SOIL ASSESSMENT AND MANAGEMENT PLAN
KLUMAC ROAD SITE
OLD SOUTH MAIN STREET
SALISBURY, ROWAN COUNTY, NORTH CAROLINA
NCDOT PROJECT: U-3459
WBS ELEMENT: 34951.1.1

Prepared for
NC Department of Transportation
Geotechnical Engineering Unit
GeoEnvironmental Section
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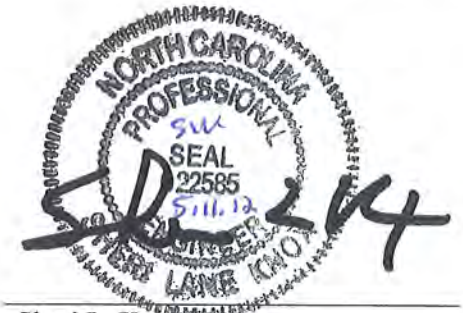
Solutions-IES Project No. 2011.0056. NDOT

May 2012



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EXECUTIVE SUMMARY

The North Carolina Department of Transportation (NCDOT) is preparing to re-align Klumac Road (NC SR-2541) located in Salisbury, Rowan County, North Carolina to the west of its present location. Solutions-IES submitted a proposal to conduct additional soil sampling activities and prepare a soil management plan for the project site referred to in this report as the Klumac Road Site. The scope of work executed at the site was performed generally as outlined in Solutions-IES proposal NC11118 dated November 2, 2012, and was initiated based on a Notice to Proceed issued by the NCDOT Geotechnical Engineering Unit on October 11, 2011, under Contract No. 7000012169, dated June 6, 2011.

Soil sampling activities were conducted on February 20 and 21, 2012, in cooperation with Geoprobe® services provided by Quantex, Inc. of Raleigh, North Carolina. A total of 36 soil borings were advanced at the Klumac Road Site. Seven of the borings were advanced in the vicinity of proposed drainage structures, 16 borings were advanced with in the proposed slope-stake excavations and 13 hand auger borings were advanced in the proposed drainage ditches along the corridor. Fifteen of the 49 soil samples analyzed contained dieldrin concentrations at or greater than the "Contained-Out" level for unrestricted use target concentration of 1.1 µg/kg. Soil samples representative of soil with concentrations less than 1.1 µg/kg were not evaluated for further disposal options.

By definition, a "P" hazardous list waste code for dieldrin (P037) applies where dieldrin has been discarded as a commercial chemical product, is a manufacturing intermediate, where off-specification commercial dieldrin contains certain ingredients, and where soil or debris have been contaminated by spills of dieldrin or intermediates. It is unknown how dieldrin came into contact with the soil or its use at the Klumac Road Site, and therefore, the soil impacted by dieldrin would not likely be considered a listed hazardous waste by a Subtitle D lined municipal solid waste landfill (MSWLF) reviewing results for disposal.

Based on this information, we recommend that results of this assessment be provided to a MSWLF for a comparison to their acceptance criteria prior to soil waste generation. If the MSWLF indicates that the soil waste generated during excavation will be accepted for disposal, excavation of the soil should be planned prior to road construction.

If the soil waste generated at the Klumac Road Site is accepted for disposal by the MSWLF based on the results provided in this assessment, then an excavation of approximately 3,000 cubic yards of soil should be planned prior to the road construction.

If the MSWSF indicates that the soil waste generated during excavation is considered a listed "P" waste, the soil waste will likely have to be stockpiled or stored in roll-off boxes to allow for more testing prior to disposal. In this case, additional testing may still reveal that concentrations of dieldrin are below the acceptance criteria required by a MSWLF and so, would be disposed of in a MSWLF. If the concentrations exceed the acceptance criteria, the soil generated would likely be considered hazardous waste and disposed of accordingly.

1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) is preparing to re-align Klumac Road (NC SR-2541) located in Salisbury, Rowan County, North Carolina to the west of its present location (**Figure 1**). The re-alignment will position the "new" road west of the Johnson Concrete facility and east of the Former FCX Chemical Plant (**Figure 2**). Solutions-IES submitted a proposal to conduct additional soil sampling activities and prepare a soil management plan for the project site referred to in this report as the Klumac Road Site. The scope of work executed at the site was performed generally as outlined in Solutions-IES proposal NC11118 dated November 2, 2012, and was initiated based on a Notice to Proceed issued by the NCDOT Geotechnical Engineering Unit on October 11, 2011 under contract 7000012169, dated June 6, 2011.

2.0 BACKGROUND AND SITE DESCRIPTION

The Klumac Road Site is located near the southwest corner of Old South Main and Klumac Road within the City Limits of Salisbury, Rowan County, North Carolina. In September and October of 2006, Solutions-IES performed a preliminary site assessment (PSA) at the Klumac Road Site (Solutions-IES 3210.06A3[1] reports dated September 1 and October 5, 2006). According to the 2006 reports, aerial photographs taken in 1972 provided by the NCDOT showed the locations of facility buildings, as well as probable storage vessels and uncovered storage areas. A later NCDOT aerial photograph from 1986 showed that several buildings, as well as the suspected storage vessels, had been removed from the site. The 1986 photograph also suggested that the uncovered storage areas had been removed as well. Current aerial photography obtained via Google Earth depicts concrete piping stored on portions of the Klumac Road Site by Johnson Concrete Company, which uses the site as a lay-down area.

Currently, the surface of the site is covered with a mixture of concrete and grass, as well as the remaining concrete foundations of the former FCX structures that have been razed. Johnson Concrete Company, a concrete manufacturing facility is directly adjacent to the eastern portion of the site. A petroleum fuel release from a UST was on record within the NCDENR files as having occurred at the Johnson Concrete facility (Incident #17922). However, neither volatile organic compounds (VOCs) nor semi-VOCs possibly attributable to this release were detected in soil or groundwater collected from the Klumac Road Site during the 2006 PSA.

[1] Solutions-IES Project No 3210.06A3.NDOT

In addition and as reported in 2006, Carolina Rubber Hose is located adjacent to the western boundary of the Klumac Road Site. Carolina Rubber Hose (NCDOO3218492) was identified as having generated or stored hazardous waste in the past. During the 2006 PSA, methyl ethyl ketone, a VOC ,was identified as a contaminant of concern to monitor at the Klumac Road Site based on it close proximity to Carolina Rubber Hose. However, as previously discussed, VOCs were not identified in soil or groundwater during the 2006 Klumac Road PSA.

Soil samples collected from the subsurface at the Klumac Road Site were also screened for a variety of constituents associated with the operations of the former FCX Chemical Plant including select metals, ammonia, nitrate, VOCs, semi-VOCs, organochlorine pesticides, formaldehyde and chlorinated herbicides. Results suggested that total chromium was present in three soil samples at concentrations exceeding the North Carolina Department of Environment and Natural Resources (NCDENR) Soil-to-Groundwater Maximum Soil Contamination Concentrations (MSCCs). However, results did not exceed the North Carolina Industrial/Commercial Soil Cleanup Level for chromium, which is 613,200 mg/kg for trivalent chromium, and 1,226 mg/kg for hexavalent chromium, as provided in the North Carolina Underground Storage Tank Section "Guidelines for Assessment and Corrective Action" (April 2001). Given the range of chromium concentrations (14 to 74 mg/kg) and the average concentration (34 +/- 17 mg/kg) of total chromium collected at other locations in the vicinity of the Klumac Road site, it was concluded that chromium results reflected background concentrations naturally present in area soils, and that further testing was not required.

However, the analytical data for the pesticide analysis indicated the presence of dieldrin in a single soil sample at a concentration of 1.8 µg/kg. To obtain more information about shallow soil, additional shallow soil samples were collected and analyzed for dieldrin, and dieldrin was identified in four of five soil samples collected above laboratory detection limits suggesting that dieldrin would be a contaminant of concern during future excavation for road construction (**Figure 3**). A file review update performed as part of this scope of work did not identify new information associated with the Klumac Road Site. Current photographs of the Klumac Road Site are presented in **Appendix A**.

On January 25, 2012, Solutions-IES traveled to the Klumac Road Site to identify boring locations and generally discuss planned field activities with Mike Johnson, Operations Manager at Johnson Concrete. Mr. Johnson was interested and cooperative. He and Mr. Ernest Jackson, the Health & Safety Officer, provided limited additional historical information about the Klumac Road Site and operations. Mr.

Jackson suggested that in the past, customers would pick up farm chemicals from the former FCX Chemical Plant by a public road located near the railroad track that is now covered with soil.

3.0 FIELD ACTIVITIES

This scope of work was limited to areas of soil to potentially be "cut" for road construction or drainage. The work was not conducted as an environmental assessment to delineate the lateral or vertical extent of dieldrin soil contamination. The primary purpose of this scope of work was to identify soil disposal options and estimate the volume of dieldrin contaminated soil to be managed as a part of future construction activities. Knowledge of the level of dieldrin-impact is also an important consideration for the safety of personnel with potential to contact soil during construction.

The focus of this work is the area impacted by road construction should not be construed as representative of other areas on the site which are outside of the limits of the investigation.

The area assessed during field activities extends from NCDOT Station 29+00 to Station 35+00, a distance of approximately 500 feet (**Figure 3**). The width of the area extends approximately 50 feet in both the left (west) and east (right) directions from the project centerline that runs south to north through the center of the NCDOT right-of-way. The depth of sampling was dependent on the projected depth of road construction or "cut" and varied from 1 to 4 feet below ground surface (ft bgs) between Station 30+00 and Station 32+00 to progressively deeper depths between Station 32+50 (6 ft bgs) and Station 35+00 (16 ft bgs). Generally, soil samples were collected for potential laboratory analysis every 2 feet to the maximum identified depth.

Soil samples were also collected from proposed drainage ditches that will be installed on both sides of and parallel to the road construction. Sample depths were no deeper than 2.5 ft bgs in the proposed drainage ditches.

On February 14, 2012, Solutions-IES placed boring locations and coordinated utility clearance and oversaw concrete coring activities. KCI Associates of North Carolina of Raleigh and North Carolina 811 were used to clear the boring locations and Penhall Company of Charlotte, North Carolina cored approximately five boring locations for the field work planned for the following week.

Soil sampling activities were conducted on February 20 and 21, 2012, in cooperation with Geoprobe services provided by Quantex, Inc. of Raleigh, North Carolina.

A total of 36 soil borings were advanced at the Klumac Road Site. Seven of the borings were advanced in the vicinity of proposed drainage structures, 16 borings were advanced with in the proposed slope-stake excavations and 13 hand auger borings were advanced in proposed drainage ditches along the corridor (**Figure 3)**.

Soil borings were advanced with a track-mounted Geoprobe® with greater maneuverability so that soil samples could be obtained from tight locations near and between concrete piping, and in a poorly accessible location near Station 29+00 (**Appendix A**). Soil samples were obtained from each boring using a Macro-Core® sampler fitted with single-use, disposable polyvinyl chloride (PVC) liners. Each liner was 4 feet in length.

Generally, soil samples were collected for laboratory analysis at 2-ft increments collected as the sampler was advanced into the soil. The samples were placed in laboratory-supplied containers and stored on ice pending shipment to Prism Laboratories, Inc. in Charlotte, NC. Each of the shallow soil samples (< 2 ft bgs) was analyzed for dieldrin according to EPA Method 8081B. Expedited 4-day turnaround time was requested on the samples collected from the 0 to 2 ft bgs interval. Deeper samples were retained by the laboratory until it was determined that analysis was needed to evaluate vertical extent at that particular location. By expediting the first set of analyses, the deeper samples could be analyzed within the allowable laboratory hold time. If dieldrin was detected in a shallow samples at concentrations greater than 1.1 µg/L, which is the "Contained-Out" target concentration for unrestricted use, the remaining samples collected at greater depths were analyzed. In addition, after reviewing the initial total dieldrin concentration, six samples with elevated dieldrin concentrations were selected for TCLP extraction. The TCLP extract was analyzed for dieldrin, and eight RCRA metals. Each of these selected samples was also analyzed for ignitibility, corrosivity and reactivity.

4.0 SAMPLING RESULTS

The soil analytical data indicate the presence of dieldrin in 15 soil samples collected at the Klumac Road Site in excess of the "Contained Out" for unrestricted use target concentration of 1.1 µg/kg . **Table 1** shows the results of the dieldrin analyses. The Prism laboratory reports are provided in **Appendix B**.

Shallow soil samples (< 2 feet bgs) associated with the right side proposed drainage ditches (Stations 30+00, 30+50, and 32+50) contained concentrations of dieldrin greater than 1.1 µg/kg. Soil samples collected in the "cut" Stations 31+00, 32+50, 33+00, 33+50, and 35+ 50, including one proposed drainage structure collected at Station 33+00, also contained concentrations of dieldrin greater than 1.1 µg/kg at a depth of 10 ft bgs or shallower. **Figure 3** summarizes the analytical findings by estimating the areal extent and associated volume of dieldrin-impacted soil across the site.

In addition, TCLP dieldrin was detected at an estimated concentration of 0.15(J) µg/L at Station 33+00 in the right "cut" sample (33.0 E2) at a depth of 2 ft bgs. Neither TCLP RCRA metals nor characteristic waste criteria (ignitability, corrosivity nor reactivity) were reported in samples selected for these analyses. Corrosives are defined in terms of pH by the Environmental Protection Agency (EPA) as having a pH greater than 12 or less than 2. The pH of soil samples selected for the corrosive analysis was within the range between 12 and 2.

5.0 DISCUSSION AND CONCLUSIONS

The soil analytical data indicate the presence of low concentrations (>1.1 ug/kg to <120 ug/kg) of dieldrin in the soil samples collected from shallow soil samples in the right side proposed drainage ditches and in the "cut" north of Station 31+00. **Figures 5 through 12** provide an interpretation of the horizontal and vertical extent of dieldrin at each station along the right-of-way. Due to the limitations of the scope-of-work the vertical extent was not defined for the impacted proposed ditch locations, Station 32+50 East (Right) "Cut" at a depth of 4 ft bgs (32.5 E4), for Station 33+50 East (Right) "Cut" at a depth of 8 ft bgs (33.5 E8), or for Station 33+00 Invert 10 at a depth of 10 ft bgs. Samples were not collected below the indicated depth because that is the depth of the road excavation. The total amount of soil identified for disposal is approximately 3,000 cubic yards. Note that the depth of excavation was extended at least 1.5 feet beyond the depth of the sample where the vertical extent was not defined.

Soil samples representative of soil with concentrations less than 1.1 µg/kg were not evaluated for further disposal options.

6.0 SOIL MANAGEMENT PLAN

6.1 REGULATORY FRAMEWORK

Based on information provided in the North Carolina Hazardous Waste Section "Contained-In" Policy for Soil Contaminated with Listed Hazardous Waste (Policy), the soil waste generated by excavation of dieldrin-impacted soil at the Klumac Road Site may be considered in one of three categories for disposal: 1) non-hazardous waste; 2) characteristic hazardous waste; and 3) listed hazardous waste (**Appendix C**).

Soil waste not considered a characteristic or listed waste may be disposed of in a Subtitle D lined municipal solid waste landfill (MSWLF). If the soil waste is a characteristic or listed waste, soil waste should be disposed of in a Subtitle C hazardous waste facility. The Policy also contains "Contained-Out" levels for soil. Disposal options for dieldrin are based on the "Contained-Out" level for unrestricted use target concentration of 1.1 µg/kg or 0.22 µg/L leachate (TCLP) values. Soil waste impacted by dieldrin at concentrations below these targets may be disposed of in a MSWLF.

The soil samples analyzed for ignitability, corrosivity, and reactivity did not exhibit these hazardous waste characteristics. Thus, soil generated as waste during excavation would not be considered a characteristic waste by a MSWLF.

By definition, a "P" hazardous list waste code for dieldrin (P037) applies where dieldrin has been discarded as a commercial chemical product, is a manufacturing intermediate, where off-specification commercial dieldrin contains certain ingredients, and where soil or debris have been contaminated by spills of dieldrin or intermediates. It is unknown how dieldrin came into contact with the soil or its use at the Klumac Road Site, and therefore, the soil impacted by dieldrin would not likely be considered a listed hazardous waste by a Subtitle D lined municipal solid waste landfill (MSWLF) reviewing results for disposal.

6.2 DISCUSSION

A total of 36 soil borings were advanced at the Klumac Road Site. Seven of the borings were advanced in the vicinity of proposed drainage structures, 16 borings were advanced with in the proposed slope-stake excavation and 13 hand auger borings were advanced in proposed ditches along the corridor. Fifteen of

the 49 soil samples analyzed (considering that multiple samples were collected within a single boring) contained dieldrin concentrations of 1.1 µg/kg or greater.

Six soil samples were selected for further testing based on their higher dieldrin concentrations ranging from 1.7 µg/kg to 120 µg/kg. These samples were analyzed for the hazardous waste characteristics of ignitability, corrosivity, and reactivity, and the samples did not exhibit these characteristics, so it is likely that soil waste generated during excavation would not be considered a characteristic hazardous waste by a MSWLF. TCLP leachate from these soil samples were also analyzed for dieldrin and 8 RCRA metals without evidence of reportable detections.

Based on this information, we recommend that results of this assessment be provided to a MSWLF for a comparison to their acceptance criteria prior to soil waste generation.

If the soil waste generated at the Klumac Road Site is accepted for disposal by the MSWLF based on the results provided in this assessment, then an excavation of approximately 3,000 cubic yards of soil should be planned prior to the road construction based on the dieldrin impact estimated in **Figures 4 through 12**. As previously discussed, this estimated volume takes into account that the vertical extent is not defined for samples 32.5 E4, 33.5 E8, 33.0 Invert 10, or proposed drainage ditch samples. Therefore, we have calculated the depth of excavation should be extended to approximately 6 feet, 10 feet bgs, and 3 feet bgs respectively, in the vicinity of those locations. These depths range from 1.5 to 2 feet below the maximum depth of the sample analyzed.

If the MSWSF, indicates that the soil waste generated during excavation is considered a listed “P” waste, the soil waste will likely have to be stockpiled or stored in a roll-off boxes to allow for more testing prior to disposal. In this case, additional testing may still reveal that concentrations of dieldrin are below the acceptance criteria required by a MSWLF and so would be disposed of in a MSWLF. If the concentrations exceed the acceptance criteria, the soil generated would likely be considered hazardous waste and disposed of accordingly.

Subcontractors planning to conduct soil-disturbing work at the site should also review the data collected and plan the site work to minimize dust production and worker exposure to dust. Options to minimize worker exposure to dust may include tarping stockpiles, covering dump trucks, misting soil prior to disturbance, and ensuring that appropriate protective personnel equipment are available.

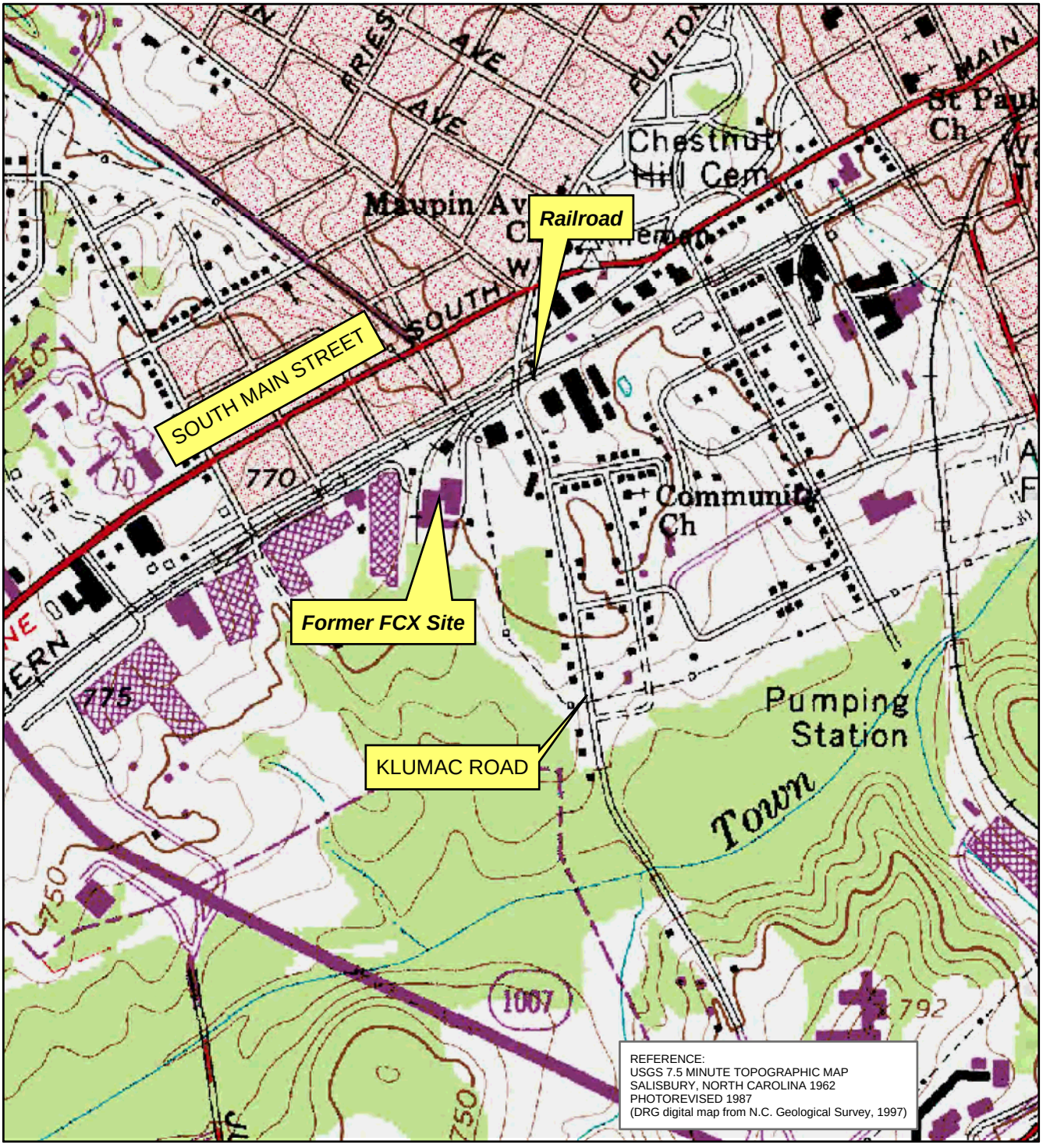
TABLE

TABLE
Summary of Soil Sampling Results
Klumac Road Site
NCDOT Project U-3459, WBS 34951.1.1
Salisbury, Rowan County, North Carolina
Solutions-IES Project No. 2011.0056.NDOT
Sample Dates: February 21 and 22, 2012

