED BY C. Lee CHECKED BY AT END OF NOTES AFTER DRILLING	PROJECT NAME Former City of Yakima Landfill PROJECT LOCATION Yakima, Washington		
DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY AT END OF NOTES AFTER DRILLING	ter		
LOGGED BY _C. Lee CHECKED BY AT END OF NOTES AFTER DRILLING			
NOTES AFTER DRILLING			
NOTES AFTER DRILLING			
THE LEG COUNTS ALUE) ALUE) ALUE A			
	GRAM		
WOOD WASTE, some gravelly sand, little silt. ✓ Cond ✓ પ્રાથમ Hydr	rated tonite		
Sch.	iameter : 40 PVC :k riser		
D&M GP13-S1 100 10 GRAVELLY SAND, gray, fine- to medium-grained, fine to coarse gravel, loose, moist.			
4.5			
WOOD WASTE, trace fine gravel, moist.	2		
Colo	orado a sand		
	iameter		
7.5	. 40 PVC		
D&M GP13-S3 10 17 (4.54)			
End U.V.	сар		
10.0 1052.5 10.0 Boring completed at 10.0 feet.			

SOIL VAPOR PROBE COMPLETION DETAILS:

+2.9 to 0 feet: 1"-diameter Sch. 40 PVC blank riser encased in an 8"-diameter protective steel monument set in concrete with three protective concrete-filled steel bollards.

0 to 4.2 feet: 1"-diameter Sch. 40 PVC blank riser.
4.2 to 9 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.
9 to 9.3 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 1 foot: Concrete.

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1 to 3 feet: Hydrated bentonite chips. 3 to 10 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

✓ Water level at time of drilling.

PROBE NUMBER GP-14 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp. Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington **DATE STARTED** 4/16/09 **COMPLETED** 4/16/09 GROUND ELEVATION _____ HOLE SIZE _8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: ¥ AT TIME OF DRILLING 13.5 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY _____ AT END OF _---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA NAME MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 SANDY SILT, brown, low plasticity, little fine-grained sand, very stiff, damp, trace roots. Concrete ML Hydrated bentonite D&M 80 20 chips 2.5 1"-diameter Sch. 40 PVC blank riser SANDY GRAVEL, gray, medium to coarse, little brown 6 O° fine-grained sand, loose, damp. D&M 25 17 5.0 2x12 Colorado GP silica sand pack D&M 25 17 7.5 GRAVELLY SAND, brown, fine-grained, some fine gravel. little fractured cobbles, medium-dense, damp. 50 SP D&M 18 10.0 GINT US.GDT 1"-diameter Sch. 40 PVC 0.020"-slotted SANDY GRAVEL, gray, coarse, fractured, little BORINGS.GPJ screen fine-grained sand, trace fine gravel, medium-dense, damp to 000 GP 75 27 D&M 12.5

REMARKS

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SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

Water level at time of drilling.

PAGE 2 OF 2

PROJECT NAME Former City of Yakima Landfill

PROJECT LOCATION Yakima, Washington

PROJECT NUMBER 001.0221.00004

CLIENT City of Yakima

DEPTH (ff) (ff) INTERVAL	TYPE	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM
					GP		SANDY GRAVEL, gray, coarse, fractured, little fine-grained sand, trace fine gravel, medium-dense, damp to moist. (continued) ② ② 13.5 feet: Little fine gravel, few fine-grained sand, trace brown silt, wet.	End cap
15.0	D&M		50	31	GP			Native slough.

Boring completed at 15.5 feet.

SOIL VAPOR PROBE COMPLETION DETAILS:

0 to 3.1 feet: 1"-diameter Sch. 40 PVC blank riser.

3.1 to 12.9 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

12.9 to 13.2 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 1 foot: Concrete.

1 to 2.5 feet: Hydrated bentonite chips. 3 to 14 feet: 2x12 Colorado silica sand. 14 to 15.5 feet: Native slough.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

Water level at time of drilling.

YAKIMA SOIL BORINGS.GPJ GINT US.GDT 4/23/09

SLR GP LOG

PROBE NUMBER GP-15 22122 20th Avenue SE Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT LOCATION Yakima, Washington PROJECT NUMBER _001.0221.00004 GROUND ELEVATION HOLE SIZE 8.5" Diameter **DATE STARTED** 4/16/09 **COMPLETED** 4/16/09 **GROUND WATER LEVELS:** DRILLING DRILLING CONTRACTOR Cascade Drilling $\sqrt{2}$ AT TIME OF DRILLING 13.5 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY AT END OF _---AFTER DRILLING ---NOTES _ BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. INTERVA MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 SAND, brown, fine-grained, few fine to medium gravel, few fractured cobbles, medium-dense, damp, trace roots. Concrete SP Hydrated bentonite chips 30 23 D&M 2.5 1"-diameter Sch. 40 PVC blank riser GRAVEL, gray, medium to coarse, subangular to subrounded, trace fine gravel, trace fine-grained brown 000 sand, medium-dense, damp. GP D&M 50 24 5.0 2x12 Colorado 0 silica sand SANDY GRAVEL, gray, coarse, subangular to pack subrounded, some fractured cobbles, little fine-grained 00 sand, very dense, damp. D&M 50 50/6" 7.5 GRAVEL, gray, coarse, subrounded, very dense, damp. D&M 50 50/6" GΡ GINT US.GDT 4/23/09 10.0 0 1"-diameter SANDY GRAVEL, gray, coarse, subrounded, some Sch. 40 PVC fractured cobbles, little fine-grained sand, very dense, moist. 0.020"-slotted screen 72 D&M

REMARKS

BORINGS.GPJ

YAKIMA SOIL

SLR GP LOG

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

☑ Water level at time of drilling.

