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Data Validation Memoranda, Analytical Reports, and Chains of Custody

ecology and environment, inc.
Global Environmental Specialists
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Seattle, Washington 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: November 21, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Inorganic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 5 water samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Dissolved Metals (EPA CLP SOW ISM02.4) was performed by Bonner Analytical, Hattiesburg, Mississippi. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

MJLND2 MJLND3 MJLND8 MJLNE1 MJLNE2

No discrepancies were noted.

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2019
CarrierName: FedEx
AirbillNo: 7768 1897 4850

CHAIN OF CUSTODY RECORD

Case #: 48514
Cooler #: BON 01

MJLNO2
EPW14029 Revised

No: 10-102519-131011-0011
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19434023	MJLNC3	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1128 (HNO3 pH<2) (1)	MW01GW	10/22/2019 12:50	
19434024	MJLNC4	Groundwater/ A. Jensen	Grab	ICP-AES/MS(21)	10-1134 (HNO3 pH<2) (2)	MW355	10/22/2019 13:20	QC
19434025	MJLNC5	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1140 (HNO3 pH<2) (1)	MW356	10/22/2019 14:50	
19434026	MJLNC6	Water/ J. Fetters	Grab	ICP-AES/MS(21)	10-1146 (HNO3 pH<2) (1)	RI01WT	10/24/2019 11:00	
19434027	MJLNC7	Water/ J. Fetters	Grab	ICP-AES/MS(21)	10-1152 (HNO3 pH<2) (1)	RI02WT	10/24/2019 11:30	
19434032	MJLND2	Ground Water Dissolved/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1248 (HNO3 pH<2) (1)	BH01GW-D	10/23/2019 15:45	
19434037	MJLND7	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1273 (HNO3 pH<2) (1)	MW02GW	10/22/2019 15:40	
19434038	MJLND8	Ground Water Dissolved/	Grab	ICP-AES/MS(21)	10-1254 (HNO3 pH<2) (1)	MW02GW-D	10/22/2019 15:40	
19434040	MJLNE0	Groundwater/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1300 (HNO3 pH<2) (1)	BK01GW	10/23/2019 17:55	
19434041	MJLNE1	Ground Water Dissolved/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1257 (HNO3 pH<2) (1)	BK01GW-D	10/23/2019 17:55	

Sample(s) to be used for Lab QC: 19434024 Tag 10-1134

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=TAL Metals ICP-AES + ICP-MS (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
			Mary K. Pleau BON	10/26/19 1500	Good

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2019
CarrierName: FedEx
AirbillNo: 7768 1897 4850

EPW14029

CHAIN OF CUSTODY RECORD

Case #: 48514
Cooler #: BON 01

MJLN02
Revised

No: 10-102519-131011-0011
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19434042	MJLNE2	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1258 (HNO3 pH<2) (1)	FL01WT	10/24/2019 12:00	

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=TAL Metals ICP-AES + ICP-MS (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
			BON	10/26/19 1500	Good

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2019
CarrierName: FedEx
AirbillNo: 7768 1902 7971

CHAIN OF CUSTODY RECORD

Case #: 48514
Cooler #: BON 2

MJLN02
EPW14029 Revised

No: 10-102519-131404-0012
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19434007	MJLNA7	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1036 (None) (1)	BH03SB02	10/23/2019 14:17	
19434015	MJLNB5	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1076 (None) (1)	BK01SB01	10/23/2019 16:01	
19434016	MJLNB6	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1081 (None) (1)	BK01SB02	10/23/2019 16:20	
19434017	MJLNB7	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1086 (None) (1)	BK01SB03	10/23/2019 16:42	
19434018	MJLNB8	Groundwater/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1092 (HNO3 pH<2) (1)	BH01GW	10/23/2019 15:45	
19434019	MJLNB9	Groundwater/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1104 (HNO3 pH<2) (1)	BH02GW	10/23/2019 16:12	
19434033	MJLND3	Ground Water Dissolved/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1249 (HNO3 pH<2) (1)	BH02GW-D	10/23/2019 16:12	

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=TAL Metals ICP-AES + ICP-MS (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
			BON	10/26/19 1500	Good

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2019
CarrierName: FedEx
AirbillNo: 7768 1897 4850

CHAIN OF CUSTODY RECORD

Case #: 48514
Cooler #: BON 01

MJLND2
EPW14029

No: 10-102519-131011-0011
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19434023	MJLNC3	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1128 (HNO3 pH<2) (1)	MW01GW	10/22/2019 12:50	
19434024	MJLNC4	Groundwater/ A. Jensen	Grab	ICP-AES/MS(21)	10-1134 (HNO3 pH<2) (1)	MW355	10/22/2019 13:20	QC
19434025	MJLNC5	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1140 (HNO3 pH<2) (1)	MW356	10/22/2019 14:50	
19434026	MJLNC6	Water/ J. Fetters	Grab	ICP-AES/MS(21)	10-1146 (HNO3 pH<2) (1)	RI01WT	10/24/2019 11:00	
19434027	MJLNC7	Water/ J. Fetters	Grab	ICP-AES/MS(21)	10-1152 (HNO3 pH<2) (1)	RI02WT	10/24/2019 11:30	
19434032	MJLND2	Groundwater/	Grab	ICP-AES/MS(21)	10-1248 (HNO3 pH<2) (1)	BH01GW-D	10/23/2019 15:45	
19434037	MJLND7	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1273 (HNO3 pH<2) (1)	MW02GW	10/22/2019 15:40	
19434038	MJLND8	Groundwater/	Grab	ICP-AES/MS(21)	10-1254 (HNO3 pH<2) (1)	MW02GW-D	10/22/2019 15:40	
19434040	MJLNE0	Groundwater/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1300 (HNO3 pH<2) (1)	BK01GW	10/23/2019 17:15	
19434041	MJLNE1	Groundwater/	Grab	ICP-AES/MS(21)	10-1257 (HNO3 pH<2) (1)	BK01GW-D	10/23/2019 17:55	
19434042	MJLNE2	Groundwater/	Grab	ICP-AES/MS(21)	10-1258 (HNO3 pH<2) (1)	FL01WT	10/24/2019 12:00	

Sample(s) to be used for Lab QC: 19434024 Tag 10-1134

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=TAL Metals ICP-AES + ICP-MS (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		10/25/19 1400	BON	10/26/19 1500	Good

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2019
CarrierName: FedEx
AirbillNo: 7768 1902 7971

CHAIN OF CUSTODY RECORD

Case #: 48514
Cooler #: BON 2

MJLND2
EPW14029

No: 10-102519-131404-0012
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19434007	MJLNA7	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1036 (None) (1)	BH03SB02	10/23/2019 14:17	
19434015	MJLNB5	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1076 (None) (1)	BK01SB01	10/23/2019 16:01	
19434016	MJLNB6	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1081 (None) (1)	BK01SB02	10/23/2019 16:20	
19434017	MJLNB7	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1086 (None) (1)	BK01SB03	10/23/2019 16:42	
19434018	MJLNB8	Groundwater/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1092 (HNO3 pH<2) (1)	BH01GW	10/23/2019 15:45	
19434019	MJLNB9	Groundwater/ D. Pulvino	Grab	ICP-AES/MS(21)	10-1104 (HNO3 pH<2) (1)	BH02GW	10/23/2019 16:12	
19434033	MJLND3	Groundwater/	Grab	ICP-AES/MS(21)	10-1249 (HNO3 pH<2) (1)	BH02GW-D	10/23/2019 16:12	

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=TAL Metals ICP-AES + ICP-MS (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		10/25/19 1400	BON	10/26/19 1500	Good

SDG # JLNA8

USEPA CLP COC (LAB COPY)
DateShipped: 11/7/2019
CarrierName: FedEx
AirbillNo: 7769 2644 5840

CHAIN OF CUSTODY RECORD
EPW14030
Case #: 48596
Cooler #: chem 4

No: 10-110719-094134-0015
Lab: ChemTech Consulting Group
Contact Name: fetters
Contact Phone: 3609816817

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19454000	JLNA8	Soil Subsurface/ J. Fetters	Grab	SVOA/PCB/PAH SIM(21), CLP VOA(21)	10-1351 (None), 10-1353 (None) (5)	BH04SB01	11/06/2019 10:04	
19454001	JLNA9	Soil Subsurface/ J. Fetters	Grab	SVOA/PCB/PAH SIM(21), CLP VOA(21)	10-1362 (None), 10-1364 (None) (5)	BH04SB02	11/06/2019 10:22	
19454002	JLNB0	Soil Subsurface/ J. Fetters	Grab	SVOA/PCB/PAH SIM(21), CLP VOA(21)	10-1373 (None), 10-1375 (None) (5)	BH05SB01	11/06/2019 11:10	
19454003	JLNB1	Soil Subsurface/ J. Fetters	Grab	SVOA/PCB/PAH SIM(21), CLP VOA(21)	10-1384 (None), 10-1386 (None) (5)	BH05SB02	11/06/2019 11:55	
19454004	JLNB2	Soil Subsurface/ J. Fetters	Grab	SVOA/PCB/PAH SIM(21), CLP VOA(21)	10-1395 (None), 10-1397 (None) (5)	BH06SB01	11/06/2019 13:02	
19454005	JLNB3	Soil Subsurface/ J. Fetters	Grab	SVOA/PCB/PAH SIM(21), CLP VOA(21)	10-1406 (None), 10-1408 (None) (6)	BH06SB02	11/06/2019 13:38	
19454006	JLNB4	Groundwater/ J. Fetters	Grab	SVOA/PAH SIM(21 Day), ARO(21), CLP TVOA(21)	10-1319 (None), 10-1320 (None), 10-1322 (HCl) (9)	RI03WT	11/06/2019 16:30	
19454007	JLNC0	Water/ J. Fetters	Grab	CLP TVOA(21)	10-1417 (HCl) (5)	TB02WT	11/06/2019 07:30	

Sample(s) to be used for Lab QC: 19454005 Tag 10-1406, 19454005 Tag 10-1408

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PCB/PAH SIM=Semivolatiles/Aroclors Low + PAH SIM, CLP VOA=CLP TCL Volatiles, SVOA/PAH SIM=Semivolatiles Low + PAH SIM, ARO=CLP Aroclors, CLP TVOA=CLP TCL Trace Volatiles

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
			Paul Gulak	11-11-19 9:00	IR Gun # 1 2.2
					Temp Blank present custody Seal Intact
					NO TAGS

2

USEPA CLP COC (LAB COPY)
DateShipped: 11/7/2019
CarrierName: FedEx
AirbillNo: 7769 2637 4844

CHAIN OF CUSTODY RECORD

Case #: 48596
Cooler #: BON 3

MJLNA8
EPW14029

No: 10-110719-091631-0014
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
19454000	MJLNA8	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1352 (None) (1)	BH04SB01	11/06/2019 10:04	
19454001	MJLNA9	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1363 (None) (1)	BH04SB02	11/06/2019 10:22	
19454002	MJLNB0	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1374 (None) (1)	BH05SB01	11/06/2019 11:10	
19454003	MJLNB1	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1385 (None) (1)	BH05SB02	11/06/2019 11:55	
19454004	MJLNB2	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1396 (None) (1)	BH06SB01	11/06/2019 13:02	
19454005	MJLNB3	Soil Subsurface/ J. Fetters	Grab	ICP-AES/MS(21)	10-1407 (None) (1)	BH06SB02	11/06/2019 13:38	QC
19454006	MJLNB4	Groundwater/ J. Fetters	Grab	ICP-AES/MS(21)	10-1321 (HNO3 pH<2) (1)	RI03WT	11/06/2019 16:30	

Sample(s) to be used for Lab QC: 19454005 Tag 10-1407

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=TAL Metals ICP-AES + ICP-MS (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		11/7/19 1000	BON	11/11/19 903	Good

002

USEPA CLP COC (REGION COPY)
DateShipped: 10/25/2019
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Gunshy Manor/WA
Case #: 48514
Cooler #: MEL 1

No: 10-102419-142930-0002
Lab: EPA Region 10 Laboratory (MEL)
Contact Name: fetters
Contact Phone: 3609816817

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
19434000		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH01SB01	10/23/2019 10:35	Field Sample
19434001		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH01SB02	10/23/2019 10:59	Field Sample
19434002		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH01SB03	10/23/2019 11:14	Field Sample
19434003		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH02SB01	10/23/2019 12:16	Field Sample
19434004		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH02SB02	10/23/2019 12:40	Field Sample
19434005		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH02SB03	10/23/2019 13:00	Field Sample
19434006		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH03SB01	10/23/2019 13:58	Field Sample

Special Instructions:	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key: TPH-Gx=TPH-Gx, TPH-Dx=TPH-Dx	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature]	10/25/19 0830	Kim Wood	10/25/19 10:00	good

USEPA CLP COC (REGION COPY)
DateShipped: 10/25/2019
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Gunshy Manor/WA
Case #: 48514
Cooler #: MEL 1

No: 10-102419-142930-0002
Lab: EPA Region 10 Laboratory (MEL)
Contact Name: fetters
Contact Phone: 3609816817

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
19434007		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BH03SB02	10/23/2019 14:17	Field Sample
19434015		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N7 (None) (4) N4, N5, N6, N8	BK01SB01	10/23/2019 16:01	Field Sample
19434016		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BK01SB02	10/23/2019 16:20	Field Sample
19434017		Soil Subsurface/ J. Fetters	Grab	TPH-Gx(21), TPH-Dx(21)	N1 (None), N2 (None), N3 (None), N4 (None) (4)	BK01SB03	10/23/2019 16:42	Field Sample
19434018		Groundwater/ D. Pulvino	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	BH01GW	10/23/2019 15:45	Field Sample
19434019		Groundwater/ D. Pulvino	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	BH02GW	10/23/2019 16:12	Field Sample
19434023		Groundwater/ J. Fetters	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	MW01GW	10/22/2019 12:50	Field Sample
19434024		Groundwater/ A. Jensen	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) A8, A9, (3) A10	MW355	10/22/2019 13:20	Field Sample
19434025		Groundwater/ J. Fetters	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	MW356	10/22/2019 14:50	Field Sample

Sample(s) to be used for Lab QC: 19434024 Tag A1, 19434024 Tag A2, 19434024 Tag A3	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key: TPH-Gx=TPH-Gx, TPH-Dx=TPH-Dx	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature]	10/25/19 0820	Kim Wood	10/25/19 10:00	good

USEPA CLP COC (REGION COPY)
DateShipped: 10/25/2019
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Gunshy Manor/WA
Case #: 48514
Cooler #: MEL 1

No: 10-102419-142930-0002
Lab: EPA Region 10 Laboratory (MEL)
Contact Name: fetters
Contact Phone: 3609816817

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
19434026		Water/ J. Fetters	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	RI01WT	10/24/2019 11:00	QC Blank - Rinsate/Equipment
19434027		Water/ J. Fetters	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	RI02WT	10/24/2019 11:30	QC Blank - Rinsate/Equipment
19434028		Water/ J. Fetters	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	TB01WT	10/23/2019 06:30	QC Blank - Trip
19434037		Groundwater/ J. Fetters	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	MW02GW	10/22/2019 15:40	Field Sample
19434040		Groundwater/ D. Pulvino	Grab	TPH-Gx(21)	A1 (HCl), A2 (HCl), A3 (HCl) (3)	BK01GW	10/23/2019 17:55	Field Sample

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TPH-Gx=TPH-Gx, TPH-Dx=TPH-Dx

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature]	10/25/19 0800	Kim Wood	10/25/19 10:00	good

USEPA CLP COC (REGION COPY)
DateShipped: 10/25/2019
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Gunshy Manor/WA
Case #: 48514
Cooler #: MEL 2

No: 10-102519-075504-0005
Lab: EPA Region 10 Laboratory (MEL)
Lab Contact: Karen Norton
Lab Phone: 360-871-8760

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
19434018		Groundwater/ D. Pulvino	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	BH01GW	10/23/2019 15:45	Field Sample
19434019		Groundwater/ D. Pulvino	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	BH02GW	10/23/2019 16:12	Field Sample
19434037		Groundwater/ J. Fetters	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	MW02GW	10/22/2019 15:40	Field Sample

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TPH-Dx=TPH-Dx

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature]	10/25/19 0800	Kim Wood	10/25/19 10:00	good

USEPA CLP COC (REGION COPY)
DateShipped: 10/25/2019
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Gunshy Manor/WA
Case #: 48514
Cooler #: MEL 3

No: 10-102519-075854-0006
Lab: EPA Region 10 Laboratory (MEL)
Lab Contact: Karen Norton
Lab Phone: 360-871-8760

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
19434024		Groundwater/ A. Jensen	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl), A6 (HCl), A7 (HCl) (4)	MW355	10/22/2019 13:20	Field Sample
19434025		Groundwater/ J. Fetters	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	MW356	10/22/2019 14:50	Field Sample
19434026		Water/ J. Fetters	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	RI01WT	10/24/2019 11:00	QC Blank - Rinsate/Equipment

Sample(s) to be used for Lab QC: 19434024 Tag A4, 19434024 Tag A5, 19434024 Tag A6, 19434024 Tag A7

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TPH-Dx=TPH-Dx

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		10/25/19 0800	Kurri Wood	10/25/19 10:00	good

USEPA CLP COC (REGION COPY)
DateShipped: 10/25/2019
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Gunshy Manor/WA
Case #: 48514
Cooler #: MEL 4

No: 10-102519-080051-0007
Lab: EPA Region 10 Laboratory (MEL)
Contact Name: fetters
Contact Phone: 3609816817

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
19434023		Groundwater/ J. Fetters	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	MW01GW	10/22/2019 12:50	Field Sample
19434027		Water/ J. Fetters	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	RI02WT	10/24/2019 11:30	QC Blank - Rinsate/Equipment
19434040		Groundwater/ D. Pulvino	Grab	TPH-Dx(21)	A4 (HCl), A5 (HCl) (2)	BK01GW	10/23/2019 17:55	Field Sample

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TPH-Dx=TPH-Dx

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature]	10/25/19 0800	[signature]	10/25/19 10:00	good

ecology and environment, inc.
Global Environmental Specialists

720 Third Avenue, Suite 1700
Seattle, Washington 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: December 4, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 27 samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Total Petroleum Hydrocarbons – Diesel Range Extended (Ecology Method NWTPH-Dx) was performed at the USEPA Region 10 Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Manual Process (S4VEM).

The samples were numbered:

19434000	19434001	19434002	19434003	19434004	19434005
19434006	19434007	19434015	19434016	19434017	19434018
19434019	19434023	19434024	19434025	19434026	19434027
19434037	19434040	19454000	19454001	19454002	19454003
19454004	19454005	19454006			

No discrepancies were noted.

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

Subject: Data Release for Total Petroleum Hydrocarbon Identification and Petroleum Hydrocarbon-Diesel Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: Gunshy Manor

Project Code: SFP-156A

From: Gerald Dodo
Laboratory Services & Applied Sciences Division
USEPA Region 10

To: Brandon Perkins
Superfund & Emergency Management Division
USEPA Region 10

CC: Derek Pulvino – E&E

I have authorized release of this data package. Attached you will find the total petroleum hydrocarbon-diesel range extended (TPH-Dx) analysis results for the Gunshy Manor samples. For further information regarding the attached data, contact Chris Pace at 360-871-8703.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: November 13, 2019

To: Brandon Perkins
Superfund & Emergency Management Division
USEPA Region 10

From: Pat Coogan
Laboratory Services & Applied Sciences Division
USEPA Region 10

Subject: Quality Assurance Review for the Total Petroleum Hydrocarbon-Diesel Range Extended Analysis of Samples from the Gunshy Manor PA

Project Code: SFP-156A
Account Code: 2020T10P000DD210ZZLA00

CC: Derek Pulvino – E&E

The following is a quality assurance review of the data for total petroleum hydrocarbon - diesel range extended (TPH-Dx) analysis of samples from the above referenced site. The analyses were performed by the USEPA Region 10 Laboratory in Port Orchard, WA, following USEPA and Laboratory guidelines.

This review was conducted for the following samples:

19434000	19434001	19434002	19434003	19434004	19434005
19434006	19434007	19434015	19434016	19434017	19434018
19434019	19434023	19434024	19434025	19434026	19434027
19434037	19434040	19454000	19454001	19454002	19454003
19454004	19454005	19454006			

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

1. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality. Field information was provided to the laboratory from other sources, such as Chain of Custody records.

2. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of soil and preserved water samples is 14 days from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

3. Sample Preparation

Samples were prepared according to the method/SOP.

4. Initial Calibration

Initial calibrations were performed on 12/13/18 for #2 diesel, motor oil and surrogate. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq$20% or the correlation coefficients met the criteria of $\geq$0.99.

5. Continuing Calibration Verification (CCV)

The CCV met the criteria for frequency of analysis and relative retention time (RRT) windows for all target and surrogate compounds. The percent accuracies were 80-120% of the true values.

6. Blank Analysis

Method blanks were prepared and analyzed with each sample extraction batch to evaluate the potential for laboratory contamination and effects on the sample results. TPH-Dx was not detected in the blanks.

7. Surrogates

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. All surrogate recoveries for the samples were within the criteria of 50-150%.

8. LCS/LCSD

Data for laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the QAPP criteria of 50-150% with a relative percent difference (RPD) of $\leq$35 for soil/sediment and 60-140% with an RPD of $\leq$20 for water.

9. Duplicate Sample Analysis

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. Duplicate analyses were performed using samples 19434001, 19434015, 19434024 and 19454005. All samples and duplicates were non-detects. RPD calculations were not applicable.

10. Compound Identification/Quantitation

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

Samples with detected results were subjected to sulfuric acid/silica gel clean-up.

Diesel range organics is a collective term for petroleum products that generally elute before motor oil but after gasoline from the gas chromatograph.

Motor oil range organics is a collective term for any petroleum product that chromatographically consists primarily of an unresolved envelope of compounds generally eluting after #2 diesel. Included in the definition are hydraulic fluids, motor oils, lubricating oils, cutting oils, mineral oils, transmission fluids, etc.

Chemical Abstract Service (CAS) numbers with a "*" indicates that the number was created at the Region 10 Laboratory due to lack of an existing one.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

11. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

US EPA Region 10 Laboratory

Multi-Analyte Final Report

Project Code : SFP-156A
Site : GUNSHY MANOR : Preliminary Assessment
Contact : Brandon Perkins
Account : 2020T10P000DD210ZZLA00

Sample : 19434000

Information : BH01SB01
Matrix : Soil
Collected : 10/23/2019 10:35:00AM
Field Name : JLNA0

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	39	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	97	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	93	%Rec		10/31/19	1

Sample : 19434001

Information : BH01SB02
Matrix : Soil
Collected : 10/23/2019 10:59:00AM
Field Name : JLNA1

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	42	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	110	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	93	%Rec		10/31/19	1

Sample : 19434002

Information : BH01SB03
Matrix : Soil
Collected : 10/23/2019 11:14:00AM
Field Name : JLNA2

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	36	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	89	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		10/31/19	1

Sample : 19434003

Information : BH02SB01
Matrix : Soil
Collected : 10/23/2019 12:16:00PM
Field Name : JLNA3

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	38	mg/Kg	U	11/12/19	1
***400010**	**TPH-GC/Motor Oil Range Organics**	**500**	**mg/Kg**		11/12/19	1
Surrogate Compounds:						
629992	Pentacosane	105	%Rec		11/12/19	1

Sample : 19434004

Information : BH02SB02
Matrix : Soil
Collected : 10/23/2019 12:40:00PM
Field Name : JLNA4

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	64	mg/Kg	U	11/12/19	1
*400010	TPH-GC/Motor Oil Range Organics	160	mg/Kg	U	11/12/19	1
Surrogate Compounds:						
629992	Pentacosane	113	%Rec		11/12/19	1

Sample : 19434005

Information : BH02SB03
Matrix : Soil
Collected : 10/23/2019 1:00:00PM
Field Name : JLNA5

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	140	mg/Kg	U	11/12/19	1
*400010	TPH-GC/Motor Oil Range Organics	360	mg/Kg	U	11/12/19	1
Surrogate Compounds:						
629992	Pentacosane	117	%Rec		11/12/19	1

Sample : 19434006

Information : BH03SB01
Matrix : Soil
Collected : 10/23/2019 1:58:00PM
Field Name : JLNA6

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	40	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	99	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		10/31/19	1

Sample : 19434007

Information : BH03SB02
Matrix : Soil
Collected : 10/23/2019 2:17:00PM
Field Name : JLNA7

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	61	mg/Kg	U	11/12/19	1
*400010	TPH-GC/Motor Oil Range Organics	150	mg/Kg	U	11/12/19	1
Surrogate Compounds:						
629992	Pentacosane	118	%Rec		11/12/19	1

Sample : 19434015

Information : BK01SB01
Matrix : Soil
Collected : 10/23/2019 4:01:00PM
Field Name : JLNB5

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	43	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	110	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	94	%Rec		10/31/19	1

Sample : 19434016

Information : BK01SB02
Matrix : Soil
Collected : 10/23/2019 4:20:00PM
Field Name : JLNB6

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	40	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	99	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	92	%Rec		10/31/19	1

Sample : 19434017

Information : BK01SB03
Matrix : Soil
Collected : 10/23/2019 4:42:00PM
Field Name : JLNB7

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	39	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	98	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	93	%Rec		10/31/19	1

Sample : 19434018

Information : BH01GW
Matrix : Water
Collected : 10/23/2019 3:45:00PM
Field Name : JLNB8

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	74	%Rec		11/ 1/19	1

Sample : 19434019

Information : BH02GW
Matrix : Water
Collected : 10/23/2019 4:12:00PM
Field Name : JLNB9

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	90	%Rec		11/ 1/19	1

Sample : 19434023

Information : MW01GW
Matrix : Water
Collected : 10/22/2019 12:50:00PM
Field Name : JLNC3

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		11/ 1/19	1

Sample : 19434024

Information : MW355
Matrix : Water
Collected : 10/22/2019 1:20:00PM
Field Name : JLNC4

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/1/19	1
Surrogate Compounds:						
629992	Pentacosane	90	%Rec		11/1/19	1

Sample : 19434025

Information : MW356
Matrix : Water
Collected : 10/22/2019 2:50:00PM
Field Name : JLNC5

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/1/19	1
Surrogate Compounds:						
629992	Pentacosane	90	%Rec		11/1/19	1

Sample : 19434026

Information : RI01WT
Matrix : Water
Collected : 10/24/2019 11:00:00AM
Field Name : JLNC6

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	93	%Rec		11/ 1/19	1

Sample : 19434027

Information : RI02WT
Matrix : Water
Collected : 10/24/2019 11:30:00AM
Field Name : JLNC7

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	92	%Rec		11/ 1/19	1

Sample : 19434037

Information : MW02GW
Matrix : Water
Collected : 10/22/2019 3:40:00PM
Field Name : JLND7

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	91	%Rec		11/ 1/19	1

Sample : 19434040

Information : BK01GW
Matrix : Water
Collected : 10/23/2019 5:55:00PM
Field Name : JLNA7

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		11/ 1/19	1

Sample : 19454000

Information : BH04SB01
Matrix : Soil
Collected : 11/6/2019 10:04:00AM
Field Name : JLNA8

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	40	mg/Kg	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	100	mg/Kg	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		11/ 8/19	1

Sample : 19454001

Information : BH04SB02
Matrix : Soil
Collected : 11/6/2019 10:22:00AM
Field Name : JLNA9

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	42	mg/Kg	U	11/12/19	1
*400010	TPH-GC/Motor Oil Range Organics	100	mg/Kg	U	11/12/19	1
Surrogate Compounds:						
629992	Pentacosane	115	%Rec		11/12/19	1

Sample : 19454002

Information : BH05SB01
Matrix : Soil
Collected : 11/6/2019 11:10:00AM
Field Name : JLNB0

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	38	mg/Kg	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	96	mg/Kg	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	97	%Rec		11/ 8/19	1

Sample : 19454003

Information : BH05SB02
Matrix : Soil
Collected : 11/6/2019 11:55:00AM
Field Name : JLNB1

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	39	mg/Kg	U	11/12/19	1
***400010**	**TPH-GC/Motor Oil Range Organics**	**140**	**mg/Kg**		11/12/19	1
Surrogate Compounds:						
629992	Pentacosane	109	%Rec		11/12/19	1

Sample : 19454004

Information : BH06SB01
Matrix : Soil
Collected : 11/6/2019 1:02:00PM
Field Name : JLNB2

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	39	mg/Kg	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	97	mg/Kg	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		11/ 8/19	1

Sample : 19454005

Information : BH06SB02
Matrix : Soil
Collected : 11/6/2019 1:38:00PM
Field Name : JLNB3

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	38	mg/Kg	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	96	mg/Kg	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		11/ 8/19	1

Sample : 19454006

Information : RI03WT
Matrix : Water
Collected : 11/6/2019 4:30:00PM
Field Name : JLNB4

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.19	mg/L	U	11/8/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.48	mg/L	U	11/8/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		11/8/19	1

Sample : 19434001 Sample Duplicate

Information : BH01SB02
Matrix : Soil
Collected : 10/23/2019 10:59:00AM
Field Name : JLNA1

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	50	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	130	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	92	%Rec		10/31/19	1

Sample : 19434015 Sample Duplicate

Information : BK01SB01
Matrix : Soil
Collected : 10/23/2019 4:01:00PM
Field Name : JLNB5

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	43	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	110	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		10/31/19	1

Sample : 19434024 Sample Duplicate

Information : MW355
Matrix : Water
Collected : 10/22/2019 1:20:00PM
Field Name : JLNC4

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.20	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.50	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	89	%Rec		11/ 1/19	1

Sample : 19454005 Sample Duplicate

Information : BH06SB02
Matrix : Soil
Collected : 11/6/2019 1:38:00PM
Field Name : JLNB3

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	41	mg/Kg	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	100	mg/Kg	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	94	%Rec		11/ 8/19	1

Sample : 92S103119B1 Blank

Information : Blank
Matrix : Solid

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	40	mg/Kg	U	10/31/19	1
*400010	TPH-GC/Motor Oil Range Organics	100	mg/Kg	U	10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	93	%Rec		10/31/19	1

Sample : 92S110819B1 Blank

Information : Blank
Matrix : Solid

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	40	mg/Kg	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	100	mg/Kg	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	90	%Rec		11/ 8/19	1

Sample : 92W110119B1 Blank

Information : Blank
Matrix : Liquid

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.20	mg/L	U	11/ 1/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.50	mg/L	U	11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		11/ 1/19	1

Sample : 92W110819B1 Blank

Information : Blank
Matrix : Liquid

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	0.20	mg/L	U	11/ 8/19	1
*400010	TPH-GC/Motor Oil Range Organics	0.50	mg/L	U	11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		11/ 8/19	1

Sample : 92S103119L1 Lab Control Std

Information : Lab Control Standard
Matrix : Solid

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	97	%Rec		10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	91	%Rec		10/31/19	1

Sample : 92S110819L1 Lab Control Std

Information : Lab Control Standard
Matrix : Solid

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	85	%Rec		11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	80	%Rec		11/ 8/19	1

Sample : 92W110119L1 Lab Control Std

Information : Lab Control Standard
Matrix : Liquid

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	91	%Rec		11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		11/ 1/19	1

Sample : 92W110819L1 Lab Control Std

Information : Lab Control Standard
Matrix : Liquid

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	100	%Rec		11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	103	%Rec		11/ 8/19	1

Sample : 92S103119L2 Lab Control Std#2

Information : Lab Control Standard Dup.
Matrix : Solid

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	97	%Rec		10/31/19	1
Surrogate Compounds:						
629992	Pentacosane	92	%Rec		10/31/19	1

Sample : 92S110819L2 Lab Control Std#2

Information : Lab Control Standard Dup.
Matrix : Solid

Parameter : TPH-Dx
Prep Method: Ultrasonication - Ultrasonic Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	94	%Rec		11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	89	%Rec		11/ 8/19	1

Sample : 92W110119L2 Lab Control Std#2

Information : Lab Control Standard Dup.
Matrix : Liquid

Parameter : TPH-Dx
Prep Method: 3535A - Solid Phase Extraction
Analysis Method: NWTPH-Dx - Diesel range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	107	%Rec		11/ 1/19	1
Surrogate Compounds:						
629992	Pentacosane	110	%Rec		11/ 1/19	1

Sample : 92W110819L2 Lab Control Std#2

Information : Lab Control Standard Dup.

Matrix : Liquid

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	92	%Rec		11/ 8/19	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		11/ 8/19	1

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MEMORANDUM

DATE: December 16, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 29 samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Total Petroleum Hydrocarbons – Gasoline Range Extended (Ecology Method NWTPH-Gx) was performed at the USEPA Region 10 Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Manual Process (S4VEM).

The samples were numbered:

19434000	19434001	19434002	19434003	19434004	19434005
19434006	19434007	19434015	19434016	19434017	19434018
19434019	19434023	19434024	19434025	19434026	19434027
19434028	19434037	19434040	19454000	19454001	19454002
19454003	19454004	19454005	19454006	19454007	

No discrepancies were noted.

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

Subject: Data Release for Total Petroleum Hydrocarbon-Gasoline Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: Gunshy Manor PA

Project Code: SFP-156A

From: Gerald Dodo
Laboratory Services & Applied Sciences Division
USEPA Region 10

To: Brandon Perkins
Superfund & Emergency Management Division
USEPA Region 10

CC: Derek Pulvino - E&E

I have authorized release of this data package. Attached you will find the total petroleum hydrocarbon-gasoline range extended (TPH-Gx) analysis results for the above referenced project. For further information regarding the attached data, contact Chris Pace at (360) 871-8703.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: December 9, 2019

To: Brandon Perkins
Superfund & Emergency Management Division
USEPA Region 10

From: Chris Pace
Laboratory Services & Applied Sciences Division
USEPA Region 10

Subject: Quality Assurance Review for the Total Petroleum Hydrocarbon-Gasoline Range Extended Analysis of Samples from the Gunshy Manor PA.

Project Code: SFP-156A
Account Code: 2020T10P000DD210ZZLA00

CC: Derek Pulvino, E&E

The following is a quality assurance review of the data for gasoline range organics (TPH-Gx) of samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory in Port Orchard, WA, following EPA and Laboratory guidelines.

This review was conducted for the following samples:

19434000	19434001	19434002	19434003	19434004	19434005
19434006	19434007	19434015	19434016	19434017	19434018
19434019	19434023	19434024	19434025	19434026	19434027
19434028	19434037	19434040	19454000	19454001	19454002
19454003	19454004	19454005	19454006	19454007	

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

1. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality. Field information was provided to the laboratory from other sources, such as Chain of Custody records.

2. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied to preserved soil/sediment and water samples is 14 days from the time of collection. All samples were analyzed within the applicable criteria.

3. Sample Preparation

Samples were prepared according to the method/SOP.

4. Initial Calibration

Initial calibration was performed on 8/1/19 for gasoline range organics and the surrogate, 1,4-difluorobenzene. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq$20% or the correlation coefficients met the criteria of $\geq$0.99.

5. Continuing Calibration Verification (CCV)

The CCV met the criteria for frequency of analysis. The percent accuracies were 80-120% of the true value for gasoline range organics and the surrogate.

6. Blank Analysis

Method blanks were prepared and analyzed with each sample extraction batch to evaluate the potential for laboratory contamination and effects on the sample results. Gasoline range organics were not detected in the blank(s).

7. Surrogates

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. All surrogate recoveries for the samples were within the Laboratory's SOP criteria of 50-150%.

8. LCS/LCSD

Data for laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the QAPP criteria of 50-150% with a relative percent difference (RPD) of $\leq$35 soil/sediment and 60-140% with an RPD of $\leq$20 for waters.

9. Duplicate Sample Analysis

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. Duplicate analysis was performed using samples 19434001, 19434015, 19434024 and 19454005. The samples and duplicates were all non-detects. An RPD calculation is not applicable. None of the data were qualified on this basis.

10. Compound Quantitation/ Identification

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

Gasoline range organics is a collective term for volatile petroleum products, e.g., gasolines, naphtha, mineral spirits, Stoddard solvent, and other volatile petroleum products.

11. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Chris pace at the Region 10 Laboratory, phone number (360) 871-8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

US EPA Region 10 Laboratory

Multi-Analyte Final Report

Project Code : SFP-156A
Site : GUNSHY MANOR : Preliminary Assessment
Contact : Brandon Perkins
Account : 2020T10P000DD210ZZLA00

Sample : 19434000

Information : BH01SB01
Matrix : Soil
Collected : 10/23/2019 10:35:00AM
Field Name : JLNA0

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	7.0	mg/Kg	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		10/29/19	1

Sample : 19434001

Information : BH01SB02
Matrix : Soil
Collected : 10/23/2019 10:59:00AM
Field Name : JLNA1

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	13	mg/Kg	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		10/29/19	1

Sample : 19434002

Information : BH01SB03
Matrix : Soil
Collected : 10/23/2019 11:14:00AM
Field Name : JLNA2

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.9	mg/Kg	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	105	%Rec		10/29/19	1

Sample : 19434003

Information : BH02SB01
Matrix : Soil
Collected : 10/23/2019 12:16:00PM
Field Name : JLNA3

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.4	mg/Kg	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	102	%Rec		10/29/19	1

Sample : 19434004

Information : BH02SB02
Matrix : Soil
Collected : 10/23/2019 12:40:00PM
Field Name : JLNA4

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	26	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	109	%Rec		10/30/19	1

Sample : 19434005

Information : BH02SB03
Matrix : Soil
Collected : 10/23/2019 1:00:00PM
Field Name : JLNA5

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	51	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	113	%Rec		10/30/19	1

Sample : 19434006

Information : BH03SB01
Matrix : Soil
Collected : 10/23/2019 1:58:00PM
Field Name : JLNA6

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.3	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	110	%Rec		10/30/19	1

Sample : 19434007

Information : BH03SB02
Matrix : Soil
Collected : 10/23/2019 2:17:00PM
Field Name : JLNA7

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	14	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	114	%Rec		10/30/19	1

Sample : 19434015

Information : BK01SB01
Matrix : Soil
Collected : 10/23/2019 4:01:00PM
Field Name : JLNB5

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.7	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	102	%Rec		10/30/19	1

Sample : 19434016

Information : BK01SB02
Matrix : Soil
Collected : 10/23/2019 4:20:00PM
Field Name : JLNB6

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.8	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	111	%Rec		10/30/19	1

Sample : 19434017

Information : BK01SB03
Matrix : Soil
Collected : 10/23/2019 4:42:00PM
Field Name : JLNB7

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.8	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	125	%Rec		10/30/19	1

Sample : 19434018

Information : BH01GW
Matrix : Water
Collected : 10/23/2019 3:45:00PM
Field Name : JLNB8

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		10/29/19	1

Sample : 19434019

Information : BH02GW
Matrix : Water
Collected : 10/23/2019 4:12:00PM
Field Name : JLNB9

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	109	%Rec		10/29/19	1

Sample : 19434023

Information : MW01GW
Matrix : Water
Collected : 10/22/2019 12:50:00PM
Field Name : JLNC3

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	108	%Rec		10/29/19	1

Sample : 19434024

Information : MW355
Matrix : Water
Collected : 10/22/2019 1:20:00PM
Field Name : JLNC4

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	108	%Rec		10/29/19	1

Sample : 19434025

Information : MW356
Matrix : Water
Collected : 10/22/2019 2:50:00PM
Field Name : JLNC5

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		10/29/19	1

Sample : 19434026

Information : RI01WT
Matrix : Water
Collected : 10/24/2019 11:00:00AM
Field Name : JLNC6

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	107	%Rec		10/29/19	1

Sample : 19434027

Information : RI02WT
Matrix : Water
Collected : 10/24/2019 11:30:00AM
Field Name : JLNC7

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	110	%Rec		10/29/19	1

Sample : 19434028

Information : TB01WT
Matrix : Water
Collected : 10/23/2019 6:30:00AM
Field Name : JLNC8

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	121	%Rec		10/29/19	1

Sample : 19434037

Information : MW02GW
Matrix : Water
Collected : 10/22/2019 3:40:00PM
Field Name : JLND7

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		10/29/19	1

Sample : 19434040

Information : BK01GW
Matrix : Water
Collected : 10/23/2019 5:55:00PM
Field Name : JLNA7

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	106	%Rec		10/29/19	1

Sample : 19454000

Information : BH04SB01
Matrix : Soil
Collected : 11/6/2019 10:04:00AM
Field Name : JLNA8

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.5	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	119	%Rec		11/13/19	1

Sample : 19454001

Information : BH04SB02
Matrix : Soil
Collected : 11/6/2019 10:22:00AM
Field Name : JLNA9

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	7.0	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	118	%Rec		11/13/19	1

Sample : 19454002

Information : BH05SB01
Matrix : Soil
Collected : 11/6/2019 11:10:00AM
Field Name : JLNB0

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.5	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	106	%Rec		11/13/19	1

Sample : 19454003

Information : BH05SB02
Matrix : Soil
Collected : 11/6/2019 11:55:00AM
Field Name : JLNB1

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.8	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		11/13/19	1

Sample : 19454004

Information : BH06SB01
Matrix : Soil
Collected : 11/6/2019 1:02:00PM
Field Name : JLNB2

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.9	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	119	%Rec		11/13/19	1

Sample : 19454005

Information : BH06SB02
Matrix : Soil
Collected : 11/6/2019 1:38:00PM
Field Name : JLNB3

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.8	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	113	%Rec		11/13/19	1

Sample : 19454006

Information : RI03WT
Matrix : Water
Collected : 11/6/2019 4:30:00PM
Field Name : JLNB4

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	107	%Rec		11/13/19	1

Sample : 19454007

Information : TB02WT
Matrix : Water
Collected : 11/6/2019 7:30:00AM
Field Name : JLNC0

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	103	%Rec		11/13/19	1

Sample : 19434001 Sample Duplicate

Information : BH01SB02
Matrix : Soil
Collected : 10/23/2019 10:59:00AM
Field Name : JLNA1

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	9.2	mg/Kg	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	103	%Rec		10/29/19	1

Sample : 19434015 Sample Duplicate

Information : BK01SB01
Matrix : Soil
Collected : 10/23/2019 4:01:00PM
Field Name : JLNB5

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.6	mg/Kg	U	10/30/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	105	%Rec		10/30/19	1

Sample : 19434024 Sample Duplicate

Information : MW355
Matrix : Water
Collected : 10/22/2019 1:20:00PM
Field Name : JLNC4

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	103	%Rec		10/29/19	1

Sample : 19454005 Sample Duplicate

Information : BH06SB02
Matrix : Soil
Collected : 11/6/2019 1:38:00PM
Field Name : JLNB3

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.9	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	120	%Rec		11/13/19	1

Sample : 91T102919B1 Blank

Information : Blank
Matrix : Solid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.0	mg/Kg	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	108	%Rec		10/29/19	1

Sample : 91T111319B1 Blank

Information : Blank
Matrix : Solid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.0	mg/Kg	U	11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	105	%Rec		11/13/19	1

Sample : TW102919B1 Blank

Information : Blank
Matrix : Liquid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	122	%Rec		10/29/19	1

Sample : 91T102919L1 Lab Control Std

Information : Lab Control Standard
Matrix : Solid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	90	%Rec		10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	102	%Rec		10/29/19	1

Sample : 91T111319L1 Lab Control Std

Information : Lab Control Standard
Matrix : Solid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	98	%Rec		11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	102	%Rec		11/13/19	1

Sample : TW102919L1 Lab Control Std

Information : Lab Control Standard
Matrix : Liquid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	81	%Rec		10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	117	%Rec		10/29/19	1

Sample : 91T102919L2 Lab Control Std#2

Information : Lab Control Standard Dup.
Matrix : Solid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	90	%Rec		10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	104	%Rec		10/29/19	1

Sample : 91T111319L2 Lab Control Std#2

Information : Lab Control Standard Dup.
Matrix : Solid

Parameter : TPH-Gx
Prep Method: NWTPH-Gx - Gasoline range organics
Analysis Method: NWTPH-Gx - Gasoline range organics
Weight Basis : Dry

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	102	%Rec		11/13/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	103	%Rec		11/13/19	1

Sample : TW102919L2 Lab Control Std#2

Information : Lab Control Standard Dup.

Matrix : Liquid

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Weight Basis : Wet

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	80	%Rec		10/29/19	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	112	%Rec		10/29/19	1

ecology and environment, inc.
Global Environmental Specialists

720 Third Avenue, Suite 1700
Seattle, Washington 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: November 13, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.6027.009.01

The data quality assurance review of 1 water sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Extended Gasoline Range Total Petroleum Hydrocarbons (Ecology Method NWTPH-Gx) analyses was performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Manual Process (S2B/4VM).

The sample was numbered: 19434030

Data Qualifications:

1. Sample Holding Times: Acceptable.

The sample was maintained and received within the QC limits of 4°C ± 2°C. The sample was collected on October 23, 2019, and was analyzed by November 4, 2019, therefore meeting QC criteria of less than 14 days between collection and analysis for preserved water samples.

2. Initial Calibration: Acceptable.

Calculations were verified as correct. All relative percent differences (RPDs) were less than or equal to the laboratory control limits.

3. Continuing Calibration: Acceptable.

Calculations were verified as correct. All percent differences were less than or equal to the laboratory control limits.

4. Blanks: Acceptable.

A method blank was analyzed at the required frequency of every 12 hours for each matrix, preparation technique, and analysis system. Gasoline-range TPHs were not detected in the method blank.

5. System Monitoring Compounds (SMC): Acceptable.

All recoveries of the SMCs were within QC limits.

6. **Blank Spikes (BS) and BS Duplicate (BSD) Analyses: Acceptable.**

BS and BSD results were within laboratory QC limits.

7. **Duplicates: Acceptable.**

All spike duplicate results were within laboratory QC limits.

8. **Quantitation and Quantitation Limits: Acceptable.**

Sample quantitation and sample quantitation limits were correctly calculated.

9. **Laboratory Contact: Not Required.**

No laboratory contact was required.

10. **Overall Assessment of Data for Use**

A total of one result was validated in this data memorandum. No sample results were qualified as estimated quantities (J) based on spike duplicate precision outliers, spike accuracy outliers, holding time outliers, incorrect sample containers, or sample temperature outliers. No sample results were rejected (R). No contaminants were detected in the blanks.

The reviewer used professional judgment to apply a single bias qualifier when more than one bias qualifier was applicable to an individual estimated sample result.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the analytical method(s), the EPA Region 10 Emergency Management Program SOG 144E Analytical Data Validation, and/or the Office of Emergency and Remedial Response Publication "National Functional Guidelines for Superfund Organic Methods Data Review, January 2017". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met. H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Seattle Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 11041924.D

Analysis Method: NWTPH-Gx Date Collected: 10/23/2019 16:00

Sample wt/vol: 5(mL) Date Analyzed: 11/04/2019 20:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 315857 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00228	Gasoline	ND		0.25	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		50-150
98-08-8	Trifluorotoluene (Surr)	108		50-150

11/13/19

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MEMORANDUM

DATE: November 13, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data quality assurance review of 1 water sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Extended Diesel Range Total Petroleum Hydrocarbons (Ecology Method NWTPH-Dx) was performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Manual Process (S2B/4VM).

The sample was numbered: 19434030

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The sample was maintained at 4°C ± 2°C. The sample was collected on October 23, 2019, extracted on November 4, 2019, and analyzed by November 4, 2019, therefore meeting QC criteria of less than 14 days between collection and extraction for preserved water samples and less than 40 days between extraction and analysis.

2. **Initial Calibration: Acceptable.**

Calculations were verified as correct. All relative percent differences (RPDs) were within the laboratory control limits.

3. **Continuing Calibration: Acceptable.**

Calculations were verified as correct. All percent differences (%Ds) were within the laboratory control limits.

4. **Blanks: Acceptable.**

A method blank was analyzed for each extraction batch for each matrix and analysis system. Diesel- and motor oil-range TPHs were not detected in the method blank.

5. **System Monitoring Compounds (SMC): Acceptable.**

All recoveries of the SMCs were within QC limits.

6. Blank Spike (BS) and BS Duplicate (BSD): Acceptable.

BS and BSD recoveries were within QC limits.

7. Duplicates: Acceptable.

All spike duplicate results were within QC limits.

8. Quantitation and Quantitation Limits: Acceptable.

Sample concentrations were correctly calculated.

9. Laboratory Contact: Not Required.

No laboratory contact was required.

10. Overall Assessment of Data for Use

A total of two results were validated in this data memorandum. No sample results were qualified as estimated quantities (J) based on duplicate precision outliers, spike accuracy outliers, holding time outliers, incorrect sample containers, or sample temperature outliers. No sample results were rejected (R). No potential contaminants of concern were detected in the laboratory blanks.

The reviewer used professional judgment to apply a single bias qualifier when more than one bias qualifier was applicable to an individual estimated sample result.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the analytical method(s), the EPA Region 10 Emergency Management Program SOG 144E Analytical Data Validation, and/or the Office of Emergency and Remedial Response Publication "National Functional Guidelines for Superfund Organic Methods Data Review, January 2017". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Spokane Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 590-0006228-017.D

Analysis Method: NWTPH-Dx Date Collected: 10/23/2019 16:00

Extraction Method: 3510C Date Extracted: 11/04/2019 15:21

Sample wt/vol: 953.3(mL) Date Analyzed: 11/04/2019 17:42

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: ZB-1HT B ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 25040 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00383	Residual Range Organics (RRO) (C25-C36)	1.9		0.17	0.13
STL00258	Diesel Range Organics (DRO) (C10-C25)	0.96		0.10	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	93		50-150
93952-07-9	n-Triacontane-d62	105		50-150

11H319

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720 Third Avenue, Suite 1700
Seattle, Washington 98104
Tel. (206) 624-9537, Fax: (206) 621-9832 **MEMORANDUM**

DATE: November 13, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data quality assurance review of one water sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Semivolatile Organic Compound (SVOC) analysis (EPA Method 8270) was performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Manual Process (S2B/4VM).

The sample was numbered: 19434030

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The sample was maintained and received within the QC limits of 0°C to 6°C. The sample was collected on October 23, 2019, was extracted on October 30, 2019, and analyzed by November 12, 2019, therefore meeting holding time criteria of less than 7 days between collection and extraction and less than 40 days between extraction and analysis.

2. **Tuning: Acceptable.**

Tuning was performed at the beginning of each 12-hour analysis sequence. All results were within QC limits.

3. **Initial Calibration: Satisfactory.**

All average Relative Response Factors (RRFs) were within the QC limits except n-nitroso-di-n-propylamine; associated sample quantitation limits were rejected (R). All Relative Standard Deviations (RSDs) were within the QC limits.

4. **Continuing Calibration: Satisfactory.**

All RRFs were within the QC limits except as noted in the initial calibration; no additional actions were taken. All % differences were within the QC limits except low benzyl alcohol, benzoic acid, 4-chloroaniline, 3-nitroaniline, 2,4-dinitrophenol, carbazole, benzidine and 3,3'-dichlorobenzidine recoveries (associated positive results and sample quantitation limits were qualified as estimated quantities with a low bias [JL or UJL]) and high bis(2-ethylhexyl)phthalate, diethylphthalate, and di-n-butyl phthalate recoveries (associated positive results were qualified as estimated quantities with a high bias [JH]).

5. Blanks: Satisfactory.

A method blank was analyzed for each 20 sample batch per matrix. There were no detections in any method blank except benzoic acid (0.882 J ug/L); associated positive sample results less than the reporting limit were qualified as not detected (U) at the reporting limit.

6. System Monitoring Compounds (SMCs): Satisfactory.

All SMC recoveries were within QC limits except one low recovery in the method blank; no actions were taken as all other SMCs were within QC limits.

7. Blank Spike (BS)/BS Duplicate (BSD) Analysis: Satisfactory.

BS and BSD analyses were performed per SDG or per matrix per concentration level, whichever was more frequent. All recoveries were within QC limits except high diethyl phthalate, di-n-butyl phthalate, butyl benzyl phthalate, bis(2-ethylhexyl)phthalate, n-nitroso di-n-propylamine, 2,4,5-trichlorophenol, dimethyl phthalate, phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, and carbazole recoveries; associated positive sample results were qualified as estimated quantities with a high bias (JH).

8. Duplicate Analysis: Satisfactory.

Duplicate and spike duplicate analyses were performed per SDG or per matrix per concentration level, whichever was more frequent. All duplicate and spike duplicate results were within QC limits except 2,4-dimethylphenol and 4-chloroaniline. No qualifiers were applied based on the duplicate outliers alone.

9. Internal Standards: Acceptable.

All internal standards (IS) were within $\pm$ 30 seconds of the continuing calibration IS retention times. All area counts were within 50 % to 200 % of the continuing calibration area counts.

10. Overall Assessment of Data for Use

A total of 67 results were validated in this data memorandum. No sample results were qualified as estimated quantities (J) based on duplicate precision outliers, holding time outliers, incorrect sample containers, or sample temperature outliers. One sample result was qualified as estimated based on spike accuracy outliers. One sample result was rejected (R). The following potential contaminant of concern was detected in the laboratory blank: benzoic acid.

The reviewer used professional judgment to apply a single bias qualifier when more than one bias qualifier was applicable

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the analytical method(s), the EPA Region 10 Emergency Management Program SOG 144E Analytical Data Validation, and/or the Office of Emergency and Remedial Response Publication "National Functional Guidelines for Superfund Organic Methods Data Review, January 2017". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate

concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Seattle Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 40scan111219A013.D

Analysis Method: 8270D Date Collected: 10/23/2019 16:00

Extract. Method: 3520C Date Extracted: 10/30/2019 15:28

Sample wt/vol: 954.1(mL) Date Analyzed: 11/12/2019 14:37

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 316566 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	ND		4.2	0.30
111-44-4	Bis(2-chloroethyl)ether	ND		0.63	0.10
95-57-8	2-Chlorophenol	ND		0.63	0.23
541-73-1	1,3-Dichlorobenzene	ND		0.42	0.10
106-46-7	1,4-Dichlorobenzene	ND		0.42	0.063
100-51-6	Benzyl alcohol	ND		3.1	0.72
95-50-1	1,2-Dichlorobenzene	ND		0.63	0.10
95-48-7	2-Methylphenol	ND		0.63	0.10
15831-10-4	3 & 4 Methylphenol	ND		0.84	0.19
621-64-7	N-Nitrosodi-n-propylamine	ND	*	0.63	0.10
67-72-1	Hexachloroethane	ND		1.0	0.10
98-95-3	Nitrobenzene	ND		0.63	0.23
78-59-1	Isophorone	ND		0.42	0.10
88-75-5	2-Nitrophenol	ND		1.0	0.15
105-67-9	2,4-Dimethylphenol	ND	*	4.2	0.87
65-85-0	Benzoic acid	ND		4.2	0.89
111-91-1	Bis(2-chloroethoxy)methane	ND		0.63	0.10
120-83-2	2,4-Dichlorophenol	ND		4.2	0.18
120-82-1	1,2,4-Trichlorobenzene	ND		0.42	0.042
91-20-3	Naphthalene	ND		0.42	0.10
106-47-8	4-Chloroaniline	ND	*	10	2.2
87-68-3	Hexachlorobutadiene	ND		1.0	0.10
59-50-7	4-Chloro-3-methylphenol	ND		0.63	0.10
91-57-6	2-Methylnaphthalene	ND		0.42	0.063
77-47-4	Hexachlorocyclopentadiene	ND		3.1	0.084
88-06-2	2,4,6-Trichlorophenol	ND		0.63	0.10
95-95-4	2,4,5-Trichlorophenol	ND	*	0.42	0.10
91-58-7	2-Chloronaphthalene	ND		1.0	0.14
88-74-4	2-Nitroaniline	ND		0.63	0.10
131-11-3	Dimethyl phthalate	0.11	J *	0.63	0.10
208-96-8	Acenaphthylene	ND		1.0	0.10
606-20-2	2,6-Dinitrotoluene	1.4		0.63	0.10
99-09-2	3-Nitroaniline	ND		3.1	0.17
83-32-9	Acenaphthene	ND		0.42	0.084

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Seattle Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 40scan111219A013.D

Analysis Method: 8270D Date Collected: 10/23/2019 16:00

Extract. Method: 3520C Date Extracted: 10/30/2019 15:28

Sample wt/vol: 954.1(mL) Date Analyzed: 11/12/2019 14:37

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 316566 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
51-28-5	2,4-Dinitrophenol	ND		21	6.1
100-02-7	4-Nitrophenol	ND		16	0.67
132-64-9	Dibenzofuran	ND		0.42	0.063
121-14-2	2,4-Dinitrotoluene	ND		1.0	0.15
84-66-2	Diethyl phthalate	ND	*	13	0.75
7005-72-3	4-Chlorophenyl phenyl ether	ND		0.63	0.10
86-73-7	Fluorene	ND		2.1	0.094
100-01-6	4-Nitroaniline	ND		2.1	0.14
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.8
86-30-6	N-Nitrosodiphenylamine	ND		3.1	0.15
101-55-3	4-Bromophenyl phenyl ether	ND		0.63	0.10
118-74-1	Hexachlorobenzene	ND		0.63	0.10
87-86-5	Pentachlorophenol	ND		10	2.6
85-01-8	Phenanthrene	ND	*	1.0	0.14
120-12-7	Anthracene	ND		16	0.15
84-74-2	Di-n-butyl phthalate	ND	*	3.1	0.58
206-44-0	Fluoranthene	ND	*	3.1	0.16
129-00-0	Pyrene	ND	*	2.1	0.10
85-68-7	Butyl benzyl phthalate	ND	*	10	0.39
91-94-1	3,3'-Dichlorobenzidine	ND		16	3.3
56-55-3	Benzo[a]anthracene	ND	*	1.0	0.094
218-01-9	Chrysene	ND	*	0.63	0.18
117-81-7	Bis(2-ethylhexyl) phthalate	ND	*	16	6.6
117-84-0	Di-n-octyl phthalate	ND		1.0	0.19
50-32-8	Benzo[a]pyrene	ND		1.0	0.17
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.0	0.052
53-70-3	Dibenz(a,h)anthracene	ND		0.63	0.10
191-24-2	Benzo[g,h,i]perylene	ND		1.0	0.10
86-74-8	Carbazole	ND	*	0.63	0.10
90-12-0	1-Methylnaphthalene	ND		1.0	0.073
205-99-2	Benzo[b]fluoranthene	ND		1.0	0.14
207-08-9	Benzo[k]fluoranthene	ND		1.0	0.10
108-60-1	bis(chloroisopropyl) ether	ND		0.63	0.22

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Seattle Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 40scan111219A013.D

Analysis Method: 8270D Date Collected: 10/23/2019 16:00

Extract. Method: 3520C Date Extracted: 10/30/2019 15:28

Sample wt/vol: 954.1(mL) Date Analyzed: 11/12/2019 14:37

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 316566 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	67		36-120
4165-62-2	Phenol-d5 (Surr)	61		38-120
4165-60-0	Nitrobenzene-d5 (Surr)	72		46-129
321-60-8	2-Fluorobiphenyl	70		50-120
118-79-6	2,4,6-Tribromophenol (Surr)	88		48-125
1718-51-0	Terphenyl-d14 (Surr)	82		61-126

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720 Third Avenue, Suite 1700
Seattle, Washington 98104
Tel: (206) 624-9537, Fax: (206) 621-9832 **MEMORANDUM**

DATE: November 13, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data quality assurance review of 1 water sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analyses for Polychlorinated Biphenyls (PCBs - EPA Method 8082) were performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Manual Process (S2B/4VM).

The sample was numbered: 19434030

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The sample was maintained at 0°C to 6°C. The sample was collected on October 23, 2019, extracted on October 30, 2019, and was analyzed by October 30, 2019. There are no holding time limits for Method 8082 PCB analyses.

2. **Instrument Performance: Acceptable.**

The surrogate retention time percent difference between the initial calibration standards and the remaining standards and samples was within QC limits.

3. **Initial and Continuing Calibration: Satisfactory.**

All initial calibration relative standard deviations (RSDs) were within QC limits. All continuing calibration % differences (% D) were within QC limits except two low individual peaks (one each for Aroclors 1016 and 1260); no actions were taken based on one outlying peak per calibration.

4. **Blanks: Acceptable.**

A method blank was prepared at the required frequency of every time samples were extracted for each matrix and for each concentration level, or every 20 samples, whichever is greater, and for each analytical system. No target analytes were detected in the laboratory blank.

5. **System Monitoring Compounds (SMCs): Acceptable.**

All recoveries of the SMCs were within the established control limits.

6. **Blank Spike (BS) and BS Duplicate (BSD) Analyses: Acceptable.**

BS and BSD recoveries were within QC limits.

7. **Duplicates: Acceptable.**

Relative Percent Differences (RPDs) of all spiked analytes were within QC limits.

8. **Compound Identification: Acceptable.**

All positive results were dual-column confirmed with differences between the columns less than 40%.

9. **Target Compound Quantitation and Quantitation Limits: Acceptable.**

Sample results and quantitation limits were correctly calculated.

10. **Laboratory Contact**

No laboratory contact was required.

11. **Overall Assessment**

A total of nine results were validated in this data memorandum. No sample results were qualified as estimated quantities (J) based on duplicate precision outliers, spike accuracy outliers, holding time outliers, incorrect sample containers, or sample temperature outliers. No sample results were rejected (R). No potential contaminants of concern were detected in the laboratory blanks.

The reviewer used professional judgment to apply a single bias qualifier when more than one bias qualifier was applicable to an individual estimated sample result.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the analytical method(s), the EPA Region 10 Emergency Management Program SOG 144E Analytical Data Validation, and/or the Office of Emergency and Remedial Response Publication "National Functional Guidelines for Superfund Organic Methods Data Review, January 2017". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Spokane Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 191030028.D

Analysis Method: 8082A Date Collected: 10/23/2019 16:00

Extraction Method: 3510C Date Extracted: 10/30/2019 09:19

Sample wt/vol: 978.6(mL) Date Analyzed: 10/30/2019 20:56

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 5(mL) GC Column: STX-CLP Pst2 ID: 0.2(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 24957 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.20	0.11
11104-28-2	PCB-1221	ND		0.20	0.11
11141-16-5	PCB-1232	ND		0.20	0.11
53469-21-9	PCB-1242	ND		0.20	0.11
12672-29-6	PCB-1248	ND		0.20	0.11
11097-69-1	PCB-1254	ND		0.20	0.11
11096-82-5	PCB-1260	ND		0.20	0.029
11100-14-4	PCB-1268	ND		0.20	0.11
37324-23-5	PCB-1262	ND		0.20	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	63		20-126
2051-24-3	DCB Decachlorobiphenyl (Surr)	102		23-138

11-13-19

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MEMORANDUM

DATE: November 13, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data quality assurance review of 1 water sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Volatile Organic Compound (VOC) analysis (EPA Method 8260) was performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Manual Process (S2B/4VM).

The sample was numbered: 19434030

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The sample was maintained and received within the QC limits of 4°C ± 2°C. The sample was collected on October 23, 2019, was received at the laboratory on October 25, 2019, and was analyzed by November 2, 2019, therefore meeting QC criteria of less than 14 days between collection and analysis for preserved water samples.

2. **Tuning: Acceptable.**

Tuning was performed at the beginning of each 12-hour analysis sequence. All results were within QC limits.

3. **Initial Calibration: Acceptable.**

All average Relative Response Factors (RRFs) were within the QC limits. All Relative Standard Deviations (RSDs) and/or correlation coefficients were within the QC limits.

4. **Continuing Calibration: Satisfactory.**

All RRFs were within the QC limits. All % differences were within the QC limits except high toluene, isopropylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,2,4-trimethylbenzene, and hexachlorobutadiene with high recoveries; associated positive results were qualified as estimated quantities with a high bias (JH).

5. **Blanks: Satisfactory.**

A method blank was analyzed for each 20 sample batch per matrix. There were no detections in any method blank except 1,2,4-trichlorobenzene (0.121 J ug/L) and n-propylbenzene (0.104 J ug/L); no actions were taken as these analytes were not detected in the associated sample.

6. System Monitoring Compounds (SMCs): Acceptable.

All SMC recoveries were within QC limits.

7. Blank Spike (BS)/BS Duplicate (BSD) Analysis: Acceptable.

BS and BSD analyses were performed per SDG or per matrix per concentration level, whichever was more frequent. All recoveries were within QC limits.

8. Duplicate Analysis: Acceptable.

Spike duplicate analyses were performed per SDG or per matrix per concentration level, whichever was more frequent. All spike duplicate results were within QC limits.

9. Internal Standards: Acceptable.

All internal standards were within $\pm$ 30 seconds of the continuing calibration internal standard retention times. All area counts were within 50 % to 200 % of the continuing calibration area counts.

10. Overall Assessment of Data for Use

A total of 60 results were validated in this data memorandum. No sample results were qualified as estimated quantities (J) based on duplicate precision outliers, spike accuracy outliers, holding time outliers, incorrect sample containers, or sample temperature outliers. No sample results were rejected (R). No potential contaminants of concern were detected in the blanks that potentially affected sample results.

The reviewer used professional judgment to apply a single bias qualifier when more than one bias qualifier was applicable to an individual estimated sample result.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the analytical method(s), the EPA Region 10 Emergency Management Program SOG 144E Analytical Data Validation, and/or the Office of Emergency and Remedial Response Publication "National Functional Guidelines for Superfund Organic Methods Data Review, January 2017". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Seattle Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 103119_074.D

Analysis Method: 8260C Date Collected: 10/23/2019 16:00

Sample wt/vol: 10(mL) Date Analyzed: 11/02/2019 01:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 624SIL-MS ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 315783 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-50-1	1,2-Dichlorobenzene	ND		0.30	0.050
95-49-8	2-Chlorotoluene	ND		0.50	0.12
96-18-4	1,2,3-Trichloropropane	ND		0.20	0.050
56-23-5	Carbon tetrachloride	ND		0.20	0.025
10061-01-5	cis-1,3-Dichloropropene	ND		0.20	0.090
108-90-7	Chlorobenzene	ND		0.20	0.025
75-01-4	Vinyl chloride	ND		0.020	0.013
135-98-8	sec-Butylbenzene	ND		1.0	0.17
74-95-3	Dibromomethane	ND		0.20	0.062
179601-23-1	m-Xylene & p-Xylene	0.12	J	0.50	0.12
95-47-6	o-Xylene	ND		0.50	0.15
120-82-1	1,2,4-Trichlorobenzene	ND		0.30	0.072
100-42-5	Styrene	ND		0.50	0.19
74-97-5	Chlorobromomethane	ND		0.20	0.025
75-27-4	Dichlorobromomethane	ND		0.20	0.060
541-73-1	1,3-Dichlorobenzene	ND		0.30	0.050
71-43-2	Benzene	ND		0.20	0.030
75-00-3	Chloroethane	ND		0.50	0.096
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	0.092
87-61-6	1,2,3-Trichlorobenzene	ND		0.50	0.15
103-65-1	N-Propylbenzene	ND		0.30	0.091
99-87-6	4-Isopropyltoluene	0.076	J	0.30	0.050
104-51-8	n-Butylbenzene	ND		0.50	0.080
563-58-6	1,1-Dichloropropene	ND		0.20	0.036
156-59-2	cis-1,2-Dichloroethene	ND		0.20	0.055
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	0.056
95-63-6	1,2,4-Trimethylbenzene	ND		0.30	0.072
108-88-3	Toluene	ND		0.20	0.050
91-20-3	Naphthalene	ND		1.0	0.22
108-67-8	1,3,5-Trimethylbenzene	0.22	J	0.50	0.15
142-28-9	1,3-Dichloropropane	ND		0.20	0.056
67-66-3	Chloroform	0.54		0.20	0.030
106-43-4	4-Chlorotoluene	ND		0.30	0.050
124-48-1	Chlorodibromomethane	ND		0.20	0.055
75-71-8	Dichlorodifluoromethane	ND		0.40	0.13
79-00-5	1,1,2-Trichloroethane	ND		0.20	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Seattle Job No.: 580-90365-1

SDG No.:

Client Sample ID: 19434030 Lab Sample ID: 580-90365-1

Matrix: Water Lab File ID: 103119_074.D

Analysis Method: 8260C Date Collected: 10/23/2019 16:00

Sample wt/vol: 10(mL) Date Analyzed: 11/02/2019 01:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 624SIL-MS ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 315783 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-06-6	tert-Butylbenzene	ND		0.50	0.10
74-87-3	Chloromethane	ND		0.50	0.15
75-09-2	Methylene Chloride	ND		5.0	0.74
75-35-4	1,1-Dichloroethene	ND		0.20	0.10
98-82-8	Isopropylbenzene	ND		1.0	0.19
107-06-2	1,2-Dichloroethane	ND		0.20	0.043
127-18-4	Tetrachloroethene	ND		0.50	0.084
71-55-6	1,1,1-Trichloroethane	ND		0.20	0.025
594-20-7	2,2-Dichloropropane	ND		0.50	0.060
106-93-4	Ethylene Dibromide	ND		0.10	0.025
75-25-2	Bromoform	ND		0.50	0.16
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.44
75-69-4	Trichlorofluoromethane	ND		0.50	0.11
79-01-6	Trichloroethene	ND		0.20	0.066
108-86-1	Bromobenzene	ND		0.20	0.035
78-87-5	1,2-Dichloropropane	ND		0.20	0.060
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.30	0.027
100-41-4	Ethylbenzene	0.052	J	0.20	0.030
156-60-5	trans-1,2-Dichloroethene	ND		0.20	0.089
87-68-3	Hexachlorobutadiene	ND		0.50	0.15
75-34-3	1,1-Dichloroethane	ND		0.20	0.025
74-83-9	Bromomethane	ND		0.50	0.16
106-46-7	1,4-Dichlorobenzene	ND		0.30	0.050
1634-04-4	Methyl tert-butyl ether	ND		0.30	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120
98-08-8	Trifluorotoluene (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		80-120

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MEMORANDUM

DATE: November 13, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data quality assurance review of 1 water sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Target Analyte List (TAL) metals analyses (EPA Methods 6010 and 7470) were performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Manual Process (S2B/4VM).

The sample was numbered: 19434030

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The sample was maintained at < 6°C (only applies to mercury). The sample was collected on October 23, 2019, and was analyzed by November 5, 2019, therefore meeting QC criteria of less than 6 months between collection, extraction, and analysis (28 days for mercury).

2. **Initial and Continuing Calibration: Acceptable.**

A minimum of one calibration standard and a blank were analyzed at the beginning of the ICP analysis sequence and after every 10 samples. No results were greater than 110% of the highest calibration standard. All ICP recoveries were within the QC limits. All AA recoveries were within QC limits and the initial calibration correlation coefficient was > 0.995.

3. **Blanks: Satisfactory.**

A preparation blank was analyzed for each 20 samples or per matrix per concentration level. Blanks were analyzed after each Initial or Continuing Calibration Verification. There were no detections in any blanks except manganese (0.0032 mg/L) and aluminum (0.118 mg/L) in the Method Blank, thallium (0.0059 mg/L) in the Initial Calibration Blank (ICB), and beryllium (0.0025 mg/L), cadmium (0.0008 mg/L), cobalt (0.0007 mg/L), and manganese (0.0024 mg/L) in CCB 2 (only the highest applicable concentration for CCBs are listed). Associated sample results were qualified as not detected (U) if the sample result was less than five times the positive blank concentration.

4. **ICP Interference Check Sample: Acceptable.**

An Interference Check Sample (ICS) was analyzed at the beginning of each sequence. All applicable ICS (solution AB) results were within QC limits of 80% - 120% recovery.

recycled paper

5. **Duplicate Analysis: Acceptable.**

A laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All spike duplicate results were within QC limits.

6. **Laboratory Control Sample Analysis: Acceptable.**

A Laboratory Control Sample (LCS) was analyzed per SDG per matrix. All LCS and LCS duplicate results were within the established control limits.

7. **Overall Assessment of Data for Use**

A total of 22 results were validated in this data memorandum. No sample results were qualified as estimated quantities (J) based on duplicate precision outliers, spike accuracy outliers, holding time outliers, incorrect sample containers, or sample temperature outliers. No sample results were rejected (R). The following potential contaminants of concern were detected in the laboratory blanks: aluminum, manganese, thallium, beryllium, cadmium, and cobalt.