Station ID	Location Description	Sample ID	Depth ft bgs	Dieldrin (µg/kg)	TCLP Dieldrin (µg/L)	TCLP RCRA Metals	Corrosivity - pH (S.U.)	Ignitability
30+00.00	East (Right) Ditch	30.0 ED1.5*	1.5	**120**	<0.0084	BRL[6]	9.6	Pass
30+50.00	East (Right) Ditch	30.5ED1.5*	1.5	**33**	<.0.0084	BRL[6]	9.9	Pass
31+00.00	East (Right) Ditch	31.0 ED1	1.0	0.64 J	Not Analyzed for these Parameters			
	West (Left)"Cut"	31.0 W1	1.0	**5.5**				
31+50.00	West (Left)"Cut"	31.5 W1	1.0	0.42 J				
32+00.00	West (Left)"Cut"	32.0 W2	2.0	0.44 J				
	East (Right) "Cut" not a Ditch	32.0 ED1.5	1.5	**2.5**				
32+50.00	East (Right) Ditch	32.5 ED1	1.0	**1.3 J**				
	East (Right) "Cut"	32.5 E2	2.0	**1.4 J**				
	East (Right) "Cut"	32.5 E4	4.0	**4.0**				
33+00.00	East (Right) "Cut"	33.0 E2*	2.0	**2.7J**	0.15J	BRL[6]	5.3	Pass
	East (Right) "Cut"	33.0 E4	4.0	**110**	Not Analyzed for these Parameters			
	East (Right) "Cut"	33.0 E6	6.0	0.73 J				
	East (Right) "Cut"	33.0 E8	8.0	0.74 J				
	West (Left) "Cut"	33.0 W2*	2.0	**4.3**	<0.0084	BRL[6]	5.0	Pass
	Invert	33.0 INVW 10*	10.0	**1.7 J**	<0.0084	BRL[6]	4.1	Pass
33+50.00	East (Right) "Cut"	33.5 E2	2.0	**1.4 J**	Not Analyzed for these Parameters			
	East (Right) "Cut"	33.5 E4	4.0	**1.7**				
	East (Right) "Cut"	33.5 E6	6.0	0.49 J				
	East (Right) "Cut"	33.5 E8	8.0	**5.0**				
35+00.00	West (Left) "Cut"	35.0 W2*	2.0	**13**	<0.0084	BRL[6]	6.0	Pass
	West (Left) "Cut"	35.0 W12	12.0	0.75 J	Not Analyzed for these Parameters			

Notes:
1) Bold = exceeds "Contained-Out" target concentration
2) mg/kg = milligrams per kilogram; µg/L = microgram per liter
3) Left (West)"cut" = approximately 50 west of the centerline.
4) INVW = invert
All samples analyzed for Dieldrin via EPA Method 8081A.
* Sample also analyzed for TCLP Dieldrin (EPA 1311/8081); TCLP 8 RCRA metals (EPA 1311/ 6010C/7470A), corrosivity-pH (EPA Method 9045D), and ignitability (Method 1030).
TCLP Dieldrin was detected in 33.0 E2 as noted, but below the "contained out" target concentration.
6) According to the laboratory narrative and notes, the BRL = method detection limit in mg/L: mercury < 0.000014; Arsenic < 0.010; Barium < 0.013; Cadmium< 0.00043; Chromium < 0.00085; Lead < 0.0038; Selenium < 0.012; Silver < 0.0017)

FIGURES



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SITE LOCATION MAP

KLUMAC ROAD SITE
GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1; STATE PROJECT U-3459

Solutions-IES
Industrial & Environmental Services

1101 Nowell Road, Raleigh, NC 27609
Phone (919) 873-1060, Fax (919) 873-1074

Created by:	RT	Project:	2011.0056.NDOT
Checked by:	SK	Date:	APRIL 2012
File:	Figure 1.mxd		
Software:	ESRI ArcMap 9.1	FIGURE	1

PROJECT NUMBER 0056

DRAFTER AF

CHECKED BY SLK

PROJECT MANAGER SLK

DATE 05/17/12

FILE SOLUTIONS-BASE

FORMER FCX CHEMICAL PLANT

ENKAY PROPERTIES, LLC DB 834 PG 330

JOHNSON CONCRETE

JOHNSON CONCRETE CO NO DEED REF

DUKE ENERGY EASEMENT

DUKE ENERGY CORP DB 3995 PG 22 84' x 107' R-B

-L- PI Sta. 36+61.19 D = 20° 44' 48.0" (LT) D = 2° 49' 11.0" L = 543.15' T = 274.56' R = 1,500.00' SE = .03

PC Sta. 33+96.63 -L-

MAIN1 - STA. 3917+28.08 END BRIDGE

PROP. 4" CONC. SIDEWALK

PROP C&G

PROP. 2'-6" C&G

15" RCP-IV

18" RCP-IV

24" RCP-IV

30" RCP-IV

CB

SPECIAL LATERAL 2' BASE DITCH SEE DETAIL A

SPECIAL LATERAL V DITCH SEE DETAIL B

REMOVE

FILL W/ FLOWABLE FILL

TRANSMISSION

29+00 30+00 30+50 31+00 31+50 32+00 32+50 33+00 33+50 34+00 34+50 35+00 35+50

LEGEND

30+00 STATION LABELS

RIGHT OF WAY/PROPERTY LINE

0 60 120

SCALE IN FEET

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

KLUMAC ROAD SITE
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

SITE LAYOUT

FIGURE: 2

PROJECT NUMBER 0056

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PROJECT MANAGER SLK

DATE 05/17/12

FILE SOLUTIONS-BASE

FORMER FCX
CHEMICAL PLANT

ENKAY PROPERTIES, LLC
DB 834 PG 330

JOHNSON
CONCRETE

JOHNSON CONCRETE CO
NO DEED REF

DUKE ENERGY EASEMENT

PROP. 4" CONC. SIDEWALK

PROP C&G

PROP. 2'-6" C&G

15" RCP-IV

24" RCP-IV

30" RCP-III

93 CY

320 CY

194 CY

2338 CY
(AVG DEPTH = 7')

105 CY

SPECIAL LATERAL 2' BASE DITCH
SEE DETAIL A

SPECIAL LATERAL V DITCH
SEE DETAIL B

FILL W/ FLOWABLE FILL

REMOVE

MAIN1 - STA. 3917+28.08
END BRIDGE

-L-
PI Sta. 36+61.19
D = 20° 44' 48.0" (LT)
D = 3° 49' 11.0"
L = 543.15'
T = 274.58'
R = 1,500.00'
SE = .03

PT 28+01.56

PC 33+96.19

29+00 30+00 30+50 31+00 31+50 32+00 32+50 33+00 33+50 34+00 34+50 35+00 35+50

FCXB1 FCXB2 FCXB3 FCXB4 FCXB5

LEGEND

30+00	STATION LABELS
	RIGHT OF WAY/PROPERTY LINE
FCXB1	2006 SOIL BORING LOCATION
	2012 ROADWAY CUT BORING LOCATION
	2012 INVERT BORING LOCATION
	2012 DRAINAGE DITCH BORING LOCATION
45 CY	ESTIMATE EXTENT OF DIELDRIN IMPACT AND VOLUME

0 60 120
SCALE IN FEET

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KLUMAC ROAD SITE
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

ESTIMATED EXTENT OF
DIELDRIN IMPACT TO SOIL

FIGURE:
3

PROJECT NUMBER 0056
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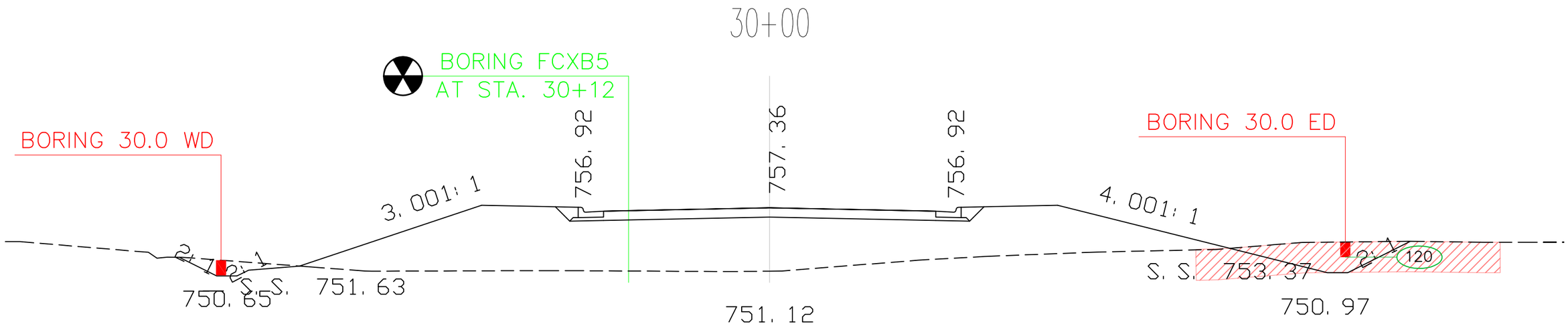
PROJECT MANAGER SLK
DATE 05/17/12
FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

0 10 20
SCALE IN FEET

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GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 30+00

FIGURE: 4

PROJECT NUMBER 0056

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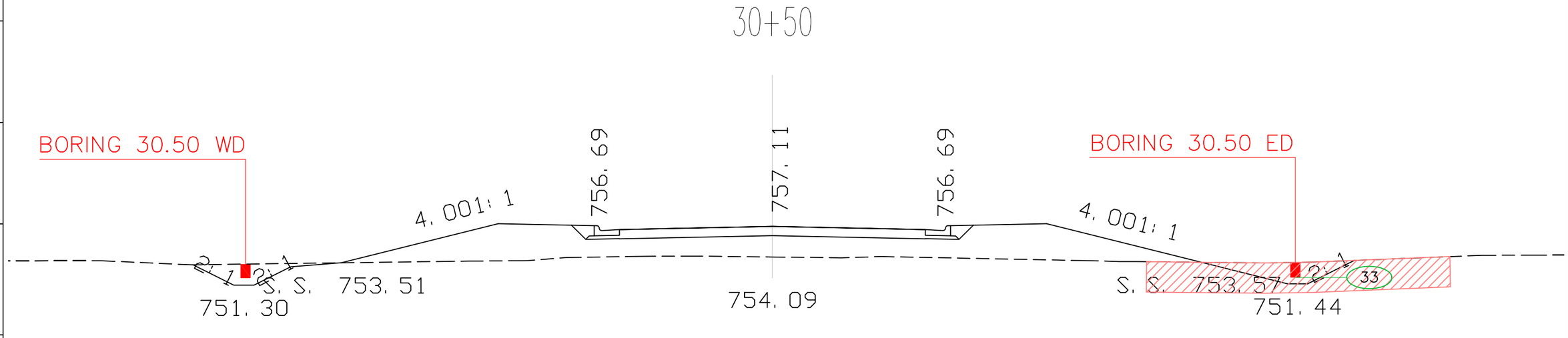
DATE 05/17/12

FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

0 10 20

SCALE IN FEET

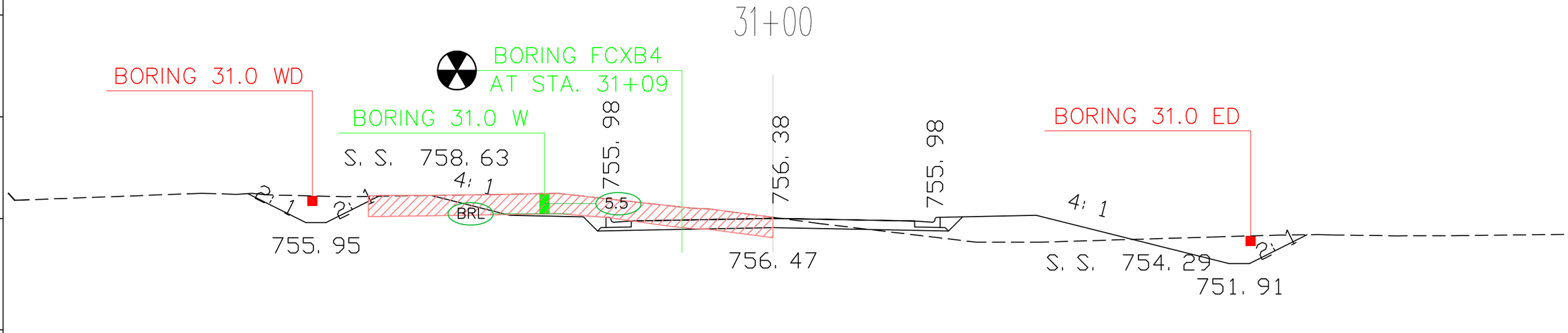
Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 30+50

FIGURE: 5

PROJECT NUMBER 0056
DRAFTER AF
CHECKED BY SLK
PROJECT MANAGER SLK
DATE 05/17/12
FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

0 10 20
SCALE IN FEET

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 31+00

FIGURE: 6

PROJECT NUMBER 0056

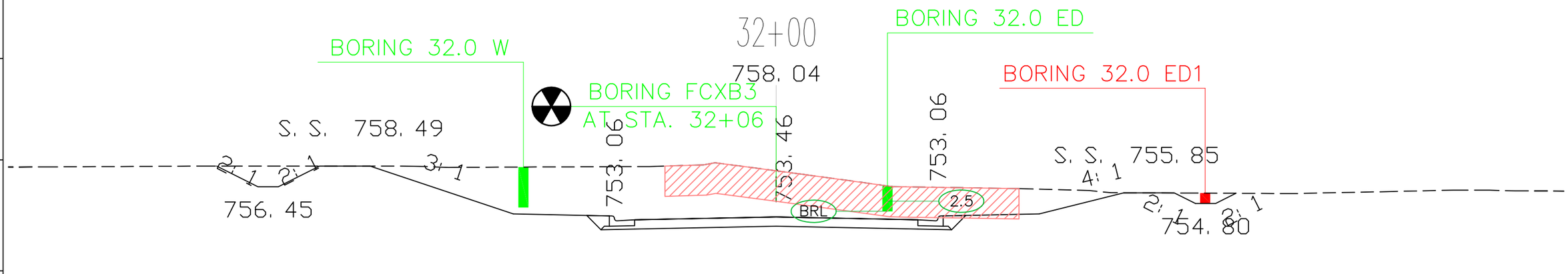
DRAFTER AF

CHECKED BY SLK

PROJECT MANAGER SLK

DATE 05/17/12

FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

0 10 20

SCALE IN FEET

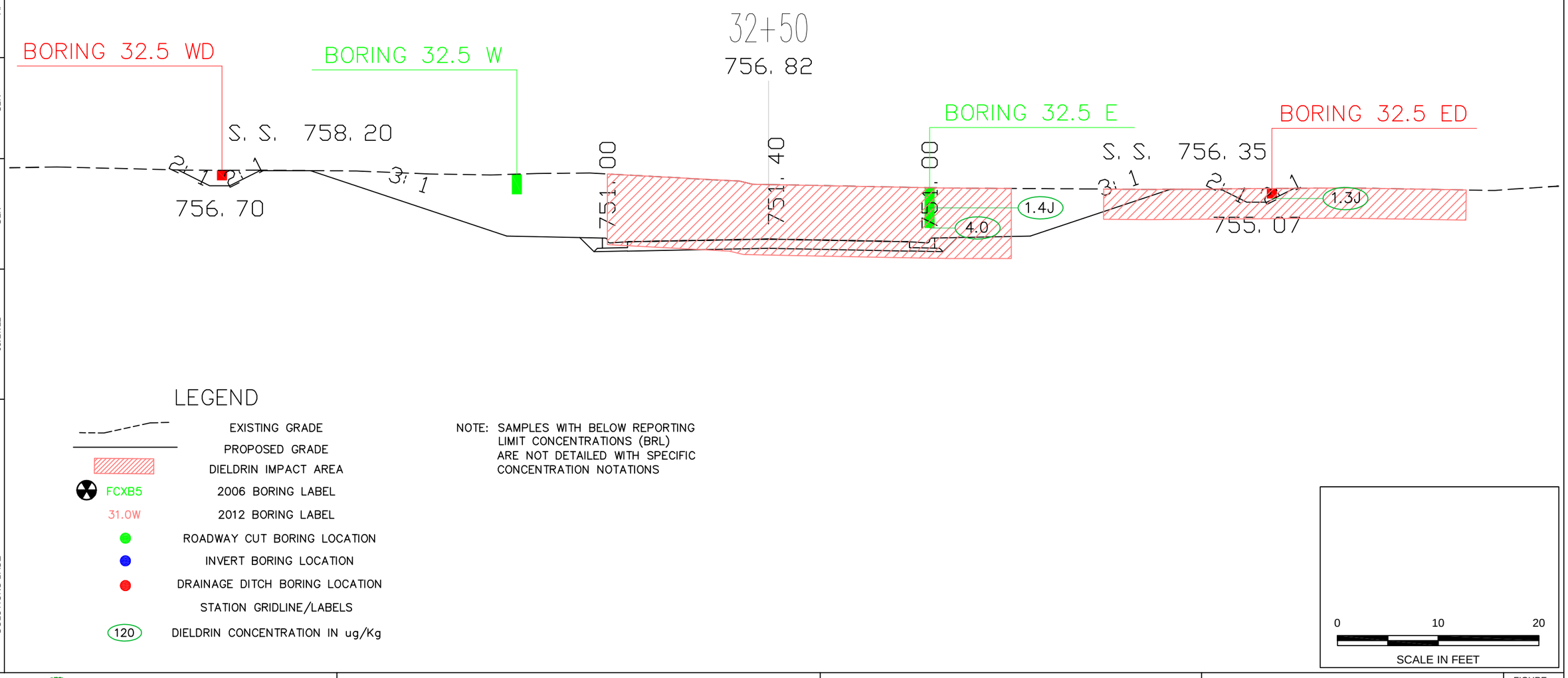
Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 32+00

FIGURE: 7

PROJECT NUMBER 0056
DRAFTER AF
CHECKED BY SLK
PROJECT MANAGER SLK
DATE 05/17/12
FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

0 10 20
SCALE IN FEET

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 32+50

FIGURE: 8

PROJECT NUMBER 0056

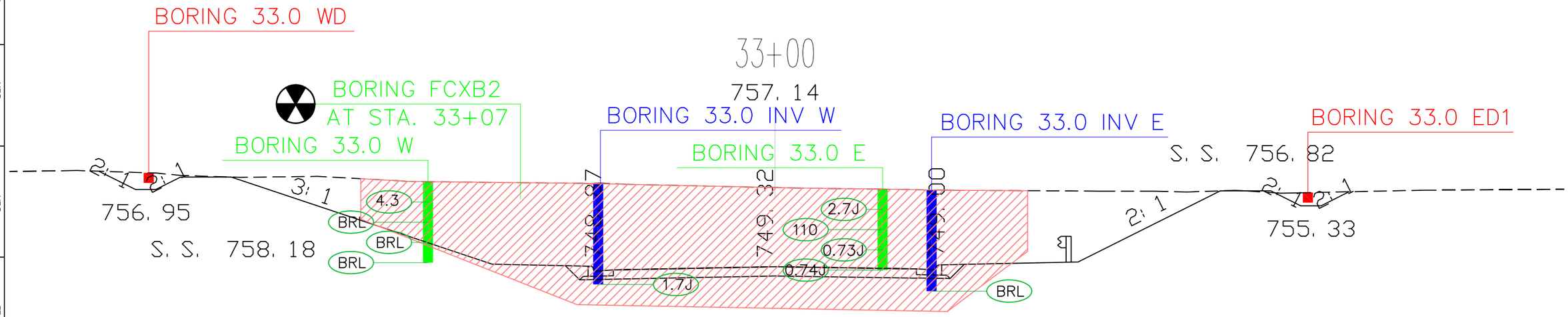
DRAFTER AF

CHECKED BY SLK

PROJECT MANAGER SLK

DATE 05/17/12

FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

0 10 20

SCALE IN FEET

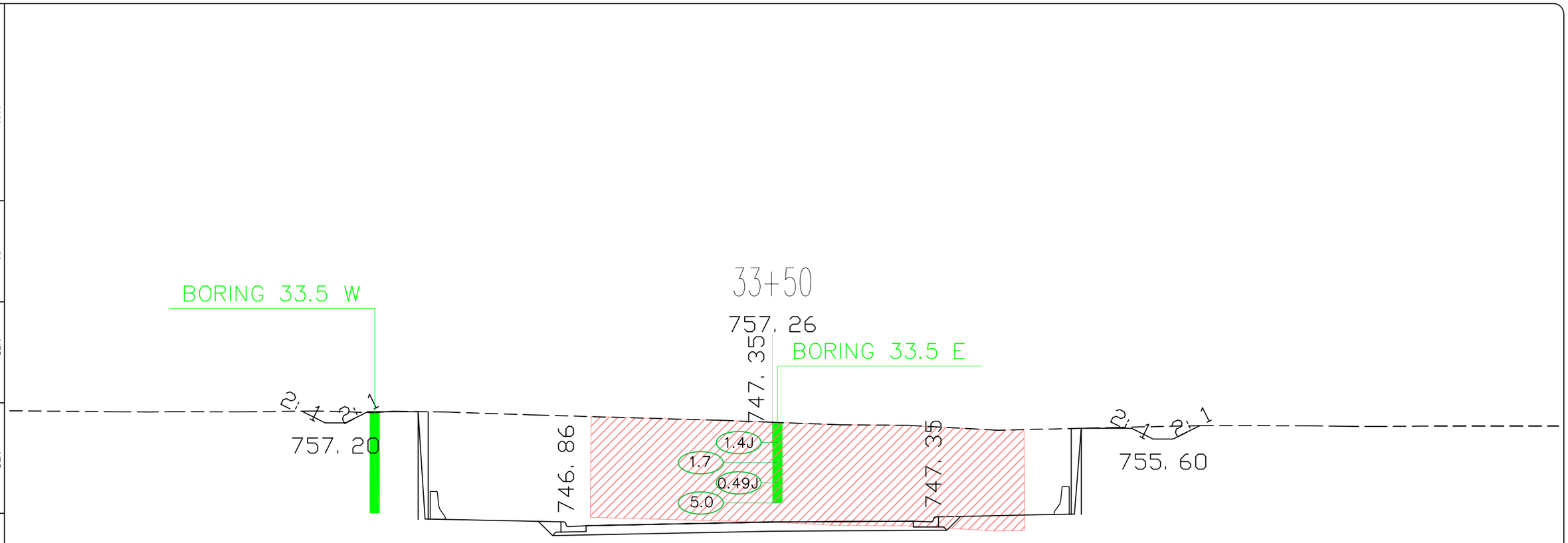
Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 33+00

