G:\Drafting\RINGWOOD\RAR-RI-SI\SR-9\Fig 02 - UPPER SR-9.dwg, FIG 2 - UPPER, 3/29/2007 3:15:44 PM

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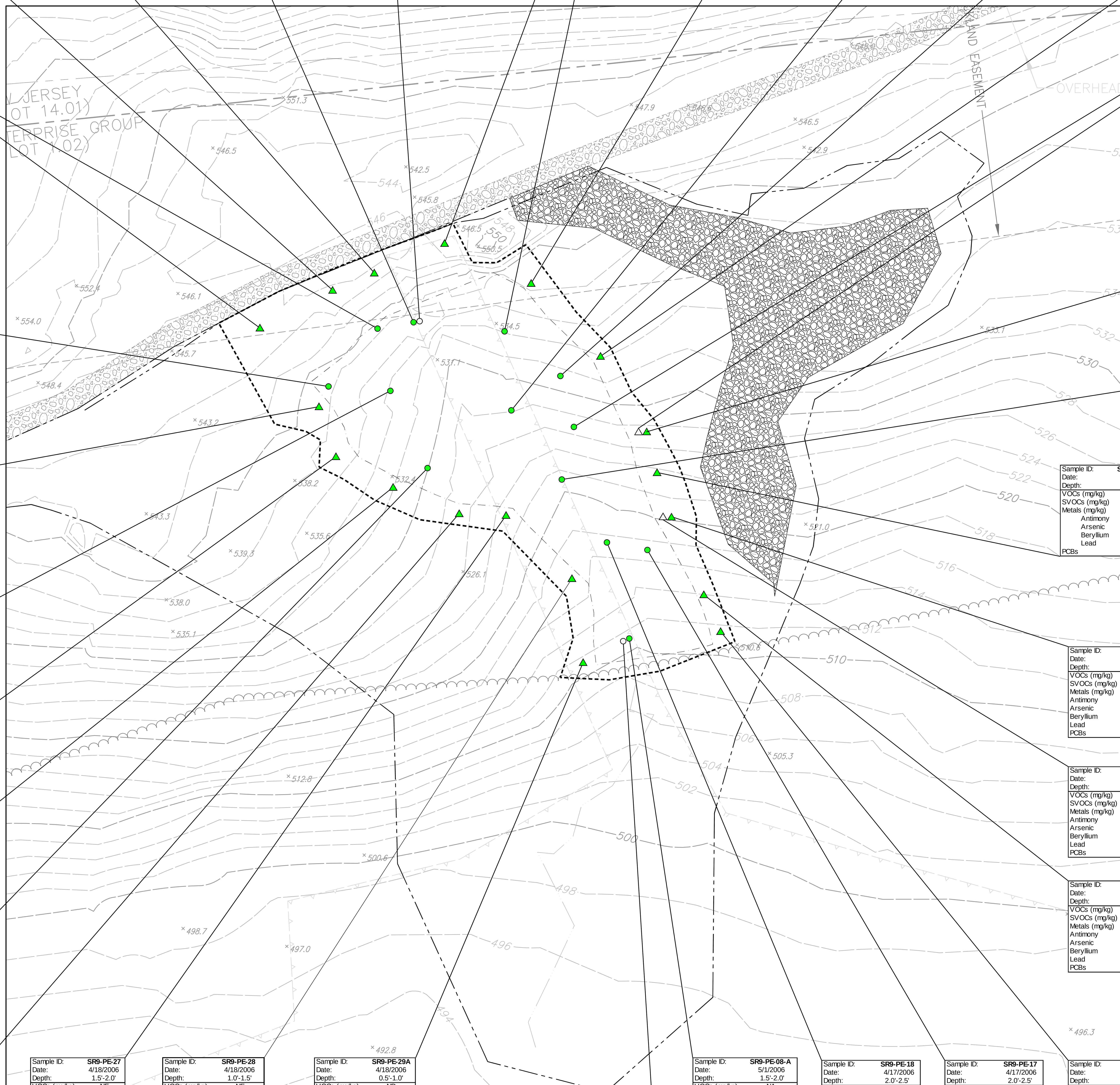


