				UR	S Corpo	oration				TEST BORING	LOG		
										BORING NO:		IPR-1	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	KeyS	oan Pro	perty
CLIENT:						KeySpan				JOB NO.:	11	117506	5
BORING	CONTRAC	CTOR:	:			Fenley	and Nicol			DRILLING METHOD:	G	eoprob	е
GROUNI	OWATER:					CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DATE	TIME	LE	VEL	TYPE	TYPE	Temp.	Macrocore			DATE STARTED:	0	1/07/08	3
					DIA.	3"	2"			DATE FINISHED:	0	1/07/08	3
					WT.					DRILLER:		Guzzar	
					FALL					GEOLOGIST:	J. H	larshm	an
						* POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:		Conna	
			SAMP	LE				DES	SCRIPTION	<u>"</u>			
DEPTH				BLOW	S REC		CONSIST			MATERIAL		REM	IARKS
FEET	STRATA	NO.	TYPE	PER 6		COLOR	HARD			ESCRIPTION	uscs		Moist
0		S-1	Grab		N/A	Dk. Brown		0' to 3'.		dium SAND and some fine to	SP	0.0	Dry
		J-1	Ciab			DR. DIOWII		coarse			01	0.0	Diy
1													
2					$\dashv$								
3				$\vdash$	_			01 to 51	Eine to	roo CAND little to access the	25		_
					_	Lt. Brown		3' to 5', coarse		rse SAND, little to some fine to	SP		Dry
4								coarse	graver.				
5												<b>↓</b>	
		S-2	Macro		56"	Lt. Brown				to very coarse SAND, little fine	GP	0.0	Dry
6			core			/ Yellow		to coars	se gravel.				
7													
						Brown				nedium dense, intervals	SP	0.0	Dry
8						/Dk. Brown				an fine to coarse SAND, some			
						/Tan		fine gra	vel.				
9													
10													
		S-3	Macro		46"	Yellow		Losse, f	ine to medi	um SAND, trace to little fine	SP	0.0	Dry
11			core		- "	/ Orange		gravel.			0.		2.,
					-	, 51595							
12					-								
13													
<u></u>													
14													
					$\dashv$								
15					-								
15		C 1	Macro	$\vdash$	42"	Ton/		Loose to	n medium d	lense, fine to coarse SAND,	CD/CD	0.0	D=1
16		3-4		$\vdash$	42	Tan/ Yellow				and, some fine to coarse	SP/GP	0.0	Dry
16			core						No visible in				
17						/ Orange							
17					_								
				$\vdash$	_								
18					_								
19													
20													<u> </u>
Commen							iced to 45 ft, th		lled	PROJECT NO.	1	117506	5
		tempo	orary 3-	in casing	and comple	eted boring w	ith 1-inch PVC	well.		BORING NO.		IPR-1	

				JRS Co	ornor	ation			TEST BOR	ING L	OG	
				7710 00	<i></i>	ation			BORING NO:		IPR-1	
PROJEC1	Γ:				KeySpar	n Hempstead	d MGP		SHEET:		2 of 3	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
			SAMPL				T		ESCRIPTION	1		
DEPTH	STRATA		TVDE	BLOWS	REC	001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		escription coarse SAND, little fine	USCS SW	PID	MOIST
21		S_5	Macro core		38"	Yellow/ Orange/		gravel. No impacts		SVV	0.0	Dry
21			core			Tan						
22						Tall						
23												
24												
25												
		S-6	Macro		36"	Yellow/			ne to verycoarse SAND, little	SW	0.0	Dry
26			core			Orange/		fine gravel. No imp	acts.			
						Tan						
27												
						Brown			tained and coated (MGP) barse SAND, trace to little fine	SP	50.0	Wet
28						Stained			ole trace of DNAPL, Moderate			
- 00								MGP odor. Water t	table at about 28' bgs.			
29												
30												
30		S-7	Macro		32"	<b></b>	 	30' to 32'. Medium	dense, fine to medium SAND.	SW	280.0	
31		<i>3-1</i>	core		32			Partially saturated	with DNAPL. Stained and	011	200.0	
									f very thin seams of DNAPL			
32								saturated.	strong MGP odor, water			
33												
						Lt. Brown			nedium SAND, trace fine			Wet
34								gravel, no visible ir	npact.			
35								Mark and a configuration	OAND			
00		S-8	Macro		32"	Lt. Brown		to coarse gravel. N	e to caorse SAND, some fine lo visible impact.	SW	0.0	Wet
36			core			/ Tan		g. a. 31. 10				
37						/ Orange						
37												
38												
39												
40												
COMMEN	ITS:	32' HC	N:3.						PROJECT NO.		IPR-1	
									BORING NO.		1117506	5

				JRS C	ornoi	ration			TEST BOR	ING L	OG	
				<i></i>	וטקוט	auon			BORING NO:		IPR- 1	
PROJEC1	Γ:				KeySpa	n Hempstead	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL						ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
		S-9	Macro		40"	Lt. Brown			medium dense, fine to ce coarse sand, trace to little	SP	0.0	Wet
41			core		4	/ Yellow		gravel. No visible i				
40					-	/ Orange			•			
42					-							
40					4							
43					-							
44												
44												
45					1							
40								End (	of boring: 45' bgs			
46					-			Lila	or borning. 45 bgs			
40			l 1									
47			l l		1							
			l l		1							
48												
49												
50												
51												
52												
53												
					_							
54					4							
					1							
55					4							
56					-							
50					1							
57					-							
<i>-</i> ,					1							
58					1							
					1							
59					1							
					1							
60					1							
COMMEN	ITS:			I	•			•	PROJECT NO.		IPR- 1	•
									BORING NO.	1	117506	5

CLIENT: BORING GROUN										BORING NO:		IPR- 2	
BORING GROUN					KeySp	an Hempstea	ad MGP			LOCATION:	KeySr	an Pro	perty
GROUN	:					KeySpan				JOB NO.:		17506	•
	CONTRAC	CTOR:					and Nicol			DRILLING METHOD:		probe/H	
DATE	DWATER:			~ 27 bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		90'	
	TIME	ΙF	VEL	TYPE	TYPE	Temp.	Macrocore			DATE STARTED:	0	1/07/08	<u> </u>
					DIA.	3"	2"			DATE FINISHED:		1/09/08	
					WT.					DRILLER:		Guzzaro	
					FALL					GEOLOGIST:		-larshm	
						POCKET P	L ENETROMET	FR RFA	DING	REVIEWED BY:		Connar	
			SAMP	I E		I			SCRIPTION				
DEPTH			JAMI	BLOW	REC		CONSIST	I		MATERIAL	1	REM	IARKS
FEET	STRATA	NO.	TYPE	PER 6		COLOR	HARD			ESCRIPTION	USCS		Moist
	SIRAIA			PERO			HAND	Fine to		ND, some fine to coarse			
0		S-1	Grab		N/A	Dk. Brown				slag, coal. No MGP odors.	Fill/SP	0.0	Dry
_					_			g , .	,	g,			
1					4								
2													
3													
					_								
4													
5								<u> </u>					<u> </u>
		S-2	Macro		30"	Dk. Brown		5' to 6',	Fine to med	dium SAND, trace fine gravel.	SP	0.0	Dry
6			core										
						Lt. Brown				edium SAND, trace coarse	SP		Dry
7						/ Yellow		sand, tr	ace coarse	gravel. No visible impacts.			
8	1												
9													
10													
		S-3	Macro		48"	Lt. Brown		Fine to	coarse SAN	ID, some fine to coarse gravel.	SW	0.0	Dry
11			core			/ Yellow		No impa	act.	-			,
12													
13					-								
14													
15													
10		S-1	Macro			Lt. Brown		Fine to	coarse SAN	ID, some fine to coarse gravel.	SW	0.0	Dry
16	1	J-4	core			/ Yellow		No impa		, some mie to ocarse graver.	SVV	0.0	Dry
10	1		5016			, I CHOW		I .					
17					-								
17													
18	1				-								
ΙÖ					_								
					_								
19					_								
					_								
20						<u> </u>	<u> </u>	<u> </u>		I			
Commer							ring to 90 ft, th			PROJECT NO.		17506	5
							talled tempora n PVC well to		v C well.	BORING NO.		IPR- 2	

				JRS C	ornoi	ration			TEST BOR	ING L	OG	
				<i>7110</i> 00	<i>51 p 01</i>	ation			BORING NO:		IPR- 2	
PROJEC1	T:				KeySpa	n Hempstead	MGP		SHEET:		2 of 5	
CLIENT:					KeyS	pan			JOB NO.:		1117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
			SAMPL	.E				D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Ren	narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		30"	Orange / Lt. Brown		20' to 23', Fine to valittle fine gravel.	very coarse SAND, trace to	SW	0.0	Dry
22												
23						Lt. Brown		23' to 25', Fine to c	coarse SAND, trace fine	SP	0.0	Dry
24			,			Et. Brown		gravel. No impacts			0.0	J.,
25		S-6	Macro		42"	Grey /			ng at 28', fine to medium	SP	45.0	Wet
26			core			Lt. Brown		coated by DNAPL,	se sand. 28' to 29' interval is slight MGP odor, trace to little turated) at 27' to 30'. Water			
27								table at about 27' b				
28												
30												
31		S-7	Macro core		35"			SAND, stained and	saturated fine to medium d coated black to brown. g MGP odor, sheen.	SP	450.0	Wet
32						Lt. Brown		32' to 33', Fine to r	nedium SAND. Faint MGP			Wet
34									o medium SAND, with one PL pooling around thin seams			
35		S-8	Marco		30"	Lt. Brown			o medium SAND, trace fine mpact. Faint MGP odor	SP/GP	400.0	Wet Wet
36		3-0	core		30			Medium dense, fin fine to coarse GRA	e to very coarse SAND and AVEL, intervals of 2" to 3"	oi /ai	400.0	vvet
37								odor, stained black	saturation, with strong MGP <pre>c/brown and coated, DNAPL arse gravel (water saturated)</pre>			
38									( / / /			
39												
40 COMMEN	_						N = 0,42' H <sub>2</sub> S	= 1. After 30'	PROJECT NO.		IPR- 2	
		driller	changes	s to M. Mea	de for res	t of core.			BORING NO.		1117506	5
									<u> </u>			

				JRS Co	rnor	ation			TEST BORI	NG LC	)G	
				7710 00		u			BORING NO:		IPR-2	
PROJECT	:				KeySpar	n Hempstead	MGP		SHEET:		3 of 5	
CLIENT:					KeyS				JOB NO.:		1117506	5
BORING (	CONTRACTO					Fenley and I	Nicol		BORING LOCATION:	Key	Span Pro	perty
	-		SAMPL					•	DESCRIPTION		ı	
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		DESCRIPTION	USCS	PID	MOIST
41		S-9	Macro core		34"	Lt. Brown		40' to 43', Loose to SAND, trace fine g	o medium dense, fine to medium ravel.	SP	0.0	Wet
42												
43								43' to 44', 2" DNAF coated. Moderate I	PL saturated seam, stained and MGP odor.	SP	30.0	Wet
44								44' to 45', Fine to r	medium SAND. Faint MGP odor.	SP	0.0	Wet
46		S-10	Macro core		20"	Lt. Brown			very coarse SAND, trace fine to een, faint MGP odor.	SP	6.0	Wet
47												
48												
49 50									saturated fine to medium SAND, d black. MGP odor, trace fine	SP	90.0	Wet
51		S-11	Macro core		24"	Lt. Brown / Grey		coarse sand, very	ne to medium SAND, trace thin seam (1") of DNAPL light/faint MGP odor.	SP	10.0	Wet
52												
53												
54 55												
56		S-12	Macro core		26"	Lt. Brown and trace Orange			dense, very fine to medium trace coarse sand, interval at urse gravel.	SP		Wet
57						Orange						
58 59									medium SAND with very thin PL saturation, trace fine gravel, MGP odor.	SP	43.0	Wet
60												
COMMEN	TS:	52.5' H	ICN: 2.	<u> </u>		<u> </u>		<u> </u>	PROJECT NO.		IPR-2	
									BORING NO.		1117506	5

				JRS Co	rnor	ration			TEST BOR	ING L	OG	
				טרט טרט	ηροι	aliuii			BORING NO:		IPR- 2	
PROJEC1	Г:				KeySpar	n Hempstead	MGP		SHEET:		4 of 5	
CLIENT:					KeyS	pan			JOB NO.:	1	117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL						ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		1	arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
- 0.4		S-13	Macro		30"	Lt. Grey / White			medium "beach" SAND, little to fine sand, trace intervals of	SP	0.0	Wet
61			core			/ WILLE			e impact, very faint MGP odor.		2.0	
62											2.0	
02												
63												
64												
65												
		S-14	Macro		32"	White /		Medium dense, ve little medium sand.	ry fine to fine SAND, trace to	SP	0.0	Wet
66			core			Lt. Grey /		iillie iilediuiii sand.	No visible impact.			
						Orange brown						
67						DIOWII						
68												
- 00												
69												
70												
		S-15	Macro		36"	Tan /			m SAND, trace clay varves	SP	0.0	Wet
71			core			Yellow /		(white clay), very th	nin. No visible impacts.			
						Lt. Brown						
72												
73												
73												
74												
75												
		S-16	Macro		32"	Lt. Brown			n SAND, trace clay varves	SP	0.0	Wet
76			core			/ Orange		(very thin). No visit	ole impact.			
77												
78												
/8												
79												
80												
COMMEN	ITS:					- ·	•	-	PROJECT NO.		IPR- 2	
									BORING NO.	1	117506	5

				IDC	Corno	ration			TEST BOF	ING L	OG	
			(	כחנ	Corpo	alion			BORING NO:		IPR- 2	
PROJECT	Г:				KeySpa	n Hempstead	MGP		SHEET:		5 of 5	
CLIENT:					KeyS	Span			JOB NO.:	1	1117506	5
BORING	CONTRACT	OR:				Fenley and I	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL					1	ESCRIPTION			
DEPTH	STRATA		T)/DE	BLOV		001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	_		COLOR Lt. Brown	HARD		ry fine to fine SAND, trace	USCS SP	<b>PID</b> 0.0	MOIST Wet
81		S-17	Macro core		34"	and Orange	<u></u>	medium sand. No		55	0.0	wei
- 01			COIC			and orange			·			
82												
83												
84												
85		0.40				Lt. Brown		Madium danaa ya	ry fine to fine SAND, trace	0.0	0.0	347.1
86		S-18	Macro core		32"	and Orange	<u> </u>	medium sand. No		SP	0.0	Wet
- 00			COIE			and Orange	, 		·			
87												
88												
89												
90												
91								End	of boring: 90' bgs			
91												
92												
93												
94												
95						-						
96					$\dashv$							
30												
97												
					$\exists$							
98												
99												
				$\vdash$								
100	ITO.							<u> </u>	DDG ISOT NG		IDD 6	
COMMEN	115:								PROJECT NO. BORING NO.		IPR- 2 1117506	5
									BOAING NO.		1117306	3
<u> </u>												

				URS	Corpo	oration				TEST BORING	LOG		
										BORING NO:		IPR-4	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	KeySı	oan Pro	oerty
CLIENT:					-7-1-	KeySpan				JOB NO.:		1175065	-
BORING	CONTRAC	CTOR	:				and Nicol			DRILLING METHOD:		eoprobe	
GROUNI	DWATER:			~25'		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		65'	
DATE	TIME	1 5	VEL	TYPE	TYPE	OAO.	Macrocore	CONE	TOBL	DATE STARTED:	0	1/22/08	
DATE	IIIVIE	LE	VEL	ITPE	DIA.		2"			DATE FINISHED:		1/22/08	
					WT.		2			DRILLER:		. Meade	
					FALL					GEOLOGIST:			
					_	POOKET D			DINO	REVIEWED BY:	J. f	larshma	an
						POCKETP	ENETROMET						
			SAMP		T			DE	SCRIPTION				
DEPTH				BLOWS			CONSIST			MATERIAL			ARKS
FEET	STRATA		TYPE	PER 6"	RQD	COLOR	HARD			ESCRIPTION	USCS		Moist
0		S-1	Macro		38"	Dk. Brown				ım sand, fine to coarse gravel,	Fill	0.0	Dry
			core					rea brici	ks, wood.				
1													
2													
3													
-													
4													
4					-								
-													
5					0.511			רוווים	بعد منامات ما	revel apparent average de coel			_
		S-2	Macro		25"					ravel, apparent gypsum drywall ck stained gravel, petroleum	Fill	2 to 3	Dry
6			core					type odd		ck stailled graver, petroleum			
								.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
7													
8													
9													
10					1								
		S-3	Macro		48"			Loose, I	black staine	ed and coated, heavy	SP	200.0	Moist
11			core		⊢ "					act. Moist at 10' to 11'. Fine to	0.	200.0	WOIST
- ' '			COIC		-					e poorly graded fine to coarse		HCN:	
12								gravel. \	Very strong	petroleum odor.		11.0	
12					_							11.0	
40					_								
13					_								
					_							150.0	
14													
15													
		S-4	Macro		36"	Brown				dense. Some black staining at		250.0	Moist
16			core							troleum impact. Fine to coarse			
									some poorly ım type odo	y graded fine gravel, strong			
17								Periolet	iii iype odo	и.			
18													
					-								
10					-								
19					_								
- 00					_								
20		01:	<u> </u>			<u> </u>		L		Inno inot			
Commer							ring to 90 ft, th			PROJECT NO.	1.	1175065	5
							talled tempora n PVC well to		vo well.	BORING NO.		IPR-4	
		_4101		o tompora	. , won and	o.aou 0-1	• • • • • • • • • • • • • • • • • •						

very coarse SAND at 20 to 23' with black staining.  Strong petroleum odor.  23 to 25', Fine to coarse SAND, little fine gravel. No staining, moderate odor.  SP 440.0 Divide the plack staining, At about 25' water table and strong petroleum type odor (360 ppm).  Black 27' to 28', Loose, Fine to coarse SAND, with some black staining, At about 25' water table and strong petroleum type odor (360 ppm).  Black 27' to 28', Loose, stained and coated fine to coarse SAND, with some black staining, At about 25' water table and strong petroleum type odor (360 ppm).  Black 27' to 28', Loose, fine to medium SAND, MGP odor, with little brown staining. Liner stained.  SP 200.0 W SAND, Strong petroleum door. 28' to 30', Loose, fine to medium SAND, MGP odor, with little brown staining. Liner stained.  SP 260.0 With the same of DNAPL saturation (75 to 100%). Trace DNAPL saturation (75 to 100%). Trace DNAPL sound in side liner. Fine to Medium SAND, Strong MGP odor.  32' to 35', Loose, fine to medium SAND, trace coarse sand. No staining.  SR Macro 38' Li. Brown (75 to 35', Loose, fine to medium SAND, trace coarse sand. No staining.  SR Macro 38' Li. Brown (75 to 37', Loose, fine to medium SAND, trace coarse sand and fine gravel. Very thin seam (2') of DNAPL saturation with strong MGP odor.				,	IBS C	ornor	etion		TEST BOR	NG LC	)G	
DOB NO.: 1175065   BORNO LOCATION: KeySpan Property						npoi	ation		BORING NO:		IPR-4	
BORING CONTRACTOR:   Fenley and Nicol   SAMPLE   DESCRIPTION   SAMPLE   SAMPLE   DESCRIPTION   USCS   Remarks   SAMPLE   SAMPLE   DESCRIPTION   USCS   Remarks   SYMBOL   No.   TYPE   PER * ROD   COLOR   HARD   DESCRIPTION   USCS   PID   MO   No.   No	PROJECT	ī:	Key	Span He	empstead M	GP			SHEET:		2 of 4	
SAMPLE   DESCRIPTION   DESCR									JOB NO.:		1117506	5
DEPTH   STRATA   SYMBOL   NO.   Type   BLOWS   REC   PER 6"   RQD   COLOR   HARD   DESCRIPTION   DUSCS   PID   MO   NO.   Type   PER 6"   RQD   A0"   S.5   Macro   A0"   A0"   S.5   Macro   A0"   A0"   S.5   Macro   A0"   A0"   Strong petroleum odor.   S.6   Macro   A4"   Grey   Strong petroleum odor.   S.6   Macro   A4"   Grey   Strong petroleum odor.   S.6   Macro   A4"   Grey   Strong petroleum odor.   S.7   Loose, Fine to coarse SAND, with some black staining. At about 25 water table and strong petroleum type odor (360 pem).   S.7   Macro   S.7   Macro   A1   Strong petroleum odor.   S.7   S.7   S.7   Macro   A1   Strong petroleum odor.   S.7   S.	BORING (	CONTRACTO					7			Key	Span Pro	perty
Symbol   No.   Type   PER6*   RQD   COLOR   HARD   DESCRIPTION   USCS   PID   MO	l			SAMPL						1	_	
S.5   Macro   40"   20" to 23" Loose, litervals of black staining. Fine to core   22"   23"   24"   24"   24"   24"   25"			NO	TVDE			COLOR					
21   22   23   24   25   27   25   27   25   27   25   27   26   27   28   26   27   28   29   29   29   29   29   29   29	FEET	STWIBUL			PER 0		COLOR	паки				Moist
23 to 25', Fine to coarse SAND, little fine gravel. No staining, moderate odor.  See Macro Core Core Sand Black Staining, At about 25' water table and strong petroleum type odor (360 ppm).  Black Sand Strong petroleum odor. Lt. Brown Orange Core Sand Strong petroleum odor. Lt. Brown Sand Strong petroleum odor. See Sand Sand Sand Sand Sand Sand Sand Sand	21		3-3	l F		40			very coarse SAND at 20' to 23' with black staining.	, 3r	200.0	WOSt
24												
S-6   Macro   44"   Grey   25' to 27', Loose, Fine to coarse SAND, with some black staining. At about 25' water table and strong petroleum type odor (360 ppm).   SP   360.0   W   SP   27' to 28', Loose, stained and coated fine to coarse SAND, with some black staining, at about 25' water table and strong petroleum type odor (360 ppm).   SP   200.0   W   27' to 28', Loose, stained and coated fine to coarse SAND, with some black staining at a stained and coated fine to coarse SAND, with some black staining at about 25' water table and strong petroleum odor.   SP   200.0   W   W   W   W   W   W   W   W   W				-					=	SP	440.0	Dry
Diack staining, At about 25' water table and strong petroleum type odor (360 ppm).    Black	25		S-6	Macro		44"	Grev		25' to 27'. Loose. Fine to coarse SAND. with some	SP	360.0	Wet
Black Lt. Brown 29 30 S-7 Macro core 31 32 33 34 35 S-8 Macro core 37 An Aran Aran Aran Aran Aran Aran Aran A			- •	I F					black staining. At about 25' water table and strong			
Lt. Brown / Orange 28' to 30', Loose, fine to medium SAND, MGP odor, with little brown staining. Liner stained.  S-7 Macro core 38" 30' to 32', MGP impacted. Stained brown with very thin seams of DNAPL saturation (75 to 100%). Trace DNAPL product inside liner. Fine to Medium SAND. Strong MGP odor.  32		SP	200.0	Wet								
S-7   Macro   38"   38"   30" to 32', MGP impacted. Stained brown with very thin seams of DNAPL saturation (75 to 100%). Trace DNAPL product inside liner. Fine to Medium SAND. Strong MGP odor.   32' to 35', Loose, fine to medium SAND, trace   SP   10.0   W   10.										SP		Wet
32   32   32   to 35', Loose, fine to medium SAND, trace coarse sand. No staining.  34   35   36   36   37'   Loose, fine to medium SAND, trace coarse sand and fine gravel. Very thin seam (2") of DNAPL saturation with strong MGP odor.  37   37   38   39   39   39   39   39   39   30   30			S-7	l F		38"			thin seams of DNAPL saturation (75 to 100%). Trace DNAPL product inside liner. Fine to Medium	SP	260.0	WET
35 S-8 Macro core 36 NAPL saturation with strong MGP odor. 37 S-8 Macro core 38' Lt. Brown / Tan / Yellow 37' to 40', Loose, fine to very coarse SAND with fine to coarse gravel. No staining, slight MGP odor. 37' to 40', Loose, fine to very coarse SAND with fine to coarse gravel. No staining, slight MGP odor.				-					32' to 35', Loose, fine to medium SAND, trace	SP	10.0	Wet
36   Core   / Tan   Coarse sand and fine gravel. Very thin seam (2") of DNAPL saturation with strong MGP odor.  37   38   39   39   40   40   40   40   40   40   40   4							I + Prown		25' to 27' Lagge fine to medium CAND trace	0.0	500.0	
fine to coarse gravel. No staining, slight MGP odor.  39 40			S-8	I F		38"	/ Tan		coarse sand and fine gravel. Very thin seam (2") of		500.0	Wet
40											50.0	Wet
11		TS:	26.5',	HCN: 2	ı				PROJECT NO.		IPR- 4	<u> </u>
<b>BORING NO.</b> 11175065		=-										5