FIGURE: 9

PROJECT NUMBER 0056
DRAFTER AF
CHECKED BY SLK
PROJECT MANAGER SLK
DATE 05/17/12
FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
- INVERT BORING LOCATION
- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

0 10 20
SCALE IN FEET

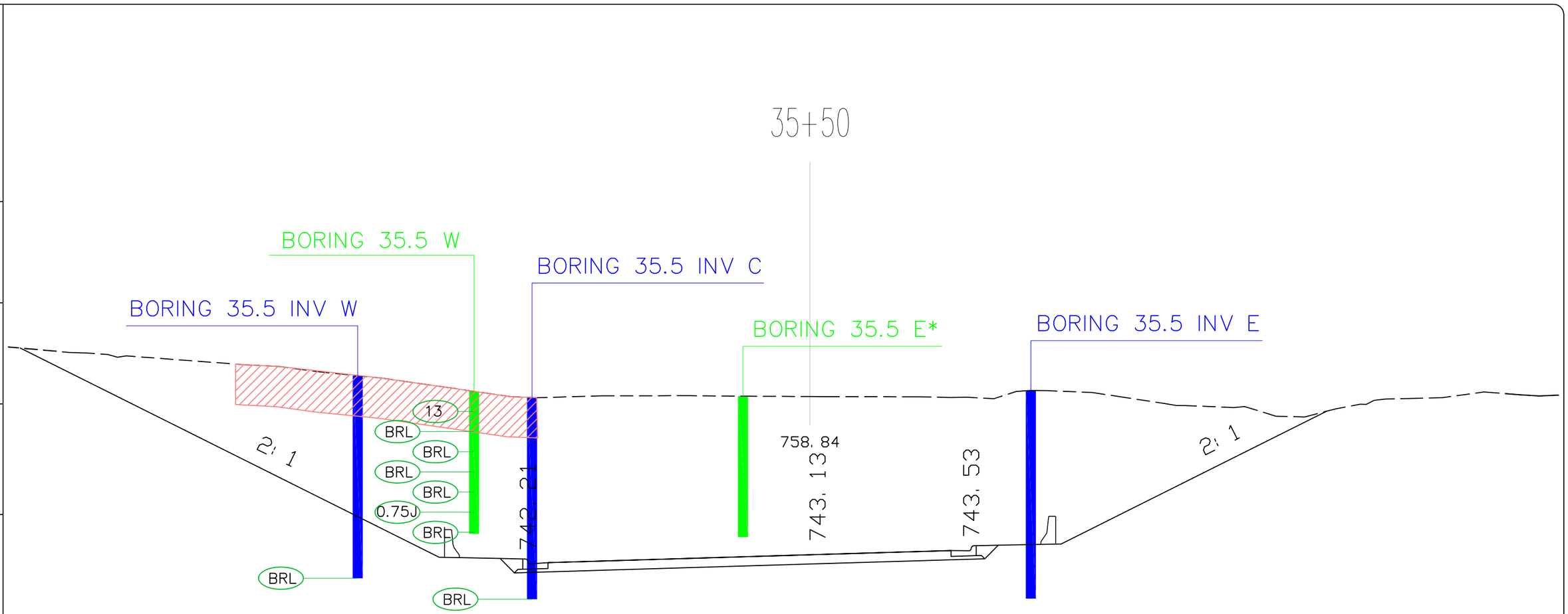
Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 33+50

FIGURE: 10

PROJECT NUMBER 0056
DRAFTER AF
CHECKED BY SLK
PROJECT MANAGER SLK
DATE 05/17/12
FILE SOLUTIONS-BASE



LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- DIELDRIN IMPACT AREA
- FCXB5 — 2006 BORING LABEL
- 31.0W — 2012 BORING LABEL
- ROADWAY CUT BORING LOCATION
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- DRAINAGE DITCH BORING LOCATION
- STATION GRIDLINE/LABELS
- 120 — DIELDRIN CONCENTRATION IN ug/Kg

NOTE: SAMPLES WITH BELOW REPORTING LIMIT CONCENTRATIONS (BRL) ARE NOT DETAILED WITH SPECIFIC CONCENTRATION NOTATIONS

NOTE: *BORINGS WERE ADVANCED BETWEEN STATION 35+00 AND 35+50 BUT ARE SHOWN ON THIS FIGURE

0 10 20
SCALE IN FEET

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

CROSS SECTION
STATION 35+50

FIGURE: 11

APPENDIX A

PHOTOGRAPHS

Photograph 1. Klumac Road Site facing east toward the Johnson Concrete facility.

Photograph 2. View of direct push work toward the northeast.

Photograph 3. View of direct push efforts toward west to Carolina Rubber Hose.

Photograph 4. View of congested work conditions.

APPENDIX B

LABORATORY ANALYTICAL REPORTS – SOIL SAMPLES

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert No. 37735
VA Certification No. 1287

Case Narrative

03/09/2012

Solutions-IES, Inc.
Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.
Project No.: Klumack
Lab Submittal Date: 02/20/2012
Prism Work Order: 2020443

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Narrative Notes:

Reactivity analysis was subcontracted to Gulf Coast Analytical Labs (GCAL). Laboratory report is attached.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.

VP Laboratory Services

Reviewed By

Data Qualifiers Key Reference:

HT	Sample received and analyzed outside of the hold time.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

Sample Receipt Summary

03/09/2012

Prism Work Order: 2020443

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
35.0 E2	2020443-01	Solid	02/20/12	02/20/12
35.0 W2	2020443-08	Solid	02/20/12	02/20/12
35.0 W4	2020443-09	Solid	02/20/12	02/20/12
35.0 W6	2020443-10	Solid	02/20/12	02/20/12
35.0 W8	2020443-11	Solid	02/20/12	02/20/12
35.0 W10	2020443-12	Solid	02/20/12	02/20/12
35.0 W12	2020443-13	Solid	02/20/12	02/20/12
35.0 W14	2020443-14	Solid	02/20/12	02/20/12
35.0 INVW20	2020443-15	Solid	02/20/12	02/20/12
35.0 INVC20	2020443-16	Solid	02/20/12	02/20/12
35.0 INVE20	2020443-17	Solid	02/20/12	02/20/12
34.5 E2	2020443-18	Solid	02/20/12	02/20/12
34.5 W2	2020443-24	Solid	02/20/12	02/20/12
34.0 W2	2020443-31	Solid	02/20/12	02/20/12
34.0 E2	2020443-37	Solid	02/20/12	02/20/12
33.5 E2	2020443-42	Solid	02/20/12	02/20/12
33.5 E4	2020443-43	Solid	02/20/12	02/20/12
33.5 E6	2020443-44	Solid	02/20/12	02/20/12
33.5 E8	2020443-45	Solid	02/20/12	02/20/12
33.5 W2	2020443-46	Solid	02/20/12	02/20/12
33.0 ED1	2020443-51	Solid	02/20/12	02/20/12
33.0 E2	2020443-52	Solid	02/20/12	02/20/12
33.0 E4	2020443-53	Solid	02/20/12	02/20/12
33.0 E6	2020443-54	Solid	02/20/12	02/20/12
33.0 E8	2020443-55	Solid	02/20/12	02/20/12
33.0 INVE10	2020443-56	Solid	02/20/12	02/20/12
33.0 INVW10	2020443-57	Solid	02/20/12	02/20/12
33.0 W2	2020443-58	Solid	02/20/12	02/20/12
33.0 W4	2020443-59	Solid	02/20/12	02/20/12
33.0 W6	2020443-60	Solid	02/20/12	02/20/12
33.0 W8	2020443-61	Solid	02/20/12	02/20/12
33.0 WD1	2020443-62	Solid	02/20/12	02/20/12
32.5 WD1	2020443-63	Solid	02/20/12	02/20/12

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

32.5 W2	2020443-64	Solid	02/20/12	02/20/12
32.5 E2	2020443-67	Solid	02/20/12	02/20/12
32.5 E4	2020443-68	Solid	02/20/12	02/20/12
32.5 ED1	2020443-69	Solid	02/20/12	02/20/12

Samples received in good condition at 2.1 degrees C unless otherwise noted.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Summary of Detections

03/09/2012

Prism Work Order: 2020443

Prism ID	Client ID	Parameter	Method	Result		Units
2020443-08	35.0 W2	Corrosivity-pH	*9045D	6.0	HT	pH Units
2020443-08	35.0 W2	Dieldrin	8081B	13		ug/kg dry
2020443-13	35.0 W12	Dieldrin	8081B	0.75	J	ug/kg dry
2020443-42	33.5 E2	Dieldrin	8081B	1.4	J	ug/kg dry
2020443-43	33.5 E4	Dieldrin	8081B	1.7		ug/kg dry
2020443-44	33.5 E6	Dieldrin	8081B	0.49	J	ug/kg dry
2020443-45	33.5 E8	Dieldrin	8081B	5.0		ug/kg dry
2020443-52	33.0 E2	Corrosivity-pH	*9045D	5.3	HT	pH Units
2020443-52	33.0 E2	Dieldrin	8081B	2.7	J	ug/kg dry
2020443-52	33.0 E2	Dieldrin	8081B	0.15	J	ug/L
2020443-53	33.0 E4	Dieldrin	8081B	110		ug/kg dry
2020443-54	33.0 E6	Dieldrin	8081B	0.73	J	ug/kg dry
2020443-55	33.0 E8	Dieldrin	8081B	0.74	J	ug/kg dry
2020443-57	33.0 INVW10	Corrosivity-pH	*9045D	4.1	HT	pH Units
2020443-57	33.0 INVW10	Dieldrin	8081B	1.7	J	ug/kg dry
2020443-58	33.0 W2	Corrosivity-pH	*9045D	5.0	HT	pH Units
2020443-58	33.0 W2	Dieldrin	8081B	4.3		ug/kg dry
2020443-67	32.5 E2	Dieldrin	8081B	1.4	J	ug/kg dry
2020443-68	32.5 E4	Dieldrin	8081B	4.0		ug/kg dry
2020443-69	32.5 ED1	Dieldrin	8081B	1.3	J	ug/kg dry

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 E2
Prism Sample ID: 2020443-01
Prism Work Order: 2020443
Time Collected: 02/20/12 09:10
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**77.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.6	0.48	1	8081B	2/22/12 19:44	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*108 %*	*26-204*
Tetrachloro-m-xylene	*104 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W2
Prism Sample ID: 2020443-08
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**74.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Corrosivity-pH	**6.0 HT**	**pH Units**			**1**	***9045D**	**2/27/12 9:00**	**JAB**	**P2B0502**
Ignitability	Pass	mm/sec	0.10		1	*1030	3/1/12 11:30	JAB	P2C0021
Organochlorine Pesticides by GC/ECD									
Dieldrin	**13**	**ug/kg dry**	**2.7**	**0.49**	**1**	**8081B**	**2/22/12 20:25**	**JMV**	**P2B0414**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*106 %*	*26-204*
Tetrachloro-m-xylene	*96 %*	*40-162*

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
TCLP Extraction by EPA 1311									
TCLP Extraction	Complete	N/A			1	*1311	2/28/12 9:50	MEH	P2B0553
TCLP Metals									
Mercury	BRL	mg/L	0.010	0.000014	1	*7470A	3/5/12 14:29	BGM	P2C0068
Arsenic	BRL	mg/L	0.050	0.010	1	*6010C	2/29/12 20:24	BGM	P2B0564
Barium	BRL	mg/L	5.0	0.013	1	*6010C	2/29/12 20:24	BGM	P2B0564
Cadmium	BRL	mg/L	0.025	0.00043	1	*6010C	2/29/12 20:24	BGM	P2B0564
Chromium	BRL	mg/L	0.25	0.00085	1	*6010C	2/29/12 20:24	BGM	P2B0564
Lead	BRL	mg/L	0.050	0.0038	1	*6010C	2/29/12 20:24	BGM	P2B0564
Selenium	BRL	mg/L	0.10	0.012	1	*6010C	2/29/12 20:24	BGM	P2B0564
Silver	BRL	mg/L	0.25	0.0017	1	*6010C	2/29/12 20:24	BGM	P2B0564
TCLP Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/L	0.50	0.0084	1	8081B	3/2/12 17:24	JMV	P2C0002

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*115 %*	*13-186*
Tetrachloro-m-xylene	*91 %*	*40-134*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W4
Prism Sample ID: 2020443-09
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**71.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.26	1	8081B	3/3/12 2:28	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*105 %*	*26-204*
Tetrachloro-m-xylene	*89 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W6
Prism Sample ID: 2020443-10
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**70.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.26	1	8081B	3/3/12 3:10	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*103 %*	*26-204*
Tetrachloro-m-xylene	*89 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W8
Prism Sample ID: 2020443-11
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**68.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.5	0.27	1	8081B	3/3/12 3:51	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*99 %*	*26-204*
Tetrachloro-m-xylene	*79 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W10
Prism Sample ID: 2020443-12
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**67.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.5	0.27	1	8081B	3/3/12 4:33	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*107 %*	*26-204*
Tetrachloro-m-xylene	*89 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W12
Prism Sample ID: 2020443-13
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**67.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.75 J**	**ug/kg dry**	**1.5**	**0.28**	**1**	**8081B**	**3/3/12 5:15**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*138 %*	*26-204*
Tetrachloro-m-xylene	*95 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 W14
Prism Sample ID: 2020443-14
Prism Work Order: 2020443
Time Collected: 02/20/12 09:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**64.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.6	0.29	1	8081B	3/3/12 5:57	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*115 %*	*26-204*
Tetrachloro-m-xylene	*84 %*	*40-162*

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Sample Matrix: Solid

Client Sample ID: 35.0 INVW20
Prism Sample ID: 2020443-15
Prism Work Order: 2020443
Time Collected: 02/20/12 09:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**61.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	3.2	0.59	1	8081B	2/22/12 21:07	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*87 %*	*26-204*
Tetrachloro-m-xylene	*76 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 INVC20
Prism Sample ID: 2020443-16
Prism Work Order: 2020443
Time Collected: 02/20/12 10:20
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**59.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	3.4	0.62	1	8081B	2/22/12 21:49	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*110 %*	*26-204*
Tetrachloro-m-xylene	*102 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 35.0 INVE20
Prism Sample ID: 2020443-17
Prism Work Order: 2020443
Time Collected: 02/20/12 10:50
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**58.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	3.4	0.64	1	8081B	2/22/12 22:31	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*108 %*	*26-204*
Tetrachloro-m-xylene	*73 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 34.5 E2
Prism Sample ID: 2020443-18
Prism Work Order: 2020443
Time Collected: 02/20/12 11:00
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**76.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.6	0.49	1	8081B	2/22/12 23:13	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*107 %*	*26-204*
Tetrachloro-m-xylene	*85 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 34.5 W2
Prism Sample ID: 2020443-24
Prism Work Order: 2020443
Time Collected: 02/20/12 11:20
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**73.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.8	0.51	1	8081B	2/22/12 23:54	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*98 %*	*26-204*
Tetrachloro-m-xylene	*84 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 34.0 W2
Prism Sample ID: 2020443-31
Prism Work Order: 2020443
Time Collected: 02/20/12 11:40
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**72.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.7	0.51	1	8081B	2/23/12 0:36	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*103 %*	*26-204*
Tetrachloro-m-xylene	*97 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 34.0 E2
Prism Sample ID: 2020443-37
Prism Work Order: 2020443
Time Collected: 02/20/12 11:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**82.8**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.4	0.44	1	8081B	2/23/12 2:41	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*108 %*	*26-204*
Tetrachloro-m-xylene	*101 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.5 E2
Prism Sample ID: 2020443-42
Prism Work Order: 2020443
Time Collected: 02/20/12 12:15
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**71.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**1.4 J**	**ug/kg dry**	**2.8**	**0.52**	**1**	**8081B**	**2/23/12 3:23**	**JMV**	**P2B0414**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*110 %*	*26-204*
Tetrachloro-m-xylene	*102 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.5 E4
Prism Sample ID: 2020443-43
Prism Work Order: 2020443
Time Collected: 02/20/12 12:15
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**69.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**1.7**	**ug/kg dry**	**1.4**	**0.27**	**1**	**8081B**	**3/3/12 6:39**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*112 %*	*26-204*
Tetrachloro-m-xylene	*88 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.5 E6
Prism Sample ID: 2020443-44
Prism Work Order: 2020443
Time Collected: 02/20/12 12:15
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**66.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.49 J**	**ug/kg dry**	**1.5**	**0.27**	**1**	**8081B**	**3/3/12 7:21**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*94 %*	*26-204*
Tetrachloro-m-xylene	*74 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.5 E8
Prism Sample ID: 2020443-45
Prism Work Order: 2020443
Time Collected: 02/20/12 12:15
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**64.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**5.0**	**ug/kg dry**	**1.6**	**0.29**	**1**	**8081B**	**3/3/12 10:08**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*106 %*	*26-204*
Tetrachloro-m-xylene	*94 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.5 W2
Prism Sample ID: 2020443-46
Prism Work Order: 2020443
Time Collected: 02/20/12 12:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**78.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.5	0.47	1	8081B	2/23/12 4:05	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*111 %*	*26-204*
Tetrachloro-m-xylene	*107 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 ED1
Prism Sample ID: 2020443-51
Prism Work Order: 2020443
Time Collected: 02/20/12 12:45
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**75.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.6	0.49	1	8081B	2/23/12 4:47	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*134 %*	*26-204*
Tetrachloro-m-xylene	*102 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 E2
Prism Sample ID: 2020443-52
Prism Work Order: 2020443
Time Collected: 02/20/12 12:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**72.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Corrosivity-pH	**5.3 HT**	**pH Units**			**1**	***9045D**	**2/27/12 9:00**	**JAB**	**P2B0502**
Ignitability	Pass	mm/sec	0.10		1	*1030	3/1/12 11:30	JAB	P2C0021
Organochlorine Pesticides by GC/ECD									
Dieldrin	**2.7 J**	**ug/kg dry**	**2.8**	**0.51**	**1**	**8081B**	**2/23/12 5:28**	**JMV**	**P2B0414**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*105 %*	*26-204*
Tetrachloro-m-xylene	*92 %*	*40-162*

TCLP Extraction by EPA 1311									
TCLP Extraction	Complete	N/A			1	*1311	2/28/12 9:50	MEH	P2B0553
TCLP Metals									
Mercury	BRL	mg/L	0.010	0.000014	1	*7470A	3/5/12 14:40	BGM	P2C0068
Arsenic	BRL	mg/L	0.050	0.010	1	*6010C	2/29/12 20:32	BGM	P2B0564
Barium	BRL	mg/L	5.0	0.013	1	*6010C	2/29/12 20:32	BGM	P2B0564
Cadmium	BRL	mg/L	0.025	0.00043	1	*6010C	2/29/12 20:32	BGM	P2B0564
Chromium	BRL	mg/L	0.25	0.00085	1	*6010C	2/29/12 20:32	BGM	P2B0564
Lead	BRL	mg/L	0.050	0.0038	1	*6010C	2/29/12 20:32	BGM	P2B0564
Selenium	BRL	mg/L	0.10	0.012	1	*6010C	2/29/12 20:32	BGM	P2B0564
Silver	BRL	mg/L	0.25	0.0017	1	*6010C	2/29/12 20:32	BGM	P2B0564
TCLP Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.15 J**	**ug/L**	**0.50**	**0.0084**	**1**	**8081B**	**3/2/12 18:06**	**JMV**	**P2C0002**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*88 %*	*13-186*
Tetrachloro-m-xylene	*71 %*	*40-134*

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Project: Klumac Rd.