Sample Results

Sample ID	Date	Depth	VOCs (mg/kg)	SVOCs (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Beryllium (mg/kg)	Lead (mg/kg)	PCBs
SR9-PE-30S	5/5/2006	3.0'-3.5'	ND	ND	<2.2 J	3.7	<0.56	5.3	ND
SR9-PE-02	3/23/2006		NE	ND	< 2.2 J	3	0.55	4.5	ND
SR9-PE-07	3/29/2006		NA	NA	< 2.4 J	3.2	< 0.59	6.4 J	ND
SR9-PE-04	3/23/2006		NE	ND	9.1 J	4.1	< 0.6	**474**	ND
SR9-PE-01	3/23/2006		NE	ND	< 2.2 J	3.4	< 0.54	5.3	ND
SR9-PE-10	4/6/2006	2.0'-2.5'	ND	ND	<2.2 J	2.2	<0.55	3.8	ND
SR9-PE-09	4/6/2006	1.5'-2.0'	ND	ND	<2.4 J	<2.4	<0.6	4.6	ND
SR9-PE-20	4/17/2006	3.0'-3.5'	NE	NE	<2.2	2.7	0.65	61	ND
SR9-PE-11	4/7/2006	2.0'-2.5'	ND	NE	<2.6 J	<2.6	<0.64	10.4	ND
SR9-PE-12	4/17/2006	0.5'-1.0'	ND	ND	<2.2	<2.2	<0.56	9.4	ND
SR9-PE-05	3/23/2006		NE	ND	< 2.3 J	3.4	0.77	17.7	ND
SR9-PE-03	3/23/2006		NE	ND	< 2.3 J	5.2	0.59	11.7	ND
SR-9-PE-06	3/29/2006		NE	NE	< 2.2 J	< 2.2	< 0.54	< 2.2 J	ND
SR9U-PE-24	4/18/2006	2.0'-2.5'	NE	ND	<2.2 J	4.4	<0.55	10.3	ND
SR9-PE-23	4/18/2006	3.0'-3.5'	NE	ND	<2.4 J	<2.4	<0.61	31.6	ND
SR9-PE-25	4/18/2006	4.5'-5.0'	NE	ND	<2.3 J	<2.3	<0.58	3.3	ND
SR9-PE-26	4/18/2006	1.0'-1.5'	ND	ND	<2.3 J	2.6	0.71	3.7	ND
SR9-PE-22	4/17/2006	1.5'-2.0'	ND	ND	<2.1	2.1	0.53	9.2	ND
SR9-PE-31S	5/5/2006	1.0'-1.5'	ND	ND	<2.3 J	3	<0.58	4.9	ND
SR9-PE-27	4/18/2006	1.5'-2.0'	NE	ND	<2.2 J	2.8	0.57	29.3	ND
SR9-PE-28	4/18/2006	1.0'-1.5'	NE	NE	<2.5 J	3.8	0.98	177	
SR9-PE-29A	4/18/2006	0.5'-1.0'	ND	NE	<2.8 J	3.3	0.75	105	ND
SR9-PE-08	3/31/2006	1.0'-1.5'	NE	ND	<3.2 R	5	**2.1**	61.9	ND
SR9-PE-08-A	5/1/2006	1.5'-2.0'	NA	NA	<2.7 J	5.8	<0.69	21.7	ND
SR9-PE-18	4/17/2006	2.0'-2.5'	NE	NE	< 2.6	3.1	0.83	228 J	ND
SR9-PE-17	4/17/2006	2.0'-2.5'	ND	ND	<2.3	<2.3	<0.58	7.3	ND
SR9-PE-16	4/17/2006	0.5'-1.0'	ND	NE	<2.9	5.6	<0.73	58.7	ND
SR9-PE-21	4/17/2006	2.5'-3.0'	NE	NE	< 2.6	3.8 J	0.8	32.4 J	ND
SR9-PE-13	4/17/2006	2.0'-2.5'	ND	ND	12.8	3	<0.55	**408**	ND
SR9-PE-13A	5/3/2006	2.5'-3.0'	NE	ND	<2.3 J	3	<0.56	54.9	ND
SR9-PE-19	4/17/2006	2.0'-2.5'	ND	NE	<3	3.7	0.91	345	ND
SR9-PE-32S	5/5/2006	2.5'-3.0'	ND	ND	<2.3 J	<2.3	<0.57	3.7	ND
SR9-PE-14A	5/3/2006	3.0'-3.5'	ND	ND	<2.2 J	2.6	<0.56	43.3	ND
SR9-PE-14	4/17/2006	2.5'-3.0'	NE	ND	8.8	7.3	<0.57	**581**	ND
SR9-PE-15	4/17/2006	0.5'-1.0'	ND	ND	<2.6	2.6	<0.66	12.7	ND