PROJECT: KeySpan Hempstead MGP					IRS C	rnor	ation			TEST BOR	ING L	OG	
Source					JH3 CC	προι	alion			BORING NO:		IPR-4	
Description   SAMPLE	l <del></del>	Γ:				KeySpar	n Hempstead	d MGP					
SAMPLE   DESCRIPTION   MATERIAL   STRATA   No.   TYPE   PER s'   ROD   COLOR   HARD   Loose to medium dense, fine to coarse SAND, or   SP   0.0   Wet   STRATA   SAND, with the same state   SP   SP   SAND, with the same state   SP   SP   SP   SP   SP   SP   SP   S													
DEPTH   STRATA   SYMBOL   NO.   Type   PER 6"   ROD   COLOR   HARD   DESCRIPTION   USCS   PID   MOIST   Material   No.   Moist   No.   Type   PER 6"   ROD   COLOR   HARD   DESCRIPTION   USCS   PID   MOIST   No.   Moist   No.   Moist   No.   Moist   No.   N	BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	KeyS	pan Pro	perty
SYMBOL   No.   TYPE   PER 6"   ROD   COLOR   HARD   DESCRIPTION   USCS   PID   MOIS'				SAMPL		1		1					
S-9   Macro   38"   L. Brown   Loses to medium dense, fine to coarse SAND,   SP   0.0   Wet												1	
A1	FEET	SYMBOL			PER 6"			HARD					
A2	41		S-9			38 "					5P	0.0	wet
43	41			core			Orange						
44	12												
45	72												
45	43												
45													
45	44												
S-10   Macro													
Vellow / Brown   Coarse SAND, trace very coarse sand and fine gravel. No impacts.   SP   0.0   Wet	45												
Serven			S-10	Macro		32"	Orange /				SP	0.0	Wet
47 to 50', Loose, fine to medium SAND. No   SP   0.0   Wet   with pacts.	46			core			Yellow /						
Lt. Brown   47' to 50', Loose, fine to medium SAND. No   SP   0.0   Wet							Brown		gravei. No impacts	i <b>.</b>			
Macro	47												
S-11   Macro   37"   Lt. Brown   Loose, fine to medium SAND, trace coarse sand   SP   0.0   Wet   and fine gravel. No Impact.							Lt. Brown			ine to medium SAND. No	SP	0.0	Wet
S-11   Macro   37"   Lt. Brown   Core   37"   Lt. Brown   Loose, fine to medium SAND, trace coarse sand   SP   0.0   Wet   and fine gravel. No Impact.   SP   0.0   Wet   SS   S-12   Macro   22"   Lt. Brown   Core   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   SS   SS   SS   SS   SS   SS   SS	48								impacts.				
S-11   Macro   37"   Lt. Brown   Core   37"   Lt. Brown   Loose, fine to medium SAND, trace coarse sand   SP   0.0   Wet   and fine gravel. No Impact.   SP   0.0   Wet   SS   S-12   Macro   22"   Lt. Brown   Core   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   SS   SS   SS   SS   SS   SS   SS													
S-11   Macro   37"   Lt. Brown   Core   1   1   1   1   1   1   1   1   1	49												
S-11   Macro   37"   Lt. Brown   Core   1   1   1   1   1   1   1   1   1													
Solution	50						I + Drawn		Loggo fine to mad	ium CAND trans searce send	0.0		,,,, .
State			S-11			37"					SP	0.0	Wet
S-12   Macro   22"   Lt. Brown   Core   Core   Core   Comments:   Loose, fine to coarse SAND, trace fine gravel.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black,   MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL product present.   SP   0.0   DNAPL present.   SP   0.	51			core			/ Orange			•			
S-12   Macro   22"   Lt. Brown   Core   Core   Core   Comments:   Loose, fine to coarse SAND, trace fine gravel.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black,   MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL product present.   SP   0.0   DNAPL present presen	52												
S-12   Macro   22"   Lt. Brown   Core   Core   Core   Core   Community   Com	52												
S-12   Macro   22"   Lt. Brown   Core   Co	53												
S-12   Macro   22"   Lt. Brown													
S-12 Macro core   Lt. Brown / Orange   Loose, fine to coarse SAND, trace fine gravel. DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0 Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0 Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Unit of the first present pres	54												
S-12 Macro core   Lt. Brown / Orange   Loose, fine to coarse SAND, trace fine gravel. DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0 Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0 Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Wet   DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.   SP   0.0   Unit of the first present pres													
DNAPL saturation (75 to 100%) at 60'. Black, MGP odor and DNAPL product present.	55												
MGP odor and DNAPL product present.			S-12	Macro		22"					SP	0.0	Wet
57	56			core			/ Orange						
58									ar casi and biv	product projett.			
59   10.0   10.0   COMMENTS:   PROJECT NO.   IPR- 4	57												
59   10.0   10.0   COMMENTS:   PROJECT NO.   IPR- 4													
60 10.0 COMMENTS: PROJECT NO. IPR- 4	58												
60 10.0 COMMENTS: PROJECT NO. IPR- 4	F2												
COMMENTS: PROJECT NO. IPR- 4	59												
COMMENTS: PROJECT NO. IPR- 4	60											10.0	
		ITS:					<u> </u>			PROJECT NO			
										BORING NO.	1		5
201.114 NO. 11170000										_ :			_

				IDC		rnor	ation			TEST BOR	ING L	OG	
				JNS	, СС	ηροι	aliUii			BORING NO:		IPR-4	
PROJECT	Т:					KeySpar	n Hempstead	d MGP		SHEET:		4 of 4	
CLIENT:						KeyS				JOB NO.:		117506	
BORING	CONTRACT	OR:					Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
		1	SAMPL		1			1	,	ESCRIPTION	1		
DEPTH FEET	STRATA SYMBOL	NO.	TYPE	BLO PER		REC RQD	COLOR	CONSIST HARD		MATERIAL		PID	arks MOIST
FEET	STMBUL	S-13			10	33"	Grey	ПАКИ		grey and light brown/yellow	USCS SP	0.0	Wet
61		5-13	core			33	Lt. Brown		very fine to mediur	m SAND. No staining, no	Oi	0.0	WCt
							/ Yellow		impact.				
62													
63													
64													
65									End	of boring: 65' bgs			
66									Liid	or borning. 05 bgs			
67													
67													
68													
69													
70													
71													
72													
73													
74													
75													
76													
77													
78													
79													
80						_						_	
COMMEN	ITS:									PROJECT NO.		IPR-4	
										BORING NO.	1	117506	5

				U	RS (	Corpo	ration				TEST BORING	LOG		
											BORING NO:		IPR-5	
PROJEC	T:					KeySpa	an Hempstea	d MGP			LOCATION:	KeySp	an Pro	perty
CLIENT:							KeySpan				JOB NO.:		17506	
BORING	CONTRAC	CTOR:	:					and Nicol			DRILLING METHOD:	G	eoprob	е
GROUNI	DWATER:			~27' bg	gs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		55'	
DATE	TIME	1 F	VEL	TV	PE	TYPE	0.110.	Macrocore			DATE STARTED:	0	1/10/08	1
DAIL	IIIVIL		VLL	- ' '	-	DIA.		2"			DATE FINISHED:		1/10/08	
						WT.					DRILLER:		. Mead	
						FALL					GEOLOGIST:			
							DOOKET DE	NETROMET	ED DE A	NINO.	REVIEWED BY:	J. F	larshm	an
							POCKETPE	NETROMET					ī	
			SAMP					ı	DES	CRIPTION				
DEPTH					ows	REC		CONSIST			MATERIAL			IARKS
FEET	STRATA	NO.	TYPE	PEI	R 6"	RQD	COLOR	HARD			ESCRIPTION	USCS	PID	Moist
0									Asphalt	pavement	at surface.			
		S-1	Grab			1			0' to 2',	Black stain	ed SAND and GRAVEL, with	SP	0.0	Moist
1						1			some M	IGP materia	al (ALM, coal). NO odor.			
						i								
2						1								
						ł	Lt. Brown		2' to 5'	Fine to coa	urse SAND and some fine to	SP	0.0	D=:
$\vdash$						l	Li. Brown		coarse		and some mid to	55	0.0	Dry
3						l				J				
						l								
4														
						ļ								
5														
		S-2	Macro			54"	Lt. Brown				coarse SAND with some well	SP	0.0	Dry
6			core			1	/ Yellow		graded	fine to coar	se gravel. No visible impacts.			
						i								
7						1								
						ł								
						ł								
8						Į.								
						ļ								
9														
						ļ								
10														
		S-3	Macro			53"	Lt. Brown		Loose,	fine to very	coarse SAND, with some well	SP	0.0	Dry
11			core			1	/ Yellow		graded	fine to coar	se gravel. No visible impacts.			
						1	/ Orange							
12						1	, c.ago							
						1								
13						ł								
13						1								
$\vdash$														
14														
<u> </u>														
15														
		S-4	Macro			42"	Lt. Brown				e SAND, with some well	SP	3.0	Dry
16			core				/ Yellow				se gravel. Very faint odor at			
						1	/ Orange		20°. No	visible impa	act.			
17							3-							
						1								
18						1								
10						l								
						l								
19						I								
						l								
20												<u> </u>		
Commen	nts:	0' to 5	o' excav	ated b	y hanc	tools.					PROJECT NO.	11	17506	5
											BORING NO.		IPR-5	

			1	JRS Co	rnor	ation			TEST BOR	ING L	<u>OG</u>	
				<i>,,,,</i>	ηροι	ation			BORING NO:		IPR-5	
PROJECT	T:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeyS				JOB NO.:	1	117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
ļ			SAMPL						ESCRIPTION	, ,		
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		32"	Lt. Brown / Yellow / Orange			ery coarse SAND, with some coarse gravel. Faint to or.	SP	10 to 40.0	Dry
23								Odlar OSI Blash are	d business files at			
24									d brown MGP staining, fine to to fine coarse gravel. Little derate MGP odor.	SP	60.0	Dry
26 27		S-6	Macro core		32"	Brown / Tan / Brown		coarse sand, well g Some staining and	e to medium SAND, trace graded fine to coarse gravel. coating (MGP impact) at 29' to of DNAPL at 29' to 30'. ut 27'	SP	80.0	Moist to Wet
28												
31		S-7	Macro core		24"			trace coarse sand, little to some brown moderate MGP ode	dense, fine to medium SAND, trace well graded fine gravel, n staining and coating. Faint to or, sheen, (water saturated), DNAPL (liner stained).	SP	0.0	Wet
33 34 35												
36		S-8	Macro core		40"	Yellow / Orange		35' to 38' Fine to ve	ery coarse SAND and fine to ed GRAVEL. No visible	GP/SP	0.0	Wet
38 39 40						Lt. Brown / Tan / Orange			nedium SAND, little coarse coarse gravel. No visible	GP/SP		Wet
COMMEN	TS:								PROJECT NO.		IPR-5	
									BORING NO.	1	117506	5

S-9 Macro core					IRS	Cornor	ation			TEST BOR	ING L	OG	
Debta   Sample   Sa					יטחט	Sorpor	ation			BORING NO:		IPR-5	
BORING CONTRACTOR:   Fenley and Nicol   BORING LOCATION: KeySpan Properation	PROJECT	Γ:				KeySpa	n Hempstead	d MGP		SHEET:		3 of 3	
SAMPLE   SAMPLE   DESCRIPTION						KeyS					1	117506	5
DEPTH   STRATA   SYMBOL   NO.   TYPE   PER 6"   RQD   COLOR   CONSIST   MATERIAL   DESCRIPTION   USCS   PID   MACRO   41	BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
Separation				SAMPI				T	1				
S-9   Macro   Orde	II												
A1	FEET	SYMBOL			PER 6			HARD					MOIST
Yellow / Lt. Brown   Sand, trace well graded fine gravel. No visible impacts.   SP   0.0	41		S-9			34"			graded fine to coar		GP/SP	0.0	Wet
Lt. Brown  Lt. Brown  Lt. Brown  Lt. Brown  Sand, trace well graded fine gravel. No visible impacts.  S-10 Macro	42												<b></b>
A5	43								sand, trace well gr		SP	0.0	Wet
S-10 Macro core	44												
46  47  48  49  50  S-11 Macro core  S-11 Macro core  Lt. Brown  Lt. Brown  Loose to medium dense. Little yellow/orange banding. Fine to medium SAND, trace coarse sand, trace well graded fine gravel. No visible impacts.  52  53  54  56  57  58	45		0.10	Mari		00"	Vallar: /		Intervals of fine to	coarse SAND and poorly	CD/CD		Wet
48	46		5-10			38"			graded GRAVEL a		GP/SP	0.0	wei
S-11   Macro   29"   Lt. Brown   Loose to medium dense. Little yellow/orange banding. Fine to medium SAND, trace coarse sand, trace well graded fine gravel. No visible impacts.   Sp   0.0   S-11	47												
S-11   Macro   29"   Lt. Brown   Loose to medium dense. Little yellow/orange banding. Fine to medium SAND, trace coarse sand, trace well graded fine gravel. No visible impacts.   SP   0.0	48												
S-11 Macro core  S-11 Macro core  Lit. Brown Little yellow/orange banding. Fine to medium dense. Little yellow/orange banding. Fine to medium SAND, trace coarse sand, trace well graded fine gravel. No visible impacts.  SP 0.0  SP 0.0  SP 0.0  SP 55  End of boring: 55' bgs	49												
51	50		S-11	Macro		29"	It Brown		Loose to medium of	dense. Little yellow/orange	SP	0.0	Wet
52 53 54 55 55 56 57 58	51		0						banding. Fine to m sand, trace well gr	edium SAND, trace coarse			
55 End of boring: 55' bgs  57	52								impacts.				
55 End of boring: 55' bgs  56	53												
56													
56       57       58	55												
58	56								End o	of boring: 55' bgs			
	57												
59	58												
	59												
GO PROJECT NO. IPR- 5		ITS:								PRO JECT NO		IDD F	
BORING NO. 11175065	COMMEN	113.									1		5
<b>3571114G NO.</b> 1117/3003													

				URS	Corpo	oration				TEST BORING	LOG		
					=					BORING NO:		IPR- 6	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	KeySı	oan Pro	perty
CLIENT:						KeySpan				JOB NO.:	1	117506	5
BORING	CONTRAC	TOR:				Fenley a	and Nicol			DRILLING METHOD:	G	eoprob	е
GROUNE	DWATER:		,	~27' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		65'	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	1/15/08	3
					DIA.		2"			DATE FINISHED:		1/15/08	
					WT.					DRILLER:		. Mead	
					FALL					GEOLOGIST:	J. F	Harshm	an
					,	POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:			
	•		SAMP	LE	-			DES	SCRIPTION				
DEPTH				BLOWS	REC		CONSIST			MATERIAL		REN	IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD		D	ESCRIPTION	USCS	PID	Moist
0		S-1	Grab			Brown				. Bricks, concrete, fine to	Fill	0.0	Dry
					1			medium	sand and g	gravel, ALM.			
1													
2													
3													
						Dk. Brown				lium SAND, some fine to	SP	0.0	Dry
4								coarse	gravel.				
5													
		S-2	Macro		42"	Dk. Brown				se SAND, some poorly graded	SP	0.4	Dry
6			core			/ Lt. Brown				parse gravel. Very faint odor			
						/ Tan		(possibi	y MGP odoi	1).			
7													
8													
9													
10													
		S-3	Macro		54"	Dk. Brown				ne to coarse SAND, some	SP	0.0	Dry
11			core			/ Lt. Brown				gravel, trace coarse gravel. ssibly MGP odor).			
						/ Tan		vory iai	in odor (poc	ololy war odor).			
12					_								
					4								
13					_								
					4				4', Black sta ie gravel. Sl	lined, fine to medium SAND,	SP		Dry
14					4				•				
					4	Lt. Brown			5', Loose, fir slight odor.	ne to medium SAND, trace fine	SP	80.0	Dry
15	ļ							,	Ü				
		S-4			45"					d with some coating, fine to	SP	80.0	Dry
16			core		4					some poorly graded fine gravel. Moderate MGP odor.			
					4					5			
17					4								
					4								
18					4								
					4								
19					_								
					_								
20													
Commen	nts:	0' to 5	o' excav	ated by har	id tools. 1	7', HCN = 1.				PROJECT NO.	1	117506	5
										BORING NO.		IPR- 6	
										<u> </u>			

			,	JRS Co	rnoi	ration			TEST BOR	ING L	OG	
					npoi	ation			BORING NO:		IPR-6	
PROJECT	Г:				KeySpa	n Hempstead	d MGP		SHEET:		2 of 4	
CLIENT:					KeyS	pan			JOB NO.:		1117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Keys	Span Pro	perty
			SAMPL	.E				D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Rem	arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD	D	ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		42"	Black Stained		fine to medium SA	ed and coated (MGP impact), ND, trace coarse sand, little ght brown sand (not stained)	SP	260.0	Dry
22								at 20 : Moderate to	oliong man oddi.			
23												
24												
25		S-6	Macro		42"	Lt. Brown		Loose, light brown	with thin intervals of black	SP	300.0	Wet
26		G-0	core		74	LL. DIOWII		staining. Fine to me sand at 29' to 30', t	edium SAND with little coarse trace well graded fine gravel		0.00.0	*****
27								wet at ~27' to 28'. Strace DNAPL coati	Strong MGP odor, sheen, ng.			
28												
29												
30									danca la varior and black			
31		S-7	Macro core		40"			stained and coated	dense, brown and black d (MGP impact), fine to neens, intervals of partial	SP	315.0	Wet
32									Strong MGP odor, liner			
33												
34												
35												
36		S-8	Macro core		42"	Lt. Brown			fine to medium SAND, trace MGP odor (30 ppm).	SP	30.0 to	Wet
37											250.0	
38												
39								medium SAND. Bla	L saturated (100%) fine to ack DNAPL liquid present, sheen, liner stained, trace to 39.5' to 40'.	SP		Wet
	ITC.	22' L	CN = 1	27' HCN = 2	33' ∐∩	N - 3		<u> </u>	PROJECT NO.		IDD 4	
COMMEN	113:	, 110	J14 - 1.	_, IION = Z	. 55 , 110	0.			BORING NO.		IPR-6 1117506	
									BONING NO.		111/506	,

			ı	JRS Co	ornor	ation			TEST BOR	ING L	OG	
				7710 00	<i></i> po.	ation			BORING NO:		IPR-6	
PROJEC1	Г:				KeySpar	n Hempstead	d MGP		SHEET:		3 of 4	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
			SAMPL				T		ESCRIPTION			
DEPTH	STRATA	NO	TVDE	BLOWS	REC	001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR Lt. Brown	HARD		ESCRIPTION dense, fine to coarse SAND	USCS SP	<b>PID</b> 10.0	MOIST Wet
41		S-9	Macro core		30"	/ Orange			e to coarse gravel. Pocket of	Si	to	WEL
41			core			/ Yellow		DNAPL saturated	(100%) sand at 43' with strong		150.0	
42						7 1011011		MGP odor, sheen.			100.0	
43			l 1									
			l i									
44			l İ									
45												
		S-10	Marco		35"	Lt. Brown			dense, fine to very coarse	SP	60.0	Wet
46			core			/ Yellow			aded fine gravel. Pocket of (100%) sand at 45' with			
								DNAPL pooling are				
47												
40												
48												
49			<b> </b>									
73												
50			l l									
		S-11	Macro		30"	Lt. Brown		Fine to coarse SAN	ND, trace to little very coarse	SP	0.7	Wet
51			core			/ Yellow			vell graded fine gravel. No			
								visible impacts.				
52												
53												
54												
55		Q_10	Macro	-		Lt. Brown		Loose to medium of	dense, fine to coarse SAND,	SP	0.0	Wet
56		0-12	core			Tan with		little very coarse sa	and at 59' to 60', little fine to		5.5	
			3310			Bands of		coarse gravel. No	wet visible impacts.			
57						Orange						
58												
59												
			] [									
60									T			
COMMEN	ITS:								PROJECT NO.		IPR- 6	
									BORING NO.	•	1117506	5

				IDC	· C	rnor	otion			TEST BOR	ING L	OG	
				JNS	,	προι	ation			BORING NO:		IPR-6	
PROJECT	Т:					KeySpar	n Hempstead	d MGP		SHEET:		4 of 4	
CLIENT:						KeyS	pan			JOB NO.:	1	117506	5
BORING	CONTRACT	OR:					Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL							ESCRIPTION			
DEPTH	STRATA				ws	REC		CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE		₹ 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
		S-13				30"	Lt. Brown		Loose, fine to coar gravel. No visible i	se SAND, trace fine to coarse	SP	0.0	Wet
61			core						gravon rec violoto r	mpaoto.			
62													
02													
63													
- 00													
64													
_													
65													
									End	of boring: 65'bgs			
66													
67													
68													
69													
69													
70													
71													
72													
73													
74													
75													
75													
76													
77													
78													
79													
80	ITO.									DDG IFOT NG		IDE 6	
COMMEN	115:									PROJECT NO. BORING NO.		IPR- 6	5
										BUMING NU.		117506	J .

				URS	Corpo	ration				TEST BORING	LOG		
										BORING NO:		IPR- 7	
PROJEC	CT:				KeySp	an Hempstea	ad MGP			LOCATION:	KeyS	oan Pro	perty
CLIENT:	:					KeySpan				JOB NO.:	11	117506	5
BORING	CONTRAC	TOR:				Fenley	and Nicol			DRILLING METHOD:	G	eoprob	е
GROUN	DWATER:		^	29' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	1/03/08	3
					DIA.		2"			DATE FINISHED:		1/04/08	
					WT.		_			DRILLER:		Guzzar	
					FALL					GEOLOGIST:		larshm	
						POCKET P	L ENETROMET	FR RFA	DING	REVIEWED BY:	0.1	1011111	uii
			SAMP	I E	I	TOOKETT			SCRIPTION				
DEPTH	I		JAMI	BLOWS	REC		CONSIST	T DE.		MATERIAL		DEN	IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD			ESCRIPTION	USCS		Moist
	JINAIA			PERO	nQD		HAND	0' to 1'	Loamy tops				
0	4	S-1	Grab		4	Dk. Brown		0 10 1,	Loanly tops	ion.	SP	0.0	Dry
					4								
1													
										dium SAND, trace coal, trace to	SP	0.0	Dry
2								little fine	e gravel.				
					]								
3													
					1								
4					1								
					1								
5	1		ľ										
		S-2	Macro		32"	Lt. Brown		5' to 7',	Loose, fine	to coarse SAND, little fine	SP		Dry
6		0 -	core		1 02	/ Brown		gravel.	,	,	0.		Diy
-	4		COIC		1	DIOWII							
7					-								
-			-		4			7' to 10'	Black/brov	vn stained and coated (MGP	O.D.	105.0	D
_					4					nedium SAND, trace coarse	SP	125.0	Dry
8	4				4					fine gravel. Modrate MGP			
					4			odor.					
9					4								
10													
		S-3	Macro		49"					d and coated (MGP impacted),	SP	88.0	Moist
11			core		_					ND, trace coarse sand, trace to derate MGP odor.			
								iittie iirie	e graver. ivio	derate MGF 0001.			
12													
13					1								
	1				1								
14					1								
					1								
15					1								
		S-4	Macro		N/A			Black/h	rown staine	d and coated (MGP impacted),	SP	60.0	Dry
16		J-4	core		1 17/7					ND, trace coarse sand, trace to		00.0	ыу
10			core		┨					derate MGP odor.			
4-					-								
17					4								
					4								
18					4								
					1								
19					_								
20					1_		<u> </u>				<u>L</u> _		
Commer	nts:	0' to 5	' excav	ated by han	d tools.					PROJECT NO.	11	117506	5
										BORING NO.		IPR- 7	
											Ì		

				JRS Co	ornor	ation			TEST BOR	ING L	OG	
				<i></i>	p.c.	41.011			BORING NO:		IPR- 7	
PROJECT					KeySpar	n Hempstead	d MGP		SHEET:		2 of 3	
CLIENT:					KeyS	pan			JOB NO.:		1117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
			SAMPL				T	T	ESCRIPTION		,	
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		24"	Brown		20' to 22', Mud-like possible NAPL, she	, very fine sand. Impacted by eens. MGP odor.	SP/GP	100.0	
22								20' to 24' Proven at	tained fine to energe SAND	SP/GP		Moist
23									ained fine to coarse SAND, el with MGP impact. Moderate			IVIOISE
25								24' to 25', Fine to c coarse gravel. No i	coarse SAND, some fine to mpact.	SP/GP		Dry
26		S-6	Marco core		42"	Lt. Brown		trace very coarse s	dense, fine to coarse SAND, and, with trace fine gravel, 6' (80 ppm). MGP odor and	SP	80.0	Moist
27								impact seam.				
28												
30								e to fine SAND, stained and DNAPL. Moderate MGP odor. bgs.		360.0	Wet	
31		S-7	Macro core		30"			impacted) SAND, v	ne to fine brown stained (MGP vith very thin seams of black (possible DNAPL). Moderate	SP/GP	440.0	Wet
32						Lt. Brown		30.5' to 35', Fine to	medium SAND, trace coarse avel. No visible impact.	SP/GP	60.0	Wet
34												
35 36		S-8	Macro core		32"	Lt. Brown			dense, fine to medium SAND, aint MGP odor. No visible	SP/GP	8.0	Moist to Wet
37						Lt. Brown / Orange		some fine to coarse	dense fine to coarse SAND, e gravel, small cobble. Very	SP/GP		Moist to Wet
39								faint MGP odor.				
40												
COMMEN	TS:						-	-	PROJECT NO.	•	IPR- 7	•
									BORING NO.		1117506	5