Project No.: Klumack
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Client Sample ID: 33.0 E4
Prism Sample ID: 2020443-53
Prism Work Order: 2020443
Time Collected: 02/20/12 12:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**73.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**110**	**ug/kg dry**	**14**	**2.5**	**10**	**8081B**	**3/5/12 9:58**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*100 %*	*26-204*
Tetrachloro-m-xylene	*80 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 E6
Prism Sample ID: 2020443-54
Prism Work Order: 2020443
Time Collected: 02/20/12 12:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**68.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.73 J**	**ug/kg dry**	**1.5**	**0.27**	**1**	**8081B**	**3/3/12 11:31**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*83 %*	*26-204*
Tetrachloro-m-xylene	*81 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 E8
Prism Sample ID: 2020443-55
Prism Work Order: 2020443
Time Collected: 02/20/12 12:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**67.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.74 J**	**ug/kg dry**	**1.5**	**0.27**	**1**	**8081B**	**3/3/12 12:13**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*104 %*	*26-204*
Tetrachloro-m-xylene	*84 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 INVE10
Prism Sample ID: 2020443-56
Prism Work Order: 2020443
Time Collected: 02/20/12 13:05
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**66.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	3.0	0.56	1	8081B	2/23/12 6:10	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*108 %*	*26-204*
Tetrachloro-m-xylene	*94 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 INVW10
Prism Sample ID: 2020443-57
Prism Work Order: 2020443
Time Collected: 02/20/12 13:15
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**61.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Corrosivity-pH	**4.1 HT**	**pH Units**			**1**	***9045D**	**2/27/12 9:00**	**JAB**	**P2B0502**
Ignitability	Pass	mm/sec	0.10		1	*1030	3/1/12 11:30	JAB	P2C0021
Organochlorine Pesticides by GC/ECD									
Dieldrin	**1.7 J**	**ug/kg dry**	**3.2**	**0.60**	**1**	**8081B**	**2/23/12 6:52**	**JMV**	**P2B0414**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*112 %*	*26-204*
Tetrachloro-m-xylene	*99 %*	*40-162*

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
TCLP Extraction by EPA 1311									
TCLP Extraction	Complete	N/A			1	*1311	2/28/12 9:50	MEH	P2B0553
TCLP Metals									
Mercury	BRL	mg/L	0.010	0.000014	1	*7470A	3/5/12 14:44	BGM	P2C0068
Arsenic	BRL	mg/L	0.050	0.010	1	*6010C	2/29/12 20:39	BGM	P2B0564
Barium	BRL	mg/L	5.0	0.013	1	*6010C	2/29/12 20:39	BGM	P2B0564
Cadmium	BRL	mg/L	0.025	0.00043	1	*6010C	2/29/12 20:39	BGM	P2B0564
Chromium	BRL	mg/L	0.25	0.00085	1	*6010C	2/29/12 20:39	BGM	P2B0564
Lead	BRL	mg/L	0.050	0.0038	1	*6010C	2/29/12 20:39	BGM	P2B0564
Selenium	BRL	mg/L	0.10	0.012	1	*6010C	2/29/12 20:39	BGM	P2B0564
Silver	BRL	mg/L	0.25	0.0017	1	*6010C	2/29/12 20:39	BGM	P2B0564
TCLP Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/L	0.50	0.0084	1	8081B	3/2/12 18:48	JMV	P2C0002

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*99 %*	*13-186*
Tetrachloro-m-xylene	*85 %*	*40-134*

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1101 Nowell Road
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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 W2
Prism Sample ID: 2020443-58
Prism Work Order: 2020443
Time Collected: 02/20/12 13:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**77.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Corrosivity-pH	**5.0 HT**	**pH Units**			**1**	***9045D**	**2/27/12 9:00**	**JAB**	**P2B0502**
Ignitability	Pass	mm/sec	0.10		1	*1030	3/1/12 11:30	JAB	P2C0021
Organochlorine Pesticides by GC/ECD									
Dieldrin	**4.3**	**ug/kg dry**	**2.6**	**0.48**	**1**	**8081B**	**2/23/12 7:34**	**JMV**	**P2B0414**
			Surrogate			Recovery		Control Limits	
			Decachlorobiphenyl			*118 %*		*26-204*	
			Tetrachloro-m-xylene			*106 %*		*40-162*	
TCLP Extraction by EPA 1311									
TCLP Extraction	Complete	N/A			1	*1311	2/28/12 9:50	MEH	P2B0553
TCLP Metals									
Mercury	BRL	mg/L	0.010	0.000014	1	*7470A	3/5/12 14:48	BGM	P2C0068
Arsenic	BRL	mg/L	0.050	0.010	1	*6010C	2/29/12 20:46	BGM	P2B0564
Barium	BRL	mg/L	5.0	0.013	1	*6010C	2/29/12 20:46	BGM	P2B0564
Cadmium	BRL	mg/L	0.025	0.00043	1	*6010C	2/29/12 20:46	BGM	P2B0564
Chromium	BRL	mg/L	0.25	0.00085	1	*6010C	2/29/12 20:46	BGM	P2B0564
Lead	BRL	mg/L	0.050	0.0038	1	*6010C	2/29/12 20:46	BGM	P2B0564
Selenium	BRL	mg/L	0.10	0.012	1	*6010C	2/29/12 20:46	BGM	P2B0564
Silver	BRL	mg/L	0.25	0.0017	1	*6010C	2/29/12 20:46	BGM	P2B0564
TCLP Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/L	0.50	0.0084	1	8081B	3/2/12 19:30	JMV	P2C0002
			Surrogate			Recovery		Control Limits	
			Decachlorobiphenyl			*104 %*		*13-186*	
			Tetrachloro-m-xylene			*88 %*		*40-134*	

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 W4
Prism Sample ID: 2020443-59
Prism Work Order: 2020443
Time Collected: 02/20/12 13:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**72.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.26	1	8081B	3/3/12 12:55	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*90 %*	*26-204*
Tetrachloro-m-xylene	*79 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 W6
Prism Sample ID: 2020443-60
Prism Work Order: 2020443
Time Collected: 02/20/12 13:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**70.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.26	1	8081B	3/3/12 13:37	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*108 %*	*26-204*
Tetrachloro-m-xylene	*87 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 W8
Prism Sample ID: 2020443-61
Prism Work Order: 2020443
Time Collected: 02/20/12 13:25
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**70.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.27	1	8081B	3/3/12 14:19	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*121 %*	*26-204*
Tetrachloro-m-xylene	*81 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 33.0 WD1
Prism Sample ID: 2020443-62
Prism Work Order: 2020443
Time Collected: 02/20/12 13:35
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**82.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.4	0.45	1	8081B	2/23/12 8:15	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*133 %*	*26-204*
Tetrachloro-m-xylene	*91 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 32.5 WD1
Prism Sample ID: 2020443-63
Prism Work Order: 2020443
Time Collected: 02/20/12 13:50
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**81.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.4	0.45	1	8081B	2/23/12 8:57	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*117 %*	*26-204*
Tetrachloro-m-xylene	*99 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 32.5 W2
Prism Sample ID: 2020443-64
Prism Work Order: 2020443
Time Collected: 02/20/12 13:55
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**76.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	2.6	0.48	1	8081B	2/23/12 9:39	JMV	P2B0414

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*116 %*	*26-204*
Tetrachloro-m-xylene	*98 %*	*40-162*

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Project: Klumac Rd.

Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 32.5 E2
Prism Sample ID: 2020443-67
Prism Work Order: 2020443
Time Collected: 02/20/12 14:05
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**70.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**1.4 J**	**ug/kg dry**	**2.8**	**0.53**	**1**	**8081B**	**2/24/12 12:12**	**JMV**	**P2B0414**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*98 %*	*26-204*
Tetrachloro-m-xylene	*112 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 32.5 E4
Prism Sample ID: 2020443-68
Prism Work Order: 2020443
Time Collected: 02/20/12 14:05
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**70.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/24/12 14:15**	**JAB**	**P2B0492**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**4.0**	**ug/kg dry**	**1.4**	**0.26**	**1**	**8081B**	**3/3/12 15:00**	**JMV**	**P2C0006**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*124 %*	*26-204*
Tetrachloro-m-xylene	*96 %*	*40-162*

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Project No.: Klumack
Sample Matrix: Solid

Client Sample ID: 32.5 ED1
Prism Sample ID: 2020443-69
Prism Work Order: 2020443
Time Collected: 02/20/12 14:15
Time Submitted: 02/20/12 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**76.8**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/21/12 14:30**	**JAB**	**P2B0411**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**1.3 J**	**ug/kg dry**	**2.6**	**0.48**	**1**	**8081B**	**2/24/12 12:54**	**JMV**	**P2B0414**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*93 %*	*26-204*
Tetrachloro-m-xylene	*105 %*	*40-162*

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Project: Klumac Rd.

Project No: Klumack

Prism Work Order: 2020443
Time Submitted: 2/20/2012 4:10:00PM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0414 - 3550C GC										
Blank (P2B0414-BLK1)				Prepared & Analyzed: 02/22/12						
Dieldrin	BRL	2.0	ug/kg wet							
Surrogate: Decachlorobiphenyl	*37.5*		*ug/kg wet*	*32.88*		*114*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*34.9*		*ug/kg wet*	*32.88*		*106*	*40-162*			
LCS (P2B0414-BS1)				Prepared & Analyzed: 02/22/12						
4,4'-DDD	34.8	2.0	ug/kg wet	33.42		104	72-142			
4,4'-DDE	37.4	2.0	ug/kg wet	33.42		112	74-129			
4,4'-DDT	46.5	3.0	ug/kg wet	33.42		139	75-141			
Aldrin	38.8	2.0	ug/kg wet	33.42		116	66-132			
alpha-BHC	38.4	2.0	ug/kg wet	33.42		115	72-126			
cis-Chlordane	40.1	2.0	ug/kg wet	33.42		120	71-132			
beta-BHC	37.4	2.0	ug/kg wet	33.42		112	79-134			
Chlordane	BRL	50	ug/kg wet				50-150			
delta-BHC	40.8	2.0	ug/kg wet	33.42		122	74-132			
Dieldrin	38.4	2.0	ug/kg wet	33.42		115	72-136			
Endosulfan I	39.4	2.0	ug/kg wet	33.42		118	74-134			
Endosulfan II	39.1	2.0	ug/kg wet	33.42		117	79-134			
Endosulfan Sulfate	38.4	2.0	ug/kg wet	33.42		115	73-147			
Endrin	41.1	2.0	ug/kg wet	33.42		123	74-147			
Endrin Aldehyde	34.1	2.0	ug/kg wet	33.42		102	73-138			
Endrin Ketone	37.8	2.0	ug/kg wet	33.42		113	84-135			
gamma-BHC	37.4	2.0	ug/kg wet	33.42		112	71-129			
trans-Chlordane	41.8	2.0	ug/kg wet	33.42		125	71-132			
Heptachlor	33.1	2.0	ug/kg wet	33.42		99	72-134			
Heptachlor Epoxide	39.8	2.0	ug/kg wet	33.42		119	73-132			
Methoxychlor	43.1	2.0	ug/kg wet	33.42		129	91-138			
Toxaphene	BRL	50	ug/kg wet				50-150			
Surrogate: Decachlorobiphenyl	*40.4*		*ug/kg wet*	*33.42*		*121*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*36.1*		*ug/kg wet*	*33.42*		*108*	*40-162*			

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Project: Klumac Rd.

Project No: Klumack

Prism Work Order: 2020443
Time Submitted: 2/20/2012 4:10:00PM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0414 - 3550C GC										
LCS Dup (P2B0414-BSD1)				Prepared & Analyzed: 02/22/12						
4,4'-DDD	29.8	2.0	ug/kg wet	33.12		90	72-142	15	200	
4,4'-DDE	33.5	2.0	ug/kg wet	33.12		101	74-129	11	200	
4,4'-DDT	39.4	3.0	ug/kg wet	33.12		119	75-141	16	200	
Aldrin	35.4	2.0	ug/kg wet	33.12		107	66-132	9	200	
alpha-BHC	36.1	2.0	ug/kg wet	33.12		109	72-126	6	200	
cis-Chlordane	35.8	2.0	ug/kg wet	33.12		108	71-132	11	200	
beta-BHC	34.8	2.0	ug/kg wet	33.12		105	79-134	7	200	
Chlordane	BRL	50	ug/kg wet				50-150		200	
delta-BHC	37.1	2.0	ug/kg wet	33.12		112	74-132	9	200	
Dieldrin	34.1	2.0	ug/kg wet	33.12		103	72-136	12	200	
Endosulfan I	34.8	2.0	ug/kg wet	33.12		105	74-134	13	200	
Endosulfan II	33.8	2.0	ug/kg wet	33.12		102	79-134	15	200	
Endosulfan Sulfate	32.5	2.0	ug/kg wet	33.12		98	73-147	17	200	
Endrin	35.4	2.0	ug/kg wet	33.12		107	74-147	15	200	
Endrin Aldehyde	29.5	2.0	ug/kg wet	33.12		89	73-138	15	200	
Endrin Ketone	32.1	2.0	ug/kg wet	33.12		97	84-135	16	200	
gamma-BHC	34.4	2.0	ug/kg wet	33.12		104	71-129	8	200	
trans-Chlordane	36.8	2.0	ug/kg wet	33.12		111	71-132	13	200	
Heptachlor	30.1	2.0	ug/kg wet	33.12		91	72-134	9	200	
Heptachlor Epoxide	35.4	2.0	ug/kg wet	33.12		107	73-132	12	200	
Methoxychlor	39.7	2.0	ug/kg wet	33.12		120	91-138	8	200	
Toxaphene	BRL	50	ug/kg wet				50-150		200	
Surrogate: Decachlorobiphenyl	*34.4*		*ug/kg wet*	*33.12*		*104*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*33.5*		*ug/kg wet*	*33.12*		*101*	*40-162*			
Matrix Spike (P2B0414-MS1)	**Source: 2020443-01**			Prepared & Analyzed: 02/22/12						
4,4'-DDD	49.1	2.6	ug/kg dry	43.03	BRL	114	57-152			
4,4'-DDE	50.8	2.6	ug/kg dry	43.03	BRL	118	61-143			
4,4'-DDT	68.4	3.9	ug/kg dry	43.03	BRL	159	56-163			
Aldrin	51.6	2.6	ug/kg dry	43.03	BRL	120	57-137			
alpha-BHC	49.1	2.6	ug/kg dry	43.03	BRL	114	62-134			
cis-Chlordane	54.7	2.6	ug/kg dry	43.03	BRL	127	59-138			
beta-BHC	49.1	2.6	ug/kg dry	43.03	BRL	114	67-144			
Chlordane	BRL	65	ug/kg dry		BRL		50-150			
delta-BHC	53.8	2.6	ug/kg dry	43.03	BRL	125	70-138			
Dieldrin	52.1	2.6	ug/kg dry	43.03	BRL	121	60-141			
Endosulfan I	53.4	2.6	ug/kg dry	43.03	BRL	124	66-137			
Endosulfan II	55.5	2.6	ug/kg dry	43.03	BRL	129	70-141			
Endosulfan Sulfate	55.5	2.6	ug/kg dry	43.03	BRL	129	65-153			
Endrin	60.7	2.6	ug/kg dry	43.03	BRL	141	65-164			
Endrin Aldehyde	49.5	2.6	ug/kg dry	43.03	BRL	115	63-147			
Endrin Ketone	51.6	2.6	ug/kg dry	43.03	BRL	120	65-152			
gamma-BHC	47.8	2.6	ug/kg dry	43.03	BRL	111	62-137			
trans-Chlordane	57.2	2.6	ug/kg dry	43.03	BRL	133	59-139			
Heptachlor	43.5	2.6	ug/kg dry	43.03	BRL	101	63-142			
Heptachlor Epoxide	52.5	2.6	ug/kg dry	43.03	BRL	122	63-136			
Methoxychlor	60.7	2.6	ug/kg dry	43.03	BRL	141	60-179			

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Project: Klumac Rd.

Project No: Klumack

Prism Work Order: 2020443
Time Submitted: 2/20/2012 4:10:00PM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0414 - 3550C GC										
Matrix Spike (P2B0414-MS1)		**Source: 2020443-01**		Prepared & Analyzed: 02/22/12						
Toxaphene	BRL	65	ug/kg dry		BRL		50-150			
Surrogate: Decachlorobiphenyl	*52.9*		*ug/kg dry*	*43.03*		*123*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*43.5*		*ug/kg dry*	*43.03*		*101*	*40-162*			
Matrix Spike Dup (P2B0414-MSD1)		**Source: 2020443-01**		Prepared & Analyzed: 02/22/12						
4,4'-DDD	44.0	2.6	ug/kg dry	43.16	BRL	102	57-152	11	29	
4,4'-DDE	48.3	2.6	ug/kg dry	43.16	BRL	112	61-143	5	36	
4,4'-DDT	60.0	3.9	ug/kg dry	43.16	BRL	139	56-163	13	38	
Aldrin	47.0	2.6	ug/kg dry	43.16	BRL	109	57-137	9	29	
alpha-BHC	48.3	2.6	ug/kg dry	43.16	BRL	112	62-134	1	24	
cis-Chlordane	49.6	2.6	ug/kg dry	43.16	BRL	115	59-138	10	25	
beta-BHC	47.0	2.6	ug/kg dry	43.16	BRL	109	67-144	4	17	
Chlordane	BRL	65	ug/kg dry		BRL		50-150		60	
delta-BHC	51.4	2.6	ug/kg dry	43.16	BRL	119	70-138	5	18	
Dieldrin	47.9	2.6	ug/kg dry	43.16	BRL	111	60-141	8	30	
Endosulfan I	48.3	2.6	ug/kg dry	43.16	BRL	112	66-137	10	32	
Endosulfan II	49.2	2.6	ug/kg dry	43.16	BRL	114	70-141	12	20	
Endosulfan Sulfate	48.3	2.6	ug/kg dry	43.16	BRL	112	65-153	14	24	
Endrin	51.4	2.6	ug/kg dry	43.16	BRL	119	65-164	17	21	
Endrin Aldehyde	42.7	2.6	ug/kg dry	43.16	BRL	99	63-147	15	35	
Endrin Ketone	48.3	2.6	ug/kg dry	43.16	BRL	112	65-152	7	18	
gamma-BHC	46.6	2.6	ug/kg dry	43.16	BRL	108	62-137	2	22	
trans-Chlordane	51.8	2.6	ug/kg dry	43.16	BRL	120	59-139	10	27	
Heptachlor	42.7	2.6	ug/kg dry	43.16	BRL	99	63-142	2	27	
Heptachlor Epoxide	49.2	2.6	ug/kg dry	43.16	BRL	114	63-136	6	18	
Methoxychlor	63.0	2.6	ug/kg dry	43.16	BRL	146	60-179	4	30	
Toxaphene	BRL	65	ug/kg dry		BRL		50-150		60	
Surrogate: Decachlorobiphenyl	*47.5*		*ug/kg dry*	*43.16*		*110*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*38.4*		*ug/kg dry*	*43.16*		*89*	*40-162*			

Solutions-IES, Inc.
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Project: Klumac Rd.

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0006 - 3550C GC										
Blank (P2C0006-BLK1)				Prepared: 03/01/12 Analyzed: 03/02/12						
Dieldrin	BRL	1.0	ug/kg wet							
Surrogate: Decachlorobiphenyl	*17.7*		*ug/kg wet*	*16.73*		*106*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*16.1*		*ug/kg wet*	*16.73*		*96*	*40-162*			
LCS (P2C0006-BS1)				Prepared: 03/01/12 Analyzed: 03/02/12						
4,4'-DDD	15.6	1.0	ug/kg wet	16.76		93	72-142			
4,4'-DDE	17.4	1.0	ug/kg wet	16.76		104	74-129			
4,4'-DDT	16.1	1.5	ug/kg wet	16.76		96	75-141			
Aldrin	17.4	1.0	ug/kg wet	16.76		104	66-132			
alpha-BHC	17.3	1.0	ug/kg wet	16.76		103	72-126			
cis-Chlordane	17.4	1.0	ug/kg wet	16.76		104	71-132			
beta-BHC	16.4	1.0	ug/kg wet	16.76		98	79-134			
Chlordane	BRL	25	ug/kg wet				50-150			
delta-BHC	17.8	1.0	ug/kg wet	16.76		106	74-132			
Dieldrin	16.6	1.0	ug/kg wet	16.76		99	72-136			
Endosulfan I	16.8	1.0	ug/kg wet	16.76		100	74-134			
Endosulfan II	16.9	1.0	ug/kg wet	16.76		101	79-134			
Endosulfan Sulfate	16.1	1.0	ug/kg wet	16.76		96	73-147			
Endrin	16.9	1.0	ug/kg wet	16.76		101	74-147			
Endrin Aldehyde	14.4	1.0	ug/kg wet	16.76		86	73-138			
Endrin Ketone	16.9	1.0	ug/kg wet	16.76		101	84-135			
gamma-BHC	16.6	1.0	ug/kg wet	16.76		99	71-129			
trans-Chlordane	17.3	1.0	ug/kg wet	16.76		103	71-132			
Heptachlor	14.8	1.0	ug/kg wet	16.76		88	72-134			
Heptachlor Epoxide	16.6	1.0	ug/kg wet	16.76		99	73-132			
Methoxychlor	17.4	1.0	ug/kg wet	16.76		104	91-138			
Toxaphene	BRL	25	ug/kg wet				50-150			
Surrogate: Decachlorobiphenyl	*17.9*		*ug/kg wet*	*16.76*		*107*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*16.4*		*ug/kg wet*	*16.76*		*98*	*40-162*			

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0006 - 3550C GC										
LCS Dup (P2C0006-BSD1)				Prepared: 03/01/12 Analyzed: 03/03/12						
4,4'-DDD	17.1	1.0	ug/kg wet	16.76		102	72-142	9	200	
4,4'-DDE	19.3	1.0	ug/kg wet	16.76		115	74-129	10	200	
4,4'-DDT	17.8	1.5	ug/kg wet	16.76		106	75-141	10	200	
Aldrin	19.1	1.0	ug/kg wet	16.76		114	66-132	9	200	
alpha-BHC	18.6	1.0	ug/kg wet	16.76		111	72-126	7	200	
cis-Chlordane	19.3	1.0	ug/kg wet	16.76		115	71-132	10	200	
beta-BHC	17.8	1.0	ug/kg wet	16.76		106	79-134	8	200	
Chlordane	BRL	25	ug/kg wet				50-150		200	
delta-BHC	19.1	1.0	ug/kg wet	16.76		114	74-132	7	200	
Dieldrin	18.3	1.0	ug/kg wet	16.76		109	72-136	10	200	
Endosulfan I	18.6	1.0	ug/kg wet	16.76		111	74-134	10	200	
Endosulfan II	18.6	1.0	ug/kg wet	16.76		111	79-134	9	200	
Endosulfan Sulfate	17.8	1.0	ug/kg wet	16.76		106	73-147	10	200	
Endrin	18.6	1.0	ug/kg wet	16.76		111	74-147	9	200	
Endrin Aldehyde	15.4	1.0	ug/kg wet	16.76		92	73-138	7	200	
Endrin Ketone	18.3	1.0	ug/kg wet	16.76		109	84-135	8	200	
gamma-BHC	17.9	1.0	ug/kg wet	16.76		107	71-129	8	200	
trans-Chlordane	19.3	1.0	ug/kg wet	16.76		115	71-132	11	200	
Heptachlor	15.9	1.0	ug/kg wet	16.76		95	72-134	8	200	
Heptachlor Epoxide	18.4	1.0	ug/kg wet	16.76		110	73-132	10	200	
Methoxychlor	18.9	1.0	ug/kg wet	16.76		113	91-138	8	200	
Toxaphene	BRL	25	ug/kg wet				50-150		200	
Surrogate: Decachlorobiphenyl	*18.3*		*ug/kg wet*	*16.76*		*109*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*17.3*		*ug/kg wet*	*16.76*		*103*	*40-162*			
Matrix Spike (P2C0006-MS1)	**Source: 2020443-09**			Prepared: 03/01/12 Analyzed: 03/03/12						
4,4'-DDD	22.6	1.4	ug/kg dry	23.27	BRL	97	57-152			
4,4'-DDE	25.1	1.4	ug/kg dry	23.27	BRL	108	61-143			
4,4'-DDT	23.3	2.1	ug/kg dry	23.27	0.933	96	56-163			
Aldrin	25.4	1.4	ug/kg dry	23.27	3.27	95	57-137			
alpha-BHC	24.7	1.4	ug/kg dry	23.27	0.933	102	62-134			
cis-Chlordane	25.4	1.4	ug/kg dry	23.27	BRL	109	59-138			
beta-BHC	23.7	1.4	ug/kg dry	23.27	0.467	100	67-144			
Chlordane	BRL	35	ug/kg dry		BRL		50-150			
delta-BHC	25.6	1.4	ug/kg dry	23.27	0.700	107	70-138			
Dieldrin	24.4	1.4	ug/kg dry	23.27	BRL	105	60-141			
Endosulfan I	24.4	1.4	ug/kg dry	23.27	BRL	105	66-137			
Endosulfan II	24.7	1.4	ug/kg dry	23.27	BRL	106	70-141			
Endosulfan Sulfate	23.3	1.4	ug/kg dry	23.27	BRL	100	65-153			
Endrin	25.1	1.4	ug/kg dry	23.27	BRL	108	65-164			
Endrin Aldehyde	20.9	1.4	ug/kg dry	23.27	BRL	90	63-147			
Endrin Ketone	24.0	1.4	ug/kg dry	23.27	BRL	103	65-152			
gamma-BHC	24.2	1.4	ug/kg dry	23.27	0.700	101	62-137			
trans-Chlordane	25.4	1.4	ug/kg dry	23.27	BRL	109	59-139			
Heptachlor	22.3	1.4	ug/kg dry	23.27	0.933	92	63-142			
Heptachlor Epoxide	24.4	1.4	ug/kg dry	23.27	BRL	105	63-136			
Methoxychlor	24.2	1.4	ug/kg dry	23.27	1.17	99	60-179			

