Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

July 29, 2013

SUBJECT: FAI Route 90/94
Project NHPP-000S (941)
Section 2013-007R
Cook County
Contract No. 60W25
Item No. 17, 8/2/13 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Replaced the Schedule of Prices.
2. Revised the Table of Contents to the Special Provisions.
3. Revised pages 1, 2, 9-13, 15, 16, 18, 20, 26, 54-58, 100, 110, 111, 116-120, 127-130, 133, 134, 137-139, 146, 159, 160, 162-165, 170, 171, 227, 228, 515-519, & 542-555 of the Special Provisions.
4. Deleted pages 21-25, 101-109, and 112-115 of the Special Provisions.
5. Added pages 583-714
6. Revised sheets 1-13, 15-25, 28-29, 31-33, 42-43, 49-59, 61-66, 68-73, 75-77, 79-82, 86, 93-94, 96, 106, 112-113, 115-117, 119, 122, 126, 128-129, 130A, 131, 145-152, 154-202, 238, 267-269, 269E, and 269F of the Plans.
7. Added sheets 51A, 71A, 76A-76G, 92A-92J, 115A, 148A, 165A, 203-207, 261C and 272A to the plans.
8. Deleted sheets 225-232 of the Plans.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

John D. Baranzelli, P.E.
Acting Engineer of Design and Environment

By: Ted B. Walschleger, P. E.
Engineer of Project Management

cc: John Fortmann, Region 1, District 1; Mike Renner; D. Carl Puzey; Estimates

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 60W25

State Job # - C-91-227-13

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Code - 31 - -
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Item Number		Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
*REV	X0321963	MICRO-PILES	EACH	4.000				
	X0322141	REM TEMP WOOD POLE	EACH	1.000				
*REV	X0322400	PILE EXTRACTION	EACH	27.000				
	X0322689	P S AB 10 7G 34'-6"	EACH	1.000				
	X0323044	COARSE SAND PLACEMENT	SQ YD	426.000				
	X0324345	COMB SEW REM 24	FOOT	34.000				
*DEL	~~X0324455~~	~~DRILL/SET SOLD P SOIL~~	~~CU FT~~	~~1,358.000~~				
	X0324571	MAINT ST LTG SYS CHGO	L SUM	1.000				
	X0325207	TV INSPECT OF SEWER	FOOT	4,191.000				
	X0326148	TEMP WP 60 CL4 15 MA	EACH	3.000				
*REV	X0326326	CC TPX 2-1/C6 1-1/CG	FOOT	1,380.000				
	X0326451	VIDEO SYS DET CAMERA	EACH	3.000				
*REV	X0326486	DECORATIVE RAIL PR MT	FOOT	639.000				
	X0326801	COMBND SEWR TO BE CLN	FOOT	253.000				
	X0326968	JUN BOX POLE/POST MTD	EACH	9.000				
	X0327004	TEMP WP 60 CL 4	EACH	2.000				

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X0327172	REM REPL SIGN & SPPRT	EACH	1.000				
X0327357	CONSTRN VBRN MONITRNG	L SUM	1.000				
X0327371	PLUG EXISTING PIPE	CU YD	0.200				
X0327614	COMB SEW REM 12	FOOT	57.000				
X0327615	COMB SEW REM 8	FOOT	83.000				
X0327616	MAINT ITS DURG CONSTR	CAL MO	6.000				
X0370010	COAXIAL JMPR CBL CDOT	EACH	3.000				
X0370013	CON FDN TPBM TSC CDOT	EACH	1.000				
X0370014	CF20 .75A13B CDOT	EACH	2.000				
X0370015	CF30 1.50A16.50B CDOT	EACH	2.000				
X0370017	DRILL HNDHL/MNHL CHGO	EACH	4.000				
X0370018	ELCBL C #14 19C CDOT	FOOT	694.000				
X0370021	EL HH 30 24 F&L CDOT	EACH	1.000				
X0370022	EL HHHD 36 24F&L CDOT	EACH	1.000				
X0370023	EL MH 3X4X4 24FL CDOT	EACH	2.000				

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	X0370028	HRNS CBL 16 8/C CDOT	FOOT	340.000				
	X0370031	PS AB12.5 3G34.5 CDOT	EACH	2.000				
	X0370042	VID CBL HARNESS CDOT	EACH	3.000				
	X0370044	VID DET PWR SPLY CDOT	EACH	1.000				
*REV	X0370047	INST LP MA & LUM CHGO	EACH	12.000				
*REV	X0370049	UGRD C PVC2SCH80 CDOT	FOOT	410.000				
	X0370050	ATC TRAF 16LB PC CDOT	EACH	1.000				
	X0370052	ELCBL C # 4 2C CDOT	FOOT	97.000				
	X0370053	ELCBL C #14 3C S CDOT	FOOT	387.000				
	X0370054	INTFC PANEL 4CMA CDOT	EACH	1.000				
	X0370057	MA STL MONO 20 CDOT	EACH	3.000				
	X0370058	MA STL MONO 26 CDOT	EACH	1.000				
	X0370063	SERV INST 100AMP CDOT	EACH	1.000				
*REV	X0370064	UGRD C PVC3SCH80 CDOT	FOOT	538.000				
	X0370065	VIDEO DET CR 4C CDOT	EACH	1.000				

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X0370068	CF24 1.25A15B CDOT	EACH	7.000				
X0370069	COMB SEW ESVCP 8 CDOT	FOOT	26.000				
X0370070	COMB SEW WMR 8 CDOT	FOOT	92.000				
X0370071	COMB SEW WMR 12 CDOT	FOOT	54.000				
X0370072	COMB SEW WMR 24 CDOT	FOOT	20.000				
X0370073	REM/REIN MST/LUM CDOT	EACH	3.000				
X0370074	RACKING CBL MH/HHCDOT	EACH	2.000				
X0370075	UGRD C PVC4SCH80 CDOT	FOOT	420.000				
X0370076	ROD/CL DCT COND CDOT	FOOT	18.000				
X0370077	LOCATE TUNNEL CHICAGO	EACH	2.000				
X0370078	BULKHD TUNNEL CHICAGO	EACH	2.000				
X0370079	REL WAT MN RISER CDWM	L SUM	1.000				
*REV X2020502	BRACED EXCAVATION	CU YD	4,334.000				
X4201410	BR APPR PAVT CONN SPL	SQ YD	49.000				
*REV X4240800	DETECTABLE WARN SPL	SQ FT	98.000				

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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X4404000	PARKING LOT PAVT REM	SQ YD	61.000				
X5011100	FOUNDATION REM	EACH	12.000				
*ADD X5017307	PROTECTIVE SHIELD SPL	SQ YD	270.000				
*REV X5091730	BRIDGE FENCE RAIL SP	FOOT	140.000				
X5509900	ABANDON FILL SS	FOOT	59.000				
X5537800	SS CLEANED 12	FOOT	138.000				
X5538000	SS CLEANED 18	FOOT	58.000				
*ADD X5860110	GRANULAR BACKFILL STR	CU YD	686.000				
X6020083	INLET TA T1FOL (CHGO)	EACH	3.000				
X6020270	MAN TB 4D T1F CL CHGO	EACH	1.000				
X6022505	CB TA 4D T1FOL (CHGO)	EACH	6.000				
X6030310	FR & LIDS ADJUST SPL	EACH	15.000				
X6050040	REMOV MANHOLES SPL	EACH	1.000				
*REV X6061700	COMB CC&G TB SPL	FOOT	790.000				
*REV X6370050	CONC BAR WALL SPL	FOOT	257.000				

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X6430120	REM IMP ATTEN NO SALV	EACH	1.000				
X6640050	CH LK FENCE 42 ATS SP	FOOT	20.000				
X6640704	TEMP CL FENCE SCRN 4	FOOT	274.000				
X6700410	ENGR FLD OFF A SPL	CAL MO	12.000				
X7010216	TRAF CONT & PROT SPL	L SUM	1.000				
X7011015	TR C-PROT EXPRESSWAYS	L SUM	1.000				
X7013820	TR CONT SURVEIL EXPWY	CAL DA	50.000				
*ADD X7035100	TEMP EPOXY PVT MK L&S	SQ FT	42.000				
*ADD X7035104	TEMP EPOXY PVT MK L4	FOOT	14,867.000				
*ADD X7035105	TEMP EPOXY PVT MK L5	FOOT	4,061.000				
*ADD X7035108	TEMP EPOXY PVT MK L8	FOOT	925.000				
*ADD X7035124	TEMP EPOXY PVT MK L24	FOOT	20.000				
*ADD X7200053	REM STOR RE-E SP SPL	EACH	4.000				
X7200105	SIGN PANEL T1 SPL	SQ FT	49.000				
X8510250	PT EX POLE/POST/CONTR	EACH	1.000				

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X8730249	ELCBL C 19 6/C	FOOT	1,034.000				
X8730312	EC C LEAD 18 4C TW SH	FOOT	216.000				
X8800101	PED PUSH-BUTTON SPL	EACH	2.000				
X8850102	INDUCTION LOOP	FOOT	177.000				
Z0003855	BICYCLE RACKS	EACH	1.000				
Z0004552	APPROACH SLAB REM	SQ YD	296.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0022800	FENCE REMOVAL	FOOT	282.000				
*DEL ~~Z0026402~~	~~FUR SOLDIER PILES HP~~	~~FOOT~~	~~212.000~~				
Z0030850	TEMP INFO SIGNING	SQ FT	146.000				
Z0033020	LUM SFTY CABLE ASMBLY	EACH	3.000				
Z0033028	MAINTAIN LIGHTING SYS	CAL MO	6.000				
Z0033050	COAXIAL CABLE IN CON	FOOT	387.000				
*REV Z0046306	P UNDR FOR STRUCT 6	FOOT	232.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0056608	STORM SEW WM REQ 12	FOOT	34.000				

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*REV Z0062456	TEMP PAVEMENT	SQ YD	1,044.000				
*DEL ~~Z0073002~~	~~TEMP SOIL RETEN SYSTM~~	~~SQ FT~~	~~1,398.000~~				
Z0076600	TRAINEES	HOUR	1,500.000		0.800		1,200.000
Z0076604	TRAINEES TPG	HOUR	1,500.000		10.000		15,000.000
20100500	TREE REMOV ACRES	ACRE	0.250				
20101100	TREE TRUNK PROTECTION	EACH	5.000				
20101200	TREE ROOT PRUNING	EACH	1.000				
*REV 20200100	EARTH EXCAVATION	CU YD	755.000				
*REV 20400800	FURNISHED EXCAVATION	CU YD	610.000				
*DEL ~~20700220~~	~~POROUS GRAN EMBANK~~	~~CU YD~~	~~2,774.000~~				
*REV 20800150	TRENCH BACKFILL	CU YD	1,634.000				
21101615	TOPSOIL F & P 4	SQ YD	1,548.000				
25000210	SEEDING CL 2A	ACRE	0.500				
25000400	NITROGEN FERT NUTR	POUND	63.000				
25000600	POTASSIUM FERT NUTR	POUND	63.000				
*DEL ~~25100115~~	~~MULCH METHOD 2~~	~~ACRE~~	~~0.750~~				
*ADD 25100135	MULCH METHOD 4	ACRE	0.750				
25100630	EROSION CONTR BLANKET	SQ YD	1,387.000				

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25200110	SODDING SALT TOLERANT	SQ YD	186.000				
*REV 25200200	SUPPLE WATERING	UNIT	1.900				
28000250	TEMP EROS CONTR SEED	POUND	107.750				
28000400	PERIMETER EROS BAR	FOOT	1,908.000				
28000510	INLET FILTERS	EACH	78.000				
*REV 31101200	SUB GRAN MAT B 4	SQ YD	1,268.000				
31101400	SUB GRAN MAT B 6	SQ YD	1,444.000				
35300400	PCC BSE CSE 9	SQ YD	1,297.000				
40201000	AGGREGATE-TEMP ACCESS	TON	250.000				
40600200	BIT MATLS PR CT	TON	0.800				
40600300	AGG PR CT	TON	3.000				
40603085	HMA BC IL-19.0 N70	TON	164.000				
40603340	HMA SC "D" N70	TON	109.000				
40800050	INCIDENTAL HMA SURF	TON	0.100				
*REV 42001200	PAVEMENT FABRIC	SQ YD	1,624.000				

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*REV 42001300	PROTECTIVE COAT	SQ YD	2,853.000				
42300400	PCC DRIVEWAY PAVT 8	SQ YD	59.000				
*REV 42400200	PC CONC SIDEWALK 5	SQ FT	2,896.000				
*REV 42400410	PC CONC SIDEWALK 8	SQ FT	1,113.000				
*REV 44000100	PAVEMENT REM	SQ YD	1,726.000				
*REV 44000200	DRIVE PAVEMENT REM	SQ YD	109.000				
44000300	CURB REM	FOOT	26.000				
*REV 44000500	COMB CURB GUTTER REM	FOOT	1,519.000				
44000600	SIDEWALK REM	SQ FT	3,919.000				
44001980	CONC BARRIER REMOV	FOOT	477.000				
44004250	PAVED SHLD REMOVAL	SQ YD	480.000				
44201023	CL B PATCH T3 14	SQ YD	32.000				
44201025	CL B PATCH T4 14	SQ YD	297.000				
*REV 44213200	SAW CUTS	FOOT	574.000				
44213204	TIE BARS 3/4	EACH	201.000				

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50100300	REM EXIST STRUCT N1	EACH	1.000				
*ADD 50100400	REM EXIST STRUCT N2	EACH	1.000				
*REV 50102400	CONC REM	CU YD	83.000				
*REV 50157300	PROTECTIVE SHIELD	SQ YD	1,439.000				
*REV 50200100	STRUCTURE EXCAVATION	CU YD	148.000				
*REV 50300225	CONC STRUCT	CU YD	1,034.100				
*REV 50300255	CONC SUP-STR	CU YD	766.500				
50300260	BR DECK GROOVING	SQ YD	1,287.000				
*REV 50300285	FORM LINER TEX SURF	SQ FT	1,732.000				
*REV 50300300	PROTECTIVE COAT	SQ YD	2,340.000				
50500105	F & E STRUCT STEEL	L SUM	1.000				
*ADD 50500305	ERECT STRUCT STEEL	L SUM	1.000				
*REV 50500405	F & E STRUCT STEEL	POUND	42,810.000				
50500505	STUD SHEAR CONNECTORS	EACH	10,044.000				
*ADD 50800105	REINFORCEMENT BARS	POUND	398,156.000				

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*REV 50800205	REINF BARS, EPOXY CTD	POUND	401,200.000				
*REV 50800515	BAR SPLICERS	EACH	1,031.000				
51500100	NAME PLATES	EACH	1.000				
*REV 51602000	PERMANENT CASING	FOOT	5,691.000				
*REV 51603000	DRILLED SHAFT IN SOIL	CU YD	1,729.000				
51604000	DRILLED SHAFT IN ROCK	CU YD	42.000				
52000110	PREF JT STRIP SEAL	FOOT	124.000				
52100010	ELAST BEARING ASSY T1	EACH	24.000				
52100020	ELAST BEARING ASSY T2	EACH	12.000				
*REV 52100510	ANCHOR BOLTS 3/4	EACH	41.000				
*REV 52100520	ANCHOR BOLTS 1	EACH	72.000				
*ADD 52100540	ANCHOR BOLTS 1 1/2	EACH	24.000				
550A0050	STORM SEW CL A 1 12	FOOT	69.000				
550A0340	STORM SEW CL A 2 12	FOOT	347.000				
55100500	STORM SEWER REM 12	FOOT	86.000				

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*ADD 56101176	DIWPF 30X24 2B MJ RED	EACH	1.000				
*ADD 56101178	DIWPF 36X24 2B MJ RED	EACH	1.000				
*ADD 56104322	DIWPF242B MJ 1/4BSBND	EACH	2.000				
*ADD 56104323	DIWP FTG 30" MJ SLEEV	EACH	1.000				
*ADD 56104324	DIWP FTG 36" MJ SLEEV	EACH	1.000				
*ADD 56105310	WAT MAIN CTRL VALV 16	EACH	1.000				
56500600	DOM WAT SER BOX ADJ	EACH	3.000				
*REV 58700300	CONCRETE SEALER	SQ FT	8,728.000				
*REV 59100100	GEOCOMPOSITE WALL DR	SQ YD	448.000				
*REV 60107700	PIPE UNDERDRAINS 6	FOOT	134.000				
*REV 60108200	PIPE UNDERDRAIN 6 SP	FOOT	17.000				
60200805	CB TA 4 DIA T8G	EACH	1.000				
60201310	CB TA 4 DIA T20F&G	EACH	4.000				
60201340	CB TA 4 DIA T24F&G	EACH	3.000				
60218400	MAN TA 4 DIA T1F CL	EACH	1.000				

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60237420	INLETS TA T20F&G	EACH	2.000				
60250200	CB ADJUST	EACH	7.000				
60252800	CB RECONST	EACH	2.000				
60253800	CB RECON NEW T8G	EACH	1.000				
60255500	MAN ADJUST	EACH	1.000				
60257900	MAN RECONST	EACH	1.000				
60500040	REMOV MANHOLES	EACH	3.000				
60500050	REMOV CATCH BAS	EACH	12.000				
60500060	REMOV INLETS	EACH	2.000				
60600605	CONC CURB TB	FOOT	78.000				
60605000	COMB CC&G TB6.24	FOOT	296.500				
63700175	CONC BAR 1F 42HT	FOOT	409.000				
63700805	CONC BAR TRANS	FOOT	120.000				
*REV 63700900	CONC BARRIER BASE	FOOT	787.000				
64200116	SHOULDER RUM STRIP 16	FOOT	487.000				

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64300260	IMP ATTEN FRD NAR TL3	EACH	1.000				
*REV 66400305	CH LK FENCE 6	FOOT	115.000				
*ADD 66900200	NON SPL WASTE DISPOSL	CU YD	3,100.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
*ADD 66900530	SOIL DISPOSAL ANALY	EACH	2.000				
67100100	MOBILIZATION	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	50.000				
*REV 70300100	SHORT TERM PAVT MKING	FOOT	39,386.000				
*REV 70300210	TEMP PVT MK LTR & SYM	SQ FT	140.000				
*REV 70300220	TEMP PVT MK LINE 4	FOOT	833.000				
70300240	TEMP PVT MK LINE 6	FOOT	290.000				
70300250	TEMP PVT MK LINE 8	FOOT	297.000				
*REV 70300280	TEMP PVT MK LINE 24	FOOT	73.000				
*REV 70301000	WORK ZONE PAVT MK REM	SQ FT	4,452.000				
*REV 70400100	TEMP CONC BARRIER	FOOT	1,325.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 60W25

State Job # - C-91-227-13

	Project Number	Route
County Name - COOK- -	NHPP-000S/941/	FAI 90/94
Code - 31 - -		
District - 1 - -	*REVISED: JULY 25, 2013	
Section Number - 2013-007R		

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
*REV 70400200	REL TEMP CONC BARRIER	FOOT	1,725.000				
*REV 70600260	IMP ATTN TEMP FRN TL3	EACH	2.000				
*REV 70600332	IMP ATTN REL FRN TL3	EACH	4.000				
72000100	SIGN PANEL T1	SQ FT	74.000				
72000200	SIGN PANEL T2	SQ FT	62.000				
*REV 72000300	SIGN PANEL T3	SQ FT	911.750				
72100100	SIGN PANEL OVERLAY	SQ FT	9.000				
72400100	REMOV SIN PAN ASSY TA	EACH	7.000				
72400200	REMOV SIN PAN ASSY TB	EACH	1.000				
72400310	REMOV SIGN PANEL T1	SQ FT	64.000				
72400320	REMOV SIGN PANEL T2	SQ FT	42.000				
*REV 72400330	REMOV SIGN PANEL T3	SQ FT	802.000				
72800100	TELES STL SIN SUPPORT	FOOT	44.000				
72900100	METAL POST TY A	FOOT	39.000				
73304000	OVHD SIN STR BR MT	FOOT	109.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 60W25

State Job # - C-91-227-13

	Project Number	Route
County Name - COOK- -	NHPP-000S/941/	FAI 90/94
Code - 31 - -		
District - 1 - -	*REVISED: JULY 25, 2013	
Section Number - 2013-007R		

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78000100	THPL PVT MK LTR & SYM	SQ FT	284.000				
78000200	THPL PVT MK LINE 4	FOOT	766.000				
78000400	THPL PVT MK LINE 6	FOOT	1,469.000				
78000600	THPL PVT MK LINE 12	FOOT	29.000				
78000650	THPL PVT MK LINE 24	FOOT	347.000				
78005110	EPOXY PVT MK LINE 4	FOOT	7,104.000				
78005120	EPOXY PVT MK LINE 5	FOOT	1,912.000				
78005130	EPOXY PVT MK LINE 6	FOOT	38.000				
78005140	EPOXY PVT MK LINE 8	FOOT	394.000				
78005150	EPOXY PVT MK LINE 12	FOOT	110.000				
78008200	POLYUREA PM T1 LTR-SY	SQ FT	78.000				
78008210	POLYUREA PM T1 LN 4	FOOT	936.000				
78008230	POLYUREA PM T1 LN 6	FOOT	1,039.000				
78008250	POLYUREA PM T1 LN 12	FOOT	54.000				
78008270	POLYUREA PM T1 LN 24	FOOT	139.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 60W25

State Job # - C-91-227-13

County Name - COOK- -
Code - 31 - -
District - 1 - -
Section Number - 2013-007R

Project Number
NHPP-000S/941/

Route
FAI 90/94

***REVISED: JULY 25, 2013**

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78100200	TEMP RAIS REF PVT MKR	EACH	17.000				
78100300	REPLACEMENT REFLECTOR	EACH	194.000				
78200530	BAR WALL MKR TYPE C	EACH	16.000				
*REV 78300100	PAVT MARKING REMOVAL	SQ FT	3,022.000				
*REV 78300200	RAISED REF PVT MK REM	EACH	230.000				
80300100	LOCATE UNDERGR CABLE	FOOT	100.000				
81028200	UNDRGRD C GALVS 2	FOOT	130.000				
81028330	UNDRGRD C PVC 1 1/4	FOOT	19.000				
81028350	UNDRGRD C PVC 2	FOOT	1,731.000				
81028370	UNDRGRD C PVC 3	FOOT	219.000				
81100320	CON AT ST 1 PVC GS	FOOT	660.000				
81100605	CON AT ST 2 PVC GALVS	FOOT	834.000				
81100805	CON AT ST 3 PVC GALVS	FOOT	280.000				
81101005	CON AT ST 4 PVC GALVS	FOOT	1,000.000				
*REV 81200230	CON EMB STR 2 PVC	FOOT	1,000.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 60W25

State Job # - C-91-227-13

	Project Number	Route
County Name - COOK- -	NHPP-000S/941/	FAI 90/94
Code - 31 - -		
District - 1 - -	*REVISED: JULY 25, 2013	
Section Number - 2013-007R		

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
*ADD 81200250	CON EMB STR 3 PVC	FOOT	26.000				
81300220	JUN BX SS AS 6X6X4	EACH	12.000				
81300410	JUN BX SS AS 10X8X4	EACH	3.000				
81300530	JUN BX SS AS 12X10X6	EACH	4.000				
*REV 81300830	JUN BX SS AS 18X18X8	EACH	12.000				
81400200	HD HANDHOLE	EACH	3.000				
81603081	UD 3#2#4GXLPUSE 1.5 P	FOOT	320.000				
81702110	EC C XLP USE 1C 10	FOOT	2,340.000				
81702140	EC C XLP USE 1C 4	FOOT	320.000				
81702150	EC C XLP USE 1C 2	FOOT	960.000				
81800300	A CBL 3-1C2 MESS WIRE	FOOT	1,420.000				
82102400	LUM SV HOR MT 400W	EACH	3.000				
82107200	UNDERPAS LUM 100W HPS	EACH	12.000				
84200500	REM LT UNIT SALV	EACH	23.000				
84200804	REM POLE FDN	EACH	7.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 60W25

State Job # - C-91-227-13

	Project Number	Route
County Name - COOK- -	NHPP-000S/941/	FAI 90/94
Code - 31 - -		
District - 1 - -	*REVISED: JULY 25, 2013	
Section Number - 2013-007R		

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
85000200	MAIN EX TR SIG INSTAL	EACH	1.000				
87301305	ELCBL C LEAD 14 1PR	FOOT	394.000				
87301815	ELCBL C SERV 6 3C	FOOT	1,034.000				
87502690	TS POST A 15	EACH	2.000				
*REV 87900200	DRILL EX HANDHOLE	EACH	3.000				
88040070	SH P LED 1F 3S BM	EACH	8.000				
88040090	SH P LED 1F 3S MAM	EACH	9.000				
88102825	PED SH P LED 1F BM CT	EACH	8.000				
89502375	REMOV EX TS EQUIP	EACH	1.000				
89502380	REMOV EX HANDHOLE	EACH	4.000				
89502385	REMOV EX CONC FDN	EACH	6.000				

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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction" adopted January 1, 2012, the latest edition of the "Manual of Uniform Traffic Control Devices for Streets and Highways, the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheets included herein which apply to and govern the construction of FAI 90/94(I-90/94), Project NHPP-000S(941); Section 2013-007R, in Cook County, Contract 60W25 and in case of conflict with any part or parts of said specifications, the said special provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The project is located along Morgan Street from north of Harrison Street to south of Van Buren Street. The gross and net length of the project is 1023.81 Feet (0.194 miles).

DESCRIPTION OF PROJECT

The work consists of the replacement of the Morgan Street Bridge (Structure Number 016-1709) over I-290 and the CTA Blue Line and part of the retaining wall (Structure Numbers 016-1724) along I-290 westbound. The roadway of Morgan Street will be reconstructed along with the intersections of Congress Parkway, WB I-290 Ramp, and Tilden Street. The WB I-290 Morgan Street exit ramp will be partially removed and reconstructed at the tie in of the intersection. In addition to the partial reconstruction of the ramp, there will be pavement widening along the right side of the exit ramp.

Work includes erosion control and protection, utility relocation of existing storm sewers and an existing water main, special waste excavation, temporary pavement for both the ramp and I-290, earth excavation and embankment, removal of existing improvements, new storm and combined sewers, curb and gutters, pavements, sidewalks, pavement marking and signage, roadway lighting, retaining wall, concrete abutments, steel furnishing and erection, bridge deck and railings, traffic control and protection, traffic signals, urban enhancements and all incidental and collateral work necessary to complete the improvements as shown on the plans and as described herein. The work also includes constructing temporary structures to support ComEd electrical distribution cables. The temporary structures will be installed with close coordination with ComEd and ComEd’s contractor and is essential to the timely execution of this contract.

Revised 7/25/13

Work By Others:

- Utilities: Utility relocations and adjustments (by others). Reference STATUS OF UTILITIES TO BE ADJUSTED for additional information.
- CTA: CTA flagging and coordination. Reference CTA FLAGGING AND COORDINATION for additional information.

SOILS INFORMATION

Soil boring logs and generalized soil profiles are shown in the Plans for Morgan Street.

The report below is available for inspection at IDOT District 1, 201 W. Center Court, Schaumburg, Illinois.

Structure Geotechnical Report
Performed for the Morgan Street Over I-290 And CTA Bridge
Existing SN 016-2113, Proposed SN 016-1709
IDOT PTB 163-001 Cook County, Illinois
Prepared by:
Wang Engineering, Inc.
April 17, 2013

CONTRACTOR COOPERATION

The Contractor's attention is directed to the fact that other separate contracts may be under construction during the duration of this Contract. Adjacent contracts may consist of, but are not limited to projects near:

- Contract 60F63FAI 90/94 (Kennedy Expressway) at Ohio Street
- Contract 60W36 – Tunnel Bulkheading (Circle Interchange)
- Contract 60W26 – Halsted Street Bridge at I-290 / Congress Pkwy and Harrison Street Bridge at EB I-90/94 (Circle Interchange)
- Contract 60W29 Peoria Street Bridge at I-290 / Congress Pkwy (Circle Interchange)
- And others.

The Contractor will be governed by Article 105.08 of the Standard Specifications.

The Contractor will coordinate proposed project start dates and sequence of construction with the Engineer and other Contractors to present an effective and timely schedule for successful completion of the project.

Revised 7/25/13

The schedule shall indicate the critical path to contract completion. Only one controlling item shall be designated at any point in time on the schedule.

Acceptance or approval of any progress schedule by the Engineer shall not be construed to imply approval of any particular method of construction, sequence of construction, any implied or stated rate of production. Acceptance will not act as a waiver of the obligation of the Contractor to complete the work in accordance with the contract proposal, plans and specifications, modify any rights or obligations of the Department as set forth in the contract, nor imply any obligation of a third party. Acceptance shall not be construed to modify or amend the contract or the time limit(s) therein. Acceptance shall not relieve the Contractor of the responsibility for the accuracy of any of the information included on the schedule. Failure of the Contractor to include in the schedule any element of work required for the performance of the contract, any sequence of work required by the contract, or any known or anticipated condition affecting the work shall not excuse the Contractor from completing all work required within the time limit(s) specified in the contract notwithstanding acceptance of the schedule by the Engineer.

Basis of Payment. This work will not be paid for separately, but shall be considered as included in the costs of the various items of work in the contract.

WINTER WORK

No adjustment will be made in the contract unit prices for any concrete if winter work is necessary to meet the required completion dates specified in the contract.

STAGING AND INTERCHANGE RESTRICTIONS

Prior to the actual beginning and completion of the various stages of construction and traffic protection, the Contractor will be required to provide lane closures and barricade systems, for preparation work such as pavement marking removal, temporary lane marking, placing temporary concrete barrier, relocating existing guardrail, etc. These lane closures and barricade systems, including barricades, drums, cones, lights, signs, flaggers etc. shall be provided in accordance with details in the plans and these Special Provisions and as approved by the Engineer. The cost of this work will not be paid for separately but shall be considered included in the contract lump sum price for **TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).**

LANE AND RAMP CLOSURES

Prior to and after stage construction, temporary closures of I-290 will only be permitted at night during the allowable hours as listed in the Special Provision “Keeping the Expressway Open to Traffic”.

For all ramp closures the Contractor shall furnish and install signage per District Detail TC-08, as directed by the Engineer.

Revised 7/25/13

The Contractor shall coordinate the work such that no two (2) adjacent entrance or exit ramps in one direction of the expressway are closed at the same time. The closing of ramps, which are used as the detour route for other roadways or ramps, is prohibited. Should the Contractor fail to completely open, and keep open, the ramps to traffic in accordance with the above limitations, the Contractor shall be liable to the Department for liquidated damages as noted under the Special Provision, "Failure to Open Traffic Lanes to Traffic".

Special Ramp Closure Restrictions
Under the Maintenance of Traffic (MOT) Plan for this project, the Contractor will be permitted to close the following lanes and/or ramps for extended time periods as noted below:

Stages 1-4

- WB I-290 to Morgan Street Exit Ramp – The Contractor will be permitted to close this ramp for the duration of construction. Prior to closure, Detour Routing as noted in the plans or as approved by the Engineer shall be in effect.

The Contractor shall submit to the Department two (2) weeks ahead of time, in writing, the starting date for each of the extended ramp and/or lane closures. Approval from the Department is required prior to closing the ramp and/or lanes. Should the Contractor fail to complete the work and reopen the ramp to traffic within the allowable time limit, the Contractor shall be liable to the Department for liquidated damages as noted under FAILURE TO OPEN TRAFFIC LANES TO TRAFFIC

TRAFFIC STAGING

The following is a brief description of the traffic staging, which will be required from the Contractor during the reconstruction of the expressway. The following description shall be correlated with the Maintenance of Traffic (MOT) details located in the plans and these Special Provisions.

This suggested sequence of operations and summary for Traffic Staging does not, nor is it intended to, depict all the work that will be required by the Contractor for the maintenance of traffic during this Contract. This summary is given as an aid and guide for the Contractor's use to establish the necessary guidelines to insure a safe and as smooth as possible traffic operation during the duration of the Contract.

Stage 1

- Install temporary concrete barrier wall as shown in the structural plans to locate construction work zone on the east half of existing Morgan Street Bridge.
- Install proposed overhead bridge mounted sign on Racine Ave bridge structure over WB I-290 prior to the removal of the existing overhead bridge mounted sign on Morgan St Bridge structure. Installation shall be completed during non-peak hours and specified in the overhead sign panel placement and details and bridge mount sign structure plans.
- Locate Tunnel, Chicago and Bulkhead Tunnel, Chicago work shall be completed prior to riser shaft excavation.
- Coordinate with ComEd contractor removing and replacing existing ComEd conduits on east half of bridge. The removal and replacement of the existing utility shall be coordinated and at the discretion of ComEd.

Revised 7/25/13

- Remove existing Morgan Street bridge superstructure on the east side of stage removal line as shown in structural plans. Removal includes superstructure and approach slab within limits as specified in the structural plans and special provisions. Remove any abandoned CTA foundations interfering with the proposed north abutment, approach construction and proposed utility work. Superstructure removal must be planned to accommodate the work involved with temporary support of existing ComEd conduits.
- Install temporary shoring tower, temporary timber blocks footing at both approaches and the east temporary support beams per ComEd conduit support plans. The temporary shoring tower, timber blocks footing and support beam to be installed in coordination with ComEd.
- The demolition and reconstruction of superstructure shall be coordinated with the CTA. CTA track access is allowed during off-peak hours only. All CTA track access is shall be coordinated and performed in accordance to the discretion of the CTA. Refer to "CTA flagging and coordination" special provision. Partially remove the existing Morgan Street exit.
- Install braced excavation system at required locations per structural plans.
- Remove, relocate and reconstruct the water main connection pipes and riser shaft. The water main shutoff shall be as specified in the water main replacement and structural plans and per the special provisions.
- ComEd temporary conduit support structure must be protected during drilled shaft construction. Coordinate with ComEd contractor to ensure proper protection for both ComEd conduits and contractor's worksite.
- Drill and cast drilled shafts for abutments and wingwalls as shown in footing layout.
- Construct the north and south abutments and wingwalls as shown in structural plans.
-
- Construct retaining wall 5 (SN 016-1724) limits as shown in the structural plans. The construction of retaining wall 5 (SN 016-1724) should be coordinated with the riser shaft and water main connection construction.
- Remove the existing retaining wall per structural plans.
- Backfill the braced excavation along WB I-290 after the completion of water main connection pipes, riser shaft, and retaining wall 5 (SN 016-1724) per structural plans.
- Install the drainage structure and pipe between the ramp and gore and patch pavement.

Construct temporary pavement along outside shoulder on WB I-290 in front of retaining wall 5 (SN 016-1724).

Stage 2

- The east half of the bridge will continue to be constructed.
- Remove and store existing overhead bridge mounted signs on Racine Ave bridge structure over EB I-290. Install temporary overhead bridge mounted signs. Installation shall be completed during non-peak hours and specified in the overhead sign panel placement and details.
- The demolition and reconstruction of the east half of the north and south piers shall be coordinated with the CTA. CTA track access is allowed during off-peak hours only. All CTA track access shall be coordinated and performed in accordance to the discretion of the CTA. Refer to "CTA flagging and coordination" special provision.
- Remove median concrete barriers on the inside shoulders along EB and WB I-290.

Revised 7/25/13

- ComEd temporary conduit support structure must be protected during drilled shaft construction. Coordinate with ComEd contractor to ensure proper protection for both ComEd conduits and contractor's worksite. Drill and cast drilled shafts for east half of piers as shown in footing layout.
- Construct the east half of the piers 1 (south) and 2 (north) as shown in structural plans.
- Erect beams 7 thru 12 and construct all appurtenance superstructure work upon completion of beam erection as shown in the structural plans.
- Coordinate with the ComEd contractor for modifications to ComEd temporary conduit support structure. After beams are in place, the east wood box of ducts are to be placed on wood lagging between new bridge beams and must be protected.
- Remove east ComEd temporary conduit support structure beam.
- Construct the east deck and place inserts in deck for utility support.
- Coordinate with the ComEd contractor for the installation of ComEd ductbanks and ducts to the newly constructed east half of the bridge.
- Install city of Chicago conduits.
- Construct the east half of the north and south bridge approach pavement.
- Construct the Morgan Street exit ramp. Work includes but not limited to pavement, curb and gutter, drainage, and erosion control. Remove and reconstruct the east half of Morgan Street and Tilden Street intersection pavement, sidewalk, ADA ramps, drainage, water main connection, traffic signal and curb and gutter. Work performed shall be per standard 701701.
- Remove and reconstruct the east half of the Morgan Street and congress parkway intersection pavement, driveway at UIC parking lot #9, sidewalk, ADA ramps, drainage and curb and gutter. Work performed shall be per standard 701701.

  Install proposed overhead bridge mounted sign on Morgan Street bridge over WB I-290. Installation shall be completed during non-peak hours and specified in the overhead sign panel placement and details and bridge mount sign structure plans.

<u>Stage 3</u>

- Install temporary concrete barrier wall on the previously constructed east half of the bridge as shown in the structural plans.
- Coordinate with ComEd contractor removing and replacing existing ComEd conduits on west half of bridge. The removal and replacement of the existing utility shall be coordinated and at the discretion of ComEd.
- Remove existing Morgan Street Bridge on the west side of stage removal line as shown in structural plans. Removal includes superstructure, piers, footing, and/or piles within limits as specified in the structural plans and special provisions. Remove any abandoned CTA foundations interfering with the proposed north abutment, approach construction and proposed utility work. Superstructure removal must be planned to accommodate the work involved with temporary support of existing ComEd conduits.
- Install the west temporary support beams and timber blocks footing per ComEd conduit support plans and in coordination with ComEd.
- ComEd temporary conduit support structure must be protected during drilled shaft construction. Coordinate with ComEd contractor to ensure proper protection for both ComEd conduits and contractor's worksite. Drill and cast drilled shafts for west half of piers as shown in footing layout.

Revised 7/25/13

- Construct the remaining west half of the piers 1 (south) and 2 (north) as shown in structural plans.
- Erect beams 1 thru 6 and construct all appurtenance superstructure work upon completion of beam erection as shown in the structural plans.
- Coordinate with the ComEd contractor for modifications to ComEd temporary conduit support structure. After beams are in place, the west wood box of ducts are to be placed on wood lagging between new bridge beams and must be protected.
- Remove west ComEd temporary conduit support structure beam,
- Construct the west deck and place inserts in deck for utility support.
- Coordinate with the ComEd contractor for the installation of the ComEd ductbanks and ducts to the newly constructed west half of the bridge.
- Install proposed overhead bridge mounted sign structure on Morgan Street Bridge over EB I-290. Installation shall be completed during non-peak hours and shown in bridge mount sign structure plans.
- Construct the west half of the north and south bridge approach pavement.
- Replace concrete barrier wall (special) and provide patching along the inside shoulders along eb and WB I-290. Work shall be completed during non-peak hours utilizing night time closures as required. CTA track access is allowed during off-peak hours only. All CTA track access shall be coordinated and performed in accordance to the discretion of the CTA. Refer to “CTA flagging and coordination” special provision.
- Provide temporary pavement on the southwest quadrant of congress parkway to maintain an 11’ lane at all times prior to constructing the south bridge approach pavement and northwest quadrant of Morgan Street and congress parkway.
- Remove and reconstruct Morgan Street and congress parkway includes but not limited to pavement, sidewalk, ADA ramps, drainage, lighting, curb and gutter and fluted kneewall (special) from the west end of project limit to the beginning of the curb return. Congress parkway shall be sub-stage to maintain an 11’ lane at all times. Work performed shall be per standard 701601 and 701701. Remove and reconstruct the Morgan Street and Tilden Street intersection includes but not limited to the pavement, sidewalk, ADA ramps, drainage, traffic signal and curb and gutter. Tilden Street shall be sub-stage to maintain an 11’ lane at all times. Work performed shall be per standard 701701.
- Open NB and SB Morgan Street to vehicular traffic.

Stage 4

- Remove the temporary overheard bridge mounted signs on Racine Ave Bridge over EB I-290 and reerect existing overhead Bridge mounted. Installation shall be completed during non-peak hours and specified in the plans.
- Remove the temporary driveway at the UIC parking lot 9 when the permanent entrance is open to vehicular traffic and reconstruct the sidewalk and curb and gutter. Work performed shall be per standard 701801.
- Remove Morgan Street Bridge north and south existing abutments. Limits of removals as specified in structural plans and/or special provisions.
- Construct the outside shoulders along WB I-290 and EB I-290.
- Install concrete barrier, single face, 42 inch height along the outside shoulder of EB I-290.
- Re-grade the embankment along WB and EB I-290.
- Install all associated lighting, underpass lighting and its as specified in the plans.
- The installation of the ITS induction loops shall utilize night time dual lane closures. The two inside lanes will need to be closed together and alternated with the two outside lanes being closed together. The closures shall be per standards 701422 and/or 701446 (not shown in staging plans).
- Install final striping and signing per pavement marking and signing plans.
- Open Morgan Street exit ramp to vehicular traffic after all work completed.

Revised 7/25/13

FAILURE TO COMPLETE THE WORK ON TIME
Effective: September 30, 1985
Revised: January 1, 2007

Should the Contractor fail to complete the work on or before the completion date as specified in the Special Provision for "Completion Date Plus Working Days", or within such extended time as may have been allowed by the Department, the Contractor shall be liable to the Department in the amount of **$ 2,300** , not as a penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed.

The Contractor shall be liable to the Department in the amount of **$10,000**, not as a penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed for failing to complete the work on or before the interim completion date as specified in the Special Provision for "Completion Date Plus Working Days."

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work since the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This said mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The Department shall not be required to provide any actual loss in order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

COMPLETION DATE PLUS WORKING DAYS

Revise Article 108.05 (b) of the Standard Specifications as follows:

> "When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on April 30, 2014 except as specified herein.
>
> "All the work consisting of constructing the abutments, riser shaft, and water main along I-290 stated in Stage 1 must be completed on or before November 22, 2013."

Revised 7/25/13

"All sidewalk along east portion of work must be opened to pedestrian traffic for the reopening of the Morgan Street entrance to the CTA Blue Line station on or before March 1, 2014. Sidewalk must be complete and continuous along the entire project limits in order to allow uninterrupted pedestrian access to the reopened Morgan Street entrance."

The Contractor will be allowed to complete all clean-up work and punch list items within 10 working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for cleanup work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer."

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to both the completion date and the number of working days.

SUBMITTALS

There are elements of construction that may require long lead times between order and delivery to the project site for installation. The Contractor must prioritize timely submittals of shop drawings to minimize any delays in project execution.

Shop drawings for structural steel that is required to be galvanized must be submitted within one (1) week of the award. The submittal must be complete and include information on the steel as well as materials and processes proposed for galvanization. No additional compensation and no extension of calendar days will be made due to delays in receiving structural steel to the project area because of incomplete or delayed shop drawing submittals.

The Contractor shall provide notice to the Engineer concerning shop drawing submittal schedules and when shop drawing submittal deadlines may be delayed.

STORM SEWERS & SEWER CONNECTIONS TO CITY OF CHICAGO SEWERS
Effective: September 30, 1985
Revised: January 01, 2007

This work consists of constructing storm sewers or sewer connections to City of Chicago sewers, in accordance with Section 550 of the Standard Specifications and the details shown in the plans at the locations shown on the plans.

All storm sewers and sewer connections 21 inches (525 mm) in diameter and smaller shall be best quality tile socket pipe conforming to the specifications for Extra Strength Clay Pipe, ASTM C 700, except as otherwise specified on the plans. Sewer pipes shall be gasketed in such a manner as to produce a compression type joint conforming to the requirements of ASTM C 425.

TRAFFIC CONTROL PLAN
Effective: September 30, 1985
Revised: January 1, 2007

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS: 701101, 701106, 701301, 701311, 701401, 701411, 701421, 701422, 701451, 701501, 701601, 701701, 701801, 701901, 704001

DETAILS: Maintenance of Traffic – General Notes, Narrative, Typical Section, Stage 1, 2, 3 and 4, TC-08, TC-10, TC-12, TC-18, TC-21, TC-24, TC-27 and MUTCD TA-36.

SPECIAL PROVISIONS:

Traffic Control Plan,
Traffic Control and Protection (Arterials),
Public Convenience and Safety,
Keeping the Expressway Open to Traffic,
Failure to Open Traffic Lanes to Traffic
Traffic Control Surveillance (Expressways),
Temporary Information Signing,
Traffic Control for Work Zone Areas,
Traffic Control and Protection Expressways,
Staging and Interchange Restrictions,
Pavement Marking Removal (BDE),
Traffic Control Deficiency Deduction (BDE)

Revised 7/25/13

Revise the first sentence of Article 603.07 to read:

"**603.07 Protection Under Traffic.** After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b."

COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)
Effective: November 01, 2011

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

> Reclaimed Asphalt Pavement (RAP) may be blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP materials shall be crushed and screened. Unprocessed RAP grindings will not be permitted. The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of $\pm$ 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP.