PROJECT:  CLIENT:  BORING CONTRACTOR:  SAMPLE  SAMPLE  DESC  CONSIST  MAT  FEET SYMBOL  S-9 Macro core  A1  Lt. Brown / Orange  Lt. Brown / Orange  Lt. Brown / Orange  43  Lt. Brown / Orange  43' to 45', Fine to medius sand, trace fine gravel. Idea  44  45	se, SAND and GRAVEL, d with fine to coarse ct.	1	IPR- 7 3 of 3 1175065 pan Prop Rem PID 0.0	perty
CLIENT:  BORING CONTRACTOR:  SAMPLE  SAMPLE  DESC  STRATA  FEET SYMBOL NO. TYPE PER 6" RQD COLOR HARD  S-9 Macro core  41  42  43  Lt. Brown / Orange  End of bore	B NO.:  RING LOCATION:  CRIPTION  TERIAL  SRIPTION  Se, SAND and GRAVEL, d with fine to coarse ct.  SAND SAND, trace coarse No impact.	WSCS USCS SP/GP	1175065 pan Prop Rem PID	arks MOIST Wet
BORING CONTRACTOR:  SAMPLE  STRATA FEET SYMBOL NO. TYPE PER 6" RQD COLOR HARD  S-9 Macro core  41  42  43  43  44  45  End of bor 46	RING LOCATION: CRIPTION TERIAL SRIPTION Se, SAND and GRAVEL, d with fine to coarse ct.  SAND, trace coarse No impact.	WSCS USCS SP/GP	pan Prop Rem PID	arks MOIST Wet
DEPTH STRATA SYMBOL NO. TYPE PER 6" RQD COLOR HARD DESC!  S-9 Macro core Core Core Core Core Core Core Core C	CRIPTION  TERIAL  SRIPTION  See, SAND and GRAVEL, of with fine to coarse ct.  SAND, trace coarse  No impact.	USCS SP/GP	Rem PID	arks MOIST Wet
DEPTH STRATA SYMBOL NO. TYPE PER 6" RQD COLOR HARD DESCI	TERIAL SRIPTION See, SAND and GRAVEL, d with fine to coarse ct.  sum SAND, trace coarse No impact.	SP/GP	PID	Wet
FEET SYMBOL NO. TYPE PER 6" RQD COLOR HARD DESCI	RIPTION se, SAND and GRAVEL, d with fine to coarse ct.  se, SAND and GRAVEL, sed with fine to coarse ct.	SP/GP	PID	Wet
S-9 Macro core	se, SAND and GRAVEL, S d with fine to coarse ct.  um SAND, trace coarse S No impact.	SP/GP		Wet
41   Core   / Orange   fine to very coarse sand gravel. No visible impact   42	d with fine to coarse ct.  um SAND, trace coarse No impact.		0.0	
42  43  Lt. Brown / Orange  45  End of bot	ct. um SAND, trace coarse No impact.	SP/GP		Wet
42 43 Lt. Brown 43' to 45', Fine to mediu sand, trace fine gravel.	um SAND, trace coarse S No impact.	SP/GP		Wet
Lt. Brown 43' to 45', Fine to mediu sand, trace fine gravel.  45  End of box	No impact.	SP/GP		Wet
Lt. Brown 43' to 45', Fine to medius and, trace fine gravel.  45  End of box	No impact.	SP/GP		Wet
Lt. Brown 43' to 45', Fine to medius and, trace fine gravel.  45  End of box	No impact.	SP/GP		Wet
44 / Orange sand, trace fine gravel. I	No impact.	Si /Gi		VV CL
45 End of bot				in .
End of bot	oring: 45' bgs			Ì
End of bot	oring: 45' bgs			Ì
46	3 3 -			
				Ì
47				Ì
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56				İ
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57				İ
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58				1
				İ
59				1
60				1
	OJECT NO.		IPR- 7	
	RING NO.		1175065	
	2		5000	·

				U	RS (	Corpo	ration				TEST BORING	LOG		
						-					BORING NO:		IPR-8	
PROJEC	T:					KevSp	an Hempstea	ad MGP			LOCATION:	KevSı	oan Pro	pertv
CLIENT:						, -	KeySpan				JOB NO.:		17506	
BORING	CONTRAC	TOR:						and Nicol			DRILLING METHOD:		eoprob	
	DWATER:			~28' bg	15		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
	-				_	TVDE	CAS.		CORE	TOBE	DATE STARTED:			
DATE	TIME	LE	VEL	TY	PE	TYPE DIA.		Macrocore			DATE FINISHED:		1/09/08	
						WT.		2"			DRILLER:		1/10/08	
													. Mead	
						FALL					GEOLOGIST:	J. l	larshm	an
						,	POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:			
			SAMP	LE					DES	SCRIPTION				
DEPTH				BLC	)WS	REC		CONSIST			MATERIAL		-	IARKS
FEET	STRATA	NO.	TYPE	PEF	R 6"	RQD	COLOR	HARD		DI	ESCRIPTION	USCS	PID	Moist
0									Asphalt	at surface.				
		S-1	Grab				Dk. Brown	1			medium SAND, some fill	SP/Fill	0.0	Dry
1											of coal fragmenmts, slag,			
									some g	ravel.				
2														
3														
<del>-</del>														
4														
4														
5											OAND " .		<b></b>	<b></b>
<b>  </b>		S-2	Macro			34"	Dk. Brown		coarse		coarse SAND, some fine to	SP	0.0	Dry
6			core						coarse	graver.				
7														
8														
											k stained and coated fine to	SP/GP	76.0	Moist
9											ine gravel, trace concrete at			to Wet
							•••••		9.5' to 1	0' (possible	foundation). Faint MGP odor.		<b>†</b>	<b>†</b>
10														
	***************************************	S-3	Macro			38"			Loose to	o medium d	ense, brown/black stained	SP	137.0	Moist
11		0 0	core			00					ne to coarse SAND. Stained	Oi.	107.0	to Dry
			COIE								NAPL saturation, trace to little			to Diy
12									fine gra	vel, modera	te to strong MGP odor.			
14														
10														
13														
<u> </u>														
14														
15														
		S-4	Macro			36"	Black				ined (MGP impact) and coated	SP	324.0	Dry to
16			core				Stained				saturation, fine to coarse			Moist
									SAIND 8	ura iillie tine	gravel. Strong MGP odor.			
17														
18														
							Brown/		18' to 20	0', Brown/Bl	ack stained and coated (MGP	SP		Moist
19							Black				rse SAND, little fine gravel,	J.		IVIOISE
19							Stained			NAPL satu				
							Stairieu							
20				إ			0 811122				Inna			
Commen	nts:	0' to 5	o' excav	ated by	y hanc	tools. 1	2.5' HCN: 1.	16.5' HCN: 3.			PROJECT NO.	11	17506	5
											BORING NO.		IPR-8	

DEPTH	: CONTRACT			JRS Co		ation			BORING NO:		IPR-8	
CLIENT: BORING C DEPTH												
BORING C	CONTRACT				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
DEPTH	CONTRACT				KeyS				JOB NO.:		117506	
		OR:				Fenley and I	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL						ESCRIPTION			
FEEI	STRATA		TVDE	BLOWS	REC	001.00	CONSIST		MATERIAL			arks
	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR Brown	HARD		ESCRIPTION tained and coated (MGP	USCS SP	<b>PID</b> 400.0	MOIST Moist
21		S-5	Macro core		36"	and Black			rse SAND, partial DNAPL	SF	400.0	IVIOIST
- 21			core			Stained		saturation possible	, little fine gravel, strong MGP			
22						Otaou		odor.				
23												
24												
25												
		S-6	Marco		36"	Brown			rown stained (MGP impacted) coarse SAND, trace fine	SP	400.0	
26			core			Stained			gs. Strong MGP odor.			
07											120.0	
27											120.0	
28												
-20						Lt. Brown		28' to 30'. Fine to n	nedium SAND (no staining).	SP	50.0	Wet
29								Faint to moderate I				
30												
	-	S-7	Macro		42"	Lt. Brown			dense, fine to medium SAND,	SP	35.0	Wet
31			core			/ Tan		trace fine gravel. N faint MGP odor (dis	lo staining, no visible impact,			
								laint war odor (dis	ssolved).			
32												
33												
34												
34												
35												
	-	S-8	Macro		39"	Lt. Brown			e to medium SAND, trace fine	SP	0.0	Wet
36			core			/ Yellow			sand and fine to coarse			
								gravei at 39.5 to 4	0'. No visible impact.			
37												
38												
20												
39												
40												
COMMENT	TS:	42' HC	N: 5.						PROJECT NO.		IPR-8	
		_	-						BORING NO.	1	117506	5

				IDC (	Crno	ration			TEST BOF	RING L	OG	
			(	JNJ C	σιροι	ration			BORING NO:		IPR-8	
PROJECT	Г:				KeySpa	n Hempstea	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS	pan			JOB NO.:	-	1117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL	LE				D	DESCRIPTION			
DEPTH	STRATA			BLOWS			CONSIST		MATERIAL		Ren	narks
FEET	SYMBOL	NO.	TYPE		RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
41		S-9	Macro		33"	Lt. Brown / Orange			e to very coarse SAND and AVEL. No visible impacts or	GP/SP	0.0	Wet
41			core			/ Yellow		odors.	•			
42												
43					4							
43					-							
44												
45					$\dashv$							
								End	of boring: 45' bgs			
46												
47					-							
48					4							
49					1							
50												
51												
52					4							
52					$\dashv$							
53												
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57					$\dashv$							
58					<b>I</b>							
59				$\vdash$	$\dashv$							
					<u> </u>							
60	ITC.								DDO JECT NO		IDD 1	
COMMEN	115:								PROJECT NO. BORING NO.		IPR- 8 1117506	E
									DORING NO.		1117306	J

				U	RS (	Corpo	ration				TEST BORIN	G LOG		
						-					BORING NO:		IPR-9	
PROJEC	T:					KevSp	an Hempstea	ad MGP			LOCATION:	KevSr	an Pro	oertv
CLIENT:						-,-,-,	KeySpan				JOB NO.:		175065	
BORING	CONTRAC	CTOR						and Nicol			DRILLING METHOD:		eoprobe	
GROUNE	DWATER:						CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		8' bgs	
DATE	TIME	ΙF	VEL	ΤV	'PE	TYPE		Macrocore			DATE STARTED:		4/09/08	
DAIL	111111		*		-	DIA.		2"			DATE FINISHED:		4/09/08	
						WT.					DRILLER:		. Kegel	
						FALL					GEOLOGIST:		larshma	
						*	POCKET PI	ENETROMET	ER REA	DING	REVIEWED BY:	0		
			SAMP	LE						SCRIPTION				
DEPTH					ows	REC		CONSIST	<u> </u>		MATERIAL		REM	ARKS
	STRATA	NO.	TYPE		R 6"	RQD	COLOR	HARD			ESCRIPTION	uscs		Moist
0		S-1	Grab				Dk. Brown		FILL: Lo		medium SAND, with some	Fill	0.0	
- Ŭ		J-1	Ciab			ł	DK. DIOWII			oarse grave		SP	0.0	
1						ł						SF		
<del>-                                    </del>						ł								
2					-	1								
					-	-								
$\vdash$					-	I								
3					<u> </u>	ł						1		
<del>⊢ ,   </del> I					<u> </u>	ł						1		
4						ļ								
						l								
5														
<b>  </b>		S-2	Macro			32"					material: Sand, gravel, ning, MGP odor, concrete	Fill	633.0	Moist
6			core						fragmer		iiig, war odor, concrete			
igwdown														
7						ļ								
<b> </b>						l								
8														
						ļ			_		oring: refusal 8' bgs			
9									Re		essible former tank holder			
											bottom/pad.			
10														
11														
						ļ								
12												1		
13												1		
												1		
14												1		
15														
												1		
16														
17												1		
igsqcup												1		
18												1		
					<u> </u>									
19												1		
20														
Commen				PR-9 p	ilot ho	le likely v	with in former	r large storage	holder.	Fill 5' to 8'	PROJECT NO.	11	175065	5
		HCN:	5								BORING NO.		IPR-9	

				URS	Corpo	oration				TEST BORING	GLOG		
					-					BORING NO:		IPR-9A	
PROJEC	CT:				KeySp	an Hempstea	ad MGP			LOCATION:	KeySı	oan Pro	perty
CLIENT:						KeySpan				JOB NO.:		117506	
BORING	CONTRAC	CTOR:					and Nicol			DRILLING METHOD:	G	eoprob	Э
GROUNI	DWATER:					CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		10' bgs	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	4/09/02	2
					DIA.					DATE FINISHED:		4/10/02	
					WT.					DRILLER:		Keage	
					FALL					GEOLOGIST:		larshm	
					,	POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:			
			SAMP	LE				DES	SCRIPTION	•			
DEPTH				BLOWS	REC		CONSIST			MATERIAL		REN	IARKS
FEET	STRATA	NO.	TYPE		RQD	COLOR	HARD			ESCRIPTION	USCS		Moist
0		S-1	Grab			Dk. Brown		Loose, f		um SAND, trace red brick,	Fill/SP	0.0	Dry to
<b>⊢</b> ⊸		0 1	Citab		-	/ yellow			ragments.		1 111/01	0.0	Moist
1					-	brown							IVIOISE
╟┈					-	DIOWII							
2					$\dashv$								
					4								
					4								
3					4								
╟┈┈					4								
4					4								
⊩													
5													
		S-2	Marco		48"	Brown				ted material with perched		300.0	Wet
6			core							gravel. Sheens 75-100% urated, black stained and			
										odor, cohesive and gooey.			
7									Ü	, ,			
					_								
8										(possibly floor /pad of former		600.0	
									holder).				
9										ine to medium SAND, trace	SP	100.0	Dry
								coarse	sand and fir	ne gravel, slight odor.			
10													
									End o	of boring: 10' bgs			
11													
12					7								
					┪								
13					7								
					┪								
14					┪								
					1								
15					1								
15					$\dashv$								
16				-	$\dashv$								
10					$\dashv$								
17					-								
17					-								
10					-								
18					4								
					4								
19					4								
					4								
20													
Commen	nts:	Locat	ion beli	eved to be	within larg	ge former sto	rage holder.			PROJECT NO.	1	117506	5
										BORING NO.		IPR-9A	
1													

				URS	Corpo	oration				TEST BORING	LOG		
					=					BORING NO:	I	PR-9 B	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	KeyS	oan Pro	perty
CLIENT:						KeySpan				JOB NO.:	1	117506	5
BORING	CONTRAC	TOR:				Fenley a	and Nicol			DRILLING METHOD:	G	eoprob	е
GROUNI	DWATER:					CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		60' bgs	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:		4/11/08	3
					DIA.		2"			DATE FINISHED:		4/11/08	
					WT.		_			DRILLER:		. Kege	
					FALL					GEOLOGIST:		larshm	
					,	POCKET PI	ENETROMET	ER REA	DING	REVIEWED BY:			
			SAMP	LE	ı				SCRIPTION				
DEPTH				BLOWS	REC		CONSIST	T ==		MATERIAL		REN	IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD			ESCRIPTION	USCS		Moist
0	OTHATA	S-1	Macro	1	43"	Dk. Brown	HAILD	FILL:16		medium SAND, little coarse	Fill/SP	0.0	Moist
0		3-1	-		43					coarse gravel, trace coal. No	FIII/SF	0.0	IVIOISI
			core		-	and Black		impact.					
1					-								
					-								
2					-								
					-								
3					-								
					-								
4			-		4								
- <u>-</u> -					-								
5									fine to	madium CAND little seems			
		S-2	Macro		44"	Dk. Brown				medium SAND, little coarse coarse gravel, trace coal, brick	Fill/SP	0.0	Moist
6			core		4	and Black				ellow/brown fine to coarse			
					4			sand at	9.5' to 10'. I	No impact.			
7					4								
					4								
8					4								
					4								
9					4								
40					-								
10		0.0			50"			Loope	fine to energ	se SAND, some fine to medium	0.0	40.0	- ·
11		S-3	Macro		58"	Orange /				MGP impact at 14' to 15', with		13.0	Dry /
11			core		-	Brown				coated, moderate MGP odor.			Moist
12			-		-								
12			ŀ		-							E0.0	
13			<b> </b>	<del>-  </del> -	1							50.0	
13				-	-								
14				+	1							105.0	
- 14			<b> </b>		┨							100.0	
15					1								
	ŀ	S-4	Macro		37"	Lt. Brown		Loose to	o medium d	ense, fine to coarse SAND,	SP	200.0	Moist
16		U- <del>-</del>	core	-	┨ "	/ Tan		with sor	ne fine to m	edium gravel through out. Oily		200.0	to Dry
			0016		1	, 1411				ating strong MGP odor.			lo Diy
17			<b> </b>	<del>-  </del> -	1								
					1								
18			<b> </b>	_	1								
- <del>`</del> -					1							500.0	
19			<b> </b>	-	1							0.00.0	
13			<b> </b>	<del>-  </del>	1								
20					┨								
Commen	ıts:				1	<u> </u>	<u> </u>			PROJECT NO.	4.	117500	<u> </u>
										BORING NO.		117506 PR-9 B	
											<u> </u>	n-9 B	

			- 1	IRS Co	rnor	ation		TEST BOF	RING L	OG	
				110 00	προι			BORING NO:		IPR-9 B	
PROJECT	Γ:					Hempstead	MGP	SHEET:		2 of 3	
CLIENT:					KeySp			JOB NO.:		1117506	
BORING (	CONTRACT					Fenley and N	Nicol	BORING LOCATION:	Key	Span Pro	perty
			SAMPL					DESCRIPTION	1	D	ulu -
DEPTH FEET	STRATA SYMBOL	NO.	TYPE	BLOWS PER 6"	REC RQD	COLOR	CONSIST HARD	MATERIAL DESCRIPTION		PID	narks MOIST
, LEE!	STWIDGE	S-5	Macro	FERO	34"	Orange /	HAND	20' to 23', Loose, fine to coarse SAND, with	USCS SP	500.0	Moist
21		3-3	core		34	Brown / Yellow		some fine to medium gravel. Moderate MGP odor, slightly coated and oily.	35	500.0	IVIOIST
22											
23						Brown Staining		23' to 25', Loose, fine to coarse SAND, some fine to medium gravel. Perched water, 50 to 75% DNAPL saturated and coated, strong MGP odor.	SP	750.0	Wet
25 26		S-6	Macro core		33"			MGP-impacted troughout: Light to moderate brown staining, fine to coarse SAND with some fine to coarse gravel, oily, coated, moderate to		500.0	
27								strong MGP odor. Wet at 30', liner stained.			
28											
30											
31		S-7	Macro core		34"			30' to 33', Heavy MCG impact: Numerous thin seams of black 100% DNAPL saturation, fine to medium SAND. Strong MGP odor.	SP	400.0	Wet
32											
34						Tan / Lt. Brown		33' to 35', Loose, fine SAND. No staining, little orange sand at 35'. No impact.	SP	3.0	Wet
35		S-8	Macro core		34"	Lt Brown / Tan		35' to 39', Loose, fine to medium SAND, trace fine gravel. No impact.	SP	0.0	Wet
37											
38 39 40						Dr. Brown		39' to 40', Dense to very dense, fine to coarse SAND and fine to medium GRAVEL, trace silt. No Impact.	GP/SP		Wet
COMMEN	TS.				<u> </u>			PROJECT NO.	1	IPR-9 B	<u> </u>
CIVIIVILIN								BORING NO.		1117506	
								DOTAING NO.			_

			ı	JRS Co	ornoi	ration			TEST BOR	ING L	OG	
									BORING NO:		IPR-9B	
PROJEC1	Г:				KeySpa	n Hempstead	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
		1	SAMPL		1		1		ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
41		S-9	Macro core		34"	Orange Brown		coarse gravel. No	lium SAND, trace fine to impact.	SP	0.0	Wet
42												
43												
44												
45		_							dana finata assa CANT			
46		S-10	Macro core		30"	Lt. Brown / Orange			dense, fine to coarse SAND, arse gravel. No impact.	SP	0.0	Wet
47												
48												
49												
50		0.44	M		6"	l t Dunnin		Fine to medium SA	AND, poor recovery cobble	SP	0.0	\A/ - +
51		S-11	Macro core		ь	Lt. Brown / Tan		stuck in tip of Macr		51	0.0	Wet
52												
53												
54												
55		S-12	Macro		36"	Lt. Brown		Loose, fine to med	lium SAND, trace fine gravel,	SP	0.0	Wet
56		- · <b>-</b>	core			/ Tan		trace orange sand	_	J.		
57												
58												
59												
60												
								End o	of boring: 60' bgs			
COMMEN	ITS:								PROJECT NO.		IPR-9B	
									BORING NO.		1117506	5

				URS	Corpo	oration				TEST BORING	LOG		
					-					BORING NO:		IPR-10	
PROJEC	T:				KevSp	an Hempstea	ad MGP			LOCATION:	KevSı	oan Pro	pertv
CLIENT:					Поуор	KeySpan				JOB NO.:		117506	
	CONTRAC	TOR:	!				and Nicol			DRILLING METHOD:		eoprob	
	DWATER:					CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		40' bgs	
	-		V=1	TVDE	TVDE	CAS.		CORE	TOBE	DATE STARTED:			`
DATE	TIME	LE	VEL	TYPE	TYPE RQD		Macrocore			DATE FINISHED:		4/10/08	
					WT.		2"					4/10/08	
										DRILLER:		(. Kege	
					FALL		<u> </u>			GEOLOGIST:	J. l	larshm	an
					1	POCKET P	ENETROMET			REVIEWED BY:			
	1		SAMP					DES	SCRIPTION				
DEPTH				BLOWS	REC		CONSIST			MATERIAL			IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD			ESCRIPTION	USCS	PID	Moist
0		S-1	Grab			Brown /				ID, some poorly sorted	SP		
			•			Yellow		medium	to coarse (	gravel.			
1			•										
			•			Black		1' to 5' l	_oose, SAN	D, some poorly sorted medium	SP	3.7	
2					1			to coars	se gravel, so	ome organics. Strong	]		
F					1			hydroca	irbon-type o	dor. MGP staining.			
3					1								
					-								
$\vdash \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$					-								
4					_								
5													
		S-2	Macro		51"	Black				e fine to coarse gravel. Strong	SP	57.0	Moist
6			core							dor with possible solvent-type d. No saturation but sticky (tar-			
								like).	davily Stairle	d. No saturation but sticky (tar-			
7													
8													
9			ŀ										
			ŀ										
10			ŀ										
		S-3	Macro		25"	Black		Loose	SAND som	e fine to coarse gravel. Strong	SP	237.0	Moist
		3-3	l 1		- 25	ыаск				dor with possible solvent-type	SP	237.0	IVIOISI
11			core		-					d. No saturation but sticky (tar-			
I					_			like).					
12					_								
					4								
13					_								
					_								
14													
15					1								
	İ	S-4	Macro		24"	Black		Loose to	o medium d	ense, SAND, some fine to	SP	104.0	Moist
16			core		1					ng hydrocarbon-type odor.			
					1			Heavily	stained.				
17			<b> </b>	<del>-  </del>	┪								
- ' -					-								
10					-								
18					4								
					4								
19					_								
20					<u></u>						<u> </u>		<u> </u>
Commen	nts:	SP, 1	5' to 20'	HCN:4	_					PROJECT NO.	1	117506	5
										BORING NO.	1	IPR-10	

				IDS C	ornoi	ration			TEST BOR	ING L	OG	
			(	JRS Co	προι	aliuii			BORING NO:		IPR-10	
PROJECT	Γ:				KeySpar	n Hempstead	d MGP		SHEET:		2 of 2	
CLIENT:					KeyS	•			JOB NO.:		1117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Keys	Span Pro	perty
			SAMPL	.E				D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Rem	arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD	D	ESCRIPTION	USCS	PID	MOIST
		S-5	Macro		28"	Black			se SAND, some poorly sorted	SP	78.0	
21			core					gravel. Hydrocarbo gasoline/hydrocarb				
								gasoline/nyarocars	on type odor.			
22												
23												
24												
25		0.0			04"	DLl. /		25' to 26' Looso fi	ne to coarse SAND. Strong	0.0	1100	
26		S-6	Macro core		31"	Black / Grey		MGP odor, MGP st		SP	112.0	Moist
20			COIE			Gley			ne to coarse SAND, some	SP		
27									el, strong MGP odor, 25%	SF		
								DNAPL saturation.				
28												
29												
30												
		S-7	Macro		35"	Brown /			e to medium SAND.	SP	213.0	Moist
31			core			Yellow			ack DNAPL (slightly 32'. Strong MGP odor and			
								staining.	32. Strong Mar oddr and			
32												
33												
34												
25												
35		S-8	Macro		18"	Brown /		Loose, fine to med	ium SAND. No visible impact.	SP	1.7	Wet
36		3-0	core		10	Tan		Loodo, inio to mod	idin ortivo. No viololo impaot.	SF	1.7	wei
30			0016			1 411						
37												
38												
39												
40								<u> </u>				
								End o	of boring: 40' bgs			
COMMEN	ITS:	SP, 20	)' to 25',	25' to 30' ar	nd 30' to 3	35', HCN:3.			PROJECT NO.		IPR-10	
									BORING NO.		1117506	5