The reviewer used professional judgment to apply a single bias qualifier when more than one bias qualifier was applicable to an individual estimated sample result.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the analytical method(s), the EPA Region 10 Emergency Management Program SOG 144E Analytical Data Validation, and/or the Office of Emergency and Remedial Response Publication "National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

H - The sample result is biased high.

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

K - The bias of the sample is not known.

L - The sample result is biased low.

Q - Detected concentration is below the method reporting limit/Contract Required Quantitation Limit but is above the method quantitation limit.

R - The data is rejected and unusable. The analyte may or may not be present in the sample.

U - The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ - The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 19434030 | Lab Sample ID: 580-90365-1

Lab Name: Eurofins TestAmerica, Seattle | Job No.: 580-90365-1

SDG ID.:

Matrix: Water | Date Sampled: 10/23/2019 16:00

Reporting Basis: WET | Date Received: 10/25/2019 16:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.00030	0.00015	mg/L			1	7470A

11-13-19

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 19434030 | Lab Sample ID: 580-90365-1

Lab Name: Eurofins TestAmerica, Seattle | Job No.: 580-90365-1

SDG ID.:

Matrix: Water | Date Sampled: 10/23/2019 16:00

Reporting Basis: WET | Date Received: 10/25/2019 16:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.010	0.060	0.0072	mg/L	J		1	6010D
7440-36-0	Antimony	ND	0.060	0.0042	mg/L			1	6010D
7440-39-3	Barium	0.36	0.020	0.0039	mg/L			1	6010D
7440-41-7	Beryllium	ND	0.020	0.0015	mg/L			1	6010D
7440-43-9	Cadmium	0.00080	0.020	0.00050	mg/L	J		1	6010D
7440-47-3	Chromium	0.066	0.025	0.0033	mg/L			1	6010D
7440-48-4	Cobalt	0.014	0.020	0.00050	mg/L	J		1	6010D
7440-50-8	Copper	0.12	0.060	0.014	mg/L			1	6010D
7439-89-6	Iron	20	0.50	0.14	mg/L			1	6010D
7439-92-1	Lead	0.093	0.030	0.0027	mg/L			1	6010D
7439-96-5	Manganese	1.1	0.020	0.0017	mg/L		B	1	6010D
7440-02-0	Nickel	0.056	0.020	0.0023	mg/L			1	6010D
7782-49-2	Selenium	ND	0.10	0.0087	mg/L			1	6010D
7440-22-4	Silver	ND	0.050	0.0085	mg/L			1	6010D
7440-28-0	Thallium	ND	0.10	0.0032	mg/L			1	6010D
7440-62-2	Vanadium	0.034	0.030	0.0061	mg/L			1	6010D
7440-66-6	Zinc	0.39	0.040	0.0093	mg/L			1	6010D
7429-90-5	Aluminum	8.3	1.5	0.11	mg/L		B	1	6010D
7439-95-4	Magnesium	7.6	1.1	0.13	mg/L			1	6010D
7440-09-7	Potassium	2.5	3.3	0.41	mg/L	J		1	6010D
7440-23-5	Sodium	51	2.0	0.33	mg/L			1	6010D

11-13-19

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MEMORANDUM

DATE: November 26, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 11 soil samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analyses for Volatile, Semivolatile, PAH, and PCP (EPA CLP SOW SOM02.4) was performed by the Chemtech Consulting Group, Mountainside, New Jersey. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

JLNA0	JLNA1	JLNA2	JLNA3	JLNA4
JLNA5	JLNA6	JLNA7	JLNB5	JLNB6
JLNB7				

No discrepancies were noted.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3140

Laboratory Services and
Applied Science Division
(LSASD)

November 26, 2019

MEMORANDUM

Subject: Data Validation Report for the Gunshy Manor Preliminary Assessment, Case # 48514, SDG: JLNA0 – Aroclor Analyses

From: Karin Feddersen-Lethe, QA Chemist
USEPA Region 10,
Environmental Characterization Branch, LSASD

KARIN FEDDERSEN-LETHE
Digitally signed by KARIN FEDDERSEN-LETHE
Date: 2019.11.26 09:06:23 -08'00'

To: Brandon Perkins, Brownfields Project Manager
USEPA Region 10,
Superfund & Emergency Management Division

CC: Jeff Fetters, START-IV Project Manager,
Ecology & Environment

The quality assurance (QA) review of the analytical data generated from the analysis of 11 soil samples collected from the above-referenced site, has been completed. These samples were analyzed for volatile, semivolatile, semivolatile polycyclic aromatic hydrocarbons (PAH) and pentachlorophenol (PCP) by SIM, and aroclor analyses by Chemtech Consulting Group, located in Mountainside, NJ. When multiple analyses were conducted for the same sample (i.e., dilution, reanalysis, SIM), the analysis with reportable results has been indicated by the reviewer. Soil sample results are reported on a dry weight basis. No adjustment needs to be made by the user for dilutions on any results.

All sample analyses were evaluated following EPA's Stage IV Data Validation Electronic/Manual Process (S4VEM). The validation was conducted, and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the following:

- Sampling and Quality Assurance Project Plan (QAPP) for Gunshy Manor, 10/18/2019;
- Modified Analysis Request Reference Number 2720.3;
- USEPA Contract Laboratory Program (CLP) Statement of Work for (SOW) Organic Superfund Methods Multi-Media, Multi-Concentration (SOM02.4);
- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-2017-002); and
- Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R-08-005).

Some data may be qualified using the reviewer's professional judgment and Region 10 guidance. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this report with the pertinent dates for sample collection, laboratory sample receipt, extraction, and analyses are attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The following table summarizes the major quality control (QC) tests as well as the criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP or Region specific and different from the NFG.

Low Volatile Organic Analysis			
Quality Control Test	**Outliers?**	**Data Affected?**	**Evaluation Criteria**
Preservation and Holding Times	N	N	Sample cooler temperature ≤10 °C upon receipt. Frozen/methanol preserved within 48 hours. Soils extracted 14 days and analyzed within 40 days.
Blanks	N	N	Non-detect or sample > 5X Blank†
Initial Calibration	Y	Y*	Min. RRF: 0.010 to 0.600‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	N	Min. RRF: 0.010 to 0.600‡ and Max. Opening %D: 20% to 40%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	Y	N	Varies by Compound
Internal Standards	Y	Y*	50 – 200% of 12-hour standard
Target Compound Identification	Y	Y*	Percent solids <30%

*See the Data Qualifications section below for outliers and qualification of affected data.
†10X Blank for ketones, solvents, or common laboratory contaminants.
‡Varies by compound. See Organic NFG Table 16 for individual compound acceptance criteria.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference, RPD = Relative Percent Difference)

Semivolatile Organic Analysis			
Quality Control Test	**Outliers?**	**Data Affected?**	**Evaluation Criteria**
Preservation and Holding Times	N	N	Sample cooler temperature ≤6 °C upon receipt and during storage at the laboratory; extracted within 14 days; analyzed within 40 days
Blanks	N	N	Non-detect or sample > 5X Blank†
Initial Calibration	Y	N	Min. RRF: 0.010 to 0.500‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	Y	N	Min. RRF: 0.010 to 0.500‡ and Max. Opening %D: 20% to 50%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	N	Varies by Compound
Internal Standards	N	N	50 – 200% of 12-hour standard
Target Compound Identification	Y	Y*	Percent solids <30%

*See the Data Qualifications section below for outliers and qualification of affected data.
†10X Blank for ketones, solvents, or common laboratory contaminants.
‡Varies by compound. See Organic CLP NFG Table 30 for individual compound acceptance criteria.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference, RPD = Relative Percent Difference)

PAH/PCP SIM Organic Analysis			
Quality Control Test	**Outliers?**	**Data Affected?**	**Evaluation Criteria**
Preservation and Holding Times	N	N	Sample cooler temperature ≤6 °C upon receipt and during storage at the laboratory; extracted within 14 days; analyzed within 40 days
Blanks	N	N	Non-detect or sample > 5X Blank
Initial Calibration	N	N	Min. RRF: 0.010 to 0.900‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	N	Min. RRF: 0.010 to 0.900‡ and Max. Opening %D: 20% to 50%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	N	Varies by Compound Revised advisory limits for 1,4-Dioxane-d8: 15% to 120%
Internal Standards	N	N	50 – 200% of 12-hour standard
Target Compound Identification	Y	Y*	Percent solids <30%

*See the Data Qualifications section below for outliers and qualification of affected data.
‡Varies by compound. See Organic NFG Table 30 for individual compound acceptance criteria.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference, RPD = Relative Percent Difference)

Aroclor Organic Analysis			
Quality Control Test	**Outliers?**	**Data Affected?**	**Evaluation Criteria**
Blanks	N	N	Non-detect or sample > 10X Blank
Initial Calibration	N	N	≤ 20% RSD
Continuing Calibration Verification	N	N	Open: ≤ 25% D, Close: ≤ 50% D
Surrogate Spikes	Y	Y*	30 – 150%
Laboratory Control Samples	N	N	50 – 150%
Matrix Spikes	N	N	Varies by Compound
Target Compound Identification	Y	Y*	≤ 25% D (J); >60% D (U) Percent solids <30%

*See the Data Qualifications section below for outliers and qualification of affected data. (Note: RSD = Relative Standard Deviation, D = Difference, RPD = Relative Percent Difference)

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Data qualifications applied after the manual and electronic data review can be found in the attached "Manual/Electronic Data Review Results" section of this report.

Data Qualifiers

The following is a list of qualifiers applied to the sample result(s) either electronically or manually, when needed, to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The analyte was analyzed for but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The analyte was positively identified and the associated numerical value is an estimated quantity.
UJ	The analyte was analyzed for but was not detected above the level of the associated value. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable for all purposes. The analyte may or may not be present in the sample.
JN or NJ	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the sample result(s) manually in addition to the above data qualifiers to allow for data analysis and interpretation using PREscore software for the National Priorities Listing Hazard Ranking System (NPL-HRS).

Bias Qualifiers	
L	Low bias.
H	High bias.
K	Unknown bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

Attachments:
Manual/Electronic Data Review Results
Sample Summary Report
Data Validation Report - Analytical Sample Listing

Manual/Electronic Data Review Results

LOW VOLATILE ORGANICS ANALYSIS	
Internal Standard Qualification Summary	
The following samples have area counts less than fifty percent (<50%) but greater than twenty percent (>20%) of the 12-hour standard. Detects are qualified JK. Non-detects are qualified UJK.	
1,4-Difluorobenzene	JLNB6
1,4-Dichlorobenzene-d4	JLNB6, JLNA7
Target Analyte Quantitation Qualification Summary	
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.	
Acetone	JLNA0, JLNB5,
Carbon disulfide	JLNA1, JLNA5
Methylene chloride	JLNA0, JLNA5, JLNB5
Toluene	JLNA5, JLNA7
Ethylbenzene	JLNA1
o-xylene	JLNA1
Isopropylbenzene	JLNA1
The percent solids for the following samples are less than 30%, but greater than 10%. Detects are qualified JK. Nondetects are qualified UJL.	
JLNA5	

SEMIVOLATILE ORGANICS ANALYSIS	
Initial Calibration Verification (ICV) Qualification Summary	
The following samples are associated with an ICV % difference exceeding criteria. Detects are qualified JH. Nondetects are not qualified.	
Fluoranthene	JLNA1
Target Analyte Quantitation Qualification Summary	
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.	
Benzaldehyde	JLNA5
Phenol	JLNA0, JLNA1, JLNA2, JLNA3, JLNA5, JLNA6, JLNA7, JLNB5, JLNB7
4-Methylphenol	JLNA7
Dimethylphthalate	JLNA4, JLNB6
Dibenzofuran	JLNA1
Bis(2-ethylhexyl)phthalate	JLNA1
The percent solids for the following samples are less than 30%, but greater than 10%. Detects are qualified JK. Nondetects are qualified UJL.	
JLNA5	

Manual/Electronic Data Review Results

SEMIVOLATILE SIM ORGANICS ANALYSIS	
Target Analyte Quantitation Qualification Summary	
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.	
Naphthalene	JLNA0, JLNA4, JLNA7
2-Methylnaphthalene	JLNA0, JLNA7
Acenaphthylene	JLNA1, JLNA3
Acenaphthene	JLNA4
Fluorene	JLNA4
Pentachlorophenol	JLNA4
Phenanthrene	JLNA4
Fluoranthene	JLNA4
Pyrene	JLNA4
Chrysene	JLNA4
Benzo(b)fluoranthene	JLNA4
Benzo(k)fluoranthene	JLNA6
Benzo(a)pyrene	JLNA6
Indeno(1,2,3-cd)pyrene	JLNA6
Dibenzo(a,h)anthracene	JLNA0, JLNA3
Benzo(g,h,i)perylene	JLNA6
The percent solids for the following samples are less than 30%, but greater than 10%. Detects are qualified JK. Nondetects are qualified UJL.	
JLNA5	

AROCLOR ORGANICS ANALYSIS	
DMC/Surrogate Qualification Summary	
The following samples have DMC/surrogate percent recoveries less than the minimum criteria. Detects are qualified JL. Nondetects are qualified UJL.	
Decachlorobiphenyl	JLNA5, JLNA7
Target Analyte Quantitation Qualification Summary	
The percent solids for the following samples are less than 30%, but greater than 10%. Detects are qualified JK. Nondetects are qualified UJL.	
JLNA5	

Data Validation Report

Analytical Sample Listing

Fri, 15 Nov 2019 11:47:32

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Submission Group Id: 31583328 | **Organization: EPA Region 10** | **SOW: SOM02.4**

Method - Volatile Organics

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA0	FS	Soil	Low	10/23/2019 10:35:00	10/25/2019 09:30:00			Purge_and_Trap	10/29/2019 18:13:00	Initial	10/29/2019 18:13:00	RXI-624	MSVOA_W
JLNA1	FS	Soil	Low	10/23/2019 10:59:00	10/25/2019 09:30:00			Purge_and_Trap	10/29/2019 18:39:00	Initial	10/29/2019 18:39:00	RXI-624	MSVOA_W
JLNA2	FS	Soil	Low	10/23/2019 11:14:00	10/25/2019 09:30:00			Purge_and_Trap	10/29/2019 19:05:00	Initial	10/29/2019 19:05:00	RXI-624	MSVOA_W
JLNA3	FS	Soil	Low	10/23/2019 12:16:00	10/25/2019 09:30:00			Purge_and_Trap	10/29/2019 22:35:00	Initial	10/29/2019 22:35:00	RXI-624	MSVOA_W
JLNA4	FS	Soil	Low	10/23/2019 12:40:00	10/25/2019 09:30:00			Purge_and_Trap	10/29/2019 23:01:00	Initial	10/29/2019 23:01:00	RXI-624	MSVOA_W
JLNA5	FS	Soil	Low	10/23/2019 13:00:00	10/25/2019 09:30:00			Purge_and_Trap	10/30/2019 12:53:00	Initial	10/30/2019 12:53:00	RXI-624	MSVOA_W
JLNA6	FS	Soil	Low	10/23/2019 13:58:00	10/25/2019 09:30:00			Purge_and_Trap	10/29/2019 23:54:00	Initial	10/29/2019 23:54:00	RXI-624	MSVOA_W
JLNA7	FS	Soil	Low	10/23/2019 14:17:00	10/25/2019 09:30:00			Purge_and_Trap	10/30/2019 00:20:00	Initial	10/30/2019 00:20:00	RXI-624	MSVOA_W
								Purge_and_Trap	10/30/2019 12:27:00	Reinjection-01	10/30/2019 12:27:00	RXI-624	MSVOA_W
JLNB5	FS	Soil	Low	10/23/2019 16:01:00	10/25/2019 09:30:00			Purge_and_Trap	10/30/2019 00:46:00	Initial	10/30/2019 00:46:00	RXI-624	MSVOA_W
JLNB6	FS	Soil	Low	10/23/2019 16:20:00	10/25/2019 09:30:00			Purge_and_Trap	10/30/2019 01:12:00	Initial	10/30/2019 01:12:00	RXI-624	MSVOA_W
								Purge_and_Trap	10/30/2019 12:00:00	Reinjection-01	10/30/2019 12:00:00	RXI-624	MSVOA_W
JLNB7	FS	Soil	Low	10/23/2019 16:42:00	10/25/2019 09:30:00			Purge_and_Trap	10/30/2019 01:39:00	Initial	10/30/2019 01:39:00	RXI-624	MSVOA_W

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Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Submission Group Id: 31583328 | **Organization: EPA Region 10** | **SOW: SOM02.4**

Method - Semivolatiles

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA0	FS	Soil	Low	10/23/2019 10:35:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 16:38:00	ZB-GR	BNA_M
JLNA1	FS	Soil	Low	10/23/2019 10:59:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 17:14:00	ZB-GR	BNA_M
JLNA2	FS	Soil	Low	10/23/2019 11:14:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 17:50:00	ZB-GR	BNA_M
JLNA3	FS	Soil	Low	10/23/2019 12:16:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 18:27:00	ZB-GR	BNA_M
JLNA4	FS	Soil	Low	10/23/2019 12:40:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 19:03:00	ZB-GR	BNA_M
JLNA5	FS	Soil	Low	10/23/2019 13:00:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/13/2019 11:44:00	ZB-GR	BNA_M
JLNA6	FS	Soil	Low	10/23/2019 13:58:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 20:14:00	ZB-GR	BNA_M
JLNA7	FS	Soil	Low	10/23/2019 14:17:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 20:50:00	ZB-GR	BNA_M
JLNB5	FS	Soil	Low	10/23/2019 16:01:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 21:27:00	ZB-GR	BNA_M
JLNB6	FS	Soil	Low	10/23/2019 16:20:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 22:03:00	ZB-GR	BNA_M
JLNB7	FS	Soil	Low	10/23/2019 16:42:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/12/2019 22:39:00	ZB-GR	BNA_M

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Fri, 15 Nov 2019 11:47:32

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNA0

Lab Name: Chemtech Consulting Group

Submission Group Id: 31583328

Organization: EPA Region 10

SOW: SOM02.4

Method - Semivolatiles by SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA0	FS	Soil	Low	10/23/2019 10:35:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 15:14:00	ZB-GR	BNA_N
JLNA1	FS	Soil	Low	10/23/2019 10:59:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 15:50:00	ZB-GR	BNA_N
								Soxhlet	10/30/2019 12:40:00	Dilution-01	11/08/2019 08:41:00	ZB-GR	BNA_N
JLNA2	FS	Soil	Low	10/23/2019 11:14:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 16:25:00	ZB-GR	BNA_N
JLNA3	FS	Soil	Low	10/23/2019 12:16:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 17:50:00	ZB-GR	BNA_N
JLNA4	FS	Soil	Low	10/23/2019 12:40:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 18:26:00	ZB-GR	BNA_N
JLNA5	FS	Soil	Low	10/23/2019 13:00:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 19:02:00	ZB-GR	BNA_N
JLNA6	FS	Soil	Low	10/23/2019 13:58:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 19:38:00	ZB-GR	BNA_N
JLNA7	FS	Soil	Low	10/23/2019 14:17:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 20:14:00	ZB-GR	BNA_N
JLNB5	FS	Soil	Low	10/23/2019 16:01:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 20:50:00	ZB-GR	BNA_N
JLNB6	FS	Soil	Low	10/23/2019 16:20:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 21:26:00	ZB-GR	BNA_N
JLNB7	FS	Soil	Low	10/23/2019 16:42:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:40:00	Initial	11/07/2019 22:01:00	ZB-GR	BNA_N

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Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Submission Group Id: 31583328 | **Organization: EPA Region 10** | **SOW: SOM02.4**

Method - Aroclors

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA0	FS	Soil	LOW	10/23/2019 10:35:00	10/25/2019 09:30:00				10/30/2019 12:05:00	Initial	10/31/2019 07:08:00	ZB-MR2	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:08:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 07:08:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:08:00	ZB-MR2	ECD_R
JLNA1	FS	Soil	LOW	10/23/2019 10:59:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:22:00	ZB-MR2	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:22:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 07:22:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 07:22:00	ZB-MR2	ECD_R
JLNA2	FS	Soil	LOW	10/23/2019 11:14:00	10/25/2019 09:30:00				10/30/2019 12:05:00	Initial	10/31/2019 07:36:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 07:36:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:36:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:36:00	ZB-MR2	ECD_R
JLNA3	FS	Soil	LOW	10/23/2019 12:16:00	10/25/2019 09:30:00				10/30/2019 12:05:00	Initial	10/31/2019 07:51:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:51:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 07:51:00	ZB-MR2	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 07:51:00	ZB-MR2	ECD_R
JLNA4	FS	Soil	LOW	10/23/2019 12:40:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:05:00	ZB-MR1	ECD_R

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Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNA0

Lab Name: Chemtech Consulting Group

Submission Group Id: 31583328

Organization: EPA Region 10

SOW: SOM02.4

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:05:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:05:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:05:00	ZB-MR2	ECD_R
JLNA5	FS	Soil	LOW	10/23/2019 13:00:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:20:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:20:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:20:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:20:00	ZB-MR2	ECD_R
JLNA6	FS	Soil	LOW	10/23/2019 13:58:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:34:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:34:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:34:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:34:00	ZB-MR1	ECD_R
JLNA7	FS	Soil	LOW	10/23/2019 14:17:00	10/25/2019 09:30:00				10/30/2019 12:05:00	Initial	10/31/2019 08:49:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:49:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 08:49:00	ZB-MR2	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 08:49:00	ZB-MR2	ECD_R
JLNB5	FS	Soil	LOW	10/23/2019 16:01:00	10/25/2019 09:30:00				10/30/2019 12:05:00	Initial	10/31/2019 09:03:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:03:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:03:00	ZB-MR2	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:03:00	ZB-MR1	ECD_R
JLNB6	FS	Soil	LOW	10/23/2019 16:20:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:18:00	ZB-MR1	ECD_R

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Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNA0

Lab Name: Chemtech Consulting Group

Submission Group Id: 31583328

Organization: EPA Region 10

SOW: SOM02.4

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:18:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:18:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:18:00	ZB-MR1	ECD_R
JLNB7MS	MS	Soil	LOW	10/23/2019 16:42:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:47:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:47:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:47:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:47:00	ZB-MR2	ECD_R
JLNB7MSD	MSD	Soil	LOW	10/23/2019 16:42:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 10:01:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 10:01:00	ZB-MR2	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 10:01:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 10:01:00	ZB-MR1	ECD_R
JLNB7	FS	Soil	LOW	10/23/2019 16:42:00	10/25/2019 09:30:00			Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:32:00	ZB-MR2	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:32:00	ZB-MR1	ECD_R
								Soxhlet	10/30/2019 12:05:00	Initial	10/31/2019 09:32:00	ZB-MR1	ECD_R
									10/30/2019 12:05:00	Initial	10/31/2019 09:32:00	ZB-MR2	ECD_R

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: ABLK31	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1221	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1232	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1242	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1248	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1254	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1260	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1262	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1268	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: ALCS31	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	31	J	ug/kg	31	J	1.0	YES	S4VEM
Aroclor-1221	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1232	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1242	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1248	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1254	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1260	Spike	27	J	ug/kg	27	J	1.0	YES	S4VEM
Aroclor-1262	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1268	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA0 | Method: Aroclors | Matrix: Soil | MA Number:

Sample Location: BH01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:35:00

% Moisture: | % Solids: 84.6

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1221	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1232	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1242	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1248	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1254	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1260	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1262	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1268	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA0 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:35:00

% Moisture: | % Solids: 84.6

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	79	U	ug/kg	79	U	1.0	YES	S4VEM
Benzaldehyde	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Phenol	Target	63	JQ	ug/kg	63	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2-Chlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Acetophenone	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachloroethane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Nitrobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Isophorone	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitrophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
4-Chloroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Caprolactam	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitroaniline	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Dimethylphthalate	Target	360		ug/kg	360		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
3-Nitroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Nitrophenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Dibenzofuran	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Diethylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Nitroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Atrazine	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	390	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Carbazole	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target		REJ	ug/kg	390	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Total Alkanes	TIC	470	N	ug/kg	470	N	1.0	YES	NV
unknown-01	TIC	110	J	ug/kg	110	J	1.0	YES	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	TIC	96	JN	ug/kg	96	JN	1.0	YES	NV
1-Heneicosyl formate	TIC	120	JN	ug/kg	120	JN	1.0	YES	NV
unknown-02	TIC	79	J	ug/kg	79	J	1.0	YES	NV
4,4-Bis(tetrahydrothiopyran)	TIC	150	JN	ug/kg	150	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA0 | Method: Semivolatiles by SIM | Matrix: Soil | MA Number:

Sample Location: BH01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:35:00

% Moisture: | % Solids: 84.6

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	2.6	JQ	ug/kg	2.6	J	1.0	YES	S4VEM
2-Methylnaphthalene	Target	1.1	JQ	ug/kg	1.1	J	1.0	YES	S4VEM
Acenaphthylene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Acenaphthene	Target	4.2		ug/kg	4.2		1.0	YES	S4VEM
Fluorene	Target	5.0		ug/kg	5.0		1.0	YES	S4VEM
Pentachlorophenol	Target	7.9	U	ug/kg	7.9	U	1.0	YES	S4VEM
Phenanthrene	Target	26		ug/kg	26		1.0	YES	S4VEM
Anthracene	Target	6.2		ug/kg	6.2		1.0	YES	S4VEM
Fluoranthene	Target	25		ug/kg	25		1.0	YES	S4VEM
Pyrene	Target	22		ug/kg	22		1.0	YES	S4VEM
Benzo(a)anthracene	Target	9.9		ug/kg	9.9		1.0	YES	S4VEM
Chrysene	Target	9.3		ug/kg	9.3		1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	13		ug/kg	13		1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	4.1		ug/kg	4.1		1.0	YES	S4VEM
Benzo(a)pyrene	Target	10		ug/kg	10		1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.5		ug/kg	5.5		1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	1.4	JQ	ug/kg	1.4	J	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	6.4		ug/kg	6.4		1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA0 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:35:00

% Moisture: | % Solids: 84.6

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Bromomethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Acetone	Target	7.7	JQ	ug/kg	7.7	J	1.0	YES	S4VEM
Carbon disulfide	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methylene chloride	Target	3.6	JQ	ug/kg	3.6	J	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
2-Butanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chloroform	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Cyclohexane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Benzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Trichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Toluene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
2-Hexanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
o-xylene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Styrene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Bromoform	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA1	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 10:59:00
% Moisture:		% Solids: 73.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1221	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1232	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1242	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1248	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1254	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1260	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1262	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM
Aroclor-1268	Target	45	U	ug/kg	45	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA1 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH01SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:59:00

% Moisture: | % Solids: 73.5

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	91	U	ug/kg	91	U	1.0	YES	S4VEM
Benzaldehyde	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Phenol	Target	65	JQ	ug/kg	65	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
2-Chlorophenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2-Methylphenol	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Acetophenone	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
4-Methylphenol	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Hexachloroethane	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Nitrobenzene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Isophorone	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2-Nitrophenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	130	J	1.0	YES	S4VEM
4-Chloroaniline	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Caprolactam	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	230	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
2-Nitroaniline	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Dimethylphthalate	Target	360		ug/kg	360		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	230	U	1.0	YES	S4VEM
3-Nitroaniline	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	74	J	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
4-Nitrophenol	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Dibenzofuran	Target	51	JQ	ug/kg	51	J	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Diethylphthalate	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	110	J	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
4-Nitroaniline	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
Atrazine	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	450	U	1.0	YES	S4VEM
Phenanthrene	Target	610		ug/kg	610		1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	100	J	1.0	YES	S4VEM
Carbazole	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	580	JH	ug/kg	580		1.0	YES	S4VEM
Pyrene	Target	550		ug/kg	550		1.0	YES	S4VEM
Butylbenzylphthalate	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	200	J	1.0	YES	S4VEM
Chrysene	Target	240		ug/kg	240		1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	110	JQ	ug/kg	110	J	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	450	U	ug/kg	450	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	190	J	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	76	J	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	170	J	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	89	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	230	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	100	J	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	230	U	ug/kg	230	U	1.0	YES	S4VEM
10,18-Bisnorabieta-5,7,9(10),11,13	TIC	90	JN	ug/kg	90	JN	1.0	YES	NV
2-Pentanone, 4-hydroxy-4-methyl-	TIC	100	AJN	ug/kg	100	AJN	1.0	YES	NV
Phenanthrene, 2-methyl-	TIC	320	JN	ug/kg	320	JN	1.0	YES	NV
Octadecanoic acid	TIC	110	JN	ug/kg	110	JN	1.0	YES	NV
4H-Cyclopenta[def]phenanthrene	TIC	160	JN	ug/kg	160	JN	1.0	YES	NV
Nonadecyl trifluoroacetate	TIC	260	JN	ug/kg	260	JN	1.0	YES	NV
11H-Benzo[a]fluorene	TIC	99	JN	ug/kg	99	JN	1.0	YES	NV
Total Alkanes	TIC	570	N	ug/kg	570	N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA1 | Method: Semivolatiles by SIM | Matrix: Soil | MA Number:

Sample Location: BH01SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:59:00

% Moisture: | % Solids: 73.5

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	140		ug/kg	140	D	5.0	YES	S4VEM
2-Methylnaphthalene	Target	33		ug/kg	33		1.0	YES	S4VEM
Acenaphthylene	Target	3.5	JQ	ug/kg	3.5	J	1.0	YES	S4VEM
Acenaphthene	Target	77		ug/kg	77	D	5.0	YES	S4VEM
Fluorene	Target	120		ug/kg	120	D	5.0	YES	S4VEM
Pentachlorophenol	Target	9.1	U	ug/kg	9.1	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	680	ED	5.0	YES	S4VEM
Anthracene	Target	120		ug/kg	120	D	5.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	620	ED	5.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	450	ED	5.0	YES	S4VEM
Benzo(a)anthracene	Target	230		ug/kg	230	D	5.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	220	D	5.0	YES	S4VEM
Benzo(b)fluoranthene	Target	230		ug/kg	230	D	5.0	YES	S4VEM
Benzo(k)fluoranthene	Target	61		ug/kg	61	D	5.0	YES	S4VEM
Benzo(a)pyrene	Target	160		ug/kg	160	D	5.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	82		ug/kg	82	D	5.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	31		ug/kg	31		1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	89		ug/kg	89	D	5.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA1 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH01SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:59:00

% Moisture: | % Solids: 73.5

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Bromomethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Acetone	Target	55		ug/kg	55		1.0	YES	S4VEM
Carbon disulfide	Target	0.91	JQ	ug/kg	0.91	J	1.0	YES	S4VEM
Methyl Acetate	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methylene chloride	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
2-Butanone	Target	17		ug/kg	17		1.0	YES	S4VEM
Bromochloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chloroform	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Cyclohexane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Benzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Trichloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Toluene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
2-Hexanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Ethylbenzene	Target	2.9	JQ	ug/kg	2.9	J	1.0	YES	S4VEM
o-xylene	Target	0.66	JQ	ug/kg	0.66	J	1.0	YES	S4VEM
m,p-Xylene	Target	5.7		ug/kg	5.7		1.0	YES	S4VEM
Styrene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Bromoform	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.93	JQ	ug/kg	0.93	J	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.5	U	ug/kg	5.5	U	1.0	YES	S4VEM
Benzene, (2-methyl-1-propenyl)-	TIC	4.0	JN	ug/kg	4.0	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNA0 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
unknown-01	TIC	3.6	J	ug/kg	3.6	J	1.0	YES	NV
Benzene, 1-methyl-3-(1-methylethyl	TIC	5.0	JN	ug/kg	5.0	JN	1.0	YES	NV
Naphthalene, 1-methyl-	TIC	34	JN	ug/kg	34	JN	1.0	YES	NV
1-Hexanol, 2-ethyl-	TIC	4.2	JN	ug/kg	4.2	JN	1.0	YES	NV
Total Alkanes	TIC	14	BN	ug/kg	14	BN	1.0	YES	NV
Benzene, 1,2,3-trimethyl-	TIC	4.0	JN	ug/kg	4.0	JN	1.0	YES	NV
Indane	TIC	8.2	JN	ug/kg	8.2	JN	1.0	YES	NV
Benzene, 1,4-bis(1,1-dimethylethyl	TIC	5.4	JN	ug/kg	5.4	JN	1.0	YES	NV
1H-Indene, 2,3-dihydro-1,2-dimethy	TIC	4.1	JN	ug/kg	4.1	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA2	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 11:14:00
% Moisture:		% Solids: 83.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1221	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1232	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1242	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1248	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1254	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1260	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1262	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM
Aroclor-1268	Target	40	U	ug/kg	40	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA2 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH01SB03 | pH: | Sample Date: 10/23/2019 | Sample Time: 11:14:00

% Moisture: | % Solids: 83.1

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	81	U	ug/kg	81	U	1.0	YES	S4VEM
Benzaldehyde	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Phenol	Target	67	JQ	ug/kg	67	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
2-Chlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylphenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Acetophenone	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4-Methylphenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachloroethane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Nitrobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Isophorone	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitrophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
4-Chloroaniline	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Caprolactam	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitroaniline	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Dimethylphthalate	Target	330		ug/kg	330		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
3-Nitroaniline	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4-Nitrophenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Dibenzofuran	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Diethylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Nitroaniline	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Atrazine	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	400	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNA0 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	400	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Total Alkanes	TIC	450	N	ug/kg	450	N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA2	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 11:14:00
% Moisture:		% Solids: 83.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Acenaphthene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Fluorene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Pentachlorophenol	Target	8.1	U	ug/kg	8.1	U	1.0	YES	S4VEM
Phenanthrene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Anthracene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Fluoranthene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Pyrene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Chrysene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA2 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH01SB03 | pH: | Sample Date: 10/23/2019 | Sample Time: 11:14:00

% Moisture: | % Solids: 83.1

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Chloromethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Vinyl chloride	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromomethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Chloroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Acetone	Target	25		ug/kg	25		1.0	YES	S4VEM
Carbon disulfide	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Methyl Acetate	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Methylene chloride	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
2-Butanone	Target	20	U	ug/kg	20	U	1.0	YES	S4VEM
Bromochloromethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Chloroform	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Cyclohexane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Benzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Trichloroethene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Methylcyclohexane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromodichloromethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	20	U	ug/kg	20	U	1.0	YES	S4VEM
Toluene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Tetrachloroethene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
2-Hexanone	Target	20	U	ug/kg	20	U	1.0	YES	S4VEM
Dibromochloromethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Chlorobenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Ethylbenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
o-xylene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
m,p-Xylene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Styrene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromoform	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Isopropylbenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
1-Hexanol, 2-ethyl-	TIC	6.7	JN	ug/kg	6.7	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNA0 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV
Naphthalene, 2,3-dimethyl-	TIC	11	JN	ug/kg	11	JN	1.0	YES	NV
Naphthalene, 1,3-dimethyl-	TIC	9.7	JN	ug/kg	9.7	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA3	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH02SB01	pH:	Sample Date: 10/23/2019	Sample Time: 12:16:00
% Moisture:		% Solids: 83.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1221	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1232	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1242	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1248	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1254	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1260	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1262	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1268	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA3 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH02SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 12:16:00