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0006 - 3550C GC										
Matrix Spike (P2C0006-MS1)	**Source: 2020443-09**			Prepared: 03/01/12	Analyzed: 03/03/12					
Toxaphene	BRL	35	ug/kg dry		BRL		50-150			
Surrogate: Decachlorobiphenyl	*23.3*		*ug/kg dry*	*23.27*		*100*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*20.9*		*ug/kg dry*	*23.27*		*90*	*40-162*			
Matrix Spike Dup (P2C0006-MSD1)	**Source: 2020443-09**			Prepared: 03/01/12	Analyzed: 03/03/12					
4,4'-DDD	24.4	1.4	ug/kg dry	23.49	BRL	104	57-152	8	29	
4,4'-DDE	26.5	1.4	ug/kg dry	23.49	BRL	113	61-143	5	36	
4,4'-DDT	26.5	2.1	ug/kg dry	23.49	0.933	109	56-163	13	38	
Aldrin	25.6	1.4	ug/kg dry	23.49	3.27	95	57-137	0.9	29	
alpha-BHC	25.4	1.4	ug/kg dry	23.49	0.933	104	62-134	3	24	
cis-Chlordane	26.8	1.4	ug/kg dry	23.49	BRL	114	59-138	5	25	
beta-BHC	24.9	1.4	ug/kg dry	23.49	0.467	104	67-144	5	17	
Chlordane	BRL	35	ug/kg dry		BRL		50-150		60	
delta-BHC	27.3	1.4	ug/kg dry	23.49	0.700	113	70-138	6	18	
Dieldrin	25.8	1.4	ug/kg dry	23.49	BRL	110	60-141	6	30	
Endosulfan I	26.1	1.4	ug/kg dry	23.49	BRL	111	66-137	6	32	
Endosulfan II	26.5	1.4	ug/kg dry	23.49	BRL	113	70-141	7	20	
Endosulfan Sulfate	25.8	1.4	ug/kg dry	23.49	BRL	110	65-153	10	24	
Endrin	27.3	1.4	ug/kg dry	23.49	BRL	116	65-164	8	21	
Endrin Aldehyde	22.8	1.4	ug/kg dry	23.49	BRL	97	63-147	8	35	
Endrin Ketone	26.1	1.4	ug/kg dry	23.49	BRL	111	65-152	8	18	
gamma-BHC	24.9	1.4	ug/kg dry	23.49	0.700	103	62-137	3	22	
trans-Chlordane	27.0	1.4	ug/kg dry	23.49	BRL	115	59-139	6	27	
Heptachlor	24.2	1.4	ug/kg dry	23.49	0.933	99	63-142	8	27	
Heptachlor Epoxide	25.8	1.4	ug/kg dry	23.49	BRL	110	63-136	6	18	
Methoxychlor	27.7	1.4	ug/kg dry	23.49	1.17	113	60-179	14	30	
Toxaphene	BRL	35	ug/kg dry		BRL		50-150		60	
Surrogate: Decachlorobiphenyl	*24.2*		*ug/kg dry*	*23.49*		*103*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*20.4*		*ug/kg dry*	*23.49*		*87*	*40-162*			

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TCLP Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0002 - 3510C GC										
Blank (P2C0002-BLK1)				Prepared: 02/29/12 Analyzed: 03/02/12						
Dieldrin	BRL	0.50	ug/L							
Surrogate: Decachlorobiphenyl	*5.45*		*ug/L*	*5.000*		*109*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.25*		*ug/L*	*5.000*		*85*	*40-134*			
LCS (P2C0002-BS1)				Prepared: 02/29/12 Analyzed: 03/02/12						
Dieldrin	4.55	0.50	ug/L	5.000		91	69-130			
Surrogate: Decachlorobiphenyl	*5.00*		*ug/L*	*5.000*		*100*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.00*		*ug/L*	*5.000*		*80*	*40-134*			
LCS Dup (P2C0002-BSD1)				Prepared: 02/29/12 Analyzed: 03/02/12						
Dieldrin	5.00	0.50	ug/L	5.000		100	69-130	9	200	
Surrogate: Decachlorobiphenyl	*5.10*		*ug/L*	*5.000*		*102*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.45*		*ug/L*	*5.000*		*89*	*40-134*			
Matrix Spike (P2C0002-MS1)	**Source: 2020443-08**			Prepared: 02/29/12 Analyzed: 03/02/12						
Dieldrin	5.20	0.50	ug/L	5.000	BRL	104	27-148			
Surrogate: Decachlorobiphenyl	*5.25*		*ug/L*	*5.000*		*105*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.70*		*ug/L*	*5.000*		*94*	*40-134*			
Matrix Spike Dup (P2C0002-MSD1)	**Source: 2020443-08**			Prepared: 02/29/12 Analyzed: 03/02/12						
Dieldrin	5.20	0.50	ug/L	5.000	BRL	104	27-148	0	28	
Surrogate: Decachlorobiphenyl	*5.05*		*ug/L*	*5.000*		*101*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.50*		*ug/L*	*5.000*		*90*	*40-134*			

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TCLP Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0564 - 3010A										
Blank (P2B0564-BLK1)				Prepared & Analyzed: 02/29/12						
Arsenic	BRL	0.050	mg/L							
Barium	BRL	5.0	mg/L							
Cadmium	BRL	0.025	mg/L							
Chromium	BRL	0.25	mg/L							
Lead	BRL	0.050	mg/L							
Selenium	BRL	0.10	mg/L							
Silver	BRL	0.25	mg/L							
LCS (P2B0564-BS1)				Prepared & Analyzed: 02/29/12						
Arsenic	1.17	0.050	mg/L	1.250		94	80-120			
Barium	1.12	5.0	mg/L	1.250		89	80-120			
Cadmium	1.16	0.025	mg/L	1.250		93	80-120			
Chromium	1.13	0.25	mg/L	1.250		91	80-120			
Lead	1.14	0.050	mg/L	1.250		91	80-120			
Selenium	1.20	0.10	mg/L	1.250		96	80-120			
Silver	1.14	0.25	mg/L	1.250		91	80-120			
Batch P2C0068 - 7470A										
Blank (P2C0068-BLK1)				Prepared & Analyzed: 03/05/12						
Mercury	BRL	0.010	mg/L							
LCS (P2C0068-BS1)				Prepared & Analyzed: 03/05/12						
Mercury	0.00960	0.010	mg/L	0.009375		102	80-120			
Matrix Spike (P2C0068-MS1)		**Source: 2020443-08**		Prepared & Analyzed: 03/05/12						
Mercury	0.00916	0.010	mg/L	0.009375	BRL	98	80-120			

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TCLP Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0068 - 7470A										
Matrix Spike Dup (P2C0068-MSD1)		**Source: 2020443-08**		Prepared & Analyzed: 03/05/12						
Mercury	0.00905	0.010	mg/L	0.009375	BRL	97	80-120	1	20	

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General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0411 - NO PREP										
Blank (P2B0411-BLK1)				Prepared & Analyzed: 02/21/12						
% Solids	99.9	0.100	% by Weight							
Duplicate (P2B0411-DUP2)		**Source: 2020443-01**		Prepared & Analyzed: 02/21/12						
% Solids	78.3	0.100	% by Weight		77.9			0.5	20	
Duplicate (P2B0411-DUP3)		**Source: 2020443-46**		Prepared & Analyzed: 02/21/12						
% Solids	76.0	0.100	% by Weight		78.6			3	20	
Duplicate (P2B0411-DUP4)		**Source: 2020443-69**		Prepared & Analyzed: 02/21/12						
% Solids	80.1	0.100	% by Weight		76.8			4	20	
Batch P2B0492 - NO PREP										
Blank (P2B0492-BLK1)				Prepared & Analyzed: 02/24/12						
% Solids	100	0.100	% by Weight							
Duplicate (P2B0492-DUP1)		**Source: 2020443-53**		Prepared & Analyzed: 02/24/12						
% Solids	75.6	0.100	% by Weight		73.6			3	20	
Duplicate (P2B0492-DUP2)		**Source: 2020443-68**		Prepared & Analyzed: 02/24/12						
% Solids	71.0	0.100	% by Weight		70.9			0.1	20	
Batch P2B0502 - NO PREP										
LCS (P2B0502-BS1)				Prepared & Analyzed: 02/27/12						
Corrosivity-pH	6.83		pH Units				99-101			

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General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0502 - NO PREP										
Duplicate (P2B0502-DUP1)		**Source: 2020443-58**		Prepared & Analyzed: 02/27/12						
Corrosivity-pH	5.01		pH Units		5.02			0.2	10	

Sample Extraction Data

Prep Method: 3550C GC

Lab Number	Batch	Initial	Final	Date/Time
2020443-01	P2B0414	29.82 g	10 mL	02/22/12 9:00
2020443-08	P2B0414	30.12 g	10 mL	02/22/12 9:00
2020443-09	P2C0006	30.06 g	5 mL	03/01/12 9:29
2020443-10	P2C0006	30.21 g	5 mL	03/01/12 9:29
2020443-11	P2C0006	30.14 g	5 mL	03/01/12 9:29
2020443-12	P2C0006	30.15 g	5 mL	03/01/12 9:29
2020443-13	P2C0006	29.93 g	5 mL	03/01/12 9:29
2020443-14	P2C0006	29.94 g	5 mL	03/01/12 9:29
2020443-15	P2B0414	30.48 g	10 mL	02/22/12 9:00
2020443-16	P2B0414	30.07 g	10 mL	02/22/12 9:00
2020443-17	P2B0414	29.84 g	10 mL	02/22/12 9:00
2020443-18	P2B0414	30.08 g	10 mL	02/22/12 9:00
2020443-24	P2B0414	29.86 g	10 mL	02/22/12 9:00
2020443-31	P2B0414	30.15 g	10 mL	02/22/12 9:00
2020443-37	P2B0414	30.16 g	10 mL	02/22/12 9:00
2020443-42	P2B0414	29.75 g	10 mL	02/22/12 9:00
2020443-43	P2C0006	30.02 g	5 mL	03/01/12 9:29
2020443-44	P2C0006	30.28 g	5 mL	03/01/12 9:29
2020443-45	P2C0006	29.94 g	5 mL	03/01/12 9:29
2020443-46	P2B0414	30.36 g	10 mL	02/22/12 9:00
2020443-51	P2B0414	30.05 g	10 mL	02/22/12 9:00
2020443-52	P2B0414	30.14 g	10 mL	02/22/12 9:00
2020443-53	P2C0006	30.13 g	5 mL	03/01/12 9:29
2020443-54	P2C0006	30 g	5 mL	03/01/12 9:29
2020443-55	P2C0006	30.04 g	5 mL	03/01/12 9:29
2020443-56	P2B0414	30.09 g	10 mL	02/22/12 9:00
2020443-57	P2B0414	30.03 g	10 mL	02/22/12 9:00
2020443-58	P2B0414	30.01 g	10 mL	02/22/12 9:00
2020443-59	P2C0006	30.04 g	5 mL	03/01/12 9:29
2020443-60	P2C0006	30.4 g	5 mL	03/01/12 9:29
2020443-61	P2C0006	29.77 g	5 mL	03/01/12 9:29
2020443-62	P2B0414	30 g	10 mL	02/22/12 9:00
2020443-63	P2B0414	30.12 g	10 mL	02/22/12 9:00
2020443-64	P2B0414	30.17 g	10 mL	02/22/12 9:00
2020443-67	P2B0414	30.05 g	10 mL	02/22/12 9:00
2020443-68	P2C0006	30.15 g	5 mL	03/01/12 9:29
2020443-69	P2B0414	30.1 g	10 mL	02/22/12 9:00

Prep Method: 1311

Lab Number	Batch	Initial	Final	Date/Time
2020443-08	P2B0553	100 g	2000 mL	02/27/12 16:00
2020443-52	P2B0553	100 g	2000 mL	02/27/12 16:00
2020443-57	P2B0553	100 g	2000 mL	02/27/12 16:00
2020443-58	P2B0553	100 g	2000 mL	02/27/12 16:00

Prep Method: 3010A

Lab Number	Batch	Initial	Final	Date/Time
2020443-08	P2B0564	10 mL	50 mL	02/29/12 8:00
2020443-52	P2B0564	10 mL	50 mL	02/29/12 8:00
2020443-57	P2B0564	10 mL	50 mL	02/29/12 8:00
2020443-58	P2B0564	10 mL	50 mL	02/29/12 8:00

Prep Method: 7470A

Lab Number	Batch	Initial	Final	Date/Time

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Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Sample Extraction Data

Prep Method: 7470A

Lab Number	Batch	Initial	Final	Date/Time
2020443-08	P2C0068	20 mL	30 mL	03/05/12 9:20
2020443-52	P2C0068	20 mL	30 mL	03/05/12 9:20
2020443-57	P2C0068	20 mL	30 mL	03/05/12 9:20
2020443-58	P2C0068	20 mL	30 mL	03/05/12 9:20

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date/Time
2020443-08	P2C0002	200 mL	10 mL	02/29/12 13:30
2020443-52	P2C0002	200 mL	10 mL	02/29/12 13:30
2020443-57	P2C0002	200 mL	10 mL	02/29/12 13:30
2020443-58	P2C0002	200 mL	10 mL	02/29/12 13:30

Subcontracted Analyses

The following analyses were subcontracted to Gulf Coast Analytical Labs, Inc.

Lab Number	Analysis
2020443-08	Reactivity, Cyanide (Sub)
2020443-08	Reactivity, Sulfide (Sub)
2020443-52	Reactivity, Cyanide (Sub)
2020443-52	Reactivity, Sulfide (Sub)
2020443-57	Reactivity, Cyanide (Sub)
2020443-57	Reactivity, Sulfide (Sub)
2020443-58	Reactivity, Cyanide (Sub)
2020443-58	Reactivity, Sulfide (Sub)

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Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

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Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 1 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: KLUMC RD
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: EMILY DAVIS
Address: SAME

Client Company Name: SOLUTIONS - IES
Report To/Contact Name: SHERI KNOX
Reporting Address: 1101 NOWELL RD
RALEIGH NC 27607
Phone: 919-873-1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address sknox@solutions-ies.com
EDD Type: PDF X Excel ____ Other _____
Site Location Name: KLUMC RD
Site Location Physical Address: KLUMC RD

Purchase Order No./Billing Reference 2011.0056
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ____ USACE ____ FL ____ NC ____
SC ____ OTHER ____ N/A ____
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 DIELDRIN	REMARKS	PRISM LAB ID NO.
35.0E2	2/20/12	0910	SOIL	C	1	8 oz	NONE	X	X - ANALYTE	01
35.0E4								①	① - HOLD PENDING INITIAL ANALYSIS	02
35.0E6								①		03
35.0E8								①		04
35.0E10								①	* - HOLD ALL SAMPLES FOR POSSIBLE TCLP	05
35.0E12								①		06
35.0E14								①		07
35.0W2		0925						X	* - MDL 0.29 ug/kg	08
35.0W4								① ✓		09
35.0W6								① ✓		10

Sampler's Signature James R Tyger Sampled By (Print Name) JAMES TYGER Affiliation SOLUTIONS

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Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tyger	Received By: (Signature)	2/21/12	1505
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 2/21/12	1610

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____
COC Group No. 2020443

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____	☐ NC ☐ SC ☐ ____

*CONTAINER TYPE CODES: A = Amber C = Clear = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 2 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: KUNAE RD
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: EMILY DAVIS
Address: SAME

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client Company Name: SOLUTION - 16J
Report To/Contact Name: SHARI KNOX
Reporting Address: 161 NOWELL RD RALEIGH NC 27607
Phone: 919-873-1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address SKNOX@SOLUTION-INC.COM
EDD Type: PDF X Excel ___ Other ___
Site Location Name: KUNAE RD
Site Location Physical Address: KUNAE RD

Purchase Order No./Billing Reference 2011.0056
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___ SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 Dieldrin	REMARKS	PRISM LAB ID NO.
35.0 W 8	2/20/12	0925	SOIL	C	1	8oz	NONE	① ✓	X - ANALYZE	11
35.0 W 10								① ✓	① - HOLD PENDING	12
35.0 W 12								① ✓	INITIAL ANALYSIS	13
35.0 W 14								① ✓		14
35.0 INV W 20		0955						X	* HOLD ALL SAMPLES	15
35.0 INV C 20		1020						X	FOR POSSIBLE TCLP	16
35.0 INV E 20		1050						X		17
34.5 E 2		1100						X	* MDL = 0.29 ug/kg	18
34.5 E 4								①		19
34.5 E 6								①		20

Sampler's Signature James R Tighe | Sampled By (Print Name) JAMES TIGHE | Affiliation SOLUTION

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Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R. Tighe	Received By: (Signature)	2/21/12	1525
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 2/21/12	1610

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other ___

COC/Group No. 20-26443

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 3 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: KLUMAC RD
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: EMILY DAVIS
Address: SAME

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client Company Name: SOLUTIONS - IES
Report To/Contact Name: SHERI KNOX
Reporting Address: 161 NOWELL RD
RALEIGH NC 27607
Phone: 919 873 1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address SKNOX@SOLUTIONS-IES.COM
EDD Type: PDF X Excel ___ Other _____
Site Location Name: KLUMAC RD
Site Location Physical Address: KLUMAC RD

Purchase Order No./Billing Reference 2011.0056
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 DIESEL/GRO	REMARKS	PRISM LAB ID NO.
34.5 E8	2/20/12	1100	SOIL	C	1	8oz	NONE	①	X - ANALYZE	21
34.5 E10	"	"	"	"	"	"	"	①	① - HOLD PENDING	22
34.5 E12	"	"	"	"	"	"	"	①	INITIAL ANALYSIS	23
34.5 W2	"	1120	"	"	"	"	"	X		24
34.5 W4	"	"	"	"	"	"	"	G	* HOLD ALL SAMPLES	25
34.5 W6	"	"	"	"	"	"	"	①	FOR POSSIBLE TCLP	26
34.5 W8	"	"	"	"	"	"	"	①		27
34.5 W10	"	"	"	"	"	"	"	①	* MDL = 0.29 mg/kg	28
34.5 W12	"	"	"	"	"	"	"	①		29
34.5 W14	"	"	"	"	"	"	"	①		30

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Sampler's Signature JAMES R TYLER | Sampled By (Print Name) JAMES TYLER | Affiliation SOLUTIONS

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James P. Tyler	Received By: (Signature)	2/20/12	1545
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Jean Cole	Date 2/24/12	1610

Method of Shipment: **NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.**

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____

COC Group No. 202443

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 4 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: KUMAC Rd

Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements

Invoice To: EMILY DAVIS

Address: SAME

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES Indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client Company Name: SOLUTIONS - IES

Report To/Contact Name: SHERI KNOX

Reporting Address: 2nd 1101 POWELL RD RALEIGH NC 27607

Phone: 919 873 1066 Fax (Yes) (No): _____

Email (Yes) (No) Email Address SKNOX@solutions-ies.com

EDD Type: PDF X Excel ___ Other _____

Site Location Name: KUMAC Rd

Site Location Physical Address: KUMAC Rd

Purchase Order No./Billing Reference 2011.0056

Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days

"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ___ SC ___ OTHER ___ N/A ___

Water Chlorinated: YES ___ NO ___

Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 - Dioxin	REMARKS	PRISM LAB ID NO.
34.0W 2	2/20/12	1140	Soil	C	1	8 oz	NONE	X	X - ANALYZE	31
34.0W 4								①	① - HOLD PENDING INITIAL ANALYSIS	32
34.0W 6								①		33
34.0W 8								①		34
34.0W 10								①	* HOLD ALL SAMPLES	35
34.0W 12								①	for possible TCLP	36
34.0E 2		1155						X		37
34.0E 4								①	* MDL = 0.29 ng/kg	38
34.0E 6								①		39
34.0E 8								①		40

Sampler's Signature James P. Tigh | Sampled By (Print Name) JAMES TIGHE | Affiliation SOLUTIONS

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Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James P. Tigh	Received By: (Signature)	2/20/12	1505
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Travis Cole	Date 2/20/12	1610

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____

COC Group No. 240443

Additional Comments:

PRISM USE ONLY

Site Arrival Time:

Site Departure Time:

Field Tech Fee:

Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 5 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: KUMAC RD

Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements

Invoice To: EMILY DAVIS

Address: SAME

Client Company Name: SOLUTIONS 1(C)

Report To/Contact Name: SHERI KNOX

Reporting Address: ZOH 1101 NOWELL RD RALEIGH NC

Phone: 919 873 1060 Fax (Yes) (No): _____

Email (Yes) (No) Email Address SKnox@solutions-1.com

EDD Type: PDF X Excel ___ Other _____

Site Location Name: KUMAC RD

Site Location Physical Address: KUMAC RD

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Purchase Order No./Billing Reference 201.0056

Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days

"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ___ SC ___ OTHER ___ N/A ___

Water Chlorinated: YES ___ NO ___

Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 DIELDRIN	REMARKS	PRISM LAB ID NO.
34.0 E 10	2/20/12	1155	SOIL	C	1	8 oz	NONE	①	X - ANALYZE	41
33.5 E 2		1215						X	① - HOLD PENDING	42
33.5 E 4								①✓	INITIAL ANALYSIS	43
33.5 E 6								①✓		44
33.5 E 8								⑥✓	* HOLD ALL SAMPLES	45
33.5 W 2		1225						X	FOR POSSIBLE TCLP	46
33.5 W 4								①		47
33.5 W 6								①	* MDL = 0.29 µg/kg	48
33.5 W 8								①		49
33.5 W 10								①		50

Sampler's Signature: James R Tuggle Sampled By (Print Name): JAMES R TUGGLE Affiliation: SOLUTIONS

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tuggle	Received By: (Signature)	2/24/12	1500
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Traci Cole	Date 2/24/12	1610

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____

COC Group No. 2024443

Additional Comments:

PRISM USE ONLY

Site Arrival Time:

Site Departure Time:

Field Tech Fee:

Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

ORIGINAL

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 6 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Kluttz Rd
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Emily Davis
Address: Same

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client Company Name: Solutions IQ
Report To/Contact Name: Sherri Knox
Reporting Address: 101 Nowell Rd Raleigh NC 27607
Phone: 919 873 1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address sknox@solutions-iq.com
EDD Type: PDF X Excel ___ Other _____
Site Location Name: Kluttz Rd
Site Location Physical Address: Kluttz Rd

Purchase Order No./Billing Reference 2011-0056
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 Dieldrin	REMARKS	PRISM LAB ID NO.
33.0 ED1	2/20/12	1245	Soil	C	1	8oz	None	X	X-Analyze	51
33.0 E2		1255						X	① - Hold pending	52
33.0 E4								①✓	initial analysis	53
33.0 E6								①✓		54
33.0 E8								①✓	* Hold all Samples	55
33.0 INVE10		1305						X	for possible TCLP	56
33.0 INVW10		1315						X		57
33.0 W2		1325						X	* MDL = 0.29 µg/kg	58
33.0 W4								①✓		59
33.0 W6								①✓		60

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Sampler's Signature James R Tyer | Sampled By (Print Name) James Tyer | Affiliation Solutions

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tyer	Received By: (Signature)	2/24/12	1515
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Travis Cole	Date 2/24/12	1620

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other _____
COC Group No. 262443

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 8 OF 7 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Kumac Rd
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: EMILY DAVIS
Address: SAME

Client Company Name: SOLUTIONS - IES
Report To/Contact Name: Staci Knox
Reporting Address: 1101 Nowell Rd
Raleigh NC
Phone: 919 873 1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address: Sknox@solutions-ies.com
EDD Type: PDF X Excel ___ Other ___
Site Location Name: Kumac Rd
Site Location Physical Address: Kumac Rd

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 Dieldrin	REMARKS	PRISM LAB ID NO.
33.0W8	2/20/12	1325	Soil	C	1	8oz	None	① ✓	X - Analyze	61
33.0WD1		1335						X	① - Hold pending	62
32.5WD1		1350						X	initial analysis	63
32.5W2		1355						X		64
32.5W4								①	* Hold all for	65
32.5W6								①	possible TCLP	66
32.5E2		1405						X		67
32.5E4								① ✓	* MDL = 0.29 µg/kg	68
32.5ED1		1415						X		69

Sampler's Signature: James R Tuyo Sampled By (Print Name): James Tuyo Affiliation: Solutions

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tuyo	Received By: (Signature)	2/24/12	1505
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Travis Cole	Date 2/24/12	1540

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other ___
COC Group No. 2020443

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

ORIGINAL

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Summary of Detections

02/24/2012

Order: 2020443

35.0 w4, w6,w8,w10,w12, w14
TCLP Dieldrin,TCLP 8 RCRA Metals,
Ignitability, Corrosivity, Reactivity

Prism ID	Client ID	Parameter	Method	Result		Units
2020443-08	DRAFT: 35.0 W2	Dieldrin				ug/kg dry
2020443-42	DRAFT: 33.5 E2	Dieldrin	8081B	1.4	J	ug/kg dry
2020443-52	DRAFT: 33.0 E2	Dieldrin	8081B	2.7	J	ug/kg dry
2020443-57	DRAFT: 33.0 INVW10	Dieldrin	8081B	1.7	J	ug/kg dry
2020443-58	DRAFT: 33.0 W2	Dieldrin	8081B	4.3		ug/kg dry
2020443-67	DRAFT: 32.5 E2	Dieldrin	8081B	1.4	J	ug/kg dry
2020443-69	DRAFT: 32.5 ED1	Dieldrin	8081B	1.3	J	ug/kg dry

33.5 e4,e6, e8

33.0 e4,e6,e8
TCLP Dieldrin,TCLP 8
RCRA Metals,
Ignitability, Corrosivity,
Reactivity

32.5e4

TCLP Dieldrin,TCLP 8
RCRA Metals,
Ignitability, Corrosivity,
Reactivity

33.0 w4,w6, w8
TCLP Dieldrin,TCLP 8
RCRA Metals, Ignitability,
Corrosivity, Reactivity

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Prism Laboratories, Inc.
PO BOX 240543
Charlotte, NC 28224

ATTENTION
Angie Overcash

PROJECT ID
2020443

LABORATORY REPORT NUMBER
212022701

DATE
03/01/2012

Primary Data Review By

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Avenue, Baton Rouge, LA 70820.**
- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**
- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 03/01/2012

GCAL Report 212022701

Deliver To Prism Laboratories, Inc.
PO BOX 240543
Charlotte, NC 28224
706-529-6364

Attn Angie Overcash

Project 2020443

CASE NARRATIVE

Client: Access Analytical **Report:** 212022701

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

No anomalies were found for the analyzed sample(s).

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

InterSign

Robyn Migues
Technical Director
GCAL REPORT 212022701

THIS REPORT CONTAINS 14 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21202270101	35.0 W2	Solid	02/20/2012 09:25	02/25/2012 09:50
21202270102	33.0 E2	Solid	02/20/2012 12:55	02/25/2012 09:50
21202270103	33.0 INVW10	Solid	02/20/2012 13:15	02/25/2012 09:50
21202270104	33.0 W2	Solid	02/20/2012 13:25	02/25/2012 09:50

Summary of Compounds Detected

There were no detects

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212022701-01	35.6 W2	Solid	02/20/2012 09:25	02/25/2012 09:50

SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475589	7.3.3.2	1	03/01/2012 11:05	AEL	475759

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475590	Sec 7.3.4.2	1	02/28/2012 13:30	JEM	475692

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212022701102	33.6 E2	Solid	02/20/2012 12:55	02/25/2012 09:50

SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475589	7.3.3.2	1	03/01/2012 11:08	AEL	475759

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475590	Sec 7.3.4.2	1	02/28/2012 13:30	JEM	475692

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212022701-03	33.0 INVW10	Solid	02/20/2012 13:15	02/25/2012 09:50

SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475589	7.3.3.2	1	03/01/2012 11:09	AEL	475759

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475590	Sec 7.3.4.2	1	02/28/2012 13:30	JEM	475692

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212022701-04	33.0 W2	Solid	02/20/2012 13:25	02/25/2012 09:50

SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475589	7.3.3.2	1	03/01/2012 11:10	AEL	475759

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
02/28/2012 07:30	475590	Sec 7.3.4.2	1	02/28/2012 13:30	JEM	475692

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

General Chemistry Quality Control Summary

Analytical Batch	475759	Client ID	MB475589		LCS475589		
Prep Batch	475589	GCAL ID	1036958		1036959		
Prep Method	7.3.3.2	Sample Type	Method Blank		LCS		
		Prep Date	02/28/2012 07:30		02/28/2012 07:30		
		Analytical Date	03/01/2012 11:01		03/01/2012 11:02		
		Matrix	Solid		Solid		
SW-846 9012A Reactivity CN		**Units**	mg/kg	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
57-12-5R	Reactivity Cyanide	250U	250	250	3.3	1.3	1 - 25

Analytical Batch	475759	Client ID	PORT ALLEN KOH SUMP	1036681DUP		
Prep Batch	475589	GCAL ID	21202242401	1036960		
Prep Method	7.3.3.2	Sample Type	SAMPLE	DUP		
		Prep Date	02/28/2012 07:30	02/28/2012 07:30		
		Analytical Date	03/01/2012 11:02	03/01/2012 11:03		
		Matrix	Solid	Solid		
SW-846 9012A Reactivity CN		**Units**	mg/kg	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
57-12-5R	Reactivity Cyanide	0.0	250	0.0	0.0	25

General Chemistry Quality Control Summary

Analytical Batch 475692	**Client ID**	MB475590			LCS475590		
Prep Batch 475590	**GCAL ID**	1036961			1036962		
Prep Method Sec 7.3.4.2	**Sample Type**	Method Blank			LCS		
	Prep Date	02/28/2012 07:30			02/28/2012 07:30		
	Analytical Date	02/28/2012 13:30			02/28/2012 13:30		
	Matrix	Solid			Solid		
SW-846 9034 Reactivity Sulfide	**Units**	**Result**	mg/kg **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
18496-25-8R Reactivity Sulfide		80U	80	721	481	66.7	20 - 114

Analytical Batch 475692	**Client ID**	PORT ALLEN KOH SUMP		1036681DUP		
Prep Batch 475590	**GCAL ID**	21202242401		1036963		
Prep Method Sec 7.3.4.2	**Sample Type**	SAMPLE		DUP		
	Prep Date	02/28/2012 07:30		02/28/2012 07:30		
	Analytical Date	02/28/2012 13:30		02/28/2012 13:30		
	Matrix	Solid		Solid		
SW-846 9034 Reactivity Sulfide	**Units**	**Result**	mg/kg **RDL**	**Result**	**RPD**	**RPD Limit**
18496-25-8R Reactivity Sulfide		0	80	0	0	25

Access/45605/212022701/ 3/2/12

SUBCONTRACT ORDER

Prism Laboratories, Inc.

2020443

SENDING LABORATORY:

Prism Laboratories, Inc.
P. O. Box 240543
Charlotte, NC 28224-0543
Phone: 800-529-6364
Fax: 704-525-0409
Project Manager: Angela D. Overcash

RECEIVING LABORATORY:

Gulf Coast Analytical Labs, Inc.
7979 GSRI Avenue
Baton Rouge, LA 70820
Phone :(225) 769-4900
Fax: (225) 767-5717

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 2020443-08	**Solid**	**Sampled:02/20/12 09:25**	350102	1
Reactivity, Sulfide (Sub)		02/27/12 09:25		
Reactivity, Cyanide (Sub)		03/05/12 09:25		
Containers Supplied:				
2 oz jar				
Sample ID: 2020443-52	**Solid**	**Sampled:02/20/12 12:55**	350102	2
Reactivity, Sulfide (Sub)		02/27/12 12:55		
Reactivity, Cyanide (Sub)		03/05/12 12:55		
Containers Supplied:				
u				
Sample ID: 2020443-57	**Solid**	**Sampled:02/20/12 13:15**	350102	3
Reactivity, Sulfide (Sub)		02/27/12 13:15		
Reactivity, Cyanide (Sub)		03/05/12 13:15		
Containers Supplied:				
u				
Sample ID: 2020443-58	**Solid**	**Sampled:02/20/12 13:25**	350102	4
Reactivity, Sulfide (Sub)		02/27/12 13:25		
Reactivity, Cyanide (Sub)		03/05/12 13:25		
Containers Supplied:				
u				

2.4

Travis Cole	2.24.12	FEDEX	2.24.12
Released By	Date	Received By	Date
FEDEX	2/24/12 0950		02/25/12 0950
Released By	Date	Received By	Date

7932 6986 9142

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

SAMPLE RECEIVING CHECKLIST

Workorder: 212022701

Client: 4565 - Access Analytical

Profile: 80251 - Prism Lab

Line Item: 2 - Solid

Received by: Saucier, Charlotte

Received Date/Time: 2/25/2012 9:50:00 AM

Samples Received via: FEDEX

Number of Coolers Received: 1

Cooler tracking numbers(s): 7932 6936 9142

Cooler temperature(s): 2.4

Were all coolers received at a temperature of 0 - 6° C?	☑ Yes	☐ No	☐ N/A
Were all custody seals intact?	☑ Yes	☐ No	☐ N/A
Were all samples received in proper containers?	☑ Yes	☐ No	☐ N/A
Were all samples properly preserved?	☑ Yes	☐ No	☐ N/A
Was preservative added to any container at the lab?	☐ Yes	☑ No	☐ N/A
Were all containers received in good condition?	☑ Yes	☐ No	☐ N/A
Were all VOA vials received with no head space?	☐ Yes	☐ No	☑ N/A
Do all sample labels match the Chain of Custody?	☑ Yes	☐ No	☐ N/A
Did the Chain of Custody list the sampling technician?	☐ Yes	☑ No	☐ N/A
Was the client notified about any discrepancies?	☐ Yes	☐ No	☑ N/A

Notes/Comments:

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert No. 37735
VA Certification No. 1287

Case Narrative

03/12/2012

Solutions-IES, Inc.
Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Lab Submittal Date: 02/21/2012
Prism Work Order: 2020467

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Narrative Notes:

Reactivity analysis was subcontracted to Gulf Coast Analytical Labs (GCAL). Laboratory report is attached.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.

VP Laboratory Services

Peggy J Kendall

Reviewed By

Data Qualifiers Key Reference:

A	Quantitated RPD value measured between the primary and the conformational column exceeded method acceptance limits of <40.
Aa	Taken off Hold after expiration date.
HT	Sample received and analyzed outside of the hold time.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

Sample Receipt Summary

03/12/2012

Prism Work Order: 2020467

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
32.0 W2	2020467-01	Solid	02/20/12	02/21/12
31.5 W1	2020467-03	Solid	02/20/12	02/21/12
31.5 WD1	2020467-05	Solid	02/20/12	02/21/12
31.0 WD1	2020467-07	Solid	02/20/12	02/21/12
31.0 W1	2020467-09	Solid	02/20/12	02/21/12
31.0 W2	2020467-10	Solid	02/20/12	02/21/12
29.0 INV4	2020467-11	Solid	02/21/12	02/21/12
29.5 INV4	2020467-12	Solid	02/21/12	02/21/12
31.5 ED1	2020467-13	Solid	02/21/12	02/21/12
32.0 ED1.5	2020467-15	Solid	02/21/12	02/21/12
32.0 ED2.5	2020467-16	Solid	02/21/12	02/21/12
30.5 WD1.5	2020467-17	Solid	02/21/12	02/21/12
30.0 WD1.5	2020467-18	Solid	02/21/12	02/21/12
32.0 ED1	2020467-19	Solid	02/21/12	02/21/12
31.0 ED1	2020467-20	Solid	02/21/12	02/21/12
30.5 ED1.5	2020467-22	Solid	02/21/12	02/21/12
30.0 ED1.5	2020467-23	Solid	02/21/12	02/21/12

Samples received in good condition at 0.3 degrees C unless otherwise noted.

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Summary of Detections

03/12/2012

Prism Work Order: 2020467

Prism ID	Client ID	Parameter	Method	Result		Units
2020467-01	32.0 W2	Dieldrin	8081B	0.44	J	ug/kg dry
2020467-03	31.5 W1	Dieldrin	8081B	0.42	J	ug/kg dry
2020467-09	31.0 W1	Dieldrin	8081B	5.5	A	ug/kg dry
2020467-15	32.0 ED1.5	Dieldrin	8081B	2.5		ug/kg dry
2020467-20	31.0 ED1	Dieldrin	8081B	0.64	J	ug/kg dry
2020467-22	30.5 ED1.5	Corrosivity-pH	*9045D	9.9	HT	pH Units
2020467-22	30.5 ED1.5	Dieldrin	8081B	33		ug/kg dry
2020467-23	30.0 ED1.5	Corrosivity-pH	*9045D	9.6	HT	pH Units
2020467-23	30.0 ED1.5	Dieldrin	8081B	120		ug/kg dry

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 32.0 W2
Prism Sample ID: 2020467-01
Prism Work Order: 2020467
Time Collected: 02/20/12 15:20
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**75.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.44 J**	**ug/kg dry**	**1.3**	**0.24**	**1**	**8081B**	**2/24/12 1:04**	**JMV**	**P2B0434**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*97 %*	*26-204*
Tetrachloro-m-xylene	*81 %*	*40-162*

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.5 W1
Prism Sample ID: 2020467-03
Prism Work Order: 2020467
Time Collected: 02/20/12 15:25
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**79.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.42 J**	**ug/kg dry**	**1.2**	**0.23**	**1**	**8081B**	**2/24/12 1:46**	**JMV**	**P2B0434**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*89 %*	*26-204*
Tetrachloro-m-xylene	*77 %*	*40-162*

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Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.5 WD1
Prism Sample ID: 2020467-05
Prism Work Order: 2020467
Time Collected: 02/20/12 15:30
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**76.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.24	1	8081B	2/24/12 2:28	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*106 %*	*26-204*
Tetrachloro-m-xylene	*91 %*	*40-162*

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Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.0 WD1
Prism Sample ID: 2020467-07
Prism Work Order: 2020467
Time Collected: 02/20/12 15:40
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**75.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.25	1	8081B	2/24/12 3:09	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*84 %*	*26-204*
Tetrachloro-m-xylene	*78 %*	*40-162*

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Attn: Sheri Knox
1101 Nowell Road
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Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.0 W1
Prism Sample ID: 2020467-09
Prism Work Order: 2020467
Time Collected: 02/20/12 15:45
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**69.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**5.5 A**	**ug/kg dry**	**1.4**	**0.26**	**1**	**8081B**	**2/24/12 3:51**	**JMV**	**P2B0434**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*87 %*	*26-204*
Tetrachloro-m-xylene	*92 %*	*40-162*

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Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.0 W2
Prism Sample ID: 2020467-10
Prism Work Order: 2020467
Time Collected: 02/20/12 15:45
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**72.2 Aa**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/28/12 14:30**	**JAB**	**P2B0549**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.25	1	8081B	3/3/12 15:42	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*121 %*	*26-204*
Tetrachloro-m-xylene	*67 %*	*40-162*

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Attn: Sheri Knox
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Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 29.0 INV4
Prism Sample ID: 2020467-11
Prism Work Order: 2020467
Time Collected: 02/21/12 09:30
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**76.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.24	1	8081B	2/24/12 4:33	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*88 %*	*26-204*
Tetrachloro-m-xylene	*88 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 29.5 INV4
Prism Sample ID: 2020467-12
Prism Work Order: 2020467
Time Collected: 02/21/12 09:50
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**73.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.25	1	8081B	2/24/12 5:15	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*118 %*	*26-204*
Tetrachloro-m-xylene	*96 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.5 ED1
Prism Sample ID: 2020467-13
Prism Work Order: 2020467
Time Collected: 02/21/12 10:00
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**75.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.24	1	8081B	2/24/12 5:56	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*94 %*	*26-204*
Tetrachloro-m-xylene	*98 %*	*40-162*

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 32.0 ED1.5
Prism Sample ID: 2020467-15
Prism Work Order: 2020467
Time Collected: 02/21/12 10:20
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**71.8**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**2.5**	**ug/kg dry**	**1.4**	**0.25**	**1**	**8081B**	**2/24/12 8:02**	**JMV**	**P2B0434**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*101 %*	*26-204*
Tetrachloro-m-xylene	*94 %*	*40-162*

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 32.0 ED2.5
Prism Sample ID: 2020467-16
Prism Work Order: 2020467
Time Collected: 02/21/12 10:20
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**72.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/28/12 14:30**	**JAB**	**P2B0549**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.4	0.26	1	8081B	3/3/12 16:24	JMV	P2C0006

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*111 %*	*26-204*
Tetrachloro-m-xylene	*86 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 30.5 WD1.5
Prism Sample ID: 2020467-17
Prism Work Order: 2020467
Time Collected: 02/21/12 10:35
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**78.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.24	1	8081B	2/24/12 8:43	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*100 %*	*26-204*
Tetrachloro-m-xylene	*95 %*	*40-162*

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 30.0 WD1.5
Prism Sample ID: 2020467-18
Prism Work Order: 2020467
Time Collected: 02/21/12 10:40
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**77.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.24	1	8081B	2/24/12 9:25	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*104 %*	*26-204*
Tetrachloro-m-xylene	*106 %*	*40-162*

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 32.0 ED1
Prism Sample ID: 2020467-19
Prism Work Order: 2020467
Time Collected: 02/21/12 10:50
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**77.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/kg dry	1.3	0.24	1	8081B	2/24/12 10:07	JMV	P2B0434

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*106 %*	*26-204*
Tetrachloro-m-xylene	*95 %*	*40-162*

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 31.0 ED1
Prism Sample ID: 2020467-20
Prism Work Order: 2020467
Time Collected: 02/21/12 11:00
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**76.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Organochlorine Pesticides by GC/ECD									
Dieldrin	**0.64 J**	**ug/kg dry**	**1.3**	**0.24**	**1**	**8081B**	**2/24/12 10:49**	**JMV**	**P2B0434**

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*102 %*	*26-204*
Tetrachloro-m-xylene	*101 %*	*40-162*