				URS	Corpo	oration				TEST BORING	LOG		
										BORING NO:		IPR-11	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	KeySp	an Pro	perty
CLIENT:						KeySpan				JOB NO.:	11	17506	5
BORING	CONTRAC	TOR:	:			Fenley	and Nicol			DRILLING METHOD:	G	eoprob	е
GROUNI	DWATER:					CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:	4	40' bgs	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	4/09/08	3
					DIA.		2"			DATE FINISHED:	0	4/09/08	3
					WT.					DRILLER:	K	í. Kege	
					FALL					GEOLOGIST:		larshm	
					,	POCKET P	ENETROMET	ER REAL	DING	REVIEWED BY:			
			SAMP	LE	•			DES	SCRIPTION				
DEPTH				BLOWS	REC		CONSIST			MATERIAL		REN	IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD		D	ESCRIPTION	uscs	PID	Moist
0		S-1	Grab			Dk. Brown		Fill: Larg		s/morter, sand, fine to coarse	Fill	0.0	Wet
Ť		٠.	G. a.			J			Perched wa			0.0	
1													
<del>                                     </del>					1								
2					1								
					$\dashv$								
3					-1								
					-1								
4					-1								
4					-								
-					-								
5		0.0			400		<b></b>	El to Cl	FILL avers	Land are conserts from anto			
		S-2	Macro		48"			5 10 6,	FILL: grave	I and grey concrete fragments.	FILL	0.0	Wet
6			core			_		01 +- 401	1	- t CAND t t-			_
					4	Orange /		little fine		e to coarse SAND, trace to	SP		Dry
7						Brown /		iittic iiiic	graver.				
						Dk. Brown							
8													
9													
10													
		S-3	Macro		40"	Reddish			ine to coars	se SAND, little fine gravel. No	SP	0.0	Moist
11			core			Brown /		imapct.					to Dry
						Lt. Brown							
12													
					_								
13													
14													
15						]							
		S-4	Macro		0"					ed, macrocore point lost during			
16			core					advance	ement. Sam	ple not representative.			
17					_[								
					]								
18					_]								
19					7								
					7								
20					1								
Commen	nts:				•	•	•			PROJECT NO.	11	17506	5
										BORING NO.		IPR-11	

				JRS C	ornoi	ration			TEST BOR	ING L	OG	
					orpor	ation			BORING NO:		IPR-11	
PROJEC <sup>*</sup>	Γ:					n Hempstead	d MGP		SHEET:		2 of 2	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT			_		Fenley and	Nicol		BORING LOCATION:	Keys	Span Pro	perty
DEPTH	STRATA		SAMPL	BLOWS	REC	<u> </u>	CONSIST		ESCRIPTION MATERIAL		Rem	arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
1221	UTILIEUE	S-5	Macro	1 211 0	28"	Lt. Brown	1174115		ine to coarse SAND, with	SP	107.0	Moist
21			core		]	/ Yellow		poorly sorted suba gravel. Oily, MGP	ngular to subrounded coarse odor.			
22												
23					1				ine to coarse SAND, some rly sorted gravel. Oily, MGP	SP		Wet / Moist
24					1							
25		S-6	Macro		24"	Lt. Grey			ium SAND, with band of	SP	990.0	Moist
26			core		1				gravel at 27' to 27.5'. or, oily, black staining in			
27					-							
29			,		1							
30												
31		S-7	Macro core		19"			fine to medium SAI 70% DNAPL satura	dense to dense, black stained ND and coarse gravel. 60 to ated, with MGP staining and	SP	2890.0	Moist
32					1			odor.				
33					}	Grey /		33' to 35', Loose, fi staining slight odor	ine to medium SAND. No	SP	140.0	
34					1	Yellow						
36		S-8	Macro core		16"				lium SAND, with coarse I, No DNAPL, moderate odor.	SP	63.0	
37					1							
38					1							
39					]							
40												
			لبيا					End o	of boring: 40' bgs			
COMMEN	ITS:	SP 25'	to 30', l	HCN:6. SP	30' to 35'	, HCN:21.			PROJECT NO.		IPR-11	
									BORING NO.		1117506	5
<u> </u>												

SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick.  Faint MGP odor.  S-3 Macro  10  S-3 Macro  core  11  Yellow / Brown  13  14  15  SAND, trace coarse sand, some fine to coarse gravel. Little black staining and coating, perched water.  11' to 15', Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water.  11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.					URS	Corpo	oration				TEST BORING	LOG		
SOURCE   S						•					BORING NO:	II	PR-12A	
SOURCE   S	PROJEC	T:				KevSp	an Hempstea	nd MGP			LOCATION:	KevSr	oan Pro	pertv
SORING CONTRACTOR:	CLIENT:					-7-1-	•				JOB NO.:			
GROUNDATER:   CAS.   SAMPLER   CORE   TUBE   TOTAL DEPTH:	BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:			
DATE   TIME   LEVEL   TYPE   Macrocore   DATE STARTED: 0.40/80/8	GROUNE	DWATER:					_		CORE	TURE			15' has	
DIA.   2"   DATE   SAMPLE   K. Keggl			1 =	VEL	TVDE	TVDE	OAO.		COLL	TOBL				,
SAMPLE   SAMPLE   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   FALL   GEOLOGIST: J. Harntman   GEOLOGIST: J.	DATE	IIIVIE	LE	VEL	ITPE									
SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  STRATA  NO. TYPE  PER 8"  ROD  DX. Brown  FILL: Losse to medium SAND and Fill  Material: Ash like material, red brick, slag, gravel.  Fill  Core  S-2  S-2  Macro  Core  S-3  S-2  Macro  Core  S-3  S-3  S-4  Macro  S-4  Macro  S-5  S-7  S-8  S-8  S-8  S-8  S-9  S-9  S-9  S-9														
SAMPLE  DEPTH STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  FILL: Loose time to medium SAND and Fill Material: Ash like material, red brick, slag, gravel. GP/SP  STRATA NO. TYPE PER 6" ROD COLOR HARD  FILL: Loose time to medium dense, fine to medium SAND, trace to coarse gravel. Little concrete, trace wood and red brick. Faint MGP odor.  Fill No. Type PER 6" ROD COLOR HARD  FILL: Loose time to medium dense, fine to medium SAND, trace to save gravel. Little black staining and coaling, perched water.  STRATA NO. TYPE PER 6" ROD COLOR HARD  STRATA NO. TYPE PER 6" ROD COLOR HARD  FILL: Loose time to medium dense, fine to medium SAND, trace to save gravel. Little black staining and coaling, perched water.  STRATA NO. TYPE PER 6" ROD STRATA NO. TYPE PER 6" RO														
DEPTH STRATA NO. TYPE PER 6" ROD COLOR HARD DESCRIPTION  O S S-1 Grab Dok. Brown Dok. Brown Dok. Brown SAND, trace to medium sand, some fine to coarse sand, some fine to coarse gravel. Little black staining and coating, perhed water 11 or to 11*, Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perhed water 12 coarse sand, little fine gravel. Faint to moderate perfoleum-type odor.  S-4 Macro J 36" Lt. Brown Core Drown J 10" to 11", Loose, fine to medium SAND, trace to little fine gravel. Faint to moderate perfoleum-type odor.  S-4 Macro J 36" Lt. Brown Core J 36" Lt. Brown J 10" to 11", Loose, fine to medium SAND, little coarses and, little fine gravel. Faint to moderate perfoleum-type odor.  S-4 Macro J 36" Lt. Brown J 10" to 11", Loose, fine to medium SAND, trace to little fine gravel. Faint to moderate perfoleum-type odor.  S-5 Macro J 36" Lt. Brown J 10" to 11", Loose, fine to medium SAND, trace to little fine gravel. Faint to moderate perfoleum-type odor.  S-7 J 10" Lt. Brown J 10" to 11", Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or perfoleum-type odor.  S-7 J 10" Lt. Brown J 10" to 11", Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or perfoleum-type odor.  S-8 J 10" Lt. Brown J 10" to 11", Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or perfoleum-type odor.  S-8 J 10" Lt. Brown J 10" to 11", Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or perfoleum-type odor.  S-9 J 104.0 Dr 11" to 15" Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or perfoleum-type odor.  S-9 J 104.0 Dr 11" to 15" Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or perfoleum-type odor.  S-1 J 10" Lt. Brown gravel. Moderate MGP or perfoleum-type odor.  S-1 J 10" Lt. Brown gravel. Moderate MGP or perfoleum-type odor.  S-1 J 10" Lt. Brown gravel. Moderate MGP or perfoleum-type odor.  S-1 J 10" Materia: Ash like materia: Ash like materia: Ash like materia: Ash li							DOCKET DI	NETROMET	ED DE A	DINC		J. F	arsnm	an
DEPTH PEET STRATA NO. TYPE PER 6" ROD COLOR HARD DESCRIPTION USCS PID Mole of				04445			POCKETPI	ENETROWET					1	
STATA NO. TYPE   PER 6"   ROD   COLOR   HARD   DESCRIPTION   USCS   PID   Molecular				SAMP		250		00110107	DE				DE1/	1451/0
Dix. Brown    Pill.: Loose, fine to medium SAND and Fill Material: Ash like material, red brick, slag, gravel.   Pill.:   QP/SP						_								_
Material: Ash like material, red brick, slag, gravel.  QP/SP    1	_	SIRAIA			PER 6"	RQD		HARD	F					MOIST
Solution of the state of the st	0		S-1	Grab			Dk. Brown						0.4	
2 3 4 5 5 5-2 Macro						_			ivialeria	. ASII IIKE III	ialeriai, red brick, slag, gravei.	GP/SP		
3  4  5  S-2 Macro	1													
S-2 Macro														
S-2 Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Macro Macr	2													
S-2 Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Sharp Macro Core Macro Macr														
S-2 Macro core 28" Brown FiLL: Lose to medium dense, fine to medium SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick. Faint MGP odor.  S-3 Macro core 38" Dk. Brown core 10" to 11", Lose, fine to medium SAND, trace to fittle fine to coarse gravel. Little black staining and coating, perched water. 11" to 15", Lose, fine to medium SAND, trace to fittle fine to coarse gravel. Little black staining and coating, perched water. 11" to 15", Lose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  S-4 Macro 36" Lt. Brown / Brown / Brown / Brown / Pellow / Sightly coated (oily)  Lose, fine to coarse SAND and fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  Temp well installed (1" sch. 40 PVC).	3													
S-2 Macro core 28" Brown FiLL: Lose to medium dense, fine to medium SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick. Faint MGP odor.  S-3 Macro core 38" Dk. Brown core 10" to 11", Lose, fine to medium SAND, trace to fittle fine to coarse gravel. Little black staining and coating, perched water. 11" to 15", Lose, fine to medium SAND, trace to fittle fine to coarse gravel. Little black staining and coating, perched water. 11" to 15", Lose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  S-4 Macro 36" Lt. Brown / Brown / Brown / Brown / Pellow / Sightly coated (oily)  Lose, fine to coarse SAND and fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  Temp well installed (1" sch. 40 PVC).														
S-2   Macro   28°   Brown   FILL: Loose to medium dense, fine to medium   SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick.   Faint MGP odor.   Fiji   0.2   Mo   Mo   Mo   Mo   Mo   Mo   Mo   M	4					1								
S-2   Macro   28°   Brown   FILL: Loose to medium dense, fine to medium   SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick.   Faint MGP odor.   Fiji   0.2   Mo   Mo   Mo   Mo   Mo   Mo   Mo   M														
SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick.  Sand Macro  10  S-3 Macro  Ore  11  12  Yellow / Brown  13  14  15  S-4 Macro  Core  36*  Lt. Brown  16 S-4 Macro  Core  17  18  19  20  Comments: Temp well installed (1* sch. 40 PVC).  SAND, trace coarse sand, some fine to coarse gravel. Little to coarse sand, some fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water.  11' to 15', Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water.  11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  Dry  Mo  16  17  Repose TNO.  1175065	5			Ì										
SAND, trace coarse sand, some fine to coarse gravel. Little concrete, trace wood and red brick.  Faint MGP odor.  S-3 Macro  10 S-3 Macro  11 Core  Yellow / Brown  12 Brown  13 S-4 Macro  15 S-6 Macro  16 S-7 Macro  17 To 15, Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water.  11 to 15, Loose, fine to medium SAND, little coarse sand, stille fine gravel. Faint to moderate petroleum-type odor.  S-4 Macro  16 S-4 Macro  17 Core  S-4 Macro  18 S-4 Macro  19 S-4 Macro  19 S-4 Macro  19 S-7 Macro  19 S-8 Macro  19 S-9 10 to little fine to coarse gravel. Little black staining and coating, perched water.  10 to 11, Loose, fine to medium SAND, irace to little fine to coarse gravel. Little black staining and coating, perched water.  10 to 11, Loose, fine to medium SAND, little coarse sand, still fine gravel. Faint to moderate petroleum-type odor.  Dry Mo  13 S-4 Macro  14 Core  15 S-6 Macro  16 S-7 Macro  17 S-8 Macro  18 S-9 10 to W.  15.0  15 Dry  15 Dry  16 Moderate MGP or petroleum-type odor, slightly coated (oily)  PROJECT NO. 11175065			S-2	Macro		28"	Brown		FILL: Lo	ose to med	lium dense, fine to medium	Fill	0.2	Moist
gravel. Little concrete, trace wood and red brick.  Faint MGP odor.  S-3 Macro	6		_	l 1		1								
7   8   9   10   10   10   10   10   10   11   10   11   10   10   11   10						1					ete, trace wood and red brick.			
8 9 10 S-3 Macro	7					1			Faint M	GP odor.				
9 10 S-3 Macro core 11 11 12 13 14 15 S-4 Macro core 21 15 S-4 Macro core 36° Lt. Brown core 20 16 17 18 19 20 Comments: Temp well installed (1" sch. 40 PVC).  10' to 11', Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water. 11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  10' to 11', Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water. 11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  11' to 15', Loose, fine to medium sAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  11' to 15', Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  12 13 14 15 15 16 17 17 18 18 19 20 11' to 11', Loose, fine to medium sAND, trace to little fine to coarse gravel. Little black staining and coating, perched water. 11' to 15', Loose, fine to medium sAND, little coarse sand, little fine to coarse sand, little fine to coarse sand little fine to coarse sand little fine to coarse sand little fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  10 to 11', Loose, fine to coarse sand little fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  11 to 15', Loose, fine to coarse sand little fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)				•	-	-								
9 10 S-3 Macro core 11 11 12 13 14 15 S-4 Macro core 21 15 S-4 Macro core 36° Lt. Brown core 20 16 17 18 19 20 Comments: Temp well installed (1" sch. 40 PVC).  10' to 11', Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water. 11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  10' to 11', Loose, fine to medium SAND, trace to little fine to coarse gravel. Little black staining and coating, perched water. 11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  11' to 15', Loose, fine to medium sand, little fine gravel. Faint to moderate petroleum-type odor.  12 S-4 Macro 36° Lt. Brown / Brown / Yellow 20' Slightly coated (oily) 20	8			•	-	-								
S-3 Macro core	- Ŭ					-								
S-3 Macro core	0			•		-								
S-3 Macro core Dk. Brown core	9				-									
S-3 Macro core Dk. Brown core	10				-									
11   12   14   15   16   17   18   19   19   10   19   19   10   10   19   10   10	10		0.0	Maara	-	20"	DI. D		10' to 1	1' Loose fir	ne to medium SAND trace to	OD	10 to	\A/-+
Coating, perched water.  11' to 15', Loose, fine to medium SAND, little coarse sand, little fine gravel. Faint to moderate petroleum-type odor.  S-4 Macro			5-3	l 1		38"	DK. Brown							wet
Coarse sand, little fine gravel. Faint to moderate petroleum-type odor.    13				core		-							15.0	
Coarse sand, little fine gravel. Faint to moderate petroleum-type odor.    13						4			11140 11	-! Lagas fir	as to madium CAND little			<u>.</u>
petroleum-type odor.    Seta   Macro   Seta	12					4	_							Dry to
13	<u> </u>					4	Brown							Moist
S-4 Macro Sore S-4 Macro Sore Macro Sore Macro Sore Macro Sore Macro Sore Macro Sore Moderate MGP or petroleum-type odor, slightly coated (oily)  17 Somments: Temp well installed (1" sch. 40 PVC).  Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  PROJECT NO. 11175065	13					4								
S-4 Macro Sore S-4 Macro Sore Macro Sore Macro Sore Macro Sore Macro Sore Macro Sore Moderate MGP or petroleum-type odor, slightly coated (oily)  17 Somments: Temp well installed (1" sch. 40 PVC).  Loose, fine to coarse SAND and fine to medium gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  PROJECT NO. 11175065	<b> </b>					4								
S-4 Macro core	14			] ]		4								
S-4 Macro ocore				] ]		4								
16 Core / Brown / Yellow gravel. Moderate MGP or petroleum-type odor, slightly coated (oily)  18	15						]		<u>.</u>					
Temp well installed (1" sch. 40 PVC).   PROJECT NO.   11175065			S-4	Macro		36"						SP	104.0	Dry
17	16			core		_	/ Brown							
18						1	/ Yellow		ongritty (	Juliu (Ully)	,			
19 20 Comments: Temp well installed (1" sch. 40 PVC).  PROJECT NO. 11175065	17													
19 20 Comments: Temp well installed (1" sch. 40 PVC).  PROJECT NO. 11175065														
20 Comments: Temp well installed (1" sch. 40 PVC). PROJECT NO. 11175065	18													
20 Comments: Temp well installed (1" sch. 40 PVC). PROJECT NO. 11175065						1								
Comments: Temp well installed (1" sch. 40 PVC). PROJECT NO. 11175065	19					1								
Comments: Temp well installed (1" sch. 40 PVC). PROJECT NO. 11175065						1								
Comments: Temp well installed (1" sch. 40 PVC). PROJECT NO. 11175065	20				<u> </u>	1								
		nts:	Temp	well ins	stalled (1" s	ch. 40 P\	/C).		1		PROJECT NO.	11	17506	5
111112A			r				,					T		
												<u> </u>		

				IBS C	rnor	ation			TEST BOR	ING L	OG	
				JRS Co	προι	aliuii			BORING NO:		IPR-12A	
PROJEC <sup>*</sup>	Т:				KeySpar	n Hempstead	d MGP		SHEET:		2 of 3	
CLIENT:					KeyS	pan			JOB NO.:	1	117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
		1	SAMPI				1		ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ne to coarse SAND, some	USCS	PID	MOIST
21		S-5	Macro core		32"	Lt. Brown / Yellow			coated (oily) moderate MGP-	SP	260	Moist
22								22' to 25' Loose fi	ine to medium SAND, trace	SP		Dny
23									coated (oily), moderate MGP	51		Dry
24												
25		S-6	Macro		29"	Lt. Brown		Loose fine to med	ium SAND, trace to little fine	SP	608	Moist
26		5-0	core		29	Lt. Brown		gravel. Moderate to coated (oliy), 25%	o strong MGP odor, lightly DNAPL saturated at 29' to 30',	54	606	to Wet
27								liner stained.				
28												
29												
30		S-7	Macro		32"	Lt. Brown		Loose to medium o	dense, fine to medium SAND,	SP	10	Wet
31		3-7	core		32	/ Orange /			ery faint MGP odor, no	SF	10	wei
32						Tan						
33												
34												
35		S-8	Macro					Interval not sample	ed (mistake made by driller,			
36		3-0	core					interval was misse	d). Auger cuttings show sand			
			00.0					and gravel mix.				
37												
38												
39												
40												
40 COMMEN	ITC.		<u> </u>			<u> </u>			PROJECT NO.		IPR-12A	
COMINIEN	113.								BORING NO.		117506	
											, 500	
<u> </u>												

				IDC	Corno	ration			TEST BOR	ING L	OG	
			(	JNS (	Corpoi	aliuii			BORING NO:		IPR-12A	١
PROJECT	Т:				KeySpa	n Hempstea	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
			SAMPI						DESCRIPTION		•	
DEPTH	STRATA			BLOW		4	CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE			COLOR	HARD		ESCRIPTION lium SAND, trace coarse sand,	USCS	PID	MOIST
41		S-9	Macro		32"	Orange / Brown			o coarse gravel. No staining,	SP	0	Wet
41			core			DIOWII		no DNAPL, no visi	ble impact.			
42					-							
72					-							
43												
44												
45												
								End	of boring: 45' bgs			
46												
47					_							
47					_							
48					-							
- 10												
49												
50												
51												
F0					_							
52					_							
53												
- 55												
54												
55												
56					_							
57					_							
5/					-							
58					-							
55					_							
59												
60							<u> </u>					
COMMEN	ITS:								PROJECT NO.		IPR-12A	
									BORING NO.		1117506	5

				URS	Corpo	oration				TEST BORING	LOG		
					=					BORING NO:	II	PR-12E	1
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	KeySp	oan Pro	perty
CLIENT:						KeySpan				JOB NO.:	1	117506	5
BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:	G	eoprob	е
GROUND	DWATER:					CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		40' bgs	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	4/08/08	3
					DIA.		2"			DATE FINISHED:		4/08/08	
					WT.					DRILLER:	k	(. Kege	l
					FALL					GEOLOGIST:	J. F	larshm	an
					,	POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:			
	•		SAMP	LE	-			DES	SCRIPTION				
DEPTH				BLOWS	REC		CONSIST			MATERIAL		REM	IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD		D	ESCRIPTION	USCS	PID	Moist
0		S-1	Grab			Dk. Brown		Loose, 1	fine to medi	um loamy SAND, trace coarse	SP	0.0	Dry to
			ľ					sand, tra	ace fine gra	vel. No visible impact.			Moist
1			ľ		1								
			ľ		1								
2					1								
					1								
3			ľ		1								
					1								
4					1								
			ľ										
5					7								
	•	S-2	Macro		42"	Brown /		Loose, f	fine to medi	um SAND, little to some	SP	0.0	Dry
6			core			Orange		coarse	sand, trace	fine gravel. No impact.			
			ľ										
7													
					7								
8													
9													
10													
		S-3	Macro		45"	Brown /				ense, fine to coarse SAND,			
11			core			Orange		trace to	little fine gr	avel. No impact.			
					_								
12					_								
					_								
13					_								
			[		_								
14					_								
					4								
15	ļ												
		S-4	Macro		46"	Orange /				ense, fine to medium SAND,	SP	200.0	Moist
16			core		_	Lt. Brown				trace to little well graded ed (oily), moderate			
					4	/ Grey			ım/gasoline				
17					_				-				
			[		4								
18					_								
					4								
19					_								
					_								
20													
Commen	nts:	0' to 5	' excav	ated by har	nd tools.					PROJECT NO.	1	117506	5
										BORING NO.	I	PR-12E	}
											<u> </u>		

				JRS Co	rnor	ration			TEST BOR	ING L	OG	
					npoi	ation			BORING NO:		IPR-12B	1
PROJECT	Г:				KeySpar	n Hempstead	MGP		SHEET:		2 of 2	
CLIENT:					KeyS	pan			JOB NO.:		1117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Key	Span Pro	perty
			SAMPL	.E	1				ESCRIPTION			
DEPTH	STRATA			BLOWS	REC	1	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		38"	Brown / Grey		gravel. Lightly coa	rse SAND, little fine to coarse ted (oily), possibly coated with derate odor, 25% DNAPL	SP	240.0	
22												
23											350.0	
24 25												
26		S-6	Macro core		36"	Brown / Yellow		Oily, some brown I	rse SAND, trace fine gravel. MGP staining, 25% to 50% n, moderate to strong MGP	SP	500.0	Moist
27								odor, liner stained.			1000.0	
28												
30												
31		S-7	Macro core		39"	Black and Brown stained		SAND. 100% DNA other thin seams o	MGP impact: Fine to medium PL saturation at 32.5' to 33', If near 100% DNAPL ate to strong MGP odor, liner	SP	320.0	Wet
32								stained.	,			
34						Tan			very fine to fine SAND. No L, slight MGP odor.	SP	100.0	Wet
35 36		S-8	Macro core		36"	Lt. Brown / Tan		trace coarse sand	dense, fine to medium SAND, and fine gravel. No visible	SP	4.5	Wet
37								impact.			0.0	
38											0.0	
39 40												
40								FJ	of boring: 40' bas			
COMMEN	ITC.	SP 25	' to 30'	HCN:2. SP	30' to 35'	HCN·1		End	of boring: 40' bgs PROJECT NO.		IPR-12B	
COMMEN	113.	J. , <b>L</b> O	,			,			BORING NO.		1117506	
Ī												-