% Moisture: | % Solids: 83.7

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	80	U	ug/kg	80	U	1.0	YES	S4VEM
Benzaldehyde	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Phenol	Target	46	JQ	ug/kg	46	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2-Chlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Acetophenone	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachloroethane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Nitrobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Isophorone	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitrophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
4-Chloroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Caprolactam	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitroaniline	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Dimethylphthalate	Target	220		ug/kg	220		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
3-Nitroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Nitrophenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Dibenzofuran	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Diethylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Nitroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Atrazine	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	390	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	44	J	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Carbazole	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target		REJ	ug/kg	390	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	41	J	1.0	YES	S4VEM
Butylbenzylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	200	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
unknown-03	TIC	250	J	ug/kg	250	J	1.0	YES	NV
10,18-Bisnorabieta-5,7,9(10),11,13	TIC	1200	JN	ug/kg	1200	JN	1.0	YES	NV
7-Isopropyl-1,1,4a-trimethyl-1,2,3	TIC	180	JN	ug/kg	180	JN	1.0	YES	NV
Retene	TIC	400	JN	ug/kg	400	JN	1.0	YES	NV
10H-Benzo[b][1,8]naphthyridin-5-on	TIC	190	JN	ug/kg	190	JN	1.0	YES	NV
unknown-01	TIC	100	J	ug/kg	100	J	1.0	YES	NV
unknown-02	TIC	83	J	ug/kg	83	J	1.0	YES	NV
4b,8-Dimethyl-2-isopropylphenanthr	TIC	370	JN	ug/kg	370	JN	1.0	YES	NV
Total Alkanes	TIC	250	N	ug/kg	250	N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA3	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH02SB01	pH:	Sample Date: 10/23/2019	Sample Time: 12:16:00
% Moisture:		% Solids: 83.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	5.5		ug/kg	5.5		1.0	YES	S4VEM
2-Methylnaphthalene	Target	6.0		ug/kg	6.0		1.0	YES	S4VEM
Acenaphthylene	Target	3.8	JQ	ug/kg	3.8	J	1.0	YES	S4VEM
Acenaphthene	Target	4.6		ug/kg	4.6		1.0	YES	S4VEM
Fluorene	Target	8.1		ug/kg	8.1		1.0	YES	S4VEM
Pentachlorophenol	Target	8.0	U	ug/kg	8.0	U	1.0	YES	S4VEM
Phenanthrene	Target	53		ug/kg	53		1.0	YES	S4VEM
Anthracene	Target	9.0		ug/kg	9.0		1.0	YES	S4VEM
Fluoranthene	Target	43		ug/kg	43		1.0	YES	S4VEM
Pyrene	Target	31		ug/kg	31		1.0	YES	S4VEM
Benzo(a)anthracene	Target	19		ug/kg	19		1.0	YES	S4VEM
Chrysene	Target	24		ug/kg	24		1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	16		ug/kg	16		1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	4.1		ug/kg	4.1		1.0	YES	S4VEM
Benzo(a)pyrene	Target	9.6		ug/kg	9.6		1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	4.8		ug/kg	4.8		1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	1.9	JQ	ug/kg	1.9	J	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	6.7		ug/kg	6.7		1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA3 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH02SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 12:16:00

% Moisture: | % Solids: 83.7

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Bromomethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Acetone	Target	19		ug/kg	19		1.0	YES	S4VEM
Carbon disulfide	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methyl Acetate	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methylene chloride	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
2-Butanone	Target	9.1	U	ug/kg	9.1	U	1.0	YES	S4VEM
Bromochloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chloroform	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Cyclohexane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Benzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Trichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methylcyclohexane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Bromodichloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	9.1	U	ug/kg	9.1	U	1.0	YES	S4VEM
Toluene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Tetrachloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
2-Hexanone	Target	9.1	U	ug/kg	9.1	U	1.0	YES	S4VEM
Dibromochloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Ethylbenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
o-xylene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
m,p-Xylene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Styrene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Bromoform	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Isopropylbenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA4	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH02SB02	pH:	Sample Date: 10/23/2019	Sample Time: 12:40:00
% Moisture:		% Solids: 64.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1221	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1232	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1242	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1248	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1254	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1260	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1262	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM
Aroclor-1268	Target	51	U	ug/kg	51	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA4 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH02SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 12:40:00

% Moisture: | % Solids: 64.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	100	U	ug/kg	100	U	1.0	YES	S4VEM
Benzaldehyde	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Phenol	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
2-Chlorophenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2-Methylphenol	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Acetophenone	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
4-Methylphenol	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Hexachloroethane	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Nitrobenzene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Isophorone	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2-Nitrophenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
4-Chloroaniline	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Caprolactam	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2-Nitroaniline	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Dimethylphthalate	Target	160	JQ	ug/kg	160	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
3-Nitroaniline	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
4-Nitrophenol	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Dibenzofuran	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Diethylphthalate	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
4-Nitroaniline	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Atrazine	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	510	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Carbazole	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target		REJ	ug/kg	510	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	510	U	ug/kg	510	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	260	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	260	U	ug/kg	260	U	1.0	YES	S4VEM
17-Norkaur-15-ene, 13-methyl-, (8.	TIC	120	JN	ug/kg	120	JN	1.0	YES	NV
Nonadecyl trifluoroacetate	TIC	500	JN	ug/kg	500	JN	1.0	YES	NV
Ferruginol	TIC	330	JN	ug/kg	330	JN	1.0	YES	NV
unknown-01	TIC	2500	J	ug/kg	2500	J	1.0	YES	NV
Lup-20(29)-en-3-one	TIC	3700	JN	ug/kg	3700	JN	1.0	YES	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	TIC	1400	JN	ug/kg	1400	JN	1.0	YES	NV
Ethyl Camphorsulfonates	TIC	510	JN	ug/kg	510	JN	1.0	YES	NV
10,18-Bisnorabieta-5,7,9(10),11,13	TIC	390	JN	ug/kg	390	JN	1.0	YES	NV
Furan, 2,2-methylenebis[5-methyl-	TIC	110	JN	ug/kg	110	JN	1.0	YES	NV
2-(Carboxymethylene)-4,4-dimethyl-	TIC	420	JN	ug/kg	420	JN	1.0	YES	NV
7-Isopropyl-1,1,4a-trimethyl-1,2,3	TIC	200	JN	ug/kg	200	JN	1.0	YES	NV
4b,8-Dimethyl-2-isopropylphenanthr	TIC	160	JN	ug/kg	160	JN	1.0	YES	NV
Phosphetane, 2,2,3,4,4-pentamethyl	TIC	180	JN	ug/kg	180	JN	1.0	YES	NV
Total Alkanes	TIC	690	N	ug/kg	690	N	1.0	YES	NV
Retene	TIC	390	JN	ug/kg	390	JN	1.0	YES	NV
4,4-Bis(tetrahydrothiopyran)	TIC	300	JN	ug/kg	300	JN	1.0	YES	NV
1-Heptacosanol	TIC	350	JN	ug/kg	350	JN	1.0	YES	NV
Phenanthrene, 7-ethenyl-1,2,3,4,4a	TIC	170	JN	ug/kg	170	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA4 | Method: Semivolatiles by SIM | Matrix: Soil | MA Number:

Sample Location: BH02SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 12:40:00

% Moisture: | % Solids: 64.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	1.1	JQ	ug/kg	1.1	J	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Acenaphthene	Target	1.3	JQ	ug/kg	1.3	J	1.0	YES	S4VEM
Fluorene	Target	1.2	JQ	ug/kg	1.2	J	1.0	YES	S4VEM
Pentachlorophenol	Target	2.5	JQ	ug/kg	2.5	J	1.0	YES	S4VEM
Phenanthrene	Target	2.6	JQ	ug/kg	2.6	J	1.0	YES	S4VEM
Anthracene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Fluoranthene	Target	1.6	JQ	ug/kg	1.6	J	1.0	YES	S4VEM
Pyrene	Target	1.5	JQ	ug/kg	1.5	J	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Chrysene	Target	1.3	JQ	ug/kg	1.3	J	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	1.7	JQ	ug/kg	1.7	J	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA4 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH02SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 12:40:00

% Moisture: | % Solids: 64.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Vinyl chloride	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bromomethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Acetone	Target	26		ug/kg	26		1.0	YES	S4VEM
Carbon disulfide	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methyl Acetate	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methylene chloride	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
2-Butanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Bromochloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chloroform	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Cyclohexane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Trichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methylcyclohexane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bromodichloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Toluene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Tetrachloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
2-Hexanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Dibromochloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Ethylbenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
o-xylene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
m,p-Xylene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Styrene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bromoform	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Isopropylbenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bicyclo[2.2.1]heptane, 2,2,3-	TIC	3.3	JN	ug/kg	3.3	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNA0 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trime									
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA5	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH02SB03	pH:	Sample Date: 10/23/2019	Sample Time: 13:00:00
% Moisture:		% Solids: 24.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1221	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1232	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1242	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1248	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1254	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1260	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1262	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM
Aroclor-1268	Target	130	UJL	ug/kg	130	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA5	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH02SB03	pH:	Sample Date: 10/23/2019	Sample Time: 13:00:00
% Moisture:		% Solids: 24.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	270	UJL	ug/kg	270	U	1.0	YES	S4VEM
Benzaldehyde	Target	370	JQ	ug/kg	370	J	1.0	YES	S4VEM
Phenol	Target	240	JQ	ug/kg	240	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
2-Chlorophenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2-Methylphenol	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Acetophenone	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
4-Methylphenol	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Hexachloroethane	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Nitrobenzene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Isophorone	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2-Nitrophenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
4-Chloroaniline	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Caprolactam	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2-Nitroaniline	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Dimethylphthalate	Target	990	JK	ug/kg	990		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
3-Nitroaniline	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
4-Nitrophenol	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Dibenzofuran	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Diethylphthalate	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
4-Nitroaniline	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Atrazine	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	1400	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNA0 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	1400	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	1400	UJL	ug/kg	1400	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	700	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	700	UJL	ug/kg	700	U	1.0	YES	S4VEM
(Z)-14-Tricosenyl formate	TIC	490	JN	ug/kg	490	JN	1.0	YES	NV
Hexadecane, 1-iodo-	TIC	790	JN	ug/kg	790	JN	1.0	YES	NV
unknown-01	TIC	340	J	ug/kg	340	J	1.0	YES	NV
2-Heptacosanone	TIC	2600	JN	ug/kg	2600	JN	1.0	YES	NV
2-Pentadecanone	TIC	1400	JN	ug/kg	1400	JN	1.0	YES	NV
Benz[c]acridine	TIC	590	JN	ug/kg	590	JN	1.0	YES	NV
unknown-03	TIC	560	J	ug/kg	560	J	1.0	YES	NV
2-Pentacosanone	TIC	330	JN	ug/kg	330	JN	1.0	YES	NV
Total Alkanes	TIC	16000	N	ug/kg	16000	N	1.0	YES	NV
1,1-Biphenyl, 2-methoxy-	TIC	370	JN	ug/kg	370	JN	1.0	YES	NV
unknown-02	TIC	2900	J	ug/kg	2900	J	1.0	YES	NV
1-Heptacosanol	TIC	7300	JN	ug/kg	7300	JN	1.0	YES	NV
2-Tridecanone	TIC	660	JN	ug/kg	660	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA5	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH02SB03	pH:	Sample Date: 10/23/2019	Sample Time: 13:00:00
% Moisture:		% Solids: 24.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Acenaphthylene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Acenaphthene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Fluorene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Pentachlorophenol	Target	27	UJL	ug/kg	27	U	1.0	YES	S4VEM
Phenanthrene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Anthracene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Fluoranthene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Pyrene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Chrysene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	14	UJL	ug/kg	14	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA5 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH02SB03 | pH: | Sample Date: 10/23/2019 | Sample Time: 13:00:00

% Moisture: | % Solids: 24.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Chloromethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Vinyl chloride	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Bromomethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Chloroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Acetone	Target	660	JK	ug/kg	660		1.0	YES	S4VEM
Carbon disulfide	Target	25	JQ	ug/kg	25	J	1.0	YES	S4VEM
Methyl Acetate	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Methylene chloride	Target	62	JQ	ug/kg	62	J	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
2-Butanone	Target	250	JK	ug/kg	250		1.0	YES	S4VEM
Bromochloromethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Chloroform	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Cyclohexane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Benzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Trichloroethene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Methylcyclohexane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Bromodichloromethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	140	UJL	ug/kg	140	U	1.0	YES	S4VEM
Toluene	Target	14	JQ	ug/kg	14	J	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Tetrachloroethene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
2-Hexanone	Target	140	UJL	ug/kg	140	U	1.0	YES	S4VEM
Dibromochloromethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Chlorobenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Ethylbenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
o-xylene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
m,p-Xylene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Styrene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Bromoform	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Isopropylbenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	71	UJL	ug/kg	71	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA6	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH03SB01	pH:	Sample Date: 10/23/2019	Sample Time: 13:58:00
% Moisture:		% Solids: 88.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1221	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1232	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1242	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1248	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1254	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1260	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1262	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1268	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA6 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH03SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 13:58:00

% Moisture: | % Solids: 88.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	76	U	ug/kg	76	U	1.0	YES	S4VEM
Benzaldehyde	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Phenol	Target	53	JQ	ug/kg	53	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
2-Chlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Methylphenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Acetophenone	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4-Methylphenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Hexachloroethane	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Nitrobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Isophorone	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Nitrophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
4-Chloroaniline	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Caprolactam	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Nitroaniline	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Dimethylphthalate	Target	240		ug/kg	240		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
3-Nitroaniline	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4-Nitrophenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Dibenzofuran	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Diethylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
4-Nitroaniline	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Atrazine	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	370	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Carbazole	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target		REJ	ug/kg	370	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	190	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Sulfurous acid, pentadecyl 2-propy	TIC	190	JN	ug/kg	190	JN	1.0	YES	NV
10,18-Bisnorabieta-5,7,9(10),11,13	TIC	1000	JN	ug/kg	1000	JN	1.0	YES	NV
n-Hexadecanoic acid	TIC	93	JN	ug/kg	93	JN	1.0	YES	NV
Total Alkanes	TIC	420	N	ug/kg	420	N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA6	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH03SB01	pH:	Sample Date: 10/23/2019	Sample Time: 13:58:00
% Moisture:		% Solids: 88.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	5.4		ug/kg	5.4		1.0	YES	S4VEM
2-Methylnaphthalene	Target	6.4		ug/kg	6.4		1.0	YES	S4VEM
Acenaphthylene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Acenaphthene	Target	9.5		ug/kg	9.5		1.0	YES	S4VEM
Fluorene	Target	11		ug/kg	11		1.0	YES	S4VEM
Pentachlorophenol	Target	7.6	U	ug/kg	7.6	U	1.0	YES	S4VEM
Phenanthrene	Target	32		ug/kg	32		1.0	YES	S4VEM
Anthracene	Target	13		ug/kg	13		1.0	YES	S4VEM
Fluoranthene	Target	26		ug/kg	26		1.0	YES	S4VEM
Pyrene	Target	21		ug/kg	21		1.0	YES	S4VEM
Benzo(a)anthracene	Target	7.0		ug/kg	7.0		1.0	YES	S4VEM
Chrysene	Target	4.8		ug/kg	4.8		1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.4		ug/kg	5.4		1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	1.9	JQ	ug/kg	1.9	J	1.0	YES	S4VEM
Benzo(a)pyrene	Target	3.6	JQ	ug/kg	3.6	J	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1.8	JQ	ug/kg	1.8	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	1.8	JQ	ug/kg	1.8	J	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA6 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH03SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 13:58:00

% Moisture: | % Solids: 88.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromomethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Acetone	Target	41		ug/kg	41		1.0	YES	S4VEM
Carbon disulfide	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methyl Acetate	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methylene chloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
2-Butanone	Target	7.9	JQ	ug/kg	7.9	J	1.0	YES	S4VEM
Bromochloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloroform	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Cyclohexane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Benzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Trichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methylcyclohexane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromodichloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Toluene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Tetrachloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
2-Hexanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Dibromochloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Ethylbenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
o-xylene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
m,p-Xylene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Styrene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromoform	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Isopropylbenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNA7 | Method: Aroclors | Matrix: Soil | MA Number:

Sample Location: BH03SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 14:17:00

% Moisture: | % Solids: 50.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1221	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1232	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1242	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1248	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1254	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1260	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1262	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM
Aroclor-1268	Target	65	UJL	ug/kg	65	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA7 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BH03SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 14:17:00

% Moisture: | % Solids: 50.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	130	U	ug/kg	130	U	1.0	YES	S4VEM
Benzaldehyde	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Phenol	Target	97	JQ	ug/kg	97	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
2-Chlorophenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2-Methylphenol	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Acetophenone	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
4-Methylphenol	Target	110	JQ	ug/kg	110	J	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Hexachloroethane	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Nitrobenzene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Isophorone	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2-Nitrophenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
4-Chloroaniline	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Caprolactam	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2-Nitroaniline	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Dimethylphthalate	Target	390		ug/kg	390		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
3-Nitroaniline	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
4-Nitrophenol	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Dibenzofuran	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Diethylphthalate	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
4-Nitroaniline	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Atrazine	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	650	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Carbazole	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNA0 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target		REJ	ug/kg	650	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	650	U	ug/kg	650	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	340	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	340	U	ug/kg	340	U	1.0	YES	S4VEM
Retene	TIC	3200	JN	ug/kg	3200	JN	1.0	YES	NV
10,18-Bisnorabieta-5,7,9(10),11,13	TIC	260	JN	ug/kg	260	JN	1.0	YES	NV
Octadecanal	TIC	160	JN	ug/kg	160	JN	1.0	YES	NV
Lup-20(29)-en-3-one	TIC	2500	JN	ug/kg	2500	JN	1.0	YES	NV
Phenanthrene, 1,2,3,4,4a,9,10,10a-	TIC	1400	JN	ug/kg	1400	JN	1.0	YES	NV
4b,8-Dimethyl-2-isopropylphenanthr	TIC	180	JN	ug/kg	180	JN	1.0	YES	NV
Hop-22(29)-en-3.beta.-ol	TIC	840	JN	ug/kg	840	JN	1.0	YES	NV
1-Octadecanol	TIC	230	JN	ug/kg	230	JN	1.0	YES	NV
Total Alkanes	TIC	1900	N	ug/kg	1900	N	1.0	YES	NV
Hexadecane, 1-iodo-	TIC	170	JN	ug/kg	170	JN	1.0	YES	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	TIC	410	JN	ug/kg	410	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA7 | Method: Semivolatiles by SIM | Matrix: Soil | MA Number:

Sample Location: BH03SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 14:17:00

% Moisture: | % Solids: 50.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	2.3	JQ	ug/kg	2.3	J	1.0	YES	S4VEM
2-Methylnaphthalene	Target	2.0	JQ	ug/kg	2.0	J	1.0	YES	S4VEM
Acenaphthylene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Acenaphthene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Fluorene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Pentachlorophenol	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Phenanthrene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Anthracene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Fluoranthene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Pyrene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chrysene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA7 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH03SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 14:17:00

% Moisture: | % Solids: 50.4

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Chloromethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Vinyl chloride	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Bromomethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Chloroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Acetone	Target	780		ug/kg	780		1.0	YES	S4VEM
Carbon disulfide	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Methyl Acetate	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Methylene chloride	Target	23		ug/kg	23		1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
2-Butanone	Target	260		ug/kg	260		1.0	YES	S4VEM
Bromochloromethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Chloroform	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Cyclohexane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Benzene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Trichloroethene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Methylcyclohexane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Bromodichloromethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	35	U	ug/kg	35	U	1.0	YES	S4VEM
Toluene	Target	4.7	JQ	ug/kg	4.7	J	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Tetrachloroethene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
2-Hexanone	Target	35	U	ug/kg	35	U	1.0	YES	S4VEM
Dibromochloromethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Chlorobenzene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Ethylbenzene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
o-xylene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
m,p-Xylene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Styrene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
Bromoform	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
Isopropylbenzene	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	17	U	ug/kg	17	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	17	UJK	ug/kg	17	U	1.0	YES	S4VEM
Total Alkanes	TIC	11	BN	ug/kg	11	BN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Bicyclo[2.2.1]heptane, 2,2,3-trime	TIC	130	JN	ug/kg	130	JN	1.0	YES	NV
Benzene, 1,3-bis(1,1-dimethylethyl	TIC	13	JN	ug/kg	13	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNB5 | Method: Aroclors | Matrix: Soil | MA Number:

Sample Location: BK01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:01:00

% Moisture: | % Solids: 81.1

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1221	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1232	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1242	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1248	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1254	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1260	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1262	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1268	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB5 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BK01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:01:00

% Moisture: | % Solids: 81.1

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	82	U	ug/kg	82	U	1.0	YES	S4VEM
Benzaldehyde	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Phenol	Target	60	JQ	ug/kg	60	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
2-Chlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Methylphenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Acetophenone	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4-Methylphenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Hexachloroethane	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Nitrobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Isophorone	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Nitrophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
4-Chloroaniline	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Caprolactam	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Nitroaniline	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Dimethylphthalate	Target	310		ug/kg	310		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
3-Nitroaniline	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4-Nitrophenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Dibenzofuran	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Diethylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
4-Nitroaniline	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Atrazine	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	410	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	410	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Total Alkanes	TIC	410	N	ug/kg	410	N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB5	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BK01SB01	pH:	Sample Date: 10/23/2019	Sample Time: 16:01:00
% Moisture:		% Solids: 81.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Acenaphthylene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Acenaphthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Fluorene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Pentachlorophenol	Target	8.2	U	ug/kg	8.2	U	1.0	YES	S4VEM
Phenanthrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Anthracene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Fluoranthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Pyrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Chrysene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB5 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BK01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:01:00

% Moisture: | % Solids: 81.1

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Chloromethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Vinyl chloride	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Bromomethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Chloroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Acetone	Target	10	JQ	ug/kg	10	J	1.0	YES	S4VEM
Carbon disulfide	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Methyl Acetate	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Methylene chloride	Target	4.5	JQ	ug/kg	4.5	J	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
2-Butanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Bromochloromethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Chloroform	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Cyclohexane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Benzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Trichloroethene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Methylcyclohexane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Bromodichloromethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Toluene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Tetrachloroethene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
2-Hexanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Dibromochloromethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Chlorobenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Ethylbenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
o-xylene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
m,p-Xylene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Styrene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Bromoform	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Isopropylbenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	6.3	U	ug/kg	6.3	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB6	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BK01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 16:20:00
% Moisture:		% Solids: 81.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1221	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1232	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1242	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1248	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1254	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1260	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1262	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1268	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNB6	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BK01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 16:20:00
% Moisture:		% Solids: 81.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	82	U	ug/kg	82	U	1.0	YES	S4VEM
Benzaldehyde	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Phenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
2-Chlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Methylphenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Acetophenone	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4-Methylphenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Hexachloroethane	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Nitrobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Isophorone	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Nitrophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
4-Chloroaniline	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Caprolactam	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Nitroaniline	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Dimethylphthalate	Target	110	JQ	ug/kg	110	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
3-Nitroaniline	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4-Nitrophenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Dibenzofuran	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Diethylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
4-Nitroaniline	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Atrazine	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	410	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	410	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	410	U	ug/kg	410	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	210	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB6	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BK01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 16:20:00
% Moisture:		% Solids: 81.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Acenaphthylene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Acenaphthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Fluorene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Pentachlorophenol	Target	8.2	U	ug/kg	8.2	U	1.0	YES	S4VEM
Phenanthrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Anthracene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Fluoranthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Pyrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Chrysene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	4.1	U	ug/kg	4.1	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB6 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BK01SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:20:00

% Moisture: | % Solids: 81.3

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Chloromethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Bromomethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Chloroethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Acetone	Target	10	UJK	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Methylene chloride	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
2-Butanone	Target	10	UJK	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Chloroform	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Cyclohexane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Benzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Trichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
o-xylene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Styrene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Bromoform	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	YES	S4VEM
Total Alkanes	TIC	3.0	BN	ug/kg	3.0	BN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
2-Ethyl-1-dodecanol	TIC	3.1	JN	ug/kg	3.1	JN	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB7	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BK01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 16:42:00
% Moisture:		% Solids: 78.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1221	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1232	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1242	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1248	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1254	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1260	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1262	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1268	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB7 | Method: Semivolatiles | Matrix: Soil | MA Number:

Sample Location: BK01SB03 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:42:00

% Moisture: | % Solids: 78.0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	86	U	ug/kg	86	U	1.0	YES	S4VEM
Benzaldehyde	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Phenol	Target	86	JQ	ug/kg	86	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
2-Chlorophenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2-Methylphenol	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Acetophenone	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
4-Methylphenol	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Hexachloroethane	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Nitrobenzene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Isophorone	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2-Nitrophenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
4-Chloroaniline	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Caprolactam	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2-Nitroaniline	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Dimethylphthalate	Target	430		ug/kg	430		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
3-Nitroaniline	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
4-Nitrophenol	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Dibenzofuran	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Diethylphthalate	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
4-Nitroaniline	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Atrazine	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	420	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	420	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	420	U	ug/kg	420	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	220	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	220	U	ug/kg	220	U	1.0	YES	S4VEM
Total Alkanes	TIC	130	N	ug/kg	130	N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB7	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BK01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 16:42:00
% Moisture:		% Solids: 78.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Acenaphthylene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Acenaphthene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Fluorene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Pentachlorophenol	Target	8.6	U	ug/kg	8.6	U	1.0	YES	S4VEM
Phenanthrene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Anthracene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Fluoranthene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Pyrene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Chrysene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	4.2	U	ug/kg	4.2	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNB7 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BK01SB03 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:42:00

% Moisture: | % Solids: 78.0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Bromomethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Acetone	Target	7.7	JQ	ug/kg	7.7	J	1.0	YES	S4VEM
Carbon disulfide	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methylene chloride	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
2-Butanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chloroform	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Cyclohexane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Benzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Trichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Toluene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
2-Hexanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
o-xylene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Styrene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Bromoform	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNB7MS | Method: Aroclors | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: 10/23/2019 | Sample Time: 16:42:00

% Moisture: | % Solids: 78.0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	170		ug/kg	170		1.0	YES	S4VEM
Aroclor-1221	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1232	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1242	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1248	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1254	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1260	Spike	150		ug/kg	150		1.0	YES	S4VEM
Aroclor-1262	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1268	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB7MSD	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 16:42:00
% Moisture:		% Solids: 78.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	180		ug/kg	180		1.0	YES	S4VEM
Aroclor-1221	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1232	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1242	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1248	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1254	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1260	Spike	150		ug/kg	150		1.0	YES	S4VEM
Aroclor-1262	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM
Aroclor-1268	Target	42	U	ug/kg	42	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK32	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	67	U	ug/kg	67	U	1.0	YES	S4VEM
Benzaldehyde	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Phenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
2-Chlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Methylphenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Acetophenone	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4-Methylphenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Hexachloroethane	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Nitrobenzene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Isophorone	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Nitrophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Naphthalene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
4-Chloroaniline	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Caprolactam	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Nitroaniline	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Dimethylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Acenaphthylene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
3-Nitroaniline	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Acenaphthene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4-Nitrophenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Dibenzofuran	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Diethylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Fluorene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
4-Nitroaniline	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Atrazine	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Pentachlorophenol	Target		REJ	ug/kg	330	U	1.0	YES	S4VEM
Phenanthrene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Anthracene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Fluoranthene	Target		REJ	ug/kg	330	U	1.0	YES	S4VEM
Pyrene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Chrysene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target		REJ	ug/kg	170	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK33	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Acenaphthylene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Acenaphthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Fluorene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Pentachlorophenol	Target	6.7	U	ug/kg	6.7	U	1.0	YES	S4VEM
Phenanthrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Chrysene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK13 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: VBLK14 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK15 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNA0** | **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK19 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNA0 | **Lab Name:** Chemtech Consulting Group

Sample Number: VHBLK01 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

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MEMORANDUM

DATE: December 16, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 6 soil and 2 water samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analyses for Volatile, Semivolatile, PAH, PCP, and PCB organics (EPA CLP SOW SOM02.4) was performed by the Chemtech Consulting Group, Mountainside, New Jersey. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

JLNC0	JLNA8	JLNA9	JLNB0	JLNB1
JLNB2	JLNB3	JLNB4		

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3123

LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

Date: December 12, 2019

Reply to:
Attn of: LSASD-14D12

MEMORANDUM

SUBJECT: Data Validation Report for the Volatiles, Semivolatile (SVOA) and Semivolatile-SIM (SIM) & Aroclor analyses of both soil and water samples collected from the Gunshy Manor PA/SI Site.
Case Number: 48596 SDG: JLNA8 Raymond Wu 12/12/19

FROM: Raymond Wu, QA Chemist
Environmental Characterization Branch
Quality Assurance Section
Office of Laboratory Services & Applied Science Division (LSASD – 14D12)

TO: Brandon Perkins, EPA Task Monitor
Emergency Management Branch
Spill Prevention & Removal Section
Office of Superfund & Emergency Management Division (SEMD – 13J07)

CC: Linda Ader, START Team Leader
Ecology and Environment, Inc.

Jeff Fetters, Project Manager
Ecology and Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 6 soil & 2 water samples collected from the above referenced site has been completed. The samples were analyzed for Low/Medium Volatile, SVOA, SVOA-SIM and Aroclors. They were all analyzed in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM02.4) by Chemtech, located in Mountainside, New Jersey. When multiple analytical runs were conducted (i.e., dilution, reanalysis, SIM), the run with reportable results has been indicated by the reviewer.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the draft SQAP for the Gunshy Manor PA/SI Site (October, 2019), the technical specifications of USEPA CLP SOW for Organic Data Review (SOM02.4, 2016), the Contract Laboratory Program's National Functional Guidelines for Organic Data Review (EPA-540-R-014-002, 2017) and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005).

Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt, extraction, and analyses are attached along with the reviewed data.

The conclusions presented herein are based on the information provided for the review.

I. QUALITY CONTROL RESULTS SUMMARY

The following tables summarize the major quality control (QC) tests as well as the criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP or Region specific and different from the NFG.

Water Volatile Organic Analysis#		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	Y	Min. RRF: 0.010 to 0.600‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.600‡ and Max. Opening %D: 20% to 50%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	Varies by Compound
Internal Standards	N	50 – 200% of internal standard area

Soil Low/Medium Volatile Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	Y*	Non-detect or < 5X Blank†
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.600‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.600‡ and Max. Opening %D: 20% to 50%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard

*See the Data Qualifications section below for outliers and qualification of affected data.
†10X Blank for ketones, solvents, or common laboratory contaminants.
‡Varies by compound. See Organic CLP NFG Tables 18(VOC) for individual compound acceptance criteria.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference)

Water & Soil Semivolatile Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	Y	Min. RRF: 0.010 to 0.900‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	Y*	Min. RRF: 0.010 to 0.900‡ and Max. Opening %D: 20% to 40%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard

Water & Soil Semivolatile-SIM Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. Opening %D: 20% to 40%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard

*See the Data Qualifications section below for outliers and qualification of affected data.
†10X Blank for ketones, solvents, or common laboratory contaminants.
‡Varies by compound. See Organic CLP NFG Tables 34(SVOC) for individual compound acceptance criteria.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference)

Water & Soil Aroclor Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 10X Blank
Initial Calibration	N	≤ 20% RSD
Continuing Calibration Verification	N	Open: ≤ 25% D, Close: ≤ 50% D
Deuterated Monitoring Compounds	N	30 – 150%
Target Compound Identification	N	25 % ≤ %D ≤ 60%

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Data qualifications applied after the manual and electronic data review can be found in the attached "Manual/Electronic Data Review" section of this report.

Control Required Quantitation Limits: Sample data with values reported below the CRQL are qualified J.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

U	The analyte was not detected at or above the reported result.
J	The analyte was positively identified. The associated numerical result is an estimate.
UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
R	The data are unusable for all purposes.
N	There is evidence the analyte is present in this sample
JN	There is evidence the analyte is present. The associated numerical result is an estimate.
Q	The result is estimated because the concentration is below the contract required Quantitation Limit (CRQLs)
L	Low bias
H	High bias
K	Unknown bias

Attachments:
Manual/Electronic Data Review Results
Sample Summary Report
Data Validation Report - Analytical Sample Listing

InitialCalibration

Method - Volatile Organics

Test Name: EXES-793
Defect Message: The following samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detects are qualified as estimated J. Use professional judgment to qualify nondetects.

Associated Samples: JLNB4, JLNC0, VBLK51, VBLK52, VHBLK01

Defective Analyte	Defective Samples/Analyses
Bromoform	VSTD00536

Method - Semivolatiles

Test Name: EXES-793
Defect Message: The following samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detects are qualified as estimated J. Use professional judgment to qualify nondetects.

Associated Samples: JLNA8, JLNA9, JLNB0, JLNB1, JLNB2, JLNB3, JLNB4, SBLK34, SBLK50

Defective Analyte	Defective Samples/Analyses
Fluoranthene	SSTD00501
Butylbenzylphthalate	SSTD00501

ContinuingCalibrationVerification

Method - Semivolatiles

Test Name: EXES-1208
Defect Message: The following samples are associated with an opening or closing CCV with % Difference exceeding criteria. Detects are qualified as estimated J. Nondetects are qualified as estimated UJ.
Associated Samples: JLNA8, JLNA9, JLNB0, JLNB1, JLNB2, JLNB3, JLNB4, SBLK50

Defective Analyte	Defective Samples/Analyses
Butylbenzylphthalate	SSTD02006
Bis(2-ethylhexyl)phthalate	SSTD02006

Blanks

Method - Volatile Organics

Test Name: EXES-1111
Defect Message: The following samples have analyte results reported less than CRQLs. The associated storage blank results are less than CRQLs. Detects are qualified U. Sample results have been reported at CRQLs.

Associated Samples: JLNA8, JLNB1

Defective Analyte	Defective Samples/Analyses
Acetone	JLNA8, JLNB1

Test Name: EXES-1162
Defect Message: The following samples have analyte results reported greater than or equal to 2x Blank Results . The associated storage blank results are less than CRQLs. Detects are not qualified.

