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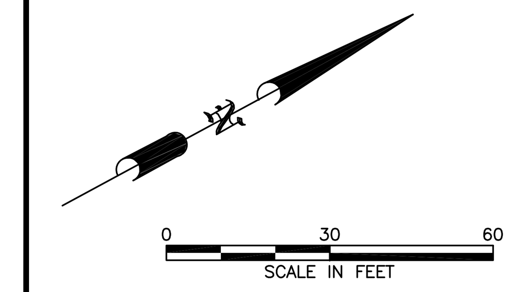


Sample ID	SR4-PE-20
Date	2/8/2006
Depth	0.5'-1.0'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	3.3
Lead	17.4
Thallium	NA
Total PCBs(mg/kg)	NA

Sample ID	SR4-PE-23
Date	2/9/2006
Depth	1.5'-2.0
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	2.7
Lead	25.9
Thallium	NA
Total PCBs(mg/kg)	NA

Sample ID	SR4-PE-19
Date	2/8/2006
Depth	1.5'-2.0'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	4.2
Lead	5.4
Thallium	NA
Total PCBs(mg/kg)	NA

Sample ID	SR4-PE-05	SR4-PE-05	SR4-PE-05
Date	2/1/2006	2/9/2006	2/9/2010
Depth	9.5'-10.0'	10.0'-10.5'	11.0'
VOCs (mg/kg)	NA	NA	NA
SVOCs (mg/kg)	NE	NE	NA
Metals (mg/kg)			
Antimony	10.1	NA	NA
Arsenic	10.9	6.6	NA
Lead	**503**	390	219
Thallium	<1.2	NA	NA
Total PCBs (mg/kg)	NA	NA	NA

Sample ID	SR4-PE-09
Date	2/1/2006
Depth	2.0'-2.5'
VOCs	NE
SVOCs	ND
Metals (mg/kg)	
Antimony	<2.2
Arsenic	4.6
Lead	8.3
Thallium	<1.1
Total PCBs (mg/kg)	ND

Sample ID	SR4-PE-08
Date	2/1/2006
Depth	3.0'-3.5'
VOCs	NE
SVOCs	NE
Metals (mg/kg)	
Antimony	<2.4
Arsenic	5.3
Lead	10.3
Thallium	<1.2
Total PCBs (mg/kg)	ND

Sample ID	SR4-PE-07
Date	2/1/2006
Depth	2.0'-2.5'
VOCs	NE
SVOCs	NE
Metals (mg/kg)	
Antimony	<2.2
Arsenic	13.3
Lead	43.2
Thallium	<1.1
Total PCBs (mg/kg)	
PCB 1254	0.0586

Sample ID	SR4-PE-03
Date	2/1/2006
Depth	3.5'-4.0'
VOCs	ND
SVOCs	NE
Metals (mg/kg)	
Antimony	<2.3
Arsenic	5
Lead	12.3
Thallium	<1.2
Total PCBs (mg/kg)	
PCB 1254	0.0741

Sample ID	SR4-PE-21
Date	2/8/2006
Depth	0.5'-1.0'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	<2.4
Lead	25.8
Thallium	NA
Total PCBs (mg/kg)	NA

Sample ID	SR4-PE-18
Date	2/8/2006
Depth	0.5'-1.0'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	<2.2
Lead	4.8
Thallium	NA
Total PCBs (mg/kg)	NA

Sample ID	SR4-PE-22
Date	2/8/2006
Depth	1.0'-1.5'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	10.4
Lead	18.3
Thallium	NA
Total PCBs (mg/kg)	NA

Sample ID	SR4-PE-16
Date	2/8/2006
Depth	0.5'-1.0'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	7.2
Lead	48.8
Thallium	NA
Total PCBs (mg/kg)	NA

Sample ID	SR4-PE-17
Date	2/8/2006
Depth	1.5'-2.0'
VOCs	NA
SVOCs	NA
Metals (mg/kg)	
Antimony	NA
Arsenic	5.7
Lead	31.9
Thallium	NA
Total PCBs (mg/kg)	NA