				U	RS (	Corpo	oration				TEST BORING	LOG		
											BORING NO:		IPR-13	
PROJEC	CT:					KeySp	an Hempstea	ad MGP			LOCATION:	KeySp	oan Pro	perty
CLIENT	:						KeySpan				JOB NO.:		17506	
BORING	CONTRA	CTOR	:					and Nicol			DRILLING METHOD:	G	eoprob	е
GROUN	DWATER:						CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:	4	45' bgs	
DATE	TIME	ΙF	VEL	ΤV	'PE	TYPE		Macrocore			DATE STARTED:		4/10/08	}
DAIL	111112				-	DIA.		2"			DATE FINISHED:		4/10/08	
						WT.		_			DRILLER:		. Kege	
						FALL					GEOLOGIST:		larshm	
							POCKET PI	L ENETROMET	FR RFA	DING	REVIEWED BY:	0.1	iaisiiiii	an
			SAMP	L			l ookerr.			SCRIPTION				
DEPTH			JAMI		ows	REC		CONSIST			MATERIAL	1	BEN	IARKS
FEET	STRATA	NO.	TYPE		R 6"	RQD	COLOR	HARD			ESCRIPTION	uscs		Moist
0	JIIIAIA	NO.	TIFE		1	HQD	COLOII	HAILD	Crovel	at surface.	LOOMIF HON	0303	FID	
U		S-1	Cuah			-		 	<b></b>		medium SAND, little fill		0.0	
		3-1	Grab			-	Dk. Brown				wood, ash-like material.	Fill	0.0	Dry
1						4			matoria		mood, don into materiali			
						4								
2														
						1								
3														
4														
5														
		S-2	Macro			40"	Yellow				se SAND, little to some fine	SP	0.0	Moist
6			core				Brown		gravel.	No impact.				to Dry
						1								
7						1								
						1								
8						1								
						1								
9						1								
						1								
10						1								
10		S-3	Macro			35"	Yellow		Loose.	fine to coars	se SAND, little to some fine	SP	0.0	Moist
11		0-0	core			33	Brown				ım gravel. No impact.	J.	0.0	to Dry
- ' '			core			4	DIOWII							to Dry
12						-								
12						ł								
10						ł								
13					-	-								
					-	-								
14						-								
				ļ		4								
15									l					
		S-4	Macro			36"	Yellow				ne to coarse SAND, little to race medium gravel. No	SP	4.0	Moist
16			core				Brown		impact.	-	ace medium gravei. No			to Dry
						1	Dk. Brown				medium dense, fine to			Moist
17						1			medium	n SAND, tra	ce to little coarse sand, little			0151
· ·						1					I. Some black staining,		15.0	
18						1			modera	te petroleur	m-type odor.		.5.5	
10						1								
10						1							20.0	
19						1							30.0	
- 0.5						-								
20		017		<u> </u>	l'	-14- 1					IDDO IDOT NO		<u> </u>	
Commer	าเร:	u to 5	o precle	eared	by han	nd tools.					PROJECT NO.		17506	5
											BORING NO.		IPR-13	

				JRS Co	ornoi	ration			TEST BOR	ING L	OG	
					προι	ation			BORING NO:		IPR-13	
PROJEC1	Γ:				KeySpa	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
	077474		SAMPL				00110107		ESCRIPTION		D	
DEPTH FEET	STRATA SYMBOL	NO.	TYPE	BLOWS PER 6"	REC RQD	COLOR	CONSIST HARD		MATERIAL ESCRIPTION	USCS	PID	narks MOIST
	CHILDOL	S-5	Macro	1 Lit 0	36"	Brown	HAILD		ium SAND, trace coarse sand,	SP	60	Moist
21		00	core			Diowii.		little to some fine to	medium gravel. Some black	O.	00	Wichet
					1			staining and coatin odor.	g, moderate petroleum-type			
22								odor.				
23					ļ							
24												
25												
		S-6	Macro		28"	1		25' to 27', Petroleu	m/oily impact: Fine to medium	SP	55	Moist
26			core		1				coarse gravel. Black stained			
								and coated.				
27												
						Brown /			pacted: Fine to medium  L, some brown and black		85	Moist
28						Grey			ted, moderate odor.			to Wet
- 20								_				
29												
30												
		S-7	Macro		28"	1			pact: Medium dense, fine to	SP	155	Wet
31			core						own MGP staining, thin seams 00% saturation), moderate to			
								strong MGP odor.	70 76 Saturation), moderate to			
32					1							
33												
33												
34												
					1	Brown /		34' to 35', Medium	dense fine to medium SAND,	SP	26	Wet
35						Tan			n gravel. No staining faint			<u> </u>
		S-8	Macro		26"	Lt. Brown		35' to 37', Medium	dense, fine to very coarse fine to coarse GRAVEL. No	GP/SP		
36			core			/ Yellow		staining.	line to coarse GRAVEL. No			
07						/ Tan						
37								37' to 38' MGP im	pacted SAND and GRAVEL		155	
38									saturation, moderate MGP		133	
								odor.				
39						Lt. Brown			ne to medium SAND. No		4	Wet
						/ Yellow		staining.				
40												
COMMEN	ITS:								PROJECT NO.		IPR-13	
									BORING NO.		117506	5

			,	JRS Co	ornoi	ration			TEST BOR	ING L	OG	
					npoi	ation			BORING NO:		IPR-13	
PROJECT	Γ:				KeySpa	n Hempstead	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	KeyS	Span Pro	perty
			SAMPL				T		ESCRIPTION			
DEPTH	STRATA			BLOWS	REC	1	CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
44		S-9	Macro		36"	Orange		No impact.	um SAND, trace fine gravel.	SP	0	Wet
41			core		1	Brown						
42					ł							
42					ł							
43			l		ł							
70					ł							
44			l 1									
			l 1									
45			l İ		1							
								End o	of boring: 45' bgs			
46												
47												
48					ļ							
49												
49					ļ							
50			<b> </b>		1							
- 50			l									
51			l 1									
			l l		1							
52					1							
53												
54					ļ							
<u> </u>												
55												
56												
30			<b> </b>		1							
57												
58												
59												
			[									
60								<u> </u>				
	ITC.								PROJECT NO.		IPR-13	
COMMEN	113.								BORING NO.		117506	

				URS	Corpo	oration				TEST BORING	LOG		
					•					BORING NO:	I	PR- 14	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
CLIENT:					, ,	KeySpan				JOB NO.:		17506	
BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:		eoprob	
GROUNI	DWATER:			~24' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DATE	TIME	LE	VEL	TYPE	TYPE	0.101	Macrocore			DATE STARTED:	0	1/18/08	3
DAIL					DIA.		2"			DATE FINISHED:		1/18/08	
					WT.					DRILLER:		. Mead	
					FALL					GEOLOGIST:		larshm	
						POCKET PI	L ENETROMET	FR RFA	DING	REVIEWED BY:	0.1	iaisiiiii	an
			SAMP	I E		I			SCRIPTION	L			
DEPTH	I		OAWII	BLOWS	REC		CONSIST	T		MATERIAL		BEN	IARKS
	STRATA	NO.	TYPE	PER 6"	RQD	COLOR	HARD			ESCRIPTION	USCS		Moist
0	JIIIAIA		Grab	FERT	TIQD	Dk. Brown	HAILD	0' to 3'	Loamy tops		SP	0.0	moiot
- 0		S-1	Grab		-	DK. Brown		0 10 3,	Loanly tops	oli.	SP	0.0	
					4								
1					4								
$\vdash$					-								
2					4								
$\vdash$					4								
3					4	L		01 + 51	Ti 4	CAND BH - "			l _
					4	Dk. Brown		3° to 5',	rine to coar	rse SAND, little fine gravel.	SP		Dry
4													
5								l					
		S-2	Macro		49"	Lt. Brown				se SAND, trace very coarse aded fine gravel. No visible	SP	0.0	Dry
6			core			/ Yellowish		impacts		ided fille graver. No visible			
			ļ										
7													
			ļ										
8													
9					_								
10													
		S-3	Macro		56"	Lt. Brown			2', Loose, fir	ne to medium SAND, trace fine	SP	0.0	Dry
11			core			/ Yellowish		gravel.					
12					_								
					_	Brown /				ne to very coarse SAND, with	SP		Dry
13					_	Lt. Brown		some po	oorly graded	d fine gravel.			
					_								
14					_								
					_								
15						<u> </u>	<u> </u>	<u> </u>				<u> </u>	
		S-4	Macro		40"	Brown				coarse SAND and fine to	GP/SP	0.0	Dry
16			core					coarse	GRAVEL. N	o visible impacts.			
17													
18													
			ľ		1								
19					1								
			ŀ		1								
20			ľ		1								
Commen	nts:	0' to 5	' excav	ated by har	nd tools.	<u> </u>	1	1		PROJECT NO.	11	17506	5
				,						BORING NO.		PR- 14	
											1 '		

				JRS Co	rnoi	ation			TEST BOR	ING L	OG	
					npoi	ation			BORING NO:		IPR- 14	
PROJECT	Γ:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeyS	pan			JOB NO.:	-	1117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cente	er Lot
			SAMPL	.E				D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Rem	arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		40"	Brown			medium dense, fine to e very coarse sand, little fine odor.	SP	30.0	Dry
22												
23						Brown Stained		and coated, fine to	MGP impacted, brown stained coarse SAND, trace to little ate MGP odor. Water table at	SP	175.0	Moist to Wet
25 26		S-6	Macro core		44"	Brown Black Stained		brown black, fine to of DNAPL saturation	sted, stained and coated o coarse SAND, black seams on (75 to 100%). Very strong silt and liner stained.	SP	800.0	Wet
28											1600.0	
29 30												
31		S-7	Macro core		40"	Black and Brown		brown staining and	MGP impacted, black and I coated fine to medium SAND NPL saturation (350 ppm).	SP	350.0	Wet
32						Staining		Strong MGP odor		SP	75.0	Wet
33									ne to medium SAND, no L. Moderate MGP odor.			
34												
35		S-8	Macro		36"	Lt. Brown			ne to medium SAND, no	SP	161.0	Wet
36			core					staining. Moderate	MGP odor.			
37						<b> </b>		0711. 401		<b></b>		
						Lt. Brown			ne to very coarse SAND and VEL. Faint MGP odor.	GP	20.0	Wet
38						/ Yellow		into to coarse and	TVEE. I diff Wild Out.			
						/ Orange					20.0	
39											30.0	
- 10												
40								<u> </u>			IDD ::	
COMMEN	IIS:								PROJECT NO.		IPR- 14	
									BORING NO.	•	1117506	0

Comments   Comments					IDC	Corpoi	otion			TEST BOF	RING L	OG	
Column   C				(	כחנ	Corpor	alion						
Column   C	PROJEC1	Γ:				KeySpa	n Hempstead	d MGP		SHEET:		3 of 3	
SORING CONTRACTOR:   SAMPLE   DESCRIPTION   Medical Center													5
DEPTH   SYMBOL   No.   TYPE   BLOWS   FEC   RQD%   COLOR   Lose, fine to coarse SAND, trace to little fine   SP   2.0	BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
SYMBOL   NO. TYPE   PER 6"   ROD%   COLOR   HARD   DESCRIPTION   USCS   PID				SAMPL	.E				C	DESCRIPTION			
S-5   Macro	DEPTH	STRATA								MATERIAL		Ren	
41	FEET	SYMBOL						HARD			USCS		MOIST
43 44 45 46 47 48 49 49 49 50 50 51 51 52 53 53 54 55 56 56 57 57 58 59 60 COMMENTS:			S-5			33"	Brown				SP	2.0	Wet
43	41			core					graver. No stairiing	J.			
43												4.0	
44	42											1.0	
44	10												
45	43												
45	4.4					_						0.0	
End of boring: 45' bgs  End of	44					_						0.0	
End of boring: 45' bgs  End of	45					_							
46	40								End	of horing: 45' has			
47 48 49 50 51 52 53 53 54 55 55 56 60 COMMENTS:	46									o. 50g. 10 5gc			
48 49 49 50 50 51 51 52 53 53 53 55 56 57 57 58 58 59 60 COMMENTS:						_							
48 49 49 50 50 51 51 52 53 53 53 55 56 57 57 58 58 59 60 COMMENTS:	47												
49 50 51 51 52 53 54 55 56 56 57 57 58 59 60 COMMENTS:  PROJECT NO. IPR- 14													
50 51 52 52 53 54 54 55 56 56 57 57 58 59 60 COMMENTS: PROJECT NO. IPR- 14	48												
50 51 52 53 54 55 56 57 57 58 59 60 COMMENTS: PROJECT NO. IPR- 14													
51 52 53 54 54 55 56 57 57 58 59 60 COMMENTS:	49												
51 52 53 54 54 55 56 57 57 58 59 60 COMMENTS:													
52 53 54 55 55 56 57 58 59 60 COMMENTS:	50												
52 53 54 55 55 56 57 58 59 60 COMMENTS:													
53 54 54 55 55 56 60 59 60 COMMENTS:  PROJECT NO. IPR-14	51												
53 54 54 55 55 56 57 57 58 60 COMMENTS:  PROJECT NO. IPR-14						_							
54	52												
54	F0					_							
55 56 57 58 59 60 COMMENTS: PROJECT NO. IPR- 14	53					_							
55 56 57 58 59 60 COMMENTS: PROJECT NO. IPR- 14	54												
56	01					_							
56	55												
57 58 59 60 COMMENTS: PROJECT NO. IPR- 14						_							
58	56												
58													
59 60 COMMENTS: PROJECT NO. IPR- 14	57												
59													
60 PROJECT NO. IPR- 14	58												
60 PROJECT NO. IPR- 14													
COMMENTS: PROJECT NO. IPR- 14	59												
COMMENTS: PROJECT NO. IPR- 14						_							
								l		DDG IFOT US		IDD ::	
	COMMEN	115:											
BOHING NO. 1117-3005										DURING NO.		111/506	J

0   S   S   S   S   S   S   S   S   S			UHS	Corpc	ration				TEST BORING	LOG		
CLIENT: BORING CONTRACT GROUNDWATER:  DATE TIME  DEPTH FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  6  17  18  S  S  S  S  S  S  S  S  S  S  S  S  S									BORING NO:	I	PR- 15	
BORING CONTRACT GROUNDWATER:  DATE TIME  DEPTH FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18				KeySp	an Hempstea	ad MGP			LOCATION:	Medica	al Cente	er Lot
DATE   TIME					KeySpan				JOB NO.:	11	17506	5
DEPTH FEET STRATA N  0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 5 5 16 17 18	ΓOR:	:			Fenley a	and Nicol			DRILLING METHOD:	G	eoprob	Э
DEPTH FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18		-	~25' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DEPTH FEET STRATA N  0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	LE\	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	1/17/08	3
FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  16  17  18				DIA.		2"			DATE FINISHED:		1/17/08	
FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  16  17  18				WT.		_			DRILLER:		. Meade	
FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  16  17  18				FALL					GEOLOGIST:		larshm	
FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  16  17  18					POCKET P	L ENETROMET	FR RFAI	DING	REVIEWED BY:	0.1	101011111	an
FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  16  17  18		SAMP	I E	l	TOOKETT			SCRIPTION				
FEET STRATA N  0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  5  16  17  18	1	JAMI	BLOWS	REC		CONSIST	l DE		MATERIAL		DEM	IARKS
0   S   S   S   S   S   S   S   S   S	NO.	TYPE	PER 6"	RQD%	COLOR	HARD			ESCRIPTION	USCS		Moist
1	_	_	PENO			ПАПИ	0' to 0'	Loamy tops				WOISt
2 3 4 5 6 7 8 9 10 5 11 12 13 14 15 16 17 18	S-1	Grab		4	Dk. Brown		0 10 2,	Loamy tops	OII.	SP	0.0	
2 3 4 5 6 7 8 9 10 5 11 12 13 14 15 16 17 18				4								
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18				4								
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18				1								
4 5 6 7 8 9 10 5 11 12 13 14 15 16 17 18				_								
4 5 6 7 8 9 10 5 11 12 13 14 15 16 17 18		] [		]	Lt. Brown		2' to 5',	Fine to coar	rse SAND, little fine gravel.	SP		Dry
5 6 7 8 9 10 11 12 13 14 15 16 17 18				]								
5 6 7 8 9 10 11 12 13 14 15 16 17 18				1								
10 S 11 12 13 14 15 16 17 18 18			İ	1								
10 S 11 12 13 14 15 16 17 18 18				1								
6				1								
6	S-2	Macro		52"	Dk. Brown		Loose, f	ine to coars	se SAND, intervals of very	SP	0.0	Dry
7 8 9 10 5 11 12 13 14 15 16 17 18		core		1	/ Brown				ell graded fine gravel.			٥.,
10 S 11 S 14 S 16 S 16 T 7 T 18		0010		1	, Brown							
10 S 11 S 14 S 16 S 16 T 7 T 18				1								
9 10 11 12 13 14 15 16 17 18				1								
9 10 11 12 13 14 15 16 17 18				1								
10 S 11 12 13 14 15 S 16 17 18 18				4								
10 S 11 12 13 14 15 S 16 17 18 18				4								
11				1								
11				_								
11												
12 13 14 15 16 17 18	S-3	Macro		58"	Dk. Brown				se SAND, intervals of very	SP	0.0	Dry
13 14 15 16 17 18		core			/ Brown		coarse s	sand little w	ell graded fine gravel.			
13 14 15 16 17 18												
14 15 16 17 18				1								
14 15 16 17 18			i	1								
14 15 16 17 18			İ	1								
15   S   S   S   S   S   S   S   S   S				1								
15   S   S   S   S   S   S   S   S   S				1								
16 17 18				1								
16 17 18			_	1								
16 17 18	S-4	Maara		39"	Dk Brann		l nose f	ine to very	coarse SAND, little well graded	en.	5.0	D
17	ა-4	I		39"	Dk. Brown				um type odor (like degraded	SP	5.0	Dry
18		core		-	/ Brown				20'. No staining, slightly coated.			
18				4					·			
				_[								
				_[								
<u> </u>				]								
				]								
19				1							60.0	
				1								
20				1								
01	' to 5	5' interva	al cleared by	hand to	ols.	1	<u> </u>		PROJECT NO.	11	17506	5
									BORING NO.	1	PR- 15	
									<u> </u>	<u>'</u>		

				JRS Co	ornor	ation			TEST BOR	ING L	OG	
					npoi	ation			BORING NO:		IPR- 15	
PROJEC1	Γ:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeySı				JOB NO.:	-	1117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cente	er Lot
			SAMPL						ESCRIPTION			
DEPTH	STRATA	NO	TVDE	BLOWS	REC	001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	<b>NO.</b> S-5	TYPE Macro	PER 6"	<b>RQD%</b>	COLOR	HARD		ESCRIPTION se SAND, little to some fine to	USCS SP	<b>PID</b> 300.0	MOIST
21		3-3	core		40	Brown		coarse gravel. Sev at 23' and 24' with to 25', with strong I	reral intervals of black staining fine to medium sand at 24.5' MGP odor and slight staining.	3F	300.0	
22								Water table at ~25	'bgs.			
23												
24											600.0	
25												Wet
26		S-6	Macro core		45"	Lt. Brown / Grey			ne to very coarse SAND, d fine gravel. Very strong odor.	SP	1800.0	Wet
27								27' to 30' MGP im	pacted, stained brown with	SP	1000.0	Wet
28								some coating fine to coarse sand, 50 to	to medium SAND, trace 75% DNAPL saturation at 29'	01	1000.0	••••
29								to 30', with strong I	vige odor.			
30 31 32		S-7	Macro core		42"	Black and Brown Staining		100% DNAPL satu SAND.with trace un sandy silt. Very stro	nd brown MGP stained, almost irated fine to medium instained thin intervals of ong MGP odor. Black banding thick 100% DNAPL sand.	SP	2500.0	Wet
33						Lt. Brown / Tan		33' to 35', Loose, fi staining, moderate	ine to medium SAND. No MGP odor.	SP	200.0	Wet
35		S-8	Macro core		42"	Lt. Brown / Tan			ine to medium SAND, trace fine gravel. Faint MGP odor.	SP	135.0	Wet
37						Brown		37' to 38', Stiff sand	dy SILT. Faint MGP odor.	ML	20.0	Wet
39	111111111111111111111111111111111111111					Lt. Brown		, , ,	ne to very coarse SAND and VEL. Faint MGP odor.	SP/GP	8.5	Wet
40	ITO.	ാവ ⊔റ	NI- 2						DDO IFOT NO		IDD 45	
COMMEN	115:	22' HC	11N. J.						PROJECT NO.		IPR- 15	
									BORING NO.		1117506	5

			,	IDC	: C	rnor	ation			TEST BOR	ING L	OG	
				<i>ว</i> กจ	, 00	μοι	aliUII			BORING NO:		IPR- 15	
PROJECT	Т:					KeySpar	n Hempstead	d MGP		SHEET:		3 of 3	
CLIENT:						KeySp				JOB NO.:	-	1117506	5
BORING	CONTRACT	OR:					Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
			SAMPL	.E					D	ESCRIPTION			
DEPTH	STRATA			BLO		REC		CONSIST		MATERIAL		Ren	narks
FEET	SYMBOL	NO.	TYPE		R 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
41		S-5	Macro core			38"	Lt. Brown		Loose, fine to coar gravel. No staining	se SAND, little fine to coarse or visible impact.	SP	0.0	Wet
42													
43													
44													
45									F	d of boring: 45'			
46										d of borning. 45			
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60	170											IDE :	
COMMEN	115:									PROJECT NO. BORING NO.		IPR- 15	
										DUMING NO.		1117506	S .