PAGE 2 OF 2

PROJECT NAME Former City of Yakima Landfill

PROJECT LOCATION Yakima, Washington

PROJECT NUMBER 001.0221.00004

CLIENT City of Yakima

MWRE NAME

TYPE

NAME

NALUE)

NAME

SANDY GRAVEL, gray, coarse, subrounded, some fractured cobbles, little fine-grained sand, very dense, moist. (continued)

MATERIAL DESCRIPTION

@ 13.5 feet: Little fine- to medium-grained sand, medium-dense, wet.

End cap

End cap

Native slough.

PROBE DIAGRAM

Boring completed at 15.5 feet.

SOIL VAPOR PROBE COMPLETION DETAILS:

0 to 3 feet: 1"-diameter Sch. 40 PVC blank riser.

3 to 12.8 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

12.8 to 13.1 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 1 foot: Concrete.

1 to 2.5 feet: Hydrated bentonite chips. 3 to 14 feet: 2x12 Colorado silica sand.

14 to 15.5 feet: Native slough.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

☑ Water level at time of drilling.

PROBE NUMBER GP-16 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425,402,8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill **CLIENT** City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington **DATE STARTED** 4/16/09 **COMPLETED** 4/16/09 GROUND ELEVATION HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: ¥AT TIME OF DRILLING 13.5 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY AT END OF ---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. DEPTH (ft) NTERVA NAME MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 SILTY GRAVEL, gray, coarse, subrounded, little brown silt, few fine gravel, few fine-grained sand, medium-dense, <Concrete Hydrated GM bentonite D&M 100 34 chips 2.5 1"-diameter Sch. 40 PVC blank riser GRAVEL, gray, coarse, some cobbles, few fine-grained sand, very dense, damp. 0 50/2" ⊠D&M 5.0 2x12 Colorado silica sand pack D&M 0 50/6" GP 7.5 D&M 10 50/6" 10.0 ڄڄ 1"-diameter SANDY GRAVEL, gray, coarse, subangular, some fractured cobbles, little fine- to medium-grained sand, dry. Sch. 40 PVC 0 ()° 0.020"-slotted screen GP D&M 80 50/6" **REMARKS**

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

Water level at time of drilling.

GINT US.GDT

BORINGS.GPJ

YAKIMA SOIL

GP LOG

PAGE 2 OF 2

PROJECT NAME Former City of Yakima Landfill

PROJECT LOCATION Yakima, Washington

PROJECT NUMBER 001.0221.00004

CLIENT City of Yakima

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(#) (#)	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM	
					GP		SANDY GRAVEL, gray, coarse, subangular, some fractured cobbles, little fine- to medium-grained sand, dry. (continued) 13.5 □	End cap	
15.0	D&M		50	18	sw		GRAVELLY SAND, brown, fine- to coarse-grained, little medium to coarse gravel, little fractured cobbles, trace silt, wet.	Native slough.	
Paring completed at 15.5 feet									

Boring completed at 15.5 feet.

SOIL VAPOR PROBE COMPLETION DETAILS:

0 to 3.2 feet: 1"-diameter Sch. 40 PVC blank riser.

3.2 to 13 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.

13 to 13.3 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 1 foot: Concrete.

1 to 2.5 feet: Hydrated bentonite chips. 3 to 14 feet: 2x12 Colorado silica sand.

14 to 15.5 feet: Native slough.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

Water level at time of drilling.

SLR GP LOG

PROBE NUMBER GP-17 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 CLIENT City of Yakima PROJECT NAME Former City of Yakima Landfill PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 4/17/09 COMPLETED 4/17/09 GROUND ELEVATION HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: ∇ AT TIME OF DRILLING 14.5 ft DRILLING DRILLING METHOD Hollow Stem Auger LOGGED BY C. Lee CHECKED BY AT END OF ---AFTER DRILLING _---NOTES BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 SILTY GRAVEL, gray, coarse, subangular to subrounded, some fractured cobbles, some brown silt, trace fine- to Concrete medium-grained sand, medium-dense, moist. GM Hydrated bentonite D&M 80 23 chips 2.5 1"-diameter Sch. 40 PVC blank riser GRAVEL, gray, coarse, subangular to subrounded, some $^{\circ}$ $^{\circ}$ fractured cobbles, few fine- to medium-grained brown sand, trace silt, very dense, damp. D&M 100 50/6" 5.0 @ 5.5 feet: No silt. 30,0 Colorado GP silica sand pack D&M 70 50/6" 7.5 000 SANDY GRAVEL, gray, medium to coarse, subrounded to rounded, some fractured cobbles, little fine- to 900 medium-grained brown sand, medium-dense, damp. GP D&M 50 31 10.0 1"-diameter 0 Sch. 40 PVC 0.020"-slotted GRAVEL, gray, coarse, subrounded to rounded, some screen $\circ \bigcirc \circ$ fractured cobbles, very dense, damp. 000 D&M 100 50/5" GP 12.5 REMARKS SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. \sum Water level at time of drilling.