Sample ID	SR4-PE-11	SR4-PE-11
Date	2/1/2006	2/9/2010
Depth	1.0'-1.5'	3.0'
VOCs	ND	NA
SVOCs	NE	NA
Metals (mg/kg)		
Antimony	<21	NA
Arsenic	**28.9**	16.8
Lead	<21	NA
Thallium	<11	NA
Total PCBs (mg/kg)	ND	NA

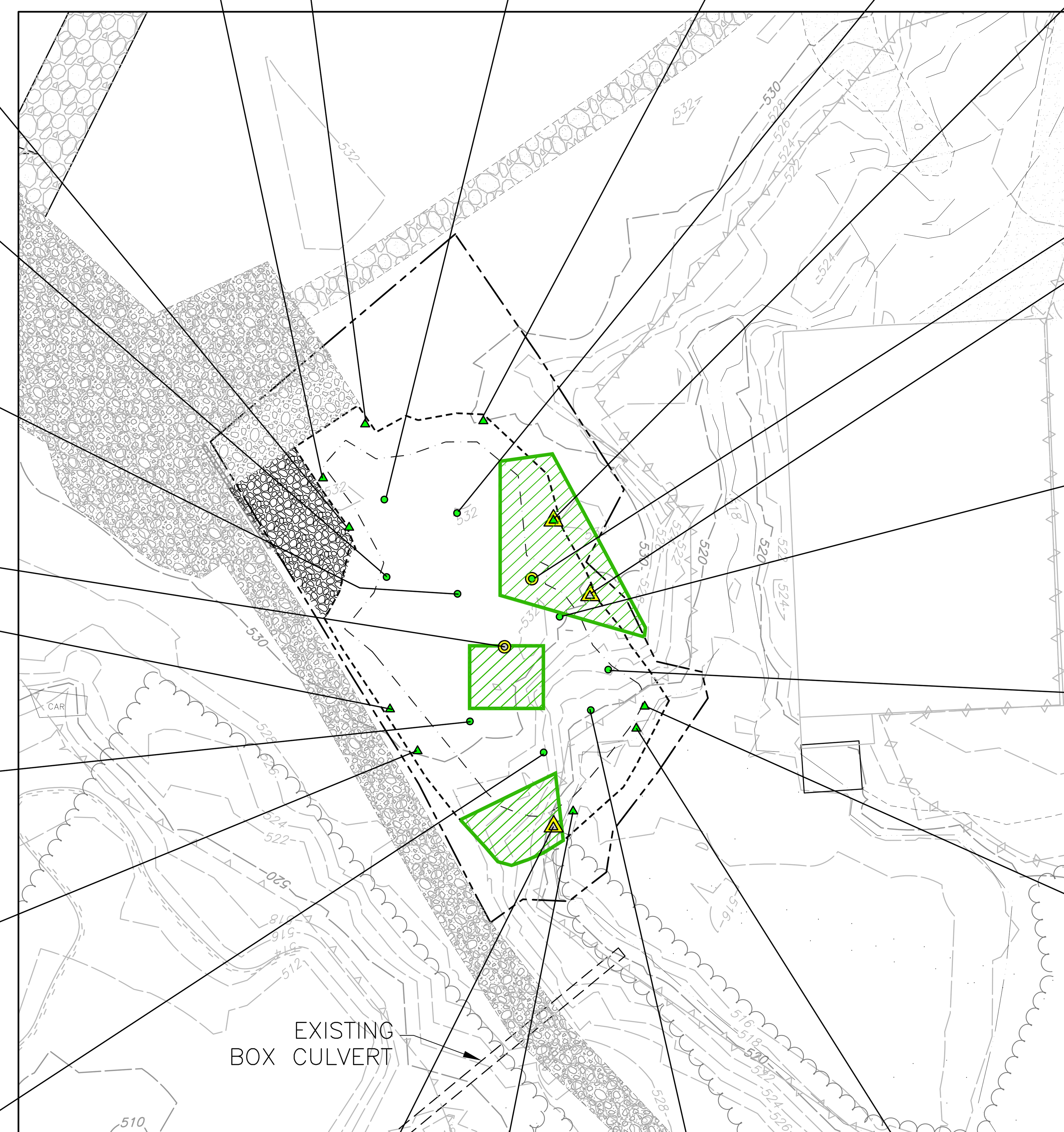
Sample ID	SR4-PE-10	SR4-PE-10
Date	2/1/2006	2/9/2010
Depth	2.0'-2.5'	3.0'
VOCs	ND	NA
SVOCs	ND	NA
Metals (mg/kg)		
Antimony	<11	NA
Arsenic	**21**	15.1
Lead	11.2	NA
Thallium	<5.4	NA
Total PCBs (mg/kg)	ND	NA