Pages 21-25 have been deleted
The next page is 26

Revised 7/25/13

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)
Effective: April 1, 2011
Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

" (i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note)…….. 1030
(j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

Revised 7/25/13

STATUS OF UTILITIES TO BE ADJUSTED
Effective: January 30, 1987
Revised: January 24, 2013

Utility companies involved in this project have provided the following estimated durations:

NAME OF UTILITY	TYPE	LOCATION	Estimated Duration of Time for the Completion of Relocation or Adjustments
ComEd	Electric	Ductbank and Conduits (4 x 3) between ComEd Manhole near Harrison and Morgan intersection and ComEd manhole at Sta.3606+14 – Carried below the western portion of the existing bridge	ComEd has developed a plan to maintain live cables across the bridge throughout construction. The work related to this temporary connection will be installed and maintained jointly by the Contractor, ComEd and ComEd's contractor. The sequence of work and temporary structures are described in detail in the plans on sheets 92A through 92G. Advance work is expected to be complete prior to the start of bridge and roadway construction, including the removal of unused cables, removal of existing conduits, placement of protective shield on existing beams and other items. I The Contractor, ComEd and ComEd's contractor must work together to ensure that the live cables are maintained in working condition without impacting the operations of the Contractor. The adjustments and relocation of the electric cables will be ongoing throughout the construction of the western portion of the bridge. Constant communication between the Contractor, ComEd, ComEd's contractor and the Engineer is essential to accommodating the bridge and roadway reconstruction around the maintenance of live electrical distribution cables.

Revised 7/25/13

ComEd	Electric	Ductbank and Conduits (4 x 3) between ComEd Manhole near Harrison and Morgan intersection and ComEd manhole near Van Buren and Morgan intersection – Carried below the eastern portion of the existing bridge	ComEd has developed a plan to maintain live cables across the bridge throughout construction. The work related to this temporary connection will be installed and maintained jointly by the Contractor, ComEd and ComEd's contractor. The sequence of work and temporary structures are described in detail in the plans on sheets 92A through 92G. Advance work is expected to be complete prior to the start of bridge and roadway construction, including the removal of unused cables, removal of existing conduits, placement of protective shield on existing beams and other items. I The Contractor, ComEd and ComEd's contractor must work together to ensure that the live cables are maintained in working condition without impacting the operations of the Contractor. The adjustments and relocation of the electric cables will be ongoing throughout the construction of the eastern portion of the bridge. Constant communication between the Contractor, ComEd, ComEd's contractor and the Engineer is essential to accommodating the bridge and roadway reconstruction around the maintenance of live electrical distribution cables.
ComEd	Electric	ComEd Manhole on Morgan Street – Sta. 3606+14.30	ComEd will adjust manhole to final grade.

Revised 7/25/13

City of Chicago	Electric / Communications	Conduits from south of project limits and City Electric manhole at Sta.3606+25	Removal of conduits across Morgan Street bridge is expected to completed by ComEd.. The City of Chicago will pull any necessary cable or fiber optic after completion of all conduits and connections.
City of Chicago	Electric / Communications	Conduits from south of project limits and City Electric manhole at Sta.3606+25	Reconstruction of conduits across Morgan Street bridge is to be completed by the Contractor. The City of Chicago will pull any necessary cable or fiber optic after completion of all conduits and connections.
City of Chicago	Electric	Conduits and cables serving existing roadway lighting	Contractor will complete this work.
City of Chicago	Office of Emergency Management	Pole Mounted Cameras – Morgan Street Exit Ramp	City will remove existing cameras in advance of any existing pole removals. Contractor will coordinate with the City to install cameras after proposed pole(s) are installed.
City of Chicago	Water	36” Watermain Crossing under I-290, Riser Structure, Connections to Existing 30”	Reconstruction is included within this contract. Chicago Department of Water Management to de-energize and energize main. Shutdown periods and coordination requirements for the existing watermain are identified within the item description for MORGAN WATER MAIN RISER RELOCATION (CDWM). Contractor must coordinate with City of Chicago Department of Water Management.
City of Chicago	Water	Fire Hydrant on Morgan Street – Sta. 3602+33.43	Adjustment will be performed by City of Chicago Department of Water Management. Contractor must coordinate with City of Chicago Department of Water Management.

Revised 7/25/13

City of Chicago	Water	Fire Hydrant on Congress Parkway – Sta. 3306+34	Temporary relocation or removal must take place prior to installation of temporary pavement to maintain traffic flow for eastbound Congress Parkway. Work will be performed by City of Chicago Department of Water Management. Contractor must coordinate with City of Chicago Department of Water Management. Reinstallation of the fire hydrant must be coordinated with the City of Chicago Department of Water Management prior to the completion of proposed pavement, curb and gutter and sidewalk in the area. The City of Chicago Department of Water Management will reinstall a fire hydrant at this location.
City of Chicago	Water	8” Water Main along Morgan Street and Congress Parkway	Relocation of this water main is required due to the proposed foundations for the proposed approach slab to the south of the new Morgan Street Bridge. Contractor must coordinate with City of Chicago Department of Water Management.
City of Chicago	Traffic	Morgan / Morgan Exit Ramp / Tilden Intersection Traffic Signals	Removal of existing system and Installation of proposed manholes, controller, cables, conduits, poles and signals will be completed by contractor.
Peoples Energy	Gas	Morgan Street – Beginning North of approximate Sta.3606+50	Valve adjustment may be necessary due to pavement reconstruction and profile adjustment – no coordination with Peoples Energy as of the date of this specification

Revised 7/25/13

Chicago Transit Authority	Traction Power Supply Rail	Within median of I-290	CTA has indicated that they may remove or relocate the electrified third rail within the bridge and barrier wall reconstruction limits. Contractor must coordinate with Chicago Transit Authority.
Chicago Transit Authority	Communications	Within median of I-290	CTA has indicated there are signal and other communication cable utilities within the CTA ROW. Locations of existing facilities are to be provided. Contractor is expected to coordinate with Chicago Transit Authority and avoid any and all impacts to all communication systems.

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

In accordance with 605 ILCS 5/9-113 of the Illinois Compiled Statutes, utility companies have 90 days to complete the relocation of their facilities after receipt of written notice from the Department. The 90-day written notice will be sent to the utility companies after the following occurs:

1) Proposed right of way is clear for contract award.
2) Final plans have been sent to and received by the utility company.
3) Utility permit is received by the Department and the Department is ready to issue said permit.
4) If a permit has not been submitted, a 15 day letter is sent to the utility company notifying them they have 15 days to provide their permit application. After allowing 15 days for submission of the permit the 90 day notice is sent to the utility company.

Any time within the 90 day relocation period the utility company may request a waiver for additional time to complete their relocation. The Department has 10 days to review and respond to a waiver request.

BRIDGE APPROACH PAVEMENT CONNECTOR (SPECIAL)

Description. This work shall consist of a bridge approach pavement connector to connect and transition the pavement of the approach slab and roadway at the locations shown on the plans. The pavements shall be constructed according to the details shown on the plans.

Materials. Materials shall meet the applicable requirements of Division 1000 of the Standard Specifications.

Revised 7/25/13

Revise the Aerial Electric Cable Properties table of Article 1066.03(a)(3) to read:

Aerial Electric Cable Properties

Phase Conductor				Messenger wire	
Size AWG	Stranding	Average Insulation Thickness		Minimum Size AWG	Stranding
		mm	mils		
6	7	1.1	(45)	6	6/1
4	7	1.1	(45)	4	6/1
2	7	1.1	(45)	2	6/1
1/0	19	1.5	(60)	1/0	6/1
2/0	19	1.5	(60)	2/0	6/1
3/0	19	1.5	(60)	3/0	6/1
4/0	19	1.5	(60)	4/0	6/1

Add the following to Article 1066.03(b) of the Standard Specifications:

"Cable sized No. 2 AWG and smaller shall be U.L. listed Type RHH/RHW and may be Type RHH/RHW/USE. Cable sized larger than No. 2 AWG shall be U.L. listed Type RHH/RHW/USE."

Revise Article 1066.04 to read:

"Aerial Cable Assembly. The aerial cable shall be an assembly of insulated aluminum conductors according to Section 1066.02 and 1066.03. Unless otherwise indicated, the cable assembly shall be composed of three insulated conductors and a steel reinforced bare aluminum conductor (ACSR) to be used as the ground conductor. Unless otherwise indicated, the code word designation of this cable assembly is "Palomino". The steel reinforced aluminum conductor shall conform to ASTM B-232. The cable shall be assembled according to ANSI/ICEA S-76-474."

Revise the second paragraph of Article 1066.05 to read:

"The tape shall have reinforced metallic detection capabilities consisting of a woven reinforced polyethylene tape with a metallic core or backing."

Pages 101-109 have been deleted
The next page is 110

Revised 7/25/13

PIPE UNDERDRAINS FOR STRUCTURES
Effective: May 17, 2000
Revised: January 22, 2010

Description. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

Construction Requirements. All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

Pages 112-115 have been deleted.
The next page is 116

Revised 7/25/13

GRANULAR BACKFILL FOR STRUCTURES
Effective: April 19, 2012
Revised: October 30, 2012

Revise Section 586 of the Standard Specifications to read:

SECTION 586. GRANULAR BACKFILL FOR STRUCTURES

586.01 Description. This work shall consist of furnishing, transporting and placing granular backfill for abutment structures.

586.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Fine Aggregate	1003.04
(b) Coarse Aggregates	1004.05

CONSTRUCTION REQUIREMENTS

586.03 General. This work shall be done according to Article 502.10 except as modified below. The backfill volume shall be backfilled, with granular material as specified in Article 586.02, to the required elevation as shown in the contract plans. The backfill volume shall be placed in convenient lifts for the full width to be backfilled. Unless otherwise specified in the contract plans, mechanical compaction will not be required. A deposit of gravel or crushed stone placed behind drain holes shall not be required. All drains not covered by geocomposite wall drains or other devices to prevent loss of backfill material shall be covered by sufficient filter fabric material meeting the requirements of Section 1080 and Section 282 with either 6 or 8 oz/sq yd (200 or 270 g/sq m) material allowed, with free edges overlapping the drain hole by at least 12 in. (300 mm) in all directions.

Revised 7/25/13

The granular backfill shall be brought to the finished grade as shown in the contract plans. When concrete is to be cast on top of the granular backfill, the Contractor, subject to approval of the Engineer, may prepare the top surface of the fill to receive the concrete as he/she deems necessary for satisfactory placement at no additional cost to the Department.

586.04 Method of Measurement. This work will be measured for payment as follows.

(a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a).

(b) Measured Quantities. This work will be measured for payment in place and the volume computed in cubic yards (cubic meters). The volume will be determined by the method of average end areas behind the abutment.

586.05 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for GRANULAR BACKFILL FOR STRUCTURES.

KEEPING THE EXPRESSWAY OPEN TO TRAFFIC
Effective: March 22, 1996
Revised: February 9, 2005

Whenever work is in progress on or adjacent to an expressway, the Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards and the District Freeway details. All Contractors' personnel shall be limited to these barricaded work zones and shall not cross the expressway.

The Contractor shall request and gain approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer (847-705-4151) twenty-four (24) hours in advance of all daily lane, ramp and shoulder closures and seventy-two (72) hours in advance of all permanent and weekend closures on all Freeways and/or Expressways in District One. This advance notification is calculated based on workweek of Monday through Friday and shall not include weekends or Holidays.

LOCATION: I-290 @ Morgan Street Prior to Stage Construction

WEEK NIGHT	TYPE OF CLOSURE	ALLOWABLE LANE CLOSURE HOURS		
Sunday - Thursday	1-Lane	8:00 PM	to	5:00 AM
	2-Lane	11:00 PM	to	5:00 AM
	3-Left Lane*	1:00 AM	to	5:00 AM
Friday	1-Lane	10:00 PM (Fri)	to	8:00 AM (Sat)
	2-Lane	11:59 PM (Fri)	to	6:00 AM (Sat)
	3-Left Lane*	NOT		ALLOWED
Saturday	1-Lane	10:00 PM (Sat)	to	10:00 AM (Sun)
	2-Lane	11:59 PM (Sat)	to	8:00 AM (Sun)
	3-Left Lane*	1:00 AM (Sun)	to	7:00 AM (Sun)

*3 lane closures will only be allowed from the left & are only approved for specific operations.

LOCATION: I-290: @ Morgan St. During Stage Construction

WEEK NIGHT	TYPE OF CLOSURE	ALLOWABLE LANE CLOSURE HOURS		
Sunday - Thursday	1-Lane	11:00 PM	to	5:00 AM
	2-Left Lane*	1:00 AM	to	5:00 AM
Friday	2-Lane	11:59 PM (Fri)	to	6:00 AM (Sat)
	3-Left Lane*	NOT		ALLOWED
Saturday	2-Lane	11:59 PM (Sat)	to	8:00 AM (Sun)
	3-Left Lane*	1:00 AM (Sun)	to	7:00 AM (Sun)

* 3 lane closures will only be allowed from the left & are only approved for specific operations

In addition to the hours noted above, temporary shoulder and partial ramp closures are allowed weekdays between 9:00 A.M. and 3:00 P.M. and 7:00 P.M. and 5:00 A.M.

Full Expressway Closures will only be permitted for a maximum of 15 minutes at a time during the low traffic volume hours of 1:00 A.M. to 5:00 A.M. Monday thru Friday and from 1:00 A.M. to 7:00 A.M. on Sunday. During Full Expressway Closures, the Contractor will be required to close off all lanes except one, using Freeway Standard Closures. Police forces should be notified and requested to close off the remaining lane at which time the work item may be removed or set in place. The District One Traffic Operations Department **shall be** notified (847-705-4151) at least 3 working days (weekends and holidays DO NOT count into this 72 hours notification) in advance of the proposed road closure and will coordinate the closure operations with police forces.

Revised 7/25/13

All stage changes requiring the stopping and/or the pacing of traffic shall take place during the allowable hours for Full Expressway Closures and shall be approved by the Department.
Temporary ramp closures for service interchanges will only be permitted at night during the restricted hours listed for temporary one-lane closures within the project limits. However, no two (2) adjacent entrance and exit ramps in one direction of the expressway shall be closed at the same time. Freeway to freeway (system interchange) full ramp closures for two lane ramps will not be permitted. Partial ramp closures of system ramps may be allowed during the 1-lane closure hours above. System ramp full closures for single lane ramps are only permitted for a maximum of four (4) hours.

- between the hours of 1:00 a.m. and 5:00 a.m. on Monday thru Friday
- between the hours of 1:00 a.m. and 6:00 a.m. on Saturday, and
- between the hours of 1:00 a.m. and 7:00 a.m. on Sunday.

The Contractor shall furnish and install large (48" X 48") "DETOUR with arrow" signs as directed by the Engineer for all system ramp closures. In addition, one portable changeable message sign will be required to be placed in advance of the ramp closure. The cost of these signs and PCMS board shall be included in the cost of traffic control and protection (6 static signs maximum per closure).

Should the Contractor fail to completely open, and keep open, the ramps to traffic in accordance with the above limitations, the Contractor shall be liable to the Department for liquidated damages as noted under the Special Provision, "Failure to Open Traffic Lanes to Traffic".

All daily lane closures shall be removed during adverse weather conditions such as rain, snow, and/or fog and as determined by the Engineer.

Additional lane closure hour restrictions may have to be imposed to facilitate the flow of traffic to and from major sporting events and/or other events.

All lane closure signs shall not be erected any earlier than one-half (1/2) hour before the starting hours listed above. Also, these signs should be taken down within one-half (1/2) hour after the closure is removed.

The Contractor will be required to cooperate with all other contractors when erecting lane closures on the expressway. All lane closures (includes the taper lengths) without a three (3) mile gap between each other, in one direction of the expressway, shall be on the same side of the pavement. Lane closures on the same side of the pavement with a half (1/2) mile or less gap between the end of one work zone and the start of taper of next work zone should be connected. The maximum length of any lane closure on the project and combined with any adjacent projects shall be three (3) miles. Gaps between successive permanent lane closures shall be no less than two (2) miles in length.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at the locations approved by the Engineer.

Revised 7/25/13

FAILURE TO OPEN TRAFFIC LANES TO TRAFFIC
Effective: March 22, 1996
Revised: February 9, 2005

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified under the Special Provisions for "Keeping the Expressway Open to Traffic", the Contractor shall be liable to the Department for the amount of:

I-290 and Ramps:	All Stages One lane or ramp blocked = $1,700 /15 min. Two lanes blocked = $3,500 /15 min.

Revised 7/25/13

Jacking of conduit under Railroad tracks shall be accomplished in accordance with the applicable portions of the special provision for rigid steel conduit. In the event that settlement develops within a period of two (2) months from the date of installation and the Railroad is put to
extra expense for track raising and surfacing, the Contractor shall reimburse the Railroad directly for any such expense incurred.

Any damage to the Railroad tracks, or other existing Railroad facilities caused by the Contractor's operations shall be replaced or repaired by the Railroad at the Contractor's expense.

Upon final completion of the work, the Contractor shall remove all materials, falsework, rubbish and/or temporary structures and leave the Railroad's premises in as good condition as they were prior to commencement of work under this contract.

Reimbursement of Costs: The cost of all engineering inspection, switchmen, flagmen, or other workmen furnished by the Railroad, and all work performed by the Railroad for the convenience of the Contractor, together with all incidental costs thereof, shall be paid directly to the Railroad by the Contractor.

The cost of providing engineering inspection and flagmen will be reimbursed to the Contractor in accordance with Section 107.12 of the Standard Specifications for Road and Bridge Construction. No other compensation will be provided for railroad services.

REMOVAL OF EXISTING STRUCTURES NO. 1

Description. This item shall consist of furnishing all labor, equipment and materials necessary for the removal and disposal of the existing Morgan Street. Bridge over Interstate 290 and CTA. The work shall be done in accordance with the applicable portions of Section 501 of the Standard Specifications.

All structure elements of the Morgan Street Bridge over I-290 including, but not limited to, abutments, abutments' footings, piers, piers' footing, beams, bearings, diaphragms, deck, sidewalk railing and fence, piles (to a depth as noted on the plans or directed by the Engineer) shall be included in Removal of Existing Structures No. 1. Included in this item shall also be removal of existing approach bents and piles (interfering with new construction) as shown on the plans. Removal of existing approach slabs shall be included with FOUNDATION REMOVAL (quantities provided in Civil plans).

Included in the Removal of Existing Structures No. 1 shall be partial or complete removal of the southwest, southeast, and northwest wing walls to limits noted on the plans.

Revised 7/25/13

Included in the Removal of Existing Structures No. 1, shall be the complete or partial removal (to a minimum depth of 1 foot from proposed structure) of any abandoned structure elements that may interfere with the construction of the new bridge, but not including abandoned CTA elevated pier foundations. These removals will be paid for under the item FOUNDATION REMOVAL (quantities provided in Civil plans). Historical drawing of the construction of Morgan Street over I-290, dated 6/25/52 indicate six (6) CTA spread footing foundations bearing at elevation +7.0 CCD and two (2) circular abandoned CTA subpiers of unknown depth and diameter located behind the existing north abutment. These elements shall be removed or partially removed as required.

Included in the Removal of Existing Structures No. 1 shall be the soil retention system adjacent to the north face of the existing Pier 1. The work shall include the concrete saw cutting of the existing footing, drilling for the anchor bolts, the 12" x 12" timber blocks, the joint filler between the remaining footing and the new Pier 1 crashwall, and all necessary backfilling required to meet existing grade as directed by the Engineer. See Special Provision for Soil Retention System No. 1.

Included in the Removal of Existing Structures No. 1 shall be the removal of items and appurtenances located on, attached or adjacent to the bridge including, but not limited to, bicycle racks, CTA appurtenances and newspaper stands and highway sign structures attached to the fascia of the bridge.

Included in the Removal of Existing Structures No. 1 shall be coordination with the City of Chicago, Bureau of Electricity (BOE) for the removal of street light and traffic signal poles and equipment by the BOE. The Contractor shall remove all embedded conduits and hand or manholes. Conduits (and asbestos insulation) attached to the existing structure using supports and hangers are anticipated to be removed by the ComEd contractor prior to the beginning of work under this item. The work by the ComEd contractor includes the City of Chicago existing conduits (and asbestos insulation). The City of Chicago will remove cables and wire in advance of the conduit removal.

Existing conduits and wires owned by ComEd will be removed by ComEd. Included in the Removal of Existing Structures No. 1 will be any coordination with ComEd by the Contractor required for the removal of ComEd’s conduits. The removal of the bridge shall be staged and the limits of removal and schedule of removal shall be coordinated with ComEd so that ComEd can maintain the existing electrical service that is presently attached to the existing bridge.

The existing bridge is adjacent to the existing entrance to the CTA Blue Line station and over the CTA rail lines. All demolition activity must protect CTA property. Any damage to CTA property must be restored to the satisfaction of the CTA at the Contractor’s expense.

Revised 7/25/13

The close proximity of the work activities to active CTA rail tracks imposes additional safety requirements. All activities over or in CTA right-of-way must comply to all CTA requirements.

The work shall conform in every respect to all environmental, state and local regulations regarding construction requirements, the protection of adjacent properties, as well as dust and noise control.

Prior to commencing work under this Item, the Contractor shall verify the location of all existing utilities in the area. The Contractor shall submit drawings and written documentation to the Engineer of such verification. All work under this Item shall be executed in such a manner so as not to disturb or damage the existing utilities.

All materials removed by the Contractor under this Item shall become the property of the Contractor and shall be disposed of by the Contractor off the site and in a lawful manner meeting all IDOT Policies and Procedures.

Existing piles that are determined and noted on plan to be completely removed will be paid for separately as PILE EXTRACTION

Traffic Operations
The traffic using Interstate I-290 must remain open to all lanes of traffic during demolition activities unless the Contractor has secured the necessary permits from the Illinois Department of Transportation to allow for temporary closure of lanes.

Rail Operations
The CTA rail traffic must remain operational at all times during demolition activities unless the Contractor has secured the necessary permits from CTA to allow for temporary halting of rail traffic.

Method of Measurement. Removal of Existing Structures No. 1 shall be measured for payment by each of the structure removed including additional elements noted above.

Basis of Payment. The work under this Item will be paid for at the Contract unit price each for REMOVAL OF EXISTING STRUCTURES NO. 1, as indicated on the Plans and as specified herein.

PILE EXTRACTION

Description. This item shall consist of furnishing all labor, equipment and materials necessary for the extraction of timber piles at locations shown on the plans, or not shown, including all pertinent work such as removal and satisfactory disposal of adjacent concrete mats or other obstructions interfering with the removal operations as directed by the Engineer. The work shall be done in accordance with the applicable portions of Section 501 of the Standard Specifications.

Revised 7/25/13

The work shall conform in every respect to all environmental, state and local regulations regarding construction requirements, the protection of adjacent properties, as well as dust and noise control.

Prior to commencing work under this Item, the Contractor shall verify the location of all existing utilities in the area. The Contractor shall submit drawings and written documentation to the Engineer of such verification. All work under this Item shall be executed in such a manner so as not to disturb or damage the existing utilities.

The work shall consist of removing all obstructions interfering with the pile extraction in the vicinity of the proposed caissons as shown on the plans. Excavation by hand may be required to expose the top of timber piles which interfere with the proposed drilled shafts construction. The Contractor shall extract the piles in a way so that the piles will not break. All excavation required for satisfactory completion of this work shall be considered incidental to this item.

The Contractor shall obtain all approvals and permits required for all operations as may be required for the removal of the existing timber piles.

All materials removed under this Item shall become the property of the Contractor and shall be disposed of by the Contractor off the site and in a lawful manner meeting all IDOT Policies and Procedures.

Construction Requirements. The Contractor shall submit drawings, complete with a list of equipment and methods the contractor proposes to use for the removal and disposal of all existing timber pile dolphins to the Engineer for review. Further, the Contractor shall submit copies of all approvals and permits for the work under this Item to the Engineer. All work under this Item shall be performed so as not to disturb adjacent facilities or construction. The removal shall include all timber piles and related materials encountered at installation of any drilled shaft. If an existing timber pile breaks during removal operations, the Contractor is required to remove the remaining remnants of the existing timber pile prior to installation of any new drilled shafts.

Method of Measurement. Removal of existing pile shall be measured for payment by the number (each) of the complete pile. No other or separate measurement will be made for this Item.

Basis of Payment. The work under this Item will be paid for at the Contract unit price each for PILE EXTRACTION, as indicated on the Plans and as specified herein.

Revised 7/25/13

DECORATIVE RAILING (PARAPET MOUNTED)

The railing shall conform to Section 503 and 509 of the Standard Specifications except as herein modified.

Description. This Work consists of furnishing and installing Chicago Barrier aluminum railing system of the type specified at locations shown on the Plans or directed by the Engineer, and in accordance with the details shown in the Plans.

Materials: Aluminum alloys 6063-T6 and 6061-T6 can be used interchangeably at the option of the manufacturer, with the requirements that the minimum physical properties must be 2500 PSI yield, 30,000 PSI ultimate yield, and 10% elongations.

Color: Clear anodized with minimum 1.0 mil thickness. Color samples are to be submitted to the Engineer for approval.

General. The rail sections must be factory pre-bent into curves to form radii rather than employing angular splices at the expansion joints. Any bending must be done prior to finishing to avoid distortion of the rail and/or damage to the finishing properties of the alloy.

Submittals:

1. Manufacturer's certification that aluminum rail and connections meet IDOT and CDOT specifications.
2. Shop drawings including wall and railing system.
3. Color sample of railing.
4. Mockup of railings.
5. Calculations signed and sealed by an Illinois Registered Professional Structural Engineer

Coordination: Coordinate with Chicago Wall concrete barrier manufacturer, fence manufacturer, electrical and traffic surveillance requirements to install conduit and junction boxes.

Complete shop drawings and calculations by an Illinois Registered Professional Structural Engineer, and field installation drawings must be submitted to the Engineer for approval prior to ordering materials, commencement of any shop fabrication, and/or finishing.

Revised 7/25/13

Aluminum Railing: The aluminum rail system must be in accordance with the Plans and with AASHTO-AGC-ARTBE Joint Committee Task Force 13 Report "A Guide to Standardized Highway Barrier Hardware." This system must meet and match the color, shape, and composition of the Aluminum Railing as furnished and installed for the North Lake Shore Drive Project. Alternate systems that meet all requirements and specifications will be considered by the Engineer if submitted for approval at the time of the Pre-Bid Conference.

There must be a single source responsibility for the aluminum rail system, which will include but not be limited to the aluminum railing, the aluminum supports (stanchion system), anodizing, splices, color, thief protection system, structural calculations, and the design of all components above the top horizontal plane of the concrete wall system including bolts, fasteners, welding, shop fabrication, field erection, anchoring system, and freight etc. Bolts, studs, and embedment required must also be by the Contractor.

Design Requirements. The design requirements must be as set forth in the AASHTO Task Force 13 Report ("A Guide to Standardized Highway Barrier Hardware")

The cross section must conform to an ellipse 4” x7 7/8”.

Exposed fasteners must be stainless steel. All bolts must be A307.

No field welding will be permitted.

Structural Requirements. The aluminum railing system must conform to the requirements of AASHTO "Standard Specifications for Highway Bridges" Section 2.7.

All thickness and material specifications requirements, unless otherwise approved by the Engineer, must be based on certifications based on structural calculations provided by the Contractor.

Acceptable Rail Manufacturers:

1. Valentine & Company, Middletown, OH.
2. Approved Equal.

Method of Measurement. This Work will be measured for payment, complete in place, per foot.

Basis of Payment. This Work will be paid for at the Contract Unit Price per foot for DECORATIVE RAILING (PARAPET MOUNTED), which price includes furnishing and placing all material required, including all labor, equipment and incidentals necessary to complete the Work as herein specified.

Revised 7/25/13

CONSTRUCTION VIBRATION MONITORING

Description. This work consists of monitoring buildings susceptible to movement. Additional monitoring of facilities may be required and these will be determined by the Engineer during the work. This additional monitoring is included in this item. The Contractor shall monitor adjacent buildings for both vibration and displacement. The Contractor shall designate a minimum of two monitoring point locations for each of the structures located at 411 South Sangamon Street (Sangamon Lofts), 933 West Van Buren, 410 South Morgan (Automatic Lofts), 1040 West Harrison Street (UIC EPASW Building) and 412 South Peoria Street (UIC CUPPA Hall Building). The monitoring point locations shall be spaced as evenly as possible along the building edge at the interface between the bridge and the building properties. The monitoring points for vibration and displacement do not have to be at the same location. The Contractor shall coordinate with the Engineer and building owners to ensure the proposed monitoring locations are acceptable to the building and accessible to both the Contractor and the Engineer. Proposed locations of building vibration and displacement monitoring points are to be submitted to the Engineer for approval prior to construction.

Vibration Monitoring: The Contractor shall employ the services of a seismic monitoring consultant as approved by the Engineer. Monitoring point locations and frequency of data collection shall be as determined by the Contractor's Consultant and are subject to the approval of the Engineer. All vibration monitoring devices (seismographs) shall be attached to the floor of the buildings they are monitoring. The limit of acceptable vibration (Limiting Value) at structure shall be 0.5 in/s (inches per second) peak particle velocity. The Contractor's consultant may propose a Threshold Value of vibration for Engineer's review. When the Threshold Value is reached, the Contractor must stop the work and meets with the Engineer to determine the best course of action to reduce the vibrations (or minimize further displacement). Once the Limiting Value is reached, the work is stopped and a more formal response plan is submitted for approval before work can proceed. All seismographs on the project shall be programmed to actuate an alarm when the Threshold Value is exceeded. The alarm notification protocol shall consist of immediate dialing of mobile telephone numbers of the Engineer and the Contractor.

If the Limiting Value is exceeded, all vibration inducing work within 100 feet of the existing building shall be stopped. Work may resume at the direction of the Engineer with the Contractor continuing to closely monitor vibration in the area of the alarm. If the work is stopped because the Limiting Value is exceeded there will be no additional compensation nor any additional time extensions granted. Any change in construction methods to avoid exceeding Limiting Value will not be grounds for additional compensation.

Revised 7/25/13

Displacement Monitoring: The Contractor shall provide the exact horizontal and vertical location of the displacement monitoring points to the Engineer prior to the commencement of any construction activities. The data shall be presented in a tabular format and shall include horizontal positions (stations and offsets or Northing and Easting) as well as vertical elevation (Chicago City Datum) to a minimum of one hundredth of a foot (0.01').

Monitoring Frequency: During the beginning phase of each stage of demolition and construction, displacement monitoring shall be performed at the beginning and end of each work day at a minimum. These surveying intervals are the minimum required, and more frequent monitoring may be required by the Engineer as field conditions warrant.

If after a period of time resulting in movements that are small in magnitude, monitoring frequency can be reduced to a frequency as established by the Engineer. If resulting movements become random in nature and/or large in magnitude, the frequency shall be increased as directed by the Engineer. The frequency of readings will be dictated by the phase of current construction but must be sufficient to detect serious movements so that corrective measures can be initiated immediately.

Monitoring readings for displacement shall be dated, recorded, and reported to the Engineer the same day the readings are taken.

Vibration monitoring shall be a continuous and uninterrupted process. During demolition within 50 feet of a vibration monitoring point location, the Contractor shall report the results of the largest amplitude of vibration to the Engineer on the same day. At all other times the vibration report shall be submitted weekly.

Construction Requirements**.** Before the start of construction, the Contractor will complete a preconstruction inspection of the 933 West Van Buren and Automatic Lofts Buildings. Before the start of construction, the Contractor will complete a preconstruction inspection of the existing buildings listed above. Readily visible conditions and distress such as unusual cracks in concrete or masonry, obvious signs of leakage, settlement, etc. will be photographically recorded and documented. The Contractor will also make a DVD survey to provide a more complete general record of conditions in those areas. The interior survey shall include the first floor and basement (if existing) within 30 feet of the exterior wall closest to the project site. The exterior survey will include the exterior wall closest to the project site and the two adjacent walls. The survey will be performed from grade without the use of magnification devices. At the conclusion of the pre-construction field work, a report shall be prepared by the Contractor presenting the observed existing conditions and shall include written, videotaped and photographic documentation. This record shall then be used by the Contractor as a basis for comparison to distresses that may occur after the survey. The locations of the displacement monitoring points shall be included in the Report.

Revised 7/25/13

The Contractor will use the preconstruction report to aid in the selection of the displacement monitoring points. The Contractor must devise means and methods of construction that will not exceed the specified vibration limits. The Contractor is advised that particularly careful demolition requirements will be required at the edges of the bridge where the property line is immediately adjacent to the area of construction.

Corrective Measures. If at any time resulting movements are serious in nature or cause damage to facilities or property, the Contractor shall stop work immediately and the necessary corrective measures shall be initiated as directed by the Engineer. Damage as a result of the work activity of the Contractor will be corrected by the Contractor as determined by the Engineer. No additional compensation will be due the Contractor for repairing these facilities. The Contractor will not be entitled to any claim of delay for stopping of working to make correct measures.

Submittals. The Contractor must submit a Vibration and Displacement Control Plan to the Engineer for Approval. The Plan must be approved prior to the commencement of work. The plan must include, but is not limited to the following:

- Locations of all monitoring points (Vibration and displacement).
- Procedure and outline for how the data will be provided to the Engineer.
- Type of seismograph to be used (Submit to Engineer for Approval).
- List of pneumatic equipment to be used during demolition operations.
- Contact information for the Seismic Monitoring consultant.
- Timetable that outlines the duration that each monitoring point will be maintained and checked.

A “Response Plan” to detail how the contractor will address any concerns with vibration or displacement.

Additional Submittals include:

- Daily reports of all displacement monitoring
- Weekly reports of all vibration monitoring

Method of Measurement. The work under this item as described herein will not be measured separately. It will be paid for as lump sum.

Basis of Payment. This work will be paid at the contract unit price per lump sum for CONSTRUCTION VIBRATION MONITORING which payment shall be full compensation for the work described herein and as directed by the Engineer.

DETECTABLE WARNINGS (SPECIAL)

Description: Work under this item shall consist of installing cast iron detectable warning tiles on ADA curb ramps according to the latest Chicago Department of Transportation ADA Standards. Work shall be performed according to Section 424 of the IDOT Standard Specifications for Road and Bridge Construction, except as herein modified.

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(b) Fine aggregate for backfilling material shall meet a FA 6 gradation in accordance with Article 1003.04 of the IDOT Standard Specifications.

(c) City of Chicago standard frame and lids shall be in accordance with the City of Chicago Department of Water Management Standard Specifications for Water and Sewer Main Construction.

General Requirements. An ADA compliant manhole frame and closed lid shall be placed on all manholes located within the cross walk or as directed by the Engineer.

QC/QA Requirements. All precast structures shall be from an IDOT approved source.

Basis of Payment. This work will be paid for at the contract unit price per each for MANHOLES, TYPE B, 4'- DIAMETER, FRAME AND CLOSED LID (CITY OF CHICAGO.

STORM SEWER ADJACENT TO OR CROSSING WATER MAIN (CDOT)
COMBINED SEWER ADJACENT TO OR CROSSING WATER MAIN (CDOT)

Description. This work consists of constructing storm or combined sewer adjacent to or crossing a water main, at the locations shown on the plans. The material and installation requirements shall be according to the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and the applicable portions of Section 550 of the Standard Specifications; which may include concrete collars and encasing pipe with seals if required.

Pipe materials shall meet the requirements of Sections 40 and 41-2.01 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except PVC pipe will not be allowed. Ductile-Iron pipe shall meet the minimum requirements for Thickness Class 50.

Encasing of standard type storm sewer, according to the details for "Water and Sewer Separation Requirements (Vertical Separation)" in the "STANDARD DRAWINGS" Division of the "Standard Specifications for Water and Sewer Main Construction in Illinois", may be used for storm sewers crossing water mains.

Method of Measurement. Storm or Combined Sewers installed adjacent to or crossing water main shall be paid for per foot for Storm or Combined Sewer (Water Main Requirements) (CDOT), of the diameter specified.

Basis of Payment. This work will be paid according to Article 550.10 of the Standard Specifications, except the pay items shall be STORM SEWER (WATER MAIN REQUIREMENTS) and COMBINED SEWER (WATER MAIN REQUIREMENTS) (CDOT), of the diameter specified.

VCP COMBINED SEWER (CDOT) 8"

Description. Work under these items shall be performed according to Section 550 of the IDOT Standard Specifications and the current City of Chicago Department of Water Management (DWM) Regulations for Sewer Construction and Stormwater Management and DWM Standard Specifications for Water and Sewer Main Construction, except as herein modified.

This work shall consist of constructing combined sewers at locations designated by the Engineer, including any dewatering, sheeting and/or shoring required to perform the work as specified.

Materials**.** Materials shall be per the most current DWM Standard Specifications for Water and Sewer Main Construction:

Revised 7/25/13

Construction Requirements**.** Where a sewer or drain connection is to be made to a proposed E.S.C.P. storm sewer a manufactured Y or T branch pipe shall be installed in the sewer at this junction.

Where a sewer or drain connection is to be made to a proposed R.C.P. sewer a pipe section with a predrilled hole of the proper diameter shall be installed at this junction.

Where a storm sewer or drain connection is made to an existing sewer, a “T” or “Y” saddle shall be installed. The circular opening in the existing storm sewer must be core drilled to the same size as the external diameter of the proposed storm sewer or drain connection. The protrusion of the proposed sewer into the existing sewer must not exceed a maximum of 1 inch. Edge of core holes must be a minimum of 1.5 feet from the edge of pipe and a minimum distance of 5 feet horizontally between holes. Do not drill holes higher than 10 and 2 o’clock.

QC/QA Requirements**.**

The Contractor must provide a Manufacturer’s written certification that the materials comply with these specifications. All sewers and sewer structures must be inspected prior to the final payment to the Contractor.

Method of Measurement. This work will be measured for payment in place per foot.

Basis of Payment**.** This work will be paid for at the contract unit price per foot for the COMBINED SEWER of the MATERIAL, and DIAMETER (CDOT) specified.

MAINTAINING ITS DURING CONSTRUCTION

Intelligent Transportation Systems (ITS) references IDOT traffic surveillance infrastructure. These elements include, but are not limited to, the following: induction loops, ramp meters, closed circuit television cameras, dynamic message signs, highway advisory radios, copper and fiber optic communication cables, power cables, cabinets, and communication equipment.

Effective the date the Contractor's activities (ITS or otherwise) at the job site begin, the Contractor shall be responsible for the proper operation and maintenance ITS elements which are part of, or which may be affected by the work until final acceptance or as otherwise determined by the Engineer.

Before performing any excavation, removal, or installation work (ITS or otherwise) at the site, the Contractor shall initiate a request for a maintenance transfer and preconstruction inspection, as specified elsewhere herein, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. The request for the maintenance preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date.

Revised 7/25/13

LOCATE TUNNEL, CHICAGO

Description. Work under this item shall consist of furnishing all labor, equipment, tools, excavation, backfill and items required to create and maintain the shaft excavations, all materials, and incidentals necessary to locate the existing water tunnel within the project limits. This work shall be performed in accordance with the applicable portions of Sections 501, 502, and 516 of the Standard Specifications, except as herein modified.

The Contractor shall field locate the tunnel within the limits specified on the plans.

General Requirements. All work shall be performed as shown on the contract plans and as directed by the Engineer. The procedures described herein are consistent with tunnel location procedures developed and utilized by the Chicago Department of Water Management (CDWM).

The Contractor may submit alternative options to locate the tunnel subject to the Engineer's approval.

Construction Requirements. Procedure for Locating the Existing Water Tunnel:

1. The exact location of the tunnel is unknown and documentation of the tunnel location is restricted to designations on bridge and expressway record drawings.
2. At a minimum of two locations along the estimated alignment, accurately locate center of tunnel cross-section with probes. This is necessary as the exact location of the tunnel is not documented. If the alignment of the tunnel is not considered to be on a consistent and expected bearing, additional locations should be considered. The initial identified locations for the tunnel to be located are shown on the plans.
3. The foundation drawing showing the tunnel location submitted for review must show the probe locations and the locations that "hit" the tunnel to confirm the Contractor has accurately located the tunnel.
4. Drill hole to top of tunnel with 12" drill and note exact elevation of top of tunnel. Install casing to maintain opening. A casing must be installed in all cases - no exceptions will be allowed.
5. Drill through top of tunnel; determine elevation of invert of tunnel. **Note if a substantial amount of water comes out of the hole notify the Engineer immediately.**
6. A video or sonar survey must be performed after the completion of the cased holes into the tunnel at each location. The survey must be done to:
    a. Verify the location of the tunnel
    b. Verify the casings are located near the center of the tunnel so the bulkheads can be successfully installed (if a bulkhead is planned at that location).
    c. Ensure the tunnel is clear between the existing or proposed bulkhead locations. If it is discovered that either of the casings are located to the side of the tunnel, a new casing must be installed nearer to the center of the tunnel to ensure a successful bulkhead installation, and the old casing abandoned by filling with concrete.
    d. At the location immediately to the west of the existing bulkhead at Halsted Street, the existing bulkhead should be inspected to determine if there is a need to install a new bulkhead. The existing condition should identify if the integrity of the bulkhead will allow the tunnel to be filled without allowing CLSM material to migrate beyond the existing bulkhead.
    e. At the location to the east of Halsted Street, the survey should establish an alignment of the existing tunnel in the immediate area and to identify if the existing tunnel is filled. If the tunnel is filled, the type of fill material and the extents of the fill material must be established.
7. The Contractor shall perform a survey showing the location of the tunnel and the bulkhead areas. The survey shall be provided to the Engineer.

Revised 7/25/13

Method of Measurement. This work will be measured for payment as each.

Basis of Payment The cost of locating the tunnel will be paid for at the each price for LOCATE TUNNEL, CHICAGO. This includes all exploration, restoration, samples, surveys, video, sonar, drilling or any other means necessary to locate the tunnel within the designated area on the plans.

BULKHEAD TUNNEL, CHICAGO

Description. Work under this item shall consist of furnishing all labor, equipment, tools, excavation, backfill, items required to create and maintain the shaft excavations, all materials, and incidentals necessary to bulkhead the existing tunnel within the project limits. This work shall be performed in accordance with the applicable portions of Sections 501, 502, and 516 of the Standard Specifications, except as herein modified.

The Contractor shall construct a concrete bulkhead at the locations specified on the plans and as detailed below.

General Requirements. All work shall be performed as shown on the contract plans and as directed by the Engineer. The installation of the proposed bulkhead shall result in a safe and stable structure at all times, and shall comply with all safety requirements as required by all City, State, and Federal laws, codes or other regulations. The procedures described herein are consistent with tunnel bulkhead procedures developed and utilized by the Chicago Department of Water Management (CDWM).

The Contractor may submit alternative construction methods for the two bulkheads identified in the plans.

Construction Requirements. Procedure for Establishing Bulkheads within the Existing Water Tunnel:

1. Calculate the amount of very low slump, lean concrete needed to form bulkhead in tunnel.
2. Determine if water is contained in tunnel.
3. Place concrete in tunnel to 1 ft above top of tunnel (use tremie methods if tunnel contains water). Actual amount of concrete placed must be compared to calculated amount to fill tunnel.
4. When concrete sets, drill a 4” core to the invert of tunnel. Verify from an examination of the cores that the bulkhead has no discontinuities.
5. If the bulkhead verification is satisfactory by the Engineer, complete filling the core hole with concrete to surface.
6. Keep core samples drilled for verification for inspection for a minimum of 4 weeks.
7. If the bulkhead cannot be confirmed, move to new location (6 to 8 ft away) and keep repeating procedure until tunnel bulkhead closure can be confirmed.
8. Provide drawings to the Engineer showing the location of bulkhead(s), amount of concrete placed, calculated amount of concrete required, and any problems encountered in establishing the bulkhead(s) in a letter to the Engineer within 1 week of completing the bulkhead(s).
9. After a bulkhead is established at each location as shown in the plans, the tunnel between the bulkheads must be removed as part of excavation as part of temporary earth retention system installation and riser shaft construction. The tunnel must be removed where the existing tunnel conflicts with proposed improvements.
10. After completion of bulkhead installation, the Contractor shall restore any damaged parkway, pavement or sidewalk to its condition prior to the start of operations. All excess grout shall be removed and disposed of in accordance with the Standard Specifications.

Revised 7/25/13

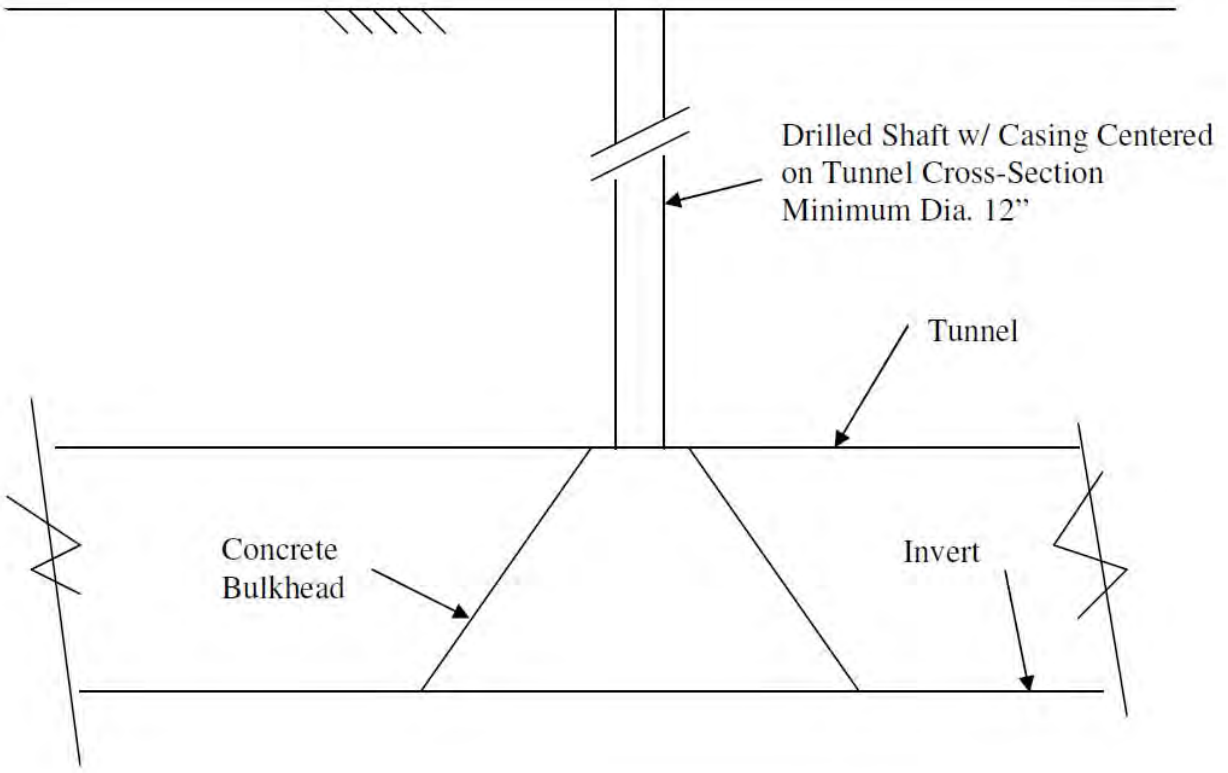

Figure No. 1

Method of Measurement. BULKHEAD TUNNEL, CHICAGO will be measured for payment as each and will include all locations shown on the plans.