0 20 40
SCALE IN FEET

LEGEND:

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- CENTERLINE OF STREAM AS FIELD SURVEYED BY GEOD
- PROPERTY BOUNDARY
- OVERHEAD UTILITY LINES
- WETLAND BOUNDARY (BY TRIDENT)
- TREE LINE
- LIMIT OF DISTURBANCE
- LIMIT OF EXCAVATION
- TOE OF SLOPE WITHIN EXCAVATION
- STABILIZED ACCESS ROAD (EXISTING ROAD/TRAIL, IMPROVED BUT NOT ENLARGED)
- STABILIZED CONSTRUCTION/LOAD OUT AREA
- UTILITY POLE
- POST EXCAVATION BASE SAMPLE LOCATION SUBSEQUENTLY EXCAVATED
- POST EXCAVATION BASE SAMPLE LOCATION
- POST EXCAVATION SIDEWALL SAMPLE LOCATION SUBSEQUENTLY EXCAVATED
- POST EXCAVATION SIDEWALL SAMPLE LOCATION

Example data box

SAMPLE ID → Sample ID: SR9-PE-14
Date: 4/17/2006 ← SAMPLE DATE
Depth: 2.5'-3.0' ← SAMPLE INTERVAL (FEET BELOW GROUND SURFACE)
CONSTITUENT → VOCs (mg/kg) NE

Sample ID:	SR9-PE-14
Date:	4/17/2006
Depth:	2.5'-3.0'
VOCs (mg/kg)	NE
SVOCs (mg/kg)	ND
Metals (mg/kg)	
Antimony	8.8
Arsenic	7.3
Beryllium	<0.57
Lead	**581**
PCBs	ND

ND	NOT DETECTED ABOVE LABORATORY DETECTION LIMIT
NE	NO EXCEEDANCE
NA	NOT ANALYZED
NS	NO STANDARD
mg/kg	MILLIGRAMS PER KILOGRAM (PARTS PER MILLION)
<	LESS THAN
BOLD	CONTAMINANT DETECTED AT LEVELS GREATER THAN THE NJDEP UNRESTRICTED USE OR IMPACT TO GROUNDWATER CRITERIA

Constituent	NJDEP Soil Cleanup Criteria		
	Unrestricted Use Criteria	Restricted Use Criteria	Impact to Groundwater Criteria
Metals (mg/kg)			
Arsenic	20	20	NS
Beryllium	2	2	NS
Lead	400	600	NS
Antimony	14	340	NS

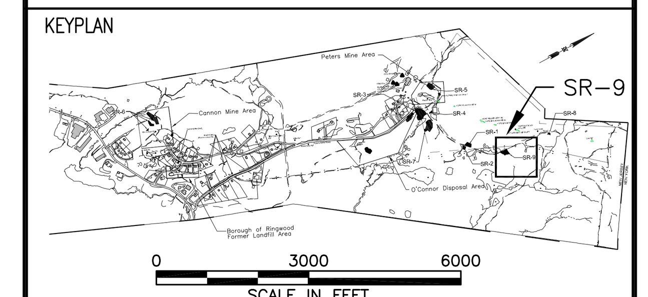
NOTE:

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.
4. EXISTING CONTOURS DEPICT TOPOGRAPHY PRIOR TO REMOVAL ACTIVITIES.
5. SAMPLE DEPTHS ARE APPROXIMATE.
6. PCBs RESULTS ARE REPORTED AS TOTAL PCBs.