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Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 30.5 ED1.5
Prism Sample ID: 2020467-22
Prism Work Order: 2020467
Time Collected: 02/21/12 11:05
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**87.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Corrosivity-pH	**9.9 HT**	**pH Units**			**1**	***9045D**	**3/1/12 11:35**	**JAB**	**P2C0022**
Ignitability	Pass	mm/sec	0.10		1	*1030	3/5/12 14:00	JAB	P2C0078
Organochlorine Pesticides by GC/ECD									
Dieldrin	**33**	**ug/kg dry**	**1.1**	**0.21**	**1**	**8081B**	**2/24/12 11:31**	**JMV**	**P2B0434**
			Surrogate			Recovery		Control Limits	
			Decachlorobiphenyl			*104 %*		*26-204*	
			Tetrachloro-m-xylene			*89 %*		*40-162*	
TCLP Extraction by EPA 1311									
TCLP Extraction	Complete	N/A			1	*1311	3/2/12 9:30	MEH	P2C0037
TCLP Metals									
Mercury	BRL	mg/L	0.010	0.000014	1	*7470A	3/5/12 14:52	BGM	P2C0068
Arsenic	BRL	mg/L	0.050	0.010	1	*6010C	3/5/12 17:50	BGM	P2C0072
Barium	BRL	mg/L	5.0	0.013	1	*6010C	3/5/12 17:50	BGM	P2C0072
Cadmium	BRL	mg/L	0.025	0.00043	1	*6010C	3/5/12 17:50	BGM	P2C0072
Chromium	BRL	mg/L	0.25	0.00085	1	*6010C	3/5/12 17:50	BGM	P2C0072
Lead	BRL	mg/L	0.050	0.0038	1	*6010C	3/5/12 17:50	BGM	P2C0072
Selenium	BRL	mg/L	0.10	0.012	1	*6010C	3/5/12 17:50	BGM	P2C0072
Silver	BRL	mg/L	0.25	0.0017	1	*6010C	3/5/12 17:50	BGM	P2C0072
TCLP Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/L	0.50	0.0084	1	*8081B	3/3/12 22:40	JMV	P2C0046
			Surrogate			Recovery		Control Limits	
			Decachlorobiphenyl			*120 %*		*13-186*	
			Tetrachloro-m-xylene			*101 %*		*40-134*	

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Sample Matrix: Solid

Client Sample ID: 30.0 ED1.5
Prism Sample ID: 2020467-23
Prism Work Order: 2020467
Time Collected: 02/21/12 11:15
Time Submitted: 02/21/12 15:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
% Solids	**88.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**2/23/12 15:30**	**JAB**	**P2B0456**
Corrosivity-pH	**9.6 HT**	**pH Units**			**1**	***9045D**	**3/1/12 11:35**	**JAB**	**P2C0022**
Ignitability	Pass	mm/sec	0.10		1	*1030	3/5/12 14:00	JAB	P2C0078
Organochlorine Pesticides by GC/ECD									
Dieldrin	**120**	**ug/kg dry**	**11**	**2.1**	**10**	**8081B**	**2/28/12 9:04**	**JMV**	**P2B0434**
			Surrogate			Recovery		Control Limits	
			Decachlorobiphenyl			*94 %*		*26-204*	
			Tetrachloro-m-xylene			*90 %*		*40-162*	
TCLP Extraction by EPA 1311									
TCLP Extraction	Complete	N/A			1	*1311	3/2/12 9:30	MEH	P2C0037
TCLP Metals									
Mercury	BRL	mg/L	0.010	0.000014	1	*7470A	3/5/12 14:56	BGM	P2C0068
Arsenic	BRL	mg/L	0.050	0.010	1	*6010C	3/5/12 18:14	BGM	P2C0072
Barium	BRL	mg/L	5.0	0.013	1	*6010C	3/5/12 18:14	BGM	P2C0072
Cadmium	BRL	mg/L	0.025	0.00043	1	*6010C	3/5/12 18:14	BGM	P2C0072
Chromium	BRL	mg/L	0.25	0.00085	1	*6010C	3/5/12 18:14	BGM	P2C0072
Lead	BRL	mg/L	0.050	0.0038	1	*6010C	3/5/12 18:14	BGM	P2C0072
Selenium	BRL	mg/L	0.10	0.012	1	*6010C	3/5/12 18:14	BGM	P2C0072
Silver	BRL	mg/L	0.25	0.0017	1	*6010C	3/5/12 18:14	BGM	P2C0072
TCLP Organochlorine Pesticides by GC/ECD									
Dieldrin	BRL	ug/L	0.50	0.0084	1	*8081B	3/3/12 23:22	JMV	P2C0046
			Surrogate			Recovery		Control Limits	
			Decachlorobiphenyl			*115 %*		*13-186*	
			Tetrachloro-m-xylene			*96 %*		*40-134*	

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Prism Work Order: 2020467
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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0434 - 3550C GC										
Blank (P2B0434-BLK1)				Prepared & Analyzed: 02/23/12						
Dieldrin	BRL	1.0	ug/kg wet							
Surrogate: Decachlorobiphenyl	*16.2*		*ug/kg wet*	*16.67*		*97*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*16.8*		*ug/kg wet*	*16.67*		*101*	*40-162*			
LCS (P2B0434-BS1)				Prepared & Analyzed: 02/23/12						
4,4'-DDD	13.9	1.0	ug/kg wet	16.61		84	72-142			
4,4'-DDE	15.8	1.0	ug/kg wet	16.61		95	74-129			
4,4'-DDT	18.4	1.5	ug/kg wet	16.61		111	75-141			
Aldrin	16.4	1.0	ug/kg wet	16.61		99	66-132			
alpha-BHC	16.3	1.0	ug/kg wet	16.61		98	72-126			
cis-Chlordane	16.8	1.0	ug/kg wet	16.61		101	71-132			
beta-BHC	15.9	1.0	ug/kg wet	16.61		96	79-134			
Chlordane	BRL	25	ug/kg wet				50-150			
delta-BHC	16.8	1.0	ug/kg wet	16.61		101	74-132			
Dieldrin	16.1	1.0	ug/kg wet	16.61		97	72-136			
Endosulfan I	16.1	1.0	ug/kg wet	16.61		97	74-134			
Endosulfan II	16.1	1.0	ug/kg wet	16.61		97	79-134			
Endosulfan Sulfate	14.6	1.0	ug/kg wet	16.61		88	73-147			
Endrin	17.1	1.0	ug/kg wet	16.61		103	74-147			
Endrin Aldehyde	13.9	1.0	ug/kg wet	16.61		84	73-138			
Endrin Ketone	14.8	1.0	ug/kg wet	16.61		89	84-135			
gamma-BHC	15.9	1.0	ug/kg wet	16.61		96	71-129			
trans-Chlordane	16.8	1.0	ug/kg wet	16.61		101	71-132			
Heptachlor	13.6	1.0	ug/kg wet	16.61		82	72-134			
Heptachlor Epoxide	16.6	1.0	ug/kg wet	16.61		100	73-132			
Methoxychlor	16.6	1.0	ug/kg wet	16.61		100	91-138			
Toxaphene	BRL	25	ug/kg wet				50-150			
Surrogate: Decachlorobiphenyl	*16.3*		*ug/kg wet*	*16.61*		*98*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*16.3*		*ug/kg wet*	*16.61*		*98*	*40-162*			

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0434 - 3550C GC										
LCS Dup (P2B0434-BSD1)				Prepared & Analyzed: 02/23/12						
4,4'-DDD	14.1	0.99	ug/kg wet	16.54		85	72-142	0.8	200	
4,4'-DDE	16.2	0.99	ug/kg wet	16.54		98	74-129	3	200	
4,4'-DDT	19.5	1.5	ug/kg wet	16.54		118	75-141	6	200	
Aldrin	16.9	0.99	ug/kg wet	16.54		102	66-132	3	200	
alpha-BHC	16.7	0.99	ug/kg wet	16.54		101	72-126	3	200	
cis-Chlordane	17.4	0.99	ug/kg wet	16.54		105	71-132	3	200	
beta-BHC	16.5	0.99	ug/kg wet	16.54		100	79-134	4	200	
Chlordane	BRL	25	ug/kg wet				50-150		200	
delta-BHC	17.4	0.99	ug/kg wet	16.54		105	74-132	3	200	
Dieldrin	16.7	0.99	ug/kg wet	16.54		101	72-136	4	200	
Endosulfan I	16.7	0.99	ug/kg wet	16.54		101	74-134	4	200	
Endosulfan II	16.5	0.99	ug/kg wet	16.54		100	79-134	3	200	
Endosulfan Sulfate	15.4	0.99	ug/kg wet	16.54		93	73-147	5	200	
Endrin	17.4	0.99	ug/kg wet	16.54		105	74-147	2	200	
Endrin Aldehyde	13.9	0.99	ug/kg wet	16.54		84	73-138	0.4	200	
Endrin Ketone	15.4	0.99	ug/kg wet	16.54		93	84-135	4	200	
gamma-BHC	16.4	0.99	ug/kg wet	16.54		99	71-129	3	200	
trans-Chlordane	17.4	0.99	ug/kg wet	16.54		105	71-132	3	200	
Heptachlor	14.1	0.99	ug/kg wet	16.54		85	72-134	3	200	
Heptachlor Epoxide	17.0	0.99	ug/kg wet	16.54		103	73-132	3	200	
Methoxychlor	16.4	0.99	ug/kg wet	16.54		99	91-138	1	200	
Toxaphene	BRL	25	ug/kg wet				50-150		200	
Surrogate: Decachlorobiphenyl	*17.2*		*ug/kg wet*	*16.54*		*104*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*15.9*		*ug/kg wet*	*16.54*		*96*	*40-162*			
Matrix Spike (P2B0434-MS1)	**Source: 2020467-05**			Prepared & Analyzed: 02/23/12						
4,4'-DDD	17.5	1.3	ug/kg dry	21.66	0.648	78	57-152			
4,4'-DDE	19.9	1.3	ug/kg dry	21.66	1.51	85	61-143			
4,4'-DDT	20.4	1.9	ug/kg dry	21.66	5.62	68	56-163			
Aldrin	20.6	1.3	ug/kg dry	21.66	1.95	86	57-137			
alpha-BHC	21.4	1.3	ug/kg dry	21.66	0.865	95	62-134			
cis-Chlordane	20.6	1.3	ug/kg dry	21.66	BRL	95	59-138			
beta-BHC	20.8	1.3	ug/kg dry	21.66	0.432	94	67-144			
Chlordane	BRL	32	ug/kg dry		BRL		50-150			
delta-BHC	21.7	1.3	ug/kg dry	21.66	0.865	96	70-138			
Dieldrin	19.9	1.3	ug/kg dry	21.66	BRL	92	60-141			
Endosulfan I	20.1	1.3	ug/kg dry	21.66	0.432	91	66-137			
Endosulfan II	20.1	1.3	ug/kg dry	21.66	0.432	91	70-141			
Endosulfan Sulfate	28.4	1.3	ug/kg dry	21.66	8.21	93	65-153			
Endrin	27.7	1.3	ug/kg dry	21.66	5.62	102	65-164			
Endrin Aldehyde	18.4	1.3	ug/kg dry	21.66	BRL	85	63-147			
Endrin Ketone	22.1	1.3	ug/kg dry	21.66	1.95	93	65-152			
gamma-BHC	20.6	1.3	ug/kg dry	21.66	0.648	92	62-137			
trans-Chlordane	20.8	1.3	ug/kg dry	21.66	BRL	96	59-139			
Heptachlor	18.4	1.3	ug/kg dry	21.66	0.648	82	63-142			
Heptachlor Epoxide	21.4	1.3	ug/kg dry	21.66	BRL	99	63-136			
Methoxychlor	27.7	1.3	ug/kg dry	21.66	5.19	104	60-179			

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0434 - 3550C GC										
Matrix Spike (P2B0434-MS1)	**Source: 2020467-05**			Prepared & Analyzed: 02/23/12						
Toxaphene	BRL	32	ug/kg dry		BRL		50-150			
Surrogate: Decachlorobiphenyl	*22.7*		*ug/kg dry*	*21.66*		*105*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*20.6*		*ug/kg dry*	*21.66*		*95*	*40-162*			
Matrix Spike Dup (P2B0434-MSD1)	**Source: 2020467-05**			Prepared: 02/23/12 Analyzed: 02/24/12						
4,4'-DDD	18.4	1.3	ug/kg dry	21.60	0.648	82	57-152	5	29	
4,4'-DDE	20.7	1.3	ug/kg dry	21.60	1.51	89	61-143	4	36	
4,4'-DDT	21.4	1.9	ug/kg dry	21.60	5.62	73	56-163	5	38	
Aldrin	21.2	1.3	ug/kg dry	21.60	1.95	89	57-137	3	29	
alpha-BHC	21.6	1.3	ug/kg dry	21.60	0.865	96	62-134	0.7	24	
cis-Chlordane	21.2	1.3	ug/kg dry	21.60	BRL	98	59-138	3	25	
beta-BHC	21.6	1.3	ug/kg dry	21.60	0.432	98	67-144	4	17	
Chlordane	BRL	32	ug/kg dry		BRL		50-150		60	
delta-BHC	22.5	1.3	ug/kg dry	21.60	0.865	100	70-138	4	18	
Dieldrin	20.7	1.3	ug/kg dry	21.60	BRL	96	60-141	4	30	
Endosulfan I	21.0	1.3	ug/kg dry	21.60	0.432	95	66-137	4	32	
Endosulfan II	21.0	1.3	ug/kg dry	21.60	0.432	95	70-141	4	20	
Endosulfan Sulfate	30.2	1.3	ug/kg dry	21.60	8.21	102	65-153	6	24	
Endrin	28.5	1.3	ug/kg dry	21.60	5.62	106	65-164	3	21	
Endrin Aldehyde	19.0	1.3	ug/kg dry	21.60	BRL	88	63-147	3	35	
Endrin Ketone	23.1	1.3	ug/kg dry	21.60	1.95	98	65-152	4	18	
gamma-BHC	21.2	1.3	ug/kg dry	21.60	0.648	95	62-137	3	22	
trans-Chlordane	21.4	1.3	ug/kg dry	21.60	BRL	99	59-139	3	27	
Heptachlor	19.9	1.3	ug/kg dry	21.60	0.648	89	63-142	8	27	
Heptachlor Epoxide	21.8	1.3	ug/kg dry	21.60	BRL	101	63-136	2	18	
Methoxychlor	29.8	1.3	ug/kg dry	21.60	5.19	114	60-179	7	30	
Toxaphene	BRL	32	ug/kg dry		BRL		50-150		60	
Surrogate: Decachlorobiphenyl	*25.3*		*ug/kg dry*	*21.60*		*117*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*21.2*		*ug/kg dry*	*21.60*		*98*	*40-162*			

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0006 - 3550C GC										
Blank (P2C0006-BLK1)				Prepared: 03/01/12 Analyzed: 03/02/12						
Dieldrin	BRL	1.0	ug/kg wet							
Surrogate: Decachlorobiphenyl	*17.7*		*ug/kg wet*	*16.73*		*106*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*16.1*		*ug/kg wet*	*16.73*		*96*	*40-162*			
LCS (P2C0006-BS1)				Prepared: 03/01/12 Analyzed: 03/02/12						
4,4'-DDD	15.6	1.0	ug/kg wet	16.76		93	72-142			
4,4'-DDE	17.4	1.0	ug/kg wet	16.76		104	74-129			
4,4'-DDT	16.1	1.5	ug/kg wet	16.76		96	75-141			
Aldrin	17.4	1.0	ug/kg wet	16.76		104	66-132			
alpha-BHC	17.3	1.0	ug/kg wet	16.76		103	72-126			
cis-Chlordane	17.4	1.0	ug/kg wet	16.76		104	71-132			
beta-BHC	16.4	1.0	ug/kg wet	16.76		98	79-134			
Chlordane	BRL	25	ug/kg wet				50-150			
delta-BHC	17.8	1.0	ug/kg wet	16.76		106	74-132			
Dieldrin	16.6	1.0	ug/kg wet	16.76		99	72-136			
Endosulfan I	16.8	1.0	ug/kg wet	16.76		100	74-134			
Endosulfan II	16.9	1.0	ug/kg wet	16.76		101	79-134			
Endosulfan Sulfate	16.1	1.0	ug/kg wet	16.76		96	73-147			
Endrin	16.9	1.0	ug/kg wet	16.76		101	74-147			
Endrin Aldehyde	14.4	1.0	ug/kg wet	16.76		86	73-138			
Endrin Ketone	16.9	1.0	ug/kg wet	16.76		101	84-135			
gamma-BHC	16.6	1.0	ug/kg wet	16.76		99	71-129			
trans-Chlordane	17.3	1.0	ug/kg wet	16.76		103	71-132			
Heptachlor	14.8	1.0	ug/kg wet	16.76		88	72-134			
Heptachlor Epoxide	16.6	1.0	ug/kg wet	16.76		99	73-132			
Methoxychlor	17.4	1.0	ug/kg wet	16.76		104	91-138			
Toxaphene	BRL	25	ug/kg wet				50-150			
Surrogate: Decachlorobiphenyl	*17.9*		*ug/kg wet*	*16.76*		*107*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*16.4*		*ug/kg wet*	*16.76*		*98*	*40-162*			

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Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0006 - 3550C GC										
LCS Dup (P2C0006-BSD1)				Prepared: 03/01/12 Analyzed: 03/03/12						
4,4'-DDD	17.1	1.0	ug/kg wet	16.76		102	72-142	9	200	
4,4'-DDE	19.3	1.0	ug/kg wet	16.76		115	74-129	10	200	
4,4'-DDT	17.8	1.5	ug/kg wet	16.76		106	75-141	10	200	
Aldrin	19.1	1.0	ug/kg wet	16.76		114	66-132	9	200	
alpha-BHC	18.6	1.0	ug/kg wet	16.76		111	72-126	7	200	
cis-Chlordane	19.3	1.0	ug/kg wet	16.76		115	71-132	10	200	
beta-BHC	17.8	1.0	ug/kg wet	16.76		106	79-134	8	200	
Chlordane	BRL	25	ug/kg wet				50-150		200	
delta-BHC	19.1	1.0	ug/kg wet	16.76		114	74-132	7	200	
Dieldrin	18.3	1.0	ug/kg wet	16.76		109	72-136	10	200	
Endosulfan I	18.6	1.0	ug/kg wet	16.76		111	74-134	10	200	
Endosulfan II	18.6	1.0	ug/kg wet	16.76		111	79-134	9	200	
Endosulfan Sulfate	17.8	1.0	ug/kg wet	16.76		106	73-147	10	200	
Endrin	18.6	1.0	ug/kg wet	16.76		111	74-147	9	200	
Endrin Aldehyde	15.4	1.0	ug/kg wet	16.76		92	73-138	7	200	
Endrin Ketone	18.3	1.0	ug/kg wet	16.76		109	84-135	8	200	
gamma-BHC	17.9	1.0	ug/kg wet	16.76		107	71-129	8	200	
trans-Chlordane	19.3	1.0	ug/kg wet	16.76		115	71-132	11	200	
Heptachlor	15.9	1.0	ug/kg wet	16.76		95	72-134	8	200	
Heptachlor Epoxide	18.4	1.0	ug/kg wet	16.76		110	73-132	10	200	
Methoxychlor	18.9	1.0	ug/kg wet	16.76		113	91-138	8	200	
Toxaphene	BRL	25	ug/kg wet				50-150		200	
Surrogate: Decachlorobiphenyl	*18.3*		*ug/kg wet*	*16.76*		*109*	*26-204*			
Surrogate: Tetrachloro-m-xylene	*17.3*		*ug/kg wet*	*16.76*		*103*	*40-162*			

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Prism Work Order: 2020467
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TCLP Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0046 - 3510C GC										
Blank (P2C0046-BLK1)				Prepared: 03/02/12 Analyzed: 03/03/12						
Dieldrin	BRL	0.50	ug/L							
Surrogate: Decachlorobiphenyl	*5.55*		*ug/L*	*5.000*		*111*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.85*		*ug/L*	*5.000*		*97*	*40-134*			
LCS (P2C0046-BS1)				Prepared: 03/02/12 Analyzed: 03/03/12						
Dieldrin	5.40	0.50	ug/L	5.000		108	69-130			
Surrogate: Decachlorobiphenyl	*5.50*		*ug/L*	*5.000*		*110*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.65*		*ug/L*	*5.000*		*93*	*40-134*			
LCS Dup (P2C0046-BSD1)				Prepared: 03/02/12 Analyzed: 03/03/12						
Dieldrin	5.40	0.50	ug/L	5.000		108	69-130	0	200	
Surrogate: Decachlorobiphenyl	*5.35*		*ug/L*	*5.000*		*107*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.75*		*ug/L*	*5.000*		*95*	*40-134*			
Matrix Spike (P2C0046-MS1)	**Source: 2020467-22**			Prepared: 03/02/12 Analyzed: 03/03/12						
Dieldrin	5.80	0.50	ug/L	5.000	0.300	110	27-148			
Surrogate: Decachlorobiphenyl	*5.55*		*ug/L*	*5.000*		*111*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*5.25*		*ug/L*	*5.000*		*105*	*40-134*			
Matrix Spike Dup (P2C0046-MSD1)	**Source: 2020467-22**			Prepared: 03/02/12 Analyzed: 03/03/12						
Dieldrin	5.40	0.50	ug/L	5.000	0.300	102	27-148	7	28	
Surrogate: Decachlorobiphenyl	*5.20*		*ug/L*	*5.000*		*104*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*4.60*		*ug/L*	*5.000*		*92*	*40-134*			

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Time Submitted: 2/21/2012 3:00:00PM

TCLP Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0068 - 7470A										
Blank (P2C0068-BLK1)				Prepared & Analyzed: 03/05/12						
Mercury	BRL	0.010	mg/L							
LCS (P2C0068-BS1)				Prepared & Analyzed: 03/05/12						
Mercury	0.00960	0.010	mg/L	0.009375		102	80-120			
Batch P2C0072 - 3010A										
Blank (P2C0072-BLK1)				Prepared & Analyzed: 03/05/12						
Arsenic	BRL	0.050	mg/L							
Barium	BRL	5.0	mg/L							
Cadmium	BRL	0.025	mg/L							
Chromium	BRL	0.25	mg/L							
Lead	BRL	0.050	mg/L							
Selenium	BRL	0.10	mg/L							
Silver	BRL	0.25	mg/L							
LCS (P2C0072-BS1)				Prepared & Analyzed: 03/05/12						
Arsenic	1.22	0.050	mg/L	1.250		98	80-120			
Barium	1.12	5.0	mg/L	1.250		90	80-120			
Cadmium	1.18	0.025	mg/L	1.250		94	80-120			
Chromium	1.17	0.25	mg/L	1.250		94	80-120			
Lead	1.14	0.050	mg/L	1.250		91	80-120			
Selenium	1.27	0.10	mg/L	1.250		102	80-120			
Silver	1.15	0.25	mg/L	1.250		92	80-120			
Matrix Spike (P2C0072-MS1)		**Source: 2020467-22**		Prepared & Analyzed: 03/05/12						
Arsenic	1.26	0.050	mg/L	1.250	BRL	101	75-125			
Barium	1.22	5.0	mg/L	1.250	0.116	88	75-125			
Cadmium	1.19	0.025	mg/L	1.250	BRL	95	75-125			
Chromium	1.23	0.25	mg/L	1.250	0.0233	96	75-125			
Lead	1.16	0.050	mg/L	1.250	0.00734	92	75-125			
Selenium	1.36	0.10	mg/L	1.250	0.0597	104	75-125			
Silver	1.15	0.25	mg/L	1.250	BRL	92	75-125			

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Prism Work Order: 2020467
Time Submitted: 2/21/2012 3:00:00PM

TCLP Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2C0072 - 3010A										
Matrix Spike Dup (P2C0072-MSD1)	**Source: 2020467-22**			Prepared & Analyzed: 03/05/12						
Arsenic	1.21	0.050	mg/L	1.250	BRL	97	75-125	4	20	
Barium	1.20	5.0	mg/L	1.250	0.116	87	75-125	2	20	
Cadmium	1.13	0.025	mg/L	1.250	BRL	91	75-125	5	20	
Chromium	1.19	0.25	mg/L	1.250	0.0233	93	75-125	3	20	
Lead	1.11	0.050	mg/L	1.250	0.00734	88	75-125	4	20	
Selenium	1.29	0.10	mg/L	1.250	0.0597	99	75-125	5	20	
Silver	1.14	0.25	mg/L	1.250	BRL	91	75-125	0.7	20	

Solutions-IES, Inc.
Attn: Sheri Knox
1101 Nowell Road
Raleigh, NC 27607

Project: Klumac Rd.