Basis of Payment. The cost of bulkheading the tunnel will be paid for at the EACH unit price for BULKHEAD TUNNEL, CHICAGO, which price includes all drilling, removal and disposal of all material, construction of any retaining or support structures, repairs to existing concrete structures, concrete, core samples, backfill, and any incidentals required to complete the work as specified herein or as directed by the Engineer to bulkhead the tunnel to the satisfaction of the Engineer.

HOT DIP GALVANIZING FOR STRUCTURAL STEEL
Effective: June 22, 1999
Revised: March 26, 2012

Description. This work shall consist of surface preparation and hot dip galvanizing all structural steel specified on the plans and painting of galvanized structural steel when specified on the plans.

Materials. Fasteners shall be ASTM A 325 Type 1, High Strength bolts with matching nuts and washers.

Fabrication Requirements. To insure identification after galvanizing, piece marks shall be supplemented with metal tags for all items where fit-up requires matching specific pieces.

After fabrication (cutting, welding, drilling, etc.) is complete, all holes shall be deburred and all fins, scabs or other surface/edge anomalies shall be ground or repaired per AASHTO M 160. The items shall then be cleaned per Steel Structures Painting Council's Surface Preparation Specification SSPC-SP1 (Solvent Cleaning) and SSPC-SP6 (Commercial Blast Cleaning). All surfaces shall be inspected to verify no fins, scabs or other similar defects are present.

The Contractor shall consult with the galvanizer to insure proper removal of grease, paint and other deleterious materials prior to galvanizing.

Cleaning Structural Steel

If rust, mill scale, dirt, oil, grease or other foreign substances have accumulated prior to galvanizing, steel surfaces shall be cleaned by a combination of either:

-caustic cleaning and cleaning according to SSPC-SP8 (Pickling) or
-cleaning according to SSPC-SP1 (Solvent Cleaning) and SSPC-SP6 (Commercial Blast Cleaning).

Special attention shall be given to the cleaning of corners and reentrant angles.

Revised 7/25/13

Installation. Installation shall be as described in Articles 821 and 877.

Method of Measurement. The lighting unit shall be counted as each installed.

Basis of Payment. This item shall be paid for at the contract unit per INSTALL LIGHT POLE, MAST ARM AND LUMINAIRE (CHICAGO), which shall be payment in full for the installation.

TEMPORARY WOOD POLE, 60 FT., CLASS 4

Description. This item shall consist of furnishing and installing a temporary wood pole and mast arm, as specified herein and all hardware and accessories required for the intended temporary use of the pole.

Materials. Materials shall be according to the following Articles of Section 1000 - Materials

Item	Article/Section
(a) Light Pole Identification	1069.06
(b) Wood Pole	1069.04
(c) Mast Arm	1069.03(a)

CONSTRUCTION REQUIREMENTS

Installation. Installation shall be as described in Article 830.03(c). The Contractor shall provide all hardware to install the pole and mast arm as specified herein and indicated on the plans.

Wood poles may be used poles as approved by the Engineer as described in Article 830.04. The wood pole and mast arm, as applicable, shall remain the property of the Contractor and shall be removed when directed by the Engineer.

The void caused by the removal of the wood pole shall be backfilled according to Article 819.04.

Method Of Measurement. Wood poles shall be counted as, each installed.

Basis Of Payment. This item shall be paid at the contract unit price each for **TEMPORARY WOOD POLE**, of the mounting height, class, mast arm quantity and length indicated.

Revised 7/25/13

REMOVE MANHOLES, SPECIAL

Description. This work will consist of completely breaking down and removing an existing manhole and filling in the affected area to grade or as directed by the Engineer.

Definition. This work will consist of removing the frame and cover of the existing manhole, breaking down the manhole walls, removing the debris and backfilling the hole with screenings or other approved material. Backfill must be installed in 6 inch layers and tamped. If the manhole is in pavement, the pavement will be restored under a different pay item. If the frame or cover is deemed re-useable by the Engineer, the frame and/or cover must be delivered to the Department of Electrical Operations at a location identified by the Engineer. Any debris, including the frame and cover must be disposed of off-sight in an approved manner. The contractor will pay for all disposal fees.

Method of Measurement. This work shall be paid for per each manhole removed. All backfill will be considered as part of this manhole removal pay item.

Basis of Payment. This work will be paid for at the contract unit price per each for REMOVING MANHOLES, SPECIAL which price will be payment in full for all labor and materials necessary to complete the work as described. Salvaging of the frame and cover will be considered incidental to this item.

Revised 7/25/13

RELOCATE WATER MAIN RISER (CDWM)

Description. This work under this item consists of furnishing and installing ductile iron water main, fittings, line valve and other appurtenances for the relocation of the water main riser piping in the exit ramp at Morgan Street. The work shall be performed as detailed on the plans, specified herein and directed by the IDOT Resident Engineer and the Chicago Department of Water Management Commissioner or his representative (Engineer).

The Contractor is advised that the work will be performed on a potable water system owned and operated by the Chicago Department of Water Management (CDWM). As such, all operations shall be performed in such a way as to avoid contamination of the water system through the introduction of contaminants or the process of the work. All work will require the review and approval of the CDWM prior to the commencement of work operations.

The water main shutdown required to perform the Work will only be allowed between September 3rd and May 1st. Exact shutdown and start up dates will be determined by the CDWM. The Work must be substantially complete in order to place the water main back into service on or before May 1st.

Construction Requirements. The furnishing and installation of ductile iron water main, fittings, line valve and other appurtenances for the relocation of the water main riser piping in the exit ramp at Morgan Street shall conform to the Contract and the applicable sections of the Chicago Department of Water Management's Technical Specifications for Water Main Construction shown below and included as part of this special provision (See Appendix C):

Ductile Iron Pipe and Fittings	Section 33 11 13
Water Main Valve Basins & Meter Vaults	Section 33 12 20

Any part or item of work, which is implied and normally required to make the water main installation satisfactorily and completely operable, is deemed to be included in the Work Item and Contract price. All miscellaneous appurtenances and/or items of Work considered incidental to meeting the intent of the Contract Documents is also deemed to be included in the Work Item and Contract price, even though such appurtenances may not be specifically shown or specified.

Method of Measurement. **RELOCATE WATER MAIN RISER (CDWM)** will not be measured for payment.

Revised 7/25/13

Basis of Payment. The Work under this Item shall be paid for at the Contract lump sum cost for **RELOCATE WATER MAIN RISER (CDWM)**. Unless otherwise noted, the cost of all labor, equipment and materials, including all pipe, fittings, valve, valve basin, test taps, polyethylene encasement, thrust blocks, joint restraint, shut down, dewatering, filling, flushing, pressure testing, disinfection required for a complete and operational installation, removal and proper disposal offsite of excavated material, trench and stockpile protection (fencing), bedding and granular trench backfill for water main trench shall be included in the cost of **RELOCATE WATER MAIN RISER (CDWM)**.

Exclusions

This Work Item does not include braced excavation of the exit ramp, demolition of the existing riser pipe and vault or construction of the relocated riser vault. However, the contractor must closely coordinate water main riser work with this work as directed by the Engineer

Pre-Purchased Material

Note: The following long lead material will be provided to the Contractor by the City of Chicago Department of Water Management:

1-36”x24” 2 BELL MECHANICAL JOINT REDUCER
1-30”x24” 2 BELL MECHANICAL JOINT REDUCER
2-24” 2 BELL MECHANICAL JOINT ¼ BASE BEND
1-36” MECHANICAL JOINT SLEEVE
1-30” MECHANICAL JOINT SLEEVE
1-16” CHICAGO STANDARD MECHANICAL JOINT GATE VALVE

The fittings and valve herein specified are furnished complete with mechanical joint accessories. The mechanical joint accessories consist of mechanical joint thrust restraint glands, rubber gaskets, and tee head bolts and hex nuts, all conforming to AWWA C110.

These items will be provided to the Contractor. Do not include this material in your bid price for this item. These materials will be purchased under separate items for replenishment to the City of Chicago Department of Water Management.

The material will be available for pickup at a designated City of Chicago Department of Water Management facility. The Engineer will provide appropriate information about which facility is storing the material, times available for pickup and contact information. The Contractor must provide 48 hours advance notice to the City of Chicago Department of Water Management prior to picking up the fittings and valve. The City must provide a certification that all products are American made. The Engineer shall coordinate the production of this certificate.

Revised 7/25/13

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Revise Article 669.01 of the Standard Specifications to read:

"669.01 Description. This work shall consist of the transportation and proper disposal of contaminated soil and water. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their content and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities."

Revise Article 669.08 of the Standard Specifications to read:

"669.08 Contaminated Soil and/or Groundwater Monitoring. The Contractor shall hire a qualified environmental firm to monitor the area containing the regulated substances. The affected area shall be monitored with a photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID). Any field screen reading on the PID or FID in excess of background levels indicates the potential presence of contaminated material requiring handling as a non-special waste, special waste, or hazardous waste. No excavated soils can be taken to a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation with detectable PID or FID meter readings that are above background. The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily. All testing shall be done by a qualified engineer/technician. Such testing and monitoring shall be included in the work. The Contractor shall identify the exact limits of removal of non-special waste, special waste, or hazardous waste. All limits shall be approved by the Engineer prior to excavation. The Contractor shall take all necessary precautions.

Based upon the land use history of the subject property and/or PID or FID readings indicating contamination, a soil or groundwater sample shall be taken from the same location and submitted to an approved laboratory. Soil or groundwater samples shall be analyzed for the contaminants of concern, including pH, based on the property's land use history or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605. The analytical results shall serve to document the level of soil contamination. Soil and groundwater samples may be required at the discretion of the Engineer to verify the level of soil and groundwater contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with decontaminated or disposable instruments. The samples shall be placed in sealed containers and transported in an insulated container to the laboratory. The container shall maintain a temperature of 39 °F (4 °C). All samples shall be clearly labeled. The labels shall indicate the sample number, date sampled, location and elevation, and any other observations.

The laboratory shall use analytical methods which are able to meet the lowest appropriate practical quantitation limits (PQL) or estimated quantitation limit (EQL) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846 and "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039. For parameters where the specified cleanup objective is below the acceptable detection limit (ADL), the ADL shall serve as the cleanup objective. For other parameters the ADL shall be equal to or below the specified cleanup objective."

Replace the first two paragraphs of Article 669.09 of the Standard Specifications with the following:

"669.09 Contaminated Soil and/or Groundwater Management and Disposal. The management and disposal of contaminated soil and/or groundwater shall be according to the following:

(a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605, the soil shall be managed as follows:

(1) When analytical results indicate chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Engineer, the excavated soil can be utilized within the construction limits as fill, when suitable. Such soil excavated for storm sewers can be placed back into the excavated trench as backfill, when suitable, unless trench backfill is specified. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

(2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(5) When the Engineer determines soil cannot be managed according to Articles 669.09(a)(1) through (a)(4) above, the soil shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

(b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC but the pH of the soil is less than 6.25 or greater than 9.0, the excavated soil can be utilized within the construction limits or managed and disposed of off-site as "uncontaminated soil" according to Article 202.03. However the excavated soil cannot be taken to a CCDD facility or an uncontaminated soil fill operation.

(c) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Illinois Administrative Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste.

All groundwater encountered within lateral trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench it must be removed as a special or hazardous waste. The Contractor is prohibited from managing groundwater within the trench by discharging it through any existing or new storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

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One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10^{-7} cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer."

Revise Article 669.14 of the Standard Specifications to read:

"669.14 Final Environmental Construction Report. At the end of the project, the Contractor will prepare and submit three copies of the Environmental Construction Report on the activities conducted during the life of the project, one copy shall be submitted to the Resident Engineer, one copy shall be submitted to the District's Environmental Studies Unit, and one copy shall be submitted with an electronic copy in Adode.pdf format to the Geologic and Waste Assessment Unit, Bureau of Design and Environment, IDOT, 2300 South Dirksen Parkway, Springfield, Illinois 62764. The technical report shall include all pertinent information regarding the project including, but not limited to:

(a) Measures taken to identify, monitor, handle, and dispose of soil or groundwater containing regulated substances, to prevent further migration of regulated substances, and to protect workers,

(b) Cost of identifying, monitoring, handling, and disposing of soil or groundwater containing regulated substances, the cost of preventing further migration of regulated substances, and the cost for worker protection from the regulated substances. All cost should be in the format of the contract pay items listed in the contract plans (identified by the preliminary environmental site assessment (PESA) site number),

(c) Plan sheets showing the areas containing the regulated substances,

(d) Field sampling and testing results used to identify the nature and extent of the regulated substances,

(e) Waste manifests (identified by the preliminary environmental site assessment (PESA) site number) for special or hazardous waste disposal, and

(f) Landfill tickets (identified by the preliminary environmental site assessment (PESA) site number) for non-special waste disposal."

Revise the second paragraph of Article 669.16 of the Standard Specifications to read:

"The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL."

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

General. This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

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All contaminated materials shall be managed as either "uncontaminated soil" or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. **Phase I Preliminary Engineering information is available through the District's Environmental Studies Unit.** Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

The Contractor shall manage any excavated soils and sediment within the following areas:

- Station 3603+00 to Station 3603+50 (Centerline Morgan Street) 0 to 80 feet LT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Anthracene, Benzo(a)Pyrene, Benzo(b)Fluoranthene, Dibenzo(a,h)Anthracene, Indeno(1,2,3-cd)Pyrene, Lead, and Manganese.
- Station 3602+70 to Station 3603+50 (Centerline Morgan Street) 0 to 50 feet RT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Anthracene, Benzo(a)Pyrene, Benzo(b)Fluoranthene, Dibenzo(a,h)Anthracene, Lead, and Manganese.
- Station 3601+50 to Station 3603+00 (Centerline Morgan Street) 0 to 50 feet LT (UIC Education and the Performing Arts Building and Theater, PESA Site 223, 1040-1044 West Harrison Street). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Pyrene, Dibenzo(a,h)Anthracene, and Lead.
- Station 3601+50 to Station 3602+70 (Centerline Morgan Street) 0 to 50 feet RT (UIC Parking Lot #9, PESA Site 224, 521 South Morgan Street). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead.
- Station 3305+00 to Station 3306+30 (Centerline Congress Parkway) 0 to 50 feet RT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Pyrene, Dibenzo(a,h)Anthracene, and Manganese.
- Station 1000+60 to Station 1002+60 (Baseline Morgan Street Exit Ramp) 0 to 40 feet LT and 0 to 60 feet RT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 1004+30 to Station 1006+25 (Baseline Morgan Street Exit Ramp) 0 to 30 feet LT and 0 to 80 feet RT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 3606+30 to Station 3606+70 (Centerline Morgan Street) 0 to 50 feet LT (Mixed-Use Building, PESA Site 205, 1001-1025 West Van Buren Street and 410 South Morgan Street). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Pyrene.
- Station 3305+00 to Station 3306+00 (Centerline Congress Parkway) 0 to 50 feet LT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(b) and shall be managed in accordance to Article 669.09.
- Station 3605+50 to Station 3606+30 (Centerline Morgan Street) 0 to 50 feet LT (IDOT ROW, PESA Site 219, I-290 between Throop Street and Chicago River). This material meets the criteria of Article 669.09(b) and shall be managed in accordance to Article 669.09.

Revised 7/25/13

REMOVAL AND DISPOSAL OF SURPLUS MATERIALS (BDE)

Effective: November 2, 2012

Revise the first four paragraphs of Article 202.03 of the Standard Specifications to read:

"**202.03 Removal and Disposal of Surplus, Unstable, Unsuitable, and Organic Materials.** Suitable excavated materials shall not be wasted without permission of the Engineer. The Contractor shall dispose of all surplus, unstable, unsuitable, and organic materials, in such a manner that public or private property will not be damaged or endangered.

Suitable earth, stones and boulders naturally occurring within the right-of-way may be placed in fills or embankments in lifts and compacted according to Section 205. Broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities may be used in embankment or in fill. If used in fills or embankments, these materials shall be placed and compacted to the satisfaction of the Engineer; shall be buried under a minimum of 2 ft (600 mm) of earth cover (except when the materials include only uncontaminated dirt); and shall not create an unsightly appearance or detract from the natural topographic features of an area. Broken concrete without protruding metal bars, bricks, rock, or stone may be used as riprap as approved by the Engineer. If the materials are used for fill in locations within the right-of-way but outside project construction limits, the Contractor must specify to the Engineer, in writing, how the landscape restoration of the fill areas will be accomplished. Placement of fill in such areas shall not commence until the Contractor's landscape restoration plan is approved by the Engineer.

Aside from the materials listed above, all other construction and demolition debris or waste shall be disposed of in a licensed landfill, recycled, reused, or otherwise disposed of as allowed by State or Federal laws and regulations. When the Contractor chooses to dispose of uncontaminated soil at a clean construction and demolition debris (CCDD) facility or at an uncontaminated soil fill operation, it shall be the Contractor's responsibility to have the pH of the material tested to ensure the value is between 6.25 and 9.0, inclusive. A copy of the pH test results shall be provided to the Engineer.

A permit shall be obtained from IEPA and made available to the Engineer prior to open burning of organic materials (i.e., plant refuse resulting from pruning or removal of trees or shrubs) or other construction or demolition debris. Organic materials originating within the right-of-way limits may be chipped or shredded and placed as mulch around landscape plantings within the right-of-way when approved by the Engineer. Chipped or shredded material to be placed as mulch shall not exceed a depth of 6 in. (150 mm)."

Revised 7/25/13

STORM WATER POLLUTION PREVENTION PLAN

Illinois Department of Transportation

Storm Water Pollution Prevention Plan

Route	F.A.I. 90/94/290	Marked Rte.	Morgan Street
Section	2013-007R	Project No.	NHPP-
County	Cook County	Contract No.	60W25

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

John Fortmann, PE	
Print Name	Signature
Director of Highways, Region One Engineer	
Title	Date
Illinois Department of Transportation	
Agency	

I. Site Description:

A. Provide a description of the project location (include latitude and longitude):

Morgan Street Bridge over I-290 and the CTA Blue Line in the City of Chicago, Cook County, Illinois.

Latitude: 41° 52' 32.05" N
Longitude: 87° 39' 6.49" W

B. Provide a description of the construction activity which is the subject of this plan:

The project is located along Morgan Street from north of Harrison Street to south of

Van Buren Street. The gross and net length of the project is 1023.81 Feet (0.194 miles).

The work consists of the replacement of the Morgan Street Bridge (Structure Number 016-1709) over I-290 and the CTA Blue Line and part of the retaining wall (Structure Numbers 016-1724) along I-290 westbound. The roadway of Morgan Street will be reconstructed along with the intersections of Congress Parkway, WB I-290 Ramp, and Tilden Street. The WB I-290 Morgan Street exit ramp will be partially removed and reconstructed at the tie in of the intersection. In addition to the partial reconstruction of the ramp, there will be pavement widening along the right side of the exit ramp.

Work includes erosion control and protection, utility relocation of existing storm sewers and an existing water main, special waste excavation, temporary pavement for both the ramp and I-290, earth excavation and embankment, removal of existing improvements, new storm and combined sewers, curb and gutters, pavements, sidewalks, pavement marking and signage, roadway lighting, retaining wall, concrete abutments, steel furnishing and erection, bridge deck and railings, traffic control and protection, traffic signals, urban enhancements and all incidental and collateral work necessary to complete the improvements as shown on the plans and as described herein.

C. Provide the estimated duration of this project:

6 months

D. The total area of the construction site is estimated to be 1.18 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 0.32 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.32 AC (0.3 PERVIOUS) + 0.98 AC (0.9 IMPERVIOUS) / 1.18 AC = 0.83

The C-value will not change from before to after this contract, due to the existing impervious surfaces remaining before and after this project.

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

The soil stratigraphy consists generally of, in descending order, 1) man-made ground (fill); 2) very soft to
medium stiff clay to silty clay; 3) stiff to hard silty clay loam diamicton; 4) very stiff to hard silty clay
loam hardpan; 5) very dense sand to gravelly sand; and 6) dolostone bedrock.

Sandy Loam to Sand, trace gravel - Moderate erosivity overall: the silt fraction in the

loam is very erodible.

Clay to Silty Clay - High potential for runoff and low infiltration rates, low to moderate susceptibility to erosion.

Silty Clay Loam Diamicton - Low to moderate erosivity, the hardpan sounds low.

G. Provide an aerial extent of wetland acreage at the site:

N/A

H. Provide a description of potentially erosive areas associated with this project:

Potentially erosive areas are along the embankments adjacent to the I-290 expressway - these where there are no retaining walls from the local road to the expressway. The existing Morgan Street exit ramp and the west sides of the north and south Morgan Street Bridge abutments have embankment side slopes of 3:1 or steeper.

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

The existing Morgan Street exit ramp will be partially removed at the tie in with the Morgan Street intersection; the existing Morgan Street Bridge is to be removed; and part of the existing retaining wall along the Morgan Street exit ramp will be removed - these items will then be reconstructed. The construction activity from removal and reconstruction will occur adjacent to the existing sloped embankment area. Construction activity will also affect the bridge piers adjacent to the CTA tracks - this area is not adjacent to an embankment, however, the construction activity will expose erodible fill soils which occur up to a depth of approximately 15 feet (as with all project site excavation). Temporary erosion control seeding and mulch will stabilize the exposed soil on the embankment slope and perimeter erosion control barriers will prevent soil from leaving areas of exposed soil.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

City of Chicago / IDOT

L. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment

control plans:

The Morgan Street Bridge area drains to Pump Station 5, which then pumps to the South Branch Chicago River. The South Branch Chicago River is impaired for the designated use of fish consumption due to the PCBs. PCBs are not expected to be a pollutant associated with this contract. The South Branch Chicago River is not a Biologically Significant Stream.

M. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

None. Embankment slopes to be regraded and vegetation to be re-established.

N. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- ☐ Floodplain
- ☐ Wetland Riparian
- ☐ Threatened and Endangered Species
- ☐ Historic Preservation
- ☐ 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- ☐ Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
- ☒ Applicable Federal, Tribal, State or Local Programs
- ☐ Other

1. 303(d) Listed receiving waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

a. The name(s) of the listed water body:

b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

O. The following pollutants of concern will be associated with this construction project:

☒	Soil Sediment	☒	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
☒	Concrete	☒	Antifreeze / Coolants
☒	Concrete Truck Waste	☒	Waste water from cleaning construction equipment
☒	Concrete Curing Compounds	☒	Other (specify) Drilling mud for jacking
☒	Solid Waste Debris	☐	Other (specify)
☒	Paints	☐	Other (specify)
☒	Solvents	☐	Other (specify)
☒	Fertilizers / Pesticides	☐	Other (specify)

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls

1. **Stabilized Practices:** Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall

be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven (7) days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

Where the initiation of stabilization measures by the seventh day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following stabilization practices will be used for this project:

☒	Preservation of Mature Vegetation	☒	Erosion Control Blanket / Mulching
☐	Vegetated Buffer Strips	☐	Sodding
☒	Protection of Trees	☐	Geotextiles
☒	Temporary Erosion Control Seeding	☐	Other (specify)
☐	Temporary Turf (Seeding, Class 7)	☐	Other (specify)
☒	Temporary Mulching	☐	Other (specify)
☒	Permanent Seeding	☐	Other (specify)

Describe how the stabilization practices listed above will be utilized during construction:

1. Preservation of Mature Vegetation: Mature vegetation shall be preserved as specified in the contract and at the direction of the Engineer.

2. Protection of Trees: Trees shall be protected as specified in the contract and at the direction of the Engineer.

3. Temporary Erosion Control Seeding: This item will be applied to all bare areas every seven days to minimize the amount of exposed surface areas. Earth stockpiles shall be temporarily seeded if they are to remain unused for more than 14 days. Within the construction limits, areas which may be susceptible to erosion as determined by the Engineer shall remain undisturbed until full scale construction is underway to prevent unnecessary soil erosion. Bare and sparsely vegetated ground in highly erodible areas as determined by the Engineer shall be temporarily seeded at the beginning of construction where no construction activities are expected within seven days.

4. Temporary Mulching: Mulch as applied to temporary erosion control seeding shall be by the method specified in the contract and at the direction of the Engineer. Mulch will be paid separately and shall conform to Section 251 of the Standard Specifications.

5. Permanent Seeding: Seeding, Class 2 will be installed per IDOT specifications.

6. Erosion Control Blanket / Mulching: Erosion control blankets will be installed over fill slopes and in high velocity areas (i.e. ditches) and seeded to protect slopes from erosion and allow seeds to germinate. Mulch will be applied in relatively flat areas to protect the disturbed areas and prevent further erosion.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Permanent Stabilization – All areas disturbed by construction will be stabilized with permanent seeding immediately following the finished grading. Erosion control blankets will be installed over slopes 3:1 (H:V) or steeper which have been brought to final grade, topsoiled, and have been seeded to protect the slopes from rill and gully erosion and allow seed to germinate properly. Mulch will be used on relatively flat areas.

2. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to
the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the
discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project:

☒	Perimeter Erosion Barrier	☐	Rock Outlet Protection
☐	Temporary Ditch Check	☐	Riprap
☒	Storm Drain Inlet Protection	☐	Gabions
☐	Sediment Trap	☐	Slope Mattress
☐	Temporary Pipe Slope Drain	☒	Retaining Walls
☐	Temporary	☐	Slope Walls

☐	Sediment Basin	☐	
☐	Temporary Stream Crossing	☐	Concrete Revetment Mats
☒	Stabilized Construction Exits	☐	Level Spreaders
☐	Turf Reinforcement Mats	☐	Other (specify)
☐	Permanent Check Dams	☐	Other (specify)
☐	Permanent Sediment Basin	☐	Other (specify)
☐	Aggregate Ditch	☐	Other (specify)
☐	Paved Ditch	☐	Other (specify)

Describe how the structural practices listed above will be utilized during construction:

1. Perimeter Erosion Barrier: Silt fences shall be placed along the contour at the limits in an effort to contain silt and runoff from leaving the site. Silt fence shall not be installed in areas of concentrated flow such as across ditches. The barrier will be constructed at the beginning of construction.

2. Storm Drain Inlet Protection: Sediment filters will be placed in all inlets, catch basins and manholes during construction and will be cleaned on a regular basis.

3. Stabilized Construction Exits: Stabilized Construction Exits or Entrances will be provided by the Contractor access. The entrance shall be maintained in a condition which shall prevent tracking or flowing of sediment onto Public-Right-Of-Way. Periodic Inspection and needed maintenance shall be provided after heavy use and each rainfall event.

As soon as reasonable access is available to all locations where water drains away from the project, perimeter erosion barrier shall be installed as called out in this plan and directed by the Engineer.

All erosion control products furnished shall be specifically recommended by the manufacturer for the use specified in the erosion control plan prior to the approval and use of the product. The Contractor shall submit to the Engineer a notarized certification by the producer stating the intended use of the product and that the physical properties required for this application are met or exceeded. The contractor shall provide manufacturer installation procedures to facilitate the Engineer in construction inspection.

Describe how the structural practices listed above will be utilized after

construction activities have been completed:

Once the construction is completed and the vegetation has been established, the perimeter barrier will be removed and areas disturbed by the removal will be stabilized with seeding and mulching.

3. **Storm Water Management:** Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

   a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

      The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

   b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of storm water management controls:

a. Vehicle Entrances and Exits: Stabilized construction entrances and exits must be constructed to prevent tracking of sediments onto roadways. The Contractor will provide the Resident Engineer with a written plan identifying the location of stabilized entrances and exits and the procedures (s)he will use to construct and maintain them.

b. Storage pipes will be constructed to hold storm water surcharing in the existing drainage to pump station 5.

A detention tank will be constructed that will improve water quality in runoff from the 5-year and greater storms, south of the Circle Interchange, discharging to pump station 26.

Phosphorous fertilizer has been eliminated from the project to reduce project impacts on the receiving waters.

c. Stockpile Management: BMPs shall be implemented to reduce or eliminate pollution of strom water from stockpiles of soil and paving materials such as, but not limited to, Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered:

* Perimeter Erosion Barrier
* Temporary Seeding
* Temporary Mulch
* Plastic Covers
* Soil Binders

The Contractor will provide the Resident Engineer with a written plan of the procedures (s)he will use on the project and how they will be maintained.

d. Waste Disposal: No materials, including building materials, shall be discharged into waters of the State, except as authorized by a Section 404 permit.

e. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or Local water disposal, sanitary sewer or septic system regulations.

f. The Contractor shall provide a written and graphic plan to the Resident Engineer identifying where each of the above areas will be located and how they are to be managed

4. **Approved State or Local Laws:** The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are

enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

All management practices, controls, and other provisions provided in this plan are in accordance with "IDOT Standard Specification for Road and Bridge Construction."

5. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.

a. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

- Approximate duration of the project, including each stage of the project
- Rainy season, dry season, and winter shutdown dates
- Temporary stabilization measures to be employed by contract phases
- Mobilization timeframe
- Mass clearing and grubbing/roadside clearing dates
- Deployment of Erosion Control Practices
- Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
- Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
- Paving, saw-cutting, and any other pavement related operations
- Major planned stockpiling operations
- Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
- Permanent stabilization activities for each area of the project

b. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for

this project.

- Stockpile Management – Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal – Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

1. Seeding: All erodible bare earth will be temporarily seeded on a weekly basis to minimize the amount of erodible surface within the contract limits.

2. Perimeter erosion barrier: Sediment will be removed if the integrity of the fencing is in jeopary and any fencing knocked down will be repaired immediately.

3. Erosion Control Blanket/Mulching: Any areas that fail will be repaired immediately.

4. Protection of trees/temporary tree protection: Any protective measures which are knocked down will be repaired immediately.

All maintenance of erosion control systems will be the responsibility of the contractor until construction is complete and accepted by IDOT after final inspection.

Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 0.5 inches or greater rainfall, or an equivalent snowfall. The project shall additionally be inspected by the Construction Field Engineer on a bi-weekly

basis to determine that erosion control efforts are in place and effective and if other erosion control work is necessary.

The field guide cited above has mainteance guidelines for the additional BMPs. In additional, the following link may also be useful for maintenance:

http://www.dot.il.gov/desenv/environmental/bestpractices.html

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized,
structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water
Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm that is 0.5 inch or greater or equivalent snowfall.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

Illinois Department of Transportation

Contractor Certification Statement

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.5 of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route	F.A.I. 90/94/290	Marked Rte.	Morgan Street
Section	2013-007R	Project No.	NHPP-000S(941)
County	Cook County	Contract No.	60W25

This certification statement is a part of the SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in the SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

☐ Contractor

☐ Sub-Contractor

Print Name	Signature
Title	Date
Name of Firm	Telephone
Street Address	City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.5. of the SWPPP:

CTA FLAGGING AND COORDINATION

All work to be done by the Contractor on, over, or in close proximity of the CTA (Chicago Transit Authority) right-of-way shall be performed according to Article 107.12 of the Standard Specifications and the following additional CTA requirements:

The CTA's Representative for this project will be:

Mr. David Heard
Manager, Construction Management Oversight
(312) 681-3862

1.01 SUMMARY

A. This section includes the requirements for safe construction operations on and adjacent to operating tracks of the CTA rail system. The Contractor shall be responsible for compliance with the CTA Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System in effect at such time.

B. After the letting of the contract and prior to performing any work, the CTA Representative shall be notified by the Department to attend the preconstruction meeting. In this meeting, the Contractor shall confer with the CTA's Representative regarding the CTA's requirements for the protection of clearances, operations and safety.

C. Prior to the start of any work on or over the CTA's right-of-way, the Contractor shall meet with the CTA Representative to determine his requirements for flagmen and all other necessary items related to the work activities on, over and next to the CTA facilities and to receive CTA's approval for the Contractor's proposed operations.

D. The Contractor shall notify the CTA Representative 72-hours in advance of the time he intends to enter upon the CTA right-of-way for the performance of any work.

1.02 PROJECT CONDITIONS

A. The Chicago Transit Authority (CTA) is an operating transportation agency and must maintain rail operations at all scheduled times for the benefit of the public. The Contractor shall conduct his operations in such a manner as not to cause damage to the CTA equipment, put the public or the CTA personnel in danger, cause inconvenience to the customers, interrupt train service (except as permitted herein) or cause avoidable inconvenience to the public and the surrounding communities.

Added 7/25/13

B. The CTA will be operating trains during the construction of this project. The rail operations are 24 hours per day, seven days per week.

C. Certain portions of the project may be performed on, above or adjacent to sections of track where rail service is suspended in order to facilitate the work. For any work occurring within, above or adjacent to a section of track to be taken out of service, the Contractor shall confirm with the CTA that track within the work limits has been taken out of service and the third rail de-energized, as required, prior to beginning the work.

D. If the CTA deems any of the Contractor's work or operations hazardous to the CTA's operations or to the public, the CTA shall contact the Engineer. The Engineer may elect to order the Contractor to immediately suspend work until reasonable remedial measures are taken satisfactory to the CTA.

E. The CTA's may review of any of the Contractor's procedures, methods, temporary structures, tools or equipment that will be utilized within the CTA Right-of-Way. These reviews do not relieve the Contractor of responsibility for the safety, maintenance, and repairs of any temporary structure or work, or for the safety, construction, and maintenance of the work, or from any liability whatsoever on account of any procedure or method employed, or due to any failure or movement of any temporary structure, tools or equipment furnished as necessary to execute work on CTA Right-of-Way.

F. At least five (5) weeks prior to the start of any work on, above or adjacent to the CTA right-of-way, the Contractor will be required to attend weekly coordination meetings with CTA Operations and other CTA departments to review and coordinate proposed work activities of the Contractor(s). The Contractor will be required to provide a five week look-ahead schedule, in a format acceptable to CTA, reflecting proposed work activities within the CTA Right-of-Way.

G. The Contractor, through the Engineer, shall submit a Rail Service Bulletin Request form to the CTA at least twenty-one (21) calendar days in advance of the Contractor's proposed scheduled time to enter upon the CTA Right-of-Way for the performance of any work under this Contract. Bulletin requests will be required when performing work which impacts rail operations such as prior to each phase of staged station construction, Track Access Occurrences, track survey, etc.

Added 7/25/13

H. CTA generally permits only one Track Access Occurrence at a time on any given route. Other work on CTA's system, including required operations and/or maintenance by CTA, or work by other contractors elsewhere on the route, may limit the available dates of track access occurrences for this project. The contractor is strongly encouraged to submit Rail Service Bulletin requests with more than the twenty-one (21) day minimum required advance notice.

I. The Contractor shall at all times observe all rules, safety regulations and other requirements of the CTA, including, but not limited to, the following Standard Operating Procedures (SOP's).

1. **No. 7037, "Flagging on the Right-of-Way".**
2. **No. 7038, "Train Operation Through Slow Zones".**
3. **No. 7041, "Slow Zones".**
4. **No. 8111, "Workers Ahead Warning System".**
5. **No. 8130, "Safety on Rapid Transit Tracks".**
6. **No. 8212, "Test Train Procedures"**
7. **Sketch 2000-SZ-1, Slow Zone Equipment**

1.03 REIMBURSEMENT OF COSTS

A. The cost of all flagmen, infrastructure crews, engineering inspection, switchmen, and other workmen furnished by the CTA and authorized by the Engineer shall be paid for directly to the CTA by the contractor.

B. The costs associated with Track Access Occurrences granted and established by the CTA shall be paid for directly to the CTA by the Contractor.

C. The amount paid to the Contractor shall be the amount charged to the Contractor for all authorized CTA charges including CTA additive rates audited and accepted by the Department, according to Article 107.12 and Article 109.05 of the Standard Specifications.

D. Following approval of the CTA invoices by the Department, the Contractor shall pay all monies to the CTA as invoiced and shall submit to the Department certified and notarized evidence of the amount of payments. No overhead or profit will be allowed on these payments.

E. There are maximum amounts of flagger shifts identified within this specification. If Contractor operations require flagger shifts that are granted by the CTA beyond these limits, the Contractor shall pay for the services, but will receive no reimbursement.

Added 7/25/13

F. The Department will not be liable for any delays by the CTA in providing flagmen, establishing track closures or other service provided by the CTA and identified within this special provision.

1.04 RAIL SAFETY TRAINING

A. All Contractor and Subcontractor employees assigned to work on, over or near the CTA Right-of-Way shall be required to attend an all-day Rail Right-of-Way Safety Training Session in accordance with the CTA Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System. The cost of this training is currently $200.00 per employee, paid by the Contractor in advance. The certification is good for one calendar year from the date of issuance. The Contractor shall coordinate rail safety training with the Engineer. The cost of training shall be paid directly to the CTA by the Contractor. Reimbursement of training costs shall be in accordance with the Reimbursement of Costs section of this specification.

B. Rail Right-of-Way Safety Training for contractor and subcontractor personnel will be scheduled by CTA as training slots become available. The Contractor is advised that the Contractor's failure to request training sufficiently in advance of when the employee is required on the work site shall not be cause for relaxing the requirement for Rail Right-of-Way Safety Training.

C. The $200.00 fee is non-refundable. If any individual fails to report for training or is rejected for training and must be rescheduled, an additional $200.00 will be required. No additional compensation will be made for the rescheduling of any training.

D. Upon successful completion of CTA Rail Safety Training, each trainee will be issued a non-transferable Rail Safety Tour Identification Card with the trainee's photo and a decal with pressure sensitive adhesive to be affixed on the hard hat. The Rail Safety Tour Identification Card and the decal are valid for one (1) year from the date of issue. The validity of the Card and the decal are in no way related to the length of this Contract.

E. Contractor and Subcontractor personnel must renew their Rail Safety Tour Identification Cards annually by successfully completing Rail Safety Training again. Contractor or Subcontractor personnel who fail to maintain a valid Rail Safety Tour Identification Card are not permitted to work on, above or adjacent to the CTA Rail Right of Way and CTA reserves the right to remove such personnel from the work site.

Added 7/25/13

F. The costs incurred by the Contractor for CTA Rail Safety Training will not be reimbursed.

1.05 MANDATORY ITEMS FOR EMPLOYEES ON CTA RIGHT-OF-WAY

A. Contractor's and Subcontractor's employees assigned to work on the CTA Right-of-Way:

1. Contractor's and Subcontractor's employees will be given individual property permits. These permits shall be carried by each employee at all times while on CTA property. All permits issued shall be returned to CTA at the completion of the project, if the employee no longer works on this project, or on the date of expiration.

2. Each employee shall carry a valid Rail Safety Tour Identification Card at all times while on CTA right-of-way in accordance with Article 2-2 of the CTA Safety Manual.

3. All employees shall wear an undamaged hard hat with current rail safety sticker affixed, CTA standard safety vest and eye protection at all times while on CTA right-of-way. Noise protection shall be used when necessary. The Contractor must also comply with all OSHA requirements as required for the work. The CTA shall provide the rail safety sticker to each Contractor employee upon successful completion of the Rail Right-of-Way Safety Training.

4. Contractor personnel shall wear suitable work shoes with defined heel and non-slip soles. Steel toes or metal cleats on the sole or heel of shoes are prohibited. Shoelaces are to be kept short so they do not pose a tripping hazard. Athletic shoes, sandals, open-toed shoes, moccasins and/or shoes with heels higher than 1" are not permitted.

5. Contractor personnel shall have a non-metallic, working flashlight after dark or when working in the subway.

B. Contractor and Subcontractor employees assigned to work <u>adjacent to or above</u> the CTA right-of-way shall wear a CTA standard safety vest at all times. Personnel without current Rail Safety Training and a valid property permit shall not enter onto any CTA Right-of-Way.

Added 7/25/13

1.06 WORK AREA AVAILABILITY

A. DEFINITIONS

1. RIGHT-OF-WAY WORK: Any work performed at, above, or below track level within the CTA Right-of-Way.

2. IN-SERVICE TRACK: All CTA tracks are in service seven days a week, 24 hours a day, unless specifically removed from service for specific times by a Rail Service Bulletin issued by the Vice President, Rail Operations. Copies of the CTA's current train schedule for the lines affected by this project is available on the CTA's website and are subject to changes at any time, before or during, the Contract.

3. OUT-OF-SERVICE TRACK: The CTA tracks within limits defined by CTA that are temporarily removed from service for the purpose of completing specific work. Traction power will remain on at all times unless power removal is requested by the Contractor and approved by the CTA. In such cases, traction power must be removed and restored by CTA personnel. The Contractor may request the CTA to de-energize portions of the CTA right-of-way to perform work on, or near an Out-of-Service Track when no revenue service is scheduled, or as specified under a Rail Service Bulletin. Upon completion of the Out-of-Service Work, the Contractor shall maintain sufficient personnel on-site to correct any deficiencies in the Contractor's Work discovered by the CTA during power and service restoration and testing.

4. TRACK ACCESS OCCURRENCE: A condition(s) which provides a modification to the normal operation of CTA service to facilitate access for a Contractor(s) to perform work on or near the CTA Right-of-Way as defined and limited herein.

5. RE-ROUTE: Modification to the normal routing of trains in order to remove rail traffic from a section of track to facilitate access for a Contractor(s) to perform work on or near the CTA Right-of-Way as defined and limited herein.

6. LINE CUT: A temporary cessation of all service on a transit line; meaning total stoppage of transit service on all tracks and at all stations within the closure zone to facilitate access for a contractor(s) to perform work on or near the CTA Right-of-Way as defined and limited herein.

Added 7/25/13

1. SINGLE-TRACK: A temporary operation established by operating trains bi-directionally on one track while the adjacent track is taken out-of-service as defined in paragraph 1.05.a.4, above. Only one single-track at a time can be set up on a line and only for very limited time periods. If CTA or a separate contractor(s) request single track operations along the same line concurrently with the contractor for this contract, CTA shall have the exclusive authority to determine which request shall be granted.

8. RUSH HOURS: Monday through Friday, from 0500 to 0900 hours and from 1500 to 1900 hours.

9. FLAGGER SHIFT: A flagger shift is defined as the services of a CTA Flagman up to, but no more than eight (8) hours including travel and required breaks. For example:

   a. A Contractor five hour work shift which requires 3 flaggers will use 3 flagger shifts.
   b. A Contractor eight hour work shift requiring 3 flaggers shall use 6 flagger shifts (because travel & break time will increase the flaggers work hours beyond eight).
   c. A Contractor ten hour work shift requiring 3 flaggers will use 6 flagger shifts.

10. INFRASTRUCTURE SHIFT: An infrastructure shift is defined as up to, but no more than eight (8) hours worked per CTA Infrastructure employee. For example:

    a. A Contractor five hour work shift requiring 2 signal maintainers will use 2 infrastructure shifts.
    b. A Contractor eight hour work shift requiring 2 towermen shall use 2 infrastructure shifts.
    c. A ten hour work shift requiring 2 lineman will use 4 infrastructure shifts.

11. PERSON-IN-CHARGE (PIC): A person or persons, specified in a CTA Rail Service Bulletin, who is solely in charge of a work zone and is the single point contact between CTA and all persons (Contractor's, CTA and others) working in a work zone. The Rail Service Bulletin may identify the PIC by name or by radio call number. The Engineer or the Engineer's designee shall serve as PIC.

Added 7/25/13

1. POWER & WAY SERVICE BULLETIN (PWS Bulletin): A document authorized by the CTA Infrastructure Division intended to supplement a CTA Rail Service Bulletin by defining power/signal removal and restoration procedures and other work zone protection measures required to safely perform construction and/or maintenance work on or adjacent to the CTA Right-of-Way (ROW).

B. No service disruptions will be allowed for the completion of this work, except as noted herein. If the CTA deems it necessary, the CTA will impact operations to avoid a hazardous condition to either the passengers or employees and charge the Contractor for all associated costs and damages incurred. No compensation will be made for CTA charges to the Contractor due to unauthorized Contractor access or other unapproved impacts to CTA operations.

1.07 CTA OPERATING REQUIREMENTS

1. Strictly comply with operating requirements of the Chicago Transit Authority while construction work is in progress, specifically as follows:

   1. All work performed on the CTA Right-of-Way will be allowed during the Construction Period only in accordance with the Article 1.07 “ALLOWABLE HOURS OF CONSTRUCTION”. During most periods of construction, a “slow zone” shall be established at the work site and flagging personnel shall be deployed to facilitate safe and continuous train operations and to protect Contractor, CTA employees, passengers, the general public and property in the vicinity.