Associated Samples: JLNA9, JLNB0, JLNB3

Defective Analyte	Defective Samples/Analyses
Acetone	JLNA9, JLNB0, JLNB2, JLNB3

TargetAnalyteQuantitation

Method - Aroclors

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: ALCS50, JLNB1

Defective Analyte	Defective Samples/Analyses
Aroclor-1016	ALCS50
Aroclor-1260	ALCS50, JLNB1

Method - Volatile Organics

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNA8, JLNA9, JLNB1, JLNB3, VBLK23, VHBLK02

Defective Analyte	Defective Samples/Analyses
Acetone	JLNA8, JLNB1, VBLK23, VHBLK02

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNA8, JLNA9, JLNB1, JLNB3, VBLK23, VHBLK02

Defective Analyte	Defective Samples/Analyses
2-Butanone	JLNA9, JLNB3
Toluene	JLNA9

Method - Semivolatiles

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNA8, JLNA9, JLNB0, JLNB1, JLNB2, JLNB3, JLNB4

Defective Analyte	Defective Samples/Analyses
Phenol	JLNA8, JLNA9, JLNB0, JLNB1, JLNB2, JLNB3, JLNB4
Dimethylphthalate	JLNA8, JLNB0, JLNB1, JLNB2, JLNB3
Phenanthrene	JLNB0, JLNB1
Fluoranthene	JLNB0, JLNB1
Pyrene	JLNB0, JLNB1
Benzo(a)anthracene	JLNB0
Chrysene	JLNB0
Benzo(b)fluoranthene	JLNB0
Benzo(a)pyrene	JLNB0
Indeno(1,2,3-cd)pyrene	JLNB0
Benzo(g,h,i)perylene	JLNB0

Method - Semivolatiles by SIM

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNA8, JLNA9, JLNB0, JLNB1, JLNB2, JLNB3

Defective Analyte	Defective Samples/Analyses
Naphthalene	JLNA9, JLNB1
2-Methylnaphthalene	JLNA9, JLNB1
Acenaphthylene	JLNB1
Acenaphthene	JLNB1
Fluorene	JLNA9, JLNB0, JLNB1
Phenanthrene	JLNA8, JLNA9, JLNB2, JLNB3
Anthracene	JLNA9
Fluoranthene	JLNA8, JLNA9, JLNB3
Pyrene	JLNA8
Benzo(a)anthracene	JLNA8, JLNA9, JLNB3
Chrysene	JLNA8, JLNA9, JLNB3
Benzo(b)fluoranthene	JLNA8, JLNA9, JLNB3
Benzo(k)fluoranthene	JLNA8, JLNA9, JLNB2, JLNB3
Benzo(a)pyrene	JLNA8, JLNA9, JLNB3

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNA8, JLNA9, JLNB0, JLNB1, JLNB2, JLNB3

Defective Analyte	Defective Samples/Analyses
Indeno(1,2,3-cd)pyrene	JLNA8, JLNA9, JLNB2, JLNB3
Dibenzo(a,h)anthracene	JLNA9, JLNB1, JLNB2
Benzo(g,h,i)perylene	JLNA8, JLNA9, JLNB2, JLNB3

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: ABLK49 | Method: Aroclors | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1221	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1232	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1242	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1248	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1254	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1260	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1262	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1268	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: ABLK50	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: ALCS49	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	39		ug/kg	39		1.0	YES	S4VEM
Aroclor-1221	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1232	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1242	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1248	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1254	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1260	Spike	35		ug/kg	35		1.0	YES	S4VEM
Aroclor-1262	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM
Aroclor-1268	Target	33	U	ug/kg	33	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: ALCS50	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	0.98	J	ug/L	0.98	J	1.0	YES	S4VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1260	Spike	0.88	J	ug/L	0.88	J	1.0	YES	S4VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA8	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 84.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1221	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1232	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1242	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1248	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1254	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1260	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1262	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM
Aroclor-1268	Target	39	U	ug/kg	39	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA8	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 84.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	79	U	ug/kg	79	U	1.0	YES	S4VEM
Benzaldehyde	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Phenol	Target	70	JQ	ug/kg	70	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2-Chlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Acetophenone	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachloroethane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Nitrobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Isophorone	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitrophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Naphthalene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
4-Chloroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Caprolactam	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitroaniline	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Dimethylphthalate	Target	120	JQ	ug/kg	120	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Acenaphthylene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
3-Nitroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Acenaphthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4-Nitrophenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Dibenzofuran	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Diethylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluorene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Nitroaniline	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Atrazine	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Pentachlorophenol	Target	390	R	ug/kg	390	U	1.0	NO	S4VEM
Phenanthrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluoranthene	Target	390	R	ug/kg	390	U	1.0	NO	S4VEM
Pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	200	UJK	ug/kg	200	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Chrysene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	UJK	ug/kg	200	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	390	U	ug/kg	390	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	200	R	ug/kg	200	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Total Alkanes	TIC	160	N	ug/kg	160	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA8	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 84.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Acenaphthylene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Acenaphthene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Fluorene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Pentachlorophenol	Target	7.9	U	ug/kg	7.9	U	1.0	YES	S4VEM
Phenanthrene	Target	2.1	JQ	ug/kg	2.1	J	1.0	YES	S4VEM
Anthracene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Fluoranthene	Target	2.5	JQ	ug/kg	2.5	J	1.0	YES	S4VEM
Pyrene	Target	3.2	JQ	ug/kg	3.2	J	1.0	YES	S4VEM
Benzo(a)anthracene	Target	1.6	JQ	ug/kg	1.6	J	1.0	YES	S4VEM
Chrysene	Target	1.7	JQ	ug/kg	1.7	J	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	1.7	JQ	ug/kg	1.7	J	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	1.1	JQ	ug/kg	1.1	J	1.0	YES	S4VEM
Benzo(a)pyrene	Target	1.2	JQ	ug/kg	1.2	J	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.81	JQ	ug/kg	0.81	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	3.9	U	ug/kg	3.9	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.97	JQ	ug/kg	0.97	J	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA8	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 84.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Bromomethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Acetone	Target	8.9	U	ug/kg	6.6	J	1.0	YES	S4VEM
Carbon disulfide	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methyl Acetate	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methylene chloride	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
2-Butanone	Target	8.9	U	ug/kg	8.9	U	1.0	YES	S4VEM
Bromochloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chloroform	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Cyclohexane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Benzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Trichloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Methylcyclohexane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Bromodichloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	8.9	U	ug/kg	8.9	U	1.0	YES	S4VEM
Toluene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Tetrachloroethene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
2-Hexanone	Target	8.9	U	ug/kg	8.9	U	1.0	YES	S4VEM
Dibromochloromethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Chlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Ethylbenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
o-xylene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
m,p-Xylene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Styrene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Bromoform	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Isopropylbenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	4.5	U	ug/kg	4.5	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dimethyl ether	TIC	11	JBN	ug/kg	11	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA9 | Method: Aroclors | Matrix: Soil | MA Number:

Sample Location: BH04SB02 | pH: | Sample Date: 11/06/2019 | Sample Time: 10:22:00

% Moisture: | % Solids: 85.7

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1221	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1232	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1242	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1248	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1254	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1260	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1262	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1268	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA9	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH04SB02	pH:	Sample Date: 11/06/2019	Sample Time: 10:22:00
% Moisture:		% Solids: 85.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	78	U	ug/kg	78	U	1.0	YES	S4VEM
Benzaldehyde	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Phenol	Target	100	JQ	ug/kg	100	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
2-Chlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylphenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Acetophenone	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4-Methylphenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachloroethane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Nitrobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Isophorone	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitrophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Naphthalene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
4-Chloroaniline	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Caprolactam	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitroaniline	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Dimethylphthalate	Target	200		ug/kg	200		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Acenaphthylene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
3-Nitroaniline	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Acenaphthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4-Nitrophenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Dibenzofuran	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Diethylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluorene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Nitroaniline	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Atrazine	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Pentachlorophenol	Target	380	R	ug/kg	380	U	1.0	NO	S4VEM
Phenanthrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Carbazole	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	380	R	ug/kg	380	U	1.0	NO	S4VEM
Pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	200	UJK	ug/kg	200	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Chrysene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	UJK	ug/kg	200	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Total Alkanes	TIC	2000	N	ug/kg	2000	N	1.0	NO	NV
n-Hexadecanoic acid	TIC	83	JN	ug/kg	83	JN	1.0	NO	NV
10,18-Bisnorabieta-5,7,9(10),11,13	TIC	97	JN	ug/kg	97	JN	1.0	NO	NV
18-Norabietane	TIC	200	JN	ug/kg	200	JN	1.0	NO	NV
Oxirane, heptadecyl-	TIC	190	JN	ug/kg	190	JN	1.0	NO	NV
4b,8-Dimethyl-2-isopropylphenanthr	TIC	81	JN	ug/kg	81	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA9	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH04SB02	pH:	Sample Date: 11/06/2019	Sample Time: 10:22:00
% Moisture:		% Solids: 85.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.95	JQ	ug/kg	0.95	J	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.97	JQ	ug/kg	0.97	J	1.0	YES	S4VEM
Acenaphthylene	Target	3.8	U	ug/kg	3.8	U	1.0	YES	S4VEM
Acenaphthene	Target	3.8	U	ug/kg	3.8	U	1.0	YES	S4VEM
Fluorene	Target	0.87	JQ	ug/kg	0.87	J	1.0	YES	S4VEM
Pentachlorophenol	Target	7.8	U	ug/kg	7.8	U	1.0	YES	S4VEM
Phenanthrene	Target	2.7	JQ	ug/kg	2.7	J	1.0	YES	S4VEM
Anthracene	Target	1.2	JQ	ug/kg	1.2	J	1.0	YES	S4VEM
Fluoranthene	Target	2.8	JQ	ug/kg	2.8	J	1.0	YES	S4VEM
Pyrene	Target	3.8		ug/kg	3.8		1.0	YES	S4VEM
Benzo(a)anthracene	Target	2.2	JQ	ug/kg	2.2	J	1.0	YES	S4VEM
Chrysene	Target	3.1	JQ	ug/kg	3.1	J	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	3.0	JQ	ug/kg	3.0	J	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	2.1	JQ	ug/kg	2.1	J	1.0	YES	S4VEM
Benzo(a)pyrene	Target	2.1	JQ	ug/kg	2.1	J	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	2.0	JQ	ug/kg	2.0	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	1.4	JQ	ug/kg	1.4	J	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	2.5	JQ	ug/kg	2.5	J	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNA9 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH04SB02 | pH: | Sample Date: 11/06/2019 | Sample Time: 10:22:00

% Moisture: | % Solids: 85.7

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Bromomethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Acetone	Target	31	U	ug/kg	31		1.0	YES	S4VEM
Carbon disulfide	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methylene chloride	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
2-Butanone	Target	5.5	JQ	ug/kg	5.5	J	1.0	YES	S4VEM
Bromochloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chloroform	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Cyclohexane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Benzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Trichloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Toluene	Target	0.83	JQ	ug/kg	0.83	J	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
2-Hexanone	Target	11	U	ug/kg	11	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
o-xylene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Styrene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Bromoform	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.7	U	ug/kg	5.7	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dimethyl ether	TIC	13	JBN	ug/kg	13	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB0	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH05SB01	pH:	Sample Date: 11/06/2019	Sample Time: 11:10:00
% Moisture:		% Solids: 90.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1221	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1232	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1242	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1248	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1254	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1260	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1262	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1268	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB0	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH05SB01	pH:	Sample Date: 11/06/2019	Sample Time: 11:10:00
% Moisture:		% Solids: 90.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	74	U	ug/kg	74	U	1.0	YES	S4VEM
Benzaldehyde	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Phenol	Target	86	JQ	ug/kg	86	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
2-Chlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Methylphenol	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Acetophenone	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
4-Methylphenol	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Hexachloroethane	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Nitrobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Isophorone	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Nitrophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Naphthalene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
4-Chloroaniline	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Caprolactam	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Nitroaniline	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Dimethylphthalate	Target	170	JQ	ug/kg	170	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Acenaphthylene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
3-Nitroaniline	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Acenaphthene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
4-Nitrophenol	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Dibenzofuran	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Diethylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Fluorene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
4-Nitroaniline	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Atrazine	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Pentachlorophenol	Target	360	R	ug/kg	360	U	1.0	NO	S4VEM
Phenanthrene	Target	56	R	ug/kg	56	J	1.0	NO	S4VEM
Anthracene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Fluoranthene	Target	120	R	ug/kg	120	J	1.0	NO	S4VEM
Pyrene	Target	120	R	ug/kg	120	J	1.0	NO	S4VEM
Butylbenzylphthalate	Target	190	UJK	ug/kg	190	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	62	R	ug/kg	62	J	1.0	NO	S4VEM
Chrysene	Target	64	R	ug/kg	64	J	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	190	UJK	ug/kg	190	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	360	U	ug/kg	360	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	70	R	ug/kg	70	J	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	55	JQ	ug/kg	55	J	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	38	JQ	ug/kg	38	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	48	JQ	ug/kg	48	J	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Total Alkanes	TIC	340	N	ug/kg	340	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB0	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH05SB01	pH:	Sample Date: 11/06/2019	Sample Time: 11:10:00
% Moisture:		% Solids: 90.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	8.5		ug/kg	8.5		1.0	YES	S4VEM
2-Methylnaphthalene	Target	4.9		ug/kg	4.9		1.0	YES	S4VEM
Acenaphthylene	Target	5.6		ug/kg	5.6		1.0	YES	S4VEM
Acenaphthene	Target	4.2		ug/kg	4.2		1.0	YES	S4VEM
Fluorene	Target	3.2	JQ	ug/kg	3.2	J	1.0	YES	S4VEM
Pentachlorophenol	Target	7.4	U	ug/kg	7.4	U	1.0	YES	S4VEM
Phenanthrene	Target	51		ug/kg	51		1.0	YES	S4VEM
Anthracene	Target	12		ug/kg	12		1.0	YES	S4VEM
Fluoranthene	Target	110		ug/kg	110	D	5.0	YES	S4VEM
Pyrene	Target	140		ug/kg	140	D	5.0	YES	S4VEM
Benzo(a)anthracene	Target	68		ug/kg	68	D	5.0	YES	S4VEM
Chrysene	Target	72		ug/kg	72	D	5.0	YES	S4VEM
Benzo(b)fluoranthene	Target	78		ug/kg	78	D	5.0	YES	S4VEM
Benzo(k)fluoranthene	Target	25		ug/kg	25		1.0	YES	S4VEM
Benzo(a)pyrene	Target	54		ug/kg	54		1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	31		ug/kg	31		1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	9.0		ug/kg	9.0		1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	39		ug/kg	39		1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB0 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH05SB01 | pH: | Sample Date: 11/06/2019 | Sample Time: 11:10:00

% Moisture: | % Solids: 90.2

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Chloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Bromomethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Chloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Acetone	Target	25	U	ug/kg	25		1.0	YES	S4VEM
Carbon disulfide	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Methylene chloride	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Chloroform	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Cyclohexane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Benzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Trichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
o-xylene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Styrene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Bromoform	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	YES	S4VEM
Benzene, 1,2,3,4-tetramethyl-	TIC	4.0	JN	ug/kg	4.0	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
o-Cymene	TIC	3.6	JN	ug/kg	3.6	JN	1.0	NO	NV
Benzene, 1-ethenyl-3-ethyl-	TIC	3.5	JN	ug/kg	3.5	JN	1.0	NO	NV
Benzene, 1-ethenyl-4-ethyl-	TIC	14	JN	ug/kg	14	JN	1.0	NO	NV
Dimethyl ether	TIC	11	JBN	ug/kg	11	JBN	1.0	NO	NV
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV
Indan, 1-methyl-	TIC	3.3	JN	ug/kg	3.3	JN	1.0	NO	NV
Benzene, 2-ethyl-1,3-dimethyl-	TIC	5.6	JN	ug/kg	5.6	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB1	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 85.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1221	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1232	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1242	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1248	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1254	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1260	Target	18	JQ	ug/kg	18	J	1.0	YES	S4VEM
Aroclor-1262	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1268	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB1	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 85.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	78	U	ug/kg	78	U	1.0	YES	S4VEM
Benzaldehyde	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Phenol	Target	91	JQ	ug/kg	91	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
2-Chlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylphenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Acetophenone	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4-Methylphenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachloroethane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Nitrobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Isophorone	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitrophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Naphthalene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
4-Chloroaniline	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Caprolactam	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	200	R	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2-Nitroaniline	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Dimethylphthalate	Target	180	JQ	ug/kg	180	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Acenaphthylene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
3-Nitroaniline	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Acenaphthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4-Nitrophenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Dibenzofuran	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Diethylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluorene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Nitroaniline	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Atrazine	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Pentachlorophenol	Target	380	R	ug/kg	380	U	1.0	NO	S4VEM
Phenanthrene	Target	41	R	ug/kg	41	J	1.0	NO	S4VEM
Anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Fluoranthene	Target	55	R	ug/kg	55	J	1.0	NO	S4VEM
Pyrene	Target	61	R	ug/kg	61	J	1.0	NO	S4VEM
Butylbenzylphthalate	Target	200	UJK	ug/kg	200	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Chrysene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	UJK	ug/kg	200	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	380	U	ug/kg	380	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	200	R	ug/kg	200	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	200	U	ug/kg	200	U	1.0	YES	S4VEM
Total Alkanes	TIC	160	N	ug/kg	160	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB1	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 85.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	2.0	JQ	ug/kg	2.0	J	1.0	YES	S4VEM
2-Methylnaphthalene	Target	1.8	JQ	ug/kg	1.8	J	1.0	YES	S4VEM
Acenaphthylene	Target	1.7	JQ	ug/kg	1.7	J	1.0	YES	S4VEM
Acenaphthene	Target	3.2	JQ	ug/kg	3.2	J	1.0	YES	S4VEM
Fluorene	Target	2.2	JQ	ug/kg	2.2	J	1.0	YES	S4VEM
Pentachlorophenol	Target	7.8	U	ug/kg	7.8	U	1.0	YES	S4VEM
Phenanthrene	Target	32		ug/kg	32		1.0	YES	S4VEM
Anthracene	Target	6.6		ug/kg	6.6		1.0	YES	S4VEM
Fluoranthene	Target	38		ug/kg	38		1.0	YES	S4VEM
Pyrene	Target	54		ug/kg	54		1.0	YES	S4VEM
Benzo(a)anthracene	Target	20		ug/kg	20		1.0	YES	S4VEM
Chrysene	Target	23		ug/kg	23		1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	21		ug/kg	21		1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	8.1		ug/kg	8.1		1.0	YES	S4VEM
Benzo(a)pyrene	Target	19		ug/kg	19		1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	11		ug/kg	11		1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	3.1	JQ	ug/kg	3.1	J	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	14		ug/kg	14		1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB1	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 85.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Chloromethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Bromomethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Chloroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Acetone	Target	12	U	ug/kg	6.1	J	1.0	YES	S4VEM
Carbon disulfide	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Methylene chloride	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
2-Butanone	Target	12	U	ug/kg	12	U	1.0	YES	S4VEM
Bromochloromethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Chloroform	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Cyclohexane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Benzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Trichloroethene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	12	U	ug/kg	12	U	1.0	YES	S4VEM
Toluene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
2-Hexanone	Target	12	U	ug/kg	12	U	1.0	YES	S4VEM
Dibromochloromethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
o-xylene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Styrene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Bromoform	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	6.0	U	ug/kg	6.0	U	1.0	YES	S4VEM
Dimethyl ether	TIC	14	JBN	ug/kg	14	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB2	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH06SB01	pH:	Sample Date: 11/06/2019	Sample Time: 13:02:00
% Moisture:		% Solids: 81.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1221	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1232	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1242	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1248	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1254	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1260	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1262	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM
Aroclor-1268	Target	41	U	ug/kg	41	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB2	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH06SB01	pH:	Sample Date: 11/06/2019	Sample Time: 13:02:00
% Moisture:		% Solids: 81.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	82	U	ug/kg	82	U	1.0	YES	S4VEM
Benzaldehyde	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Phenol	Target	86	JQ	ug/kg	86	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
2-Chlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Methylphenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Acetophenone	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4-Methylphenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Hexachloroethane	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Nitrobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Isophorone	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Nitrophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Naphthalene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
4-Chloroaniline	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Caprolactam	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2-Nitroaniline	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Dimethylphthalate	Target	140	JQ	ug/kg	140	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Acenaphthylene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
3-Nitroaniline	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Acenaphthene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4-Nitrophenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Dibenzofuran	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Diethylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Fluorene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
4-Nitroaniline	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Atrazine	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Pentachlorophenol	Target	400	R	ug/kg	400	U	1.0	NO	S4VEM
Phenanthrene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Anthracene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
Fluoranthene	Target	400	R	ug/kg	400	U	1.0	NO	S4VEM
Pyrene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	210	UJK	ug/kg	210	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Chrysene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	210	UJK	ug/kg	210	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	400	U	ug/kg	400	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	210	R	ug/kg	210	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	210	U	ug/kg	210	U	1.0	YES	S4VEM
1-Heneicosanol	TIC	130	JN	ug/kg	130	JN	1.0	NO	NV
Total Alkanes	TIC	190	N	ug/kg	190	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB2	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH06SB01	pH:	Sample Date: 11/06/2019	Sample Time: 13:02:00
% Moisture:		% Solids: 81.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Acenaphthene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Fluorene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Pentachlorophenol	Target	8.2	U	ug/kg	8.2	U	1.0	YES	S4VEM
Phenanthrene	Target	3.6	JQ	ug/kg	3.6	J	1.0	YES	S4VEM
Anthracene	Target	4.0	U	ug/kg	4.0	U	1.0	YES	S4VEM
Fluoranthene	Target	6.2		ug/kg	6.2		1.0	YES	S4VEM
Pyrene	Target	9.4		ug/kg	9.4		1.0	YES	S4VEM
Benzo(a)anthracene	Target	4.4		ug/kg	4.4		1.0	YES	S4VEM
Chrysene	Target	4.9		ug/kg	4.9		1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.7		ug/kg	5.7		1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	2.2	JQ	ug/kg	2.2	J	1.0	YES	S4VEM
Benzo(a)pyrene	Target	4.7		ug/kg	4.7		1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	2.7	JQ	ug/kg	2.7	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.86	JQ	ug/kg	0.86	J	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	3.5	JQ	ug/kg	3.5	J	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14030/JLNA8 | Lab Name: Chemtech Consulting Group

Sample Number: JLNB2 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: BH06SB01 | pH: | Sample Date: 11/06/2019 | Sample Time: 13:02:00

% Moisture: | % Solids: 81.5

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromomethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Acetone	Target	11	U	ug/kg	11		1.0	YES	S4VEM
Carbon disulfide	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methyl Acetate	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methylene chloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
2-Butanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Bromochloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloroform	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Cyclohexane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Benzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Trichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methylcyclohexane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromodichloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Toluene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Tetrachloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
2-Hexanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Dibromochloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Ethylbenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
o-xylene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
m,p-Xylene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Styrene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromoform	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Isopropylbenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Dimethyl ether	TIC	8.4	JBN	ug/kg	8.4	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48596/EPW14030/JLNA8 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNB3	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 88.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1221	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1232	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1242	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1248	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1254	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1260	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1262	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1268	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB3	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 88.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	76	U	ug/kg	76	U	1.0	YES	S4VEM
Benzaldehyde	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Phenol	Target	69	JQ	ug/kg	69	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
2-Chlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Methylphenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Acetophenone	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4-Methylphenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Hexachloroethane	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Nitrobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Isophorone	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Nitrophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Naphthalene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
4-Chloroaniline	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Caprolactam	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2-Nitroaniline	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Dimethylphthalate	Target	120	JQ	ug/kg	120	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Acenaphthylene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
3-Nitroaniline	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Acenaphthene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4-Nitrophenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Dibenzofuran	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Diethylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Fluorene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
4-Nitroaniline	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Atrazine	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Pentachlorophenol	Target	370	R	ug/kg	370	U	1.0	NO	S4VEM
Phenanthrene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Anthracene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14030/JLNA8 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Fluoranthene	Target	370	R	ug/kg	370	U	1.0	NO	S4VEM
Pyrene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	190	UJK	ug/kg	190	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Chrysene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	190	UJK	ug/kg	190	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	370	U	ug/kg	370	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	190	R	ug/kg	190	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	190	U	ug/kg	190	U	1.0	YES	S4VEM
Total Alkanes	TIC	110	N	ug/kg	110	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB3	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 88.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Acenaphthylene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Acenaphthene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Fluorene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Pentachlorophenol	Target	7.6	U	ug/kg	7.6	U	1.0	YES	S4VEM
Phenanthrene	Target	1.4	JQ	ug/kg	1.4	J	1.0	YES	S4VEM
Anthracene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Fluoranthene	Target	2.4	JQ	ug/kg	2.4	J	1.0	YES	S4VEM
Pyrene	Target	4.2		ug/kg	4.2		1.0	YES	S4VEM
Benzo(a)anthracene	Target	1.9	JQ	ug/kg	1.9	J	1.0	YES	S4VEM
Chrysene	Target	2.1	JQ	ug/kg	2.1	J	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	2.4	JQ	ug/kg	2.4	J	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	1.1	JQ	ug/kg	1.1	J	1.0	YES	S4VEM
Benzo(a)pyrene	Target	1.8	JQ	ug/kg	1.8	J	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.98	JQ	ug/kg	0.98	J	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	3.7	U	ug/kg	3.7	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	1.2	JQ	ug/kg	1.2	J	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB3	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 88.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Vinyl chloride	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bromomethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Acetone	Target	70	U	ug/kg	70		1.0	YES	S4VEM
Carbon disulfide	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methyl Acetate	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methylene chloride	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
2-Butanone	Target	6.0	JQ	ug/kg	6.0	J	1.0	YES	S4VEM
Bromochloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chloroform	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Cyclohexane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Benzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Trichloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Methylcyclohexane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bromodichloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Toluene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Tetrachloroethene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
2-Hexanone	Target	13	U	ug/kg	13	U	1.0	YES	S4VEM
Dibromochloromethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Chlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Ethylbenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
o-xylene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
m,p-Xylene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Styrene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Bromoform	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Isopropylbenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	6.5	U	ug/kg	6.5	U	1.0	YES	S4VEM
Dimethyl ether	TIC	13	JBN	ug/kg	13	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB3MS	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 88.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	100		ug/kg	100		1.0	YES	S4VEM
Aroclor-1221	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1232	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1242	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1248	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1254	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1260	Spike	97		ug/kg	97		1.0	YES	S4VEM
Aroclor-1262	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM
Aroclor-1268	Target	38	U	ug/kg	38	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB3MSD	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 88.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	130		ug/kg	130		1.0	YES	S4VEM
Aroclor-1221	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1232	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1242	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1248	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1254	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1260	Spike	130		ug/kg	130		1.0	YES	S4VEM
Aroclor-1262	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM
Aroclor-1268	Target	37	U	ug/kg	37	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB4 | Method: Aroclors | Matrix: Water | MA Number:

Sample Location: RI03WT | pH: 6 | Sample Date: 11/06/2019 | Sample Time: 16:30:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB4	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: RI03WT	pH: 5	Sample Date: 11/06/2019	Sample Time: 16:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	3.9	JQ	ug/L	3.9	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	6.0		ug/L	6.0		1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Chrysene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC	11	N	ug/L	11	N	1.0	NO	NV
n-Hexadecanoic acid	TIC	2.2	JN	ug/L	2.2	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB4	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: RI03WT	pH: 5	Sample Date: 11/06/2019	Sample Time: 16:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48596/EPW14030/JLNA8 | **Lab Name:** Chemtech Consulting Group

Sample Number: JLNB4 | Method: Volatile Organics | Matrix: Water | MA Number:

Sample Location: RI03WT | pH: 1.0 | Sample Date: 11/06/2019 | Sample Time: 16:30:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC0	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: TB02WT	pH: 1.0	Sample Date: 11/06/2019	Sample Time: 07:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK34	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	UJ	ug/L	10	U	1.0	YES	S4VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK35	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK50	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	67	U	ug/kg	67	U	1.0	YES	S4VEM
Benzaldehyde	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Phenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
2-Chlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Methylphenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Acetophenone	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4-Methylphenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Hexachloroethane	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Nitrobenzene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Isophorone	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Nitrophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Naphthalene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
4-Chloroaniline	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Caprolactam	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2-Nitroaniline	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Dimethylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Acenaphthylene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
3-Nitroaniline	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Acenaphthene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4-Nitrophenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Dibenzofuran	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Diethylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Fluorene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
4-Nitroaniline	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Atrazine	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Pentachlorophenol	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Phenanthrene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Anthracene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Fluoranthene	Target	330	UJ	ug/kg	330	U	1.0	YES	S4VEM
Pyrene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	170	UJ	ug/kg	170	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Chrysene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	170	UJ	ug/kg	170	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	330	U	ug/kg	330	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	170	U	ug/kg	170	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	YES	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK51	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Acenaphthylene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Acenaphthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Fluorene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Pentachlorophenol	Target	6.7	U	ug/kg	6.7	U	1.0	YES	S4VEM
Phenanthrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Chrysene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	3.3	U	ug/kg	3.3	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14030/JLNA8 | Lab Name: Chemtech Consulting Group

Sample Number: VBLK22 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dimethyl ether	TIC	13	JN	ug/kg	13	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14030/JLNA8 | Lab Name: Chemtech Consulting Group

Sample Number: VBLK23 | Method: Volatile Organics | Matrix: Soil | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 100

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Acetone	Target	5.4	J	ug/kg	5.4	J	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dimethyl ether	TIC	4.0	JN	ug/kg	4.0	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14030/JLNA8 | Lab Name: Chemtech Consulting Group

Sample Number: VBLK51 | Method: Volatile Organics | Matrix: Water | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK52	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14030/JLNA8 | Lab Name: Chemtech Consulting Group

Sample Number: VHBLK01 | Method: Volatile Organics | Matrix: Water | MA Number:

Sample Location: | pH: 1.0 | Sample Date: | Sample Time:

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Sample Number: VHBLK02	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromomethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Acetone	Target	6.4	J	ug/kg	6.4	JB	1.0	YES	S4VEM
Carbon disulfide	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methyl Acetate	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methylene chloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
2-Butanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Bromochloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chloroform	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Cyclohexane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Benzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Trichloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Methylcyclohexane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromodichloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Toluene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Tetrachloroethene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
2-Hexanone	Target	9.9	U	ug/kg	9.9	U	1.0	YES	S4VEM
Dibromochloromethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Chlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Ethylbenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
o-xylene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
m,p-Xylene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Styrene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Bromoform	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Isopropylbenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	4.9	U	ug/kg	4.9	U	1.0	YES	S4VEM
Dimethyl ether	TIC	4.6	JBN	ug/kg	4.6	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/kg		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project	GroupID: 48596/EPW14030/JLNA8	Lab Name: Chemtech Consulting Group

Data Validation Report
Analytical Sample Listing

Mon, 2 Dec 2019 09:28:19

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Submission Group Id: 31606343

Organization: EPA Region 10

SOW: SOM02.4

Method - Volatile Organics

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNC0	FB	Water	Low	11/06/2019 07:30:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 12:44:00	Initial	11/11/2019 12:44:00	DB-624UI	MSVOA_U
JLNA8	FS	Soil	Low	11/06/2019 10:04:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 17:33:00	Initial	11/11/2019 17:33:00	RXI-624	MSVOA_W
JLNA9	FS	Soil	Low	11/06/2019 10:22:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 17:59:00	Initial	11/11/2019 17:59:00	RXI-624	MSVOA_W
JLNB0	FS	Soil	Low	11/06/2019 11:10:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 18:25:00	Initial	11/11/2019 18:25:00	RXI-624	MSVOA_W
JLNB1	FS	Soil	Low	11/06/2019 11:55:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 18:52:00	Initial	11/11/2019 18:52:00	RXI-624	MSVOA_W
JLNB2	FS	Soil	Low	11/06/2019 13:02:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 19:18:00	Initial	11/11/2019 19:18:00	RXI-624	MSVOA_W
JLNB3	FS	Soil	Low	11/06/2019 13:38:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 19:45:00	Initial	11/11/2019 19:45:00	RXI-624	MSVOA_W
JLNB4	FB	Water	Low	11/06/2019 16:30:00	11/11/2019 09:00:00			Purge_and_Trap	11/11/2019 12:21:00	Initial	11/11/2019 12:21:00	DB-624UI	MSVOA_U

Data Validation Report
Analytical Sample Listing

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Submission Group Id: 31606343

Organization: EPA Region 10

SOW: SOM02.4

Method - Semivolatiles

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA8	FS	Soil	Low	11/06/2019 10:04:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:20:00	Initial	11/22/2019 18:22:00	ZB-GR	BNA_M
JLNA9	FS	Soil	Low	11/06/2019 10:22:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:20:00	Initial	11/22/2019 17:46:00	ZB-GR	BNA_M
JLNB0	FS	Soil	Low	11/06/2019 11:10:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:20:00	Initial	11/22/2019 18:58:00	ZB-GR	BNA_M
JLNB1	FS	Soil	Low	11/06/2019 11:55:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:20:00	Initial	11/22/2019 19:34:00	ZB-GR	BNA_M
JLNB2	FS	Soil	Low	11/06/2019 13:02:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:20:00	Initial	11/22/2019 20:10:00	ZB-GR	BNA_M
JLNB3	FS	Soil	Low	11/06/2019 13:38:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:20:00	Initial	11/22/2019 20:46:00	ZB-GR	BNA_M
JLNB4	FB	Water	Low	11/06/2019 16:30:00	11/11/2019 09:00:00			Liq_Membrane	11/12/2019 08:45:00	Initial	11/22/2019 21:22:00	ZB-GR	BNA_M

Data Validation Report
Analytical Sample Listing

Mon, 2 Dec 2019 09:28:19

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48596/EPW14030/JLNA8

Lab Name: Chemtech Consulting Group

Submission Group Id: 31606343

Organization: EPA Region 10

SOW: SOM02.4

Method - Semivolatiles by SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA8	FS	Soil	Low	11/06/2019 10:04:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:22:00	Initial	11/20/2019 12:31:00	ZB-GR	BNA_N
JLNA9	FS	Soil	Low	11/06/2019 10:22:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:22:00	Initial	11/20/2019 13:07:00	ZB-GR	BNA_N
JLNB0	FS	Soil	Low	11/06/2019 11:10:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:22:00	Initial	11/20/2019 13:43:00	ZB-GR	BNA_N
								Soxhlet	11/13/2019 08:22:00	Dilution-01	11/20/2019 18:32:00	ZB-GR	BNA_N
JLNB1	FS	Soil	Low	11/06/2019 11:55:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:22:00	Initial	11/20/2019 14:19:00	ZB-GR	BNA_N
JLNB2	FS	Soil	Low	11/06/2019 13:02:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:22:00	Initial	11/20/2019 14:55:00	ZB-GR	BNA_N
JLNB3	FS	Soil	Low	11/06/2019 13:38:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:22:00	Initial	11/21/2019 18:03:00	ZB-GR	BNA_N
JLNB4	FB	Water	Low	11/06/2019 16:30:00	11/11/2019 09:00:00			Liq_Membrane	11/12/2019 08:45:00	Initial	11/20/2019 17:56:00	ZB-GR	BNA_N

Data Validation Report
Analytical Sample Listing

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Submission Group Id: 31606343 | **Organization: EPA Region 10** | **SOW: SOM02.4**

Method - Aroclors

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNA8	FS	Soil	LOW	11/06/2019 10:04:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 14:20:00	ZB-MR2	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 14:20:00	ZB-MR2	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 14:20:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 14:20:00	ZB-MR1	ECD_Q
JLNA9	FS	Soil	LOW	11/06/2019 10:22:00	11/11/2019 09:00:00				11/13/2019 08:25:00	Initial	11/13/2019 14:36:00	ZB-MR1	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 14:36:00	ZB-MR2	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 14:36:00	ZB-MR2	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 14:36:00	ZB-MR1	ECD_Q
JLNB0	FS	Soil	LOW	11/06/2019 11:10:00	11/11/2019 09:00:00				11/13/2019 08:25:00	Initial	11/13/2019 14:53:00	ZB-MR2	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 14:53:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 14:53:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 14:53:00	ZB-MR2	ECD_Q
JLNB1	FS	Soil	LOW	11/06/2019 11:55:00	11/11/2019 09:00:00				11/13/2019 08:25:00	Initial	11/13/2019 15:09:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:09:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:09:00	ZB-MR2	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:09:00	ZB-MR2	ECD_Q
JLNB2	FS	Soil	LOW	11/06/2019 13:02:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:26:00	ZB-MR2	ECD_Q

Data Validation Report
Analytical Sample Listing

Mon, 2 Dec 2019 09:28:19

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14030/JLNA8** | **Lab Name: Chemtech Consulting Group**

Submission Group Id: 31606343 | **Organization: EPA Region 10** | **SOW: SOM02.4**

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:26:00	ZB-MR1	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:26:00	ZB-MR2	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:26:00	ZB-MR1	ECD_Q
JLNB3	FS	Soil	LOW	11/06/2019 13:38:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:42:00	ZB-MR1	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:42:00	ZB-MR1	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:42:00	ZB-MR2	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:42:00	ZB-MR2	ECD_Q
JLNB3MS	MS	Soil	LOW	11/06/2019 13:38:00	11/11/2019 09:00:00			Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:58:00	ZB-MR1	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:58:00	ZB-MR1	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 15:58:00	ZB-MR2	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 15:58:00	ZB-MR2	ECD_Q
JLNB3MSD	MSD	Soil	LOW	11/06/2019 13:38:00	11/11/2019 09:00:00				11/13/2019 08:25:00	Initial	11/13/2019 16:15:00	ZB-MR2	ECD_Q
									11/13/2019 08:25:00	Initial	11/13/2019 16:15:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 16:15:00	ZB-MR1	ECD_Q
								Soxhlet	11/13/2019 08:25:00	Initial	11/13/2019 16:15:00	ZB-MR2	ECD_Q
JLNB4	FB	Water	LOW	11/06/2019 16:30:00	11/11/2019 09:00:00				11/15/2019 09:45:00	Initial	11/15/2019 14:44:00	ZB-MR1	ECD_Q
								Sep_Funnel	11/15/2019 09:45:00	Initial	11/15/2019 14:44:00	ZB-MR1	ECD_Q
								Sep_Funnel	11/15/2019 09:45:00	Initial	11/15/2019 14:44:00	ZB-MR2	ECD_Q
									11/15/2019 09:45:00	Initial	11/15/2019 14:44:00	ZB-MR2	ECD_Q

ecology and environment, inc.
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Tel: (206) 624-9537

MEMORANDUM

DATE: December 3, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 11 water samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Trace Volatile, SVOA and SVOA-SIM (EPA CLP SOW SOM02.4) was performed by Chemtech, Mountainside, New Jersey. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

JLNC3	JLNC4	JLNC5	JLND7	JLNC8
JLNB8	JLND0	JLNB9	JLNE0	JLNC6
JLNC7				

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3123

LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

Date: November 25, 2019

Reply to:
Attn of: LSASD-14D12

MEMORANDUM

SUBJECT: Data Validation Report for the Trace Volatiles, Semivolatile (SVOA) and Semivolatile-SIM (SIM) analyses of water samples collected from the Gunshy Manor PA/SI Site.
Case Number: 48514 SDG: JLNB8 Raymond Wu 11/25/19

FROM: Raymond Wu, QA Chemist
Environmental Characterization Branch
Quality Assurance Section
Office of Laboratory Services & Applied Science Division (LSASD – 14D12)

TO: Brandon Perkins, EPA Task Monitor
Emergency Management Branch
Spill Prevention & Removal Section
Office of Superfund & Emergency Management Division (SEMD – 13J07)

CC: Linda Ader, START Team Leader
Ecology and Environment, Inc.