DRAFT

REV. ISSUED DATE DESCRIPTION

KEYPLAN



PROJECT TITLE

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

SHEET TITLE

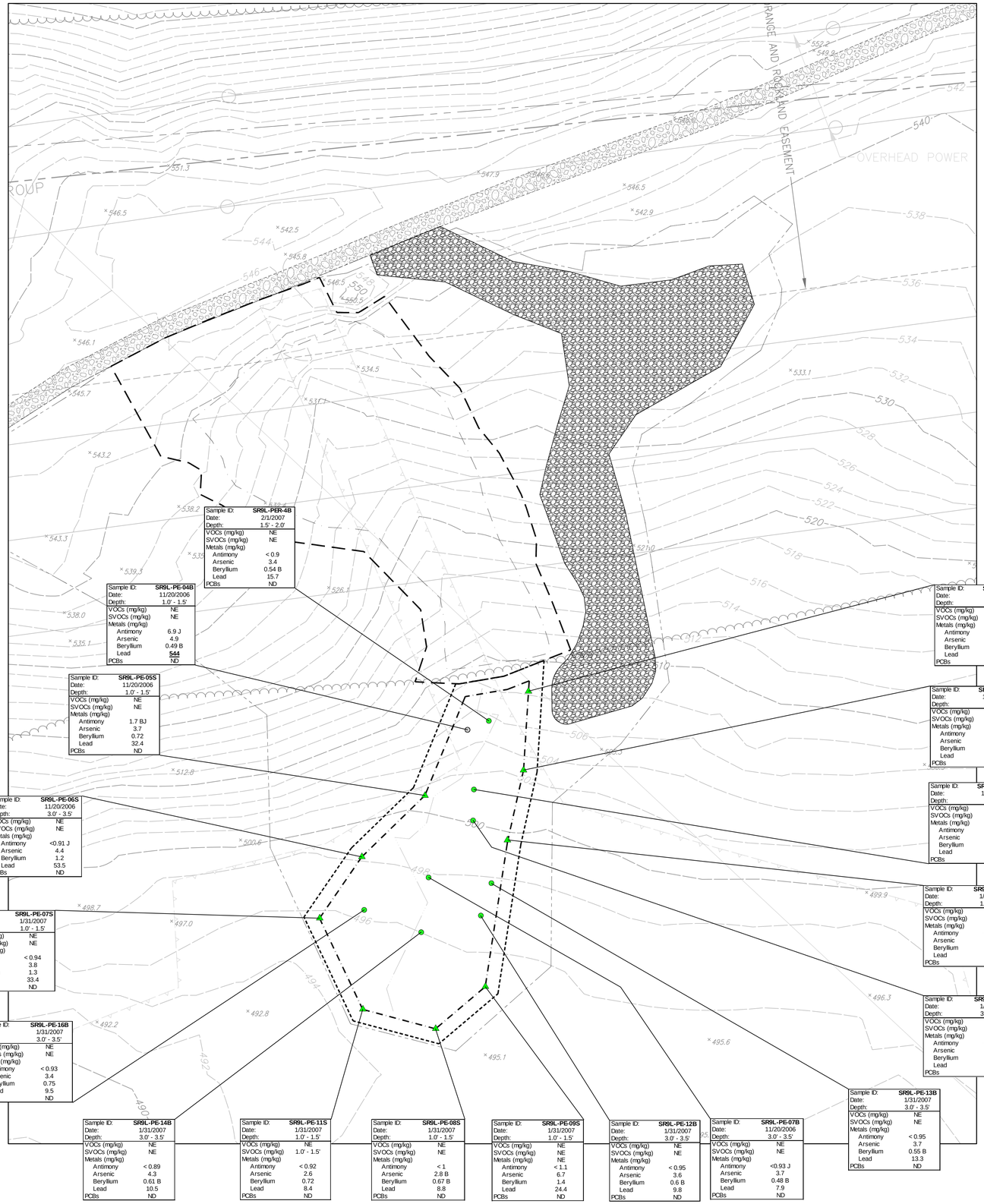
SUMMARY OF POST EXCAVATION SAMPLE LOCATIONS AND RESULTS FOR SR-9 UPPER

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: E. ZIMMERMAN	DEPARTMENT MANAGER: M. MOHIUDDIN
LEAD DESIGN PROF.: T. CONNORS	CHECKED BY: M. MOHIUDDIN
TASK/PHASE NUMBER: NJ001	DRAWN BY: J. GONZALEZ
PROJECT NUMBER: NJ000604.0028	DRAWING NUMBER: 2-SR-9