   2. No one is permitted to enter the CTA Right-of-Way during Rush Hours. Access to the underside of the existing or proposed bridge structure within the limits of the CTA Right-of-Way will not be permitted.

2. As much work as possible is to be done under normal CTA operating conditions (under traffic) without disruption of train movements. A maximum interruption of service to the CTA traffic of 15 minutes or as agreed upon with the CTA will be allowed. No interruption to CTA service will be allowed unless approved in writing by the CTA. The CTA has indicated during overnight periods, train headways are between fifteen (15) and thirty (30) minutes.

Added 7/25/13

3. Pedestrian traffic to the CTA facility entrance at Morgan shall be prohibited until the east portion of the bridge is complete and the sidewalk can be opened to pedestrian traffic. All barricades and closures on Morgan Street are to be installed and maintained by the Contractor. The CTA will install necessary signage within the CTA station facility. The closure of the station must be coordinated with the CTA at least twenty-eight (28) days prior to closure for Contractor operations.

4. Access control of the CTA Right-of-Way must be maintained at all times. This includes eliminating openings directly to the Right-of-Way where existing median barriers are to be removed. All planned removals of existing access control must be coordinated with the CTA, with plans for counter measures provided to the CTA at least three (3) weeks prior to removals.

1.08 ALLOWABLE HOURS OF CONSTRUCTION

A. Construction activities within CTA Right-of-Way are not permitted during Rush Hours. Access to the underside of the existing or proposed bridge structure within the limits of the CTA Right-of-Way will not be permitted during Rush Hours.

B. Construction activities within CTA Right-of-Way may be permitted during non-Rush Hour periods under flagging protection with the advance concurrence of the CTA as follows:

1. Monday thru Friday: From 1900 hours to 0500 hours the next day (the power shall remain on for these hours unless allowed via specific Track Access Occurrence).

2. Weekends: 1900 hours Friday to 0500 hours Monday

C. Track Access Occurrences:

1. The total number of Track Access Occurrences shall be as specified below:

a. Overnight Single Tracks: A maximum of fifteen (15) Overnight Single-Track Track Access Occurrences will be permitted. Construction activities within the CTA Right-of-Way may be permitted between the hours of 22:00 and 04:00 the following morning, including any time required for test trains stipulated in the Rail Service Bulletin.

Added 7/25/13

b. Weekend Single Tracks: A maximum of six (6) Weekend Single-Track Track Access Occurrences will be permitted. Construction activities within the CTA Right-of-Way may be permitted between the hours of 22:00 Friday night and 04:00 the following Monday morning, including any time required for test trains stipulated in the Rail Service Bulletin.

2. The exact dates and hours for all Track Access Occurrences are subject to change by the CTA depending on the nature of the work, access requirements of CTA personnel, work performed under separate contract or operational requirements of the CTA. The approval of specific dates and times for Track Access Occurrences on this Contract may be affected by major events or by a Track Access Occurrence scheduled elsewhere on that route or the CTA System.

3. The Department has identified the following windows to the CTA for completing proposed work adjacent to the eastbound track. The majority of requested Track Access Occurrences should be for weekend and weeknight periods during the following windows:

   a. Stage II and Stage III – January 1, 2014 through February 28, 2014

   The CTA may grant access outside of the above window(s) depending on Contractor progress and Contractor needs.

4. Contractors completing other Department projects may also request Track Access Occurrences along the same section of track as described herein. These projects are identified in CONTRACTOR COOPERATION. Provided these Track Access Occurrences are approved, scheduled and initiated by the CTA, the Contractor shall be able to access CTA Right-of-Way with no impact to the total count of Track Access Occurrences attributed to this Contract.

D. The CTA reserves the right to modify the allowable dates or hours of track access occurrences based on service requirements for the subject route and manpower availability for the date and location requested.

Added 7/25/13

E. The CTA reserves the right to deny or to cancel a previously approved request for a Track Access Occurrence based on service requirements for the time period requested. The CTA may notify the Contractor of such denial or cancellation no later than 1 day prior to a Track Access Occurrence. Service requirements may be affected by major events (e.g., festivals, White Sox and Cubs games, concerts), or by a Track Access Occurrence scheduled elsewhere on that route or the CTA System.

F. The Contractor will not be permitted to perform work requiring a Track Access Occurrence or Flagging during the following special events:

1. Taste of Chicago
2. Independence Day
3. Chicago Air and Water Show
4. Chicago Marathon
5. Chicago Jazz Festival
6. Chicago Blues Festival
7. Chicago St. Patrick's Day Parade
8. The Saturday before Thanksgiving Day through the Monday following Thanksgiving
9. New Year’s Eve and New Year’s Day
10. Easter Sunday
11. Gospel Fest
12. Chicago White Sox Home Games
13. Chicago Cubs Home Games
14. Chicago Bears Home Games
15. Lollapalooza
16. Pride Parade

In addition, CTA reserves the right to limit or deny access to the system during other major special events that may develop and that may impact service needs, during emergencies, and during severe weather conditions.

The CTA, at their discretion, may provide a Track Access Occurrence or Flagging during a time period identified above provided the request is made in conformance with this specification and is properly scheduled with the CTA as required.

1.09 CONSTRUCTION PROCESS PLAN

Added 7/25/13

A. CTA will require the Contractor to submit a Construction Process Plan whenever any work, in the opinion of the CTA, affects the safety or causes disruption of service or inconvenience to transit users, CTA Operations or impacts CTA Right-of-Way,. At a minimum, an individual Construction Process Plan shall be required for each instance the Contractor requests a Track Access Occurrence from CTA and for any work that requires flagging protection from CTA.

B. A draft Construction Process Plan must be submitted to CTA by such method as the CTA may direct, at least twenty-one (21) calendar days in advance of work and at least fourteen (14) calendar days prior to a pre-activity meeting. The plan shall include/address the following:

3. Applicable Contract Documents
4. Options
5. Possible conflicts
6. Compatibility problems
7. Time schedules
8. Weather limitations
9. Temporary facilities & signage
10. Space and access limitations
11. Governing regulations
12. Safe Work Plans (including Hazard Analysis)
13. CTA Operations Impact
14. Proposed Traffic Control & Staging Areas
15. Lift Plan

C. The draft plan must also include reference to all Contractor Requests for Information (RFI's) and submittals that pertain to work identified in the plan.

D. In addition, for any work to be performed during a Track Access Occurrence, the Contractor shall provide the following to the CTA:

1. A track access plan submitted to and approved by the CTA specifically identifying the area(s) of power removal and work zone protection methods being requested by the Contractor.
2. Work zone protection methods to be performed by the Contractor
3. Name, title, contact information, and work hours for Contractor's on-site supervision
4. Work zone protection requested by the Contractor for implementation by the CTA (subject to CTA approval).
5. Pre-approved Safety and Quality Control Checklists, applicable to the work elements being performed during the specific track(s) outage request for completion by the Contractor and submission to the Person-In-Charge during Track Access Occurrence.
6. A general schedule reflecting proposed work to be performed within the requested Track Access Occurrence.

Added 7/25/13

E. After pre-activity meeting minutes have been agreed to, all comments from the meeting must be incorporated into a final Construction Process Plan. This plan must be submitted and approved by the Engineer and CTA prior to the start of related work.

F. Prior to the CTA implementing an authorized Track Access Occurrence, the Contractor must provide, at least 48 hours in advance, an hourly schedule broken into tasks with a defined critical path that clearly establishes milestones that may be monitored. The hourly schedule shall also include, but not be limited to:

1. Name, title, contact information, and work hours for Contractor's on-site supervision.

2. Power removal (min 1 hour)

3. Proposed work activities.

4. Activities for inspection and completion of safety & quality checklists by Contractor.

5. Submission of safety & quality checklists to the CTA's Person-In-Charge (PIC) during Track Access Occurrence. The checklists shall be submitted to the PIC prior to commencing power restoration activities.

6. Power, Signal Restoration (min 1 hour).

7. Test train (min ½ hour).

G. The CTA intends to issue Power & Way Service Bulletins to supplement CTA Rail Service Bulletins. The Power & Way Service Bulletins are intended to provide procedural guidelines for safely removing and restoring the CTA's power & way systems (primarily traction power & signal) within the limits defined by the contract and Contractors specific track outage plan(s).

Added 7/25/13

H. CTA labor shall be required to de-energize and re-energize traction power and perform such other work as may be deemed by the CTA to be required pursuant to the Contractor's work activities and authorized Track Access Occurrences, etc. CTA Signal Maintainer shall also be required to observe and witness the Contractor disconnection and reconnection of temporary signal work at each location where modifications are performed to support construction activities. One Signal Maintainer will be required to witness testing at each location or housing where it is taking place. CTA Signal Maintainer shall also be required to witness the Contractor restoration safety testing, prior to the line being returned to the CTA.

I. Two Linemen will be required at each location where traction power is energized or de-energized. The Contractor's schedule must include travel time for the CTA Electrician's (min ½ hour) if they are to energize or de-energize traction power at more than one location.

J. Failure of the Contractor to provide the CTA the minimum specified time required for the removal and restoration of all Power & Way systems within an authorized Track Access Occurrence will result in specified liquidated damages for failure to return track(s) to service in accordance with the contract requirements. There will be no reimbursement for liquidated damages charged to the Contractor by CTA.

1.10 HAZARDOUS WORKING CONDITIONS

A. The Contractor shall caution all employees of the presence of electric third rail (600 volts DC), live cables and moving trains on CTA tracks. The Contractor shall take all necessary precautions to prevent damage to life or property through contact with the electrical or operations systems. The Contractor shall caution all employees that any contact with live electric third rail or "live" portions of train undercarriage may result in a severe burn or death.

B. The Contractor shall establish third-rail safety precautions in accordance with CTA regulations, such as using insulating hoods or covers for live third rail or cables adjacent to the work. On every day and at every work site where a live third rail hazard exists, the Contractor shall instruct all employees of the emergency procedures. Knowledge of the disconnect switch locations or manner of disconnection shall be available at all times to the personnel on the job. Unless otherwise noted, only CTA Electricians are allowed to disconnect power.

Added 7/25/13

C. The third rail may be de-energized during authorized Track Access Occurrences. The planning and implementation of the de-energizing shall be listed in the Contractor's process plan and include documenting checklist requirements.

1.11 TRACK SAFETY

A. The Contractor shall, at all times, take special care to conduct operations over, on, under, adjacent to, or adjoining, the CTA Right-of-Way in such a manner as not to cause damage, settlement or displacement of any structures, tracks or any portion thereof. The Contractor shall suspend such work until reasonable remedial measures, satisfactory to the Engineer and CTA , have been taken.

B. Any damages to the CTA tracks, supporting structures or other existing facilities and properties caused by the Contractor's operations shall be replaced or repaired by the Contractor to the satisfaction of the CTA without reimbursement. Contractor shall obtain photo documentation of damaged property to the CTA prior to performing any repair or replacement work.

C. The CTA shall have the right to perform any work it deems to be of an emergency nature and/or necessary to permit normal train operations during construction operations by the Contractor. The work to be completed by the CTA may impact the ongoing Contractor operations. If the emergency work is required due to Contractor actions, the cost of such service or emergency work provided by the CTA shall be borne by the Contractor with no reimbursement by the Department.

D. All work shall comply with the CTA Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System and CTA Standard Operating Procedures.

Added 7/25/13

E. The Contractor shall take such precautions as are necessary to ensure the safety and continuity of the CTA operations and passengers. The Contractor shall provide a minimum horizontal clearance of 7'-2" from the centerline of the nearest tangent track to any falsework, bracing and forms or other temporary obstruction during the work under this Contract. The clearance requirements for curved track sections must be calculated by the Contractor to ensure encroachment into the clearance envelope will not occur. Prepare, submit and obtain approval of detailed drawings prepared and sealed by a licensed structural engineer in the state of Illinois for all falsework, sheeting and construction procedures adjacent to and under the tracks before doing any work on same. After obtaining approval of such plans, said falsework, sheeting and construction procedures shall be constructed strictly in accordance with the approved drawings and specifications. All submittals must be submitted to the Engineer to be provided to the CTA In case of any settlement or displacement of structures or tracks, the Contractor shall immediately proceed with all shoring or other work necessary to maintain the CTA property in a safe condition for the operation of train service. If the Contractor fails to undertake this work within 24 hours after notice by the Engineer in writing, the CTA may proceed to repair or shore any such structure or tracks; and the cost thereof shall be billed to the Contractor with no compensation. If the settlement or displacement is severe enough to limit train service, the repairs shall be made immediately. All costs of any disruption to the CTA service due to the Contractor's operations or negligence shall be at the Contractor's expense with no compensation.

F. In limited cases and with advance authorization by the CTA, a minimum horizontal clearance of 6’-1” between the centerline of the nearest tangent track and an obstruction may be allowed. This clearance does not allow CTA or Contractor personnel to safely stand between the obstruction and an operating train. In addition, an obstruction at this clearance is a hazard to motormen with a cab window open. Any required flagging by the CTA will need to be requested as described herein.

G. A minimum vertical clearance of 14′-6″ (4.42 m) above the high running rail the CTA tracks must be provided at all times.

H. Protective Shield

1. The Contractor shall furnish, install, and later remover a protective shield to protect the CTA traffic from damage due to falling material and objects during construction.

Added 7/25/13

2. Protective shield will be necessary for any demolition activities during the removal of the existing structure as well as superstructure construction of the proposed structure.

3. The protective shield may be a platform, a net, or any other Department approved structure.

4. Any protective shield required, as indicated on the plans and the supporting members shall be designed to sustain a load of 200 pounds per square foot in addition to its own weight.

5. Drawings and design calculations for the protective shield shall be stamped by an Illinois Licensed Structural Engineer and shall be submitted to the Department for approval. The protective shield shall be constructed only after the Department has approved the drawings and the design.

1.12 TRACK FLAGGING OPERATIONS

A. Temporary Track Flagging slow zones per CTA SOP 7041 and "CTA Safety Manual for Contract Construction on or Near the CTA Rail System" are restricted in the following manner:

1. Temporary track flagging slow zones can only be mobilized, utilized and demobilized in non-rush hour time periods and no more than one (1) Track Flagging Operation zone will be permitted at any given time. The CTA will be the responsible party responsible to furnish and install the required slow zone signage and equipment. A Track Flagging Operation zone is defined as a contiguous work zone, of no more than 600 feet in length, regardless of the number of tracks fouled. The costs for all manpower, signage and equipment for flagging operations will be billed by the CTA to the Contractor with reimbursement as defined herein.

2. Current Standard Operating Procedures require Slow Zone with flagging protection whenever three or more workers are scheduled to work on, across or near a section of track for one half hour or more. Flagging protection shall be ordered and assigned according to the CTA Flagmen Requirements Manual. These standards must be adhered to and the number of flagmen assigned to a work location shall be as required by the CTA Flagmen Requirements Manual that is available for public viewing at CTA Headquarters upon request.

Added 7/25/13

3. Temporary Track Flagging slow zone signs will be placed, removed or turned by the CTA so the sign cannot be read from the motor cab or hooded to cover the sign so it may not be read from the motor cab when the work crew clears the Right-of-Way.

4. The Contractor shall provide the Engineer with a written request for flagmen and other personnel at least seventy two (72) hours (two normal working days and before noon) prior to the date, and time the work will be performed and the CTA personnel are requested. The Engineer or the Engineer's designee will coordinate all flagmen requests with the CTA.

5. A maximum of Sixty (60) flagger shifts will be reimbursed as part of the Contract. The costs for additional flagger shifts required for the Contractor's operations that are requested and granted by the CTA will not be reimbursed.

B. The providing of such personnel and any other safety precautions taken by the CTA shall not relieve the Contractor of any liability for death, injury or damage arising in connection with the construction operations. See CTA SOP No. 7037, "Flagging on the right-of-way", for a description of flagging personnel duties.

C. To minimize flagmen usage, the Contractor shall use approved barricades, barricaded scaffolds and/or safety railings. Barricades and safety railing arrangements shall be in accordance with Section 4-5.3 of the CTA Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System.

D. The CTA does not guarantee that flagging or other personnel will always be available when requested. The Contractor shall be advised that requests for flagging manpower must conform to the CTA Flagman Requirements Manual, and certain work locations require multiple flagging personnel when only one track is fouled by the work.

E. The Contractor shall pay for all flagging and other personnel costs incurred and charged by the CTA. The cost for the each flagger shift shall be $900.00 per flagger shift. The Contractor shall also be responsible to reimburse the CTA for all costs associated with the use of other personnel for infrastructure shifts throughout the duration of the contract. The cost for any other CTA personnel (signalmen, linemen, towermen, etc.) shall be $1,100.00 per infrastructure shift.

Added 7/25/13

F. By labor contract, CTA flagging personnel are entitled to a 30-minute break after a continuous 5-1/2 hour work period, including report and travel time. The 5-1/2 hour period begins when the person reports to work at his or her home terminal. Additionally, flagging personnel are entitled to occasional personal breaks (to use the washroom facilities) during the normal course of work. When flagging personnel leave the work site, work must cease unless provision is made for a relief flagger. The Contractor shall coordinate the Project work schedule with the flagging personnel break periods.

G. All employees of the Contractor and subcontractors shall report any actions of perceived CTA employee misconduct, or if any CTA employee does not provide a full level of cooperation in support of the contract; immediately and directly to the Engineer. The Engineer will provide written correspondence to the CTA Project Manager, as well as CTA Operations. Only with timely, written documentation will CTA be enabled to resolve work site personnel issues and take appropriate disciplinary action, when necessary.

H. If the Contractor, Engineer, CTA Construction or Safety Inspector believes that the Flagman is unable to perform his/her duties responsibly, work shall be stopped immediately, ensure that the Right-of-Way is safe for train operations, and the Work Crew shall exit, without delay, the Rail System Right-of-Way. The Contractor must contribute incident information to the Engineer to that a written report can be submitted to the CTA prior to the end of the workday.

1. In addition, all employees of the Contractor and subcontractors must report any actions of perceived CTA employee misconduct, or if any CTA employee does not provide a full level of cooperation in support of the contract immediately to the Engineer. The Engineer will then contact the CTA's Control Center and/or CTA Rail Operations Route Manager. Within 24 hours of alleged incident, the Engineer must provide a written report to the CTA including detailed explanation of incident, employee badge numbers, location of incident, etc. The Contractor must contribute incident information to the Engineer.

2. Failure to make the proper notification in writing may adversely affect any claim that the Department may file with respect to CTA employee performance or lack thereof.

I. CTA Flaggers only provide flagging protection for the CTA Right-of-Way, and only CTA Flaggers are permitted to provide flagging protection for the CTA Right-of-Way. Flaggers for streets, highways or other railroads are solely the responsibility of the Contractor, and will not be permitted to provide flagging protection for the CTA Right-of-Way. Any additional flagging required by other agencies or railroads is the responsibility of the Contractor.

Added 7/25/13

1.13 TRACK ACCESS OCCURRENCES

A. The entire system must be fully operational when the tracks are put back into service after a Track Access Occurrence. The track where work was conducted must be returned to the CTA in revenue condition; all stations must be open, fully functional and properly cleaned. The Contractor shall be immediately available with sufficient staff for up to one hour after revenue operation begins to ensure that all systems are functioning properly.

B. The Contractor shall allow enough time prior to putting the tracks back into service to make sure the line can be fully operational. A test train shall be required after any construction activity, determined by the Engineer or CTA, to require a test train. The scheduling of test trains must include travel time to and from the location being tested. Additional time should also be allowed for any possible remedial work required before the system can be made fully operational.

C. All components of the system, including, but not limited to, tracks, signals, stations, entrances, etc. must be fully and properly operational prior to putting the tracks and facilities back into service. Any facilities under demolition or construction and any temporary facilities must be safe and secure so they do not impact revenue service operations.

D. The Contractor shall be subject to fines if any station, facility, yard, structure, track, or component is not fully operational and useable at the prescribed predetermined time; including all planned staging of construction sites. The CTA will identify appropriate fines at the time of the incident. No compensation will be made for fines levied by the CTA due to Contractor actions or delays in providing CTA facilities at prescribed times.

E. The contractor shall clean all debris and equipment from the work or staging areas after work has been completed after each work day. In the event the Contractor fails to so clean to the CTA's satisfaction, the CTA may perform any necessary cleaning and fine the Contractor the cost of such cleaning. No compensation will be made for fines levied by the CTA due to delays and cleaning costs.

Added 7/25/13

BRACED EXCAVATION FOR RETAINING WALL AND RISER SHAFT

Description. This work shall include the installation of a bracing system, excavation, and backfilling to the elevation of the existing grade according to Section 502 and the following. The bracing system shall be designed and installed to prevent the movement of soil, structures, pavements and/or utilities adjacent to the excavated area.

Construction Requirements. The bracing system shall support excavations by the use of rolled or built-up steel sections, timber or plates as required. The Contractor shall submit design calculations and shop drawings prepared and sealed by an Illinois Licensed Structural Engineer for the bracing system. Shop drawings shall show all necessary details for the construction of the bracing system. The design calculations and shop drawings shall be submitted to the Engineer for review and approval.

No driving of sheeting or piles shall be allowed.

This braced excavation shall be coordinated with the braced excavation for the Morgan Street bridge North Abutment (S.N. 016-1709).

This work shall not proceed without the approval and authorization of the Engineer. However, in any event, the Contractor shall be fully responsible for the safety, stability and adequacy of the bracing system and shall be solely responsible and liable for all damages resulting from his construction operations or from failure or inadequacy of the bracing system.

In the event the bracing system protecting the existing embankment fails or is otherwise inadequate, in the judgment of the Engineer, the Contractor shall, at his own expense, take all necessary steps to restore the embankments to a safe operating condition to the satisfaction of the Engineer.

Bracing members shall be installed as soon as an excavation level is reached to permit their installation. Bracing members shall be cut to a depth which will not interfere with new construction or a minimum of 2 feet below finished grade after the excavation is backfilled.

Method of Measurement. This work shall be measured in cubic yards (cubic meters) according to the requirements for structure excavation as specified in Section 502.12 of the Standard Specifications except as modified herein: The horizontal limits of braced excavation for retaining wall and riser shaft shall be measured from face to face of proposed pile in both east-west and north-south directions.

Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for BRACED EXCAVATION. Payment for BRACED EXCAVATION will be limited to those locations shown on the plans. All bracing members, lagging and other required members associated with braced excavation will not be measured for payment but shall be included in the cost for BRACED EXCAVATION. No separate payment will be made for structure excavation where BRACED EXCAVATION is shown.

Added 7/25/13

REMOVAL OF EXISTING STRUCTURES NO. 2

Description. This item shall consist of furnishing all labor, equipment and materials necessary for the removal and disposal of the existing ComEd Temporary Support Shoring Tower, Support Beams and ancillary steel structures at the existing abutments. Work under this section includes items previously installed for the temporary support of ComEd conduits not removed by ComEd or ComEd's contractor. The work shall be done in accordance with the applicable portions of Section 501 of the Standard Specifications, and IDOT Guide Bridge Special Provision, No. 67, Structural Assessment Reports for Contractor's Means and Methods.

All structure elements of the shoring tower including, but not limited to, pile cap, micro-piles (to a depth of 3 foot below grade or as noted on the plans or directed by the Engineer) and structural steel.

Existing conduits and wires owned by ComEd will be manipulated by ComEd. Included in the Removal of Existing Structure No. 2 will be any coordination with ComEd by the Contractor required for the manipulations of ComEd's conduits. The removal of the shoring tower shall be staged and the limits of removal and schedule of removal shall be coordinated with ComEd so that ComEd can maintain the existing electrical service that is presently attached to the existing bridge.

The existing bridge is adjacent to the existing entrance to the CTA Blue Line station and over the CTA rail lines. All demolition activity must protect CTA property. Any damage to CTA property must be restored to the satisfaction of the CTA at the contractor expense.

The close proximity of the work activities to active CTA rail tracks imposes additional safety requirements. All activities over or in CTA right-of-way must comply to all CTA requirements. See Special Provision Section "CTA FLAGGING AND COORDINATION" for further information regarding the CTA requirements.

The work shall conform in every respect to all environmental, state and local regulations regarding construction requirements, the protection of adjacent properties, as well as dust and noise control.

Added 7/25/13

Prior to commencing work under this Item, the Contractor shall verify the location of all existing utilities in the area. The Contractor shall submit drawings and written documentation to the Engineer of such verification. All work under this Item shall be executed in such a manner so as not to disturb or damage the existing utilities. All materials (except for structural steel) removed under this Item shall become the property of the Contractor and shall be disposed of by the Contractor off the site and in a lawful manner meeting all IDOT Policies and Procedures. ComEd will pick up and take the structural steel back after the shoring tower is disassembled. Contractor will coordinate this pick-up with ComEd. Removal of structural steel should be scheduled with the Engineer to allow ComEd's contractor the ability to accept the steel on their vehicle immediately upon removal.

Traffic Operations

The traffic using interstate I-290 must remain open to all lanes of traffic during demolition activities unless the Contractor has secured the necessary permits from the Illinois Department of Transportation to allow for temporary closure of lanes.

Rail Operations

The CTA rail traffic must remain operational at all times during demolition activities unless the Contractor has secured the necessary permits from CTA to allow for temporary halting of rail traffic.

Method of Measurement. Removal of Existing structure No. 2 shall be measured for payment by each of the structure removed including additional elements noted above.

Basis of Payment. The work under this Item will be paid for at the Contract unit price each for REMOVAL OF EXISTING STURCTURES NO. 2, as indicated on the Plans and as specified herein.

Added 7/25/13

SOIL RETENTION SYSTEM NO. 1

Description. This work shall consist of designing, furnishing, installing, adjusting for stage construction and subsequent removal of the soil retention system according to the dimensions and details shown on the plans and in the approved design submittal. All necessary material and labor required to backfill the area after soil retention system removal shall also be included.

General. The soil retention system shall be as specified in the plans or as directed by the Engineer. This system consists of the following: sawcutting existing pier footing and utilizing remaining portion for soil retainment, installing 1" PJF between existing footing and proposed footing, installation of wood blocks to the depth determined by the Engineer, and connection of wood blocks to portion of existing footing using anchor bolts as shown in the plans. The Contractor shall submit a design of the wood blocks and anchor bolts adequate for the intended purposes prior to beginning construction. The number of wood blocks and length of anchor bolts shall be determined by the Engineer.

Traffic Operations
The traffic using Interstate I-290 must remain open to all lanes of traffic during soil retention system installation and removal unless the Contractor has secured the necessary permits from the Illinois Department of Transportation to allow for temporary closure of lanes.

Rail Operations
The CTA rail traffic must remain operational at all times during soil retention system installation and removal unless the Contractor has secured the necessary permits from CTA to allow for temporary halting of rail traffic.

Construction. The Contractor shall verify locations of all underground utilities before installing any of the soil retention system components or commencing any excavation. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The soil retention system shall be installed according to the plans, or as directed by the Engineer. The soil retention system shall remain in place until the proposed pier has been constructed or the Engineer determines it is no longer required.

The wood blocks and anchor bolts of the soil retention system shall be removed and disposed of by the Contractor when directed by the Engineer. The Contractor shall cut the anchor bolts at the top of existing footing level for removal.

Upon removal of the soil retention system, the area between the newly constructed pier and adjacent CTA tracks shall be backfilled to match existing grade as determined by the Engineer.

Added 7/25/13

Method of Measurement. The Soil Retention System furnished and installed according to the plans or as directed by the Engineer, and all necessary material and labor for the backfilling of the affected area, shall not be measured for payment.

Basis of Payment. The work under this Item shall not be paid for separately but shall be included in the Contract unit price for REMOVAL OF EXISTING STRUCTURES NO. 1, as indicated on the Plans and as specified herein.

Added 7/25/13

SOIL RETENTION SYSTEM NO. 2

Description. This work shall consist of furnishing and installing the soil retention system at the Morgan Street Exit Ramp Retaining Wall 5 (S.N. 016-1724) according to the dimensions and details shown on the plans or as approved by the Engineer.

General. The soil retention system shall be as specified in the plans or as directed by the Engineer. This system consists of the following: installation of L6x6x⅜ steel angle at the back face of the existing Morgan Street Exit Ramp south retaining wall (at location and to height as indicated on the plans or as specified by the Engineer) using minimum ASTM A325 ¾" diameter anchor bolts at 9" staggered spacing drilled and installed into the existing wall; installation of HSS12x6x¼ steel lagging supported on L6x6x⅜ steel angle and east end of proposed Retaining Wall 5 (S.N. 016-1724). Steel angle shall have minimum 36ksi yield strength and steel tube shall have minimum 46ksi yield strength.

Traffic Operations
The traffic using Interstate I-290 must remain open to all lanes of traffic during soil retention system installation unless the Contractor has secured the necessary permits from the Illinois Department of Transportation to allow for temporary closure of lanes.

Construction. The soil retention system shall be installed according to the plans, or as directed by the Engineer, and shall remain in place until the remaining portions of the Morgan Street Exit Ramp south retaining wall are completed in future contracts.

Method of Measurement. The Soil Retention System furnished and installed according to the plans, or as directed by the Engineer, shall not be measured for payment. Structural steel shall be measured for payment in pounds and anchor bolts shall be measured for payment per each and shall include furnishing, drilling, and installing.

Basis of Payment. The work under this Item shall not be paid for separately. Structural steel will be paid for at the contract unit price per pound for FURNISHING AND ERECTING STRUCTURAL STEEL and anchor bolts will be paid for at the contract unit price per each for ANCHOR BOLTS, ¾".

Added 7/25/13

MICROPILES

Description This work shall consist of furnishing all equipment, materials, tools, labor, and incidentals for furnishing and installing drilled MICRO-PILES at the locations specified on the plans. .This work shall be performed in accordance with the applicable portions of Section 512 of IDOT Standard Specifications, except as herein modified.

General. All material required for the drilled MICRO-PILES installation, including but not limited to the steel casings, grouts, reinforcing bars, and any incidental materials shall be included under this pay item.

The concrete grout shall be in accordance with the applicable portions of Section 1020 and 1024 of IDOT Standard Specifications.

Construction Requirements. The Contractor shall follow the manufacturer's recommended installation procedure in addition to the applicable portions of the IDOT Standard Specifications..

Material Acceptance. The Contractor must provide a Manufacturer's written certification that the materials comply with these specifications.

Method of Measurement. All furnished and installed drilled MICRO-PILES will be measured for payment as each.

Basis of Payment. This work will be paid at the contract unit price per each for MICRO-PILES. The contract unit price shall include all materials, fabrication, shop assembly, splicing, delivery and installation.

Added 7/25/13

PROTECTIVE SHIELD, SPECIAL

Description This work shall consist of furnishing all equipment, materials, tools, labor, and incidentals for furnishing and installing PROTECTIVE SHIELD, SPECIAL between the beam spans that contain ComEd Conduits. This work shall be performed in accordance with the applicable portions of Section 501.03 of IDOT Standard Specifications, except as herein modified.

PROTECTIVE SHIELD, SPECIAL will be furnished by the ComEd Contractor to be placed by the ComEd Contractor between the existing bridge beams. Once the support structure is in place and the ComEd ducts supported, the Contractor shall remove the PROTECTIVE SHIELD , SPECIAL and store for future use.

Once the new steel beams are in place, the Contractor shall cut the PROTECTIVE SHIELD, SPECIAL for use between the new steel beams. Contractor shall add new PROTECTIVE SHIELD, SPECIAL for areas between existing and new abutments. ComEd Contractor will remove and dispose of PROTECTIVE SHIELD, SPECIAL upon completion of supporting the ComEd Conduits on the new bridge deck.

Method of Measurement. All furnished and installed drilled PROTECTIVE SHIELD, SPECIAL will be measured for payment per square yard.

Basis of Payment. This work will be paid at the contract unit price per square yard. The contract unit price shall include all materials, fabrication, delivery and installation.

Added 7/25/13

BRIDGE FENCE RAILING (SPECIAL)

The fence railing shall conform to Section 503, 509 and 664 of the Standard Specifications except as herein modified.

Description: This Work consists of furnishing and installing decorative fence system of the type specified at locations shown on the Plans or directed by the Engineer, and in accordance with the details shown in the Plans.
Materials: T316 stainless steel.
Finish: Wire mesh frame, supports, attachment tabs, fence posts and exposed base plates shall have matt, non-directional surface, EN 10088-2 2K, maximum surface roughness of 05. Microns Ra., Wire mesh shall have surface finished as supplied by approved manufacturer.
Pickled and passivated process shall be used to remove all discoloration after fabrication for the entire fence rail system, including but not limited to mesh panels, posts, mounting tabs and anchor plate, per ASTM A380 and ASTM A967.
General: Mesh panels shall be framed with angle iron frames, mechanically attached to posts with angle iron mounting tabs. Wire mesh shall be welded to the backside of the angle iron frames with exposed welds. Frame supports shall be welded to back side of angle iron frame. Mounting tabs shall have slotted holes that mate with mounting holes on the mesh panel and shall be welded to posts.
Fence post carrying the mesh panels shall be normal to the parapet. The top and bottom of the mesh frame shall be parallel to grade line and top of bridge parapet.
Submittals:

1. Manufactures' certification that stainless steel fence and connections meet IDOT and CDOT specifications.
2. Shop drawings including bridge parapet wall with the Chicago Pattern, railing and fencing system.
3. Samples of manufacturer's available surface finishes.
4. Sample of fence components, including mesh, 6" long sections of angle iron frame, posts and full size mounting tab. Samples to have the specified finish.
5. Manufactures' certificate of achieving the specified surface finish.
6. Mockup of mesh panel and post tested for required loads, and delivered on the site for appearance approval.
7. Calculations signed and sealed by an Illinois Registered Professional Structural Engineer

Coordination: Coordinate with Chicago Wall concrete barrier manufacturer, rail manufacturer, electrical and traffic surveillance requirements to install conduit and junction boxes.
Complete shop drawings and calculations by an Illinois Registered Professional Structural Engineer, and field installation drawings must be submitted to the Engineer for approval prior to ordering materials, commencement of any shop fabrication, and/or finishing.
Stainless Steel Bridge Fence: The stainless steel system must be in accordance with the Plans and with AASHTO-AGC-ARTBE Joint Committee Task Force 13 Report "A Guide to Standardized Highway Barrier Hardware."

Added 7/25/13

There will be a single source responsibility for the stainless steel mesh panel, which will include but not be limited to the stainless steel mesh, frame, intermediate support, finishing the product, structural calculations, bolts, fasteners, welding, shop fabrication, field erection, and freight etc. The rest of the system, including but not limited to attachment of the mesh panel to posts, bolts, studs, and required embedment must be responsibility of by the Contractor.
Design Requirements: The design requirements must be as set forth in the AASHTO Task Force 13 Report ("A Guide to Standardized Highway Barrier Hardware")
All fasteners and bolts must be stainless steel.
Structural Requirements: The bridge fence system must conform to the requirements of AASHTO "Standard Specifications for Highway Bridges" Section 2.7.
All thickness and material specifications requirements, unless otherwise approved by the Engineer, must be based on certifications based on structural calculations provided by the Contractor.
Stainless Steel Wire Mesh: Large scale, three wire, rigid cable. Percent open shall be minimum 62%. Maximum sphere diameter opening: 1 3/4". Min wire diameter shall be 0.162. Triple wire groups shall run horizontally.

Acceptable wire mesh panel manufacturer:

1. Banker Wire
2. Cambridge Architectural
3. GKD Metal Fabrics
4. Approved Equal.

Acceptable wire mesh product:

1. Banker Wire Architectural Mesh Pattern: M13Z-7
2. Approved Equal

Method of Measurement: This Work will be measured for payment, complete in place, per foot.
Basis of Payment: This Work will be paid for at the Contract Unit Price per foot for BRIDGE FENCE RAILING (SPECIAL), which price includes furnishing and placing all material required, including all labor, equipment and incidentals necessary to complete the Work as herein specified.

Added 7/25/13

FORM LINER TEXTURED SURFACE

The form liner textured surfaces shall conform to applicable portions of Section 503 of the Standard Specifications except as herein modified.

Description: This Work consists of designing, developing, furnishing and installing form liners textured surface and forming concrete using reusable, high strength urethane and elastomeric form liners to achieve concrete treatment as shown on the Plans. Form liner textured surface shall be of the type specified at locations shown on the Plans or directed by the Engineer, and in accordance with the details shown in the Plans. This work shall also include furnishing and installing reveal and bevel strips.

Materials: Form liners for bridge piers shall be of high quality, highly reusable and capable of withstanding anticipated concrete pour pressures without causing leakage or physical defects. Forms for smooth surfaces shall be plastic coated to provide a smooth surface free of any impression or pattern. Reveals for the retaining walls shall be made of rubber material capable of reproducing the same quality texture with extended use on flat and curved surface.

General: Liners shall be attached to each other with flush seams and seams filled necessary to eliminate visible evidence of seams in cast concrete. Liner butt joints shall be blended into the pattern so as to create no vertical joints or reveals. Concrete pours shall be continuous form liner pattern fields. Finished textures shall be continuous without visual disruption and properly aligned over adjacent and multiple liner panels. After each use, liners shall be cleaned and visually inspected. Damaged liners shall be replaced when continued use or repair would diminish the aesthetics of the Work. At the end of the work, master molds and form liners shall be turned to the Owner, delivered to a location designated by the Owner, for future use on other contracts.

Submittals:

Shop drawings of the form liner texture surface shall be provided for each area of textured concrete.

1. Individual form liner pattern descriptions, dimensions and sequencing of form liner sections, typical cross sections, joints, corners, joint locations, edge treatment and any other conditions.
2. Elevation views and layouts showing the full height and length of the structure with each form liner outlined.
3. Two 24”x 24” cast samples for each texture using the same concrete mix as specified for the structure.
4. Mockup of the front face of a pier with a minimum height of 4’ and an approximate 6” thickness. The mockup must be available for review at the project site by the Engineer, Department staff and their designees.
5. No final concrete surfaces shall be cast until the Engineer accepts the final samples and mockup after approval of any submitted materials.

Added 7/25/13

Acceptable Form Liner Manufacturers:

1. Custom Rock International, St Paul, MN (Jim Rogers)

2. Scott Systems, Denver, CO

3. American Formliners, Inc, Naperville, IL

4. Approved Equal.

Method of Measurement: This Work will be measured for payment, complete in place, per square feet for FORM LINER TEXTURED SURFACE.

Basis of Payment: This Work will be paid for at the Contract Unit Price per square feet for FORM LINER TEXTURED SURFACE which price includes furnishing and placing all material required, including all labor, equipment and incidentals necessary to complete the Work as herein specified.

CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID (CITY OF CHICAGO)

Description. Work under this item shall be performed according to Sections 602 and 604 of the IDOT Standard Specifications for Road and Bridge Construction and the current City of Chicago Department of Water Management Standard Specifications for Water and Sewer Main Construction, except as herein modified.

Materials. Materials shall be according to the following:

(c) Coarse aggregate for bedding material shall meet a CA 11 gradation in accordance with Article 1004.05 of the IDOT Standard Specifications.

(d) Fine aggregate for backfilling material shall meet a FA 6 gradation in accordance with Article 1003.04 of the IDOT Standard Specifications.

(e) City of Chicago standard frame and lid shall meet be in accordance with the City of Chicago Department of Water Management Standard Specifications for Water and Sewer Main Construction.

General Requirements. An ADA compliant open lid shall be placed on all catch basins located within the cross walk or as directed by the Engineer.

The City of Chicago Department of Water Management's (DOWM) Rain Blocker Restrictor Program shall be maintained with any roadway improvement. The restrictors shall be installed in all catch basins outside of the Central Business District. Restrictors must not be installed in catch basins in close proximity to viaduct areas, bus stops, or emergency entrances. The City of Chicago Department of Water Management (DOWM) must approve the non-installation or removal of any restrictor. The restrictors can be obtained from City of Chicago Department of Water Management Central District at 3901 S. Ashland Avenue. The contractor should arrange for pick up by contacting 312-747-1177 (7am to 3pm, Monday to Friday). The furnishing and installing of a restrictor shall be included in the contract unit price for catch basins.

Requirements for restrictor installation are as follows:

- Arterial Streets: 3-inch Orifice Restrictor
- Bus Routes: 3-inch Orifice Restrictor
- Residential Streets: 3-inch Vortex Restrictor
- Alleys: 3-inch Orifice Restrictor in the last catch basin

When using an orifice restrictor, insert it into the half-trap. Upon tightening of the center nut on the face of the restrictor, the rubber O-rings will expand inside the half trap providing a water-tight seal. Pull on the restrictor to verify a tight fit is made.

Added 7/25/13

When applying a vortex restrictor, insert it with the opening down. Upon tightening of the 2 bolts on the face of the restrictor, the rubber O-rings will provide a water-tight seal. Pull on the restrictor to verify a tight fit is made.

QC/QA Requirements. All precast structures shall be from an IDOT approved source.

Basis of Payment. This work will be paid for at the contract unit price per each for CATCH BASINS, TYPE A, 4'- DIAMETER, TYPE 1 FRAME, OPEN LID (CITY OF CHICAGO).

Added 7/25/13

REMOVE, STORE, AND RE-ERECT SIGN PANEL (SPECIAL)

Description. Work under this item shall consist of removing, storing, and re-erecting overhead sign panels mounted to existing bridge mounted structures.

The Contractor shall inventory and tag the location and orientation of each sign panel removed prior to removal. Overhead sign panels will be stored off the job site and public right-of-way in a dry facility until reinstallation per engineer's direction. The dates for reinstallation of sign panels will be coordinated with the Engineer. Overhead sign panels mounted to existing bridge mounted structures will be reinstalled to the original location. Installation work must be performed in accordance with the requirements of Section 723 of the Standard Specifications.

Method of Measurement. This work shall be paid for per each overhead sign panel removed, stored, and re-erected.

Basis of Payment. This work will be paid for at the contract unit price each for REMOVE, STORE, AND RE-ERECT SIGN PANEL (SPECIAL). Replacement of any sign panel hardware broken during removal of a sign panel, or any lost or stolen sign panels or hardware will be included in the cost of this item. The transport and storage of sign panels will also be included in the cost of this item.

Added 7/25/13

TEMPORARY EPOXY PAVEMENT MARKING

Description. This work shall consist of furnishing, installing, and maintaining Temporary Epoxy Pavement Markings.

Material. Materials shall be according to Article 1095.04 of the Standard Specifications.

Equipment. Equipment shall be according to Article 1105.02.

Construction Requirements. Prior to application a surface preparation adhesive shall be applied to a clean, dry road surface. The pavement shall be cleaned by a method of approved by the Engineer to remove all dirt, grease, glaze, or other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. No markings shall be placed until the Engineer approves the cleaning. The Temporary Epoxy Pavement Marking shall be placed according to the applicable portions of Article 780.09.

Method of Measurement and Basis of Payment. This work will be paid for at the contract unit price per foot for TEMPORARY EPOXY PAVEMENT MARKING of the line width specified.

Removal will be paid at the contract unit price per square foot (square meter) for WORK ZONE PAVEMENT MARKING REMOVAL.

When temporary pavement marking is shown on the Standard, the cost of the temporary pavement marking will be included in the cost of the Standard.

Added 7/25/13

WATER MAIN CONTROL VALVES

Description. This section includes requirements for the furnishing of gate valves for water main control.

A. Design Requirements:

a. References
   i. American Society for Testing and Materials (ASTM), latest edition:
      1. ASTM A48 - Gray Iron Castings.
      2. ASTM A126 - Gray Iron Castings for Valves, Flanges.
      3. ASTM A436 - Austenitic Gray Iron Castings.
      4. ASTM A439 - Austenitic Ductile Iron Castings.
      5. ASTM B584 - Copper Alloy Sand Castings for General Application.
   ii. AWWA C110 - Ductile Iron and Gray Iron Fittings, latest edition.
   iii. AWWA C111 - Rubber Gasket Joints for Ductile Iron, latest edition.
   iv. AWWA C500 - Metal-seated Gate Valves for Water Supply Service, latest edition
   v. AWWA C550 - Standard for Protective Epoxy Interior Coatings for Valves and Hydrants, latest edition.
   vi. Federal Specification FF-B-575C - Bolts; Hex and Square, latest edition.
   vii. Federal Specification FF-N-836E - Nut; Square, Hex, Cap, latest edition.

b. Submittals
   i. Contractor must provide an affidavit stating that all gate valves comply with all applicable provisions shown on the drawings and as specified in this specification.
   ii. Provide manufacturers catalog cuts and/or certified drawings of all valves to be furnished. The manufacturers catalog cuts and/or certified drawings must provide all necessary information regarding dimensions and materials used and conformance to requirements stated in these specifications.
   iii. All submittals must be reviewed and approved by the IDOT Resident Engineer and the City of Chicago Department of Water Management Commissioner (Engineer) prior to delivery.

c. Quality Assurance
   i. Each valve must be hydrostatically tested at the manufacturer's shops and proven hydraulically tight at all pressures up to 200-pounds per square inch.
   ii. For gate valves, the following tests are required:
      1. The first test consists of applying a 200-pound per square inch hydrostatic pressure between the discs through an opening in the bonnet casting.
      2. The second test consists of applying a 200-pound per square inch hydrostatic pressure against the outside of each disc in the manner prescribed below:

a. The valves must be plugged or capped on both ends. The caps or plugs must be drilled and tapped to accept the pressure test piping.
b. With the pressure test piping in place, open the gates of the valve, the test-piping valve, and remove the plug in the bonnet. Fill the valve with water. When a discharge occurs at the outlet side, close the water supply line and insert the bonnet plug.
c. Close the gates of the valves, open test-piping valve, and apply a 200-pound per square inch hydrostatic pressure on the inlet side.
d. Hold test pressure for one (1) minute. During this time no water should discharge from the outlet end of the test piping. If no leak occurs, release pressure, reverse the test piping, and repeat the test procedures for the other gate. If a leak occurs, repair and/or replace the valve as directed by the Engineer. Repeat the test procedures.