Sample ID	SR4-PE-14	SR4-PE-14
Date	2/1/2006	2/15/2006
Depth	1.0'-1.5'	1.0'-1.5'
VOCs (mg/kg)	ND	NA
SVOCs (mg/kg)		
Benzo(a)pyrene	**0.693**	0.0755
Metals (mg/kg)		
Antimony	<21	NA
Arsenic	**24.3**	15.9
Lead	30.1	NA
Thallium	<11	NA
Total PCBs (mg/kg)	ND	NA

Sample ID	SR4-PE-12
Date	2/1/2006
Depth	2.0'-2.5'
VOCs	ND
SVOCs	NE
Metals (mg/kg)	
Antimony	<2.3
Arsenic	16.7
Lead	52.8
Thallium	<1.2
Total PCBs (mg/kg)	ND

Sample ID	SR4-PE-13
Date	2/1/2006
Depth	3.0'-3.5'
VOCs	ND
SVOCs	NE
Metals (mg/kg)	
Antimony	<11
Arsenic	14.6
Lead	15.2
Thallium	<5.6
Total PCBs (mg/kg)	ND

Sample ID	SR4-PE-15
Date	2/1/2006
Depth	1.0'-1.5'
VOCs	ND
SVOCs	NE
Metals (mg/kg)	
Antimony	<13
Arsenic	<13
Lead	44.6
Thallium	<6.3
Total PCBs (mg/kg)	ND



Sample ID	SR4-PE-06	SR4-PE-06	SR4-PE-06
Date	2/1/2006	3/15/2010	3/23/2010
Depth	1.0'-1.5'	2.5'	4.5'-5.0'
VOCs (mg/kg)	NE	NA	NA
SVOCs (mg/kg)			
Benzo(a)anthracene	**2.37**	**36.8**	0.043
Benzo(a)pyrene	**2.11**	**30**	0.035
Benzo(b)fluoranthene	**1.97**	**32.5**	0.047
Benzo(k)fluoranthene	**1.43**	**11**	0.025
Indeno(1,2,3-cd)pyrene	**1.22**	**14.3**	0.023
Metals (mg/kg)			
Antimony	<2.4	NA	NA
Arsenic	7.1	NA	NA
Lead	51.6	NA	NA
Thallium	<1.2	NA	NA
Total PCBs (mg/kg)			
PCB 1254	0.098	NA	NA

Sample ID	SR4-PE-04
Date	2/1/2006
Depth	4.0'-4.5'
VOCs	NE
SVOCs	NE
Metals (mg/kg)	
Antimony	<2.3
Arsenic	4.8
Lead	57.4
Thallium	<1.2
Total PCBs (mg/kg)	ND

Sample ID	SR4-PE-02
Date	1/30/2006
Depth	4.5'-5.0'
VOCs	NA
SVOCs	NE
Metals (mg/kg)	
Antimony	NA
Arsenic	6.2
Lead	101
Thallium	NA
Total PCBs (mg/kg)	NA

Sample ID	SR4-PE-01
Date	1/30/2006
Depth	1.0'-1.5'
VOCs	NA
SVOCs	NE
Metals (mg/kg)	
Antimony	NA
Arsenic	6.4
Lead	25.7
Thallium	NA
Total PCBs (mg/kg)	NA

LEGEND:

- 529.02 EXISTING SPOT ELEVATION
- 530 EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- PROPERTY BOUNDARY
- OVERHEAD UTILITY LINES
- WETLAND BOUNDARY (TRIDENT)
- TREE LINE
- PROPOSED EXCAVATION AREA
- STABILIZED ACCESS ROAD (EXISTING ROAD/TRAIL, IMPROVED BUT NOT ENLARGED)
- STABILIZED CONSTRUCTION/LOAD OUT AREA
- EXISTING DIRT TRAIL/ROAD
- LIMITS OF DISTURBANCE
- LIMITS OF EXCAVATION
- TOE OF SLOPE WITHIN EXCAVATION
- POST EXCAVATION BASE SAMPLE LOCATION SUBSEQUENTLY EXCAVATED
- POST EXCAVATION BASE SAMPLE LOCATION
- POST EXCAVATION SIDEWALL SAMPLE LOCATION SUBSEQUENTLY EXCAVATED
- POST EXCAVATION SIDEWALL SAMPLE LOCATION
- SAMPLE EXCEEDS FOR ARSENIC AND/OR LEAD
- SAMPLE EXCEEDS FOR SVOCs

SAMPLE ID

Sample ID	SR4-PE-15
Date	2/1/2006
Depth	1.0'-1.5'
VOCs	ND
SVOCs	NE
Metals (mg/kg)	
Arsenic	<13
Lead	44.6
PCBs (mg/kg)	ND

CONSTITUENT

SAMPLE DATE

SAMPLE INTERVAL (FEET BELOW GROUND SURFACE)

ND NOT DETECTED ABOVE LABORATORY DETECTION LIMIT

NE NO EXCEEDANCE

NA NOT ANALYZED

NS NO STANDARD

BOLD CONTAMINANT DETECTED AT LEVELS GREATER THAN THE NJDEP UNRESTRICTED USE OR IMPACT TO GROUNDWATER CRITERIA

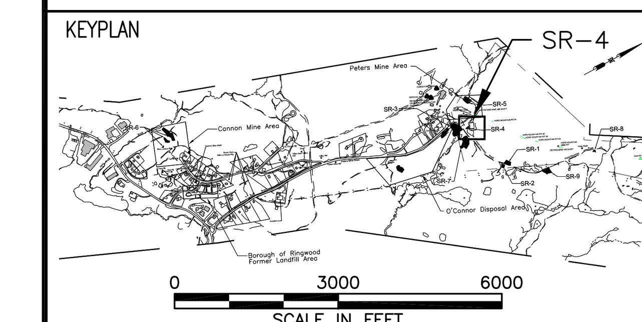
NOTES:

1. WETLAND BOUNDARY ESTABLISHED BY TRIDENT ENVIRONMENTAL CONSULTANTS (2005).
2. DATA QUALIFIERS WERE NOT PROVIDED ON DRAWINGS. DATA QUALIFIERS ARE REPORTED IN ANALYTICAL TABLES.
3. WHEN A DUPLICATE SAMPLE ANALYSIS WAS PERFORMED, THE DATA REPORTED ON THE DRAWING IS THE GREATER OF THE TWO ANALYTICAL RESULTS.

Constituent	NJDEP Soil Cleanup Criteria		
	Unrestricted Use Criteria	Restricted Use Criteria	Impact to Groundwater Criteria
Metals (mg/kg)			
Arsenic	20	20	NS
Lead	400	600	NS

REV. ISSUED DATE DESCRIPTION

KEYPLAN



PROJECT TITLE

RINGWOOD MINE/LANDFILL SITE REMEDIATION PROJECT, RINGWOOD, NEW JERSEY

SHEET TITLE

SUMMARY OF POST EXCAVATION LOCATIONS AND RESULTS FOR SR-4

ARCADIS

1 International Boulevard
Suite 406
Mahwah, NJ 07495
Tel: 201-684-1410 Fax: 201-684-1420
www.arcadis-us.com

SEAL

SEAL

PROJECT MANAGER	DEPARTMENT MANAGER
E. ZIMMERMAN	T. RODRIGUEZ
LEAD DESIGN PROF.	CHECKED BY
J. ROCKLIN	V. MYERS
TASK/PHASE NUMBER	DRAWN BY
00018	9/18/09
PROJECT NUMBER	DRAWING NUMBER
NJ000604.0035	1

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