Jeff Fetters, Project Manager
Ecology and Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 11 water samples collected from the above referenced site has been completed. The samples were analyzed for Trace Volatile, SVOA and SVOA-SIM. They were all analyzed in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM02.4) by Chemtech, located in Mountainside, New Jersey. When multiple analytical runs were conducted (i.e., dilution, reanalysis, SIM), the run with reportable results has been indicated by the reviewer.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the draft SQAP for the Gunshy Manor PA/SI Site (October, 2019), the technical specifications of USEPA CLP SOW for Organic Data Review (SOM02.4, 2016), the Contract Laboratory Program's National Functional Guidelines for Organic Data Review (EPA-540-R-014-002, 2017) and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005).

Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt, extraction, and analyses are attached along with the reviewed data.

The conclusions presented herein are based on the information provided for the review.

I. QUALITY CONTROL RESULTS SUMMARY

The following tables summarize the major quality control (QC) tests as well as the criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP or Region specific and different from the NFG.

Trace Water Volatile Organic Analysis#		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	Y	Min. RRF: 0.010 to 0.700‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.700‡ and Max. Opening %D: 20% to 40%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	N	50 – 200% of internal standard area

Soil Semivolatile Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. Opening %D: 20% to 40%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard

Soil Semivolatile-SIM Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. Opening %D: 20% to 40%‡

		Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	N	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard

*See the Data Qualifications section below for outliers and qualification of affected data.
†10X Blank for ketones, solvents, or common laboratory contaminants.
‡Varies by compound. See Organic CLP NFG Tables 4(Trace Volatiles) & 34(SVOC & SVOC-SIM) for individual compound acceptance criteria.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference)

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Data qualifications applied after the manual and electronic data review can be found in the attached "Manual/Electronic Data Review" section of this report.

Control Required Quantitation Limits: Sample data with values reported below the CRQL are qualified J.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

U	The analyte was not detected at or above the reported result.
J	The analyte was positively identified. The associated numerical result is an estimate.
UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
R	The data are unusable for all purposes.
N	There is evidence the analyte is present in this sample
JN	There is evidence the analyte is present. The associated numerical result is an estimate.
Q	The result is estimated because the concentration is below the contract required Quantitation Limit (CRQLs)
L	Low bias
H	High bias
K	Unknown bias

Attachments:
Manual/Electronic Data Review Results
Sample Summary Report
Data Validation Report - Analytical Sample Listing

InitialCalibration

Method - Trace Volatiles

Test Name: EXES-793
Defect Message: The following samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detects are qualified as estimated J. Nondetects are not qualified.

Associated Samples: JLNB8, JLNB9, JLNC3, JLNC4, JLNC5, JLNC6, JLNC7, JLNC8, JLND0, JLND7, JLNE0

Defective Analyte	Defective Samples/Analyses
1,1-Dichloroethane	VSTD0.531
m,p-xylene	VSTD0.531
1,2,4-trichlorobenzene	VSTD0.501
1,2,3-Trichlorobenzene	VSTD0.501

DMC_Surrogate

Method - Trace Volatiles

Test Name: EXES-792
Defect Message: The following samples have DMC/surrogate percent recoveries less than the primary minimum criteria but greater than or equal to the expanded minimum criteria. Detects are qualified as estimated J. Nondetects are qualified as estimated UJ.

Associated Samples: JLNC5

Defective Analyte	Defective Samples/Analyses
1,1-Dichloroethene-d2	JLNC5

Test Name: EXES-982
Defect Message: The following samples have DMC/surrogate percent recoveries greater than the primary maximum criteria Detects are qualified as estimated J. Use professional judgment to qualify nondetects.

Associated Samples: JLNC3

Defective Analyte	Defective Samples/Analyses
1,2-Dichlorobenzene-d4	JLNC3

Method - Semivolatiles

Test Name: EXES-113
Defect Message: The following undiluted sample analyses have DMC/surrogate percent recoveries less than the primary minimum criteria but greater than or equal to the expanded minimum criteria. Detects are qualified as estimated J. Nondetects are qualified as estimated UJ.

Associated Samples: JLND0

Defective Analyte	Defective Samples/Analyses
4-Methylphenol-d8	JLND0

Test Name: EXES-226
Defect Message: The following undiluted sample analyses have DMC/surrogate percent recoveries less than the primary minimum criteria but greater than or equal to the expanded minimum criteria. Detects are qualified as estimated Ju01. Nondetects are qualified as estimated UJ.

Associated Samples: JLNB8, JLNB9, JLNC3, JLNC4, JLNC5, JLNC6, JLNC7, JLND0, JLND7, JLNE0

Defective Analyte	Defective Samples/Analyses
Phenol-d5	JLND0
4-Nitrophenol-d4	JLNB8, JLNB9, JLNC3, JLNC4, JLNC5, JLNC6, JLNC7, JLND0, JLND7, JLNE0

TargetAnalyteQuantitation

Method - Trace Volatiles

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLND0

Defective Analyte	Defective Samples/Analyses
Chloromethane	JLND0
Acetone	JLND0

Method - Semivolatiles

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNB8, JLNB9, JLNC3, JLNC4, JLNC5, JLNC6, JLND0, JLND7, JLNE0

Defective Analyte	Defective Samples/Analyses
Phenol	JLND0
Dimethylphthalate	JLNB8, JLNB9, JLNC3, JLNC4, JLNC5, JLNC6, JLND0, JLND7, JLNE0
Bis(2-ethylhexyl)phthalate	JLND0

Method - Semivolatiles by SIM

Test Name: EXES-790
Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: JLNB8, JLND0

Defective Analyte	Defective Samples/Analyses
Pentachlorophenol	JLND0
Phenanthrene	JLNB8
Fluoranthene	JLNB8, JLND0
Pyrene	JLND0

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB8	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: BH01GW	pH: 5	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.2	U	ug/L	2.2	U	1.0	YES	S4VEM
Benzaldehyde	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Phenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Acetophenone	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Isophorone	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Naphthalene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
4-Chloroaniline	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Caprolactam	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.6	UJK	ug/L	5.6	U	1.0	YES	S4VEM
Dimethylphthalate	Target	4.8	JQ	ug/L	4.8	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
3-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Acenaphthene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4-Nitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Fluorene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
4-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Atrazine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Phenanthrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Anthracene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Carbazole	Target	11	U	ug/L	11	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNB8 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Di-n-butylphthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Fluoranthene	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Pyrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Chrysene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Octadecane, 1-iodo-	TIC	3.1	JN	ug/L	3.1	JN	1.0	NO	NV
Total Alkanes	TIC	18	N	ug/L	18	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB8	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: BH01GW	pH: 6	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluorene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.22	U	ug/L	0.22	U	1.0	YES	S4VEM
Phenanthrene	Target	0.030	JQ	ug/L	0.030	J	1.0	YES	S4VEM
Anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluoranthene	Target	0.020	JQ	ug/L	0.020	J	1.0	YES	S4VEM
Pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Chrysene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB8	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: BH01GW	pH: 1.0	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB9	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: BH02GW	pH: 5	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.1	U	ug/L	2.1	U	1.0	YES	S4VEM
Benzaldehyde	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Phenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Acetophenone	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Isophorone	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Naphthalene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
4-Chloroaniline	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Caprolactam	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.3	UJK	ug/L	5.3	U	1.0	YES	S4VEM
Dimethylphthalate	Target	2.8	JQ	ug/L	2.8	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
3-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Acenaphthene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4-Nitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Fluorene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
4-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Atrazine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Phenanthrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Anthracene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNB8 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Fluoranthene	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Pyrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Chrysene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Total Alkanes	TIC	2.6	N	ug/L	2.6	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB9	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: BH02GW	pH: 6	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNB9 | Method: Trace Volatiles | Matrix: Water | MA Number:

Sample Location: BH02GW | pH: 1.0 | Sample Date: 10/23/2019 | Sample Time: 16:12:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC3	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: MW01GW	pH: 5	Sample Date: 10/22/2019	Sample Time: 12:50:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.1	U	ug/L	2.1	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Isophorone	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Naphthalene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.2	UJK	ug/L	5.2	U	1.0	YES	S4VEM
Dimethylphthalate	Target	1.3	JQ	ug/L	1.3	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Fluorene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Anthracene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNB8 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Chrysene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Total Alkanes	TIC	2.6	N	ug/L	2.6	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC3	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: MW01GW	pH: 6	Sample Date: 10/22/2019	Sample Time: 12:50:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluorene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Phenanthrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Chrysene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC3	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: MW01GW	pH: 1.0	Sample Date: 10/22/2019	Sample Time: 12:50:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC4	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: MW355	pH: 5	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	2.4	JQ	ug/L	2.4	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Chrysene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC4	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: MW355	pH: 6	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC4	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: MW355	pH: 1.0	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC5	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: MW356	pH: 5	Sample Date: 10/22/2019	Sample Time: 14:50:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	2.4	JQ	ug/L	2.4	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNB8 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Chrysene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC5	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: MW356	pH: 6	Sample Date: 10/22/2019	Sample Time: 14:50:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC5	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: MW356	pH: 1.0	Sample Date: 10/22/2019	Sample Time: 14:50:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	UJK	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	UJK	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	UJK	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC6	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: RI01WT	pH: 5	Sample Date: 10/24/2019	Sample Time: 11:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	1.5	JQ	ug/L	1.5	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNB8 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Chrysene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC	24	N	ug/L	24	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC6	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: RI01WT	pH: 6	Sample Date: 10/24/2019	Sample Time: 11:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC6 | Method: Trace Volatiles | Matrix: Water | MA Number:

Sample Location: RI01WT | pH: 1.0 | Sample Date: 10/24/2019 | Sample Time: 11:00:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC7 | Method: Semivolatiles | Matrix: Water | MA Number:

Sample Location: RI02WT | pH: 5 | Sample Date: 10/24/2019 | Sample Time: 11:30:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.1	U	ug/L	2.1	U	1.0	YES	S4VEM
Benzaldehyde	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Phenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Acetophenone	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Isophorone	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Naphthalene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
4-Chloroaniline	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Caprolactam	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.3	UJK	ug/L	5.3	U	1.0	YES	S4VEM
Dimethylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
3-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Acenaphthene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4-Nitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Fluorene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
4-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Atrazine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Phenanthrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Anthracene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Carbazole	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14030/JLNB8 | Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Pyrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Chrysene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.3	R	ug/L	5.3	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.3	U	ug/L	5.3	U	1.0	YES	S4VEM
1-Octadecanesulphonyl chloride	TIC	3.9	JN	ug/L	3.9	JN	1.0	NO	NV
n-Nonadecanol-1	TIC	4.6	JN	ug/L	4.6	JN	1.0	NO	NV
Total Alkanes	TIC	11	N	ug/L	11	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC7	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: RI02WT	pH: 6	Sample Date: 10/24/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluorene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Phenanthrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Chrysene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC7 | Method: Trace Volatiles | Matrix: Water | MA Number:

Sample Location: RI02WT | pH: 1.0 | Sample Date: 10/24/2019 | Sample Time: 11:30:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNC8 | Method: Trace Volatiles | Matrix: Water | MA Number:

Sample Location: TB01WT | pH: 1.0 | Sample Date: 10/23/2019 | Sample Time: 06:30:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLND0 | Method: Semivolatiles | Matrix: Water | MA Number:

Sample Location: ID0WT | pH: 5 | Sample Date: 10/23/2019 | Sample Time: 16:00:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	1.5	JQ	ug/L	1.5	J	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	UJK	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	4.0	JQ	ug/L	4.0	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Chrysene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	1.0	JQ	ug/L	1.0	J	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.0	R	ug/L	5.0	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
n-Hexadecanoic acid	TIC	4.5	JN	ug/L	4.5	JN	1.0	NO	NV
Total Alkanes	TIC	66	N	ug/L	66	N	1.0	NO	NV
Octadecanoic acid	TIC	3.2	JN	ug/L	3.2	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLND0	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: ID0WT	pH: 5	Sample Date: 10/23/2019	Sample Time: 16:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.060	JQ	ug/L	0.060	J	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.020	JQ	ug/L	0.020	J	1.0	YES	S4VEM
Pyrene	Target	0.020	JQ	ug/L	0.020	J	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLND0	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: ID0WT	pH: 1.0	Sample Date: 10/23/2019	Sample Time: 16:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.31	JQ	ug/L	0.31	J	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	4.1	JQ	ug/L	4.1	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNB8

Lab Name: Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Butanal	TIC	0.55	JN	ug/L	0.55	JN	1.0	NO	NV
Hexanal	TIC	0.69	JN	ug/L	0.69	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLND7 | Method: Semivolatiles | Matrix: Water | MA Number:

Sample Location: MW02GW | pH: 5 | Sample Date: 10/22/2019 | Sample Time: 15:40:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.1	U	ug/L	2.1	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Isophorone	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Naphthalene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.2	UJK	ug/L	5.2	U	1.0	YES	S4VEM
Dimethylphthalate	Target	1.2	JQ	ug/L	1.2	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
3-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Fluorene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Phenanthrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Anthracene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNB8 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Fluoranthene	Target	10	R	ug/L	10	U	1.0	NO	S4VEM
Pyrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Chrysene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.2	R	ug/L	5.2	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.2	U	ug/L	5.2	U	1.0	YES	S4VEM
Total Alkanes	TIC	21	N	ug/L	21	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLND7	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: MW02GW	pH: 5	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLND7	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: MW02GW	pH: 1.0	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNE0	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: BK01GW	pH: 5	Sample Date: 10/23/2019	Sample Time: 17:55:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.2	U	ug/L	2.2	U	1.0	YES	S4VEM
Benzaldehyde	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Phenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Acetophenone	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Isophorone	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Naphthalene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
4-Chloroaniline	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Caprolactam	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Hexachlorocyclopentadiene	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.6	UJK	ug/L	5.6	U	1.0	YES	S4VEM
Dimethylphthalate	Target	1.3	JQ	ug/L	1.3	J	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
3-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Acenaphthene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
2,4-Dinitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4-Nitrophenol	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Fluorene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
4-Chlorophenyl-phenylether	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
4-Nitroaniline	Target	11	UJK	ug/L	11	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Atrazine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Phenanthrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Anthracene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNB8 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Fluoranthene	Target	11	R	ug/L	11	U	1.0	NO	S4VEM
Pyrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Butylbenzylphthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Chrysene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	11	U	ug/L	11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Benzo(k)fluoranthene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Benzo(a)pyrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Dibenzo(a,h)anthracene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
Benzo(g,h,i)perylene	Target	5.6	R	ug/L	5.6	U	1.0	NO	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.6	U	ug/L	5.6	U	1.0	YES	S4VEM
Octadecane, 1-chloro-	TIC	3.9	JN	ug/L	3.9	JN	1.0	NO	NV
Total Alkanes	TIC	16	N	ug/L	16	N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNE0	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location: BK01GW	pH: 5	Sample Date: 10/23/2019	Sample Time: 17:55:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Acenaphthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluorene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.22	U	ug/L	0.22	U	1.0	YES	S4VEM
Phenanthrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Chrysene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.11	U	ug/L	0.11	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: JLNE0 | Method: Trace Volatiles | Matrix: Water | MA Number:

Sample Location: BK01GW | pH: 1.0 | Sample Date: 10/23/2019 | Sample Time: 17:55:00

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK64	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14030/JLNB8 | **Lab Name:** Chemtech Consulting Group

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	UJK	ug/L	10	U	1.0	YES	S4VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK65	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK81	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S4VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK82	Method: Semivolatiles by SIM	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
2-Methylnaphthalene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Acenaphthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluorene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pentachlorophenol	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Phenanthrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Chrysene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(b)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(k)fluoranthene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(a)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Indeno(1,2,3-cd)pyrene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Dibenzo(a,h)anthracene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM
Benzo(g,h,i)perylene	Target	0.10	U	ug/L	0.10	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK06 | Method: Trace Volatiles | Matrix: Water | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acetic acid	TIC	0.58	JN	ug/L	0.58	JN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK41	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Sample Number: VHBLK01	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location:	pH: 1.0	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetic acid	TIC	0.50	JBN	ug/L	0.50	JBN	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/L		N	1.0	NO	NV

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNB8

Lab Name: Chemtech Consulting Group

Data Validation Report

Analytical Sample Listing

Fri, 15 Nov 2019 11:47:01

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNB8

Lab Name: Chemtech Consulting Group

Submission Group Id: 31583330

Organization: EPA Region 10

SOW: SOM02.4

Method - Trace Volatiles

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNC3	FS	Water	Trace	10/22/2019 12:50:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 15:53:00	Initial	10/26/2019 15:53:00	DB-624UI	MSVOA_V
JLNC4	FS	Water	Trace	10/22/2019 13:20:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 16:17:00	Initial	10/26/2019 16:17:00	DB-624UI	MSVOA_V
JLNC5	FS	Water	Trace	10/22/2019 14:50:00	10/25/2019 09:30:00			Purge_and_Trap	10/28/2019 12:32:00	Initial	10/28/2019 12:32:00	DB-624UI	MSVOA_U
JLND7	FS	Water	Trace	10/22/2019 15:40:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 18:16:00	Initial	10/26/2019 18:16:00	DB-624UI	MSVOA_V
JLNC8	FB	Water	Trace	10/23/2019 06:30:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 12:35:00	Initial	10/26/2019 12:35:00	DB-624UI	MSVOA_V
JLNB8	FS	Water	Trace	10/23/2019 15:45:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 14:42:00	Initial	10/26/2019 14:42:00	DB-624UI	MSVOA_V
JLND0	FS	Water	Trace	10/23/2019 16:00:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 17:52:00	Initial	10/26/2019 17:52:00	DB-624UI	MSVOA_V
JLNB9	FS	Water	Trace	10/23/2019 16:12:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 15:29:00	Initial	10/26/2019 15:29:00	DB-624UI	MSVOA_V
JLNE0	FS	Water	Trace	10/23/2019 17:55:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 18:40:00	Initial	10/26/2019 18:40:00	DB-624UI	MSVOA_V
JLNC6	FS	Water	Trace	10/24/2019 11:00:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 17:05:00	Initial	10/26/2019 17:05:00	DB-624UI	MSVOA_V
JLNC7	FS	Water	Trace	10/24/2019 11:30:00	10/25/2019 09:30:00			Purge_and_Trap	10/26/2019 17:29:00	Initial	10/26/2019 17:29:00	DB-624UI	MSVOA_V

Data Validation Report

Analytical Sample Listing

Fri, 15 Nov 2019 11:47:01

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14030/JLNB8

Lab Name: Chemtech Consulting Group

Submission Group Id: 31583330

Organization: EPA Region 10

SOW: SOM02.4

Method - Semivolatiles

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNC3	FS	Water	Low	10/22/2019 12:50:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 13:36:00	ZB-GR	BNA_M
JLNC4	FS	Water	Low	10/22/2019 13:20:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 14:12:00	ZB-GR	BNA_M
JLNC5	FS	Water	Low	10/22/2019 14:50:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 14:48:00	ZB-GR	BNA_M
JLND7	FS	Water	Low	10/22/2019 15:40:00	10/25/2019 09:30:00			Liq_Membrane	10/29/2019 08:27:00	Initial	11/05/2019 17:47:00	ZB-GR	BNA_M
JLNB8	FS	Water	Low	10/23/2019 15:45:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 12:25:00	ZB-GR	BNA_M
JLND0	FS	Water	Low	10/23/2019 16:00:00	10/25/2019 09:30:00			Liq_Membrane	10/29/2019 08:27:00	Initial	11/05/2019 17:11:00	ZB-GR	BNA_M
JLNB9	FS	Water	Low	10/23/2019 16:12:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 13:00:00	ZB-GR	BNA_M
JLNE0	FS	Water	Low	10/23/2019 17:55:00	10/25/2019 09:30:00			Liq_Membrane	10/29/2019 08:27:00	Initial	11/05/2019 18:23:00	ZB-GR	BNA_M
JLNC6	FS	Water	Low	10/24/2019 11:00:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 15:24:00	ZB-GR	BNA_M
JLNC7	FS	Water	Low	10/24/2019 11:30:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 16:00:00	ZB-GR	BNA_M

Data Validation Report
Analytical Sample Listing

Fri, 15 Nov 2019 11:47:01

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14030/JLNB8** | **Lab Name: Chemtech Consulting Group**

Submission Group Id: 31583330 | **Organization: EPA Region 10** | **SOW: SOM02.4**

Method - Semivolatiles by SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNC3	FS	Water	Low	10/22/2019 12:50:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 18:49:00	ZB-GR	BNA_N
JLNC4	FS	Water	Low	10/22/2019 13:20:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 19:25:00	ZB-GR	BNA_N
JLNC5	FS	Water	Low	10/22/2019 14:50:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 20:01:00	ZB-GR	BNA_N
JLND7	FS	Water	Low	10/22/2019 15:40:00	10/25/2019 09:30:00			Liq_Membrane	10/29/2019 08:28:00	Initial	11/05/2019 22:24:00	ZB-GR	BNA_N
JLNB8	FS	Water	Low	10/23/2019 15:45:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 17:37:00	ZB-GR	BNA_N
JLND0	FS	Water	Low	10/23/2019 16:00:00	10/25/2019 09:30:00			Liq_Membrane	10/29/2019 08:28:00	Initial	11/05/2019 21:48:00	ZB-GR	BNA_N
JLNB9	FS	Water	Low	10/23/2019 16:12:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 18:13:00	ZB-GR	BNA_N
JLNE0	FS	Water	Low	10/23/2019 17:55:00	10/25/2019 09:30:00			Liq_Membrane	10/29/2019 08:28:00	Initial	11/05/2019 23:00:00	ZB-GR	BNA_N
JLNC6	FS	Water	Low	10/24/2019 11:00:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 20:36:00	ZB-GR	BNA_N
JLNC7	FS	Water	Low	10/24/2019 11:30:00	10/25/2019 09:30:00			Liq_Membrane	10/28/2019 09:00:00	Initial	11/05/2019 21:12:00	ZB-GR	BNA_N

ecology and environment, inc.
Global Environmental Specialists
720 Third Avenue, Suite 1700
Seattle, Washington 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: November 20, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington

SUBJ: **Organic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 9 water samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Aroclors (EPA CLP SOW SOM02.4) was performed by Shealy Environmental Services, Inc., Columbia, South Carolina. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

JLNC3	JLNC4	JLNC5	JLND7	JLNB8
JLNB9	JLNE0	JLNC6	JLNC7	

No discrepancies were noted.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3140

Laboratory Services and
Applied Science Division
(LSASD)

November 19, 2019

MEMORANDUM

Subject: Data Validation Report for the Gunshy Manor Preliminary Assessment, Case # 48514, SDG: JLNB8 – Aroclor Analyses

From: Karin Feddersen-Lethe, QA Chemist
USEPA Region 10,
Environmental Characterization Branch, LSASD

KARIN FEDDERSEN-LETHE
Digitally signed by KARIN FEDDERSEN-LETHE
Date: 2019.11.20 06:59:20 -08'00'

To: Brandon Perkins, Brownfields Project Manager
USEPA Region 10,
Superfund & Emergency Management Division

CC: Jeff Fetters, START-IV Project Manager,
Ecology & Environment

The quality assurance (QA) review of the analytical data generated from the analysis of nine water samples collected from the above-referenced site, has been completed. These samples were analyzed for aroclor analyses by Shealy Environmental Services, located in Columbia, SC. When multiple analyses were conducted for the same sample (i.e., dilution, reanalysis, SIM), the analysis with reportable results has been indicated by the reviewer. No adjustment needs to be made by the user for dilutions on any results.

All sample analyses were evaluated following EPA's Stage IV Data Validation Electronic/Manual Process (S4VEM). The validation was conducted, and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the following:

- Sampling and Quality Assurance Project Plan (QAPP) for Gunshy Manor, 10/18/2019;
- Modified Analysis Request Reference Number 2720.3;
- USEPA Contract Laboratory Program (CLP) Statement of Work for (SOW) Organic Superfund Methods Multi-Media, Multi-Concentration (SOM02.4);
- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-2017-002); and
- Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R-08-005).

Some data may be qualified using the reviewer's professional judgment and Region 10 guidance. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this report with the pertinent dates for sample collection, laboratory sample receipt, extraction, and analyses are attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The following table summarizes the major quality control (QC) tests as well as the criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP or Region specific and different from the NFG.

Aroclor Organic Analysis			
Quality Control Test	**Outliers?**	**Data Affected?**	**Evaluation Criteria**
Blanks	N	N	Non-detect or sample > 10X Blank
Initial Calibration	N	N	≤ 20% RSD
Continuing Calibration Verification	N	N	Open: ≤ 25% D, Close: ≤ 50% D
Surrogate Spikes	N	N	30 – 150%
Laboratory Control Samples	N	N	50 – 150%
Matrix Spikes	N	N	Varies by Compound
Target Compound Identification	N	N	≤ 25% D (J); >60% D (U)

*See the Data Qualifications section below for outliers and qualification of affected data. (Note: RSD = Relative Standard Deviation, D = Difference, RPD = Relative Percent Difference)

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Data qualifications applied after the manual and electronic data review can be found in the attached "Manual/Electronic Data Review Results" section of this report.

Data Qualifiers

The following is a list of qualifiers applied to the sample result(s) either electronically or manually, when needed, to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The analyte was analyzed for but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The analyte was positively identified and the associated numerical value is an estimated quantity.
UJ	The analyte was analyzed for but was not detected above the level of the associated value. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable for all purposes. The analyte may or may not be present in the sample.
JN or NJ	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the sample result(s) manually in addition to the above data qualifiers to allow for data analysis and interpretation using PREscore software for the National Priorities Listing Hazard Ranking System (NPL-HRS).

Bias Qualifiers	
L	Low bias.
H	High bias.
K	Unknown bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

Attachments:
Manual/Electronic Data Review Results
Sample Summary Report
Data Validation Report - Analytical Sample Listing

Manual/Electronic Data Review Results

AROCLOR ORGANICS ANALYSIS
No qualification was applied

Data Validation Report
Analytical Sample Listing

Wed, 13 Nov 2019 10:19:17

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14035/JLNB8

Lab Name: Shealy Environmental Services, Inc.

Submission Group Id: 31579324

Organization: EPA Region 10

SOW: SOM02.4

Method - Aroclors

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JLNC3	FS	Water	Low	10/22/2019 12:50:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:47:00	DB-XLB	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:47:00	DB-35MS	Agilent_7890B_GC14
JLNC4	FS	Water	Low	10/22/2019 13:20:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:15:00	DB-35MS	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:15:00	DB-XLB	Agilent_7890B_GC14
JLNC4MS	MS	Water	Low	10/22/2019 13:20:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:29:00	DB-35MS	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:29:00	DB-XLB	Agilent_7890B_GC14
JLNC4MSD	MSD	Water	Low	10/22/2019 13:20:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:43:00	DB-35MS	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:43:00	DB-XLB	Agilent_7890B_GC14
JLNC5	FS	Water	Low	10/22/2019 14:50:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:57:00	DB-35MS	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:57:00	DB-XLB	Agilent_7890B_GC14
JLND7	FS	Water	Low	10/22/2019 15:40:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 14:11:00	DB-XLB	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 14:11:00	DB-35MS	Agilent_7890B_GC14
JLNB8	FS	Water	Low	10/23/2019 15:45:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:05:00	DB-35MS	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:05:00	DB-XLB	Agilent_7890B_GC14
JLNB9	FS	Water	Low	10/23/2019 16:12:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:19:00	DB-XLB	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:19:00	DB-35MS	Agilent_7890B_GC14
JLNE0	FS	Water	Low	10/23/2019 17:55:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 14:25:00	DB-XLB	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019	Initial	11/01/2019	DB-	Agilent_7890B_GC14

Data Validation Report
Analytical Sample Listing

Wed, 13 Nov 2019 10:19:17

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project

GroupID: 48514/EPW14035/JLNB8

Lab Name: Shealy Environmental Services, Inc.

Submission Group Id: 31579324

Organization: EPA Region 10

SOW: SOM02.4

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
									17:08:00		14:25:00	35MS	
JLNC6	FS	Water	Low	10/24/2019 11:00:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:01:00	DB-XLB	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 13:01:00	DB-35MS	Agilent_7890B_GC14
JLNC7	FS	Water	Low	10/24/2019 11:30:00	10/26/2019 09:00:00			Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:33:00	DB-XLB	Agilent_7890B_GC14
								Sep_Funnel	10/31/2019 17:08:00	Initial	11/01/2019 12:33:00	DB-35MS	Agilent_7890B_GC14

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: ABLK49	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: ALCS49	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	0.18	J	ug/L	0.18	J	1.0	YES	S4VEM
Aroclor-1221	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1260	Spike	0.21		ug/L	0.21		1.0	YES	S4VEM
Aroclor-1262	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNB8	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: BH01GW	pH: 7	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNB9	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: BH02GW	pH: 7	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC3	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: MW01GW	pH: 7	Sample Date: 10/22/2019	Sample Time: 12:50:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC4	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: MW355	pH: 7	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC4MS	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location:	pH: 7	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	0.51		ug/L	0.51		1.0	YES	S4VEM
Aroclor-1221	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1260	Spike	0.68		ug/L	0.68		1.0	YES	S4VEM
Aroclor-1262	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC4MSD	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location:	pH: 7	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	0.52		ug/L	0.52		1.0	YES	S4VEM
Aroclor-1221	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1260	Spike	0.69		ug/L	0.69		1.0	YES	S4VEM
Aroclor-1262	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC5	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: MW356	pH: 7	Sample Date: 10/22/2019	Sample Time: 14:50:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC6	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: RI01WT	pH: 7	Sample Date: 10/24/2019	Sample Time: 11:00:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNC7	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: RI02WT	pH: 7	Sample Date: 10/24/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.20	U	ug/L	0.20	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLND7	Method: Aroclors	Matrix: Water	MA Number: 2720.3
Sample Location: MW02GW	pH: 7	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids: 0.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14035/JLNB8** | **Lab Name: Shealy Environmental Services, Inc.**

Sample Number: JLNE0 | Method: Aroclors | Matrix: Water | MA Number: 2720.3

Sample Location: BK01GW | pH: 7 | Sample Date: 10/23/2019 | Sample Time: 17:55:00

% Moisture: | % Solids: 0.0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1221	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1232	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1242	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1248	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1254	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1260	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1262	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM
Aroclor-1268	Target	0.21	U	ug/L	0.21	U	1.0	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project	GroupID: 48514/EPW14035/JLNB8	Lab Name: Shealy Environmental Services, Inc.

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MEMORANDUM

DATE: November 21, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 11 soil samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Metals (EPA CLP SOW ISM02.4) was performed by Bonner Analytical, Hattiesburg, Mississippi. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

MJLNA0	MJLNA1	MJLNA2	MJLNA3	MJLNA4	MJLNA5
MJLNA6	MJLNA7	MJLNB5	MJLNB6	MJLNB7	

No discrepancies were noted.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

November 19, 2019

MEMORANDUM

SUBJECT: Data Validation Report for the Gunshy Manor, Redmond, Washington
Case# 48514, SDG: MJLNA0, Inorganic Analyses

FROM: Don Matheny, Chemist
LSASD, Environmental Characterization Branch

TO: Brandon Perkins, Site Assessment Manager
Superfund & Emergency Management Division

CC: Derek Pulvino, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of eleven soils collected from the above referenced site has been completed. These samples were analyzed for metals (including mercury) by Bonner Analytical located in Hattiesburg, MS.

Sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in:

- Sampling and Quality Assurance Plan for Gunshy Manor, E&E, (October 2019)
- USEPA CLP Statement of Work for Inorganic Superfund Methods (ISM02.4)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-2017-001)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The table below summarizes the major sample quality control (QC) tests, associated test results, criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP specific and different from the National Functional Guidelines. Certain QC tests are electronically evaluated the results of which are not summarized in the table below though any excursions of these tests will appear in the *Data Qualifications* section. In addition to the QC tests, calculations from minimally 10% of the samples are verified against the raw data.

QC Results Summary

Quality Control Test[1]	Result Ranges	Outliers[2] (Y or N)	Evaluation Criteria
Preservation / Holding Times	Preservation & Holding Times met	N	Cool ≤ 6°C Metals 180 Days; Hg 28 Days
MS Tune	Tune criteria met	N	≤ 0.1 amu; ≤ 5% RSD
Instrument Calibration	Calibration criteria met	N	± 30% Difference; Corr. Coeff. ≥ 0.995
Calibration Verification	All checks passed	N	Metals 90 – 110% Recovery Hg 85 – 115% Recovery
Interference Check Std.	96 – 112% or ± 2xCRQL	N	80 – 120% Recovery or ± 2xCRQL
Lab Blanks	**Significant detects reported**	**Y**	**Not detected or <10% of Sample**
Matrix Spike	**78 – 125%** ***Out: Sb (21%); Tl (170%)***	**Y**	**75 - 125% Recovery**
Lab Duplicate	≤ 9% or ± 2xCRQL	N	≤ 35% RPD or ± 2xCRQL
LCS (blank spike)	84 - 113%	N	70 - 130% Recovery Ag, Sb 50 – 150% Recovery
Serial Dilution[3]	**≤ 6%** ***Out: As (16%)***	**Y**	**≤ 15% Difference**

[1] Lab QC (matrix spike, lab duplicate, serial dilution) were performed on sample MJLNA0.

[2] See the *"Data Qualifications"* section below for QC excursions and qualification of affected data.

[3] The evaluation was limited to **Aluminum, Arsenic, Calcium, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Vanadium & Zinc** as the native concentrations of the remaining elements in the sample were too low for conducting a 1:5 Serial Dilution.

II. DATA QUALIFICATIONS

Summary of Data Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

1. **Blanks:** The following analytes have positively detected sample results < CRQLs (below the range of quantitation) and the associated laboratory blanks were also detected at concentrations < CRQLs.

Data Qualifications: Sample results are qualified U and the values elevated to the CRQLs.	
Qualified Analytical Results:	
Selenium –	MJLNA0, MJLNA1, MJLNA2, MJLNA3, MJLNA4, MJLNA6, MJLNA7, MJLNB5, MJLNB6, MJLNB7
Thallium –	MJLNA0, MJLNA1, MJLNA2, MJLNA3, MJLNA6, MJLNA7, MJLNB5, MJLNB6, MJLNB7

2. **Detection / Quantitation Limits:** The following analytes have positively detected results < CRQLs (below the range of quantitation) and the associated laboratory blanks were not detected.

Data Qualifications: Sample results are qualified JQ with no indication of bias.	
Qualified Analytical Results:	
Antimony -	All samples
Beryllium -	All samples
Cadmium –	MJLNA0, MJLNA1, MJLNA2, MJLNA3, MJLNA4, MJLNA6, MJLNA7, MJLNB5, MJLNB6, MJLNB7
Cobalt -	MJLNA7
Mercury –	MJLNA0, MJLNA1, MJLNA3, MJLNA4, MJLNA5, MJLNA6, MJLNA7, MJLNB5, MJLNB6, MJLNB7
Potassium –	MJLNA4, MJLNA7, MJLNB5
Silver -	All samples
Sodium –	All samples

3. Matrix Spike: The spike recoveries for **Antimony** (21%) and **Thallium** (170%) were outside the 75-125% criteria. All Antimony data were detected below the CRQL and Thallium data were qualified U due to blanks or were not detected. No data were qualified due to spike recovery exceedances.