PROJECT   KeySpan Hempstead MGP   LOCATION: Medical Center Lot					URS	Corpo	ration				TEST BORING	LOG		
DEPTH   SAMPLE   SPENDEN						•					BORING NO:	I	PR- 16	
SOURCE   S	PROJEC	T:				KevSp	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
BORNING CONTRACTOR:	CLIENT:					-7-1-					JOB NO.:			
CAS. SAMPLER   CORE   TUBE   TOTAL DEPTH: 69"   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   O11/10/16/08   OATS STATED   OATS STA	BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:			
DATE   TIME   LEVEL   TYPE   Macrocore   DATE FINISHED: 01/1708	GROUNE	DWATER:			~28' bas				CORE	TURE			65'	
SAMPLE   DIA   2"   DRIES   DIA   1708   DRILLER: M. Meade		-	15			TVDE	OAO.		COILE	TOBL		0		<b>)</b>
STATA NO. TYPE   Brown   Brown   Core   Gravel   No.   Sp.   Core   Gravel   Gravel   Sp.   Core   Gravel	DATE	IIIVIE	LE	VEL	ITPE	_								
SAMPLE   PRINCIP								2						
SAMPLE														
SAMPLE						_	DOCKET D	<u> </u> ENETROMET	ED DEA	DINC		J. F	1aiSiiiii	an
DEPTH   STRATA   NO.   TYPE   DE NOW   REC   COLOR   CONSIST   DESCRIPTION   USCS   PID   Moles				CAMD			FOCKETF	ENETHOWE						
STRATA   NO.   TYPE   PER 6"   ROD%   COLOR   HARD   DESCRIPTION   USCS   PID   Moiss	DEDTU			SAMP		I DEC		CONCICT	I DE			1	DEN	IADKC
S-1 Grab Dick Brown Of to 2*, Learny topsoil. SP 0.0 Dry  Brown 2* to 5*, Fine to coarse SAND, with some fine to SP 0.0 Dry  S-2 Macro Dick Brown Core Dick Brown Graded fine gravel. Very faint odor (undetermined).  S-3 Macro Dick Brown Graded fine gravel. Very faint odor (undetermined).  S-3 Macro Dick Brown Graded fine gravel. No visible impacts.  S-3 Macro Dick Brown Graded fine gravel. No visible impacts.  S-3 Macro Dick Brown Graded fine gravel. No visible impacts.  S-4 Macro Dick Brown Graded fine gravel. No visible impacts.  S-6 Macro Dick Brown Graded fine gravel. No visible impacts.  S-7 Macro Dick Brown Graded fine gravel. No visible impacts.  S-8 Macro Dick Brown Graded fine gravel. No visible impacts.  S-9 Dry  S-10		CTDATA	NO	TVDE			COLOB					Hece		
2 to 5', Fine to coarse SAND, with some fine to coarse gravel.  St.2 Macro ore Dry Dry Core Dry Dry Dry Dry Dry Dry Dry Dry Dry Dry		SIKAIA			PER 6	RQD%		HAKD	0! to 0!					WOIST
2 to 5°, Fine to coarse SAND, with some fine to coarse SAND, with some fine to coarse gravel.  September 2 to 5°, Fine to coarse SAND, with some fine to coarse stand, trace well graded fine gravel. Very faint odor (undetermined).  September 2 to 5°, Fine to coarse SAND, with some fine to specific to coarse SAND, trace well graded fine gravel. Very faint odor (undetermined).  September 3 to 5°, Fine to coarse SAND, trace well graded fine gravel. Very faint odor (undetermined).  September 3 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 3 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 5 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 5 to 5°, Fine to coarse SAND, little poorly graded fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coars	0		S-1	Grab		_	DK. Brown		0' to 2',	Loamy tops	OII.	SP	0.0	
2 to 5°, Fine to coarse SAND, with some fine to coarse SAND, with some fine to coarse gravel.  September 2 to 5°, Fine to coarse SAND, with some fine to coarse stand, trace well graded fine gravel. Very faint odor (undetermined).  September 2 to 5°, Fine to coarse SAND, with some fine to specific to coarse SAND, trace well graded fine gravel. Very faint odor (undetermined).  September 3 to 5°, Fine to coarse SAND, trace well graded fine gravel. Very faint odor (undetermined).  September 3 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 3 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 4 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 5 to 5°, Fine to coarse SAND, trace well graded fine gravel. No visible impacts.  September 5 to 5°, Fine to coarse SAND, little poorly graded fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine to coarse SAND, some fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coarse SAND, some fine gravel. September 5 to 5°, Fine to coars						_								
Brown 2 to 5; Fine to coarse SAND, with some fine to SP 0.0 Dry coarse SAND, little well graded fine gravel. Very faint odor (undetermined).  S-2 Macro Core Core Core Core Core Core Core Co	1													
Brown 2 to 5; Fine to coarse SAND, with some fine to SP 0.0 Dry coarse SAND, little well graded fine gravel. Very faint odor (undetermined).  S-2 Macro Core Core Core Core Core Core Core Co														
S2 Macro	2													
S-2 Macro Dk. Brown Brown Loose, fine to very coarse SAND, trace well graded fine gravel. Very faint odor (undetermined).  S-2 Macro Dk. Brown Brown Undetermined).  S-3 Macro S-2 Lt. Brown Loose, fine to very coarse SAND, little poorly graded fine gravel. No visible impacts.  S-3 Macro S-2 Lt. Brown Graded fine gravel. No visible impacts.  S-4 Macro S-2 Brown S-2 Brown S-3 Dry Graded fine gravel. No visible impacts.  S-4 Macro S-2 Brown S-3 Dry Graded fine gravel. No visible impacts.  S-4 Macro S-2 Brown S-3 Dry Graded fine gravel. No visible impacts.  S-4 Macro S-4 Brown S-2 Brown S-3 Dry Graded fine gravel. Faint odor.  S-4 Macro S-4 Brown S-4 Br							Brown				rse SAND, with some fine to	SP	0.0	Dry
S-2 Macro Core Core Core Core Core Core Core Co	3								coarse	gravel.				
S-2 Macro Core Core Core Core Core Core Core Co														
S-2 Macro core Dry  S-3 Macro core Core Core Core Core Core Core Core C	4													
S-2 Macro core Dry  S-3 Macro core Core Core Core Core Core Core Core C														
Gore Core Core Core Core Core Core Core C	5													
6   Core			S-2	Macro		44"	Dk. Brown		Loose,	ine to very	coarse SAND, trace well	SP	2.0	Dry
8 B B B Brown Lt. Brown Loose, fine to very coarse SAND, little poorly graded fine gravel. No visible impacts.  S-3 Macro Core Dry graded fine gravel. No visible impacts.  S-4 Macro Core Dry Brown S-4 Dry graded fine gravel. No visible impacts.  S-4 Macro Core Dry graded fine gravel. No visible impacts.  S-4 Macro Core Dry graded fine gravel. No visible impacts.  S-4 Macro Core Dry graded fine gravel. Faint odor.  S-7 Dry graded fine gravel. Faint odor.  S-8 Dry Graded fine gravel. Slight MGP odor.  S-9 J.5.0 Comments: 0.1 to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO. 11175065	6			core			Brown				Very faint odor			1
8									(undete	rmined).				
8	7													
9				ŀ		-								
9	8			ŀ		-								
10						_								
10	a			ŀ		-								
S-3 Macro core core core core core core core c	3			ŀ		_								
S-3 Macro core core core core core core core c	10			ŀ		_								
graded fine gravel. No visible impacts.    Core	-10		C 0	Maara		F0"	It Brown		Loose	ine to very	coarse SAND little poorly	O.D.	0.0	D
12 13 14 15 S-4 Macro Core Graded fine to coarse SAND, little well graded fine gravel. Faint odor.  S-4 Macro Core Graded fine gravel. Faint odor.  15' to 19.5', Loose fine to coarse SAND, little well graded fine gravel. Faint odor.  17 18 19 19 19 20 Comments: 0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO. 11175065	4.1		5-3	P		52	Lt. Diowii					5P	0.0	Dry
13  14  15  S-4 Macro core core gravel. Faint odor.  17  18  19  19  10  11  11  12  13  14  15' to 19.5', Loose fine to coarse SAND, little well graded fine gravel. Faint odor.  15 to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  20  Comments: 0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO. 11175065	- ' '			core		_			3	- <b>3</b>				
13  14  15  S-4 Macro core core gravel. Faint odor.  17  18  19  19  10  11  11  12  13  14  15' to 19.5', Loose fine to coarse SAND, little well graded fine gravel. Faint odor.  15 to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  20  Comments: 0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO. 11175065	40													
14   14   15   15   15   15   15   15	12					_								
14   14   15   15   15   15   15   15						_								
15 S-4 Macro core 5-4	13					_								
15 S-4 Macro core 5-4	igsquare					_								
S-4 Macro Core S-AND, little well graded fine gravel. Faint odor.  17 18 19 19 20  Comments:  O' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  15' to 19.5', Loose fine to coarse SAND, little well graded fine to coarse SAND, little well graded fine gravel. Faint odor.  19 19.5' to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  SP 15.0  11175065	14					_								
S-4 Macro Core S-AND, little well graded fine gravel. Faint odor.  17 18 19 19 20  Comments:  O' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  15' to 19.5', Loose fine to coarse SAND, little well graded fine to coarse SAND, little well graded fine gravel. Faint odor.  19 19.5' to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  SP 15.0  11175065	igsqcut													
graded fine gravel. Faint odor.  graded fine gravel. Faint odor.  graded fine gravel. Faint odor.  17  18  19  19.5' to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  SP  15.0  Comments:  0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065	15						_		l					
17 18 19 19 19 10 10 10 10 11 18 10 10 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10			S-4	Macro		42"	Brown					SP	3.0	Dry
19 20  O' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065	16			core					graded	rine gravel.F	-aint odor.			
19 20  O' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065														
19.5' to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  20  Comments:  O' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065	17													
19.5' to 20', Black stained and coated fine to coarse SAND, some fine gravel. Slight MGP odor.  20  Comments:  O' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065														
coarse SAND, some fine gravel. Slight MGP odor.  Black  Comments:  0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065	18													
coarse SAND, some fine gravel. Slight MGP odor.  Black  Comments:  0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065														
coarse SAND, some fine gravel. Slight MGP odor.  Black  Comments:  0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake.  PROJECT NO.  11175065	19								19.5' to	20', Black s	tained and coated fine to			
Comments: 0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake. PROJECT NO. 11175065									coarse	SAND, some	e fine gravel. Slight MGP odor.			
Comments: 0' to 5' excavated by hand tools. Note: location is 20' east of orginal stake. PROJECT NO. 11175065	20					-	Black					SP	15.0	
,		nts:	0' to 5	' excav	ated by ha	nd tools. N		is 20' east of	orginal s	take.	PROJECT NO.		_	5
IFN-10									Ja. 0					
	<b>-</b>											<u>'</u>	10	

				JRS C	ornor	ation			TEST BOR	ING L	OG	
					rpoi	ation			BORING NO:		IPR- 16	i
PROJECT	T:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeyS	pan			JOB NO.:		1117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
			SAMPL	.E				D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Ren	narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		39"	Stained Black and Brown			d coated (MGP impact), fine to little well graded fine gravel. MGP odor.	SP	75.0	Moist to Dry
22						BIOWII						
23												
24												
25		S-6	Macro		44"	Brown		· ·	ium SAND, trace coarse sand,	SP	150.0	Wet at
26	staining and MGP coating. Moderate MC											~28'bgs
27												
29												
30												
31	•	S-7	Macro core		40"	Stained Brown			saturated (75 to 100%), fine to ained and coated, strong MGP liner stained.	SP	467.0	Wet
32						Lt. Brown / Tan			fine to medium SAND, trace 4.5'. Sheen, no staining, no	SP	30.0	Wet
34						/ Tall		DNAPL, slight MG	P odor,			
35 36		S-8	Macro core		42"	Lt. Brown		35' to 37', Loose, n	nedium to very coarse SAND GRAVEL. No staining, slight	SP/GP	15.0	Wet
37			3313					MGP odor.	5. 6			
38						Lt. Brown / Orange			ne to medium SAND, trace ne gravel. Faint MGP odor.	SP	10.0	
39												
40												
COMMEN	TS:	30.5', I	H <sub>2</sub> S:4.		-	-		•	PROJECT NO.	•	IPR- 16	•
									BORING NO.		1117506	

				JRS C	ornor	ation			TEST BOR	ING L	OG	
					rpoi	ation			BORING NO:		IPR-16	
PROJECT	Γ:				KeySpar	n Hempstead	d MGP		SHEET:		3 of 4	
CLIENT:					KeyS	pan			JOB NO.:	1	1175065	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cente	er Lot
			SAMPL	.E			_	D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Rem	
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
41		S-9	Macro core		37"	Lt. Brown / Tan		sand, trace fine gra	se SAND, trace very coarse avel, trace medium to very	SP	5.0	Wet
42								coarse sand at 45	. No staining, faint MGP odor.			
											10.0	
43											10.0	
44												
45		S-10	Macro		38"	Lt. Brown		Loose fine to med	ium SAND, trace coarse sand,	SP	0.0	Wet
46		core / Tan trace well graded fine gravel. No staining no odors.							Oi	0.0	Wet	
47												
48												
49												
50												
51		S-11	Macro core		37"	Lt. Brown / Tan			ium SAND, trace to little very coarse sand, trace fine	SP	1 to 2	Wet
			core			/ Tall			d). No visible impacts.			
52												
53												
54												
55		S-12	Macro		33"	Lt. Brown			coarse SAND, with little fine	SP	0.0	Wet
56			core			/ Yellow		to coarse gravel. N	lo visible impacts.			
57												
58												
59												
60 COMMEN	ITe.							]	PROJECT NO.		IDD 16	
COMMEN	113.								BORING NO.	-	IPR-16	=
									20.11110110.			,

				IRS	-	rnor	ation			TEST BOR	ING L	OG	
				<i>)</i>		npoi	ation			BORING NO:		IPR-16	
PROJECT	Т:					KeySpar	Hempstead	MGP		SHEET:		4 of 4	
CLIENT:						KeySp				JOB NO.:		117506	
BORING	CONTRACT					-	Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
		1	SAMPL					1		ESCRIPTION			
DEPTH	STRATA	NO	T)/DE	BLO PER		REC	001.00	CONSIST HARD		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE		0	RQD%	COLOR	ПАКО		<b>ESCRIPTION</b> ine to very coarse SAND, with	USCS SP	<b>PID</b> 0.0	MOIST Wet
61		S-13	Macro core			38"	Lt. Brown / Yellow			gravel. No visible impacts.	SF	0.0	wei
01			0010				/ TCIIOW						
62													
63													
							Brown		63' to 63.5', Stiff sa		ML		Wet
64							Yellowish		63.5' to 65', Loose,	, fine to very coarse SAND, ravel. No visible impacts.			Wet
							Orange		liace to little line gi	ravei. No visible impacts.			
65									En	d of boring: 65'			
66										d of borning. 65			
- 00													
67													
68													
69													
70													
70													
71													
72													
73													
74													
7.													
75													
76													
77													
77													
78													
79													
80										T			
COMMEN	ITS:									PROJECT NO.		IPR-16	_
										BORING NO.	1	117506	5
										<u> </u>			

				URS	Corpo	ration				TEST BORING	LOG		
					-					BORING NO:	l	IPR- 17	
PROJEC	T:				KeySp	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
CLIENT:					-7-1-	KeySpan				JOB NO.:		117506	
BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:		eoprob	
GROUNE	DWATER:			~30' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		50'	
DATE	TIME	1 =	VEL	TYPE	TYPE	OAO.		COLL	TOBL	DATE STARTED:			)
DATE	IIIVIE	LE	VEL	ITPE	DIA.		Macrocore 2"			DATE FINISHED:		1/16/08	
					WT.		2			DRILLER:		1/16/08	
					FALL					GEOLOGIST:		l. Mead	
						DOCKET D	<u>I</u> ENETROMET	ED DE A	DINC	REVIEWED BY:	J. I	Harshm	an
			04445			POCKETP	ENETROMET					Т	
			SAMP		DEO		CONCICT	DE	SCRIPTION		T		1451/0
DEPTH				BLOWS	REC		CONSIST			MATERIAL			IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD%	COLOR	HARD			ESCRIPTION	USCS		Moist
0		S-1	Grab			Dk. Brown		0' to 2',	Loamy tops	OII.	SP	0.0	
					_								
1													
2													
										rse SAND, with some fine to	SP		Dry
3								coarse	gravel.				
4													
			İ										
5													
		S-2	Macro		48"	Brown /		Loose, 1	fine to very	coarse SAND, with trace to	SP	2.0	Moist
6		0 =	core		┥ . ਁ	Lt. Brown				gravel (well graded). Faint			Wiolot
					-	/ Tan		undeter	mined odor.	•			
7			ŀ		-	/ ιαιι							
			ŀ										
8			ŀ										
- 0			-		-								
9					4								
10										CAND III .			
		S-3	Macro		42"	Brown /				coarse SAND, with trace to gravel (well graded). Faint	SP	2.0	Moist
11			core			Lt. Brown			mined odor.				
						/ Tan							
12													
13													
14													
15													
	İ	S-4	Macro	i	42"	Dk. Brown				se SAND, little brown staining	SP	40.0	Moist
16			core		1	/ Dk. Grey		and coa	iting, little to	some fine to coarse poorly			
					1	]		graded	gravel. Sligl	nt odor (hydrocarbon?).			
17					-								
<del>-                                    </del>			<b> </b>		-								
18			<b> </b>		-								
10					-								
$\vdash$					-								
19					-								
$\sqsubseteq$					4								
20										I			
Commen	nts:	0' to 5	' excav	ated by har	nd tools.					PROJECT NO.	1	117506	
										BORING NO.		IPR- 17	

	:			JRS Co	וטעונ							
CLIENT: BORING C	:				•				BORING NO:		IPR-17	
BORING C					KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
					KeySp				JOB NO.:		1117506	
l	CONTRACT				-	Fenley and I	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
	•		SAMPL						ESCRIPTION			
DEPTH	STRATA	NO	TVDE	BLOWS	REC	001.00	CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR Brown	HARD		ESCRIPTION  h little coating, fine to coarse	USCS SP	<b>PID</b> 90.0	MOIST
21		S-5	Macro core		40"	and Black			some fine gravel. Slight to	SP	90.0	Dry to Moist
- 21			COIE			Staining		moderate MGP/hyd	drocarbon odor.			MOISE
22						Otaliling						
			ŀ									
23			ľ									
24												
25												
		S-6	Macro		42"	Black		Loose, stained and	I coated (possible ct), fine to coarse SAND, trace	SP	150.0	Moist
26			core			Stained			avel. Moderate odor			
07								(hydrocarbon or Mo				
27												
28												
20												
29												Moist
			ľ									to Wet
30			İ									30' bgs
	-	S-7	Macro		40"	Brown			dense, stained fine to medium	SP	250.0	Wet
31			core			and Black			5% DNAPL saturated sand at or, trace silt at 34'. Trace to			
						Stained			34.5'. Water table at 30"			
32												
- 00												
33												
34												
34												
35												
	ľ	S-8	Macro		36"	Black			saturated (100%) SAND and	SP/GP	250.0	Wet
36			core			Stained			ely stained and coated black ct. Moderate to strong MGP			
								odor.	ci. Moderate to strong MGP			
37												
						Lt. Brown		37' to 39', Fine to m sand. No DNAPL, r	nedium SAND, trace coarse	SP/GP	6.0	Wet
38								Saliu. NU DINAPL, I	no statility.			
20												
39						Black		39' to 40' DNAPL o	taurated fine to medium sand,	SD/CD	50.0	
40						Black		trace fine gravel.	naarated line to medium sallu,	3F/GP	50.0	
COMMENT	TS:							<u> </u>	PROJECT NO.		IPR-17	
									BORING NO.	1	1117506	5

				IRS (	orpor	ation			TEST BOR	ING L	OG	
				JN3 C	orpor	alion			BORING NO:		IPR-17	
PROJECT	Γ:				KeySpar	n Hempstead	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:	1	117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
			SAMPL		_		T	1	ESCRIPTION			
DEPTH	STRATA			BLOWS			CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%		HARD		ESCRIPTION	USCS	PID	MOIST
		S-9	Macro		30"	Lt. Brown			fine to medium SAND, trace ral thin seams of DNAPL.	SP	2.0	Wet
41			core		_	/ Orange						
42					-						50.0	
42					_						50.0	
43												
70												
44					1			44.5' to 45', DNAP	L saturated fine to medium			
					1	Black			MGP odor, stained and coated.			
45					1	Stained				SP	50.0	
		S-10	Macro		36"	Lt. Brown			se SAND, trace very coarse	SP	0.0	Wet
46			core			/ Yellow		sand, little poorly g No visible impacts.	raded fine to coarse gravel.			
								No visible impacts.				
47												
48												
49												
50												
								End o	of boring: 50' bgs			
51												
52												
53												
54					-							
					1							
55					7							
56					_							
					4							
57					4							
58					$\dashv$							
30					$\dashv$							
59					7							
								1				
60												
COMMEN	ITS:								PROJECT NO.		IPR-17	
									BORING NO.	1	117506	5

				URS	Corpo	ration				TEST BORING	LOG		
					-					BORING NO:		IPR-18	
PROJEC	T:				KeySpa	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
CLIENT:					, ,	KeySpan				JOB NO.:		117506	
BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:		eoprob	
GROUNE	DWATER:		,	~24' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DATE	TIME	I F	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	1/31/08	3
DAIL					DIA.		2"			DATE FINISHED:		1/31/08	
					WT.					DRILLER:		. Mead	
					FALL					GEOLOGIST:		Harshm	
					_	POCKET P	<u>I</u> ENETROMET	FR RFA	DING	REVIEWED BY:	0.1	iaisiiii	an
			SAMP	I E	ı	I			SCRIPTION				
DEPTH			OAIIII	BLOWS	REC		CONSIST	1		MATERIAL		BEN	IARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD%	COLOR	HARD			ESCRIPTION	uscs		Moist
0	JIIIAIA		Macro	FERT	44"		HAILD	0' to 3'		nse to stiff, clayey fine to	SP	-	Dry to
U		S-1	P		44	Tan				ce fine gravel.	SP	0.0	1 1
			core						, , , , ,	3			Moist
1					_								
الـــِــا					_								
2													
3							<b></b>					<b></b>	<b> </b>
<b></b>						DK. Brown				edium dense, loamy/peat-like, ND, trace fine gravel. Little fine	Peat?		Dry
4										ND, trace fine gravel. Little fine in/ orange sand at 5'.			
								to oour	o ngin bion	mi orango bana at o .			
5								<u> </u>				<u> </u>	
		S-2	Macro		54"	Lt. Brown				se SAND, little very coarse	SP	0.0	Dry
6			core			/ Yellow		sand, lit	tle to some	fine gravel. No impact.			
						/ Orange							
7													
8													
9													
10						Lt. Brown		Fine to	medium sar	nd at 10'.			
		S-3	Macro		50"	Lt. Brown		Loose,	fine to coars	se SAND, little very coarse	SP	0.0	Dry
11			core			/ Yellow		sand, lit	tle to some	fine gravel. No impact.			
						/ Orange							
12													
13													
14													
15					$\exists$								
_ · Ŭ		S-4	Macro	<del>-  </del> -	+	Lt. Brown		Loose.	fine to corse	e SAND, little very coarse	SP	0.0	Dry
16		U- <del>4</del>	core	-+		/ Yellow		sand, lit	tle to some	fine gravel, becoming more	31	0.0	Di y
-0			0016		-	/ Orange		gravelly	sand. No ir	mpact.			
17				-		, Crange							
- ' /					-								
10													
18													
<u> </u>					_								
19					_								
<b> </b>													
20												0.7	
Commen	nts:	19', H	CN:1.							PROJECT NO.		117506	
										BORING NO.		IPR-18	

				JRS C	ornor	ation			TEST BOR	ING L	OG	
				<i>3110</i> 00	Ji poi	ation			BORING NO:		IPR-18	
PROJEC1	Γ:				KeySpar	n Hempstead	d MGP		SHEET:		2 of 3	
CLIENT:					KeyS	pan			JOB NO.:		1117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
			SAMPL	.E				D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Ren	narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
21		S-5	Macro core		46"	Stained Brown		fine to medium SAI	pacted. Loose lightly stained ND, trace to little coarse sand, gravel. Faint MGP odor.	SP	30.0	
22											100.0	
24						Brown Stained			GP impact, 50% DNAPL IGP odor, fine to medium	SP	200.0	Wet at 24' bgs Wet
26								saturated intervals coarse SAND. Very	t. 75% to 100% DNAPL of black/brown stained fine to fine to medium sand at 28'	SP	400.0	Wet
27						Stained		to 30'. 100% DNAF strong MGP odor.	L saturation at 28' to 29', very		750.0	
29											1250.0	
30 31 32		S-7	Macro core		44"	Black/ Brown		saturation. Black/bi	GP impact. Near 100% rown stained, very fine to avy sheen, very strong MGP	SP	1350.0	Wet
33									ery fine to fine SAND, trace e fine gravel. No DNAPL, no oderate MGP odor.	SP	100.0	Wet
35 36 37		S-8	Macro core		16"	Lt. Brown / Tan		gravel, grading to f	se SAND, and some fine ine to medium sand. No, faint to moderate MGP	SP	70.0	Wet
38												
40	ITO.	37', H(	2N1-1						DDO IFOT NO		IDD 40	
COMMEN	113:	ο <i>ι</i> , ι ι	JIN. 1.						PROJECT NO. BORING NO.		IPR-18	
									BONING NO.		1117506	

				JRS C	ornor	ation			TEST BOR	ING L	OG	
				ins c	Jipui	ation			BORING NO:		IPR-18	
PROJEC <sup>*</sup>	T:				KeySpar	n Hempstead	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:	1	117506	5
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
			SAMPL					D	ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
		S-9	Macro		34"	Lt. Brown			lium SAND, little to some fine to coarse gravel at 43'.	SP	100.0	Wet
41			core			/ Orange			ible impact, very faint MGP			
40					-	/ Tan		odor.				
42					-							
43												
40												
44											40.0	
44											40.0	
45			l l		1							
								En	d of boring: 45'			
46			l 1						-			
			l İ									
47					1							
48												
49												
50												
51												
52												
52					1							
53												
- 50					1							
54			l i		1							
55					1							
					]							
56												
			[		]							
57					]							
58					1							
					4							
59					-							
60					1							
60 COMMEN	ITC:	41 5' I	HCN:5.		1				PROJECT NO.		IPR-18	
COMMEN	113.	, 1							BORING NO.	1	117506	5
									Domina no.			_
									<u> </u>			

				U	RS (	Corpo	ration				TEST BORING	LOG		
						_					BORING NO:	ı	PR- 19	
PROJEC	T:					KevSp	an Hempstea	ad MGP			LOCATION:	Medic	al Cente	er Lot
CLIENT:	:					-7-1-	KeySpan				JOB NO.:		175065	
BORING	CONTRAC	TOR:						and Nicol			DRILLING METHOD:		probe/H	
GROUNI	DWATER:						CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		91'	
DATE	TIME	I F	VEL	TV	PΕ	TYPE	Macro core	Split spoon	00		DATE STARTED:	0	1/21/08	
DAIL	IIIVIL		VLL	- ' '	-	DIA.	2"	2"			DATE FINISHED:		3/29/08	
						WT.		30"			DRILLER:		aro/Me	
						FALL		140			GEOLOGIST:		man/Ca	
							POCKET P	ENETROMET	FR RFA	DING	REVIEWED BY:	Harsi	iiiiaii/Ot	азсу
			SAMP	l E						SCRIPTION				
DEPTH			OAIIII		ows	REC		CONSIST	1		MATERIAL	I	REM	ARKS
FEET	STRATA	NO.	TYPE		R 6"	RQD%	COLOR	HARD			ESCRIPTION	USCS		Moist
0	UIIIAIA	S-1	Grab			TIQD /0	Dk. Brown	HAILD	SAND		Fine to medium SAND, with	GP/SP	0.0	Dry
U		3-1	Grab			-	/ Lt. Brown			ne to coarse		GF/SF	0.0	Dry
1							/ Lt. DIOWII							
						-								
2						-								
						-								
						1								
3					-	ł								
						ł								
4		6.0	Macro		-	40"	Lt. Brown	<b>.</b>	Locco	fine to coor	se SAND, little very coarse	SP	0.0	D
		5-2				40"					raded fine gravel.	52	0.0	Dry
5			core			-	/ Yellow				granen			
						1	/ Orange							
6						-								
7						-								
						-								
8						-								
0		6.3	Macro			41"	Lt. Brown		Loose	fine to coars	se SAND, little very coarse	SP	0.0	Dry
9		3-3	core			41	/ Yellow				raded fine gravel.	SF	0.0	Diy
			core				/ Orange				-			
10						1	/ Orange							
						1								
11						1								
						1								
12						1								
		S-4	Macro			36"	Lt. Brown		Loose,	fine to very	coarse SAND, some poorly	SP	0.0	Dry
13			core			1	/ Yellow			-	se gravel. No impacts.			,
						1	/ Orange							
14						1								
						1								
15						1								
						1								
16						1								
		S-5	Macro			36"	Lt. Brown				se SAND, little well graded fine	SP	50.0	Dry
17			core			1			gravel,	trace black	staining at 17'. MGP odor.			
						1								
18						1								
						1								
19						1							180.0	
						1								
20						1								
Commen											PROJECT NO.	11	175065	5
							vell screened	l 65 to 85 ft ar	nd adjace	ent shallow	BORING NO.		PR- 19	
		well s	creene	d 10 to	40 ft.									