3. An affidavit must be furnished from the manufacturer to attest to the fact that each of the valves furnished under this Contract were proven hydrostatically tight in accordance with the specified test procedures.

iii. Valves that do not meet the requirements of this Section will be rejected and removed by the Contractor, and replaced with valves that conform to this Section, within the time period allowed by the Engineer.

B. Products:

a. Gate Valves

i. All gate valves are to be Chicago Standard Gate Valves of the size specified that are designed, manufactured, tested, and inspected in accordance with AWWA C500, and in accordance with the exceptions noted here. All valves are to be delivered fully assembled.
ii. The following characters must be cast in 1/2-inch letters on the bonnet of each valve:
    1. Chicago
    2. Year of Manufacture
    3. Manufacturer's Name
iii. Gate valves must be of mechanical joint type double disk and in the following sizes: 16-inch.
iv. Material used must meet the requirements as to physical and chemical properties, as specified in this Section.
v. Valves found to contain defects such as blowholes, shrinkage or slag holes, cold shuts, or cracks will be rejected.

Added 7/25/13

vi. The thickness of metal in castings, whose standard thickness is less than 0.8-inch, must not be more than 0.08-inch less than the standard thickness. The deficiency in thickness of castings, whose standard thickness is 0.8-inch or more, must not exceed 10% of the standard thickness. The above allowable deficiencies in thickness however must not extend over more than one-half of the area of the casting.

vii. After being cleaned and tested, every assembled valve and all metallic parts must be coated inside and outside with coal tar pitch varnish. It must produce a smooth and non-tacky coating tough and tenacious when cold and not brittle nor with any tendency to scale off.

viii. The brass castings must comply with ASTM B584, Copper Allow UNS No. C83600.

ix. The bronze in the valve stem and in the stem nut must be manganese bronze, complying with ASTM B584, Copper Alloy UNS No. C86700. Stem seals are to be double o-rings complying with ASTM D2000 and ASTM 568A.

x. The gaskets used between the flanges must be fully faced, 1/32-inch thick and made of heavy-duty, asbestos-free, fiber composition, suitable for water service.

xi. Bolts and nuts must be made of cast iron or steel. Heads of seal plate bolts must conform to the dimensions shown on the Drawings (an alternate of hex or square head bolt is acceptable) while all other requirements of seal plate bolts must conform to Federal Specification FF-B-575C and nuts must conform to FF-N-836E. Heads of bolts must be unfinished and nuts must be semi-finished. Both bolts and nuts must be hot dipped galvanized as specified in the applicable Federal Specification.

xii. The valves herein specified must be furnished complete with mechanical joint accessories. The mechanical joint accessories must consist of mechanical joint thrust restraint glands, rubber gaskets, and tee head bolts and hex nuts, all conforming to AWWA C110. Dimensions and tolerances for mechanical joints must conform to table 1 of AWWA C110.

xiii. Mechanical Joint Restraint Glands.

1. Provide restraint glands at all mechanical joints.
2. Restraint glands must be designed for use with the standardized mechanical joint bell pipe conforming to AWWA C110 and AWWA C153. Restraint is to be incorporated into the design of the gland. Acceptable products for this use are Mega Lugs manufactured by EBAA Iron Works; Uniflange manufactured by Ford Meter Box; or Star Grip manufactured by Star Pipe Products.
3. Restraint is to be accomplished by the use of multiple, wedge style restraints. Proper actuation of the wedges is to be ensured with torque limiting twist off nuts.

Added 7/25/13

4. Glands 3-inches through 16-inches are to be pressure rated at 350-psi; glands 18-inch through 48-inch are to be rated at 250 psi.
5. The gland body and restraint components are to be made from ductile iron conforming to ASTM A536, 65-45-12. Ductile iron wedges are to be heat-treated within a range of 370 to 470 BHN.
6. The joint is to be capable of full deflection during assembly and joint deflection after assembly
7. Provide glands with minimum weights and number of wedges as follows: (16-inch) 52.0 lbs and 12 wedges per restrained joint.
8. Retainer glands are not acceptable.

xiv. Gaskets
1. All gaskets for pipe, fittings and appurtenances must be vulcanized natural or vulcanized synthetic rubber, non-porous, free of foreign materials and visible defects. Recycled rubber may not be used.
2. When soil conditions do not permit the use of natural or synthetic rubber gaskets and when directed by the Engineer, all gaskets for pipe, fittings, and appurtenances must be Nitrile (Acrylonitrile butadiene), nonporous, free of foreign materials and visible defects.
3. Gaskets must be stored in a cool place and protected from light, heat, oil, or grease until installed. Any gasket showing signs of cracking, weathering, abrasion or other deterioration will be rejected.

xv. It will be the manufacturer's responsibility to provide the patterns and gauges necessary to perform the work to be done hereunder. IDOT and the Chicago Department of Water Management (Department) will not furnish these items.

xvi. The Department reserves the right to make at any time such tests as it may deem proper to determine that the materials used are proper for the Work and that the valves are of good mechanical construction. The manufacturer must give the authorized inspectors of the Department free access to all places where valves are being made. At the Department's request, the manufacturer must furnish properly prepared standard test specimens of the materials used and must provide facilities for testing them.

xvii. All valves must open by turning the operation stem clockwise.

xviii. Operating nuts must be 2 ½-inches square at the base of the nut.

C. Transportation, Delivery and Storage:

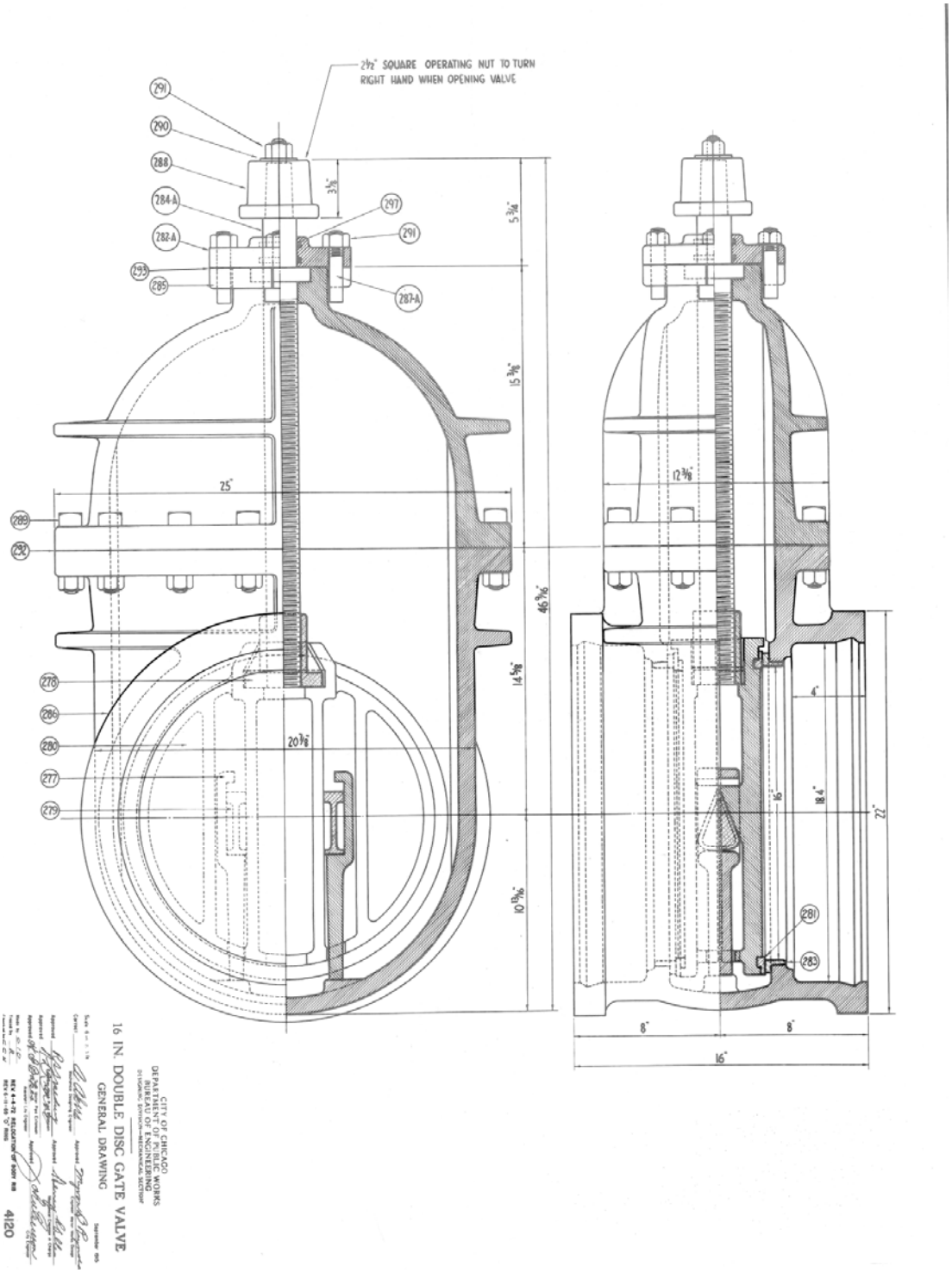
a. The valves and accessories must be delivered to a designated City of Chicago Department of Water Management facility. The Engineer will provide appropriate information about which facility will receive the material, times available for delivery and contact information. The Contractor must provide 48 hours advance notice to the City of Chicago Department of Water Management prior to delivering the valve and accessories.

Added 7/25/13

b. Every precaution must be taken to prevent damage to the valves during transportation and delivery. Valves must be sealed with caps or by another suitable method upon transportation from the supplier. Caps or end seals must be sturdy, secure, and wind resistant so as to protect the valves at all times prior to installation. Extreme care must be taken in loading and unloading the valves. Such work must be done slowly with suitable equipment and the valves must be under complete control at all times. Under no conditions may the valves be dropped, bumped, dragged, pushed, or moved in any way that will cause damage to the valves.
c. If in the process of transportation, handling, or delivery, any valve is damaged, such valve must be replaced by the Contractor and be considered incidental to the construction and no additional payment will be allowed.
d. The Contractor must store valves in a manner that will prevent damage.

Basis of Payment. This work as described above, shall be paid for at the contract unit price per each for WATER MAIN CONTROL VALVES-16 INCH, which price shall be payment in full for furnishing the valves as specified herein including delivery to the City of Chicago Department of Water Management.

Added 7/25/13


2½" SQUARE OPERATING NUT TO TURN RIGHT HAND WHEN OPENING VALVE
291
290
288
284-A
282-A
295
285
297
291
287-A
289
292
278
286
280
277
279
281
283
25"
20 7/8"
12 3/8"
4"
16"
18.4"
22"
8"
8"
16"
3 1/2"
5 3/4"
15 3/8"
46 7/16"
14 5/8"
10 15/16"
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
16 IN. DOUBLE DISC GATE VALVE
GENERAL DRAWING
4120

Added 7/25/13

DUCTILE IRON WATER PIPE FITTINGS

DESCRIPTION. This section includes requirements for the furnishing of ductile iron water pipe fittings as specified here. The fittings to be furnished are:

36" X 24" 2 Bell Mechanical Joint Reducer
30" X 24" 2 Bell Mechanical Joint Reducer
24" 2 Bell Mechanical Joint ¼ Base Bend
36" Mechanical Joint Sleeve
30" Mechanical Joint Sleeve

Design Requirements

a. REFERENCES
   i. American Society for Testing and Materials (ASTM), latest edition:
      1. ASTM A123 - Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.
      2. ASTM A153 - Zinc Coating (Hot Dip) on Iron and Steel.
      3. ASTM A240 - Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip, for Pressure Vessels and for General Applications.
      4. ASTM A307 - Carbon Steel Bolts and Studs.
      5. ASTM A536 - Ductile Iron Castings.
      6. ASTM A767 - Zinc Coated (galvanized) Steel.
      7. ASTM A775 - Epoxy Coated Steel.
      8. ASTM A780-93 - Repair of Zinc Coated (Galvanized) Steel.
      9. ASTM B308 – Stainless Steel Alloy Standard Structural Shapes, Rolled, or Extruded.
      10. ASTM C564 - Rubber Gaskets for Cast Iron Soil Pipe and Fittings.
   ii. American Water Works Association (AWWA), latest edition:
      1. AWWA C104 - Cement Mortar Lining for Ductile Iron Pipe and Fittings.
      2. AWWA C110 - Ductile-Iron and Gray-Iron Fittings.
      3. AWWA C111 - Rubber Rubber-Gasket Joints for Ductile-Iron Pressure pipe and Fittings.
      4. AWWA C116 - Protective Fusion-Bonded Epoxy Coatings Int. and Ext. Surf. Ductile-Iron/Gray-Iron Fittings.
   iii. American National Standards Institute (ANSI), latest edition:
      1. ANSI B16.21 – Metallic Gaskets for Pipe Flanges.
   iv. American Society of Mechanical Engineers (ASME), latest edition:
      1. ASME B18.2.1 – Square and Hex Bolts and Screws.
      2. ASME B18.2.2 –Square and Hex Nuts.

Added 7/25/13

b. SUBMITTALS
    i. Provide manufacturers catalog cuts and/or certified drawings of all fittings to be furnished. The manufacturers catalog cuts and/or certified drawings must provide all necessary information regarding dimensions and materials used and conformance to requirements stated in these specifications.
    ii. All submittals must be reviewed and approved by the IDOT Resident Engineer and the Chicago Department of Water Management Commissioner (Engineer) prior to delivery.
    iii. The Contractor must submit to the Engineer certified copies of all test reports for test conducted on the fittings by the manufacturer when so requested by the Engineer.
    iv. The Contractor must provide the Engineer with a notarized statement that all tests have been made and met as specified.

c. QUALITY ASSURANCE
    i. Each manufacturer supplying water pipe fittings under this contract must furnish all facilities, personnel, and materials to conduct tests required as applicable to the type of fitting being supplied, when requested by the Engineer. The cost of all plant tests required as proof of the acceptability of the water pipe fittings will be considered incidental to the Work and no additional payment will be allowed.

B. Products

a. Fittings
    i. Fittings to be furnished and installed as specified must be mechanical joint, ductile iron in accordance with AWWA C110. Lay length of mechanical joint castings must be as shown in AWWA C110. Wall thickness and allowable variation in the thickness of mechanical joint castings must conform to AWWA C110 and have a 250-psi pressure rating.
    ii. Compact fittings may not be used unless otherwise approved by the Engineer.
    iii. Plain ends of mechanical joint fittings must be beveled and gauged to properly seat in push-on joint bells.
    iv. The fittings must be smooth and free from defects of every nature that would make them unfit for the use that they were intended. Plugging of fittings is not allowed. Repairing of defects by welding will be allowed if such repairs will not adversely affect the serviceability of the fittings or their ability to meet the strength requirements of the referenced AWWA standards.
    v. All castings must be coated with a petroleum asphaltic material in conformance with AWWA C110, Section 10-10. Interior of pipe must be cement lined in accordance with AWWA C104.

Added 7/25/13

vi. The fittings herein specified must be furnished complete with mechanical joint accessories. The mechanical joint accessories must consist of mechanical joint thrust restraint glands, rubber gaskets, and tee head bolts and hex nuts, all conforming to AWWA C110. Dimensions and tolerances for mechanical joints must conform to table 1of AWWA C110.

vii. Mechanical Joint Restraint Glands.
   1. Provide restraint glands at all mechanical joints.
   2. Restraint glands must be designed for use with the standardized mechanical joint bell pipe conforming to AWWA C110 and AWWA C153. Restraint is to be incorporated into the design of the gland. Acceptable products for this use are Mega Lugs manufactured by EBAA Iron Works; Uniflange manufactured by Ford Meter Box; or Star Grip manufactured by Star Pipe Products.
   3. Restraint is to be accomplished by the use of multiple, wedge style restraints. Proper actuation of the wedges is to be ensured with torque limiting twist off nuts.
   4. Glands 3-inches through 16-inches are to be pressure rated at 350-psi; glands 18-inches through 48-inches are to be rated at 250 psi.
   5. The gland body and restraint components are to be made from ductile iron conforming to ASTM A536, 65-45-12. Ductile iron wedges are to be heat treated within a range of 370 to 470 BHN.
   6. The joint is to be capable of full deflection during assembly and joint deflection after assembly.
   7. Provide glands with minimum weights and number of wedges as shown in Table B.
   8. Retainer glands are not acceptable.

Table B: Minimum weight and number of wedges per restrained joint

-24-inch: 90.0-lbs, 16 wedges per restrained joint
-30-inch: 190.7-lbs, 20 wedges per restrained joint
-36-inch: 226.5-lbs, 24 wedges per restrained joint

viii. Gaskets
   1. All gaskets for pipe, fittings and appurtenances must be vulcanized natural or vulcanized synthetic rubber, non-porous, free of foreign materials and visible defects. Recycled rubber may not be used.

Added 7/25/13

2. When soil conditions do not permit the use of natural or synthetic rubber gaskets and when directed by the Engineer, all gaskets for pipe, fittings and appurtenances must be Nitrile (Acrylonitrile butadiene), nonporous, free of foreign materials and visible defects.
3. Gaskets must be stored in a cool place and protected from light, heat, oil, or grease until installed. Any gasket showing signs of cracking, weathering, abrasion or other deterioration will be rejected.

C. TRANSPORTATION, DELIERY AND STORAGE

a. The ductile iron water pipe fittings and accessories must be delivered to a designated City of Chicago Department of Water Management facility. The Engineer will provide appropriate information about which facility will receive the material, times available for delivery and contact information. The Contractor must provide 48 hours advance notice to the City of Chicago Department of Water Management prior to delivering the fittings and accessories.
b. Every precaution must be taken to prevent damage to the ductile iron water pipe fittings during transportation and delivery. Fittings must be sealed with caps or by another suitable method upon transportation from the supplier. Caps or end seals must be sturdy, secure, and wind resistant so as to protect the fittings at all times prior to installation. Extreme care must be taken in loading and unloading the fittings. Such work must be done slowly with suitable equipment and the fittings must be under complete control at all times. Under no conditions may the fittings be dropped, bumped, dragged, pushed, or moved in any way that will cause damage to the fittings.
c. If in the process of transportation, handling, or delivery, any fitting is damaged, such fitting must be replaced by the Contractor and be considered incidental to the construction and no additional payment will be allowed.
d. The Contractor must store fittings in a manner that will prevent damage.

Basis of Payment. This work as described above, shall be paid for at the contract unit price per each for:

Ductile Iron Water Pipe Fittings -36” X 24” 2 Bell Mechanical Joint Reducer,
Ductile Iron Water Pipe Fittings -30” X 24” 2 Bell Mechanical Joint Reducer,
Ductile Iron Water Pipe Fittings -24” 2 Bell Mechanical Joint ¼ Base Bend,
Ductile Iron Water Pipe Fittings -36” Mechanical Joint Sleeve,
Ductile Iron Water Pipe Fittings -30” Mechanical Joint Sleeve,

which price shall be payment in full for furnishing the fittings and accessories as specified herein including delivery to the City of Chicago Department of Water Management.

Added 7/25/13

IEPA FORM 663

Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation
LPC-663
Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: I90/94 at I290 (Circle Interchange) Office Phone Number, if available: _____

Physical Site Location (address, incldluding number and street):
410 South Morgan Street

City: Chicago State: IL Zip Code: 60607

County: Cook Township: _____

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.52340 (Decimal Degrees) Longitude: -87.39070 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☒ Map Interpolation ☐ Photo Interpolation ☐ Survey ☐ Other

IEPA Site Number(s), if assigned: BOL: 0316280028 BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

	Site Owner		Site Operator	
Name:	Illinois Department of Transportation		Illinois Department of Transportation	
Street Address:	201 West Center Street		201 West Center Street	
PO Box:				
City:	Schaumburg	State: IL	Schaumburg	State: IL
Zip Code:	60196-1096	Phone: 847-705-4101	60196-1096	Phone: 847-705-4101
Contact:	Sam Mead		Sam Mead	
Email, if available:	Sam.Mead@illinois.gov		Sam.Mead@illinois.gov	

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

IL 532-2922
LPC 663 Rev. 8/2012

Added 7/25/13

Project Name: I90/94 at I290 (Circle Interchange)

Latitude: 41.52340 Longitude: -87.39070

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2615-205-B01 WAS SAMPLED ADJACENT TO ISGS SITE 2615-205. SEE FIGURE 2 AND TABLE 3a OF REVISED PRELIMINARY SITE INVESTIGATION.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TEST AMERICA ANALYTICAL REPORT - JOB ID: 500-57454-2.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Steven Gobleman, P.E., L.P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobleman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

7/18/17
Date:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

P.E. or L.P.G. Seal

Added 7/25/13

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
m-Xylene
o-Xylene
p-Xylene
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene

Andrews Engineering, Inc.

Added 7/25/13

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl) phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitroso-di-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
Thallium
Vanadium
Zinc
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Added 7/25/13

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation **"No Contaminants of Concern Noted"** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

Added 7/25/13

ISGS Site 2615-219
IDOT I-290 ROW

Sample ID	2615-219-B16-1	2615-219-B16-2	2615-219-B16-3	2615-219-B16-4	2615-219-B17-1	2615-219-B17-2	2615-219-B17-2 DUP
Sample Depth (ft)	0-6	6-12	12-18	18-24	0-6	6-12	0-6
Sample Date	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013
% Solids	83	83	78	80	85	77	84
Sample pH	8.99	8.02	7.56	7.79	7.86	7.68	7.73
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
No Contaminants Concern Noted in listed borings.							

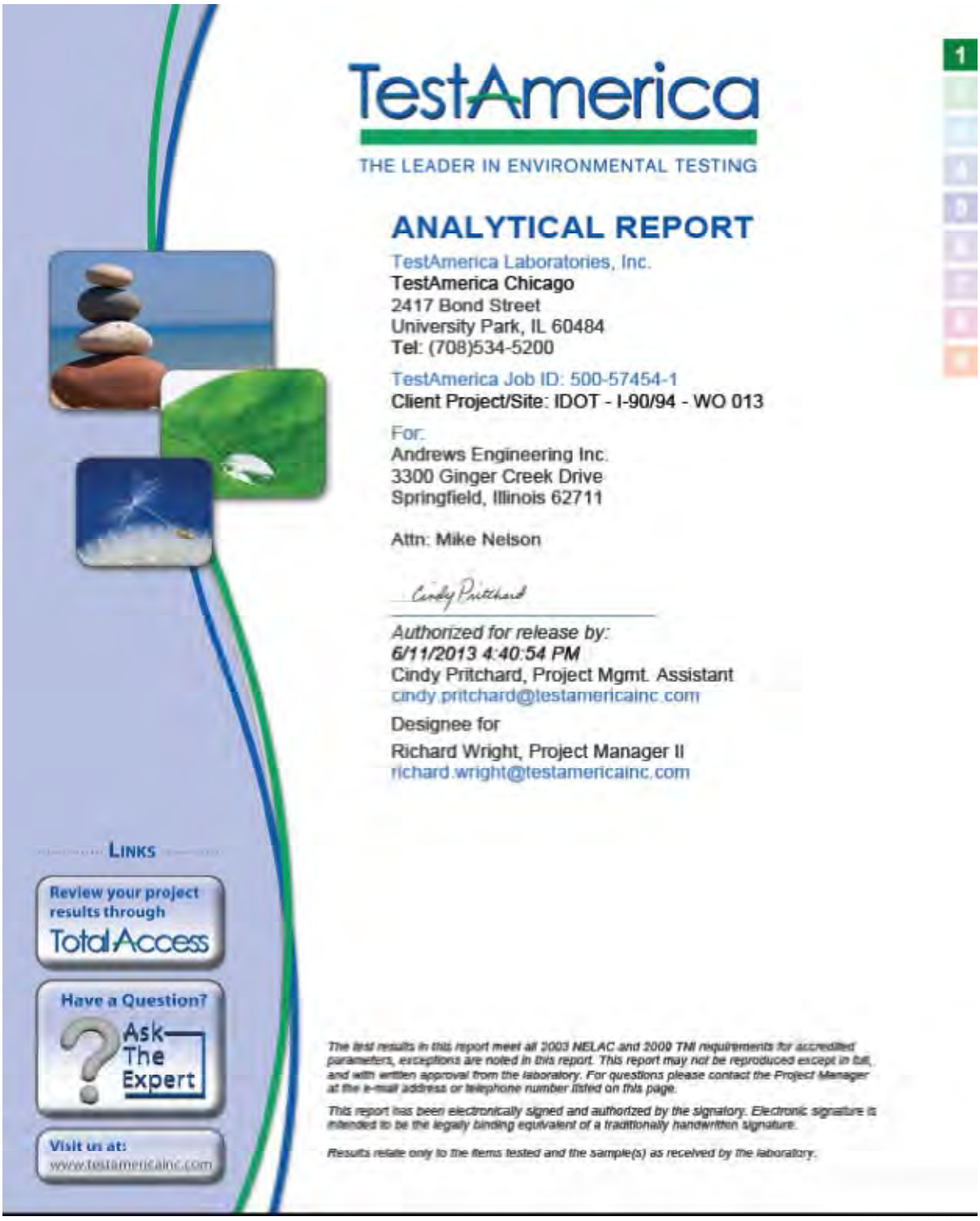
ISGS Site 2615-219
IDOT I-290 ROW

Sample ID	2615-219-B17-3	2615-219-B17-4	2615-219-B20-1	2615-219-B20-2	2615-219-B20-2 DUP	2615-219-B20-3	2615-219-B20-4
Sample Depth (ft)	12-18	18-24	0-6	6-12	0-6	12-18	18-24
Sample Date	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013
% Solids	80	79	84	81	84	78	82
Sample pH	7.9	8	7.91	7.94	8.11	8.08	7.85
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
No Contaminants Concern Noted in listed borings.							

Andrews Engineering, Inc.
6/21/2013

T:\IDOT2013\IDOT2013-013\WO\I\B63 Tables\B63 Tables(60W25)

Added 7/25/13



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-57454-1
Client Project/Site: IDOT - I-90/94 - WO 013

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Mike Nelson

Cindy Pritchard

Authorized for release by:
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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Added 7/5/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-1
Date Collected: 05/28/13 15:00
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-34
Matrix: Solid
Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0075		0.0075	0.0032	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Benzene	<0.0075		0.0075	0.0010	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Bromodichloromethane	<0.0075		0.0075	0.0013	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Bromoform	<0.0075		0.0075	0.0017	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Bromomethane	<0.0075		0.0075	0.0023	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
2-Butanone (MEK)	<0.0075		0.0075	0.0027	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Carbon disulfide	<0.0075		0.0075	0.0011	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Carbon tetrachloride	<0.0075		0.0075	0.0014	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Chlorobenzene	<0.0075		0.0075	0.00076	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Chloroethane	<0.0075		0.0075	0.0020	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Chloroform	<0.0075		0.0075	0.00086	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Chloromethane	<0.0075		0.0075	0.0016	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
cis-1,2-Dichloroethene	<0.0075		0.0075	0.0011	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
cis-1,3-Dichloropropene	<0.0075		0.0075	0.00098	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Dibromochloromethane	<0.0075		0.0075	0.0013	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,1-Dichloroethane	<0.0075		0.0075	0.0012	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,2-Dichloroethane	<0.0075		0.0075	0.0011	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,1-Dichloroethene	<0.0075		0.0075	0.0012	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,2-Dichloropropane	<0.0075		0.0075	0.0011	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,3-Dichloropropene, Total	<0.0075		0.0075	0.00098	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Ethylbenzene	<0.0075		0.0075	0.0015	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
2-Hexanone	<0.0075		0.0075	0.0021	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Methylene Chloride	<0.0075		0.0075	0.0020	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
4-Methyl-2-pentanone (MIBK)	<0.0075		0.0075	0.0020	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Methyl tert-butyl ether	<0.0075		0.0075	0.0012	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Styrene	<0.0075		0.0075	0.00098	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,1,2,2-Tetrachloroethane	<0.0075		0.0075	0.0015	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Tetrachloroethene	<0.0075		0.0075	0.0011	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Toluene	<0.0075		0.0075	0.0010	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
trans-1,2-Dichloroethene	<0.0075		0.0075	0.0010	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
trans-1,3-Dichloropropene	<0.0075		0.0075	0.0013	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,1,1-Trichloroethane	<0.0075		0.0075	0.0011	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
1,1,2-Trichloroethane	<0.0075		0.0075	0.0010	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Trichloroethene	<0.0075		0.0075	0.0012	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Vinyl acetate	<0.0075		0.0075	0.0012	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Vinyl chloride	<0.0075		0.0075	0.0016	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1
Xylenes, Total	<0.015		0.015	0.00068	mg/Kg	☼	05/28/13 15:00	06/01/13 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 122	05/28/13 15:00	06/01/13 13:52	1
Dibromofluoromethane	98		75 - 120	05/28/13 15:00	06/01/13 13:52	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	05/28/13 15:00	06/01/13 13:52	1
Toluene-d8 (Surr)	107		75 - 122	05/28/13 15:00	06/01/13 13:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.051	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-1
Date Collected: 05/28/13 15:00
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-34
Matrix: Solid
Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2-Methylphenol	<0.19		0.19	0.051	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.042	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.049	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Hexachloroethane	<0.19		0.19	0.041	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2-Chlorophenol	<0.19		0.19	0.055	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Nitrobenzene	<0.038		0.038	0.012	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.042	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,4-Dimethylphenol	<0.38		0.38	0.12	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Hexachlorobutadiene	<0.19		0.19	0.050	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Naphthalene	0.0060	J	0.038	0.0074	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,4-Dichlorophenol	<0.38		0.38	0.12	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4-Chloroaniline	<0.77		0.77	0.12	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.048	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.11	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Hexachlorocyclopentadiene	<0.77		0.77	0.18	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2-Methylnaphthalene	<0.19		0.19	0.050	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2-Nitroaniline	<0.19		0.19	0.059	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.18	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.045	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2-Nitrophenol	<0.38		0.38	0.060	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
3-Nitroaniline	<0.38		0.38	0.074	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,4-Dinitrophenol	<0.77		0.77	0.20	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Acenaphthylene	<0.038		0.038	0.0098	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Acenaphthene	0.010	J	0.038	0.011	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Dibenzofuran	<0.19		0.19	0.046	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4-Nitrophenol	<0.77		0.77	0.21	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Fluorene	0.016	J	0.038	0.0057	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4-Nitroaniline	<0.38		0.38	0.078	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Hexachlorobenzene	<0.077		0.077	0.0076	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Diethyl phthalate	<0.19		0.19	0.054	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.060	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Pentachlorophenol	<0.77	*	0.77	0.19	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.052	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
4,6-Dinitro-2-methylphenol	<0.38		0.38	0.093	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Phenanthrene	0.41		0.038	0.016	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Anthracene	0.10		0.038	0.0090	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Carbazole	<0.19		0.19	0.054	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Di-n-butyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Fluoranthene	0.84		0.038	0.016	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Pyrene	0.69		0.038	0.014	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Butyl benzyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1
Benzo[a]anthracene	0.44		0.038	0.0080	mg/Kg	☼	06/03/13 07:25	06/08/13 21:49	1

TestAmerica Chicago

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Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-1
Date Collected: 05/28/13 15:00
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-34
Matrix: Solid
Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.47		0.038	0.0086	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.032	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.051	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Di-n-octyl phthalate	<0.19		0.19	0.078	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Benzo[b]fluoranthene	0.43		0.038	0.0074	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Benzo[k]fluoranthene	0.27		0.038	0.0091	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Benzo[a]pyrene	0.38		0.038	0.0070	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Indeno[1,2,3-cd]pyrene	0.19		0.038	0.013	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Dibenz[a,h]anthracene	0.080		0.038	0.011	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
Benzo[g,h,i]perylene	0.24		0.038	0.013	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1
3 & 4 Methylphenol	<0.19		0.19	0.072	mg/Kg	☼	06/03/13 07:29	06/08/13 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		30 - 110	06/03/13 07:29	06/08/13 21:49	1
Phenol-d5	76		31 - 110	06/03/13 07:29	06/08/13 21:49	1
Nitrobenzene-d5	74		30 - 116	06/03/13 07:29	06/08/13 21:49	1
2-Fluorobiphenyl	86		30 - 119	06/03/13 07:29	06/08/13 21:49	1
2,4,6-Tribromophenol	107		35 - 137	06/03/13 07:29	06/08/13 21:49	1
Terphenyl-d14	104		38 - 134	06/03/13 07:29	06/08/13 21:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.44	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Arsenic	3.1		0.55	0.11	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Barium	180		0.55	0.059	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Beryllium	0.8		0.22	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Boron	38	B	2.8	0.12	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Cadmium	0.17	B	0.11	0.014	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Calcium	170000	B	110	30	mg/Kg	☼	05/29/13 09:20	06/05/13 22:36	10
Chromium	62		0.55	0.064	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Cobalt	7.9		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Copper	4.6		0.55	0.049	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Iron	23000		11	4.5	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Lead	9.1		0.28	0.062	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Magnesium	10000	B	5.5	1.1	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Manganese	7400		5.5	0.30	mg/Kg	☼	05/29/13 09:20	06/05/13 22:36	10
Nickel	5.1		0.55	0.054	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Potassium	1100	B	28	1.7	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Selenium	2.4		0.55	0.20	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Silver	0.30	B	0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Sodium	1000		55	7.4	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Thallium	4.0		0.55	0.23	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Vanadium	78		0.28	0.041	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1
Zinc	9.3	B	1.1	0.22	mg/Kg	☼	05/29/13 09:20	06/04/13 23:03	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.016	mg/L		06/02/13 06:57	06/04/13 02:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 02:25	1
Boron	0.66		0.10	0.058	mg/L		06/02/13 06:57	06/04/13 02:25	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-1
Date Collected: 05/28/13 15:00
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-34
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0060		0.0060	0.0020	mg/L		06/03/13 06:57	06/04/13 02:25	1
Chromium	<0.025		0.025	0.010	mg/L		06/03/13 06:57	06/04/13 02:25	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/03/13 06:57	06/04/13 02:25	1
Iron	0.34		0.20	0.20	mg/L		06/03/13 06:57	06/04/13 02:25	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/03/13 06:57	06/04/13 02:25	1
Manganese	0.11		0.025	0.010	mg/L		06/03/13 06:57	06/04/13 02:25	1
Nickel	<0.025		0.025	0.010	mg/L		06/03/13 06:57	06/04/13 02:25	1
Selenium	<0.050		0.050	0.010	mg/L		06/03/13 06:57	06/04/13 02:25	1
Silver	<0.025		0.025	0.0050	mg/L		06/03/13 06:57	06/04/13 02:25	1
Zinc	0.51		0.10	0.020	mg/L		06/03/13 06:57	06/04/13 02:25	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/03/13 06:57	06/05/13 20:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/03/13 06:57	06/05/13 20:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:15	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.020	0.0093	mg/Kg	☼	05/30/13 14:15	05/31/13 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.10		0.200	0.200	SU			06/04/13 14:22	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-2
Date Collected: 05/28/13 15:05
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-35
Matrix: Solid
Percent Solids: 96.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0054		0.0054	0.0023	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Benzene	<0.0054		0.0054	0.00074	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Bromodichloromethane	<0.0054		0.0054	0.00092	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Bromoform	<0.0054		0.0054	0.0012	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Bromomethane	<0.0054		0.0054	0.0016	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
2-Butanone (MEK)	<0.0054		0.0054	0.0019	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Carbon disulfide	<0.0054		0.0054	0.00080	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Carbon tetrachloride	<0.0054		0.0054	0.00098	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Chlorobenzene	<0.0054		0.0054	0.00054	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Chloroethane	<0.0054		0.0054	0.0015	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Chloroform	<0.0054		0.0054	0.00062	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Chloromethane	<0.0054		0.0054	0.0011	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
cis-1,2-Dichloroethene	<0.0054		0.0054	0.00076	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
cis-1,3-Dichloropropene	<0.0054		0.0054	0.00070	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Dibromochloromethane	<0.0054		0.0054	0.00093	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,1-Dichloroethane	<0.0054		0.0054	0.00085	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,2-Dichloroethane	<0.0054		0.0054	0.00080	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,1-Dichloroethene	<0.0054		0.0054	0.00087	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,2-Dichloropropane	<0.0054		0.0054	0.00081	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,3-Dichloropropene, Total	<0.0054		0.0054	0.00070	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Ethylbenzene	<0.0054		0.0054	0.0011	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
2-Hexanone	<0.0054		0.0054	0.0015	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Methylene Chloride	<0.0054		0.0054	0.0014	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0014	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Methyl tert-butyl ether	<0.0054		0.0054	0.00089	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Styrene	<0.0054		0.0054	0.00070	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,1,2,2-Tetrachloroethane	<0.0054		0.0054	0.0011	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Tetrachloroethene	<0.0054		0.0054	0.00082	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Toluene	<0.0054		0.0054	0.00075	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
trans-1,2-Dichloroethene	<0.0054		0.0054	0.00074	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
trans-1,3-Dichloropropene	<0.0054		0.0054	0.00096	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,1,1-Trichloroethane	<0.0054		0.0054	0.00080	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
1,1,2-Trichloroethane	<0.0054		0.0054	0.00073	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Trichloroethene	<0.0054		0.0054	0.00089	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Vinyl acetate	<0.0054		0.0054	0.00084	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Vinyl chloride	<0.0054		0.0054	0.0011	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1
Xylenes, Total	<0.011		0.011	0.00049	mg/Kg	☼	05/29/13 15:05	06/01/13 14:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 122	05/29/13 15:05	06/01/13 14:16	1
Dibromofluoromethane	94		75 - 120	05/29/13 15:05	06/01/13 14:16	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	05/29/13 15:05	06/01/13 14:16	1
Toluene-d8 (Surr)	106		75 - 122	05/29/13 15:05	06/01/13 14:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.053	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
1,3-Dichlorobenzene	<0.17		0.17	0.035	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
1,4-Dichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

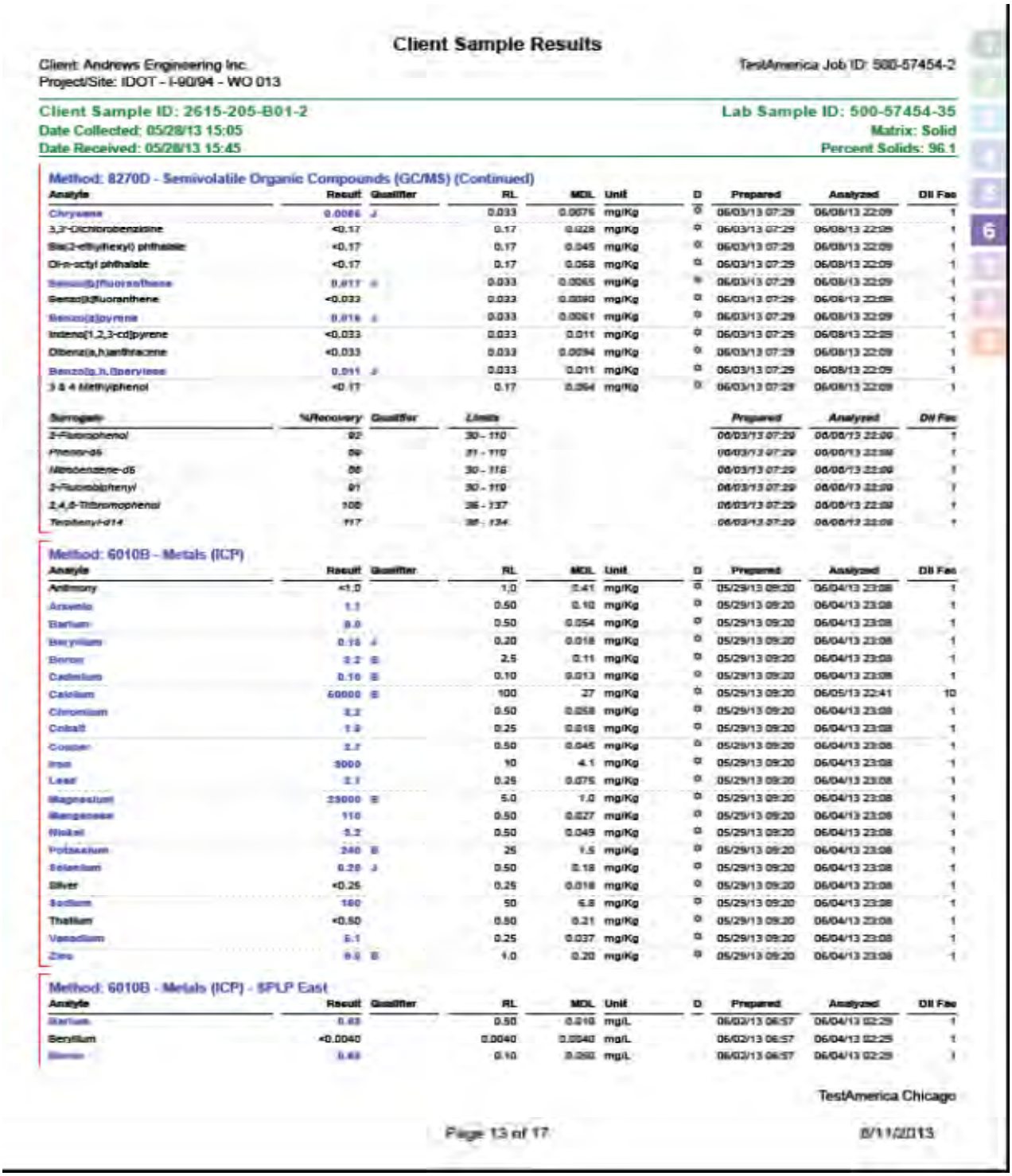
Client Sample ID: 2615-205-B01-2
Date Collected: 05/28/13 15:05
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-35
Matrix: Solid
Percent Solids: 96.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2-Methylphenol	<0.17		0.17	0.046	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.037	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.043	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Hexachloroethane	<0.17		0.17	0.036	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
3-Chlorophenol	<0.17		0.17	0.048	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Nitrobenzene	<0.033		0.033	0.010	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.037	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Isophorone	<0.17		0.17	0.037	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,4-Dimethylphenol	<0.33		0.33	0.11	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Hexachlorobutadiene	<0.17		0.17	0.044	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Naphthalene	<0.033		0.033	0.0065	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,4-Dichlorophenol	<0.33		0.33	0.10	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4-Chloroaniline	<0.68		0.68	0.10	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,4,6-Trichlorophenol	<0.33		0.33	0.042	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,4,5-Trichlorophenol	<0.33		0.33	0.086	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Hexachlorocyclopentadiene	<0.68		0.68	0.16	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2-Methylnaphthalene	<0.17		0.17	0.044	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2-Nitroaniline	<0.17		0.17	0.061	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4-Chloro-3-methylphenol	<0.33		0.33	0.16	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,6-Dinitrotoluene	<0.17		0.17	0.040	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2-Nitrophenol	<0.33		0.33	0.053	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
3-Nitroaniline	<0.33		0.33	0.085	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Dimethyl phthalate	<0.17		0.17	0.042	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,4-Dinitrophenol	<0.68		0.68	0.17	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Acenaphthylene	<0.033		0.033	0.0077	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
2,4-Dinitrotoluene	<0.17		0.17	0.052	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Acenaphthene	<0.033		0.033	0.010	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4-Nitrophenol	<0.68		0.68	0.18	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Fluorene	<0.033		0.033	0.0077	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4-Nitroaniline	<0.33		0.33	0.069	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.038	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Hexachlorobenzene	<0.068		0.068	0.0068	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Diethyl phthalate	<0.17		0.17	0.038	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.053	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Pentachlorophenol	<0.68	*	0.68	0.17	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
N-Nitrosodiphenylamine	<0.17		0.17	0.048	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
4,6-Dinitro-2-methylphenol	<0.33		0.33	0.082	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Phenanthrene	0.014	J	0.033	0.014	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Anthracene	<0.033		0.033	0.0079	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Carbazole	<0.17		0.17	0.047	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Di-n-butyl phthalate	<0.17		0.17	0.042	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Fluoranthene	0.024	J	0.033	0.014	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Pyrene	0.028	J	0.033	0.012	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Butyl benzyl phthalate	<0.17		0.17	0.042	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1
Benzo[a]anthracene	0.016	J	0.033	0.0071	mg/Kg	☼	06/03/13 07:29	06/08/13 22:09	1