0 20 40
SCALE IN FEET

LEGEND:

- TREE LINE
- 529.02 EXISTING SPOT ELEVATION
- 530 EXISTING ELEVATION CONTOUR
- CENTERLINE OF STREAM AS FIELD SURVEYED BY GEOD
- UTILITY POLE
- PROPERTY BOUNDARY
- OVERHEAD UTILITY LINES
- WETLAND BOUNDARY (TRIDENT)
- LIMIT OF DISTURBANCE
- LIMIT OF EXCAVATION
- TOE OF SLOPE WITHIN EXCAVATION
- APPROXIMATE LIMIT OF EXCAVATION
- APPROXIMATE TOE OF SLOPE WITHIN EXCAVATION
- STABILIZED ACCESS ROAD (EXISTING ROAD/TRAIL, IMPROVED BUT NOT ENLARGED)
- STABILIZED CONSTRUCTION/LOAD OUT AREA
- POST EXCAVATION BASE SAMPLE LOCATION SUBSEQUENTLY EXCAVATED
- POST EXCAVATION BASE SAMPLE LOCATION
- POST EXCAVATION SIDEWALL SAMPLE LOCATION

SAMPLE ID

Sample ID: SR9L-PE-01S
Date: 11/20/2006
Depth: 0' - 0.5'
VOCs (mg/kg) ND
SVOCs (mg/kg) NE
Metals (mg/kg)
Antimony <0.87 J
Arsenic 3
Beryllium 0.29 B
Lead 25.6
PCBs 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
mg/kg	MILLIGRAMS PER KILOGRAM (PARTS PER MILLION)
<	LESS THAN
BOLD	CONTAMINANT DETECTED AT LEVELS GREATER THAN THE NJDEP UNRESTRICTED USE OR IMPACT TO GROUNDWATER CRITERIA

Constituent	NJDEP Soil Cleanup Criteria		
	Unrestricted Use Criteria	Restricted Use Criteria	Impact to Groundwater Criteria
Metals (mg/kg)			
Arsenic	20	20	NS
Beryllium	2	2	NS
Lead	400	600	NS
Antimony	14	340	NS

NOTE:

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2. DATA QUALIFIERS WERE NOT PROVIDED ON DRAWINGS. DATA QUALIFIERS ARE REPORTED IN ANALYTICAL TABLES.
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4. EXISTING CONTOURS DEPICT TOPOGRAPHY PRIOR TO REMOVAL ACTIVITIES.
5. SAMPLE DEPTHS ARE APPROXIMATE.
6. PCBs RESULTS ARE REPORTED AS TOTAL PCBs.

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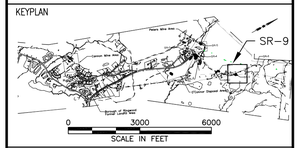
REV. ISSUED DATE DESCRIPTION

KEYPLAN



PROJECT TITLE

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

SHEET TITLE

SUMMARY OF POST EXCAVATION SAMPLE LOCATIONS AND RESULTS FOR SR-9 LOWER POST EXCAVATION

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: E. ZIMMERMAN	DEPARTMENT MANAGER: M. MOHIUDDIN
LEAD DESIGN PROF.: T. CONNORS	CHECKED BY: M. MOHIUDDIN
TASK/PHASE NUMBER: NJ001	DRAWN BY: J. GONZALEZ
PROJECT NUMBER: NJ000604.0028	DRAWING NUMBER: 4-SR-9

G:\Drafting\RINGWOOD\RAP-RI-SR-9\Fig 04 - LOWER PE SR-9.dwg, Fig 4 - LOWER PE, 1/29/2007 3:23:30 PM