			,	JRS C	ornor	ation			TEST BOR	ING L	OG	
					Jipoi	ation			BORING NO:		IPR-19	
PROJEC1	Γ:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT	OR:			-	Fenley and	Nicol		BORING LOCATION:	Medi	cal Cente	er Lot
			SAMPL					1	ESCRIPTION	1		
DEPTH	STRATA			BLOWS	REC	001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION se SAND, with little to some	USCS	PID	MOIST
21		S-6	Macro core		N/A	Lt. Brown		fine gravel. MGP o		SP	180.0	Dry
22												
23												
24		S-7	Macro		38"	Lt. Brown		24' to 28' Loose fi	ne to very coarse SAND,	SP	1800.0	Wet
25		3-1	core		30	Lt. Blown			coarse gravel. Strong MGP	Si	1000.0	Wei
26												
27												
28						Brown to		28' to 30', Heavy M	IGP impact. Staining and	SP	2200.0	Wet
29						Black Staining			of DNAPL saturation (75 to PL product, very strong MGP			
30		S-8	Macro core		44"	Brown to Black		product present (75	IGP impact. Stained, DNAPL 5 to 100% saturation). Very fine to medium SAND. Liner	SP	2400.0	Wet
32						Staining		stained.	ille to medium SAND. Liner			
33						Lt. Brown / Tan		33' to 35', Loose, fi staining, no DNAPI	ine to medium SAND. No L, MGP odor.	SP	160.0	Wet
35		S-9	Macro		42"	Lt. Brown		35' to 37', Loose, fi	ine to medium SAND. No	SP	85.0	Wet
36			core			/ Tan		staining, slight MG	P odor.			
37							••••••	37' to 38', Loose, S dense, trace silt.	SAND and GRAVEL, medium	GP	•••••	Wet
39						Lt. Brown	•••••	38' to 40', Loose, fi MGP odor, no stair	ne to coarse SAND. Faint ning.	SP	7.0	Wet
40												
COMMEN	ITS:								PROJECT NO.		IPR-19	
									BORING NO.		1117506	5

				JRS Co	rnor	ation			TEST BOR	ING L	OG	
				JN3 CC	προι	ation			BORING NO:		IPR-19	
PROJEC <sup>*</sup>	Т:				KeySpar	n Hempstead	MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cente	er Lot
			SAMPL		1				ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION se SAND, trace well graded	USCS	PID	MOIST
41		S-10	Macro core		43"	Lt. Brown / Tan		fine gravel. No visi		SP	0.0	Wet
41			core			/ Iall			•			
42			ŀ									
			ŀ									
43												
			ľ									
44												
45												
		S-11	Macro		22"	Lt. Brown			se SAND, trace well graded	SP	0.0	Wet
46			core			/ Tan		fine gravel. No visi	bie impacts.			
47												
40												
48			-									
49			ŀ									
43			ŀ									
50			ŀ									
		S-12	Macro		Poor	Lt. Brown		Loose, fine to med	ium SAND, trace coarse sand.	SP	35.0	Wet
51			core		rec.			Faint MGP odor.				
52												
53												
54												
EE												
55		S-12	Macro		Poor	Lt. Brown		Loose, fine to med	ium SAND, trace coarse sand.	SP	105.0	Wet
56		J-13	core		rec.	Lt. DIOWII		Faint MGP odor.	5. 1.12, 1.400 004100 0411d.	OF.	100.0	VV CL
30			5510		100.							
57												
58												
59												
60												
COMMEN	ITS:								PROJECT NO.		IPR-19	
									BORING NO.	1	117506	)
<u> </u>												

				JRS C	ornoi	ration		TEST BO	RING L	OG	
				7110 0	orpor	ation		BORING NO:		IPR-19[	)
PROJEC1	Т:				KeySpa	n Hempstead	d MGP	SHEET:		4 of 5	
CLIENT:					KeyS	•		JOB NO.:		1117506	
BORING	CONTRACT	OR:				Fenley and	Nicol	BORING LOCATION:	Keys	Span Pro	perty
			SAMPL					DESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST	MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD	DESCRIPTION	USCS	PID	MOIST
61		S-14			12"	Yellow / Orange		Medium dense, fine to medium SAND, some coarse sand. Faint MGP odor, no staining or saturation.	SP	5.0	Wet
62 63		S-15			9"	Yellow / Orange		62' to 63', Medium dense, fine to medium SANI some coarse sand. Faint MGP odor, no staining or saturation.		1.6	Wet
64		S-16			21"	Yellow / Lt. Brown Yellow /		63' to 65', Medium dense to dense, fine to coarse SAND some coarse gravel. Slight MGP odor, no staining.	SP	1.6	Wet
65 66					-	Lt. Brown Pale grey		65' to 66', Medium dense, medium to coarse SAND. No MGP impact.	SP		
67		S-17	•		2"				SP	0.0	
S-18									SP	0.0	Wet
70								69' to 70', Some thin (<1 mm) black bands of stained sand, trace medium to coarse gravel	SP		
71 72		S-19			12"	Yellow / Red / Lt. Brown		70' to 72', Medium dense to dense, fine to coarse SAND, some silt, thin bands of black stained sand.	SP	0.0	Wet
73		S-20			18"	Yellow / Red / Lt. Brown		72' to 74', Medium dense to dense, fine to coarse SAND, some silt silt, thin bands of black stained sand.	SP	0.0	Wet
74 75		S-21			23"	Lt. Brown / Yellow		74' to 76', Loose to medium dense, fine to coarse SAND, rare coarse gravel. Rare bands black stained sand. Slight MGP odor.	SP	0.0	Wet
76 77		S-22			23"	Lt. Brown / Yellow		76' to 78', Medium dense, fine to coarse SAND some coarse gravel. No MGP impact.	SP	0.0	Wet
78 79		S-23			12"	Lt. Brown / Yellow		78' to 80', Loose to medium dense, fine to coarse SAND. No MGP impact.	SP	0.0	Wet
80 COMMEN	ITQ.		•					PROJECT NO.		IPR-19[	
COMMEN	113.							BORING NO.			
								BONING NO.		1117506	

			ı	JRS Co	ornoi	ation			TEST BOR	ING L	OG	
					npoi	ation			BORING NO:		IPR-19D	)
PROJECT	Г:				KeySpar	n Hempstead	MGP		SHEET:		5 of 5	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	KeyS	pan Pro	perty
			SAMPL		1		1		ESCRIPTION	1		
DEPTH	STRATA			BLOWS	REC	001.00	CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD	COLOR	HARD		ine to medium SAND. At 80' to	USCS	PID	MOIST
81		S-24			22"	Orange Lt. Brown			plack stained sand, no odors.	SP	0.0	
82 83 84		S-25			20"	Lt. Brown / Orange			ine to coarse SAND, rare odors, very thin localized ined sand.	SP	0.0	
85		S-26			24"	Lt. Brown / Orange		84' to 85', Loose, fi coarse gravel.	ine to coarse SAND, rare	SP	0.0	
86								of light grey and bla		0.	0.0	
S-27 2" Lt. Brown / Orange 86' to 88', Loose to medium dense SAND. Ban of light grey and black stained sands.												
88 89 90		S-28			16"	Yellow / Lt. Brown			medium dense, fine to ne clay. Some black stained	SP	0.0	
91								End o	of boring: 90' bgs			
92												
93												
94												
96												
97												
98												
99												
100												
COMMEN	ITS:								PROJECT NO.		IPR-19D	
									BORING NO.	1	117506	5

PROJECT:   KeySpan Hempstead MGP					URS	Corpo	ration				TEST BORING	LOG		
DESCRIPTION   SPENSOR   SAMPLE   SAMP											BORING NO:		IPR-20	
SOURCE   S	PROJEC	T:				KeySpa	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
SORING CONTRACTOR:	CLIENT:										JOB NO.:	11	117506	5
DATE   TIME   LEVEL   TYPE   TYPE   Macrodore   DATE FINSHED; 01:3108	BORING	CONTRAC	CTOR:					and Nicol			DRILLING METHOD:	G	eoprob	е
DATE   TIME	GROUNE	DWATER:		-	~24' bgs				CORE	TUBE	TOTAL DEPTH:		45'	
	DATE	TIME	LE	VEL	TYPE	TYPE					DATE STARTED:	0		3
											DATE FINISHED:			
FALL   POCKET PENETROMETER READING   RECURSITED   RECUR						WT.		_			DRILLER:			
SAMPLE   BLOWS   REC   COLOR   MATERIAL   DESCRIPTION   STRATA   NO. TYPE   PER 6"   RODS   COLOR   CONSIST   MATERIAL   DESCRIPTION   DESCRIPTION   USCS   PID   Moist   Marco   Core   Color   Col						FALL					GEOLOGIST:			
DEPTH   SAMPLE						*	POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:			
DEPTH FEET STRATA NO. TYPE PER 6' STROTS OCOOR O				SAMP	LE									
STRATA NO.   TYPE   PER 8"   RODS,   COLOR   HARD   DESCRIPTION   USCS   PID   Moist	DEPTH					REC		CONSIST					REM	IARKS
S-1   Macro		STRATA	NO.	TYPE			COLOR					uscs		
Core   Division   Di				_		_			0' to 3'.				-	
Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  Dix. Brown  S10 5; Loose, medium to dense, loamy/peat-like. With some organic matter, very fine to fine SAND. Trace fine gravel.  Dix. Brown  Loose, fine to coarse SAND, little fine gravel. No visible impact.  S2 Macro  Core  Dix. Brown  Loose, fine to coarse SAND, little fine gravel. No visible impact.  Dix. Brown  S3 Macro  Dix. Brown  Loose to medium dense, fine to coarse SAND  GP/SP 0.0 Dry  and fine to coarse GRAVEL.  S3 Macro  Core  Dix. Brown  S4 Macro  Core  10 Dry  11 Dry  12 Dry  13 Dry  14 Dry  15 To 18, Fine to coarse SAND with some fine gravel.  S5 Dry  16 Dry  17 Dry  18 Dry  18 To 20, MGP impacted. Stained and coated brown, fine to coarse SAND, some fine gravel.  Strong MGP odor.  PROJECT NO. 11175065			0 1	l 1		┧ '''	i an					Oi.	0.0	,
Dix. Brown Si to 51, Loose, medium to dense, loamy/peat-like, Peat? Dry with some organic matter, very fine to fine SAND, frace fine gravel.  S-2 Macro S6' Lt. Brown Loose, fine to coarse SAND, little fine gravel. No SP 12.0 Dry visible impact.  S-2 Macro S6' Lt. Brown Visible impact.  S-3 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-3 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-4 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-4 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-4 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-5 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-6 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-7 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-7 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-7 Macro S0' Brown Loose to medium dense, fine to coarse SAND GP/SP 0.0 Dry and fine to coarse GRAVEL.  S-8 Macro S0' Brown	1			COIE		1								WOSt
Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Si to 5, Loose, medium to dense, loamy/peat-like, with some organic matter, very fine to fine SAND, trace fine gravel.  S-2 Macro  Core  S-2 Macro  Dry  S-3 Macro  S-3 Macro  Core  Dry  S-3 Macro  Dry  S-3 Macro  Dry  S-4 Macro  Dry  Dry  Dry  Dry  Dry  Dry  Dry  D	┝╧┩			<b> </b>		1								
Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Dk. Brown  Si to 5, Loose, medium to dense, loamy/peat-like, with some organic matter, very fine to fine SAND, trace fine gravel.  S-2 Macro  Core  S-2 Macro  Dry  S-3 Macro  S-3 Macro  Core  Dry  S-3 Macro  Dry  S-3 Macro  Dry  S-4 Macro  Dry  Dry  Dry  Dry  Dry  Dry  Dry  D	2			<b> </b>		1								
Dix. Brown Stained Dix. Brown S' to 5', Loose, medium to dense, loamy/peat-like, with some organic matter, very line to fine SAND, trace line gravel. No specified to core Sand Dix spe						┨								
Dix. Brown Stained Dix. Brown S' to 5', Loose, medium to dense, loamy/peat-like, with some organic matter, very line to fine SAND, trace line gravel. No specified to core Sand Dix spe	2					┨								
with some organic matter, very fine to fine SAND, trace fine gravel.  S-2 Macro				<b> </b>		┨	Dk Brown	<b>†</b>	3' to 5'	Loose med	fium to dense loamy/neat-like	Peat?	<del> </del>	Dry
S-2   Macro   S6"   Lt. Brown   Loose, fine to coarse SAND, little fine gravel. No   SP   12.0   Dry						┨	DIV. DIOWII					i Gat:		Diy
S-2 Macro core	-			ŀ		-			trace fir	e gravel.	·			
S-2 Macro core	- 5			ŀ		-								
Core			5.2	Maoro		56"	I t Brown		Loose			S D	12.0	Dry
S-3   Macro   S0"   Brown   Loose to medium dense, fine to coarse SAND   GP/SP   0.0   Dry	- 6		3-2	l 1		1 36					oc or ave, indic inte graver. Ive	SF	12.0	Diy
8	-			core		-	/ Iall			·				
8	7			ŀ		-								
9   5.0   5.				-		-								
9   5.0   5.				ŀ		-								
S-3   Macro   50"   Brown   Loose to medium dense, fine to coarse SAND   GP/SP   0.0   Dry	0					-								
S-3   Macro   50"   Brown   Loose to medium dense, fine to coarse SAND   GP/SP   0.0   Dry	0			ŀ		-							5.0	
S-3   Macro   S0"   Brown   Loose to medium dense, fine to coarse SAND   GP/SP   0.0   Dry	9			}		4							5.0	
S-3   Macro   S0"   Brown   Loose to medium dense, fine to coarse SAND   GP/SP   0.0   Dry	10			ŀ		1								
11	10		S-3	Macro		50"	Brown		Loose to	n medium d	ense, fine to coarse SAND	GP/SP	0.0	Dry
12	11		3-3	l 1		- 30						GF/SF	0.0	Diy
13				COIE		1	Orange							
13	12			ŀ	-	┪								
15   S-4   Macro   48"   Orange   15' to 18', Fine to coarse SAND with some fine   SP   0.0   Dry				<b> </b>		1								
15   S-4   Macro   48"   Orange   15' to 18', Fine to coarse SAND with some fine   SP   0.0   Dry	13			<b> </b>		1								
S-4 Macro description of the stained stained stained and coated brown, fine to coarse SAND, some fine gravel.  S-4 Macro description description of the stained stained and coated brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  Strong MGP odor.  PROJECT NO. 11175065						1								
S-4 Macro description of the stained stained stained and coated brown, fine to coarse SAND, some fine gravel.  S-4 Macro description description of the stained stained and coated brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  Strong MGP odor.  PROJECT NO. 11175065	14			<b> </b>		1								
S-4 Macro core				<b> </b>		1								
S-4 Macro core	15			<b> </b>		1								
16   Core   / Brown   Gravel.   Sparse	_ · · <u> </u>	•	S-4	Macro		48"	Orange	<b>†</b>	15' to 18	B', Fine to co	oarse SAND with some fine	SP	0.0	Drv
Brown Stained Brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  PROJECT NO. 11175065	16		J +			┨ ¨				,		] .	0.0	J. y
Brown Stained Brown Stained Stained and coated brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  PROJECT NO. 11175065	_ · Ŭ			00.0		1								
Brown Stained Brown Stained Stained and coated brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  PROJECT NO. 11175065	17			<b> </b>		1								
Stained brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  PROJECT NO. 11175065						1								
Stained brown, fine to coarse SAND, some fine gravel. Strong MGP odor.  PROJECT NO. 11175065	18			<b> </b>		1	Brown		18' to 20	0', MGP imp	pacted. Stained and coated	SP	400 n	Moist
19 Strong MGP odor. 750.0 Comments: PROJECT NO. 11175065						1			brown,	fine to coars		] .	.55.5	.710101
750.0 PROJECT NO. 11175065	10			<b> </b>		1	Juniou				-			
20 PROJECT NO. 11175065	19			<b> </b>		┥							750.0	
Comments: PROJECT NO. 11175065	20					┨							7 30.0	
		ıte:				1			]		PROJECT NO	1	117500	
PH-20	33/11/116/11													
													ii- ra-20	

				JRS Co	ornor	ation			TEST BOR	ING L	OG	
					Jipui	ation			BORING NO:		IPR-20	
PROJEC1	Γ:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeyS				JOB NO.:		1117506	
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cente	er Lot
			SAMPL						ESCRIPTION			
DEPTH	STRATA	NO	TVDE	BLOWS	REC	001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR Lt. Brown	HARD		ESCRIPTION  GP impact. Loose fine to	USCS SP	<b>PID</b> 700.0	MOIST
21		S-5	Macro core		48"	/ Tan		medium SAND, tra fine to coarse grav	ce to little coarse sand and el, lightly stained and coated pact. Moderate MGP odor.	31		
22											800.0	
24								coarse SAND, little	IGP impact. Loose fine to fine gravel, 25 to 50% stained and coated. Water	SP	750.0	Wet at ~24'
25 26		S-6	Macro core		43"	Lt. Brown and some		25' to 27', Moderat	e MGP impact. Loose, some to coarse SAND. Very strong	SP	1200.0	Wet
Brown Staining Black and Brown										SP	1400.0	Wet
28						Brown Staining			fine to fine sand. Very strong			
30	29								ium SAND trace MGP impact	SP	1600.0	Wet
31		3-7	core		30	/ Orange		· ·	Then no staining, no DNAPL,	3r	130.0	wei
33												
35											220.0	
36		S-8	Macro core		38"	Brown Stained Lt. Brown		35' with stained bro	dense, trace MGP impact at own fine to medium SAND. an gravelly fine to coarse ne gravel.	SP	420.0	Wet
37						/ Tan						
39						Lt. Brown		39' to 40', Fine to n	nedium SAND. No staining.	SP	75.0	
COMMEN	ITS:	22', H <sub>2</sub>	S:2. 27	', HCN:4. 28	', H <sub>2</sub> S:2. 4	41.5', HCN:2	<u> </u>		PROJECT NO.		IPR-20	
									BORING NO.	1	1117506	5

			ı	JRS C	ornor	ation			TEST BOR	ING L	OG	
					Sipoi	ation			BORING NO:		IPR-20	
PROJEC <sup>*</sup>	T:				KeySpar	n Hempstea	d MGP		SHEET:		3 of 3	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
			SAMPI						ESCRIPTION			
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
41		S-9	Macro core		42"	Lt. Brown / Tan			se SAND, trace fine gravel. no staining, very faint MGP	SP	49.0	Wet
42											6.0	
43												
44											4.0	
45												
								End o	of boring: 45' bgs			
46					_							
47					1							
								27' to 30', Heavy MGP impact.				
								Intervals of black				
							and brown MGP staining and					
							DNAPL saturation					
								(75 to 100%), very fine to fine sand.				
								Very strong MGP				
								odor. Liner stained.				
								Staou.				
48												
49												
					1							
50												
51												
52					_							
53												
54					]							
55					1							
56												
57					1							
58					_							
59					]							
					1							
60 COMMEN	ITS:	41', H	CN:1						PROJECT NO.		IPR-20	
		,							BORING NO.	1	117506	5
											, 500	-

				URS	S Corpo	ration				TEST BORING	LOG		
										BORING NO:		IPR-21	
PROJEC	CT:				KeySp	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
CLIENT:						KeySpan				JOB NO.:	1	117506	5
BORING	CONTRAC	CTOR				Fenley	and Nicol			DRILLING METHOD:	G	eoprob	е
GROUN	DWATER:		~24	1' to 25' bo	gs	CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	0	1/24/08	3
					DIA.		2"			DATE FINISHED:		1/24/08	
					WT.					DRILLER:		I. Mead	
					FALL		1			GEOLOGIST:		Harshm	
						POCKET P	ENETROMET	FR RFA	DING	REVIEWED BY:	0.1	iai oi ii ii	uii
			SAMP	1 =		I			SCRIPTION				
DEPTH			SAIVIF	BLOW	S REC		CONSIST	I DE		MATERIAL		DEM	IARKS
FEET	STRATA	NO.	TYPE	PER 6		COLOR	HARD			ESCRIPTION	uscs		Moist
	SINAIA			PENO	_		HAND	1					
0		S-1	Macro		37"	Dk. Brown			GRAVEL. N	coarse SAND and fine to	GP/SP	0.0	Dry
			core			Lt. Brown		course	OI D (V LL. I)	io impaoto.			
1						/ Yellow							
2													
3													
4													
5													
		6.3	Macro		52"	Dk. Brown		5' to 8'	Loose fine	e to very coarse SAND and fine	GP/SP	0.0	Dry
		3-2			- 32	Lt. Brown				. No impacts.	GF/SF	0.0	Dry
6			core		_								
						/ Yellow							
7													
8								ļ			<b></b>		
						Brown /				e to medium SAND, little	SP	0.0	Dry
9						Orange		coarse	sand, trace	fine gravel. No impacts.			
10													
		S-3	Macro		10"	Brown /		Loose,	fine to medi	ium SAND, little coarse sand,	SP	0.0	Dry
11			core			Orange		trace fir	ne gravel. N	o impacts.			1
						3.							
12													
<del></del>					-								
13					-								
13					$\dashv$								
14					_								
<b> </b>					_								
15								l.					
		S-4	Macro		42"	Brown to				coarse SAND, some fine to	SP	450.0	· ·
16			core			Lt. Brown				ntly coated and MGP impacted. MGP odor.			Moist
								wouera	ic to strong	IVIGI UUUI.			
17					7								
18													
19													
13													
00					$\dashv$								
20 Common	ato:									PROJECT NO.		<u> </u>	
Commer	πδ.										1	117506	b
<b> </b>										BORING NO.		IPR-21	

			,	JRS Co	rnor	ation			TEST BORI	NG LO	OG	
				7770 00	προι	ation			BORING NO:		IPR-21	
PROJECT	ī:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3	
CLIENT:					KeySp				JOB NO.:		1117506	5
BORING (	CONTRACT					Fenley and I	Nicol		BORING LOCATION:	Med	ical Cente	er Lot
			SAMPL					<u> </u>	DESCRIPTION	1		
DEPTH	STRATA		TVD=	BLOWS	REC	001.00	CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR Brown to	HARD		DESCRIPTION ine to very coarse SAND, some	USCS SP	PID	MOIST
21		S-5	Macro core		38"	Lt. Brown		fine to coarse grav	rel, slightly coated and MGP te to strong MGP odor.	SF	500.0	Dry to Moist
22												
23												
24 25									pacted with some (75%) DNAPL n). Strong MGP odor	SP		Wet
26		S-6	Macro core		39"	Black and Brown Staining		brown and black s	Moderate MGP impact with taining, fine to coarse SAND, se gravel, coated. Strong MGP	SP	2600.0	Wet
27			MGP impact:Fine to medium DNAPL saturation (75% to									
29								100%), heavily sta odor, liner stained.	ined brown, very strong MGP			
30		S-7	Macro core		45"	Black and Brown			MGP impact. 3" seam of 100% brown and black, several thin	SP	1200.0	Wet
32			0010			Stained		odor. Very fine to r				
33						Lt. Brown		32' to 35', Loose, v staining, slight MG	very fine to medium SAND. No P odor.	SP	200.0	Wet
34											10.0	
36		S-8	Macro core		40"	Brown Staining		coarse GRAVEL. S	ine to coarse SAND and fine to Slight to moderate MGP impact aining and sheen with moderate	GP	90.0	Wet
38						Lt. Brown		37' to 40', Loose, f gravel. No staining	ine to coarse SAND, trace fine g.	SP	50.0	
39 40											0.0	
COMMEN	ITS:	24.5', I	HCN:1.	32.5', HCN:	1		<u> </u>	1	PROJECT NO.		IPR-21	
	-								BORING NO.		1117506	5