Added 7/25/13



Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-2
Date Collected: 05/28/13 15:05
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-35
Matrix: Solid
Percent Solids: 96.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.0066	J	0.033	0.0076	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.028	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.045	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Di-n-octyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Benzo[b]fluoranthene	0.017	J	0.033	0.0065	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Benzo[k]fluoranthene	<0.033		0.033	0.0080	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Benzo[a]pyrene	0.016	J	0.033	0.0061	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.011	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0094	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
Benzo[g,h,i]perylene	0.011	J	0.033	0.011	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1
3 & 4 Methylphenol	<0.17		0.17	0.064	mg/Kg	☼	06/03/13 07:29	06/06/13 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		30 - 110	06/03/13 07:29	06/06/13 22:09	1
Phenol-d5	89		31 - 110	06/03/13 07:29	06/06/13 22:09	1
Nitrobenzene-d5	88		30 - 116	06/03/13 07:29	06/06/13 22:09	1
2-Fluorobiphenyl	91		30 - 119	06/03/13 07:29	06/06/13 22:09	1
2,4,6-Tribromophenol	100		36 - 137	06/03/13 07:29	06/06/13 22:09	1
Terphenyl-d14	117		38 - 134	06/03/13 07:29	06/06/13 22:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.41	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Arsenic	1.1		0.50	0.10	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Barium	8.0		0.50	0.054	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Beryllium	0.18	J	0.20	0.018	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Boron	3.2	B	2.5	0.11	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Cadmium	0.10	B	0.10	0.013	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Calcium	60000	B	100	27	mg/Kg	☼	05/29/13 09:20	06/05/13 22:41	10
Chromium	8.2		0.50	0.058	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Cobalt	1.9		0.25	0.018	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Copper	2.7		0.50	0.045	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Iron	5000		10	4.1	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Lead	2.1		0.25	0.075	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Magnesium	23000	B	5.0	1.0	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Manganese	110		0.50	0.027	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Nickel	5.2		0.50	0.049	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Potassium	240	B	25	1.5	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Selenium	0.20	J	0.50	0.18	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Silver	<0.25		0.25	0.018	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Sodium	160		50	6.8	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Thallium	<0.50		0.50	0.21	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Vanadium	5.1		0.25	0.037	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1
Zinc	9.0	B	1.0	0.20	mg/Kg	☼	05/29/13 09:20	06/04/13 23:08	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.83		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 02:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 02:29	1
Boron	0.63		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 02:29	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Client Sample ID: 2615-205-B01-2
Date Collected: 05/28/13 15:05
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-35
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 02:29	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:29	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:29	1
Iron	6.58		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 02:29	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:57	06/04/13 02:29	1
Manganese	0.883		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:29	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:29	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 02:29	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:29	1
Zinc	0.44		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 02:29	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:40	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 16:30	06/04/13 10:17	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016	0.0076	mg/Kg	☼	05/30/13 14:15	05/31/13 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.69		0.200	0.200	SU			06/06/13 14:40	1

TestAmerica Chicago

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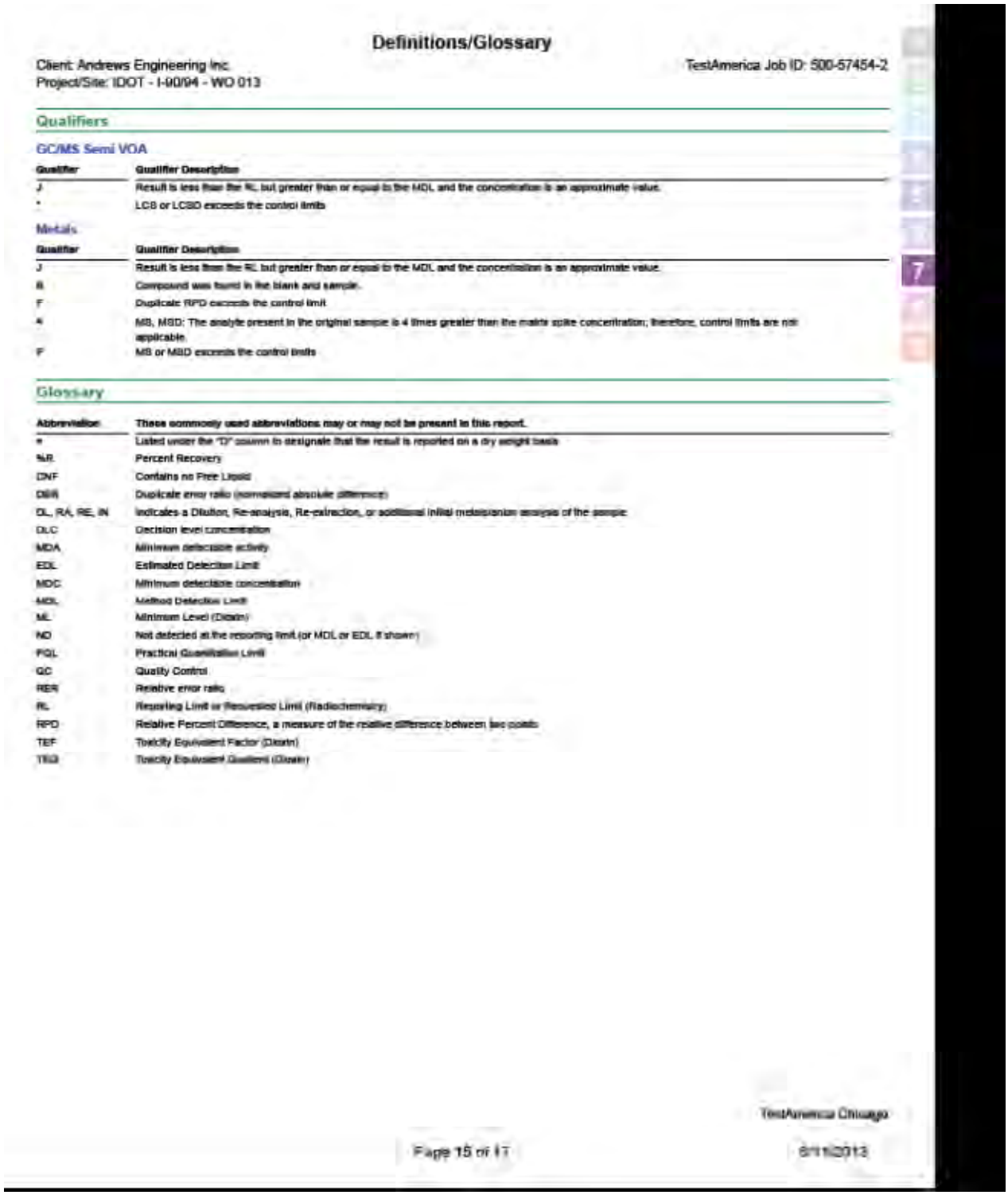
Added 7/25/13



Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

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6/11/2013

Added 7/25/13

ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

Fig 2

Client Contact

Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

Laboratory

Lab: Test America - Chicago
Address: 2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200
Contact: Dick Wright
email: richard.wright@testamericainc.com

Project Name: I 90/94 COOK CO
Project No.: IDOT 2013 - 013
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ☐ Other
Sampler: SKLW/ISS

COC No: 1 of 1
Lab Job No.: 500-57454
Sample Temp:

Special Instructions:
See Table 2 for complete parameter lists and minimum reporting limits.
* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
** If ~~Total Lead result exceeds 11IAC 4MD~~ SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization			Comments
34	2615-205-B01-1	5/25/13	3:00	S	X	X					X	X	X	X				0-0.5'
35	2615-205-B01-2	"	3:05	S	X	X					X	X	X	X				6.5-13'

Matrix Key:
W: Water
S: Soil
SL: Sludge
Se: Sediment
L: Leachate
DW: Drinking Water
Ol: Oil
O: Other

Relinquished by:		Date/Time 5/28/13	1545
Received by:		Date/Time	
Relinquished by:	TA	Date/Time 5/28/13	1650
Received by:		Date/Time 5/29/13	0700
Relinquished by:		Date/Time	
Received by:		Date/Time	

Andrews Engineering, Inc.

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Added 7/25/13

Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation
LPC-663
Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: I90/94 at I290 (Circle Interchange) Office Phone Number, if available:

Physical Site Location (address, including number and street):
Northeast and Southeast corners of intersection of South Morgan Street and Westbound Exit ramp from I-290 onto Morgan St.

City: Chicago State: IL Zip Code: 60607

County: Cook Township:

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.52335 (Decimal Degrees) Longitude: -87.39062 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☒ Map Interpolation ☐ Photo Interpolation ☐ Survey ☐ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Street	Street Address:	201 West Center Street
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

IL 532-2922
LPC 663 Rev. 8/2012

Added 7/28/13

Project Name: I90/94 at I290 (Circle Interchange)

Latitude: 41.52336 Longitude: -87.39062

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2615-219-B16, -B17, and -B20 WAS SAMPLED ADJACENT TO ISGS SITE 2615-219. SEE FIGURE 2 AND TABLE 3c OF REVISED PRELIMINARY SITE INVESTIGATION.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TEST AMERICA ANALYTICAL REPORT - JOB ID: 500-57454-1

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Steven Gobleman, P.E., L.P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobleman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

7/18/13
Date:

STEVEN GOBELMAN
196-000598
LICENSED PROFESSIONAL GEOLOGIST
STATE OF ILLINOIS

Added 7/25/13

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropane
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
m-Xylene
o-Xylene
p-Xylene
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene

Added 7/25/13

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitroso-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
Thallium
Vanadium
Zinc
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Andrews Engineering, Inc.

Added 7/25/13

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation **"No Contaminants of Concern Noted"** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

Added 7/25/13

ISGS Site 2615-219
IDOT I-290 ROW

Sample ID	2615-219-816-1	2615-219-816-2	2615-219-816-3	2615-219-816-4	2615-219-817-1	2615-219-817-2	2615-219-817-2 DUP
Sample Depth (ft)	0-6	6-12	12-18	18-24	0-6	6-12	0-6
Sample Date	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013
% Solids	83	83	79	80	85	77	84
Sample pH	8.99	8.02	7.96	7.79	7.86	7.68	7.73
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
No Contaminants Concern Noted in listed borings.							

ISGS Site 2615-219
IDOT I-290 ROW

Sample ID	2615-219-817-3	2615-219-817-4	2615-219-820-1	2615-219-820-2	2615-219-820-2 DUP	2615-219-820-3	2615-219-820-4
Sample Depth (ft)	12-18	18-24	0-6	6-12	0-6	12-18	18-24
Sample Date	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013	5/28/2013
% Solids	80	79	84	81	84	78	82
Sample pH	7.9	8	7.91	7.84	8.11	8.08	7.85
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
No Contaminants Concern Noted in listed borings.							

Andrews Engineering Inc
6/21/2013

Added 7/25/13

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-57454-1
Client Project/Site: IDOT - I-90/94 - WO 013

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Mike Nelson

Cindy Pritchard

Authorized for release by:
6/11/2013 4:40:54 PM
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Designee for

Richard Wright, Project Manager II
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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Added 7/25/13

Sample Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-57454-1	2615-219-B03-1	Solid	05/28/13 13:30	05/28/13 15:45
500-57454-2	2615-219-B03-2	Solid	05/28/13 13:40	05/28/13 15:45
500-57454-3	2615-219-B03-3	Solid	05/28/13 13:50	05/28/13 15:45
500-57454-4	2615-219-B03-4	Solid	05/28/13 14:00	05/28/13 15:45
500-57454-5	2615-219-B04-3 Dup	Solid	05/28/13 12:05	05/28/13 15:45
500-57454-6	2615-219-B04-1	Solid	05/28/13 11:55	05/28/13 15:45
500-57454-7	2615-219-B04-2	Solid	05/28/13 12:00	05/28/13 15:45
500-57454-8	2615-219-B04-3	Solid	05/28/13 12:05	05/28/13 15:45
500-57454-9	2615-219-B04-4	Solid	05/28/13 12:10	05/28/13 15:45
500-57454-10	2615-219-B14	Solid	05/28/13 15:15	05/28/13 15:45
500-57454-11	2615-219-B15	Solid	05/28/13 15:30	05/28/13 15:45
500-57454-12	2615-219-B16-1	Solid	05/28/13 11:20	05/28/13 15:45
500-57454-13	2615-219-B16-2	Solid	05/28/13 11:25	05/28/13 15:45
500-57454-14	2615-219-B16-3	Solid	05/28/13 11:30	05/28/13 15:45
500-57454-15	2615-219-B16-4	Solid	05/28/13 11:35	05/28/13 15:45
500-57454-16	2615-219-B17-1	Solid	05/28/13 10:35	05/28/13 15:45
500-57454-17	2615-219-B17-2 Dup	Solid	05/28/13 10:55	05/28/13 15:45
500-57454-18	2615-219-B17-2	Solid	05/28/13 10:40	05/28/13 15:45
500-57454-19	2615-219-B17-3	Solid	05/28/13 10:45	05/28/13 15:45
500-57454-20	2615-219-B17-4	Solid	05/28/13 10:50	05/28/13 15:45
500-57454-21	2615-219-B18-1	Solid	05/28/13 10:00	05/28/13 15:45
500-57454-22	2615-219-B18-2	Solid	05/28/13 10:05	05/28/13 15:45
500-57454-23	2615-219-B18-3	Solid	05/28/13 10:10	05/28/13 15:45
500-57454-24	2615-219-B18-4	Solid	05/28/13 10:15	05/28/13 15:45
500-57454-25	2615-219-B19-1	Solid	05/28/13 08:50	05/28/13 15:45
500-57454-26	2615-219-B19-2	Solid	05/28/13 08:55	05/28/13 15:45
500-57454-27	2615-219-B19-3	Solid	05/28/13 09:00	05/28/13 15:45
500-57454-28	2615-219-B19-4	Solid	05/28/13 09:05	05/28/13 15:45
500-57454-29	2615-219-B20-1	Solid	05/28/13 08:30	05/28/13 15:45
500-57454-30	2615-219-B20-2	Solid	05/28/13 08:35	05/28/13 15:45
500-57454-31	2615-219-B20-2 Dup	Solid	05/28/13 08:35	05/28/13 15:45
500-57454-32	2615-219-B20-3	Solid	05/28/13 08:40	05/28/13 15:45
500-57454-33	2615-219-B20-4	Solid	05/28/13 08:45	05/28/13 15:45

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-1
Date Collected: 05/28/13 11:20
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-12
Matrix: Solid
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0054		0.0054	0.0023	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Benzene	<0.0054		0.0054	0.00074	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Bromodichloromethane	<0.0054		0.0054	0.00094	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Bromoform	<0.0054		0.0054	0.0013	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Bromomethane	<0.0054		0.0054	0.0016	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
2-Butanone (MEK)	<0.0054		0.0054	0.0020	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Carbon disulfide	<0.0054		0.0054	0.00081	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Carbon tetrachloride	<0.0054		0.0054	0.00099	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Chlorobenzene	<0.0054		0.0054	0.00055	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Chloroethane	<0.0054		0.0054	0.0015	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Chloroform	<0.0054		0.0054	0.00063	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Chloromethane	<0.0054		0.0054	0.0011	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
cis-1,2-Dichloroethene	<0.0054		0.0054	0.00077	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
cis-1,3-Dichloropropene	<0.0054		0.0054	0.00071	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Dibromochloromethane	<0.0054		0.0054	0.00095	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,1-Dichloroethane	<0.0054		0.0054	0.00086	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,2-Dichloroethane	<0.0054		0.0054	0.00081	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,1-Dichloroethene	<0.0054		0.0054	0.00088	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,2-Dichloropropane	<0.0054		0.0054	0.00083	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,3-Dichloropropene, Total	<0.0054		0.0054	0.00071	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Ethylbenzene	<0.0054		0.0054	0.0011	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
2-Hexanone	<0.0054		0.0054	0.0016	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Methylene Chloride	<0.0054		0.0054	0.0015	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0014	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Methyl tert-butyl ether	<0.0054		0.0054	0.00090	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Styrene	<0.0054		0.0054	0.00071	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,1,2,2-Tetrachloroethane	<0.0054		0.0054	0.0011	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Tetrachloroethene	<0.0054		0.0054	0.00083	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Toluene	<0.0054		0.0054	0.00076	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
trans-1,2-Dichloroethene	<0.0054		0.0054	0.00075	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
trans-1,3-Dichloropropene	<0.0054		0.0054	0.00097	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,1,1-Trichloroethane	<0.0054		0.0054	0.00081	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
1,1,2-Trichloroethane	<0.0054		0.0054	0.00074	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Trichloroethene	<0.0054		0.0054	0.00090	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Vinyl acetate	<0.0054		0.0054	0.00085	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Vinyl chloride	<0.0054		0.0054	0.0011	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1
Xylenes, Total	<0.011		0.011	0.00049	mg/Kg	☼	05/28/13 11:20	05/31/13 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 122	05/28/13 11:20	05/31/13 14:40	1
Dibromofluoromethane	97		75 - 120	05/28/13 11:20	05/31/13 14:40	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	05/28/13 11:20	05/31/13 14:40	1
Toluene-d8 (Surr)	109		75 - 122	05/28/13 11:20	05/31/13 14:40	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.063	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
1,3-Dichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
1,4-Dichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-1
Date Collected: 05/28/13 11:20
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-12
Matrix: Solid
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
3-Methylphenol	<0.20		0.20	0.053	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
N-Nitroso-di-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Hexachloroethane	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2-Chlorophenol	<0.20		0.20	0.057	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,4-Dimethylphenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Hexachlorobutadiene	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Naphthalene	<0.039		0.039	0.0076	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,4-Dichlorophenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4-Chloroaniline	<0.80		0.80	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,4,6-Trichlorophenol	<0.39		0.39	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,4,5-Trichlorophenol	<0.39		0.39	0.11	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Hexachlorocyclopentadiene	<0.80		0.80	0.18	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2-Methylnaphthalene	<0.20		0.20	0.051	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2-Nitroaniline	<0.20		0.20	0.071	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4-Chloro-3-methylphenol	<0.39		0.39	0.19	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,6-Dinitrotoluene	<0.20		0.20	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2-Nitrophenol	<0.39		0.39	0.062	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
3-Nitroaniline	<0.39		0.39	0.076	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Dimethyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,4-Dinitrophenol	<0.80		0.80	0.20	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Acenaphthylene	<0.039		0.039	0.0091	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
2,4-Dinitrotoluene	<0.20		0.20	0.061	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Acenaphthene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4-Nitrophenol	<0.80		0.80	0.21	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Fluorene	<0.039		0.039	0.0090	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4-Nitroaniline	<0.39		0.39	0.081	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Hexachlorobenzene	<0.080		0.080	0.0078	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Pentachlorophenol	<0.80		0.80	0.20	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
N-Nitrosodiphenylamine	<0.20		0.20	0.064	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.096	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Phenanthrene	<0.039		0.039	0.017	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Anthracene	<0.039		0.039	0.0093	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Carbazole	<0.20		0.20	0.056	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Di-n-butyl phthalate	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Fluoranthene	0.018	J	0.039	0.016	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Pyrene	0.017	J	0.039	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Butyl benzyl phthalate	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Benzo[a]anthracene	0.010	J	0.039	0.0083	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-1
Date Collected: 05/28/13 11:20
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-12
Matrix: Solid
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.019	J	0.039	0.0089	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.033	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Di-n-octyl phthalate	<0.20		0.20	0.080	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Benzo[b]fluoranthene	0.011	J	0.039	0.0077	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Benzo[k]fluoranthene	<0.039		0.039	0.0094	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Benzo[a]pyrene	0.0088	J	0.039	0.0072	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Indeno[1,2,3-cd]pyrene	0.018	J	0.039	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Dibenz(a,h)anthracene	<0.039		0.039	0.011	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
Benzo[g,h,i]perylene	0.018	J	0.039	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1
3 & 4 Methylphenol	<0.20		0.20	0.075	mg/Kg	☼	06/05/13 07:22	06/10/13 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	39		30 - 110	06/05/13 07:22	06/10/13 18:53	1
Phenol-d5	47		31 - 110	06/05/13 07:22	06/10/13 18:53	1
Nitrobenzene-d5	36		30 - 116	06/05/13 07:22	06/10/13 18:53	1
2-Fluorobiphenyl	64		30 - 119	06/05/13 07:22	06/10/13 18:53	1
2,4,6-Tribromophenol	66		36 - 137	06/05/13 07:22	06/10/13 18:53	1
Terphenyl-d14	76		36 - 134	06/05/13 07:22	06/10/13 18:53	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.47	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Arsenic	2.8		0.59	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Barium	9.1	B	0.59	0.063	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Beryllium	0.40		0.24	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Boron	8.0	B	2.9	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Cadmium	0.12		0.12	0.015	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Calcium	21000	B	12	3.2	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Chromium	7.8		0.59	0.068	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Cobalt	4.4		0.29	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Copper	19	B	0.59	0.052	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Iron	7400		12	4.8	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Lead	9.8		0.29	0.088	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Magnesium	14000	B	5.9	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Manganese	180	B	0.59	0.032	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Nickel	16		0.59	0.058	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Potassium	1100		29	1.8	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Selenium	0.21	J	0.59	0.21	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Silver	<0.29		0.29	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Sodium	270		59	7.9	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Thallium	0.31	J	0.59	0.25	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Vanadium	18		0.29	0.044	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1
Zinc	24	B	1.2	0.24	mg/Kg	☼	05/29/13 08:50	06/05/13 18:45	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.44	J	0.50	0.010	mg/L		06/02/13 06:20	06/04/13 03:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 03:54	1
Boron	0.60		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 03:54	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-1
Date Collected: 05/28/13 11:20
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-12
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 03:54	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 03:54	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 03:54	1
Iron	0.80		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 03:54	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 03:54	1
Manganese	0.028		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 03:54	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 03:54	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 03:54	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 03:54	1
Zinc	0.32		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 03:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 19:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 19:48	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:58	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0089	mg/Kg	☼	05/30/13 14:15	05/31/13 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.89		0.200	0.200	SU			06/04/13 11:44	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-2
Date Collected: 05/28/13 11:25
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-13
Matrix: Solid
Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0047		0.0047	0.0020	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Benzene	<0.0047		0.0047	0.00065	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Bromodichloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Bromomethane	<0.0047		0.0047	0.0014	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Carbon disulfide	<0.0047		0.0047	0.00070	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Carbon tetrachloride	<0.0047		0.0047	0.00086	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Chlorobenzene	<0.0047		0.0047	0.00048	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Chloroethane	<0.0047		0.0047	0.0013	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Chloromethane	<0.0047		0.0047	0.00099	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00067	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00062	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Dibromochloromethane	<0.0047		0.0047	0.00092	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,1-Dichloroethane	<0.0047		0.0047	0.00075	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,2-Dichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,1-Dichloroethene	<0.0047		0.0047	0.00076	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,2-Dichloropropane	<0.0047		0.0047	0.00072	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00062	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Ethylbenzene	<0.0047		0.0047	0.00095	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
2-Hexanone	<0.0047		0.0047	0.0014	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00078	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Styrene	<0.0047		0.0047	0.00062	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00095	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Tetrachloroethene	<0.0047		0.0047	0.00072	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Toluene	<0.0047		0.0047	0.00066	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00065	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00084	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Trichloroethene	<0.0047		0.0047	0.00078	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Vinyl acetate	<0.0047		0.0047	0.00074	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Vinyl chloride	<0.0047		0.0047	0.00099	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1
Xylenes, Total	<0.0094		0.0094	0.00043	mg/Kg	☼	05/28/13 11:25	05/31/13 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 122	05/28/13 11:25	05/31/13 15:04	1
Dibromofluoromethane	93		75 - 120	05/28/13 11:25	05/31/13 15:04	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	05/28/13 11:25	05/31/13 15:04	1
Toluene-d8 (Surr)	106		75 - 122	05/28/13 11:25	05/31/13 15:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.060	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1

TestAmerica Chicago

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Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-2
Date Collected: 05/28/13 11:25
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-13
Matrix: Solid
Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2-Methylphenol	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
N-Nitroso-di-n-propylamine	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Hexachloroethane	<0.19		0.19	0.041	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2-Chlorophenol	<0.19		0.19	0.054	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Nitrobenzene	<0.038		0.038	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,4-Dimethylphenol	<0.38		0.38	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Hexachlorobutadiene	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Naphthalene	<0.038		0.038	0.0073	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,4-Dichlorophenol	<0.38		0.38	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4-Chloroaniline	<0.77		0.77	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,4,6-Trichlorophenol	<0.38		0.38	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,4,5-Trichlorophenol	<0.38		0.38	0.11	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Hexachlorocyclopentadiene	<0.77		0.77	0.18	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2-Methylnaphthalene	<0.19		0.19	0.049	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2-Nitroaniline	<0.19		0.19	0.068	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4-Chloro-3-methylphenol	<0.38		0.38	0.18	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.045	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2-Nitrophenol	<0.38		0.38	0.060	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
3-Nitroaniline	<0.38		0.38	0.073	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,4-Dinitrophenol	<0.77		0.77	0.19	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Acenaphthylene	<0.038		0.038	0.0087	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.058	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Acenaphthene	<0.038		0.038	0.011	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Dibenzofuran	<0.19		0.19	0.046	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4-Nitrophenol	<0.77		0.77	0.20	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Fluorene	<0.038		0.038	0.0086	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4-Nitroaniline	<0.38		0.38	0.078	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Hexachlorobenzene	<0.077		0.077	0.0075	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.060	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Pentachlorophenol	<0.77		0.77	0.19	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
N-Nitrosodiphenylamine	<0.19		0.19	0.051	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
4,6-Dinitro-2-methylphenol	<0.38		0.38	0.092	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Phenanthrene	0.060		0.038	0.016	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Anthracene	<0.038		0.038	0.0089	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Carbazole	<0.19		0.19	0.053	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Di-n-butyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Fluoranthene	<0.038		0.038	0.016	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Pyrene	<0.038		0.038	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Butyl benzyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Benzo[a]anthracene	<0.038		0.038	0.0090	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-2
Date Collected: 05/28/13 11:25
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-13
Matrix: Solid
Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.020	J	0.038	0.0086	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.032	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Di-n-octyl phthalate	<0.19		0.19	0.077	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Benzo[j]fluoranthene	<0.038		0.038	0.0074	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Benzo[k]fluoranthene	<0.038		0.038	0.0091	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Benzo[a]pyrene	<0.038		0.038	0.0068	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Dibenz(a,h)anthracene	<0.038		0.038	0.011	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
Benzo[g,h,i]perylene	0.013	J	0.038	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1
3 & 4 Methylphenol	<0.19		0.19	0.072	mg/Kg	☼	06/05/13 07:22	06/10/13 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	40		30 - 110	06/05/13 07:22	06/10/13 19:17	1
Phenol-d5	46		31 - 110	06/05/13 07:22	06/10/13 19:17	1
Nitrobenzene-d5	36		30 - 115	06/05/13 07:22	06/10/13 19:17	1
2-Fluorobiphenyl	46		30 - 119	06/05/13 07:22	06/10/13 19:17	1
2,4,6-Tribromophenol	38		36 - 137	06/05/13 07:22	06/10/13 19:17	1
Terphenyl-d14	60		39 - 134	06/05/13 07:22	06/10/13 19:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.46	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Arsenic	8.8		0.57	0.11	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Barium	37	B	0.57	0.061	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Beryllium	0.77		0.23	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Boron	16	B	2.9	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Cadmium	0.37		0.11	0.015	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Calcium	32000	B	11	3.1	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Chromium	18		0.57	0.067	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Cobalt	13		0.29	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Copper	37	B	0.57	0.051	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Iron	21000		11	4.7	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Lead	16		0.29	0.085	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Magnesium	19000	B	5.7	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Manganese	310	B	0.57	0.031	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Nickel	36		0.57	0.056	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Potassium	3300		29	1.7	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Selenium	<0.57		0.57	0.20	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Silver	<0.29		0.29	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Sodium	670		57	7.7	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Thallium	0.89		0.57	0.24	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Vanadium	21		0.29	0.042	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1
Zinc	46	B	1.1	0.23	mg/Kg	☼	05/29/13 08:50	06/05/13 18:51	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.43	J	0.50	0.010	mg/L		06/02/13 06:20	06/04/13 03:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 03:58	1
Boron	0.50		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 03:58	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-2
Date Collected: 05/28/13 11:25
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-13
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 03:58	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 03:58	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 03:58	1
Iron	2.4		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 03:58	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 03:58	1
Manganese	0.098		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 03:58	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 03:58	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 03:58	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 03:58	1
Zinc	0.30		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 03:58	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 19:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 19:54	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 11:00	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.020	0.0092	mg/Kg	0	05/30/13 14:15	05/31/13 10:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.02		0.200	0.200	SU			06/04/13 11:52	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-3
Date Collected: 05/28/13 11:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-14
Matrix: Solid
Percent Solids: 77.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.35		0.35	0.090	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Benzene	<0.017		0.017	0.0053	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Bromodichloromethane	<0.14		0.14	0.023	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Bromoform	<0.14		0.14	0.031	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Bromomethane	<0.14		0.14	0.047	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
2-Butanone (MEK)	<0.35		0.35	0.10	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Carbon disulfide	<0.35		0.35	0.030	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Carbon tetrachloride	<0.069		0.069	0.018	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Chlorobenzene	<0.069		0.069	0.0099	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Chloroethane	<0.14		0.14	0.030	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Chloroform	<0.069		0.069	0.014	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Chloromethane	<0.14		0.14	0.032	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
cis-1,2-Dichloroethene	<0.069		0.069	0.0086	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
cis-1,3-Dichloropropene	<0.069		0.069	0.012	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Dibromochloromethane	<0.14		0.14	0.024	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,1-Dichloroethane	<0.069		0.069	0.013	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,2-Dichloroethane	<0.069		0.069	0.020	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,1-Dichloroethene	<0.069		0.069	0.021	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,2-Dichloropropane	<0.069		0.069	0.014	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,3-Dichloropropene, Total	<0.069		0.069	0.012	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Ethylbenzene	<0.017		0.017	0.0088	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
2-Hexanone	<0.35		0.35	0.039	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Methylene Chloride	<0.35		0.35	0.047	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
4-Methyl-2-pentanone (MIBK)	<0.35		0.35	0.023	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Methyl tert-butyl ether	<0.14		0.14	0.030	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Styrene	<0.069		0.069	0.0065	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,1,2,2-Tetrachloroethane	<0.069		0.069	0.016	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Tetrachloroethene	<0.069		0.069	0.012	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Toluene	<0.017		0.017	0.0080	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
trans-1,2-Dichloroethene	<0.069		0.069	0.017	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
trans-1,3-Dichloropropene	<0.069		0.069	0.014	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,1,1-Trichloroethane	<0.069		0.069	0.014	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
1,1,2-Trichloroethane	<0.069		0.069	0.015	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Trichloroethene	<0.035		0.035	0.013	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Vinyl acetate	<0.14		0.14	0.023	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Vinyl chloride	<0.017		0.017	0.0072	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50
Xylenes, Total	<0.035		0.035	0.0048	mg/Kg	☼	05/28/13 11:30	06/04/13 17:35	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		76 - 120	05/28/13 11:30	06/04/13 17:35	50
Dibromofluoromethane	97		76 - 120	05/28/13 11:30	06/04/13 17:35	50
1,2-Dichloroethane-d4 (Surr)	88		76 - 126	05/28/13 11:30	06/04/13 17:35	50
Toluene-d8 (Surr)	99		76 - 120	05/28/13 11:30	06/04/13 17:35	50

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.066	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
1,3-Dichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
1,4-Dichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1

TestAmerica Chicago

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

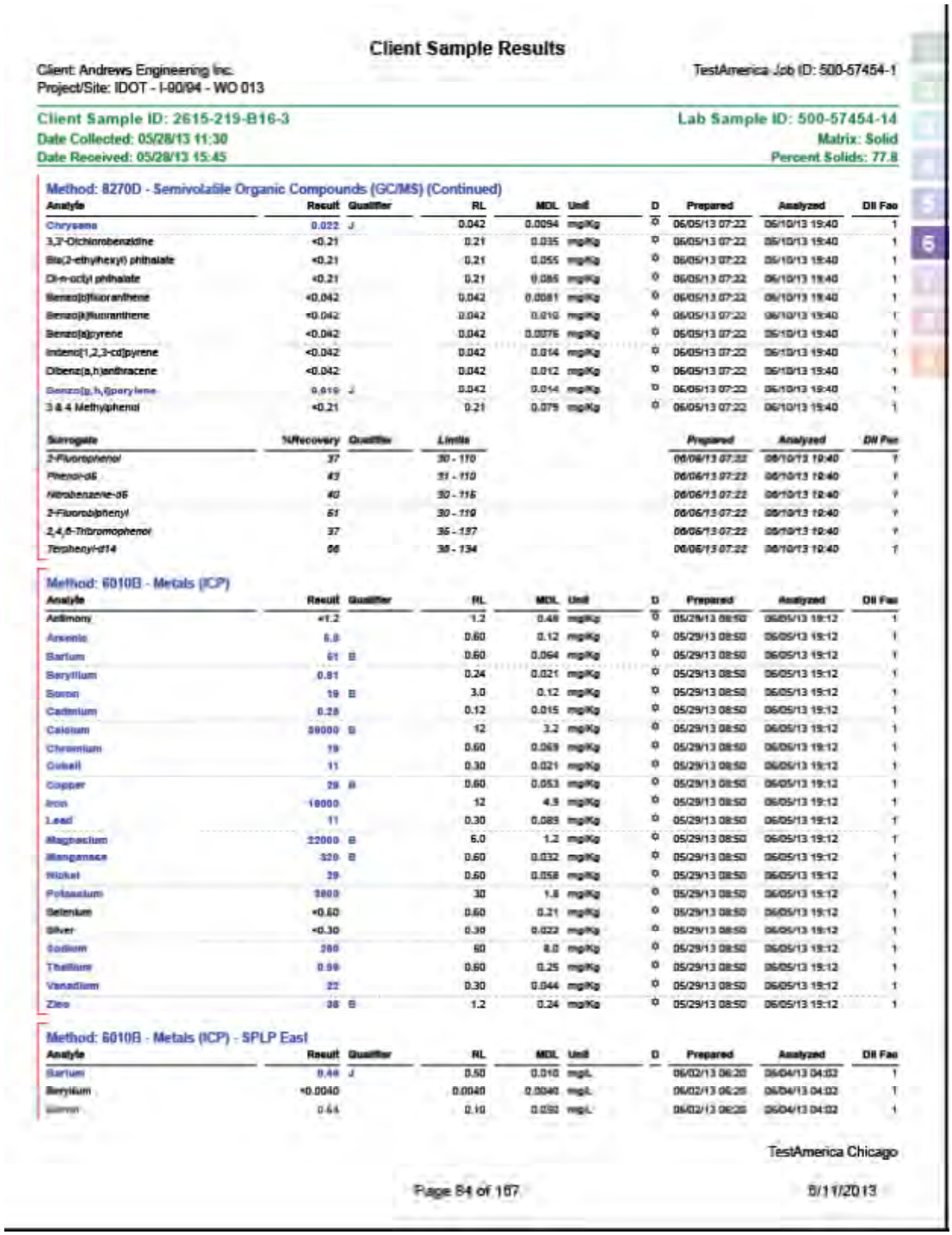
Client Sample ID: 2615-219-B16-3
Date Collected: 05/28/13 11:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-14
Matrix: Solid
Percent Solids: 77.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2-Methylphenol	<0.21		0.21	0.055	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.053	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Hexachloroethane	<0.21		0.21	0.045	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
3-Chlorophenol	<0.21		0.21	0.060	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Nitrobenzene	<0.042		0.042	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,4-Dimethylphenol	<0.42		0.42	0.13	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Hexachlorobutadiene	<0.21		0.21	0.055	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Naphthalene	<0.042		0.042	0.0081	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,4-Dichlorophenol	<0.42		0.42	0.13	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4-Chloroaniline	<0.84		0.84	0.13	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,4,6-Trichlorophenol	<0.42		0.42	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,4,5-Trichlorophenol	<0.42		0.42	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Hexachlorocyclopentadiene	<0.84		0.84	0.19	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2-Methylnaphthalene	<0.21		0.21	0.054	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2-Nitroaniline	<0.21		0.21	0.075	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4-Chloro-3-methylphenol	<0.42		0.42	0.20	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,6-Dinitrotoluene	<0.21		0.21	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2-Nitrophenol	<0.42		0.42	0.066	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
3-Nitroaniline	<0.42		0.42	0.081	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Dimethyl phthalate	<0.21		0.21	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,4-Dinitrophenol	<0.84		0.84	0.21	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Acenaphthylene	<0.042		0.042	0.0096	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
2,4-Dinitrotoluene	<0.21		0.21	0.064	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Acenaphthene	<0.042		0.042	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4-Nitrophenol	<0.84		0.84	0.23	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Fluorene	<0.042		0.042	0.0095	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4-Nitroaniline	<0.42		0.42	0.086	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Hexachlorobenzene	<0.084		0.084	0.0082	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.066	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Pentachlorophenol	<0.84		0.84	0.21	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
N-Nitrosodiphenylamine	<0.21		0.21	0.056	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
4,6-Dinitro-2-methylphenol	<0.42		0.42	0.10	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Phenanthrene	0.058		0.042	0.017	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Anthracene	<0.042		0.042	0.0098	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Carbazole	<0.21		0.21	0.059	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Di-n-butyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Fluoranthene	<0.042		0.042	0.017	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Pyrene	<0.042		0.042	0.015	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Butyl benzyl phthalate	<0.21		0.21	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Benzo[a]anthracene	<0.042		0.042	0.0088	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1

Added 7/25/13



Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-3
Date Collected: 05/28/13 11:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-14
Matrix: Solid
Percent Solids: 77.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.042	0.0094	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.035	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.055	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Di-n-octyl phthalate	<0.21		0.21	0.086	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Benzo[b]fluoranthene	<0.042		0.042	0.0081	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Benzo[k]fluoranthene	<0.042		0.042	0.010	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Benzo[a]pyrene	<0.042		0.042	0.0076	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Dibenz(a,h)anthracene	<0.042		0.042	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
Benzo[g,h,i]perylene	0.019	J	0.042	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1
3 & 4 Methylphenol	<0.21		0.21	0.079	mg/Kg	☼	06/05/13 07:22	06/10/13 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	37		30 - 110	06/05/13 07:22	06/10/13 19:40	1
Phenol-d6	43		31 - 110	06/05/13 07:22	06/10/13 19:40	1
Nitrobenzene-d5	40		30 - 115	06/05/13 07:22	06/10/13 19:40	1
2-Fluorobiphenyl	61		30 - 119	06/05/13 07:22	06/10/13 19:40	1
2,4,6-Tribromophenol	37		35 - 137	06/05/13 07:22	06/10/13 19:40	1
Terphenyl-d14	66		30 - 134	06/05/13 07:22	06/10/13 19:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Arsenic	6.8		0.60	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Barium	61	B	0.60	0.064	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Beryllium	0.81		0.24	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Boron	19	B	3.0	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Cadmium	0.28		0.12	0.015	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Calcium	39000	B	12	3.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Chromium	19		0.60	0.069	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Cobalt	11		0.30	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Copper	29	B	0.60	0.053	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Iron	19000		12	4.9	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Lead	11		0.30	0.089	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Magnesium	22000	B	6.0	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Manganese	320	B	0.60	0.032	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Nickel	29		0.60	0.058	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Potassium	3800		30	1.8	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Selenium	<0.60		0.60	0.21	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Sodium	260		60	8.0	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Thallium	0.99		0.60	0.25	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Vanadium	22		0.30	0.044	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1
Zinc	38	B	1.2	0.24	mg/Kg	☼	05/29/13 08:50	06/05/13 19:12	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.44	J	0.50	0.010	mg/L		06/02/13 06:25	06/04/13 04:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:25	06/04/13 04:02	1
Boron	0.44		0.10	0.050	mg/L		06/02/13 06:25	06/04/13 04:02	1