GINT US.GDT

SOIL BORINGS.GPJ

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PROJECT NUMBER 001.0221.00004

CLIENT City of Yakima

PROBE NUMBER GP-17

PAGE 2 OF 2

	PROJECT NAME Former City of Yakima Landfill
_	PROJECT LOCATION Yakima, Washington

(£) (£)	INTERVAL	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM
					GP		GRAVEL, gray, coarse, subrounded to rounded, some fractured cobbles, very dense, damp. (continued) @ 13.0 feet: Few fine- to medium-grained sand.	End cap
15.0	D&M		50	36			@ 14.5 feet: Becomes wet.	

Boring completed at 15.0 feet.

SOIL VAPOR PROBE COMPLETION DETAILS:

0 to 3.2 feet: 1"-diameter Sch. 40 PVC blank riser.
3.2 to 13 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen.
13 to 13.3 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 1 foot: Concrete. 1 to 2.5 feet: Hydrated bentonite chips. 3 to 15 feet: 2x12 Colorado sílica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer.

Water level at time of drilling.

PROBE NUMBER GP-18 22122 20th Avenue SE PAGE 1 OF 2 Bothell, Washington 98021 Telephone: 425.402.8800 SLR International Corp Fax: 425.402.8488 PROJECT NAME Former City of Yakima Landfill CLIENT City of Yakima PROJECT NUMBER 001.0221.00004 PROJECT LOCATION Yakima, Washington DATE STARTED 4/17/09 COMPLETED 4/17/09 GROUND ELEVATION HOLE SIZE 8.5" Diameter DRILLING DRILLING CONTRACTOR Cascade Drilling GROUND WATER LEVELS: DRILLING DRILLING METHOD Hollow Stem Auger AT TIME OF DRILLING _---LOGGED BY C. Lee CHECKED BY _____ AT END OF _---NOTES AFTER DRILLING ---BLOW COUNTS PER FOOT (N VALUE) GRAPHIC LOG RECOVERY U.S.C.S. NTERVA DEPTH (ft) NAME MATERIAL DESCRIPTION PROBE DIAGRAM 0.0 **GRAVEL**, gray, coarse, some cobbles up to 8"-diameter, little fine-grained sand, damp. Concrete @ 1.5 feet: No recovery. Hydrated 0 D&M 26 bentonite 2.5 chips 1"-diameter Sch. 40 PVC @ 3.5 feet: Medium to coarse gravel, little fractured blank riser cobbles, trace fine- to medium-grained sand, loose. 25 16 D&M 5.0 GP 2x12 Colorado silica sand pack @ 6.5 feet: Some fractured cobbles, few fine- to medium-grained sand, very dense, dry. D&M 10 71 7.5 10.0 1"-diameter 0 Sch. 40 PVC

REMARKS

D&M

80

51

GINT US.GDT

BORINGS.GPJ

SLR GP LOG

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. Did not encounter water in boring.

damp.

GP

SANDY GRAVEL, gray, coarse, some fractured cobbles,

little brown fine- to medium-grained sand, medium-dense,

0.020"-slotted

screen

PAGE 2 OF 2

1		of Yakima					PROJECT NAME Former City of Yakima Landfi	PROJECT NAME Former City of Yakima Landfill		
PROJE	CT NU	MBER _001	1.0221	.00004			PROJECT LOCATION Yakima, Washington	PROJECT LOCATION Yakima, Washington		
12.5 (ft) (T) (NTFRVA	> I W	NAME	RECOVERY %	BLOW COUNTS PER FOOT (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PROBE DIAGRAM		
		·			GP		SANDY GRAVEL, gray, coarse, some fractured cobbles, little brown fine- to medium-grained sand, medium-dense, damp. (continued) @ 13.5 feet: Medium to coarse gravel, moist.	End cap		
15.0	D&M		50	53			15.5			

Boring completed at 15.5 feet.

SOIL VAPOR PROBE COMPLETION DETAILS:

0 to 3.2 feet: 1"-diameter Sch. 40 PVC blank riser.

3.2 to 13 feet: 1"-diameter Sch. 40 PVC 0.020"-slotted screen. 13 to 13.3 feet: 1"-diameter Sch. 40 PVC end cap.

0 to 1 foot: Concrete.

1 to 2.5 feet: Hydrated bentonite chips. 3 to 15.5 feet: 2x12 Colorado silica sand.

REMARKS

SS = Samples collected by using an 18-inch-long, 3.0-inch outside diameter Dames & Moore split-barrel sampler driven by a 300 lb. wireline hammer. Did not encounter water in boring.