PROJECT:   KeySpan Hempstead MSP				,	IBS C	ornor	ation			TEST BOR	ING L	OG	
SOBRISCONTRACTOR:   SOBRISCONTRACTOR:   SOBRISCONTRACTOR:   SOBRISCONTRACTOR:   SOBRISCONTRACTOR:   SOBRISCONTRACTOR:   SOBRES						orpor	ation			BORING NO:		IPR-21	
SORING CONTRACTOR:   Fenley and Nicol   BORING LOCATION:   Medical Center Lot	PROJECT	T:				KeySpar	n Hempstead	d MGP		SHEET:		3 of 3	
DEPTH   SAMPL   SAMP	CLIENT:												
DEPTH   STRATA   NO.   Type   PERG*   RQD%   COLOR   HARD   DESCRIPTION   USCS   PID   MOIST   MATERIAL   Work   NO.   Type   PERG*   RQD%   COLOR   HARD   DESCRIPTION   USCS   PID   MOIST   MATERIAL   NO.   Type   PERG*   RQD%   COLOR   HARD   DESCRIPTION   USCS   PID   MOIST   No staining, no impact.   SP   O.   Work   N	BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
SYMBOL NO.   TYPE   PER6"   ROD%   COLOR   HARD   DESCRIPTION   USCS   PID   MOIS				SAMPL				_					
S-9   Macro   Core													_
41	FEET	SYMBOL						HARD					
43 44 45 47 48 49 49 50 51 51 52 52 53 53 54 54 55 56 57 77 58 59 60 End of boring: 45' bgs  PROJECT NO. IPR-21			S-9				Lt. Brown		Loose, fine to coar	se SAND, trace fine gravel.	SP	0.0	Wet
43 44 45 46 47 48 49 49 50 51 51 52 53 54 54 55 56 57 58 59 60 Liner stuck in macrocore.  Liner stuck in macrocore.  PROJECT NO. IPR.21	41			core					, no mi	ouot.			
43 44 45 46 47 48 49 49 50 51 51 52 53 54 54 55 56 57 58 59 60 Liner stuck in macrocore.  Liner stuck in macrocore.  PROJECT NO. IPR.21	40					_							
44 45 End of boring: 45' bgs  48 49 49 50 50 50 51 51 52 52 53 53 55 56 6 6 6 757 56 6 6 757 57 6 75 6 75 75 75 75 75 75 75 75 75 75 75 75 75	42					4							
44 45 End of boring: 45' bgs  48 49 49 50 50 50 51 51 52 52 53 53 55 56 6 6 6 757 56 6 6 757 57 6 75 6 75 75 75 75 75 75 75 75 75 75 75 75 75	42												
45 End of boring: 45' bgs  46 47 47 48 48 49 50 50 50 50 50 50 50 50 50 50 50 50 50	40												
45 End of boring: 45' bgs  46 47 47 48 48 49 50 50 50 50 50 50 50 50 50 50 50 50 50	44			l									
## End of boring: 45' bgs  ## End of boring: 45'													
## End of boring: 45' bgs  ## End of boring: 45'	45			l 1		-							
46									End o	of boring: 45' bgs			
48 49 50 51 51 52 53 53 64 55 56 57 58 59 60 COMMENTS: Liner stuck in macrocore.	46			l İ									
48 49 50 51 51 52 53 53 64 55 56 57 58 59 60 COMMENTS: Liner stuck in macrocore.													
49	47												
49													
50 51 52 53 54 54 55 56 56 57 58 58 60 COMMENTS: Liner stuck in macrocore.	48												
50 51 52 53 54 54 55 56 56 57 58 58 60 COMMENTS: Liner stuck in macrocore.													
51	49												
51													
52 53 54 55 55 56 57 57 58 59 60 COMMENTS: Liner stuck in macrocore.	50					_							
52 53 54 55 55 56 57 57 58 59 60 COMMENTS: Liner stuck in macrocore.													
53 54 55 55 56 57 58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21	51					-							
53 54 55 55 56 57 58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21	52					4							
55	32			<b> </b>		_							
55	53												
55 56 57 58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21	- 55			l l									
56	54			l 1									
56				l l									
57 58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21	55												
57 58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21													
58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21	56					_							
58 59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21				[									
59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21	57												
59 60 COMMENTS: Liner stuck in macrocore.  PROJECT NO. IPR-21						4							
60 COMMENTS: Liner stuck in macrocore. PROJECT NO. IPR-21	58					4							
60 COMMENTS: Liner stuck in macrocore. PROJECT NO. IPR-21						-							
COMMENTS: Liner stuck in macrocore. PROJECT NO. IPR-21	59					-							
COMMENTS: Liner stuck in macrocore. PROJECT NO. IPR-21	60					-							
· · · · · · · · · · · · · · · · · · ·		ITQ:	Liner s	tuck in	macrocore		]			PRO JECT NO		IDD 01	
50 ms 10.	Civilvici	1.5.			500.0.						-		5
													-

				UF	RS C	orpo	ration				TEST BORING	LOG		
											BORING NO:		IPR-22	
PROJEC	T:					KeySpa	an Hempstea	ad MGP			LOCATION:	Medic	al Cent	er Lot
CLIENT:						-	KeySpan				JOB NO.:	1	117506	5
BORING	CONTRAC	TOR:						and Nicol			DRILLING METHOD:	G	eoprob	е
GROUND	OWATER:		,	~24' bgs	s		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		85'	
DATE	TIME	LE	VEL	TYF	E .	TYPE		Macrocore			DATE STARTED:	0	2/01/08	3
						DIA.		2"			DATE FINISHED:		2/06/08	
					•	WT.					DRILLER:		. Mead	
						FALL					GEOLOGIST:		larshm	
						*	POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:			
			SAMP	LE	-				DES	SCRIPTION				
DEPTH				BLO	ws	REC		CONSIST			MATERIAL		REM	IARKS
FEET	STRATA	NO.	TYPE	PER	6"	RQD%	COLOR	HARD		Di	ESCRIPTION	USCS	PID	Moist
0		S-1	Macro			48"	Orange /		0' to 4',		nse, silty fine to coarse SAND,	SP	0.0	Dry
Ť		٠.	core				Brown			ne gravel.	, , ,	0.	0.0	2.,
1			00.0				Biowiii							
			ŀ											
2			<b> </b>	+	-									
$\vdash$ $\dashv$					-									
3			<b> </b>	-+	$\dashv$									
					-									
4			<b> </b>	<del>-  </del>	$\dashv$									
			<b> </b>	-+	$\dashv$		Dk. Brown		4' to 5'	Loamy neat	t-like fine SAND, trace organic	SP		Dry
5			ŀ	-			DR. DIOWII		and fine		t into into of into, it add organio	Oi.		Diy
	-	S-2	Macro	-	-	52"	Dk. Brown		5' to 8'.	Loose, fine	to coarse SAND, some fine to	SP	0.0	Dry
6		0 2	core			52	/ Brown				dark brown peat.	Oi.	0.0	Diy
<del>-</del>			00.0				, Brown							
7			ŀ											
<u> </u>			ŀ	-										
8			ŀ											
			•				Orange /		8' to 10'	. Loose, fine	e to coarse SAND, trace to	SP		Dry
9			ŀ				Yellow				and, with little fine gravel.			,
			ŀ											
10			ľ											
		S-3	Macro			49"	Orange /		Loose, f	ine to coars	se SAND, trace to little very	SP		Dry
11			core				Yellow		coarse	sand, little to	o some fine gravel. No impact.			,
			ŀ											
12			ľ											
					$\neg$									
13														
14														
15														
	ľ	S-4	Macro			48"	Orange /				coarse SAND, little to some	SP	0.0	Dry
16			core				Brown				IGP impact at 19.5' to 20', with			
									slight to	moderate N	VIGT 0001.			
17														
													60.0	
18														
19														
													75.0	
20														
Commen	its:							-	-		PROJECT NO.	1	117506	5
											BORING NO.		IPR-22	

ĺ			,	JRS C	ornor	ration			TEST BOR	ING L	OG	
				<i>7110</i> 00	Sipoi	ation		BORING	NO:		IPR-22	
PROJECT	Γ:				KeySpar	n Hempstead	d MGP	SHEET:			2 of 5	
CLIENT:					KeyS	pan		JOB NO.:			1117506	5
BORING (	CONTRACT	OR:				Fenley and	Nicol	BORING	LOCATION:	Medi	cal Cent	er Lot
			SAMPL	.E				DESCRIPTION	ON			
DEPTH	STRATA			BLOWS	REC		CONSIST	MATERIAI	L		Ren	narks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD	DESCRIPTION		USCS	PID	MOIST
21		S-5	Macro core		48'	Slightly Brown Stained		MGP impacted. Loose, fine to little to fine gravel. Lightly stai and coated. Several very thin stained sand at 23' to 24'. Mo	ned brown (MGP) seams of black	SP	290.0	
22								MGP odor. Liner stained.				
24											400.0	Wet at ~24'bgs
26		S-6	Macro core		48"			MGP impacted. Loose to med fine to medium SAND, interva impact with 75 to 100% DNAF to 29'. Strong MGP odor. Line	als of heavy MGP PL saturation at 27'	SP	400.0	Wet
28											687.0	
29 30												
31		S-7	Macro core		52"	Lt. Brown / Tan		Loose, very fine to fine SAND sand, trace fine to coarse san 35'. Faint MGP odor, no staini	nd and fine gravel at	SP	75.0	Wet
33												
35					1011			Loose, fine to medium SAND.	trace coerce cand	0.0	00.0	
36		S-8	Macro core		40"	Brown / Lt. Brown		No staining, faint MGP odor.	, trace coarse sand.	SP	60.0	Wet
37												
39												
COMMEN	ıte.	22 5'	H <sub>2</sub> S =2.		1	<u>I</u>		PROJECT	T NO		IPR-22	İ
COMMEN	113:	۰.۵,۱	1120 =2.									
								BORING	NO.		1117506	ບ

			,	JRS Co	ornor	ation			TEST BOR	ING L	OG	
					_				BORING NO:		IPR-22	
PROJEC1	Г:					n Hempstead	MGP		SHEET:		3 of 5	
CLIENT:					KeyS				JOB NO.:		117506	
BORING	CONTRACT		CAMPI	_		Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
DEPTH	STRATA		SAMPL	BLOWS	REC		CONSIST		ESCRIPTION MATERIAL		Rom	arks
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		ESCRIPTION	USCS	PID	MOIST
		S-9	Macro		42"	Lt. Brown			ium SAND, trace to little	SP	0.0	Wet
41			core			/ Tan		coarse sand, trace	fine gravel. No impact.			
						/ Orange						
42												
43												
44												
45			ŀ									
+5		S-10	Macro		35"	Lt. Brown		Loose, fine to coars	se SAND, trace fine gravel.	SP	0.0	Wet
46		0.0	core		00	/ Yellow		No impact.			• • • • • • • • • • • • • • • • • • • •	
						/ Tan						
47												
48												
- 10												
49												
50			ŀ									
- 50		S-11	Macro		46"	Lt. Brown		Loose, fine to coars	se SAND, trace fine gravel,	SP	0.0	Wet
51			core			/ Yellow		with trace cobble. I				
						/ Tan						
52												
53												
54												
34				-								
55												
		S-12	Macro		29"	Lt. Brown		Loose, fine to coars	se SAND, trace fine gravel,	SP	0.0	Wet
56			core			/ Yellow		with trace cobble. I	No impact.			
						/ Tan						
57												
F.												
58												
59				-								
33												
60												
COMMEN	ITS:			1				•	PROJECT NO.		IPR-22	
									BORING NO.	1	117506	5

			,	JRS C	rnoi	ation			TEST BOR	ING L	OG	
				JNS C					BORING NO:		IPR-22	
PROJEC <sup>*</sup>	Т:					n Hempstead	MGP		SHEET:		4 of 5	
CLIENT:					KeyS				JOB NO.: 1117506			
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION:	Medi	cal Cent	er Lot
I			SAMPL						DESCRIPTION			
DEPTH FEET	STRATA SYMBOL	NO.	TYPE	BLOWS PER 6"	REC	COLOR	CONSIST HARD		MATERIAL		PID	narks MOIST
FEET	STIMBUL		Macro		RQD%	COLOR	ПАКИ		escription o core drive point did not	USCS	PID	MOIST
61		5-13	core		no rec.			retract during adva				
<u> </u>			0010		100.							
62					1							
					1							
63					]							
64												
65		0.44			2011	L. B.		Modium dongo vo	ny fino to modium CAND			
66		S-14	Macro core		30"	Lt. Brown / Orange			ry fine to medium SAND, hange, no gravel. No impact.	SP	0.0	Wet
- 66			core			/ Tan			3 / 3 1			
67					1	, ran						
<u> </u>					1							
68					1							
					]							
69												
70												
		S-15	Macro			Lt. Brown			ry fine to medium SAND, hange, no gravel. No impact.	SP	0.0	Wet
71			core		Stuck	/ Orange / Tan			nango, no gravon no impaon			
72					ł	/ ran						
, <u>,                                  </u>					1							
73					1							
					1							
74					]							
75						ļ		ļ.,				ļļ
		S-16	Macro					No recovery of sar did not retract upor	mple, Macro core drive point			
76			core					a.s not rottage apol	aa. anoomona			
77												
11												
78												
79												
80												
COMMEN	ITS:								PROJECT NO.		IPR-22	
									BORING NO.	1	117506	5
<u> </u>												

				IDC	Cornor		TEST BO	RING L	OG			
			C	כחנ	Corpoi	aliuii			BORING NO:		IPR-22	
PROJEC1	Γ:				KeySpa	n Hempstead	d MGP		SHEET:		5 of 5	
CLIENT:					KeyS				JOB NO.: 11175065			
BORING	CONTRACT					Fenley and	Nicol		BORING LOCATION: Medical Center Lot			er Lot
		1	SAMPL		1				ESCRIPTION			
DEPTH	STRATA			BLO			CONSIST		MATERIAL			arks
FEET	SYMBOL	NO.	TYPE	PER			HARD		<b>ESCRIPTION</b> fine SAND. No impact.	USCS	PID	MOIST
01		S-17	Macro core		16"	Lt. Brown / Tan		Loose, very line to	ille SAND. No illipact.	SP	0.0	Wet
81			core			/ Tan						
82												
OL.												
83												
84												
85												
								En	d of boring: 85'			
86												
0.7												
87												
88												
- 00												
89												
90												
91												
92												
93												
93												
94												
95												
96												
97												
98				-								
30				+								
99												
				$\dashv$								
100												
COMMEN	ITS:				•	•	<u>-</u>	-	PROJECT NO.		IPR-22	
									BORING NO.	1	1117506	5

				URS	Corpo	oration				TEST BORING	LOG			
										BORING NO:		IPR-23		
PROJEC	CT:				KeySp	an Hempste	ad MGP			LOCATION:	Medic	al Cent	er Lot	
CLIENT:	:					KeySpan				JOB NO.:	1	117506	5	
BORING	CONTRAC	CTOR:					and Nicol			DRILLING METHOD:	G	eoprob	е	
GROUN	DWATER:			~24' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH: 45'				
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE STARTED:	C	1/30/08	3	
					DIA.		2"			DATE FINISHED:		1/30/08		
					WT.		<u> </u>			DRILLER:		I. Mead		
					FALL					GEOLOGIST:	J. Harshman			
					,	* POCKET P	ENETROMET	ER REA	DING	REVIEWED BY:				
			SAMP	l F	-1				SCRIPTION	<u> </u>				
DEPTH			<u> </u>	BLOWS	REC		CONSIST	1		MATERIAL		REM	IARKS	
FEET	STRATA	NO.	TYPE	PER 6"	RQD%	COLOR	HARD			ESCRIPTION	uscs	PID	Moist	
0	OIIIIIA	S-1	Macro	1 2.11 0	41"	Dk. Brown	Tirate	Medium		ry fine to medium silty SAND,	SP	0.0	Moist	
-		J-1			<b>⊣</b> '''	/ Brown				and coarse gravel. No impact	51	0.0	IVIOISE	
1			core	-		/ DIOWII								
- '					_									
_														
2					4									
<u> </u>					4									
3				$\vdash$	4									
					4									
4														
5														
		S-2	Macro		52"	Lt. Brown				se SAND, trace well graded	SP	0.0	Dry	
6			core			/ Yellow		fine gra	vel. No imp	act.				
						/ Orange								
7														
8	1													
9														
10					_									
10		S-3	Macro		52"	Lt. Brown		10' to 1	2'. Loose, fii	ne to coarse SAND, trace well	SP	0.0	Dry	
11		0 0	core		- 52	/ Yellow			fine gravel.			0.0	Diy	
- ' '			COIE						-	·				
12						/ Orange								
12						0.00000		12' to 1	5' Loose a	ravelly fine to coarse SAND,	CD.	0.0	D=1	
10	1				$\dashv$	Orange /			ne gravel.	ravelly line to coarse sand,	SP	0.0	Dry	
13				<del>                                     </del>	-	Brown			. 3					
					-									
14					4									
					4									
15						1.		45.	01.1	u	<b>l</b> .		_	
		S-4	Macro		49"	Orange /				ravelly fine to coarse SAND,	SP	0.0	Dry	
16			core		_	Brown		some ii	ne gravel.					
					_									
17					_									
					_									
18					_]									
										pacted. Loose, sligthly stained	SP	100.0	Dry to	
19					1					se SAND, some fine gravel.			Moist	
					7			MGP od	dor (100 ppr	n).				
20	1				┑									
Commer	nts:	23.5'.	HCN:1			<u> </u>	1			PROJECT NO.	1	117506	5	
		- ,	•							BORING NO.		IPR-23		
<del>                                     </del>											1	23		

			1	JRS Co	rnor	ation		TEST BOR	ING L	OG			
				7710 00	npoi	ation		BORING NO:		IPR-23			
PROJECT	•				KeySpar	n Hempstead	d MGP	SHEET:		2 of 3			
CLIENT:					KeyS			JOB NO.:					
BORING C	CONTRACTO	OR:				Fenley and	Nicol	BORING LOCATION:	BORING LOCATION: Medical Center Lo				
L			SAMPL				•	DESCRIPTION	ESCRIPTION				
DEPTH	STRATA			BLOWS	REC		CONSIST	MATERIAL			narks		
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD	DESCRIPTION	USCS SP	PID	MOIST		
21		S-5	Macro core		46"	Lt. Brown		20' to 24', Loose, fine to coarse slightly stained with MGP impact, some fine gravel. MGP odor.		260.0	Dry to Moist		
22			-										
23			-			Black		24' to 25', MGP impacted. 3" interval of black stained fine to medium SAND, with brown MGP stained fine to coarse sand and some fine gravel.	SP	70.0	Moist		
25						Stained		MGP odor.	01	70.0	to Wet		
26	•	S-6	Macro core		46"	Lt. Brown		25' to 27.5', Loose, fine to medium SAND, trace coarse sand and fine gravel. MGP odor, sheen, no DNAPL.	SP	270.0	Wet		
27			}										
29			-			Black and Brown Stained		27.5' to 30', Heavy MGP impact. Intervals of DNAPL saturation (75%), black and brown stained. Strong MGP odor. Fine to medium SAND, trace fine gravel. Liner stained.	SP		Wet		
31		S-7	Macro core		48"	Lt. Brown / Tan trace		Loose, fine to medium SAND, thin 1" seam of DNAPL saturation (100%) at 30.5' with black and brown staining and strong MGP odor.	SP	170.0	Wet		
33			-			Orange				70.0			
34 35			-							50.0			
36		S-8	Macro core		46"			35' to 36', Medium dense to dense, silty fine SAND, with some fine gravel. Faint MGP odor.	SP	138.0	Wet		
37								36' to 40', Loose, fine to coarse SAND, trace fine gravel. Faint MGP odor, no staining, no DNAPL.	SP		Wet		
38			-										
39													
40 COMMEN	TC.			1				PROJECT NO.		IPR-23	<u> </u>		
COMMEN	13.												
	<b>BORING NO.</b> 11175065												

				JRS C	ornor	ation			TEST BO	RING L	OG		
				JN3 C	orpor	aliuii			BORING NO:		IPR- 23		
PROJEC <sup>*</sup>	T:				KeySpar	n Hempstead	d MGP		SHEET:		3 of 3		
CLIENT:					KeyS	pan			JOB NO.: 111750			5	
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION:	Medi	Medical Center Lot		
			SAMPL	.E				D	DESCRIPTION				
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL		Remarks		
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%		HARD		DESCRIPTION		PID	MOIST	
		S-9	Macro		43"	Lt. Brown			ium SAND, trace to little fine gravel. No impact.	SP	0.0	Wet	
41			core		4	/ Tan		coarse sand, trace	ille gravel. No lilipact.				
- 10					4								
42					4								
43					4								
43	-				4								
44	-				-								
77	-				1								
45	-				1								
								End	of boring 45' bgs				
46	1				1								
	1												
47					1								
48													
					_								
49					1								
ļ					4								
50					_								
<b>5</b> 4	-				-								
51					4								
52	-				-								
32					1								
53	1				1								
54	1				1								
					1								
55													
	]												
56			[ [		1								
					]			1					
57					4								
50	-				-								
58	-				-								
59	1				1								
อย	1				1								
60					-			1					
	ITC.		1		ı	I	L	<u> </u>	PROJECT NO.		IPR- 23	<u> </u>	
COMMEN	VI5:												
COMMEN	V15:								BORING NO.		117506		

				URS	Corpo	oration				TEST BORING	LOG		
L										BORING NO:		PR-24	
PROJEC	T:				KeySpa	an Hempstea	ad MGP			LOCATION:	Medic	al Cente	er Lot
CLIENT:						KeySpan				JOB NO.:	11	17506	5
BORING	CONTRAC	TOR:					and Nicol			DRILLING METHOD:	G	eoprobe	)
GROUNI	OWATER:			~24' bgs		CAS.	SAMPLER	CORE	TUBE	TOTAL DEPTH:		45'	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore		DATE STARTED:			1/30/08	
					DIA.		2"			DATE FINISHED:		1/30/08	
					WT.		_			DRILLER:		. Meade	
					FALL					GEOLOGIST:		larshm	
					*	* POCKET PENETROMETER READING REVIEWED BY:					0	10.0	
			SAMP	l F					SCRIPTION				
DEPTH				BLOWS	REC		CONSIST	T ==		MATERIAL		REM	ARKS
FEET	STRATA	NO.	TYPE	PER 6"	RQD%	COLOR	HARD			ESCRIPTION	uscs		Moist
0	011212	S-1	Macro	1 2.11 0	42"	Dk. Brown	TIME	0' to 4'		nse, fine to coarse SAND with	SP	0.0	Dry
U		3-1	l •		42	DK. DIOWII			some fine		SF	0.0	ыу
			core										
1					_								
2					$\dashv$								
					-								
3					$\dashv$								
					$\dashv$								
4					$\dashv$	LA D#=		4' to E'	Loose fine	to medium SAND, trace	65		D
_					_	Lt. Brown				ne gravel. No impact.	SP		Dry
5											0.0		_
		S-2	Macro		58"	Lt. Brown			nne to coars No impact.	se SAND, little to some fine	SP	0.0	Dry
6			core			/ Yellow		gravon	to impaot.				
						/ Orange							
7					_								
					_								
8					_								
9					_								
					_								
10									ilaa ta aaaya	o CAND little to some fine	0.0		_
		S-3	Macro		56"	Lt. Brown			ine to coars No impact.	se SAND, little to some fine	SP	0.0	Dry
11			core			/ Yellow		gravon	to impaot.				
					_	/ Orange							
12					4								
10					$\dashv$								
13					-								
1.4					-								
14					-								
15					$\dashv$								
15	ļ	C 1	Maara		46"	I t Brown		15' to 19	a' Loosa fir	ne to coarse SAND, little to	SP	0.0	Dat
16		5-4	Macro		46"	Lt. Brown			e gravel. N		52	0.0	Dry
10			core			/ Yellow			<b>5</b>	•			
17					-	/ Orange							
17					$\dashv$								
10					-								
18					-								
4.0					4								
19					4			1014 0	N 16 "	on to operar CAND "			_
					4	Brown			0', Loose, fir No impact.	ne to coarse SAND, some fine	SP		Dry
20								graver.	vo impact.	Inno 1101 110			
Commen	its:									PROJECT NO.		17506	5
										BORING NO.		PR-24	

			,	JRS Co	ornor	ation			TEST BOR	ING L	OG		
					лрог	ation			BORING NO:		IPR-24		
PROJECT	Г:				KeySpar	n Hempstead	MGP		SHEET:		2 of 3		
CLIENT:					KeyS				JOB NO.: 11175065				
BORING	CONTRACT					Fenley and I	Nicol		BORING LOCATION: Medical Center Lot				
			SAMPL		1		1		ESCRIPTION	1 1			
DEPTH	STRATA		TVDE	BLOWS	REC	001.00	CONSIST	MATERIAL			i	arks	
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD		medium dense, fine to	USCS SP	PID	MOIST	
21		S-5	Macro core		48"	Lt. Brown / Brown		coarse SAND, little		54	0.0	Dry	
22													
23						Brown		23' to 25'. MGP im	pacted. Loose, brown MGP	SP	0.0	Wet	
24						Stained		stained fine to med (25% saturation). M	dium SAND, trace DNAPL Moderate MGP odor, liner le about ~23' to 24' bgs.	<b>O</b> .	60.0		
25 26		S-6	Macro core		44"	Black Stained		SAND, intervals of	sted. Loose, fine to medium black stained DNAPL seams tion), several thin intervals of	SP	50.0	Wet	
27									tle very fine silty sand at 29' to		10.0		
28													
30											80.0		
31		S-7	Macro core		42"	Brown Stained			mpacted, fine to medium wn with MGP impact (400 odor.	SP	400.0	Wet	
32						Lt. Brown / Tan thin interval			, fine to medium SAND, trace o coarse gravel at 35'. Slight to	SP	10.0	Wet	
34						of Orange	5						
35		S-8	Macro		38"	Lt. Brown			se SAND, trace fine to coarse	SP	33.0	Wet	
36			core			/ Tan		gravel. No visible i faint MGP odor.	mpact, no DNAPL or staining,				
37													
39											74.0		
40													
COMMEN	ITS:	27', HC	CN: 6. 3	2.5', HCN:1	. 37' HCN	I:1 to 12.			PROJECT NO.		IPR-24		
									BORING NO.	1	117506	5	

				JRS C	ornor		TEST BORING LOG						
				ms c	npor	aliUii			BORING NO:		IPR-24		
PROJEC <sup>*</sup>	T:				KeySpan	Hempstead	d MGP		SHEET:		3 of 3		
CLIENT:					KeySp	oan			<b>JOB NO.</b> : 1117506				
BORING	CONTRACT	OR:				Fenley and	Nicol		BORING LOCATION: Medical Center			er Lot	
			SAMPL	.E				D	ESCRIPTION				
DEPTH	STRATA			BLOWS	REC		CONSIST		MATERIAL			arks	
FEET	SYMBOL	NO.	TYPE	PER 6"	RQD%	COLOR	HARD	DESCRIPTION		USCS	PID	MOIST	
41	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Liner Stuck				se SAND, trace fine to coarse mpact, no DNAPL or staining, or.	SP	43.0	Wet			
42													
43													
44													
45													
46								En	d of boring: 45'				
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60 COMMEN	ITS:	42.5', I	HCN: 1.						PROJECT NO.		IPR-24		
									BORING NO.	-	1117506	5	