TestAmerica Chicago

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Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-3
Date Collected: 05/28/13 11:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-14
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 04:02	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:02	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:02	1
Iron	[illegible]		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 04:02	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 04:02	1
Manganese	0.068		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:02	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:02	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 04:02	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:02	1
Zinc	0.31		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 04:02	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 19:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 19:55	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 11:02	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.020	0.0092	mg/Kg	☼	05/30/13 14:15	05/31/13 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.2		0.200	0.200	SU			06/04/13 11:59	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-4
Date Collected: 05/28/13 11:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-15
Matrix: Solid
Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0044		0.0044	0.0019	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Benzene	<0.0044		0.0044	0.00060	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Bromodichloromethane	<0.0044		0.0044	0.00076	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Bromoform	<0.0044		0.0044	0.0010	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Bromomethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
2-Butanone (MEK)	<0.0044		0.0044	0.0016	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Carbon disulfide	<0.0044		0.0044	0.00066	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Carbon tetrachloride	<0.0044		0.0044	0.00080	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Chlorobenzene	<0.0044		0.0044	0.00045	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Chloroethane	<0.0044		0.0044	0.0012	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Chloroform	<0.0044		0.0044	0.00051	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Chloromethane	<0.0044		0.0044	0.00093	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
cis-1,2-Dichloroethene	<0.0044		0.0044	0.00062	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
cis-1,3-Dichloropropene	<0.0044		0.0044	0.00058	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Dibromochloromethane	<0.0044		0.0044	0.00077	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,1-Dichloroethane	<0.0044		0.0044	0.00070	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,2-Dichloroethane	<0.0044		0.0044	0.00065	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,1-Dichloroethene	<0.0044		0.0044	0.00071	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,2-Dichloropropane	<0.0044		0.0044	0.00057	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,3-Dichloropropene, Total	<0.0044		0.0044	0.00058	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Ethylbenzene	<0.0044		0.0044	0.00089	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
2-Hexanone	<0.0044		0.0044	0.0013	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Methylene Chloride	<0.0044		0.0044	0.0012	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0012	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Methyl tert-butyl ether	<0.0044		0.0044	0.00073	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Styrene	<0.0044		0.0044	0.00058	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,1,2,2-Tetrachloroethane	<0.0044		0.0044	0.00089	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Tetrachloroethene	<0.0044		0.0044	0.00067	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Toluene	<0.0044		0.0044	0.00062	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
trans-1,2-Dichloroethene	<0.0044		0.0044	0.00061	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
trans-1,3-Dichloropropene	<0.0044		0.0044	0.00079	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,1,1-Trichloroethane	<0.0044		0.0044	0.00066	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
1,1,2-Trichloroethane	<0.0044		0.0044	0.00060	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Trichloroethene	<0.0044		0.0044	0.00073	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Vinyl acetate	<0.0044		0.0044	0.00069	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Vinyl chloride	<0.0044		0.0044	0.00093	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1
Xylenes, Total	<0.0088		0.0088	0.00040	mg/Kg	☼	05/28/13 11:35	05/31/13 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 122	05/28/13 11:35	05/31/13 15:28	1
Dibromofluoromethane	94		75 - 120	05/28/13 11:35	05/31/13 15:28	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	05/28/13 11:35	05/31/13 15:28	1
Toluene-d8 (Surr)	105		75 - 122	05/28/13 11:35	05/31/13 15:28	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.063	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
1,3-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
1,4-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-4
Date Collected: 05/28/13 11:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-15
Matrix: Solid
Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2-Methylphenol	<0.20		0.20	0.052	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.044	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
N-Nitroso-di-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Hexachloroethane	<0.20		0.20	0.042	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2-Chlorophenol	<0.20		0.20	0.056	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.044	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,4-Dimethylphenol	<0.39		0.39	0.12	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Hexachlorocyclopentadiene	<0.20		0.20	0.052	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Naphthalene	<0.039		0.039	0.0076	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,4-Dichlorophenol	<0.39		0.39	0.12	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4-Chloroaniline	<0.80		0.80	0.12	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,4,6-Trichlorophenol	<0.39		0.39	0.050	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,4,5-Trichlorophenol	<0.39		0.39	0.11	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Hexachlorocyclopentadiene	<0.80		0.80	0.18	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2-Methylnaphthalene	<0.20		0.20	0.051	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2-Nitroaniline	<0.20		0.20	0.071	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4-Chloro-3-methylphenol	<0.39		0.39	0.19	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,6-Dinitrotoluene	<0.20		0.20	0.047	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2-Nitrophenol	<0.39		0.39	0.062	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
3-Nitroaniline	<0.39		0.39	0.076	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Dimethyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,4-Dinitrophenol	<0.80		0.80	0.20	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Acenaphthylene	<0.039		0.039	0.0091	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
2,4-Dinitrotoluene	<0.20		0.20	0.060	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Acenaphthene	<0.039		0.039	0.012	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4-Nitrophenol	<0.80		0.80	0.21	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Fluorene	<0.039		0.039	0.0090	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4-Nitroaniline	<0.39		0.39	0.081	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.044	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Hexachlorobenzene	<0.080		0.080	0.0078	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.062	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Pentachlorophenol	<0.80		0.80	0.20	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
N-Nitrosodiphenylamine	<0.20		0.20	0.053	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.096	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Phenanthrene	0.048		0.039	0.017	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Anthracene	<0.039		0.039	0.0093	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Carbazole	<0.20		0.20	0.055	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Di-n-butyl phthalate	<0.20		0.20	0.050	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Fluoranthene	<0.039		0.039	0.016	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Pyrene	<0.039		0.039	0.014	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Butyl benzyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1
Benzo[a]anthracene	<0.039		0.039	0.0083	mg/Kg	☼	05/05/13 07:22	05/10/13 20:03	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-4
Date Collected: 05/28/13 11:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-15
Matrix: Solid
Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.0089	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.033	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Di-n-octyl phthalate	<0.20		0.20	0.080	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Benzo[b]fluoranthene	<0.039		0.039	0.0077	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Benzo[k]fluoranthene	<0.039		0.039	0.0094	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Benzo[a]pyrene	<0.039		0.039	0.0072	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Dibenz[a,h]anthracene	<0.039		0.039	0.011	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1
3 & 4 Methylphenol	<0.20		0.20	0.076	mg/Kg	☼	06/05/13 07:22	06/10/13 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	34		30 - 110	06/05/13 07:22	06/10/13 20:03	1
Phenol-d6	35		31 - 110	06/05/13 07:22	06/10/13 20:03	1
Nitrobenzene-d5	27	X	30 - 110	06/05/13 07:22	06/10/13 20:03	1
2-Fluorobiphenyl	40		30 - 110	06/05/13 07:22	06/10/13 20:03	1
2,4,6-Tribromophenol	23	X	30 - 137	06/05/13 07:22	06/10/13 20:03	1
Terphenyl-d14	46		30 - 134	06/05/13 07:22	06/10/13 20:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Arsenic	7.1		0.60	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Barium	39	E	0.60	0.064	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Beryllium	0.72		0.24	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Boron	17	E	3.0	0.13	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Cadmium	0.52		0.12	0.016	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Calcium	46000	E	12	3.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Chromium	17		0.60	0.069	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Cobalt	10		0.30	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Copper	26	E	0.60	0.053	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Iron	19000		12	4.9	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Lead	11		0.30	0.089	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Magnesium	23000	E	6.0	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Manganese	330	E	0.60	0.032	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Nickel	27		0.60	0.069	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Potassium	3200		30	1.8	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Selenium	<0.60		0.60	0.21	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Sodium	260		60	8.0	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Thallium	0.72		0.60	0.25	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Vanadium	30		0.30	0.044	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1
Zinc	38	E	1.2	0.34	mg/Kg	☼	05/29/13 08:50	06/05/13 19:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/06/13 07:15	06/10/13 19:47	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B16-4
Date Collected: 05/28/13 11:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-15
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49	J	0.50	0.010	mg/L		06/02/13 06:20	06/04/13 04:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 04:06	1
Boron	0.61		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 04:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 04:06	1
Chromium	0.019	J	0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:06	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:06	1
Iron	5.0		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 04:06	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 04:06	1
Manganese	0.13		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:06	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:06	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 04:06	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:06	1
Zinc	0.29		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 04:06	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 19:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 19:56	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 11:04	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.021	0.0097	mg/Kg	☼	05/30/13 14:15	05/31/13 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.79		0.200	0.200	SU			06/04/13 12:06	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-1
Date Collected: 05/28/13 10:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-16
Matrix: Solid
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0043		0.0043	0.0019	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Benzene	<0.0043		0.0043	0.00059	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Bromodichloromethane	<0.0043		0.0043	0.00074	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Bromoform	<0.0043		0.0043	0.00099	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Bromomethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
2-Butanone (MEK)	<0.0043		0.0043	0.0016	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Carbon disulfide	<0.0043		0.0043	0.00064	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Carbon tetrachloride	<0.0043		0.0043	0.00078	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Chlorobenzene	<0.0043		0.0043	0.00044	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Chloroethane	<0.0043		0.0043	0.0012	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Chloroform	<0.0043		0.0043	0.00049	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Chloromethane	<0.0043		0.0043	0.00090	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
cis-1,2-Dichloroethene	<0.0043		0.0043	0.00061	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
cis-1,3-Dichloropropene	<0.0043		0.0043	0.00056	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Dibromochloromethane	<0.0043		0.0043	0.00075	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,1-Dichloroethane	<0.0043		0.0043	0.00068	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,2-Dichloroethane	<0.0043		0.0043	0.00064	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,1-Dichloroethene	<0.0043		0.0043	0.00069	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,2-Dichloropropane	<0.0043		0.0043	0.00065	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,3-Dichloropropene, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Ethylbenzene	<0.0043		0.0043	0.00087	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
2-Hexanone	<0.0043		0.0043	0.0012	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Methylene Chloride	<0.0043		0.0043	0.0012	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0011	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Methyl tert-butyl ether	<0.0043		0.0043	0.00071	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Styrene	<0.0043		0.0043	0.00056	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,1,2,2-Tetrachloroethane	<0.0043		0.0043	0.00087	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Tetrachloroethene	<0.0043		0.0043	0.00096	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Toluene	<0.0043		0.0043	0.00060	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
trans-1,2-Dichloroethene	<0.0043		0.0043	0.00059	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
trans-1,3-Dichloropropene	<0.0043		0.0043	0.00077	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,1,1-Trichloroethane	<0.0043		0.0043	0.00064	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
1,1,2-Trichloroethane	<0.0043		0.0043	0.00069	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Trichloroethene	<0.0043		0.0043	0.00071	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Vinyl acetate	<0.0043		0.0043	0.00068	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Vinyl chloride	<0.0043		0.0043	0.00090	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1
Xylenes, Total	<0.0086		0.0086	0.00039	mg/Kg	☼	05/28/13 10:35	05/31/13 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 132	05/28/13 10:35	05/31/13 15:52	1
Dibromofluoromethane	96		75 - 120	05/28/13 10:35	05/31/13 15:52	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	05/28/13 10:35	05/31/13 15:52	1
Toluene-d8 (Surr)	104		76 - 122	05/28/13 10:35	05/31/13 15:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.055	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
1,3-Dichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
1,4-Dichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-1
Date Collected: 05/28/13 10:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-16
Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2-Methylphenol	<0.18		0.18	0.049	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.047	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Hexachloroethane	<0.18		0.18	0.039	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2-Chlorophenol	<0.18		0.18	0.052	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Nitrobenzene	<0.036		0.036	0.011	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.041	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,4-Dimethylphenol	<0.36		0.36	0.11	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Hexachlorobutadiene	<0.18		0.18	0.048	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Naphthalene	<0.036		0.036	0.0071	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,4-Dichlorophenol	<0.36		0.36	0.11	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4-Chloroaniline	<0.74		0.74	0.11	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,4,6-Trichlorophenol	<0.36		0.36	0.046	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,4,5-Trichlorophenol	<0.36		0.36	0.10	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Hexachlorocyclopentadiene	<0.74		0.74	0.17	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2-Methylnaphthalene	<0.18		0.18	0.048	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2-Nitroaniline	<0.18		0.18	0.066	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4-Chloro-3-methylphenol	<0.36		0.36	0.18	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,6-Dinitrotoluene	<0.18		0.18	0.044	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2-Nitrophenol	<0.36		0.36	0.058	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
3-Nitroaniline	<0.36		0.36	0.071	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,4-Dinitrophenol	<0.74		0.74	0.19	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Acenaphthylene	<0.036		0.036	0.0084	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Acenaphthene	<0.036		0.036	0.011	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Dibenzofuran	<0.18		0.18	0.044	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4-Nitrophenol	<0.74		0.74	0.20	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Fluorene	<0.036		0.036	0.0083	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4-Nitroaniline	<0.36		0.36	0.075	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Hexachlorobenzene	<0.074		0.074	0.0072	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.058	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Pentachlorophenol	<0.74		0.74	0.19	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
N-Nitrosodiphenylamine	<0.18		0.18	0.050	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
4,6-Dinitro-2-methylphenol	<0.36		0.36	0.089	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Phenanthrene	0.080		0.036	0.015	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Anthracene	<0.036		0.036	0.0086	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Carbazole	<0.18		0.18	0.052	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Di-n-butyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Fluoranthene	0.016	J	0.036	0.015	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Pyrene	0.018	J	0.036	0.013	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Butyl benzyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1
Benzo[a]anthracene	0.0087	J	0.036	0.0077	mg/Kg	☼	05/05/13 07:22	06/10/13 20:26	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-1
Date Collected: 05/28/13 10:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-16
Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	J	0.036	0.0083	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.031	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.049	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Di-n-octyl phthalate	<0.18		0.18	0.074	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Benzo[b]fluoranthene	<0.036		0.036	0.0071	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Benzo[k]fluoranthene	<0.036		0.036	0.0087	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Benzo[a]pyrene	<0.036		0.036	0.0067	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Dibenz(a,h)anthracene	<0.036		0.036	0.010	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
Benzo[g,h,i]perylene	0.014	J	0.036	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1
3 & 4 Methylphenol	<0.18		0.18	0.069	mg/Kg	☼	06/05/13 07:22	06/10/13 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	46		30 - 110	06/05/13 07:22	06/10/13 20:26	1
Phenol-d5	45		31 - 110	06/05/13 07:22	06/10/13 20:26	1
Nitrobenzene-d5	58		30 - 116	06/05/13 07:22	06/10/13 20:26	1
2-Fluorobiphenyl	67		30 - 119	06/05/13 07:22	06/10/13 20:26	1
2,4,6-Tribromophenol	47		36 - 137	06/05/13 07:22	06/10/13 20:26	1
Terphenyl-d14	75		36 - 134	06/05/13 07:22	06/10/13 20:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.46	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Arsenic	7.7		0.55	0.11	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Barium	35	B	0.55	0.059	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Beryllium	0.84		0.22	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Boron	12	B	2.8	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Cadmium	0.32		0.11	0.014	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Calcium	36000	B	11	3.0	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Chromium	18		0.55	0.064	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Cobalt	11		0.28	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Copper	32	B	0.55	0.049	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Iron	16000		11	4.6	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Lead	24		0.28	0.083	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Magnesium	19000	B	5.5	1.1	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Manganese	280	B	0.55	0.030	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Nickel	30		0.55	0.054	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Potassium	2700		28	1.7	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Selenium	<0.55		0.56	0.20	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Sodium	660		55	7.4	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Thallium	0.53		0.55	0.23	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Vanadium	18		0.28	0.041	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1
Zinc	39	B	1.1	0.22	mg/Kg	☼	05/29/13 08:50	06/05/13 19:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/09/13 07:15	06/10/13 11:11	1
Manganese	2.0		0.025	0.010	mg/L		06/09/13 07:15	06/10/13 11:11	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-1
Date Collected: 05/28/13 10:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-16
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.43	J	0.50	0.010	mg/L		06/02/13 06:20	06/04/13 04:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 04:10	1
Boron	0.60		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 04:10	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 04:10	1
Chromium	0.011	J	0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:10	1
Cobalt	0.0079	J	0.025	0.0060	mg/L		06/02/13 06:20	06/04/13 04:10	1
Iron	8.7		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 04:10	1
Lead	0.0089	J	0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 04:10	1
Manganese	0.16		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:10	1
Nickel	0.017	J	0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:10	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 04:10	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:10	1
Zinc	0.51		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 04:10	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 19:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 19:58	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000020	J	0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 11:06	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0084	mg/Kg	☼	05/30/13 14:15	05/31/13 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.86		0.200	0.200	SU			06/04/13 12:14	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2 Dup
Date Collected: 05/28/13 10:55
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-17
Matrix: Solid
Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0040		0.0040	0.0017	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Benzene	<0.0040		0.0040	0.00055	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Bromodichloromethane	<0.0040		0.0040	0.00069	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Bromoform	<0.0040		0.0040	0.00092	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Bromomethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
2-Butanone (MEK)	<0.0040		0.0040	0.0014	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Carbon disulfide	<0.0040		0.0040	0.00060	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Carbon tetrachloride	<0.0040		0.0040	0.00073	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Chlorobenzene	<0.0040		0.0040	0.00040	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Chloroethane	<0.0040		0.0040	0.0011	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Chloroform	<0.0040		0.0040	0.00046	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Chloromethane	<0.0040		0.0040	0.00084	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
cis-1,2-Dichloroethene	<0.0040		0.0040	0.00056	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
cis-1,3-Dichloropropene	<0.0040		0.0040	0.00052	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Dibromochloromethane	<0.0040		0.0040	0.00069	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,1-Dichloroethane	<0.0040		0.0040	0.00053	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,2-Dichloroethane	<0.0040		0.0040	0.00059	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,1-Dichloroethene	<0.0040		0.0040	0.00064	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,2-Dichloropropane	<0.0040		0.0040	0.00061	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,3-Dichloropropene, Total	<0.0040		0.0040	0.00052	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Ethylbenzene	<0.0040		0.0040	0.00081	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
2-Hexanone	<0.0040		0.0040	0.0011	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Methylene Chloride	<0.0040		0.0040	0.0011	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0010	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Methyl tert-butyl ether	<0.0040		0.0040	0.00066	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Styrene	<0.0040		0.0040	0.00052	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,1,2,2-Tetrachloroethane	<0.0040		0.0040	0.00081	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Tetrachloroethene	<0.0040		0.0040	0.00061	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Toluene	<0.0040		0.0040	0.00056	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
trans-1,2-Dichloroethene	<0.0040		0.0040	0.00055	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
trans-1,3-Dichloropropene	<0.0040		0.0040	0.00071	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,1,1-Trichloroethane	<0.0040		0.0040	0.00060	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
1,1,2-Trichloroethane	<0.0040		0.0040	0.00054	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Trichloroethene	<0.0040		0.0040	0.00066	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Vinyl acetate	<0.0040		0.0040	0.00063	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Vinyl chloride	<0.0040		0.0040	0.00084	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1
Xylenes, Total	<0.0080		0.0080	0.00036	mg/Kg	☼	05/28/13 10:55	05/31/13 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 122	05/28/13 10:55	05/31/13 16:16	1
Dibromofluoromethane	95		75 - 120	05/28/13 10:55	05/31/13 16:16	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	05/28/13 10:55	05/31/13 16:16	1
Toluene-d8 (Surr)	107		75 - 122	05/28/13 10:55	05/31/13 16:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.060	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
1,3-Dichlorobenzene	<0.15		0.19	0.040	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
1,4-Dichlorobenzene	<0.15		0.19	0.040	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1

TestAmerica Chicago

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Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-00/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2 Dup
Date Collected: 05/28/13 10:55
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-17
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2-Methylphenol	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Hexachloroethane	<0.19		0.19	0.040	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
3-Chlorophenol	<0.19		0.19	0.054	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Nitrobenzene	<0.038		0.038	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,4-Dimethylphenol	<0.38		0.38	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Hexachlorobutadiene	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Naphthalene	<0.038		0.038	0.0073	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,4-Dichlorophenol	<0.38		0.38	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4-Chloroaniline	<0.76		0.76	0.12	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.049	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.11	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Hexachlorocyclopentadiene	<0.76		0.76	0.18	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2-Methylnaphthalene	<0.19		0.19	0.049	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2-Nitroaniline	<0.19		0.19	0.066	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.18	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.045	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2-Nitrophenol	<0.38		0.38	0.059	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
3-Nitroaniline	<0.38		0.38	0.073	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Dimethyl phthalate	<0.19		0.19	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,4-Dinitrophenol	<0.75		0.75	0.19	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Acenaphthylene	<0.038		0.038	0.0087	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.058	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Acenaphthene	<0.038		0.038	0.011	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Dibenzofuran	<0.19		0.19	0.046	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4-Nitrophenol	<0.76		0.76	0.20	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Fluorene	<0.038		0.038	0.0086	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4-Nitroaniline	<0.38		0.38	0.078	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Hexachlorobenzene	<0.075		0.075	0.0075	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.060	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Pentachlorophenol	<0.75		0.75	0.19	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.051	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
4,6-Dinitro-2-methylphenol	<0.38		0.38	0.052	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Phenanthrene	0.12		0.038	0.016	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Anthracene	<0.038		0.038	0.0089	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Carbazole	<0.19		0.19	0.053	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Di-n-butyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Fluoranthene	<0.038		0.038	0.016	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Pyrene	<0.038		0.038	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Butyl benzyl phthalate	<0.19		0.19	0.047	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Benzo[a]anthracene	<0.038		0.038	0.0079	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2 Dup
Date Collected: 05/28/13 10:55
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-17
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.031	J	0.038	0.0086	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.032	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Di-n-octyl phthalate	<0.19		0.19	0.077	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Benzo[b]fluoranthene	<0.038		0.038	0.0074	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Benzo[k]fluoranthene	<0.038		0.038	0.0090	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Benzo[a]pyrene	<0.038		0.038	0.0069	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Dibenz(a,h)anthracene	<0.038		0.038	0.011	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
Benzo[g,h,i]perylene	<0.038		0.038	0.013	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1
3 & 4 Methylphenol	<0.19		0.19	0.072	mg/Kg	☼	06/05/13 07:22	06/10/13 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*43*		*30 - 110*	*06/05/13 07:22*	*06/10/13 20:49*	*1*
Phenol-d5	*60*		*31 - 110*	*06/05/13 07:22*	*06/10/13 20:49*	*1*
Nitrobenzene-d5	*36*		*30 - 115*	*06/05/13 07:22*	*06/10/13 20:49*	*1*
2-Fluorobiphenyl	*61*		*30 - 119*	*06/05/13 07:22*	*06/10/13 20:49*	*1*
2,4,6-Tribromophenol	*41*		*35 - 137*	*06/05/13 07:22*	*06/10/13 20:49*	*1*
Terphenyl-d14	*66*		*36 - 134*	*06/05/13 07:22*	*06/10/13 20:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.45	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Arsenic	7.2		0.56	0.11	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Barium	31	B	0.56	0.060	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Beryllium	0.58		0.22	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Boron	13	B	2.8	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Cadmium	0.34		0.11	0.014	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Calcium	60000	B	11	3.0	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Chromium	13		0.56	0.065	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Cobalt	9.1		0.28	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Copper	28	B	0.56	0.050	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Iron	17000		11	4.6	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Lead	11		0.28	0.084	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Magnesium	27000	B	5.6	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Manganese	370	B	0.56	0.030	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Nickel	24		0.56	0.055	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Potassium	2600		28	1.7	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Selenium	<0.56		0.56	0.20	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Silver	0.020	J	0.28	0.020	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Sodium	380		56	7.5	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Thallium	0.84		0.56	0.24	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Vanadium	18		0.28	0.041	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1
Zinc	38	B	1.1	0.23	mg/Kg	☼	05/29/13 08:50	06/05/13 19:31	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.33	J	0.50	0.010	mg/L		06/02/13 06:20	06/04/13 04:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 04:14	1
Boron	0.39		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 04:14	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2 Dup
Date Collected: 05/28/13 10:55
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-17
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 04:14	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:14	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:14	1
Iron	0.48		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 04:14	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 04:14	1
Manganese	0.023	J	0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:14	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:14	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 04:14	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:14	1
Zinc	0.25		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 04:14	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 19:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 19:59	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 16:30	06/04/13 11:08	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.018	0.0086	mg/Kg	☼	05/30/13 14:15	05/31/13 10:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.73		0.200	0.200	SU			06/04/13 12:21	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2
Date Collected: 05/28/13 10:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-18
Matrix: Solid
Percent Solids: 76.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0052		0.0052	0.0022	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Benzene	<0.0052		0.0052	0.00071	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Bromodichloromethane	<0.0052		0.0052	0.00089	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Bromoform	<0.0052		0.0052	0.0012	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Bromomethane	<0.0052		0.0052	0.0016	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
2-Butanone (MEK)	<0.0052		0.0052	0.0019	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Carbon disulfide	<0.0052		0.0052	0.00077	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Carbon tetrachloride	<0.0052		0.0052	0.00094	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Chlorobenzene	<0.0052		0.0052	0.00053	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Chloroethane	<0.0052		0.0052	0.0014	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Chloroform	<0.0052		0.0052	0.00060	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Chloromethane	<0.0052		0.0052	0.0011	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.00073	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.00068	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Dibromochloromethane	<0.0052		0.0052	0.00090	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,1-Dichloroethane	<0.0052		0.0052	0.00082	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,2-Dichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,1-Dichloroethene	<0.0052		0.0052	0.00084	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,2-Dichloropropane	<0.0052		0.0052	0.00079	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.00068	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Ethylbenzene	<0.0052		0.0052	0.0010	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
2-Hexanone	<0.0052		0.0052	0.0015	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Methylene Chloride	<0.0052		0.0052	0.0014	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0014	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Methyl tert-butyl ether	<0.0052		0.0052	0.00086	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Styrene	<0.0052		0.0052	0.00068	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Tetrachloroethene	<0.0052		0.0052	0.00079	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Toluene	<0.0052		0.0052	0.00072	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.00071	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.00093	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.00071	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Trichloroethene	<0.0052		0.0052	0.00085	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Vinyl acetate	<0.0052		0.0052	0.00081	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Vinyl chloride	<0.0052		0.0052	0.0011	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1
Xylenes, Total	<0.010		0.010	0.00047	mg/Kg	☼	05/28/13 10:40	05/31/13 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		79 - 122	05/28/13 10:40	05/31/13 16:39	1
Dibromofluoromethane	97		75 - 120	05/28/13 10:40	05/31/13 16:39	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	05/28/13 10:40	05/31/13 16:39	1
Toluene-d8 (Surr)	106		75 - 122	05/28/13 10:40	05/31/13 16:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.066	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
1,3-Dichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
1,4-Dichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2
Date Collected: 05/28/13 10:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-18
Matrix: Solid
Percent Solids: 76.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2-Methylphenol	<0.21		0.21	0.055	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.046	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.053	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Hexachloroethane	<0.21		0.21	0.044	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
3-Chlorophenol	<0.21		0.21	0.059	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Nitrobenzene	<0.041		0.041	0.013	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.046	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,4-Dimethylphenol	<0.41		0.41	0.13	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Hexachlorobutadiene	<0.21		0.21	0.054	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Naphthalene	<0.041		0.041	0.0090	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,4-Dichlorophenol	<0.41		0.41	0.13	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4-Chloroaniline	<0.84		0.84	0.13	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,4,6-Trichlorophenol	<0.41		0.41	0.052	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,4,5-Trichlorophenol	<0.41		0.41	0.12	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Hexachlorocyclopentadiene	<0.84		0.84	0.19	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2-Methylnaphthalene	<0.21		0.21	0.054	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2-Nitroaniline	<0.21		0.21	0.075	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4-Chloro-3-methylphenol	<0.41		0.41	0.20	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,6-Dinitrotoluene	<0.21		0.21	0.048	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2-Nitrophenol	<0.41		0.41	0.069	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
3-Nitroaniline	<0.41		0.41	0.080	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Dimethyl phthalate	<0.21		0.21	0.052	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,4-Dinitrophenol	<0.84		0.84	0.21	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Acenaphthylene	<0.041		0.041	0.0095	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
2,4-Dinitrotoluene	<0.21		0.21	0.064	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Acenaphthene	<0.041		0.041	0.012	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4-Nitrophenol	<0.84		0.84	0.22	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Fluorene	<0.041		0.041	0.0094	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4-Nitroaniline	<0.41		0.41	0.086	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.046	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Hexachlorobenzene	<0.084		0.084	0.0082	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.065	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Pentachlorophenol	<0.84		0.84	0.21	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
N-Nitrosodiphenylamine	<0.21		0.21	0.056	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.10	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Phenanthrene	0.038	J	0.041	0.017	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Anthracene	<0.041		0.041	0.0097	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Carbazole	<0.21		0.21	0.058	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Di-n-butyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Fluoranthene	<0.041		0.041	0.017	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Pyrene	<0.041		0.041	0.015	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Butyl benzyl phthalate	<0.21		0.21	0.052	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1
Benzo[a]anthracene	<0.041		0.041	0.0087	mg/Kg	☼	05/05/13 07:22	05/10/13 21:12	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2
Date Collected: 05/28/13 10:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-18
Matrix: Solid
Percent Solids: 76.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.018	J	0.041	0.0094	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.035	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.055	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Di-n-octyl phthalate	<0.21		0.21	0.084	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Benzo[b]fluoranthene	<0.041		0.041	0.0081	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Benzo[k]fluoranthene	<0.041		0.041	0.0099	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Benzo[a]pyrene	<0.041		0.041	0.0076	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Dibenz(a,h)anthracene	<0.041		0.041	0.012	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
Benzo[g,h,i]perylene	<0.041		0.041	0.014	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1
3 & 4 Methylphenol	<0.21		0.21	0.079	mg/Kg	☼	06/05/13 07:22	06/10/13 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*46*		*30 - 110*	*06/05/13 07:22*	*06/10/13 21:12*	*1*
Phenol-d6	*46*		*31 - 110*	*06/05/13 07:22*	*06/10/13 21:12*	*1*
Nitrobenzene-d5	*37*		*30 - 116*	*06/05/13 07:22*	*06/10/13 21:12*	*1*
2-Fluorobiphenyl	*47*		*30 - 119*	*06/05/13 07:22*	*06/10/13 21:12*	*1*
2,4,6-Tribromophenol	*37*		*36 - 137*	*06/05/13 07:22*	*06/10/13 21:12*	*1*
Terphenyl-d14	*61*		*36 - 134*	*06/05/13 07:22*	*06/10/13 21:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.49	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Arsenic	6.7		0.61	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Barium	38	B	0.61	0.065	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Beryllium	0.74		0.24	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Boron	18	B	3.0	0.13	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Cadmium	0.31		0.12	0.015	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Calcium	34000	B	12	3.3	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Chromium	18		0.61	0.070	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Cobalt	11		0.30	0.022	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Copper	27	B	0.61	0.054	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Iron	19000		12	5.0	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Lead	12		0.30	0.090	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Magnesium	20000	B	6.1	1.3	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Manganese	330	B	0.61	0.033	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Nickel	29		0.61	0.060	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Potassium	3300		30	1.8	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Selenium	<0.61		0.61	0.22	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Sodium	780		61	8.1	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Thallium	0.54	J	0.61	0.26	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Vanadium	20		0.30	0.045	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1
Zinc	37	B	1.2	0.25	mg/Kg	☼	05/29/13 08:50	06/05/13 19:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.010	mg/L		06/02/13 06:20	06/04/13 04:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 04:18	1
Boron	0.88		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 04:18	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-2
Date Collected: 05/28/13 10:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-18
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 04:18	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:18	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:18	1
Iron	0.37		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 04:18	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 04:18	1
Manganese	0.071		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:18	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:18	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 04:18	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:18	1
Zinc	0.38		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 04:18	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 20:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 20:01	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 11:10	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.019	0.0090	mg/Kg	☼	05/30/13 14:15	05/31/13 10:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.88		0.200	0.200	SU			06/04/13 12:28	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-3
Date Collected: 05/28/13 10:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-19
Matrix: Solid
Percent Solids: 79.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0052		0.0052	0.0022	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Benzene	<0.0052		0.0052	0.00071	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Bromodichloromethane	<0.0052		0.0052	0.00089	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Bromoform	<0.0052		0.0052	0.0012	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Bromomethane	<0.0052		0.0052	0.0016	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
2-Butanone (MEK)	<0.0052		0.0052	0.0019	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Carbon disulfide	<0.0052		0.0052	0.00077	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Carbon tetrachloride	<0.0052		0.0052	0.00094	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Chlorobenzene	<0.0052		0.0052	0.00052	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Chloroethane	<0.0052		0.0052	0.0014	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Chloroform	<0.0052		0.0052	0.00059	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Chloromethane	<0.0052		0.0052	0.0011	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.00073	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.00068	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Dibromochloromethane	<0.0052		0.0052	0.00090	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,1-Dichloroethane	<0.0052		0.0052	0.00082	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,2-Dichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,1-Dichloroethene	<0.0052		0.0052	0.00083	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,2-Dichloropropane	<0.0052		0.0052	0.00078	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.00068	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Ethylbenzene	<0.0052		0.0052	0.0010	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
2-Hexanone	<0.0052		0.0052	0.0015	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Methylene Chloride	<0.0052		0.0052	0.0014	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0014	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Methyl tert-butyl ether	<0.0052		0.0052	0.00085	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Styrene	<0.0052		0.0052	0.00068	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Tetrachloroethene	<0.0052		0.0052	0.00079	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Toluene	<0.0052		0.0052	0.00072	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.00071	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.00093	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.00070	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Trichloroethene	<0.0052		0.0052	0.00085	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Vinyl acetate	<0.0052		0.0052	0.00081	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Vinyl chloride	<0.0052		0.0052	0.0011	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1
Xylenes, Total	<0.010		0.010	0.00047	mg/Kg	☼	05/28/13 10:45	05/31/13 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 122	05/28/13 10:45	05/31/13 17:03	1
Dibromofluoromethane	94		75 - 120	05/28/13 10:45	05/31/13 17:03	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	05/28/13 10:45	05/31/13 17:03	1
Toluene-d8 (Surr)	100		76 - 122	05/28/13 10:45	05/31/13 17:03	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
1,3-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
1,4-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1

Added7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-3
Date Collected: 05/28/13 10:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-19
Matrix: Solid
Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2-Methylphenol	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Hexachloroethane	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2-Chlorophenol	<0.20		0.20	0.056	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,4-Dimethylphenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Naphthalene	<0.039		0.039	0.0076	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,4-Dichlorophenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4-Chloroaniline	<0.79		0.79	0.12	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,4,6-Trichlorophenol	<0.39		0.39	0.049	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,4,5-Trichlorophenol	<0.39		0.39	0.11	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Hexachlorocyclopentadiene	<0.79		0.79	0.18	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2-Methylnaphthalene	<0.20		0.20	0.051	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2-Nitroaniline	<0.20		0.20	0.071	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4-Chloro-3-methylphenol	<0.39		0.39	0.19	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,6-Dinitrotoluene	<0.20		0.20	0.047	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2-Nitrophenol	<0.39		0.39	0.062	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
3-Nitroaniline	<0.39		0.39	0.076	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Dimethyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,4-Dinitrophenol	<0.79		0.79	0.20	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Acenaphthylene	<0.039		0.039	0.0090	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
2,4-Dinitrotoluene	<0.20		0.20	0.060	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Acenaphthene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4-Nitrophenol	<0.79		0.79	0.21	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Fluorene	<0.039		0.039	0.0089	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4-Nitroaniline	<0.39		0.39	0.081	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Hexachlorobenzene	<0.079		0.079	0.0077	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Diethyl phthalate	<0.20		0.20	0.086	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Pentachlorophenol	<0.79		0.79	0.20	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
N-Nitrosodiphenylamine	<0.20		0.20	0.053	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.095	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Phenanthrene	0.087		0.039	0.016	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Anthracene	<0.039		0.039	0.0093	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Carbazole	<0.20		0.20	0.055	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Fluoranthene	<0.039		0.039	0.016	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Pyrene	<0.039		0.039	0.014	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Butyl benzyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Benzo[a]anthracene	<0.039		0.039	0.0082	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1

TestAmerica Chicago

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-3
Date Collected: 05/28/13 10:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-19
Matrix: Solid
Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.0089	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.033	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Di-n-octyl phthalate	<0.20		0.20	0.090	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Benzo[b]fluoranthene	<0.039		0.039	0.0076	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Benzo[k]fluoranthene	<0.039		0.039	0.0094	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Benzo[a]pyrene	<0.039		0.039	0.0072	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.013	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
Dibenz(a,h)anthracene	<0.039		0.039	0.011	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
[illegible]	[illegible]	J	0.039	0.013	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1
3 & 4 Methylphenol	<0.20		0.20	0.075	mg/Kg	☼	06/05/13 07:22	06/11/13 10:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	39		30 - 110	06/05/13 07:22	06/11/13 10:17	1
Phenol-d5	42		31 - 110	06/05/13 07:22	06/11/13 10:17	1
Nitrobenzene-d5	33		30 - 115	06/05/13 07:22	06/11/13 10:17	1
2-Fluorobiphenyl	36		30 - 110	06/05/13 07:22	06/11/13 10:17	1
2,4,6-Tribromophenol	47		36 - 137	06/05/13 07:22	06/11/13 10:17	1
Terphenyl-d14	40		36 - 134	06/05/13 07:22	06/11/13 10:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Arsenic	7.7		0.59	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Barium	35	B	0.59	0.063	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Beryllium	0.84		0.24	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Boron	16	B	3.0	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Cadmium	0.44		0.12	0.015	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Calcium	49000	B	12	3.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Chromium	15		0.59	0.069	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Cobalt	10		0.30	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Copper	37	B	0.59	0.052	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Iron	19000		12	4.9	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Lead	12		0.30	0.088	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Magnesium	23000	B	5.9	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Manganese	340	B	0.59	0.032	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Nickel	28		0.59	0.058	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Potassium	3800		30	1.8	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Selenium	<0.59		0.59	0.21	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Silver	<0.30		0.30	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Sodium	240		59	7.9	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Thallium	0.53	J	0.59	0.25	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Vanadium	19		0.30	0.044	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1
Zinc	48	B	1.2	0.24	mg/Kg	☼	05/29/13 08:50	06/05/13 19:43	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.010	mg/L		06/02/13 06:20	06/04/13 04:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:20	06/04/13 04:22	1
Boron	0.75		0.10	0.050	mg/L		06/02/13 06:20	06/04/13 04:22	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-3
Date Collected: 05/28/13 10:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-19
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:20	06/04/13 04:22	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:22	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:22	1
Iron	1.3		0.20	0.20	mg/L		06/02/13 06:20	06/04/13 04:22	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:20	06/04/13 04:22	1
Manganese	0.084		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:22	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:20	06/04/13 04:22	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:20	06/04/13 04:22	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:20	06/04/13 04:22	1
Zinc	0.42		0.10	0.020	mg/L		06/02/13 06:20	06/04/13 04:22	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:20	06/05/13 20:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:20	06/05/13 20:02	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 11:12	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0091	mg/Kg	☼	05/30/13 14:15	05/31/13 10:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.80		0.200	0.200	SU			06/04/13 12:35	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-4
Date Collected: 05/28/13 10:50
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-20
Matrix: Solid
Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0021	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Benzene	<0.0050		0.0050	0.00068	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Bromodichloromethane	<0.0050		0.0050	0.00085	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Bromoform	<0.0050		0.0050	0.0011	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Bromomethane	<0.0050		0.0050	0.0015	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
2-Butanone (MEK)	<0.0050		0.0050	0.0018	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Carbon disulfide	<0.0050		0.0050	0.00074	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Carbon tetrachloride	<0.0050		0.0050	0.00090	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Chlorobenzene	<0.0050		0.0050	0.00050	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Chloroethane	<0.0050		0.0050	0.0014	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Chloroform	<0.0050		0.0050	0.00057	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Chloromethane	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
cis-1,2-Dichloroethene	<0.0050		0.0050	0.00070	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
cis-1,3-Dichloropropene	<0.0050		0.0050	0.00065	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Dibromochloromethane	<0.0050		0.0050	0.00086	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,1-Dichloroethane	<0.0050		0.0050	0.00079	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,2-Dichloroethane	<0.0050		0.0050	0.00074	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,1-Dichloroethene	<0.0050		0.0050	0.00080	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,2-Dichloropropane	<0.0050		0.0050	0.00075	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,3-Dichloropropene, Total	<0.0050		0.0050	0.00065	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Ethylbenzene	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
2-Hexanone	<0.0050		0.0050	0.0014	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Methylene Chloride	<0.0050		0.0050	0.0013	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0013	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Methyl tert-butyl ether	<0.0050		0.0050	0.00082	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Styrene	<0.0050		0.0050	0.00065	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Tetrachloroethene	<0.0050		0.0050	0.00076	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Toluene	<0.0050		0.0050	0.00070	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
trans-1,2-Dichloroethene	<0.0050		0.0050	0.00068	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
trans-1,3-Dichloropropene	<0.0050		0.0050	0.00069	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,1,1-Trichloroethane	<0.0050		0.0050	0.00074	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
1,1,2-Trichloroethane	<0.0050		0.0050	0.00068	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Trichloroethene	<0.0050		0.0050	0.00082	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Vinyl acetate	<0.0050		0.0050	0.00078	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Vinyl chloride	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1
Xylenes, Total	<0.0099		0.0099	0.00045	mg/Kg	☼	05/28/13 10:50	05/31/13 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 120	05/28/13 10:50	05/31/13 17:27	1
Dibromofluoromethane	98		76 - 120	05/28/13 10:50	05/31/13 17:27	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	05/28/13 10:50	05/31/13 17:27	1
Toluene-d8 (Surr)	107		75 - 122	05/28/13 10:50	05/31/13 17:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.065	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.060	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
1,3-Dichlorobenzene	<0.21		0.21	0.043	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
1,4-Dichlorobenzene	<0.21		0.21	0.043	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-4
Date Collected: 05/28/13 10:50
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-20
Matrix: Solid
Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2-Methylphenol	<0.21		0.21	0.054	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.045	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.052	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Hexachloroethane	<0.21		0.21	0.043	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2-Chlorophenol	<0.21		0.21	0.058	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Nitrobenzene	<0.041		0.041	0.013	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.045	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Isophorone	<0.21		0.21	0.045	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,4-Dimethylphenol	<0.41		0.41	0.13	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Hexachlorobutadiene	<0.21		0.21	0.053	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Naphthalene	<0.041		0.041	0.0079	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,4-Dichlorophenol	<0.41		0.41	0.12	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4-Chloroaniline	<0.82		0.82	0.12	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,4,6-Trichlorophenol	<0.41		0.41	0.051	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,4,5-Trichlorophenol	<0.41		0.41	0.12	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Hexachlorocyclopentadiene	<0.82		0.82	0.19	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2-Methylnaphthalene	<0.21		0.21	0.053	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2-Nitroaniline	<0.21		0.21	0.073	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4-Chloro-3-methylphenol	<0.41		0.41	0.20	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,6-Dinitrotoluene	<0.21		0.21	0.048	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2-Nitrophenol	<0.41		0.41	0.064	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
3-Nitroaniline	<0.41		0.41	0.079	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Dimethyl phthalate	<0.21		0.21	0.051	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,4-Dinitrophenol	<0.82		0.82	0.21	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Acenaphthylene	<0.041		0.041	0.0094	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
2,4-Dinitrotoluene	<0.21		0.21	0.062	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Acenaphthene	<0.041		0.041	0.012	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4-Nitrophenol	<0.82		0.82	0.22	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Fluorene	<0.041		0.041	0.0093	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4-Nitroaniline	<0.41		0.41	0.084	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Hexachlorobenzene	<0.082		0.082	0.0080	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Diethyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.064	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Pentachlorophenol	<0.82		0.82	0.21	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
N-Nitrosodiphenylamine	<0.21		0.21	0.055	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.099	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Phenanthrene	0.081		0.041	0.017	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Anthracene	<0.041		0.041	0.0096	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Carbazole	<0.21		0.21	0.057	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Di-n-butyl phthalate	<0.21		0.21	0.051	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Fluoranthene	<0.041		0.041	0.017	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Pyrene	<0.041		0.041	0.015	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Butyl benzyl phthalate	<0.21		0.21	0.051	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Benzo[a]anthracene	<0.041		0.041	0.0085	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-4
Date Collected: 05/28/13 10:50
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-20
Matrix: Solid
Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.012	J	0.041	0.0052	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.034	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.054	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Di-n-octyl phthalate	<0.21		0.21	0.083	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Benzo[b]fluoranthene	<0.041		0.041	0.0079	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Benzo[k]fluoranthene	<0.041		0.041	0.0057	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Benzo[a]pyrene	<0.041		0.041	0.0074	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.014	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Dibenz(a,h)anthracene	<0.041		0.041	0.011	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
Benzo[g,h,i]perylene	0.014	J	0.041	0.014	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1
3,3,4 Methylphenol	<0.21		0.21	0.077	mg/Kg	☼	06/05/13 07:22	06/11/13 10:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	42		30 - 110	06/05/13 07:22	06/11/13 10:37	1
Phenol-d6	46		31 - 110	06/05/13 07:22	06/11/13 10:37	1
Nitrobenzene-d5	37		30 - 115	06/05/13 07:22	06/11/13 10:37	1
2-Fluorobiphenyl	40		30 - 110	06/05/13 07:22	06/11/13 10:37	1
2,4,6-Tribromophenol	42		35 - 137	06/05/13 07:22	06/11/13 10:37	1
Terphenyl-d14	51		30 - 134	06/05/13 07:22	06/11/13 10:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Arsenic	8.1		0.60	0.12	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Barium	36	B	0.60	0.064	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Beryllium	0.68		0.24	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Boron	17	B	3.0	0.13	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Cadmium	0.39		0.12	0.015	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Calcium	43000	B	12	3.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Chromium	18		0.60	0.069	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Cobalt	11		0.30	0.021	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Copper	32	B	0.60	0.053	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Iron	21000		12	4.9	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Lead	13		0.30	0.089	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Magnesium	23000	B	6.0	1.2	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Manganese	346	B	0.60	0.032	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Nickel	29		0.60	0.056	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Potassium	3000		30	1.8	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Selenium	<0.60		0.60	0.21	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Sodium	240		60	8.0	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Thallium	0.87		0.60	0.25	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Vanadium	20		0.30	0.044	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1
Zinc	37	B	1.2	0.24	mg/Kg	☼	05/29/13 08:50	06/05/13 19:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/09/13 07:15	06/10/13 11:32	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B17-4
Date Collected: 05/28/13 10:50
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-20
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.75		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 01:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 01:00	1
Boron	0.88		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 01:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 01:00	1
Chromium	0.012	J	0.025	0.010	mg/L		06/02/13 06:57	06/04/13 01:00	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 01:00	1
Iron	6.7		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 01:00	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:57	06/04/13 01:00	1
Manganese	0.14		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 01:00	1
Nickel	0.011	J	0.025	0.010	mg/L		06/02/13 06:57	06/04/13 01:00	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 01:00	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 01:00	1
Zinc	0.49		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 01:00	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:07	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 09:36	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.020	0.0095	mg/Kg	☼	05/30/13 14:15	05/31/13 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.00		0.200	0.200	SU			06/04/13 12:43	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-1
Date Collected: 05/28/13 08:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-29
Matrix: Solid
Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0044		0.0044	0.0019	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Benzene	<0.0044		0.0044	0.00060	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Bromodichloromethane	<0.0044		0.0044	0.00075	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Bromoform	<0.0044		0.0044	0.0010	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Bromomethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
2-Butanone (MEK)	<0.0044		0.0044	0.0016	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Carbon disulfide	<0.0044		0.0044	0.00065	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Carbon tetrachloride	<0.0044		0.0044	0.00079	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Chlorobenzene	<0.0044		0.0044	0.00044	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Chloroethane	<0.0044		0.0044	0.0012	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Chloroform	<0.0044		0.0044	0.00050	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Chloromethane	<0.0044		0.0044	0.00092	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
cis-1,2-Dichloroethene	<0.0044		0.0044	0.00062	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
cis-1,3-Dichloropropene	<0.0044		0.0044	0.00057	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Dibromochloromethane	<0.0044		0.0044	0.00076	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,1-Dichloroethane	<0.0044		0.0044	0.00069	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,2-Dichloroethane	<0.0044		0.0044	0.00065	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,1-Dichloroethene	<0.0044		0.0044	0.00071	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,2-Dichloropropane	<0.0044		0.0044	0.00066	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,3-Dichloropropene, Total	<0.0044		0.0044	0.00057	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Ethylbenzene	<0.0044		0.0044	0.00088	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
2-Hexanone	<0.0044		0.0044	0.0013	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Methylene Chloride	<0.0044		0.0044	0.0012	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0011	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Methyl tert-butyl ether	<0.0044		0.0044	0.00072	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Styrene	<0.0044		0.0044	0.00057	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,1,2,2-Tetrachloroethane	<0.0044		0.0044	0.00068	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Tetrachloroethene	<0.0044		0.0044	0.00067	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Toluene	<0.0044		0.0044	0.00061	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
trans-1,2-Dichloroethene	<0.0044		0.0044	0.00060	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
trans-1,3-Dichloropropene	<0.0044		0.0044	0.00078	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,1,1-Trichloroethane	<0.0044		0.0044	0.00065	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
1,1,2-Trichloroethane	<0.0044		0.0044	0.00060	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Trichloroethene	<0.0044		0.0044	0.00072	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Vinyl acetate	<0.0044		0.0044	0.00069	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Vinyl chloride	<0.0044		0.0044	0.00092	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1
Xylenes, Total	<0.0087		0.0087	0.00040	mg/Kg	☼	05/28/13 08:30	06/01/13 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 122	05/28/13 08:30	06/01/13 12:18	1
Dibromofluoromethane	98		75 - 120	05/28/13 08:30	06/01/13 12:18	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	05/28/13 08:30	06/01/13 12:18	1
Toluene-d8 (Surr)	106		75 - 122	05/28/13 08:30	06/01/13 12:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
1,3-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
1,4-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-1
Date Collected: 05/28/13 08:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-29
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2-Methylphenol	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Hexachloroethane	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
3-Chlorophenol	<0.20		0.20	0.056	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,4-Dimethylphenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Hexachlorobutadiene	<0.20		0.20	0.051	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Naphthalene	<0.039		0.039	0.0075	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,4-Dichlorophenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4-Chloroaniline	<0.79		0.79	0.12	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,4,6-Trichlorophenol	<0.39		0.39	0.049	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,4,5-Trichlorophenol	<0.39		0.39	0.11	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Hexachlorocyclopentadiene	<0.79		0.79	0.18	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2-Methylnaphthalene	<0.20		0.20	0.051	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2-Nitroaniline	<0.20		0.20	0.070	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,6-Dinitrotoluene	<0.20		0.20	0.047	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2-Nitrophenol	<0.39		0.39	0.061	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
3-Nitroaniline	<0.39		0.39	0.076	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Dimethyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,4-Dinitrophenol	<0.79		0.79	0.20	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Acenaphthylene	<0.039		0.039	0.0090	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
2,4-Dinitrotoluene	<0.20		0.20	0.060	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Acenaphthene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4-Nitrophenol	<0.79		0.79	0.21	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Fluorene	<0.039		0.039	0.0089	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4-Nitroaniline	<0.39		0.39	0.080	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Hexachlorobenzene	<0.079		0.079	0.0077	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Diethyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Pentachlorophenol	<0.79		0.79	0.20	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
N-Nitrosodiphenylamine	<0.20		0.20	0.053	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.095	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Phenanthrene	0.11		0.039	0.016	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Anthracene	<0.039		0.039	0.0092	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Carbazole	<0.20		0.20	0.055	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Di-n-butyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Fluoranthene	0.018	J	0.039	0.016	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Pyrene	0.030	J	0.039	0.014	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Butyl benzyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1
Benzo[a]anthracene	0.010	J	0.039	0.0082	mg/Kg	☼	06/05/13 19:07	06/06/13 20:08	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-1
Date Collected: 05/28/13 08:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-29
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.039	0.0088	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.033	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Di-n-octyl phthalate	<0.20		0.20	0.079	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Benzo[b]fluoranthene	0.018	J	0.039	0.0076	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Benzo[k]fluoranthene	<0.039		0.039	0.0093	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Benzo[a]pyrene	0.013	J	0.039	0.0071	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.013	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Dibenz(a,h)anthracene	<0.039		0.039	0.011	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
Benzo[g,h,i]perylene	0.023	J	0.039	0.013	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1
3 & 4 Methylphenol	<0.20		0.20	0.074	mg/Kg	☼	06/05/13 19:07	06/08/13 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*67*		*30 - 110*	*06/05/13 19:07*	*06/08/13 20:08*	*1*
Phenol-d5	*64*		*31 - 110*	*06/05/13 19:07*	*06/08/13 20:08*	*1*
Nitrobenzene-d5	*60*		*30 - 116*	*06/05/13 19:07*	*06/08/13 20:08*	*1*
2-Fluorobiphenyl	*67*		*30 - 119*	*06/05/13 19:07*	*06/08/13 20:08*	*1*
2,4,6-Tribromophenol	*62*		*36 - 137*	*06/05/13 19:07*	*06/08/13 20:08*	*1*
Terphenyl-d14	*66*		*36 - 134*	*06/05/13 19:07*	*06/08/13 20:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.46	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Arsenic	7.8		0.57	0.11	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Barium	31		0.57	0.061	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Beryllium	0.58		0.23	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Boron	12	B	2.9	0.12	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Cadmium	0.18	B	0.11	0.014	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Calcium	68000	B	110	31	mg/Kg	☼	05/29/13 09:20	06/05/13 22:04	10
Chromium	14		0.57	0.066	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Cobalt	13		0.29	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Copper	29		0.57	0.051	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Iron	18000		11	4.7	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Lead	18		0.29	0.085	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Magnesium	24000	B	5.7	1.2	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Manganese	340		0.57	0.031	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Nickel	34		0.57	0.056	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Potassium	2200	B	29	1.7	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Selenium	0.74		0.57	0.20	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Silver	<0.29		0.29	0.021	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Sodium	310		57	7.6	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Thallium	0.58	J	0.57	0.24	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Vanadium	17		0.29	0.042	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1
Zinc	45	B	1.1	0.23	mg/Kg	☼	05/29/13 09:20	06/04/13 22:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.86		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 01:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 01:44	1
Boron	0.88		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 01:44	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-1
Date Collected: 05/28/13 08:30
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-29
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 01:44	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 01:44	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 01:44	1
Iron	1.0		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 01:44	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:57	06/04/13 01:44	1
Manganese	0.030		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 01:44	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 01:44	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 01:44	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 01:44	1
Zinc	0.60		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 01:44	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:02	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.019	0.0091	mg/Kg	☼	05/30/13 14:15	05/31/13 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.81		0.200	0.200	SU			06/04/13 13:56	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-30
Matrix: Solid
Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.30		0.30	0.077	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Benzene	<0.015		0.015	0.0044	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Bromodichloromethane	<0.12		0.12	0.020	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Bromoform	<0.12		0.12	0.026	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Bromomethane	<0.12		0.12	0.040	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
2-Butanone (MEK)	<0.30		0.30	0.087	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Carbon disulfide	<0.30		0.30	0.025	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Carbon tetrachloride	<0.059		0.059	0.015	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Chlorobenzene	<0.059		0.059	0.0085	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Chloroethane	<0.12		0.12	0.026	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Chloroform	<0.059		0.059	0.012	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Chloromethane	<0.12		0.12	0.027	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
cis-1,2-Dichloroethene	<0.059		0.059	0.0073	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
cis-1,3-Dichloropropene	<0.059		0.059	0.011	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Dibromochloromethane	<0.12		0.12	0.021	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,1-Dichloroethane	<0.059		0.059	0.011	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,2-Dichloroethane	<0.059		0.059	0.017	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,1-Dichloroethene	<0.059		0.059	0.018	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,2-Dichloropropane	<0.059		0.059	0.012	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,3-Dichloropropene, Total	<0.059		0.059	0.011	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Ethylbenzene	<0.015		0.015	0.0075	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
2-Hexanone	<0.30		0.30	0.033	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Methylene Chloride	<0.30		0.30	0.041	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
4-Methyl-2-pentanone (MIBK)	<0.30		0.30	0.020	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Methyl tert-butyl ether	<0.12		0.12	0.026	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Styrene	<0.059		0.059	0.0059	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,1,2,2-Tetrachloroethane	<0.059		0.059	0.014	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Tetrachloroethene	<0.059		0.059	0.0089	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Toluene	<0.015		0.015	0.0068	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
trans-1,2-Dichloroethene	<0.059		0.059	0.015	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
trans-1,3-Dichloropropene	<0.059		0.059	0.012	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,1,1-Trichloroethane	<0.059		0.059	0.012	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
1,1,2-Trichloroethane	<0.059		0.059	0.017	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Trichloroethene	<0.030		0.030	0.011	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Vinyl acetate	<0.12		0.12	0.020	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Vinyl chloride	<0.015		0.015	0.0062	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50
Xylenes, Total	<0.030		0.030	0.0041	mg/Kg	☼	05/28/13 08:35	06/04/13 18:24	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 120	05/28/13 08:35	06/04/13 18:24	50
Dibromofluoromethane	88		75 - 120	05/28/13 08:35	06/04/13 18:24	50
1,2-Dichloroethane-d4 (Surr)	88		75 - 125	05/28/13 08:35	06/04/13 18:24	50
Toluene-d8 (Surr)	99		75 - 120	05/28/13 08:35	06/04/13 18:24	50