Prism Work Order: 2020467
Time Submitted: 2/21/2012 3:00:00PM

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2B0456 - NO PREP										
Blank (P2B0456-BLK1)				Prepared & Analyzed: 02/23/12						
% Solids	99.9	0.100	% by Weight							
Duplicate (P2B0456-DUP1)		**Source: 2020467-17**		Prepared & Analyzed: 02/23/12						
% Solids	79.0	0.100	% by Weight		78.7			0.4	20	
Batch P2B0549 - NO PREP										
Blank (P2B0549-BLK1)				Prepared & Analyzed: 02/28/12						
% Solids	100	0.100	% by Weight							
Batch P2C0022 - NO PREP										
LCS (P2C0022-BS1)				Prepared & Analyzed: 03/01/12						
Corrosivity-pH	6.76		pH Units				99-101			
Duplicate (P2C0022-DUP1)		**Source: 2020467-23**		Prepared & Analyzed: 03/01/12						
Corrosivity-pH	9.77		pH Units		9.61			2	10	

Sample Extraction Data

Prep Method: 3550C GC

Lab Number	Batch	Initial	Final	Date/Time
2020467-01	P2B0434	30.21 g	5 mL	02/23/12 9:06
2020467-03	P2B0434	30.29 g	5 mL	02/23/12 9:06
2020467-05	P2B0434	30.28 g	5 mL	02/23/12 9:06
2020467-07	P2B0434	29.87 g	5 mL	02/23/12 9:06
2020467-09	P2B0434	30.17 g	5 mL	02/23/12 9:06
2020467-10	P2C0006	30.22 g	5 mL	03/01/12 9:29
2020467-11	P2B0434	30.21 g	5 mL	02/23/12 9:06
2020467-12	P2B0434	29.9 g	5 mL	02/23/12 9:06
2020467-13	P2B0434	30.06 g	5 mL	02/23/12 9:06
2020467-15	P2B0434	30.39 g	5 mL	02/23/12 9:06
2020467-16	P2C0006	30.16 g	5 mL	03/01/12 9:29
2020467-17	P2B0434	29.93 g	5 mL	02/23/12 9:06
2020467-18	P2B0434	30.12 g	5 mL	02/23/12 9:06
2020467-19	P2B0434	29.83 g	5 mL	02/23/12 9:06
2020467-20	P2B0434	30.3 g	5 mL	02/23/12 9:06
2020467-22	P2B0434	30.09 g	5 mL	02/23/12 9:06
2020467-23	P2B0434	30.12 g	5 mL	02/23/12 9:06

Prep Method: 1311

Lab Number	Batch	Initial	Final	Date/Time
2020467-22	P2C0037	100 g	2000 mL	03/01/12 1:00
2020467-23	P2C0037	100 g	2000 mL	03/01/12 1:00

Prep Method: 3010A

Lab Number	Batch	Initial	Final	Date/Time
2020467-22	P2C0072	10 mL	50 mL	03/05/12 9:30
2020467-23	P2C0072	10 mL	50 mL	03/05/12 9:30

Prep Method: 7470A

Lab Number	Batch	Initial	Final	Date/Time
2020467-22	P2C0068	20 mL	30 mL	03/05/12 9:20
2020467-23	P2C0068	20 mL	30 mL	03/05/12 9:20

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date/Time
2020467-22	P2C0046	200 mL	10 mL	03/02/12 13:30
2020467-23	P2C0046	200 mL	10 mL	03/02/12 13:30

Subcontracted Analyses

The following analyses were subcontracted to Gulf Coast Analytical Labs, Inc.

Lab Number	Analysis
2020467-22	Reactivity, Cyanide (Sub)
2020467-22	Reactivity, Sulfide (Sub)
2020467-23	Reactivity, Cyanide (Sub)
2020467-23	Reactivity, Sulfide (Sub)

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 1 OF 3 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Kluttz Rd
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Emily David
Address: Same

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.3	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client Company Name: Solutions - IES
Report To/Contact Name: Sheri Knox
Reporting Address: 1101 Nowell Rd
Raleigh NC 27607
Phone: 919 873 1000 Fax (Yes) (No): _____
Email (Yes) (No) Email Address sknox@solutions-ies.com
EDD Type: PDF X Excel ___ Other _____
Site Location Name: Kluttz Rd
Site Location Physical Address: Kluttz Rd

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 Dir/Dlin						REMARKS	PRISM LAB ID NO.
32.0 W2	2/20/12	1520	Soil	C	1	8 oz	None	X						X - Analyze	01
32.0 W4		1						①						① - Hold pending initial analysis	02
31.5 W1		1525						X							03
31.5 W2		1						①							04
31.5 WD1		1530						X						* - Hold all samples for possible TCLP	05
31.5 WD2		1						①							06
31.0 WD1		1540						X							07
31.0 WD2		1						①						* - MDL = 0.29 ug/kg	08
31.0 W1		1545						X							09
31.0 W2		1						①						10	10 2/21/12

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature James R Tugs | Sampled By (Print Name) James Tugs | Affiliation Solutions

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tugs	Received By: (Signature)	2/21/12	13:10
Relinquished By: (Signature)	Received By: (Signature)	2/21/12	15:00
Relinquished By: (Signature)	Received For Prism Laboratories By:	2-21-12	1500

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____

COC Group No. 202467

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 2 OF 3 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Kluttz Rd
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Emily Davis
Address: Same

Client Company Name: Solutions-IES
Report To/Contact Name: Staci Knox
Reporting Address: 1101 Nowell Rd
Raleigh NC 27607
Phone: 919 873 1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address sknox@solutions-ies.com
EDD Type: PDF X Excel ___ Other _____
Site Location Name: Kluttz Rd
Site Location Physical Address: Kluttz Rd

Purchase Order No./Billing Reference 2011.0056
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.3	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260 DHLOND	REMARKS	PRISM LAB ID NO.
29.0 INV4	2/21/12	0930	Soil	C	1	8 oz	None	X	X - Analyze	~~21~~ 11
29.5 INV4		0950						X	① - Hold pending	~~22~~ 12
31.5 ED1		1000						X	initial analysis	~~23~~ 13
31.5 ED2		1						①		~~24~~ 14
32.0 ED 1.5		1020						X	* - Hold All samples	~~25~~ 15
32.0 ED 2.5		1						①	for possible TCLP	~~26~~ 16
30.5 WD 1.5		1035						X		~~27~~ 17
30.0 WD 1.5		1040						X	* - MDL = 0.29 ug/kg	~~28~~ 18
32.0 ED1		1050						X		~~29~~ 19
31.0 ED1		1100						X		20

Sampler's Signature James R Tiger Sampled By (Print Name) James Tiger Affiliation Solutions

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tiger	Received By: (Signature)	2/21/12	17:10
Relinquished By: (Signature)	Received By: (Signature)	2/21/12	15:00
Relinquished By: (Signature)	Received For Prism Laboratories By: Travis Coe	2.21.12	1500

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____
COC Group No. 2020467

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

ORIGINAL

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 3 OF 3 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: KUMAC RD

Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements

Invoice To: EMILY DAVIS

Address: SAME

Client Company Name: SOLUTIONS - IES

Report To/Contact Name: SHERI KNOX

Reporting Address: 1101 NOWELL RD
RALEIGH NC 27607

Phone: 919 873 1060 Fax (Yes) (No): _____

Email (Yes) (No) Email Address SKNOX@SOLUTIONS-IES.COM

EDD Type: PDF X Excel ___ Other _____

Site Location Name: KUMAC RD

Site Location Physical Address: KUMAC RD

Purchase Order No./Billing Reference 2011.6056

Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 4 Days ☐ 5 Days

"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.3	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WITHOUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ___
SC ___ OTHER ___ N/A ___

Water Chlorinated: YES ___ NO ___

Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8081 Declored						REMARKS	PRISM LAB ID NO.
31.0 ED 2.5	2/21/12	1100	SOIL	C	1	8oz	NONE	①						X - ANALYZE	21
30.5 ED 1.5	"	1105	"	"	"	"	"	X						① - HOLD PENDING INITIAL ANALYSIS	22
30.0 ED 1.5	"	1115	"	"	"	"	"	X							23
														X - HOLD ALL SAMPLES FOR POSSIBLE TCLP	
														X - MDL = 0.29 mg/kg	

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature James R Tuggle | Sampled By (Print Name) JAMES TUGGLE | Affiliation SOLUTIONS

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) James R Tuggle	Received By: (Signature)	2/21/12	13:10
Relinquished By: (Signature)	Received By: (Signature)	2/21/12	15:00
Relinquished By: (Signature)	Received For Prism Laboratories By:	2-21-12	1500

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

☐ Fed Ex ☐ UPS ☒ Hand-delivered ☐ Prism Field Service ☐ Other _____

COC Group No. 2020467

Additional Comments:

PRISM USE ONLY

Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____	☐ NC ☐ SC ☐ _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Prism Laboratories, Inc.
PO BOX 240543
Charlotte, NC 28224

ATTENTION
Angie Overcash

PROJECT ID
2020467

LABORATORY REPORT NUMBER
212030106

DATE
03/07/2012

Primary Data Review By

IntegriSign

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Avenue, Baton Rouge, LA 70820.**
- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**
- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 03/07/2012

GCAL Report 212030106

Deliver To Prism Laboratories, Inc.
PO BOX 240543
Charlotte, NC 28224
706-529-6364

Attn Angie Overcash

Project 2020467

CASE NARRATIVE

Client: Access Analytical **Report:** 212030106

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

No anomalies were found for the analyzed sample(s).

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

IntegriSign

Robyn Migues
Technical Director
GCAL REPORT 212030106

IntegriSi

THIS REPORT CONTAINS 18 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21203010601	30.5 ED1.5	Solid	02/21/2012 11:05	03/01/2012 09:00
21203010602	30.0 ED1.5	Solid	02/21/2012 11:15	03/01/2012 09:00

Summary of Compounds Detected

There were no detects

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212030106001	30.5 ED1.5	Solid	02/21/2012 11:05	03/01/2012 09:00

SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
03/02/2012 07:45	475834	7.3.3.2	1	03/05/2012 14:44	AEL	476016

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
03/02/2012 07:45	475835	Sec 7.3.4.2	1	03/02/2012 15:15	JEM	475929

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212030106-02	30.0 ED1.5	Solid	02/21/2012 11:15	03/01/2012 09:00

SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
03/02/2012 07:45	475834	7.3.3.2	1	03/05/2012 14:45	AEL	476016

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
03/02/2012 07:45	475835	Sec 7.3.4.2	1	03/02/2012 15:15	JEM	475929

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

General Chemistry Quality Control Summary

Analytical Batch 476016	**Client ID**	MB475834			LCS475834		
Prep Batch 475834	**GCAL ID**	1038117			1038118		
Prep Method 7.3.3.2	**Sample Type**	Method Blank			LCS		
	Prep Date	03/02/2012 07:45			03/02/2012 07:45		
	Analytical Date	03/05/2012 14:37			03/05/2012 14:38		
	Matrix	Solid			Solid		
SW-846 9012A Reactivity CN	**Units**	**Result**	mg/kg **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
57-12-5R Reactivity Cyanide		250U	250	250	13.7	5.5	1 - 25

Analytical Batch 476016	**Client ID**	BOAT LAUNCH AREA		1037958DUP		
Prep Batch 475834	**GCAL ID**	21203010101		1038119		
Prep Method 7.3.3.2	**Sample Type**	SAMPLE		DUP		
	Prep Date	03/02/2012 07:45		03/02/2012 07:45		
	Analytical Date	03/05/2012 14:39		03/05/2012 14:40		
	Matrix	Solid		Solid		
SW-846 9012A Reactivity CN	**Units**	**Result**	mg/kg **RDL**	**Result**	**RPD**	**RPD Limit**
57-12-5R Reactivity Cyanide		0.0	250	0.0	0.0	25

General Chemistry Quality Control Summary

Analytical Batch	475929	Client ID	MB475835			LCS475835		
Prep Batch	475835	GCAL ID	1038120			1038121		
Prep Method	Sec 7.3.4.2	Sample Type	Method Blank			LCS		
		Prep Date	03/02/2012 07:45			03/02/2012 07:45		
		Analytical Date	03/02/2012 15:15			03/02/2012 15:15		
		Matrix	Solid			Solid		
SW-846 9034 Reactivity Sulfide		**Units**	**Result**	mg/kg **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
18496-25-8R	Reactivity Sulfide		80U	80	721	473	65.6	20 - 114

Analytical Batch	475929	Client ID	BOAT LAUNCH AREA		1037958DUP		
Prep Batch	475835	GCAL ID	21203010101		1038122		
Prep Method	Sec 7.3.4.2	Sample Type	SAMPLE		DUP		
		Prep Date	03/02/2012 07:45		03/02/2012 07:45		
		Analytical Date	03/02/2012 15:15		03/02/2012 15:15		
		Matrix	Solid		Solid		
SW-846 9034 Reactivity Sulfide		**Units**	**Result**	mg/kg **RDL**	**Result**	**RPD**	**RPD Limit**
18496-25-8R	Reactivity Sulfide		0	80	0	0	25

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Access / 4565 / 212530106 / 3-8-12

SUBCONTRACT ORDER

Prism Laboratories, Inc.

2020467

Certification: NELAC___ USACE___
SC___ Other NC
N/A___

SENDING LABORATORY:

Prism Laboratories, Inc.
P. O. Box 240543
Charlotte, NC 28224-0543
Phone: 800-529-6364
Fax: 704-525-0409
Project Manager: Angela D. Overcash

RECEIVING LABORATORY:

Gulf Coast Analytical Labs, Inc.
7979 GSRI Avenue
Baton Rouge, LA 70820
Phone :(225) 769-4900
Fax: (225) 767-5717

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 2020467-22	**Solid**	**Sampled:02/21/12 11:05**	20-5-6012	
Reactivity, Sulfide (Sub)		02/28/12 11:05		
Reactivity, Cyanide (Sub)		03/06/12 11:05		
Containers Supplied: 2 oz JAR				
Sample ID: 2020467-23	**Solid**	**Sampled:02/21/12 11:15**	30-0-6013	2
Reactivity, Sulfide (Sub)		02/28/12 11:15		
Reactivity, Cyanide (Sub)		03/06/12 11:15		
Containers Supplied:				

Temp 6.6

Released By	Date	Received By	Date
[signature]	2/29/12	FED EX	2/29/12
FED EX		[signature] GCAL	3/1/12 0900

7932 8640 1690

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

SAMPLE RECEIVING CHECKLIST

Workorder: 212030106 Client: 4565 - Access Analytical

Profile: 80251 - Prism Lab Line Item: 2 - Solid

Received by: McCune, Odie Received Date/Time: 3/1/2012 9:00:00 AM

Samples Received via: FEDEX Number of Coolers Received: 1

Cooler tracking numbers(s): 7932 8640 1690

Cooler temperature(s): 5.6

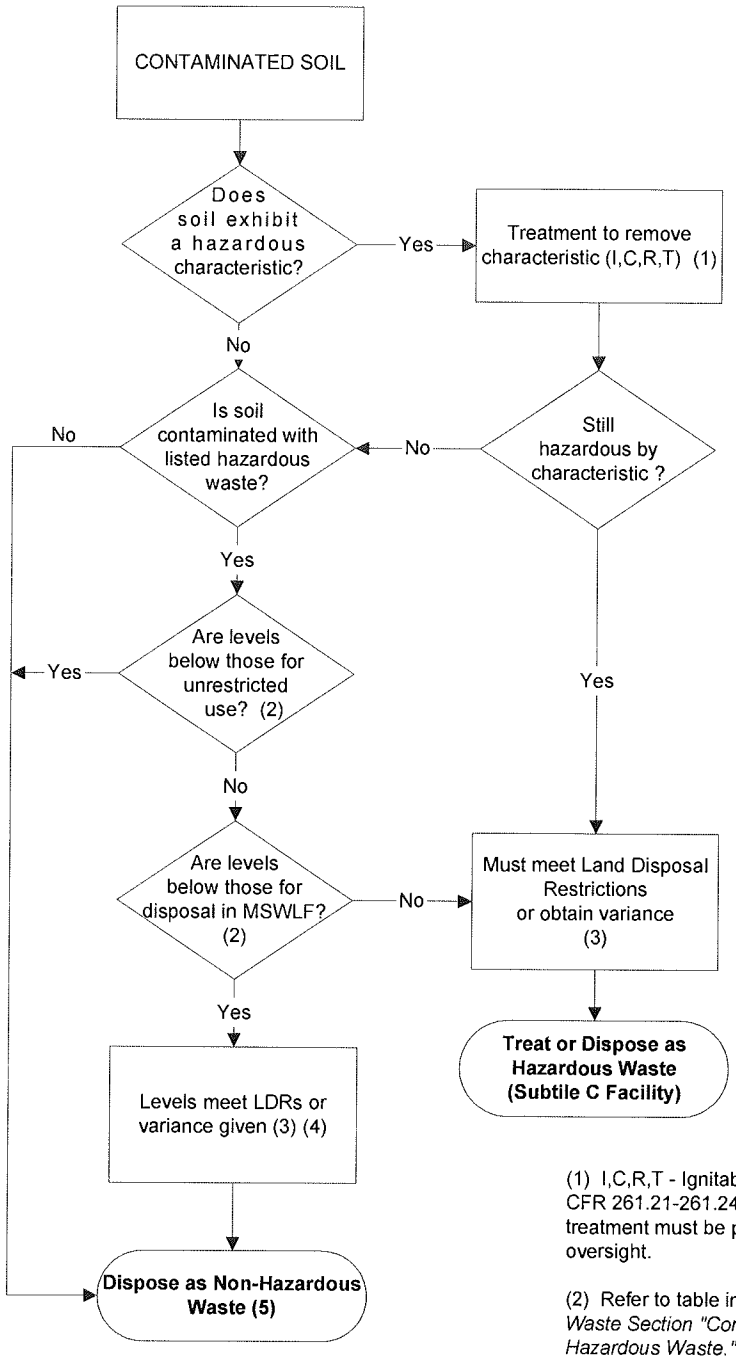
Were all coolers received at a temperature of 0 - 6° C?	☑ Yes	☐ No	☐ N/A
Were all custody seals intact?	☑ Yes	☐ No	☐ N/A
Were all samples received in proper containers?	☑ Yes	☐ No	☐ N/A
Were all samples properly preserved?	☑ Yes	☐ No	☐ N/A
Was preservative added to any container at the lab?	☐ Yes	☑ No	☐ N/A
Were all containers received in good condition?	☑ Yes	☐ No	☐ N/A
Were all VOA vials received with no head space?	☐ Yes	☐ No	☑ N/A
Do all sample labels match the Chain of Custody?	☑ Yes	☐ No	☐ N/A
Did the Chain of Custody list the sampling technician?	☐ Yes	☑ No	☐ N/A
Was the client notified about any discrepancies?	☐ Yes	☐ No	☑ N/A

Notes/Comments: _____

APPENDIX C

“CONTAINED-IN” POLICY FLOW CHART

FIGURE 1
North Carolina Hazardous Waste Section
"Contained-In" Policy Decision-Making Flowchart



FOOTNOTES

(1) I,C,R,T - Ignitability, corrosivity, reactivity and toxicity defined in 40 CFR 261.21-261.24 as referenced in 15A NCAC 13A .0106. Any on-site treatment must be pre-approved by the agency with regulatory oversight.

(2) Refer to table in Attachment 1 of this document ("*NC Hazardous Waste Section "Contained-In" Policy for Soil Contaminated with Listed Hazardous Waste.*")

(3) Treatment Standards for disposal in either a Subtitle C or D landfill must be met (10x Universal Treatment Standard or 90% reduction in concentration) per 40 CFR 268.49 as adopted in 15A NCAC 13A .0112. The variance procedure is described in 40 CFR 268.44.

(4) The HWS used 40 CFR 268.44(2)(ii) as the basis for establishing some "contained-out" levels. See "*Background Document for Determining North Carolina's "Contained-Out" Levels for Soil.*"

(5) In Subtitle D lined Municipal Solid Waste Landfill (MSWLF) -- contact landfill for acceptance criteria. If levels for unrestricted use are met, soil may be left on site.