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.063	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1

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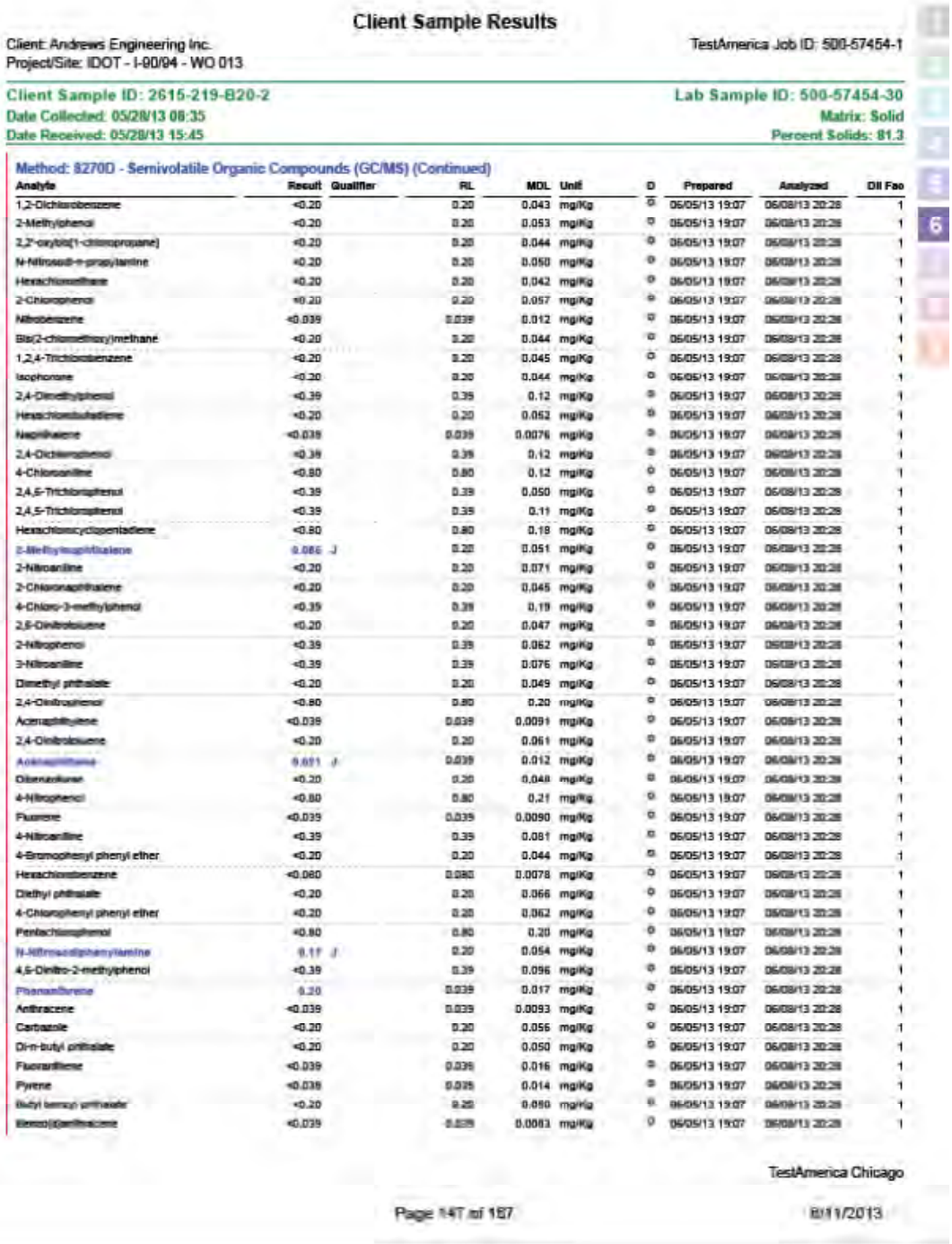

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-30
Matrix: Solid
Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2-Methylphenol	<0.20		0.20	0.053	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,2'-oxybis(1-chloropropane)	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
N-Nitroso-di-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Hexachloroethane	<0.20		0.20	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2-Chlorophenol	<0.20		0.20	0.057	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,4-Dimethylphenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Hexachlorobutadiene	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Naphthalene	<0.039		0.039	0.0076	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,4-Dichlorophenol	<0.39		0.39	0.12	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4-Chloroaniline	<0.80		0.80	0.12	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.050	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,4,5-Trichlorophenol	<0.39		0.39	0.11	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Hexachlorocyclopentadiene	<0.80		0.80	0.18	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2-Methylnaphthalene	0.086	J	0.20	0.051	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2-Nitroaniline	<0.20		0.20	0.071	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.19	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.047	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2-Nitrophenol	<0.39		0.39	0.062	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
3-Nitroaniline	<0.39		0.39	0.076	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Dimethyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,4-Dinitrophenol	<0.80		0.80	0.20	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Acenaphthylene	<0.039		0.039	0.0091	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.061	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Acenaphthene	0.021	J	0.039	0.012	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4-Nitrophenol	<0.80		0.80	0.21	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Fluorene	<0.039		0.039	0.0090	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4-Nitroaniline	<0.39		0.39	0.081	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.044	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Hexachlorobenzene	<0.080		0.080	0.0078	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.062	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Pentachlorophenol	<0.80		0.80	0.20	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
N-Nitrosodiphenylamine	0.17	J	0.20	0.054	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.096	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Phenanthrene	0.20		0.039	0.017	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Anthracene	<0.039		0.039	0.0093	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Carbazole	<0.20		0.20	0.056	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Di-n-butyl phthalate	<0.20		0.20	0.050	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Fluoranthene	<0.039		0.039	0.016	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Pyrene	<0.039		0.039	0.014	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Butyl benzyl phthalate	<0.20		0.20	0.080	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Benzo[a]anthracene	<0.039		0.039	0.0083	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-30
Matrix: Solid
Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.038	J	0.039	0.0089	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.033	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Di-n-octyl phthalate	<0.20		0.20	0.080	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Benzo[b]fluoranthene	<0.039		0.039	0.0077	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.0094	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Benzo[a]pyrene	<0.039		0.039	0.0072	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Indeno(1,2,3-cd)pyrene	<0.039		0.039	0.013	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.011	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
Benzo[g,h,i]perylene	0.028	J	0.039	0.013	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1
3 & 4 Methylphenol	<0.20		0.20	0.075	mg/Kg	☼	06/05/13 19:07	06/08/13 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*61*		*30 - 110*	*06/05/13 19:07*	*06/08/13 20:28*	*1*
Phenol-d5	*66*		*31 - 110*	*06/05/13 19:07*	*06/08/13 20:28*	*1*
Nitrobenzene-d5	*69*		*30 - 116*	*06/05/13 19:07*	*06/08/13 20:28*	*1*
2-Fluorobiphenyl	*61*		*30 - 119*	*06/05/13 19:07*	*06/08/13 20:28*	*1*
2,4,6-Tribromophenol	*79*		*36 - 137*	*06/05/13 19:07*	*06/08/13 20:28*	*1*
Terphenyl-d14	*66*		*36 - 134*	*06/05/13 19:07*	*06/08/13 20:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.45	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Arsenic	7.5		0.56	0.11	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Barium	27		0.56	0.060	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Beryllium	0.67		0.22	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Boron	12	B	2.8	0.12	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Cadmium	0.18	B	0.11	0.014	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Calcium	64000	B	110	30	mg/Kg	☼	05/29/13 09:20	06/05/13 22:10	10
Chromium	14		0.56	0.065	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Cobalt	13		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Copper	33		0.56	0.050	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Iron	19000		11	4.6	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Lead	17		0.28	0.084	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Magnesium	26000	B	5.6	1.2	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Manganese	320		0.56	0.030	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Nickel	35		0.56	0.055	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Potassium	2100	B	28	1.7	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Selenium	0.82		0.56	0.20	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Sodium	280		56	7.5	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Thallium	0.81		0.56	0.24	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Vanadium	18		0.28	0.042	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1
Zinc	51	B	1.1	0.23	mg/Kg	☼	05/29/13 09:20	06/04/13 22:42	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.84		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 02:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 02:00	1
Boron	0.84		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 02:00	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-30
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 02:00	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:00	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:00	1
Iron	0.82		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 02:00	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:57	06/04/13 02:00	1
Manganese	0.058		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:00	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:00	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 02:00	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:00	1
Zinc	0.47		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 02:00	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:33	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:07	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0089	mg/Kg	☼	05/30/13 14:15	05/31/13 10:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.94		0.200	0.200	SU			06/04/13 14:03	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2 Dup
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-31
Matrix: Solid
Percent Solids: 84.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0046		0.0046	0.0020	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Benzene	<0.0046		0.0046	0.00063	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Bromodichloromethane	<0.0046		0.0046	0.00080	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Bromoform	<0.0046		0.0046	0.0011	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Bromomethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
2-Butanone (MEK)	<0.0046		0.0046	0.0017	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Carbon disulfide	<0.0046		0.0046	0.00069	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Carbon tetrachloride	<0.0046		0.0046	0.00084	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Chlorobenzene	<0.0046		0.0046	0.00047	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Chloroethane	<0.0046		0.0046	0.0013	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Chloroform	<0.0046		0.0046	0.00053	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Chloromethane	<0.0046		0.0046	0.00097	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
cis-1,2-Dichloroethene	<0.0046		0.0046	0.00065	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
cis-1,3-Dichloropropene	<0.0046		0.0046	0.00061	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Dibromochloromethane	<0.0046		0.0046	0.00080	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,1-Dichloroethane	<0.0046		0.0046	0.00073	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,2-Dichloroethane	<0.0046		0.0046	0.00069	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,1-Dichloroethene	<0.0046		0.0046	0.00075	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,2-Dichloropropane	<0.0046		0.0046	0.00070	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,3-Dichloropropene, Total	<0.0046		0.0046	0.00061	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Ethylbenzene	<0.0046		0.0046	0.00093	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
2-Hexanone	<0.0046		0.0046	0.0013	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Methylene Chloride	<0.0046		0.0046	0.0012	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0012	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Methyl tert-butyl ether	<0.0046		0.0046	0.00076	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Styrene	<0.0046		0.0046	0.00061	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,1,2,2-Tetrachloroethane	<0.0046		0.0046	0.00093	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Tetrachloroethene	<0.0046		0.0046	0.00071	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Toluene	<0.0046		0.0046	0.00065	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
trans-1,2-Dichloroethene	<0.0046		0.0046	0.00064	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
trans-1,3-Dichloropropene	<0.0046		0.0046	0.00083	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,1,1-Trichloroethane	<0.0046		0.0046	0.00069	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
1,1,2-Trichloroethane	<0.0046		0.0046	0.00063	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Trichloroethene	<0.0046		0.0046	0.00076	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Vinyl acetate	<0.0046		0.0046	0.00073	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Vinyl chloride	<0.0046		0.0046	0.00097	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1
Xylenes, Total	<0.0092		0.0092	0.00042	mg/Kg	☼	05/28/13 08:35	06/01/13 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 122*	*05/28/13 08:35*	*06/01/13 12:41*	*1*
Dibromofluoromethane	*94*		*75 - 120*	*05/28/13 08:35*	*06/01/13 12:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/28/13 08:35*	*06/01/13 12:41*	*1*
Toluene-d8 (Surr)	*106*		*75 - 122*	*05/28/13 08:35*	*06/01/13 12:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.060	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
1,3-Dichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
1,4-Dichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2 Dup
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-31
Matrix: Solid
Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2-Methylphenol	<0.19		0.19	0.050	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Hexachloroethane	<0.19		0.19	0.040	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
3-Chlorophenol	<0.19		0.19	0.054	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Nitrobenzene	<0.037		0.037	0.012	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,4-Dimethylphenol	<0.37		0.37	0.12	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Hexachlorobutadiene	<0.19		0.19	0.049	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Naphthalene	<0.037		0.037	0.0073	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,4-Dichlorophenol	<0.37		0.37	0.11	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4-Chloroaniline	<0.76		0.76	0.11	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,4,6-Trichlorophenol	<0.37		0.37	0.047	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,4,5-Trichlorophenol	<0.37		0.37	0.11	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Hexachlorocyclopentadiene	<0.76		0.76	0.17	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2-Methylnaphthalene	<0.19		0.19	0.049	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2-Nitroaniline	<0.19		0.19	0.088	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4-Chloro-3-methylphenol	<0.37		0.37	0.18	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,6-Dinitrotoluene	<0.19		0.19	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2-Nitrophenol	<0.37		0.37	0.059	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
3-Nitroaniline	<0.37		0.37	0.073	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Dimethyl phthalate	<0.19		0.19	0.047	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,4-Dinitrophenol	<0.76		0.76	0.19	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Acenaphthylene	<0.037		0.037	0.0067	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
2,4-Dinitrotoluene	<0.19		0.19	0.056	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Acenaphthene	<0.037		0.037	0.011	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Dibenzofuran	<0.19		0.19	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4-Nitrophenol	<0.76		0.76	0.20	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Fluorene	<0.037		0.037	0.0086	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4-Nitroaniline	<0.37		0.37	0.077	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.042	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Hexachlorobenzene	<0.076		0.076	0.0074	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.059	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Pentachlorophenol	<0.76		0.76	0.19	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
N-Nitrosodiphenylamine	<0.19		0.19	0.051	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
4,6-Dinitro-2-methylphenol	<0.37		0.37	0.092	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Phenanthrene	0.11		0.037	0.016	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Anthracene	<0.037		0.037	0.0089	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Carbazole	<0.19		0.19	0.053	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Di-n-butyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Fluoranthene	<0.037		0.037	0.015	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Pyrene	0.023	J	0.037	0.014	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Butyl benzyl phthalate	<0.19		0.19	0.047	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1
Benzo[a]anthracene	<0.037		0.037	0.0075	mg/Kg	☼	06/05/13 19:07	06/08/13 20:48	1

TestAmerica Chicago

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2 Dup
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-31
Matrix: Solid
Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.017	J	0.037	0.0085	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.031	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Di-n-octyl phthalate	<0.19		0.19	0.077	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Benzo[b]fluoranthene	<0.037		0.037	0.0073	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Benzo[k]fluoranthene	<0.037		0.037	0.0090	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Benzo[a]pyrene	<0.037		0.037	0.0069	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.013	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Dibenz(a,h)anthracene	<0.037		0.037	0.011	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
Benzo[g,h,i]perylene	0.026	J	0.037	0.013	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1
3 & 4 Methylphenol	<0.19		0.19	0.071	mg/Kg	☼	05/05/13 19:07	06/08/13 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		30 - 110	05/05/13 19:07	06/08/13 20:48	1
Phenol-d5	64		37 - 110	05/05/13 19:07	06/08/13 20:48	1
Nitrobenzene-d5	46		30 - 115	05/05/13 19:07	06/08/13 20:48	1
2-Fluorobiphenyl	62		30 - 110	05/05/13 19:07	06/08/13 20:48	1
2,4,6-Tribromophenol	67		35 - 137	05/05/13 19:07	06/08/13 20:48	1
Terphenyl-d14	100		38 - 134	05/05/13 19:07	06/08/13 20:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.45	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Arsenic	6.1		0.56	0.11	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Barium	24		0.56	0.060	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Beryllium	0.47		0.23	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Boron	10	B	2.8	0.12	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Cadmium	0.19	B	0.11	0.014	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Calcium	47000	B	110	30	mg/Kg	☼	05/29/13 09:20	06/05/13 22:17	10
Chromium	12		0.56	0.065	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Cobalt	9.8		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Copper	28		0.56	0.050	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Iron	30000		11	4.6	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Lead	10		0.28	0.084	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Magnesium	21000	B	5.6	1.2	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Manganese	250		0.56	0.031	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Nickel	27		0.56	0.055	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Potassium	1800	B	28	1.7	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Selenium	0.58	J	0.56	0.20	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Sodium	520		56	7.5	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Thallium	0.54	J	0.56	0.24	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Vanadium	14		0.28	0.042	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1
Zinc	47	B	1.1	0.23	mg/Kg	☼	05/29/13 09:20	06/04/13 22:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 02:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 02:04	1
Boron	0.81		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 02:04	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-2 Dup
Date Collected: 05/28/13 08:35
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-31
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 02:04	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:04	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:04	1
Iron	9.7		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 02:04	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:57	06/04/13 02:04	1
Manganese	0.077		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:04	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:04	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 02:04	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:04	1
Zinc	0.40		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 02:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:34	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:09	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.019	0.0088	mg/Kg	☼	05/30/13 14:15	05/31/13 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.11		0.200	0.200	SU			06/04/13 14:11	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-3
Date Collected: 05/28/13 08:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-32
Matrix: Solid
Percent Solids: 78.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0021	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Benzene	<0.0050		0.0050	0.00068	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Bromochloromethane	<0.0050		0.0050	0.00085	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Bromoform	<0.0050		0.0050	0.0011	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Bromomethane	<0.0050		0.0050	0.0015	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
2-Butanone (MEK)	<0.0050		0.0050	0.0016	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Carbon disulfide	<0.0050		0.0050	0.00074	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Carbon tetrachloride	<0.0050		0.0050	0.00090	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Chlorobenzene	<0.0050		0.0050	0.00050	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Chloroethane	<0.0050		0.0050	0.0013	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Chloroform	<0.0050		0.0050	0.00057	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Chloromethane	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
cis-1,2-Dichloroethene	<0.0050		0.0050	0.00070	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
cis-1,3-Dichloropropene	<0.0050		0.0050	0.00065	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Dibromochloromethane	<0.0050		0.0050	0.00086	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,1-Dichloroethane	<0.0050		0.0050	0.00079	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,2-Dichloroethane	<0.0050		0.0050	0.00074	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,1-Dichloroethene	<0.0050		0.0050	0.00080	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,2-Dichloropropane	<0.0050		0.0050	0.00075	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,3-Dichloropropene, Total	<0.0050		0.0050	0.00065	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Ethylbenzene	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
2-Hexanone	<0.0050		0.0050	0.0014	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Methylene Chloride	<0.0050		0.0050	0.0013	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0013	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Methyl tert-butyl ether	<0.0050		0.0050	0.00082	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Styrene	<0.0050		0.0050	0.00065	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Tetrachloroethene	<0.0050		0.0050	0.00076	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Toluene	<0.0050		0.0050	0.00069	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
trans-1,2-Dichloroethene	<0.0050		0.0050	0.00068	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
trans-1,3-Dichloropropene	<0.0050		0.0050	0.00089	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,1,1-Trichloroethane	<0.0050		0.0050	0.00074	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
1,1,2-Trichloroethane	<0.0050		0.0050	0.00068	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Trichloroethene	<0.0050		0.0050	0.00082	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Vinyl acetate	<0.0050		0.0050	0.00078	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Vinyl chloride	<0.0050		0.0050	0.0010	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1
Xylenes, Total	<0.0099		0.0099	0.00045	mg/Kg	☼	05/28/13 08:40	06/01/13 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 122	05/28/13 08:40	06/01/13 13:05	1
Dibromofluoromethane	97		75 - 120	05/28/13 08:40	06/01/13 13:05	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	05/28/13 08:40	06/01/13 13:05	1
Toluene-d8 (Surr)	104		75 - 122	05/28/13 08:40	06/01/13 13:05	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.065	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
1,3-Dichlorobenzene	<0.21		0.21	0.043	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
1,4-Dichlorobenzene	<0.21		0.21	0.043	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-3
Date Collected: 05/28/13 08:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-32
Matrix: Solid
Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2-Methylphenol	<0.21		0.21	0.055	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Hexachloroethane	<0.21		0.21	0.044	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2-Chlorophenol	<0.21		0.21	0.059	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Nitrobenzene	<0.041		0.041	0.013	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,4-Dimethylphenol	<0.41		0.41	0.13	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Hexachlorobutadiene	<0.21		0.21	0.054	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Naphthalene	<0.041		0.041	0.0079	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,4-Dichlorophenol	<0.41		0.41	0.13	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4-Chloroaniline	<0.83		0.83	0.13	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,4,6-Trichlorophenol	<0.41		0.41	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,4,5-Trichlorophenol	<0.41		0.41	0.12	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Hexachlorocyclopentadiene	<0.83		0.83	0.19	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2-Methylnaphthalene	<0.21		0.21	0.053	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2-Nitroaniline	<0.21		0.21	0.074	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4-Chloro-3-methylphenol	<0.41		0.41	0.20	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,6-Dinitrotoluene	<0.21		0.21	0.049	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2-Nitrophenol	<0.41		0.41	0.065	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
3-Nitroaniline	<0.41		0.41	0.080	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Dimethyl phthalate	<0.21		0.21	0.051	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,4-Dinitrophenol	<0.83		0.83	0.21	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Acenaphthylene	<0.041		0.041	0.0095	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
2,4-Dinitrotoluene	<0.21		0.21	0.063	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Acenaphthene	<0.041		0.041	0.012	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4-Nitrophenol	<0.83		0.83	0.22	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Fluorene	<0.041		0.041	0.0094	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4-Nitroaniline	<0.41		0.41	0.084	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.046	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Hexachlorobenzene	<0.083		0.083	0.0081	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.065	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Pentachlorophenol	<0.83		0.83	0.21	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
N-Nitrosodiphenylamine	<0.21		0.21	0.056	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.10	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Phenanthrene	0.079		0.041	0.017	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Anthracene	<0.041		0.041	0.0097	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Carbazole	<0.21		0.21	0.058	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Di-n-butyl phthalate	<0.21		0.21	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Fluoranthene	<0.041		0.041	0.017	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Pyrene	0.018	J	0.041	0.015	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Butyl benzyl phthalate	<0.21		0.21	0.052	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Benzo[a]anthracene	<0.041		0.041	0.0086	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-3
Date Collected: 05/28/13 08:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-32
Matrix: Solid
Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.010	J	0.041	0.0093	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.034	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Bis(2-ethylhexyl) phthalate	0.16	J	0.21	0.055	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Di-n-octyl phthalate	<0.21		0.21	0.084	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Benzo[b]fluoranthene	<0.041		0.041	0.0080	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Benzo[k]fluoranthene	<0.041		0.041	0.0098	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Benzo[a]pyrene	<0.041		0.041	0.0075	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.014	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Dibenz(a,h)anthracene	<0.041		0.041	0.012	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
Benzo[g,h,i]perylene	0.035	J	0.041	0.014	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1
3 & 4 Methylphenol	<0.21		0.21	0.078	mg/Kg	☼	06/05/13 19:07	06/08/13 21:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		30 - 110	06/05/13 19:07	06/08/13 21:08	1
Phenol-d5	43		31 - 110	06/05/13 19:07	06/08/13 21:08	1
Nitrobenzene-d5	42		30 - 116	06/05/13 19:07	06/08/13 21:08	1
2-Fluorobiphenyl	63		30 - 119	06/05/13 19:07	06/08/13 21:08	1
2,4,6-Tribromophenol	84		36 - 137	06/05/13 19:07	06/08/13 21:08	1
Terphenyl-d14	71		36 - 134	06/05/13 19:07	06/08/13 21:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.50	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Arsenic	5.1		0.62	0.12	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Barium	87		0.62	0.066	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Beryllium	0.68		0.25	0.022	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Boron	15	B	3.1	0.13	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Cadmium	0.18	B	0.12	0.016	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Calcium	84000	B	120	34	mg/Kg	☼	05/29/13 09:20	06/05/13 22:23	10
Chromium	18		0.62	0.072	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Cobalt	12		0.31	0.022	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Copper	22		0.62	0.055	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Iron	19000		12	5.1	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Lead	13		0.31	0.092	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Magnesium	23000	B	6.2	1.3	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Manganese	310		0.62	0.034	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Nickel	27		0.62	0.061	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Potassium	2500	B	31	1.9	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Selenium	0.67		0.62	0.22	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Silver	<0.31		0.31	0.022	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Sodium	250		62	8.3	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Thallium	0.35	J	0.62	0.26	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Vanadium	19		0.31	0.046	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1
Zinc	58	B	1.2	0.25	mg/Kg	☼	05/29/13 09:20	06/04/13 22:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.79		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 02:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 02:16	1
Boron	0.82		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 02:16	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-3
Date Collected: 05/28/13 08:40
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-32
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 02:16	1
Chromium	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:16	1
Cobalt	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:16	1
Iron	1.8		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 02:16	1
Lead	<0.0075		0.0075	0.0060	mg/L		06/02/13 06:57	06/04/13 02:16	1
Manganese	0.053		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:16	1
Nickel	<0.025		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:16	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 02:16	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:16	1
Zinc	0.53		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 02:16	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:36	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:11	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.020	0.0094	mg/Kg	☼	05/30/13 14:15	05/31/13 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.09		0.200	0.200	SU			06/04/13 14:18	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-4
Date Collected: 05/28/13 08:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-33
Matrix: Solid
Percent Solids: 82.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0049		0.0049	0.0021	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Benzene	<0.0049		0.0049	0.00066	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Bromodichloromethane	<0.0049		0.0049	0.00084	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Bromoform	<0.0049		0.0049	0.0011	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Bromomethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
2-Butanone (MEK)	<0.0049		0.0049	0.0018	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Carbon disulfide	<0.0049		0.0049	0.00072	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Carbon tetrachloride	<0.0049		0.0049	0.00088	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Chlorobenzene	<0.0049		0.0049	0.00049	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Chloroethane	<0.0049		0.0049	0.0013	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Chloroform	<0.0049		0.0049	0.00056	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Chloromethane	<0.0049		0.0049	0.0010	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.00069	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.00064	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Dibromochloromethane	<0.0049		0.0049	0.00084	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,1-Dichloroethane	<0.0049		0.0049	0.00077	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,2-Dichloroethane	<0.0049		0.0049	0.00072	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,1-Dichloroethene	<0.0049		0.0049	0.00078	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,2-Dichloropropane	<0.0049		0.0049	0.00074	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.00064	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Ethylbenzene	<0.0049		0.0049	0.00098	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
2-Hexanone	<0.0049		0.0049	0.0014	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Methylene Chloride	<0.0049		0.0049	0.0013	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0013	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Methyl tert-butyl ether	<0.0049		0.0049	0.00080	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Styrene	<0.0049		0.0049	0.00064	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00098	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Tetrachloroethene	<0.0049		0.0049	0.00074	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Toluene	<0.0049		0.0049	0.00068	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.00067	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.00087	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.00072	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00066	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Trichloroethene	<0.0049		0.0049	0.00080	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Vinyl acetate	<0.0049		0.0049	0.00076	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Vinyl chloride	<0.0049		0.0049	0.0010	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1
Xylenes, Total	<0.0097		0.0097	0.00044	mg/Kg	☼	05/28/13 08:45	06/01/13 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 122*	*06/28/13 08:45*	*06/01/13 13:28*	*1*
Dibromofluoromethane	*99*		*75 - 120*	*06/28/13 08:45*	*06/01/13 13:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*06/28/13 08:45*	*06/01/13 13:28*	*1*
Toluene-d8 (Surr)	*107*		*75 - 122*	*06/28/13 08:45*	*06/01/13 13:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.062	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.041	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-4
Date Collected: 05/28/13 08:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-33
Matrix: Solid
Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2-Methylphenol	<0.20		0.20	0.052	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.043	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
N-Nitroso-di-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Hexachloroethane	<0.20		0.20	0.042	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2-Chlorophenol	<0.20		0.20	0.056	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.043	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,4-Dimethylphenol	<0.39		0.39	0.12	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Hexachlorobutadiene	<0.20		0.20	0.051	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Naphthalene	<0.039		0.039	0.0076	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,4-Dichlorophenol	<0.39		0.39	0.12	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4-Chloroaniline	<0.79		0.79	0.12	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.049	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,4,5-Trichlorophenol	<0.39		0.39	0.11	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Hexachlorocyclopentadiene	<0.79		0.79	0.18	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2-Methylnaphthalene	0.081	J	0.20	0.051	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2-Nitroaniline	<0.20		0.20	0.070	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.19	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.046	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2-Nitrophenol	<0.39		0.39	0.061	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
3-Nitroaniline	<0.39		0.39	0.075	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Dimethyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,4-Dinitrophenol	<0.79		0.79	0.20	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Acenaphthylene	<0.039		0.039	0.0090	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.060	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Acenaphthene	<0.039		0.039	0.012	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4-Nitrophenol	<0.79		0.79	0.21	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Fluorene	<0.039		0.039	0.0089	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4-Nitroaniline	<0.39		0.39	0.080	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.044	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Hexachlorobenzene	<0.079		0.079	0.0077	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Diethyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.062	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Pentachlorophenol	<0.79	*	0.79	0.20	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.053	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.095	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Phenanthrene	0.17		0.039	0.016	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Anthracene	<0.039		0.039	0.0092	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Carbazole	<0.20		0.20	0.055	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Di-n-butyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Fluoranthene	<0.039		0.039	0.016	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Pyrene	<0.039		0.039	0.014	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Butyl benzyl phthalate	<0.20		0.20	0.049	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Benzo[a]anthracene	<0.008		0.008	0.0082	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1

Added 7/25/13

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-4
Date Collected: 05/28/13 08:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-33
Matrix: Solid
Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.031	J	0.039	0.0088	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.033	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.052	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Di-n-octyl phthalate	<0.20		0.20	0.079	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Benzo[b]fluoranthene	<0.039		0.039	0.0076	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.0093	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Benzo[a]pyrene	0.017	J	0.039	0.0071	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.013	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.011	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
Benzo[g,h,i]perylene	0.015	J	0.039	0.013	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1
3 & 4 Methylphenol	<0.20		0.20	0.074	mg/Kg	☼	06/03/13 07:29	06/08/13 21:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	82		30 - 110	06/03/13 07:29	06/08/13 21:28	1
Phenol-d6	78		31 - 110	06/03/13 07:29	06/08/13 21:28	1
Nitrobenzene-d5	77		30 - 116	06/03/13 07:29	06/08/13 21:28	1
2-Fluorobiphenyl	83		30 - 119	06/03/13 07:29	06/08/13 21:28	1
2,4,6-Tribromophenol	76		36 - 137	06/03/13 07:29	06/08/13 21:28	1
Terphenyl-d14	89		30 - 134	06/03/13 07:29	06/08/13 21:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.44	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Arsenic	7.1		0.55	0.11	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Barium	31		0.55	0.059	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Beryllium	0.64		0.22	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Boron	13	B	2.8	0.12	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Cadmium	0.14	B	0.11	0.014	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Calcium	61000	B	110	30	mg/Kg	☼	05/29/13 09:20	06/05/13 22:29	10
Chromium	14		0.55	0.064	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Cobalt	13		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Copper	26		0.55	0.049	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Iron	17000		11	4.5	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Lead	14		0.28	0.082	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Magnesium	22000	B	5.5	1.1	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Manganese	660		0.55	0.030	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Nickel	35		0.55	0.054	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Potassium	2300	B	28	1.7	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Selenium	0.49	J	0.55	0.20	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Sodium	170		55	7.4	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Thallium	0.67		0.55	0.23	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Vanadium	17		0.28	0.041	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1
Zinc	64	B	1.1	0.22	mg/Kg	☼	05/29/13 09:20	06/04/13 22:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		06/05/13 07:15	06/10/13 12:17	1

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Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Client Sample ID: 2615-219-B20-4
Date Collected: 05/28/13 08:45
Date Received: 05/28/13 15:45

Lab Sample ID: 500-57454-33
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.010	mg/L		06/02/13 06:57	06/04/13 02:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/02/13 06:57	06/04/13 02:20	1
Boron	0.81		0.10	0.050	mg/L		06/02/13 06:57	06/04/13 02:20	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		06/02/13 06:57	06/04/13 02:20	1
Chromium	0.010	J	0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:20	1
Cobalt	0.0062	J	0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:20	1
Iron	6.0		0.20	0.20	mg/L		06/02/13 06:57	06/04/13 02:20	1
Lead	<0.0075		0.0075	0.0050	mg/L		06/02/13 06:57	06/04/13 02:20	1
Manganese	0.14		0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:20	1
Nickel	0.011	J	0.025	0.010	mg/L		06/02/13 06:57	06/04/13 02:20	1
Selenium	<0.050		0.050	0.010	mg/L		06/02/13 06:57	06/04/13 02:20	1
Silver	<0.025		0.025	0.0050	mg/L		06/02/13 06:57	06/04/13 02:20	1
Zinc	0.61		0.10	0.020	mg/L		06/02/13 06:57	06/04/13 02:20	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0030	mg/L		06/02/13 06:57	06/05/13 20:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		06/02/13 06:57	06/05/13 20:37	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		06/03/13 15:30	06/04/13 10:13	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.019	0.0088	mg/Kg	☼	05/30/13 14:15	05/31/13 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.86		0.200	0.200	SU			06/04/13 14:25	1

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Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - I-90/94 - WO 013

TestAmerica Job ID: 500-57454-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F	Duplicate RPD exceeds the control limit
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These community used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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CHAIN OF CUSTODY RECORD

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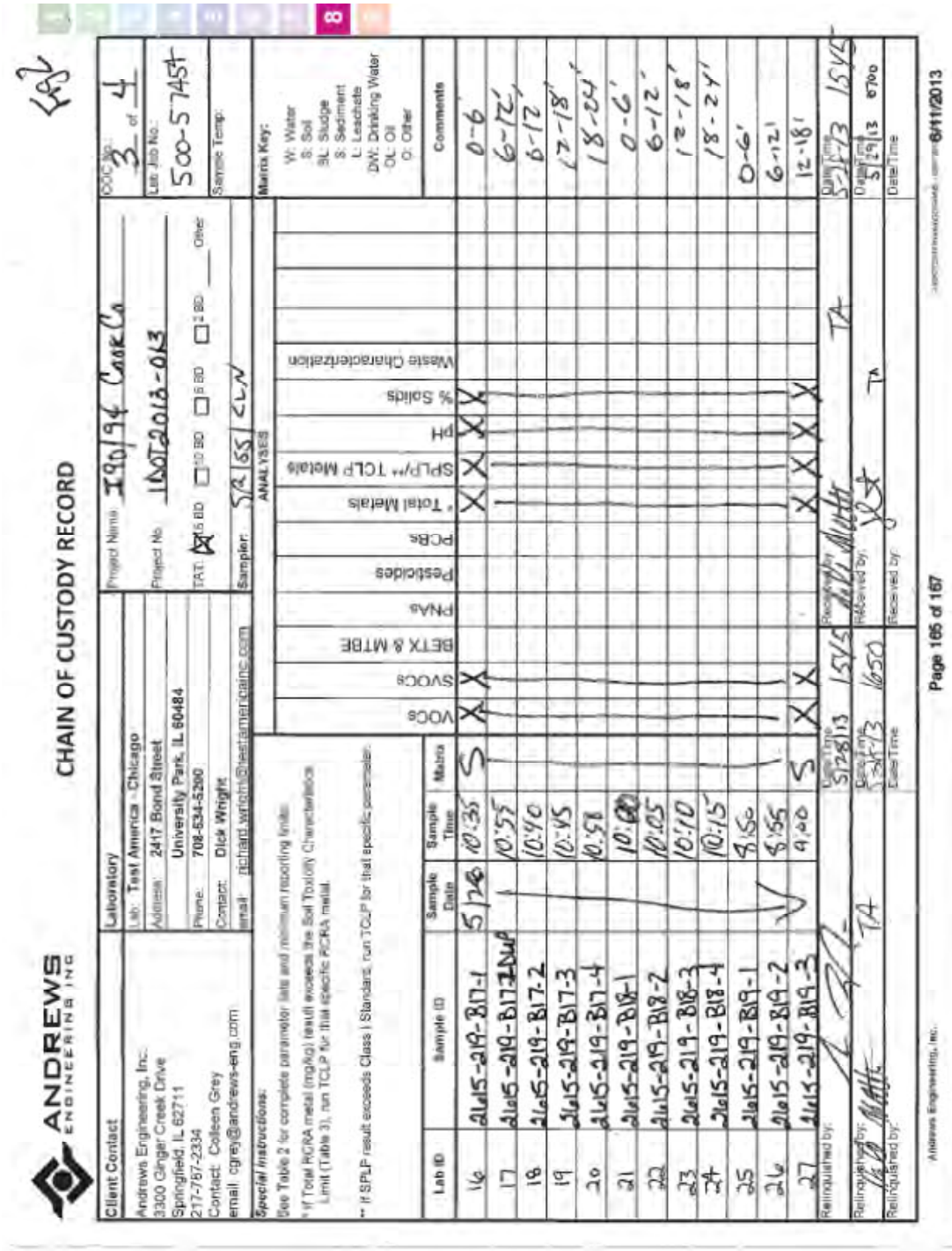

ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

COC No: 3 of 4

Client Contact
Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

Laboratory
Lab: Test America - Chicago
Address: 2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200
Contact: Dick Wright
email: richard.wright@testamericainc.com

Project Name: I90/94 Cook Co
Project No: IDOT2013-013
TAT: 5 BD 10 BD 6 BD 2 BD Other
Sampler: SR/GS/CLN

Lab Job No.: 500-57454
Sample Temp:

Special Instructions:
See Table 2 for complete parameter lists and minimum reporting limits.
* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

ANALYSES: VOCs, SVOCs, BETX & MTBE, PNAs, Pesticides, PCBs, * Total Metals, SPLP/** TCLP Metals, pH, % Solids, Waste Characterization

Matrix Key: W: Water, S: Soil, SL: Sludge, S: Sediment, L: Leachate, DW: Drinking Water, O: Oil, O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	Comments
16	2015-219-B17-1	5/24	10:35	S	0-6'
17	2015-219-B17-Dup		10:55		6-12'
18	2015-219-B17-2		10:40		6-12'
19	2015-219-B17-3		10:45		12-18'
20	2015-219-B17-4		10:50		18-24'
21	2015-219-B18-1		10:00		0-6'
22	2015-219-B18-2		10:05		6-12'
23	2015-219-B18-3		10:10		12-18'
24	2015-219-B18-4		10:15		18-24'
25	2015-219-B19-1		9:50		0-6'
26	2015-219-B19-2		9:55		6-12'
27	2015-219-B19-3		9:00	S	12-18'

Relinquished by: Date/Time 5/28/13 1545 — Received by: TA — Date/Time 5/28/13 1545
Relinquished by: TA — Date/Time 5/29/13 1650 — Received by: TA — Date/Time 5/29/13 0700
Relinquished by: — Date/Time — Received by: — Date/Time

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ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

Fig 2

Client Contact	Laboratory	Project Name: I90/94 Cook Co	COC No: 4 of 4
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street, University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: IDOT 2013-013 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ___ Other Sampler: SR ISS / CLN	Lab Job No.: 500-57454 Sample Temp:

Special Instructions:
See Table 2 for complete parameter lists and minimum reporting limits.
* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.
** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

Matrix Key: W: Water, S: Soil, SL: Sludge, S: Sediment, L: Leachate, DW: Drinking Water, OL: Oil, O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
28	2615-219-B19-4	5/28	[illegible]	S	X	X					X	X	X	X						18-24'
29	2615-219-B20-1		8:30																	0-6'
30	2615-219-B20-2[illegible]		8:35																	6-12'
31	2615-219-B20-2 DUP		8:35																	6-12'
32	2615-219-B20-3		8:40																	12-18'
33	2615-219-B20-4		8:45	S	X	X					X	X	X	X						18-24'

9:05

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	5/28/13 1545	[signature] TA	5/28/13 1545
[signature] TA	5-28-13 1650	[signature] TA	5/29/13 0700

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Login Sample Receipt Checklist

Client: Andrews Engineering Inc

Job Number: 500-57454-1

Login Number: 57454
List Number: 1
Creator: Lunt, Jeff T

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.7,4.1,4.3,3.9
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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