4. Serial Dilution: Arsenic (16%) had a serial dilution percent difference that was outside the 15%D criteria for soils with a high bias. All Arsenic data were detected above the CRQL and qualified JH.

5. Note: The Laboratory reported **Selenium & Thallium** by both ICP-AES and ICP-MS though these analytes were only scheduled for ICP-MS analysis. The ICP-AES data for these analytes were qualified R (rejected).

Data Qualifiers

The data qualifiers and their respective definitions applied to the sample result(s) are provided as follows.

U	The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.
R	The data are rejected and unusable. The analyte may or may not be present in the sample.
L	The sample result is biased low.
H	The sample result is biased high.
K	The bias of the sample is not known.
Q	Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.

III. SAMPLE INDEX

The sample listing dates of sample collection, laboratory receipt and analysis are provided below.

Sample ID	Matrix	Sample Date	Date Rec'd	ICP-AES Analysis	ICP-MS Analysis	Mercury Analysis
MJLNA0	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA1	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA2	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA3	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA4	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA5	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA6	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNA7	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNB5	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNB6	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019
MJLNB7	Soil	10/23/2019	10/26/2019	11/8/2019	11/6-8/2019	11/4/2019

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: LCS01	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	40.1		mg/kg	40.1		1	YES	S4VEM
Antimony	Spike	12.3		mg/kg	12.3		1	YES	S4VEM
Barium	Spike	45.1		mg/kg	45.1		1	YES	S4VEM
Beryllium	Spike	1.0		mg/kg	1.0		1	YES	S4VEM
Cadmium	Spike	1.1		mg/kg	1.1		1	YES	S4VEM
Calcium	Spike	1120		mg/kg	1120		1	YES	S4VEM
Chromium	Spike	2.2		mg/kg	2.2		1	YES	S4VEM
Cobalt	Spike	11.0		mg/kg	11.0		1	YES	S4VEM
Copper	Spike	4.9		mg/kg	4.9		1	YES	S4VEM
Iron	Spike	19.8		mg/kg	19.8		1	YES	S4VEM
Lead	Spike	2.2		mg/kg	2.2		1	YES	S4VEM
Magnesium	Spike	1010		mg/kg	1010		1	YES	S4VEM
Manganese	Spike	2.9		mg/kg	2.9		1	YES	S4VEM
Nickel	Spike	9.0		mg/kg	9.0		1	YES	S4VEM
Potassium	Spike	934		mg/kg	934		1	YES	S4VEM
Selenium	Spike	7.3	R	mg/kg	7.3		1	YES	S4VEM
Silver	Spike	1.7		mg/kg	1.7		1	YES	S4VEM
Sodium	Spike	1020		mg/kg	1020		1	YES	S4VEM
Thallium	Spike	5.0	R	mg/kg	5.0		1	YES	S4VEM
Vanadium	Spike	10.2		mg/kg	10.2		1	YES	S4VEM
Zinc	Spike	12.8		mg/kg	12.8		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Spike	0.85		mg/kg	0.85		1	YES	S4VEM
Selenium	Spike	4.2		mg/kg	4.2		1	YES	S4VEM
Thallium	Spike	0.85		mg/kg	0.85		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH01SB01	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.046	JQ	mg/kg	0.046	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNA0 | Method: Metals by ICP-AES | Matrix: Soil | MA Number:

Sample Location: BH01SB01 | pH: | Sample Date: 10/23/2019 | Sample Time: 10:35:00

% Moisture: | % Solids: 80.3

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	16700		mg/kg	16700		1	YES	S4VEM
Antimony	Target	0.73	JQ	mg/kg	0.73	J*	1	YES	S4VEM
Barium	Target	98.4		mg/kg	98.4		1	YES	S4VEM
Beryllium	Target	0.30	JQ	mg/kg	0.30	J	1	YES	S4VEM
Cadmium	Target	0.39	JQ	mg/kg	0.39	J	1	YES	S4VEM
Calcium	Target	5930		mg/kg	5930		1	YES	S4VEM
Chromium	Target	40.6		mg/kg	40.6		1	YES	S4VEM
Cobalt	Target	9.8		mg/kg	9.8		1	YES	S4VEM
Copper	Target	17.2		mg/kg	17.2		1	YES	S4VEM
Iron	Target	18800		mg/kg	18800		1	YES	S4VEM
Lead	Target	11.6		mg/kg	11.6		1	YES	S4VEM
Magnesium	Target	5040		mg/kg	5040		1	YES	S4VEM
Manganese	Target	326		mg/kg	326		1	YES	S4VEM
Nickel	Target	43.4		mg/kg	43.4		1	YES	S4VEM
Potassium	Target	881		mg/kg	881		1	YES	S4VEM
Selenium	Target	4.2	R	mg/kg	0.86	J*	1	YES	S4VEM
Silver	Target	0.78	JQ	mg/kg	0.78	J	1	YES	S4VEM
Sodium	Target	251	JQ	mg/kg	251	J	1	YES	S4VEM
Thallium	Target	3.0	R	mg/kg	3.0	U	1	YES	S4VEM
Vanadium	Target	49.0		mg/kg	49.0		1	YES	S4VEM
Zinc	Target	50.2		mg/kg	50.2		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH01SB01	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.5	JH	mg/kg	5.5	*	1	YES	S4VEM
Selenium	Target	2.9	U	mg/kg	0.39	J	1	YES	S4VEM
Thallium	Target	0.57	U	mg/kg	0.059	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0A	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	15.8		mg/kg	15.8		1	YES	S4VEM
Selenium	Spike	9.7	R	mg/kg	9.7		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0A	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Spike	11.0	JH	mg/kg	11.0	*	1	YES	S4VEM
Thallium	Spike	1.8		mg/kg	1.8	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNA0D	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.041	J	mg/kg	0.041	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0D	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	17000		mg/kg	17000		1	YES	S4VEM
Antimony	Target	0.72	J	mg/kg	0.72	J	1	YES	S4VEM
Barium	Target	94.2		mg/kg	94.2		1	YES	S4VEM
Beryllium	Target	0.27	J	mg/kg	0.27	J	1	YES	S4VEM
Cadmium	Target	0.41	J	mg/kg	0.41	J	1	YES	S4VEM
Calcium	Target	6130		mg/kg	6130		1	YES	S4VEM
Chromium	Target	43.1		mg/kg	43.1		1	YES	S4VEM
Cobalt	Target	10.4		mg/kg	10.4		1	YES	S4VEM
Copper	Target	17.3		mg/kg	17.3		1	YES	S4VEM
Iron	Target	18100		mg/kg	18100		1	YES	S4VEM
Lead	Target	12.7		mg/kg	12.7		1	YES	S4VEM
Magnesium	Target	5310		mg/kg	5310		1	YES	S4VEM
Manganese	Target	309		mg/kg	309		1	YES	S4VEM
Nickel	Target	44.3		mg/kg	44.3		1	YES	S4VEM
Potassium	Target	803		mg/kg	803		1	YES	S4VEM
Selenium	Target	1.2	R	mg/kg	1.2	J	1	YES	S4VEM
Silver	Target	0.72	J	mg/kg	0.72	J	1	YES	S4VEM
Sodium	Target	305	J	mg/kg	305	J	1	YES	S4VEM
Thallium	Target	3.0	R	mg/kg	3.0	U	1	YES	S4VEM
Vanadium	Target	49.2		mg/kg	49.2		1	YES	S4VEM
Zinc	Target	54.0		mg/kg	54.0		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0D	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.2		mg/kg	5.2		1	YES	S4VEM
Selenium	Target	0.36	J	mg/kg	0.36	J	1	YES	S4VEM
Thallium	Target	0.21	J	mg/kg	0.21	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0L	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	16200		mg/kg	16200		5	YES	S4VEM
Antimony	Target	35.6	U	mg/kg	35.6	U	5	YES	S4VEM
Barium	Target	96.1	J	mg/kg	96.1	J	5	YES	S4VEM
Beryllium	Target	0.28	J	mg/kg	0.28	J	5	YES	S4VEM
Cadmium	Target	0.46	J	mg/kg	0.46	J	5	YES	S4VEM
Calcium	Target	5840		mg/kg	5840		5	YES	S4VEM
Chromium	Target	40.6		mg/kg	40.6		5	YES	S4VEM
Cobalt	Target	10.1	J	mg/kg	10.1	J	5	YES	S4VEM
Copper	Target	18.1		mg/kg	18.1		5	YES	S4VEM
Iron	Target	18400		mg/kg	18400		5	YES	S4VEM
Lead	Target	11.7		mg/kg	11.7		5	YES	S4VEM
Magnesium	Target	4950		mg/kg	4950		5	YES	S4VEM
Manganese	Target	321		mg/kg	321		5	YES	S4VEM
Nickel	Target	41.6		mg/kg	41.6		5	YES	S4VEM
Potassium	Target	814	J	mg/kg	814	J	5	YES	S4VEM
Selenium	Target	1.9	R	mg/kg	1.9	J	5	YES	S4VEM
Silver	Target	0.82	J	mg/kg	0.82	J	5	YES	S4VEM
Sodium	Target	236	J	mg/kg	236	J	5	YES	S4VEM
Thallium	Target	14.8	R	mg/kg	14.8	U	5	YES	S4VEM
Vanadium	Target	48.3		mg/kg	48.3		5	YES	S4VEM
Zinc	Target	47.3		mg/kg	47.3		5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0L	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	4.6	J1	mg/kg	4.6	*	5	YES	S4VEM
Selenium	Target	1.1	J	mg/kg	1.1	J	5	YES	S4VEM
Thallium	Target	0.17	J	mg/kg	0.17	J	5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0S	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Spike	0.63		mg/kg	0.63		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0S	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	5.6	J	mg/kg	5.6	J*	1	YES	S4VEM
Barium	Spike	621		mg/kg	621		1	YES	S4VEM
Beryllium	Spike	12.3		mg/kg	12.3		1	YES	S4VEM
Cadmium	Spike	12.1		mg/kg	12.1		1	YES	S4VEM
Chromium	Spike	89.7		mg/kg	89.7		1	YES	S4VEM
Cobalt	Spike	130		mg/kg	130		1	YES	S4VEM
Copper	Spike	73.4		mg/kg	73.4		1	YES	S4VEM
Lead	Spike	17.4		mg/kg	17.4		1	YES	S4VEM
Manganese	Spike	469		mg/kg	469		1	YES	S4VEM
Nickel	Spike	172		mg/kg	172		1	YES	S4VEM
Selenium	Spike	12.5	R	mg/kg	12.5	*	1	YES	S4VEM
Silver	Spike	10.0		mg/kg	10.0		1	YES	S4VEM
Thallium	Spike	11.6	R	mg/kg	11.6		1	YES	S4VEM
Vanadium	Spike	162		mg/kg	162		1	YES	S4VEM
Zinc	Spike	174		mg/kg	174		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA0S	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 10/23/2019	Sample Time: 10:35:00
% Moisture:		% Solids: 80.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Spike	12.8	JH	mg/kg	12.8	*	1	YES	S4VEM
Selenium	Spike	9.6		mg/kg	9.6		1	YES	S4VEM
Thallium	Spike	10.2		mg/kg	10.2	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA1	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 10:59:00
% Moisture:		% Solids: 78.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.045	JQ	mg/kg	0.045	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA1	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 10:59:00
% Moisture:		% Solids: 78.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	15300		mg/kg	15300		1	YES	S4VEM
Antimony	Target	0.70	JQ	mg/kg	0.70	J*	1	YES	S4VEM
Barium	Target	87.6		mg/kg	87.6		1	YES	S4VEM
Beryllium	Target	0.24	JQ	mg/kg	0.24	J	1	YES	S4VEM
Cadmium	Target	0.47	JQ	mg/kg	0.47	J	1	YES	S4VEM
Calcium	Target	5710		mg/kg	5710		1	YES	S4VEM
Chromium	Target	44.7		mg/kg	44.7		1	YES	S4VEM
Cobalt	Target	8.8		mg/kg	8.8		1	YES	S4VEM
Copper	Target	18.1		mg/kg	18.1		1	YES	S4VEM
Iron	Target	15500		mg/kg	15500		1	YES	S4VEM
Lead	Target	24.7		mg/kg	24.7		1	YES	S4VEM
Magnesium	Target	4540		mg/kg	4540		1	YES	S4VEM
Manganese	Target	238		mg/kg	238		1	YES	S4VEM
Nickel	Target	35.0		mg/kg	35.0		1	YES	S4VEM
Potassium	Target	693		mg/kg	693		1	YES	S4VEM
Selenium	Target	4.2	R	mg/kg	1.2	J*	1	YES	S4VEM
Silver	Target	0.61	JQ	mg/kg	0.61	J	1	YES	S4VEM
Sodium	Target	288	JQ	mg/kg	288	J	1	YES	S4VEM
Thallium	Target	3.0	R	mg/kg	3.0	U	1	YES	S4VEM
Vanadium	Target	45.1		mg/kg	45.1		1	YES	S4VEM
Zinc	Target	53.1		mg/kg	53.1		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA1	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 10:59:00
% Moisture:		% Solids: 78.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.6	JH	mg/kg	5.6	*	1	YES	S4VEM
Selenium	Target	3.2	U	mg/kg	0.98	J	1	YES	S4VEM
Thallium	Target	0.63	U	mg/kg	0.044	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA2	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 11:14:00
% Moisture:		% Solids: 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.14	U	mg/kg	0.14	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA2	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 11:14:00
% Moisture:		% Solids: 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	18600		mg/kg	18600		1	YES	S4VEM
Antimony	Target	0.99	JQ	mg/kg	0.99	J*	1	YES	S4VEM
Barium	Target	89.0		mg/kg	89.0		1	YES	S4VEM
Beryllium	Target	0.27	JQ	mg/kg	0.27	J	1	YES	S4VEM
Cadmium	Target	0.42	JQ	mg/kg	0.42	J	1	YES	S4VEM
Calcium	Target	6300		mg/kg	6300		1	YES	S4VEM
Chromium	Target	36.8		mg/kg	36.8		1	YES	S4VEM
Cobalt	Target	10.8		mg/kg	10.8		1	YES	S4VEM
Copper	Target	14.5		mg/kg	14.5		1	YES	S4VEM
Iron	Target	20800		mg/kg	20800		1	YES	S4VEM
Lead	Target	3.6		mg/kg	3.6		1	YES	S4VEM
Magnesium	Target	6980		mg/kg	6980		1	YES	S4VEM
Manganese	Target	260		mg/kg	260		1	YES	S4VEM
Nickel	Target	27.5		mg/kg	27.5		1	YES	S4VEM
Potassium	Target	1130		mg/kg	1130		1	YES	S4VEM
Selenium	Target	4.0	R	mg/kg	0.61	J*	1	YES	S4VEM
Silver	Target	0.80	JQ	mg/kg	0.80	J	1	YES	S4VEM
Sodium	Target	544	JQ	mg/kg	544	J	1	YES	S4VEM
Thallium	Target	2.8	R	mg/kg	2.8	U	1	YES	S4VEM
Vanadium	Target	60.4		mg/kg	60.4		1	YES	S4VEM
Zinc	Target	55.5		mg/kg	55.5		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA2	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 11:14:00
% Moisture:		% Solids: 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.4	JH	mg/kg	5.4	*	1	YES	S4VEM
Selenium	Target	3.3	U	mg/kg	0.45	J	1	YES	S4VEM
Thallium	Target	0.66	U	mg/kg	0.042	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA3	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH02SB01	pH:	Sample Date: 10/23/2019	Sample Time: 12:16:00
% Moisture:		% Solids: 94.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.042	JQ	mg/kg	0.042	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA3	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH02SB01	pH:	Sample Date: 10/23/2019	Sample Time: 12:16:00
% Moisture:		% Solids: 94.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	10900		mg/kg	10900		1	YES	S4VEM
Antimony	Target	0.41	JQ	mg/kg	0.41	J*	1	YES	S4VEM
Barium	Target	63.3		mg/kg	63.3		1	YES	S4VEM
Beryllium	Target	0.19	JQ	mg/kg	0.19	J	1	YES	S4VEM
Cadmium	Target	0.34	JQ	mg/kg	0.34	J	1	YES	S4VEM
Calcium	Target	4400		mg/kg	4400		1	YES	S4VEM
Chromium	Target	30.8		mg/kg	30.8		1	YES	S4VEM
Cobalt	Target	8.2		mg/kg	8.2		1	YES	S4VEM
Copper	Target	13.2		mg/kg	13.2		1	YES	S4VEM
Iron	Target	12700		mg/kg	12700		1	YES	S4VEM
Lead	Target	11.7		mg/kg	11.7		1	YES	S4VEM
Magnesium	Target	3990		mg/kg	3990		1	YES	S4VEM
Manganese	Target	216		mg/kg	216		1	YES	S4VEM
Nickel	Target	31.1		mg/kg	31.1		1	YES	S4VEM
Potassium	Target	596		mg/kg	596		1	YES	S4VEM
Selenium	Target	3.6	R	mg/kg	0.44	J*	1	YES	S4VEM
Silver	Target	0.48	JQ	mg/kg	0.48	J	1	YES	S4VEM
Sodium	Target	188	JQ	mg/kg	188	J	1	YES	S4VEM
Thallium	Target	2.6	R	mg/kg	2.6	U	1	YES	S4VEM
Vanadium	Target	34.1		mg/kg	34.1		1	YES	S4VEM
Zinc	Target	39.9		mg/kg	39.9		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA3	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH02SB01	pH:	Sample Date: 10/23/2019	Sample Time: 12:16:00
% Moisture:		% Solids: 94.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	6.7	JH	mg/kg	6.7	*	1	YES	S4VEM
Selenium	Target	2.6	U	mg/kg	0.50	J	1	YES	S4VEM
Thallium	Target	0.52	U	mg/kg	0.068	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA4	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH02SB02	pH:	Sample Date: 10/23/2019	Sample Time: 12:40:00
% Moisture:		% Solids: 57.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.075	JQ	mg/kg	0.075	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA4 | Method: Metals by ICP-AES | Matrix: Soil | MA Number:

Sample Location: BH02SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 12:40:00

% Moisture: | % Solids: 57.0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	12900		mg/kg	12900		1	YES	S4VEM
Antimony	Target	0.52	JQ	mg/kg	0.52	J*	1	YES	S4VEM
Barium	Target	69.5		mg/kg	69.5		1	YES	S4VEM
Beryllium	Target	0.23	JQ	mg/kg	0.23	J	1	YES	S4VEM
Cadmium	Target	0.43	JQ	mg/kg	0.43	J	1	YES	S4VEM
Calcium	Target	6700		mg/kg	6700		1	YES	S4VEM
Chromium	Target	29.3		mg/kg	29.3		1	YES	S4VEM
Cobalt	Target	8.3		mg/kg	8.3		1	YES	S4VEM
Copper	Target	15.4		mg/kg	15.4		1	YES	S4VEM
Iron	Target	13500		mg/kg	13500		1	YES	S4VEM
Lead	Target	11.4		mg/kg	11.4		1	YES	S4VEM
Magnesium	Target	4020		mg/kg	4020		1	YES	S4VEM
Manganese	Target	247		mg/kg	247		1	YES	S4VEM
Nickel	Target	27.8		mg/kg	27.8		1	YES	S4VEM
Potassium	Target	629	JQ	mg/kg	629	J	1	YES	S4VEM
Selenium	Target	5.8	R	mg/kg	0.64	J*	1	YES	S4VEM
Silver	Target	0.42	JQ	mg/kg	0.42	J	1	YES	S4VEM
Sodium	Target	170	JQ	mg/kg	170	J	1	YES	S4VEM
Thallium	Target	4.1	R	mg/kg	4.1	U	1	YES	S4VEM
Vanadium	Target	44.7		mg/kg	44.7		1	YES	S4VEM
Zinc	Target	35.3		mg/kg	35.3		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNA4	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH02SB02	pH:	Sample Date: 10/23/2019	Sample Time: 12:40:00
% Moisture:		% Solids: 57.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	4.9	JH	mg/kg	4.9	*	1	YES	S4VEM
Selenium	Target	4.4	U	mg/kg	0.47	J	1	YES	S4VEM
Thallium	Target	0.88	U	mg/kg	0.88	U*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNA5	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH02SB03	pH:	Sample Date: 10/23/2019	Sample Time: 13:00:00
% Moisture:		% Solids: 22.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.066	JQ	mg/kg	0.066	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA5	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH02SB03	pH:	Sample Date: 10/23/2019	Sample Time: 13:00:00
% Moisture:		% Solids: 22.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	11900		mg/kg	11900		1	YES	S4VEM
Antimony	Target	0.83	JQ	mg/kg	0.83	J*	1	YES	S4VEM
Barium	Target	87.5		mg/kg	87.5		1	YES	S4VEM
Beryllium	Target	0.32	JQ	mg/kg	0.32	J	1	YES	S4VEM
Cadmium	Target	0.61		mg/kg	0.61		1	YES	S4VEM
Calcium	Target	13600		mg/kg	13600		1	YES	S4VEM
Chromium	Target	45.4		mg/kg	45.4		1	YES	S4VEM
Cobalt	Target	8.3		mg/kg	8.3		1	YES	S4VEM
Copper	Target	35.9		mg/kg	35.9		1	YES	S4VEM
Iron	Target	17900		mg/kg	17900		1	YES	S4VEM
Lead	Target	3.7		mg/kg	3.7		1	YES	S4VEM
Magnesium	Target	4460		mg/kg	4460		1	YES	S4VEM
Manganese	Target	159		mg/kg	159		1	YES	S4VEM
Nickel	Target	46.5		mg/kg	46.5		1	YES	S4VEM
Potassium	Target	559		mg/kg	559		1	YES	S4VEM
Selenium	Target	3.7	R	mg/kg	3.7	*	1	YES	S4VEM
Silver	Target	0.68	JQ	mg/kg	0.68	J	1	YES	S4VEM
Sodium	Target	203	JQ	mg/kg	203	J	1	YES	S4VEM
Thallium	Target	2.5	R	mg/kg	2.5	U	1	YES	S4VEM
Vanadium	Target	75.8		mg/kg	75.8		1	YES	S4VEM
Zinc	Target	30.3		mg/kg	30.3		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA5	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH02SB03	pH:	Sample Date: 10/23/2019	Sample Time: 13:00:00
% Moisture:		% Solids: 22.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	47.1	JH	mg/kg	47.1	D*	20	YES	S4VEM
Selenium	Target	3.2		mg/kg	3.2		1	YES	S4VEM
Thallium	Target	10.0	U	mg/kg	10.0	UD*	20	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA6	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH03SB01	pH:	Sample Date: 10/23/2019	Sample Time: 13:58:00
% Moisture:		% Solids: 86.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.036	JQ	mg/kg	0.036	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA6	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH03SB01	pH:	Sample Date: 10/23/2019	Sample Time: 13:58:00
% Moisture:		% Solids: 86.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	14800		mg/kg	14800		1	YES	S4VEM
Antimony	Target	0.88	JQ	mg/kg	0.88	J*	1	YES	S4VEM
Barium	Target	84.7		mg/kg	84.7		1	YES	S4VEM
Beryllium	Target	0.27	JQ	mg/kg	0.27	J	1	YES	S4VEM
Cadmium	Target	0.51	JQ	mg/kg	0.51	J	1	YES	S4VEM
Calcium	Target	6440		mg/kg	6440		1	YES	S4VEM
Chromium	Target	48.2		mg/kg	48.2		1	YES	S4VEM
Cobalt	Target	11.4		mg/kg	11.4		1	YES	S4VEM
Copper	Target	19.5		mg/kg	19.5		1	YES	S4VEM
Iron	Target	18700		mg/kg	18700		1	YES	S4VEM
Lead	Target	8.0		mg/kg	8.0		1	YES	S4VEM
Magnesium	Target	6130		mg/kg	6130		1	YES	S4VEM
Manganese	Target	303		mg/kg	303		1	YES	S4VEM
Nickel	Target	50.3		mg/kg	50.3		1	YES	S4VEM
Potassium	Target	993		mg/kg	993		1	YES	S4VEM
Selenium	Target	3.9	R	mg/kg	0.77	J*	1	YES	S4VEM
Silver	Target	0.56	JQ	mg/kg	0.56	J	1	YES	S4VEM
Sodium	Target	305	JQ	mg/kg	305	J	1	YES	S4VEM
Thallium	Target	2.8	R	mg/kg	2.8	U	1	YES	S4VEM
Vanadium	Target	50.2		mg/kg	50.2		1	YES	S4VEM
Zinc	Target	48.6		mg/kg	48.6		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA6	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH03SB01	pH:	Sample Date: 10/23/2019	Sample Time: 13:58:00
% Moisture:		% Solids: 86.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	4.8	JH	mg/kg	4.8	*	1	YES	S4VEM
Selenium	Target	2.7	U	mg/kg	0.44	J	1	YES	S4VEM
Thallium	Target	0.54	U	mg/kg	0.034	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA7	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH03SB02	pH:	Sample Date: 10/23/2019	Sample Time: 14:17:00
% Moisture:		% Solids: 51.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.12	JQ	mg/kg	0.12	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA7	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH03SB02	pH:	Sample Date: 10/23/2019	Sample Time: 14:17:00
% Moisture:		% Solids: 51.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	17200		mg/kg	17200		1	YES	S4VEM
Antimony	Target	0.96	JQ	mg/kg	0.96	J*	1	YES	S4VEM
Barium	Target	118		mg/kg	118		1	YES	S4VEM
Beryllium	Target	0.31	JQ	mg/kg	0.31	J	1	YES	S4VEM
Cadmium	Target	0.48	JQ	mg/kg	0.48	J	1	YES	S4VEM
Calcium	Target	5660		mg/kg	5660		1	YES	S4VEM
Chromium	Target	27.5		mg/kg	27.5		1	YES	S4VEM
Cobalt	Target	7.8	JQ	mg/kg	7.8	J	1	YES	S4VEM
Copper	Target	15.0		mg/kg	15.0		1	YES	S4VEM
Iron	Target	13500		mg/kg	13500		1	YES	S4VEM
Lead	Target	20.8		mg/kg	20.8		1	YES	S4VEM
Magnesium	Target	3020		mg/kg	3020		1	YES	S4VEM
Manganese	Target	350		mg/kg	350		1	YES	S4VEM
Nickel	Target	25.1		mg/kg	25.1		1	YES	S4VEM
Potassium	Target	642	JQ	mg/kg	642	J	1	YES	S4VEM
Selenium	Target	6.1	R	mg/kg	1.3	J*	1	YES	S4VEM
Silver	Target	0.60	JQ	mg/kg	0.60	J	1	YES	S4VEM
Sodium	Target	123	JQ	mg/kg	123	J	1	YES	S4VEM
Thallium	Target	4.4	R	mg/kg	4.4	U	1	YES	S4VEM
Vanadium	Target	40.0		mg/kg	40.0		1	YES	S4VEM
Zinc	Target	39.2		mg/kg	39.2		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNA7	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH03SB02	pH:	Sample Date: 10/23/2019	Sample Time: 14:17:00
% Moisture:		% Solids: 51.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	4.0	JH	mg/kg	4.0	*	1	YES	S4VEM
Selenium	Target	4.0	U	mg/kg	0.68	J	1	YES	S4VEM
Thallium	Target	0.80	U	mg/kg	0.053	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB5	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BK01SB01	pH:	Sample Date: 10/23/2019	Sample Time: 16:01:00
% Moisture:		% Solids: 80.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.029	JQ	mg/kg	0.029	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB5	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BK01SB01	pH:	Sample Date: 10/23/2019	Sample Time: 16:01:00
% Moisture:		% Solids: 80.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20700		mg/kg	20700		1	YES	S4VEM
Antimony	Target	0.78	JQ	mg/kg	0.78	J*	1	YES	S4VEM
Barium	Target	89.4		mg/kg	89.4		1	YES	S4VEM
Beryllium	Target	0.28	JQ	mg/kg	0.28	J	1	YES	S4VEM
Cadmium	Target	0.38	JQ	mg/kg	0.38	J	1	YES	S4VEM
Calcium	Target	3970		mg/kg	3970		1	YES	S4VEM
Chromium	Target	50.6		mg/kg	50.6		1	YES	S4VEM
Cobalt	Target	9.6		mg/kg	9.6		1	YES	S4VEM
Copper	Target	21.0		mg/kg	21.0		1	YES	S4VEM
Iron	Target	19600		mg/kg	19600		1	YES	S4VEM
Lead	Target	4.3		mg/kg	4.3		1	YES	S4VEM
Magnesium	Target	4650		mg/kg	4650		1	YES	S4VEM
Manganese	Target	205		mg/kg	205		1	YES	S4VEM
Nickel	Target	29.6		mg/kg	29.6		1	YES	S4VEM
Potassium	Target	485	JQ	mg/kg	485	J	1	YES	S4VEM
Selenium	Target	4.1	R	mg/kg	0.95	J*	1	YES	S4VEM
Silver	Target	0.56	JQ	mg/kg	0.56	J	1	YES	S4VEM
Sodium	Target	213	JQ	mg/kg	213	J	1	YES	S4VEM
Thallium	Target	2.9	R	mg/kg	2.9	U	1	YES	S4VEM
Vanadium	Target	50.7		mg/kg	50.7		1	YES	S4VEM
Zinc	Target	32.4		mg/kg	32.4		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNB5	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BK01SB01	pH:	Sample Date: 10/23/2019	Sample Time: 16:01:00
% Moisture:		% Solids: 80.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	11.5	J1	mg/kg	11.5	*	1	YES	S4VEM
Selenium	Target	3.0	U	mg/kg	0.33	J	1	YES	S4VEM
Thallium	Target	0.61	U	mg/kg	0.039	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNB6	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BK01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 16:20:00
% Moisture:		% Solids: 92.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.019	JQ	mg/kg	0.019	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNA0 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNB6 | Method: Metals by ICP-AES | Matrix: Soil | MA Number:

Sample Location: BK01SB02 | pH: | Sample Date: 10/23/2019 | Sample Time: 16:20:00

% Moisture: | % Solids: 92.2

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	10500		mg/kg	10500		1	YES	S4VEM
Antimony	Target	0.52	JQ	mg/kg	0.52	J*	1	YES	S4VEM
Barium	Target	52.7		mg/kg	52.7		1	YES	S4VEM
Beryllium	Target	0.17	JQ	mg/kg	0.17	J	1	YES	S4VEM
Cadmium	Target	0.27	JQ	mg/kg	0.27	J	1	YES	S4VEM
Calcium	Target	3850		mg/kg	3850		1	YES	S4VEM
Chromium	Target	24.4		mg/kg	24.4		1	YES	S4VEM
Cobalt	Target	8.0		mg/kg	8.0		1	YES	S4VEM
Copper	Target	12.7		mg/kg	12.7		1	YES	S4VEM
Iron	Target	12900		mg/kg	12900		1	YES	S4VEM
Lead	Target	2.4		mg/kg	2.4		1	YES	S4VEM
Magnesium	Target	2940		mg/kg	2940		1	YES	S4VEM
Manganese	Target	225		mg/kg	225		1	YES	S4VEM
Nickel	Target	19.5		mg/kg	19.5		1	YES	S4VEM
Potassium	Target	569		mg/kg	569		1	YES	S4VEM
Selenium	Target	3.8	R	mg/kg	0.56	J*	1	YES	S4VEM
Silver	Target	0.44	JQ	mg/kg	0.44	J	1	YES	S4VEM
Sodium	Target	228	JQ	mg/kg	228	J	1	YES	S4VEM
Thallium	Target	2.7	R	mg/kg	2.7	U	1	YES	S4VEM
Vanadium	Target	41.2		mg/kg	41.2		1	YES	S4VEM
Zinc	Target	23.3		mg/kg	23.3		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB6	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BK01SB02	pH:	Sample Date: 10/23/2019	Sample Time: 16:20:00
% Moisture:		% Solids: 92.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	1.9	JH	mg/kg	1.9	*	1	YES	S4VEM
Selenium	Target	2.4	U	mg/kg	0.45	J	1	YES	S4VEM
Thallium	Target	0.48	U	mg/kg	0.044	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB7	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BK01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 16:42:00
% Moisture:		% Solids: 77.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.031	JQ	mg/kg	0.031	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB7	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BK01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 16:42:00
% Moisture:		% Solids: 77.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	13100		mg/kg	13100		1	YES	S4VEM
Antimony	Target	0.58	JQ	mg/kg	0.58	J*	1	YES	S4VEM
Barium	Target	62.1		mg/kg	62.1		1	YES	S4VEM
Beryllium	Target	0.20	JQ	mg/kg	0.20	J	1	YES	S4VEM
Cadmium	Target	0.34	JQ	mg/kg	0.34	J	1	YES	S4VEM
Calcium	Target	4070		mg/kg	4070		1	YES	S4VEM
Chromium	Target	34.5		mg/kg	34.5		1	YES	S4VEM
Cobalt	Target	8.5		mg/kg	8.5		1	YES	S4VEM
Copper	Target	19.4		mg/kg	19.4		1	YES	S4VEM
Iron	Target	14700		mg/kg	14700		1	YES	S4VEM
Lead	Target	3.1		mg/kg	3.1		1	YES	S4VEM
Magnesium	Target	4370		mg/kg	4370		1	YES	S4VEM
Manganese	Target	166		mg/kg	166		1	YES	S4VEM
Nickel	Target	27.2		mg/kg	27.2		1	YES	S4VEM
Potassium	Target	966		mg/kg	966		1	YES	S4VEM
Selenium	Target	4.4	R	mg/kg	0.41	J*	1	YES	S4VEM
Silver	Target	0.38	JQ	mg/kg	0.38	J	1	YES	S4VEM
Sodium	Target	266	JQ	mg/kg	266	J	1	YES	S4VEM
Thallium	Target	3.1	R	mg/kg	3.1	U	1	YES	S4VEM
Vanadium	Target	44.5		mg/kg	44.5		1	YES	S4VEM
Zinc	Target	38.1		mg/kg	38.1		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB7	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BK01SB03	pH:	Sample Date: 10/23/2019	Sample Time: 16:42:00
% Moisture:		% Solids: 77.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.7	JH	mg/kg	5.7	*	1	YES	S4VEM
Selenium	Target	2.7	U	mg/kg	0.43	J	1	YES	S4VEM
Thallium	Target	0.53	U	mg/kg	0.081	J*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBS01	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.10	U	mg/kg	0.10	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBS01	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	mg/kg	20.0	U	1	YES	S4VEM
Antimony	Target	6.0	U	mg/kg	6.0	U	1	YES	S4VEM
Barium	Target	20.0	U	mg/kg	-0.14	J	1	YES	S4VEM
Beryllium	Target	0.50	U	mg/kg	-0.0071	J	1	YES	S4VEM
Cadmium	Target	0.50	U	mg/kg	0.50	U	1	YES	S4VEM
Calcium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Chromium	Target	1.0	U	mg/kg	1.0	U	1	YES	S4VEM
Cobalt	Target	5.0	U	mg/kg	-0.041	J	1	YES	S4VEM
Copper	Target	0.12	J	mg/kg	0.12	J	1	YES	S4VEM
Iron	Target	10.0	U	mg/kg	10.0	U	1	YES	S4VEM
Lead	Target	1.0	U	mg/kg	1.0	U	1	YES	S4VEM
Magnesium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Manganese	Target	1.5	U	mg/kg	-0.11	J	1	YES	S4VEM
Nickel	Target	4.0	U	mg/kg	4.0	U	1	YES	S4VEM
Potassium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Selenium	Target	0.24	R	mg/kg	0.24	J	1	YES	S4VEM
Silver	Target	1.0	U	mg/kg	1.0	U	1	YES	S4VEM
Sodium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Thallium	Target	2.5	R	mg/kg	-0.18	J	1	YES	S4VEM
Vanadium	Target	5.0	U	mg/kg	5.0	U	1	YES	S4VEM
Zinc	Target	0.46	J	mg/kg	0.46	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBS01	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	0.50	U	mg/kg	0.50	U	1	YES	S4VEM
Thallium	Target	0.030	J	mg/kg	0.030	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNA0** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Selenium	Target	0.17	J	mg/kg	0.17	J	1	YES	S4VEM

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MEMORANDUM

DATE: December 16, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 6 soil samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Metals (EPA CLP SOW ISM02.4) was performed by Bonner Analytical, Hattiesburg, Mississippi. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

MJLNA8	MJLNA9	MJLNB0	MJLNB1	MJLNB2	MJLNB3

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

December 6, 2019

MEMORANDUM

SUBJECT: Data Validation Report for the Gunshy Manor, Redmond, Washington
Case# 48596, SDG: MJLNA8, Inorganic Analyses

FROM: Don Matheny, Chemist
LSASD, Environmental Characterization Branch

TO: Brandon Perkins, Site Assessment Manager
Superfund & Emergency Management Division

CC: Derek Pulvino, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of six soils collected from the above referenced site has been completed. These samples were analyzed for metals (including mercury) by Bonner Analytical located in Hattiesburg, MS.

Sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in:

- Sampling and Quality Assurance Plan for Gunshy Manor, E&E, (October 2019)
- USEPA CLP Statement of Work for Inorganic Superfund Methods (ISM02.4)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-2017-001)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The table below summarizes the major sample quality control (QC) tests, associated test results, criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP specific and different from the National Functional Guidelines. Certain QC tests are electronically evaluated the results of which are not summarized in the table below though any excursions of these tests will appear in the *Data Qualifications* section. In addition to the QC tests, calculations from minimally 10% of the samples are verified against the raw data.

QC Results Summary

Quality Control Test[1]	Result Ranges	Outliers[2] (Y or N)	Evaluation Criteria
Preservation / Holding Times	Preservation & Holding Times met	N	Cool ≤ 6°C Metals 180 Days; Hg 28 Days
MS Tune	Tune criteria met	N	≤ 0.1 amu; ≤ 5% RSD
Instrument Calibration	Calibration criteria met	N	± 30% Difference; Corr. Coeff. ≥ 0.995
Calibration Verification	All checks passed	N	Metals 90 – 110% Recovery Hg 85 – 115% Recovery
Interference Check Std.	89 – 111% or ± 2xCRQL	N	80 – 120% Recovery or ± 2xCRQL
Lab Blanks	**Significant detects reported**	**Y**	**Not detected or <10% of Sample**
Matrix Spike	**75 – 106%** ***Out: Sb (28%); Mn (132%)***	**Y**	**75 - 125% Recovery**
Lab Duplicate	≤ 29% or ± 2xCRQL	N	≤ 35% RPD or ± 2xCRQL
LCS (blank spike)	84 - 106%	N	70 - 130% Recovery Ag, Sb 50 – 150% Recovery
Serial Dilution[3]	≤ 15%	Y	≤ 15% Difference

[1] Lab QC (matrix spike, lab duplicate, serial dilution) were performed on sample **MJLNB3**.

[2] See the "*Data Qualifications*" section below for QC excursions and qualification of affected data.

[3] The Serial Dilution evaluation was limited to **Aluminum, Arsenic, Calcium, Chromium, Copper, Iron, Magnesium, Manganese, Nickel, Vanadium & Zinc** as the native concentrations of the remaining elements in the sample were too low for conducting a 1:5 Serial Dilution.

II. DATA QUALIFICATIONS

Summary of Data Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

1. **Blanks**: The following analytes have positively detected sample results < CRQLs (below the range of quantitation) and the associated laboratory blanks were also detected at concentrations < CRQLs.

Data Qualifications: Sample results are qualified U and the values elevated to the CRQLs.
Qualified Analytical Results: **Thallium** – MJLNA8, MJLNA9, MJLNB3

2. **Detection / Quantitation Limits:** The following analytes have positively detected results < CRQLs (below the range of quantitation) and the associated laboratory blanks were not detected.

Data Qualifications: Sample results are qualified JQ with no indication of bias.
Qualified Analytical Results: **Antimony** - All samples **Beryllium** - All samples **Cadmium** – All samples **Mercury** – MJLNA8, MJLNA9, MJLNB1, MJLNB2, MJLNB3 **Selenium** – MJLNA8, MJLNA9, MJLNB1, MJLNB3 **Silver** - All samples **Sodium** – All samples

3. Matrix Spike: The spike recoveries for **Antimony** (28%) and **Manganese** (132%) were outside the 75-125% criteria and the post digestion spikes were within criteria. All Antimony data were detected below the CRQL and already qualified JQ. **Manganese data were qualified JH for all samples.**

Data Qualifiers

The data qualifiers and their respective definitions applied to the sample result(s) are provided as follows.

U	The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.
R	The data are rejected and unusable. The analyte may or may not be present in the sample.
L	The sample result is biased low.
H	The sample result is biased high.
K	The bias of the sample is not known.
Q	Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.

III. SAMPLE INDEX

The sample listing dates of sample collection, laboratory receipt and analysis are provided below.

Sample ID	Matrix	Sample Date	Date Rec'd	ICP-AES Analysis	ICP-MS Analysis	Mercury Analysis
MJLNA8	Soil	11/6/2019	11/11/2019	11/19/2019	11/20/2019	11/23/2019
MJLNA9	Soil	11/6/2019	11/11/2019	11/19/2019	11/20/2019	11/23/2019
MJLNB0	Soil	11/6/2019	11/11/2019	11/19/2019	11/20/2019	11/23/2019
MJLNB1	Soil	11/6/2019	11/11/2019	11/19/2019	11/20/2019	11/23/2019
MJLNB2	Soil	11/6/2019	11/11/2019	11/19/2019	11/20/2019	11/23/2019
MJLNB3	Soil	11/6/2019	11/11/2019	11/19/2019	11/20/2019	11/23/2019

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48596/EPW14029/MJLNA8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: LCS01	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	37.7		mg/kg	37.7		1	YES	S4VEM
Antimony	Spike	11.9		mg/kg	11.9		1	YES	S4VEM
Barium	Spike	41.9		mg/kg	41.9		1	YES	S4VEM
Beryllium	Spike	1.0		mg/kg	1.0		1	YES	S4VEM
Cadmium	Spike	1.0		mg/kg	1.0		1	YES	S4VEM
Calcium	Spike	954		mg/kg	954		1	YES	S4VEM
Chromium	Spike	2.1		mg/kg	2.1		1	YES	S4VEM
Cobalt	Spike	10.4		mg/kg	10.4		1	YES	S4VEM
Copper	Spike	5.2		mg/kg	5.2		1	YES	S4VEM
Iron	Spike	19.7		mg/kg	19.7		1	YES	S4VEM
Lead	Spike	1.8		mg/kg	1.8		1	YES	S4VEM
Magnesium	Spike	948		mg/kg	948		1	YES	S4VEM
Manganese	Spike	3.0		mg/kg	3.0		1	YES	S4VEM
Nickel	Spike	8.4		mg/kg	8.4		1	YES	S4VEM
Potassium	Spike	945		mg/kg	945		1	YES	S4VEM
Silver	Spike	2.0		mg/kg	2.0		1	YES	S4VEM
Sodium	Spike	958		mg/kg	958		1	YES	S4VEM
Vanadium	Spike	10.2		mg/kg	10.2		1	YES	S4VEM
Zinc	Spike	11.7		mg/kg	11.7		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Spike	0.85		mg/kg	0.85		1	YES	S4VEM
Selenium	Spike	4.2		mg/kg	4.2		1	YES	S4VEM
Thallium	Spike	0.84		mg/kg	0.84		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA8	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 83.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.028	JQ	mg/kg	0.028	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA8	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 83.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	14900		mg/kg	14900		1	YES	S4VEM
Antimony	Target	0.51	JQ	mg/kg	0.51	J*	1	YES	S4VEM
Barium	Target	68.6		mg/kg	68.6		1	YES	S4VEM
Beryllium	Target	0.22	JQ	mg/kg	0.22	J*	1	YES	S4VEM
Cadmium	Target	0.37	JQ	mg/kg	0.37	J	1	YES	S4VEM
Calcium	Target	4870		mg/kg	4870		1	YES	S4VEM
Chromium	Target	31.3		mg/kg	31.3		1	YES	S4VEM
Cobalt	Target	9.3		mg/kg	9.3		1	YES	S4VEM
Copper	Target	22.8		mg/kg	22.8	*	1	YES	S4VEM
Iron	Target	17800		mg/kg	17800		1	YES	S4VEM
Lead	Target	12.1		mg/kg	12.1		1	YES	S4VEM
Magnesium	Target	6110		mg/kg	6110		1	YES	S4VEM
Manganese	Target	275	JH	mg/kg	275	*	1	YES	S4VEM
Nickel	Target	30.9		mg/kg	30.9	*	1	YES	S4VEM
Potassium	Target	882		mg/kg	882	*	1	YES	S4VEM
Silver	Target	0.39	JQ	mg/kg	0.39	J	1	YES	S4VEM
Sodium	Target	407	JQ	mg/kg	407	J*	1	YES	S4VEM
Vanadium	Target	45.0		mg/kg	45.0	*	1	YES	S4VEM
Zinc	Target	56.0		mg/kg	56.0	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA8	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH04SB01	pH:	Sample Date: 11/06/2019	Sample Time: 10:04:00
% Moisture:		% Solids: 83.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	3.2		mg/kg	3.2	*	1	YES	S4VEM
Selenium	Target	0.24	JQ	mg/kg	0.24	J	1	YES	S4VEM
Thallium	Target	0.58	U	mg/kg	0.048	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA9	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH04SB02	pH:	Sample Date: 11/06/2019	Sample Time: 10:22:00
% Moisture:		% Solids: 87.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.034	JQ	mg/kg	0.034	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA9	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH04SB02	pH:	Sample Date: 11/06/2019	Sample Time: 10:22:00
% Moisture:		% Solids: 87.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	18800		mg/kg	18800		1	YES	S4VEM
Antimony	Target	0.48	JQ	mg/kg	0.48	J*	1	YES	S4VEM
Barium	Target	125		mg/kg	125		1	YES	S4VEM
Beryllium	Target	0.34	JQ	mg/kg	0.34	J*	1	YES	S4VEM
Cadmium	Target	0.46	JQ	mg/kg	0.46	J	1	YES	S4VEM
Calcium	Target	4140		mg/kg	4140		1	YES	S4VEM
Chromium	Target	43.8		mg/kg	43.8		1	YES	S4VEM
Cobalt	Target	10.0		mg/kg	10.0		1	YES	S4VEM
Copper	Target	21.1		mg/kg	21.1	*	1	YES	S4VEM
Iron	Target	17400		mg/kg	17400		1	YES	S4VEM
Lead	Target	22.0		mg/kg	22.0		1	YES	S4VEM
Magnesium	Target	4720		mg/kg	4720		1	YES	S4VEM
Manganese	Target	424	JH	mg/kg	424	*	1	YES	S4VEM
Nickel	Target	38.3		mg/kg	38.3	*	1	YES	S4VEM
Potassium	Target	697		mg/kg	697	*	1	YES	S4VEM
Silver	Target	0.49	JQ	mg/kg	0.49	J	1	YES	S4VEM
Sodium	Target	234	JQ	mg/kg	234	J*	1	YES	S4VEM
Vanadium	Target	50.7		mg/kg	50.7	*	1	YES	S4VEM
Zinc	Target	65.6		mg/kg	65.6	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNA9	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH04SB02	pH:	Sample Date: 11/06/2019	Sample Time: 10:22:00
% Moisture:		% Solids: 87.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.3		mg/kg	5.3	*	1	YES	S4VEM
Selenium	Target	0.39	JQ	mg/kg	0.39	J	1	YES	S4VEM
Thallium	Target	0.56	U	mg/kg	0.038	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB0	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH05SB01	pH:	Sample Date: 11/06/2019	Sample Time: 11:10:00
% Moisture:		% Solids: 90.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.15		mg/kg	0.15		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB0	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH05SB01	pH:	Sample Date: 11/06/2019	Sample Time: 11:10:00
% Moisture:		% Solids: 90.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	15100		mg/kg	15100		1	YES	S4VEM
Antimony	Target	0.59	JQ	mg/kg	0.59	J*	1	YES	S4VEM
Barium	Target	104		mg/kg	104		1	YES	S4VEM
Beryllium	Target	0.28	JQ	mg/kg	0.28	J*	1	YES	S4VEM
Cadmium	Target	0.39	JQ	mg/kg	0.39	J	1	YES	S4VEM
Calcium	Target	7150		mg/kg	7150		1	YES	S4VEM
Chromium	Target	36.9		mg/kg	36.9		1	YES	S4VEM
Cobalt	Target	8.8		mg/kg	8.8		1	YES	S4VEM
Copper	Target	15.9		mg/kg	15.9	*	1	YES	S4VEM
Iron	Target	15500		mg/kg	15500		1	YES	S4VEM
Lead	Target	34.5		mg/kg	34.5		1	YES	S4VEM
Magnesium	Target	4550		mg/kg	4550		1	YES	S4VEM
Manganese	Target	269	JH	mg/kg	269	*	1	YES	S4VEM
Nickel	Target	39.1		mg/kg	39.1	*	1	YES	S4VEM
Potassium	Target	844		mg/kg	844	*	1	YES	S4VEM
Silver	Target	0.37	JQ	mg/kg	0.37	J	1	YES	S4VEM
Sodium	Target	268	JQ	mg/kg	268	J*	1	YES	S4VEM
Vanadium	Target	44.9		mg/kg	44.9	*	1	YES	S4VEM
Zinc	Target	62.6		mg/kg	62.6	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB0	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH05SB01	pH:	Sample Date: 11/06/2019	Sample Time: 11:10:00
% Moisture:		% Solids: 90.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	3.4		mg/kg	3.4	*	1	YES	S4VEM
Selenium	Target	2.8	U	mg/kg	2.8	U	1	YES	S4VEM
Thallium	Target	0.55	U	mg/kg	0.55	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB1	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 86.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.094	JQ	mg/kg	0.094	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB1	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 86.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	14800		mg/kg	14800		1	YES	S4VEM
Antimony	Target	0.58	JQ	mg/kg	0.58	J*	1	YES	S4VEM
Barium	Target	96.3		mg/kg	96.3		1	YES	S4VEM
Beryllium	Target	0.26	JQ	mg/kg	0.26	J*	1	YES	S4VEM
Cadmium	Target	0.43	JQ	mg/kg	0.43	J	1	YES	S4VEM
Calcium	Target	7990		mg/kg	7990		1	YES	S4VEM
Chromium	Target	43.7		mg/kg	43.7		1	YES	S4VEM
Cobalt	Target	8.9		mg/kg	8.9		1	YES	S4VEM
Copper	Target	19.5		mg/kg	19.5	*	1	YES	S4VEM
Iron	Target	15200		mg/kg	15200		1	YES	S4VEM
Lead	Target	41.3		mg/kg	41.3		1	YES	S4VEM
Magnesium	Target	4620		mg/kg	4620		1	YES	S4VEM
Manganese	Target	271	JH	mg/kg	271	*	1	YES	S4VEM
Nickel	Target	40.0		mg/kg	40.0	*	1	YES	S4VEM
Potassium	Target	965		mg/kg	965	*	1	YES	S4VEM
Silver	Target	0.36	JQ	mg/kg	0.36	J	1	YES	S4VEM
Sodium	Target	317	JQ	mg/kg	317	J*	1	YES	S4VEM
Vanadium	Target	44.9		mg/kg	44.9	*	1	YES	S4VEM
Zinc	Target	73.7		mg/kg	73.7	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB1	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH05SB02	pH:	Sample Date: 11/06/2019	Sample Time: 11:55:00
% Moisture:		% Solids: 86.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	3.9		mg/kg	3.9	*	1	YES	S4VEM
Selenium	Target	0.21	JQ	mg/kg	0.21	J	1	YES	S4VEM
Thallium	Target	0.56	U	mg/kg	0.56	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14029/MJLNA8 | Lab Name: Bonner Analytical Testing Co.

Sample Number: MJLNB2	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH06SB01	pH:	Sample Date: 11/06/2019	Sample Time: 13:02:00
% Moisture:		% Solids: 86.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.045	JQ	mg/kg	0.045	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB2	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH06SB01	pH:	Sample Date: 11/06/2019	Sample Time: 13:02:00
% Moisture:		% Solids: 86.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	17300		mg/kg	17300		1	YES	S4VEM
Antimony	Target	0.63	JQ	mg/kg	0.63	J*	1	YES	S4VEM
Barium	Target	89.3		mg/kg	89.3		1	YES	S4VEM
Beryllium	Target	0.28	JQ	mg/kg	0.28	J*	1	YES	S4VEM
Cadmium	Target	0.37	JQ	mg/kg	0.37	J	1	YES	S4VEM
Calcium	Target	4660		mg/kg	4660		1	YES	S4VEM
Chromium	Target	43.8		mg/kg	43.8		1	YES	S4VEM
Cobalt	Target	9.7		mg/kg	9.7		1	YES	S4VEM
Copper	Target	18.4		mg/kg	18.4	*	1	YES	S4VEM
Iron	Target	17100		mg/kg	17100		1	YES	S4VEM
Lead	Target	17.8		mg/kg	17.8		1	YES	S4VEM
Magnesium	Target	4920		mg/kg	4920		1	YES	S4VEM
Manganese	Target	287	JH	mg/kg	287	*	1	YES	S4VEM
Nickel	Target	39.2		mg/kg	39.2	*	1	YES	S4VEM
Potassium	Target	866		mg/kg	866	*	1	YES	S4VEM
Silver	Target	0.36	JQ	mg/kg	0.36	J	1	YES	S4VEM
Sodium	Target	243	JQ	mg/kg	243	J*	1	YES	S4VEM
Vanadium	Target	47.2		mg/kg	47.2	*	1	YES	S4VEM
Zinc	Target	43.6		mg/kg	43.6	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48596/EPW14029/MJLNA8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNB2	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH06SB01	pH:	Sample Date: 11/06/2019	Sample Time: 13:02:00
% Moisture:		% Solids: 86.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	3.4		mg/kg	3.4	*	1	YES	S4VEM
Selenium	Target	2.8	U	mg/kg	2.8	U	1	YES	S4VEM
Thallium	Target	0.56	U	mg/kg	0.56	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.037	JQ	mg/kg	0.037	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	22200		mg/kg	22200		1	YES	S4VEM
Antimony	Target	0.49	JQ	mg/kg	0.49	J*	1	YES	S4VEM
Barium	Target	106		mg/kg	106		1	YES	S4VEM
Beryllium	Target	0.35	JQ	mg/kg	0.35	J*	1	YES	S4VEM
Cadmium	Target	0.39	JQ	mg/kg	0.39	J	1	YES	S4VEM
Calcium	Target	4010		mg/kg	4010		1	YES	S4VEM
Chromium	Target	47.0		mg/kg	47.0		1	YES	S4VEM
Cobalt	Target	12.5		mg/kg	12.5		1	YES	S4VEM
Copper	Target	35.4		mg/kg	35.4	*	1	YES	S4VEM
Iron	Target	21400		mg/kg	21400		1	YES	S4VEM
Lead	Target	7.2		mg/kg	7.2		1	YES	S4VEM
Magnesium	Target	6100		mg/kg	6100		1	YES	S4VEM
Manganese	Target	345	JH	mg/kg	345	*	1	YES	S4VEM
Nickel	Target	40.4		mg/kg	40.4	*	1	YES	S4VEM
Potassium	Target	892		mg/kg	892	*	1	YES	S4VEM
Silver	Target	0.48	JQ	mg/kg	0.48	J	1	YES	S4VEM
Sodium	Target	224	JQ	mg/kg	224	J*	1	YES	S4VEM
Vanadium	Target	59.8		mg/kg	59.8	*	1	YES	S4VEM
Zinc	Target	50.0		mg/kg	50.0	*	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location: BH06SB02	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	5.2		mg/kg	5.2	*	1	YES	S4VEM
Selenium	Target	0.19	JQ	mg/kg	0.19	J	1	YES	S4VEM
Thallium	Target	0.56	U	mg/kg	0.060	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3A	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	13.1		mg/kg	13.1		1	YES	S4VEM
Manganese	Spike	946		mg/kg	946		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3D	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.045	J	mg/kg	0.045	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3D	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	21200		mg/kg	21200		1	YES	S4VEM
Antimony	Target	0.71	J	mg/kg	0.71	J	1	YES	S4VEM
Barium	Target	112		mg/kg	112		1	YES	S4VEM
Beryllium	Target	0.34	J	mg/kg	0.34	J	1	YES	S4VEM
Cadmium	Target	0.40	J	mg/kg	0.40	J	1	YES	S4VEM
Calcium	Target	3850		mg/kg	3850		1	YES	S4VEM
Chromium	Target	46.7		mg/kg	46.7		1	YES	S4VEM
Cobalt	Target	11.6		mg/kg	11.6		1	YES	S4VEM
Copper	Target	26.5		mg/kg	26.5	*	1	YES	S4VEM
Iron	Target	20500		mg/kg	20500		1	YES	S4VEM
Lead	Target	6.9		mg/kg	6.9		1	YES	S4VEM
Magnesium	Target	5550		mg/kg	5550		1	YES	S4VEM
Manganese	Target	359		mg/kg	359		1	YES	S4VEM
Nickel	Target	38.6		mg/kg	38.6		1	YES	S4VEM
Potassium	Target	1130		mg/kg	1130		1	YES	S4VEM
Silver	Target	0.43	J	mg/kg	0.43	J	1	YES	S4VEM
Sodium	Target	223	J	mg/kg	223	J	1	YES	S4VEM
Vanadium	Target	59.4		mg/kg	59.4		1	YES	S4VEM
Zinc	Target	48.1		mg/kg	48.1		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48596/EPW14029/MJLNA8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNB3D	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	4.4		mg/kg	4.4		1	YES	S4VEM
Selenium	Target	0.31	J	mg/kg	0.31	J	1	YES	S4VEM
Thallium	Target	0.075	J	mg/kg	0.075	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3L	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	19900		mg/kg	19900		5	YES	S4VEM
Antimony	Target	33.8	U	mg/kg	33.8	U	5	YES	S4VEM
Barium	Target	95.9	J	mg/kg	95.9	J	5	YES	S4VEM
Beryllium	Target	0.28	J	mg/kg	0.28	J*	5	YES	S4VEM
Cadmium	Target	0.36	J	mg/kg	0.36	J	5	YES	S4VEM
Calcium	Target	3680		mg/kg	3680		5	YES	S4VEM
Chromium	Target	42.7		mg/kg	42.7		5	YES	S4VEM
Cobalt	Target	11.8	J	mg/kg	11.8	J	5	YES	S4VEM
Copper	Target	32.5		mg/kg	32.5		5	YES	S4VEM
Iron	Target	19700		mg/kg	19700		5	YES	S4VEM
Lead	Target	5.2	J	mg/kg	5.2	J	5	YES	S4VEM
Magnesium	Target	5570		mg/kg	5570		5	YES	S4VEM
Manganese	Target	317		mg/kg	317		5	YES	S4VEM
Nickel	Target	34.9		mg/kg	34.9	*	5	YES	S4VEM
Potassium	Target	781	J	mg/kg	781	J*	5	YES	S4VEM
Silver	Target	0.47	J	mg/kg	0.47	J	5	YES	S4VEM
Sodium	Target	193	J	mg/kg	193	J*	5	YES	S4VEM
Vanadium	Target	53.3		mg/kg	53.3	*	5	YES	S4VEM
Zinc	Target	43.5		mg/kg	43.5	*	5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3L	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	6.0		mg/kg	6.0	*	5	YES	S4VEM
Selenium	Target	14.1	U	mg/kg	14.1	U	5	YES	S4VEM
Thallium	Target	2.8	U	mg/kg	2.8	U	5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3S	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Spike	0.45		mg/kg	0.45		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3S	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	6.8		mg/kg	6.8	*	1	YES	S4VEM
Barium	Spike	558		mg/kg	558		1	YES	S4VEM
Beryllium	Spike	11.4		mg/kg	11.4		1	YES	S4VEM
Cadmium	Spike	10.8		mg/kg	10.8		1	YES	S4VEM
Chromium	Spike	89.4		mg/kg	89.4		1	YES	S4VEM
Cobalt	Spike	120		mg/kg	120		1	YES	S4VEM
Copper	Spike	86.4		mg/kg	86.4		1	YES	S4VEM
Lead	Spike	11.5		mg/kg	11.5		1	YES	S4VEM
Manganese	Spike	493		mg/kg	493	*	1	YES	S4VEM
Nickel	Spike	160		mg/kg	160		1	YES	S4VEM
Silver	Spike	11.0		mg/kg	11.0		1	YES	S4VEM
Vanadium	Spike	170		mg/kg	170		1	YES	S4VEM
Zinc	Spike	164		mg/kg	164		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB3S	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 11/06/2019	Sample Time: 13:38:00
% Moisture:		% Solids: 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Spike	9.0		mg/kg	9.0		1	YES	S4VEM
Selenium	Spike	11.7		mg/kg	11.7		1	YES	S4VEM
Thallium	Spike	5.1		mg/kg	5.1		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBS01	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.10	U	mg/kg	0.10	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBS01	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	mg/kg	20.0	U	1	YES	S4VEM
Antimony	Target	6.0	U	mg/kg	6.0	U	1	YES	S4VEM
Barium	Target	20.0	U	mg/kg	-0.14	J	1	YES	S4VEM
Beryllium	Target	0.50	U	mg/kg	-0.011	J	1	YES	S4VEM
Cadmium	Target	0.50	U	mg/kg	0.50	U	1	YES	S4VEM
Calcium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Chromium	Target	1.0	U	mg/kg	1.0	U	1	YES	S4VEM
Cobalt	Target	5.0	U	mg/kg	-0.027	J	1	YES	S4VEM
Copper	Target	0.16	J	mg/kg	0.16	J	1	YES	S4VEM
Iron	Target	10.0	U	mg/kg	10.0	U	1	YES	S4VEM
Lead	Target	1.0	U	mg/kg	1.0	U	1	YES	S4VEM
Magnesium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Manganese	Target	1.5	U	mg/kg	1.5	U	1	YES	S4VEM
Nickel	Target	4.0	U	mg/kg	4.0	U	1	YES	S4VEM
Potassium	Target	4.2	J	mg/kg	4.2	J	1	YES	S4VEM
Silver	Target	1.0	U	mg/kg	1.0	U	1	YES	S4VEM
Sodium	Target	500	U	mg/kg	500	U	1	YES	S4VEM
Vanadium	Target	5.0	U	mg/kg	-0.049	J	1	YES	S4VEM
Zinc	Target	0.10	J	mg/kg	0.10	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNA8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBS01	Method: Metals by ICP-MS	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	0.50	U	mg/kg	0.50	U	1	YES	S4VEM
Selenium	Target	2.5	U	mg/kg	2.5	U	1	YES	S4VEM
Thallium	Target	0.50	U	mg/kg	0.50	U	1	YES	S4VEM

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MEMORANDUM

DATE: December 16, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 1 water rinsate blank sample collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Metals (EPA CLP SOW ISM02.4) was performed by Bonner Analytical, Hattiesburg, Mississippi. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

MJLNA8	MJLNA9	MJLNB0	MJLNB1	MJLNB2	MJLNB3

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

December 6, 2019

MEMORANDUM

SUBJECT: Data Validation Report for the Gunshy Manor, Redmond, Washington
Case# 48596, SDG: MJLNB4, Inorganic Analyses

FROM: Don Matheny, Chemist
LSASD, Environmental Characterization Branch

TO: Brandon Perkins, Site Assessment Manager
Superfund & Emergency Management Division

CC: Derek Pulvino, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of one water field equipment rinsate blank collected in support of the above referenced site assessment has been completed. This sample was analyzed for metals (including mercury) and hardness by Bonner Analytical located in Hattiesburg, MS.

Sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in:

- Sampling and Quality Assurance Plan for Gunshy Manor, E&E, (October 2019)
- USEPA CLP Statement of Work for Inorganic Superfund Methods (ISM02.4)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-2017-001)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The table below summarizes the major sample quality control (QC) tests, associated test results, criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP specific and different from the National Functional Guidelines. Certain QC tests are electronically evaluated the results of which are not summarized in the table below though any excursions of these tests will appear in the *Data Qualifications* section. In addition to the QC tests, calculations from minimally 10% of the samples are verified against the raw data.

QC Results Summary

Quality Control Test[1]	Result Ranges	Outliers[2] (Y or N)	Evaluation Criteria
Preservation / Holding Times	Preservation & Holding Times met	N	Cool ≤ 6°C, pH<2 Metals 180 Days; Hg 28 Days
MS Tune	Tune criteria met	N	≤ 0.1 amu; ≤ 5% RSD
Instrument Calibration	Calibration criteria met	N	± 30% Difference; Corr. Coeff. ≥ 0.995
Calibration Verification	All checks passed	N	Metals 90 – 110% Recovery Hg 85 – 115% Recovery
Interference Check Std.	84 – 115% or ± 2xCRQL	N	80 – 120% Recovery or ± 2xCRQL
Lab Blanks	**Significant detects reported**	**Y**	**Not detected or <10% of Sample**
Matrix Spike	N/A	Y	75 - 125% Recovery
Lab Duplicate	N/A	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	83 - 108%	N	70 - 130% Recovery Ag, Sb 50 – 150% Recovery
Serial Dilution	N/A	N	≤ 10% Difference

[1] Sample specific Lab QC (matrix spike, lab duplicate, serial dilution) are not performed/required for field blank samples.

[2] See the "*Data Qualifications*" section below for QC excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Data Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

1. **Blanks**: The following analytes have positively detected sample results < CRQLs (below the range of quantitation) and the associated laboratory blanks were also detected at concentrations < CRQLs. Data for these analytes were qualified U and the results reported to the CRQLs. **Arsenic, Barium, Beryllium, Iron, Manganese, Nickel** and **Zinc.** Hardness was also qualified U as the parent Calcium and Magnesium values were non-detects.

Data Qualifiers

The data qualifiers and their respective definitions applied to the sample result(s) are provided as follows.

U	The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.
R	The data are rejected and unusable. The analyte may or may not be present in the sample.
L	The sample result is biased low.
H	The sample result is biased high.
K	The bias of the sample is not known.
Q	Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.

III. SAMPLE INDEX

The sample listing dates of sample collection, laboratory receipt and analysis are provided below.

Sample ID	Matrix	Sample Date	Date Rec'd	ICP-AES Analysis	ICP-MS Analysis	Mercury Analysis
MJLNB4	Field Rinsate Blank	11/6/2019	11/11/2019	11/26/2019	11/26/2019	11/25/2019

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNB4** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	427		ug/L	427		1	YES	S4VEM
Antimony	Spike	120		ug/L	120		1	YES	S4VEM
Barium	Spike	433		ug/L	433		1	YES	S4VEM
Beryllium	Spike	9.5		ug/L	9.5		1	YES	S4VEM
Cadmium	Spike	10.4		ug/L	10.4		1	YES	S4VEM
Calcium	Spike	10800		ug/L	10800		1	YES	S4VEM
Chromium	Spike	19.9		ug/L	19.9		1	YES	S4VEM
Cobalt	Spike	101		ug/L	101		1	YES	S4VEM
Copper	Spike	43.5		ug/L	43.5		1	YES	S4VEM
Iron	Spike	204		ug/L	204		1	YES	S4VEM
Lead	Spike	18.6		ug/L	18.6		1	YES	S4VEM
Magnesium	Spike	10600		ug/L	10600		1	YES	S4VEM
Manganese	Spike	30.3		ug/L	30.3		1	YES	S4VEM
Nickel	Spike	78.3		ug/L	78.3		1	YES	S4VEM
Potassium	Spike	10500		ug/L	10500		1	YES	S4VEM
Silver	Spike	20.8		ug/L	20.8		1	YES	S4VEM
Sodium	Spike	9550		ug/L	9550		1	YES	S4VEM
Vanadium	Spike	101		ug/L	101		1	YES	S4VEM
Zinc	Spike	125		ug/L	125		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNB4** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Spike	1.7		ug/L	1.7		1	YES	S4VEM
Selenium	Spike	10.7		ug/L	10.7		1	YES	S4VEM
Thallium	Spike	1.9		ug/L	1.9		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNB4** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB4	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: RI03WT	pH: 1.	Sample Date: 11/06/2019	Sample Time: 16:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNB4** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB4	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: RI03WT	pH: 1.	Sample Date: 11/06/2019	Sample Time: 16:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	U	ug/L	60.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	0.34	J	1	YES	S4VEM
Beryllium	Target	5.0	U	ug/L	0.053	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	100	U	ug/L	23.7	J	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	1.0	J	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	6.6	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	2.5	J	1	YES	S4VEM
Hardness	Derived	33.0	U	mg/L	0.12	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNB4** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB4	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: RI03WT	pH: 1.	Sample Date: 11/06/2019	Sample Time: 16:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	1.0	U	ug/L	0.46	J	1	YES	S4VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14029/MJLNB4 | Lab Name: Bonner Analytical Testing Co.

Sample Number: PBW01	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	-0.064	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48596/EPW14029/MJLNB4** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	31.0	J	ug/L	31.0	J	1	YES	S4VEM
Antimony	Target	60.0	U	ug/L	60.0	U	1	YES	S4VEM
Barium	Target	1.6	J	ug/L	1.6	J	1	YES	S4VEM
Beryllium	Target	0.084	J	ug/L	0.084	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	-0.57	J	1	YES	S4VEM
Iron	Target	17.2	J	ug/L	17.2	J	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Manganese	Target	0.78	J	ug/L	0.78	J	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	-0.44	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	-66	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	3.2	J	ug/L	3.2	J	1	YES	S4VEM
Hardness	Derived	0.18		mg/L	0.18	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48596/EPW14029/MJLNB4 | Lab Name: Bonner Analytical Testing Co.

Sample Number: PBW01 | Method: Metals by ICP-MS | Matrix: Water | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | | % Solids: |

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Thallium	Target	0.19	J	ug/L	0.19	J	1	YES	S4VEM

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MEMORANDUM

DATE: November 21, 2019

TO: Jeff Fetters, START-IV Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-IV Chemist, E & E, Seattle, Washington MW

SUBJ: **Inorganic Data Summary Check, Gunshy Manor SI Site, Redmond, Washington**

REF: TO: TO-027 PAN: 1004530.0027.009.01

The data summary check of 9 water samples collected from the Gunshy Manor SI site in Redmond, Washington, has been completed. Analysis for Metals (EPA CLP SOW ISM02.4) was performed by Bonner Analytical, Hattiesburg, Mississippi. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

MJLNB8	MJLNB9	MJLNC3	MJLNC4	MJLNC5	MJLNC6
MJLNC7	MJLND7	MJLNE0			

No discrepancies were noted.

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LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

November 14, 2019

MEMORANDUM

SUBJECT: Data Validation Report for the Gunshy Manor, Redmond, Washington
Case# 48514, SDG: MJLNB8, Inorganic Analyses

FROM: Don Matheny, Chemist
LSASD, Environmental Characterization Branch

TO: Brandon Perkins, Site Assessment Manager
Superfund & Emergency Management Division

CC: Derek Pulvino, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of nine waters collected from the above referenced site has been completed. These samples were analyzed for total metals (including mercury) by Bonner Analytical located in Hattiesburg, MS.

Sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in:

- Sampling and Quality Assurance Plan for Gunshy Manor, E&E, (October 2019)
- USEPA CLP Statement of Work for Inorganic Superfund Methods (ISM02.4)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-2017-001)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The table below summarizes the major sample quality control (QC) tests, associated test results, criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP specific and different from the National Functional Guidelines. Certain QC tests are electronically evaluated the results of which are not summarized in the table below though any excursions of these tests will appear in the *Data Qualifications* section. In addition to the QC tests, calculations from minimally 10% of the samples are verified against the raw data.

QC Results Summary

Quality Control Test[1]	Result Ranges	Outliers[2] (Y or N)	Evaluation Criteria
Preservation / Holding Times	Preservation & Holding Times met	N	Cool ≤ 6°C, pH<2 Metals 180 Days; Hg 28 Days
MS Tune	Tune criteria met	N	≤ 0.1 amu; ≤ 5% RSD
Instrument Calibration	Calibration criteria met	N	± 30% Difference; Corr. Coeff. ≥ 0.995
Calibration Verification	All checks passed	N	Metals 90 – 110% Recovery Hg 85 – 115% Recovery
Interference Check Std.	87 – 111% or ± 2xCRQL	N	80 – 120% Recovery or ± 2xCRQL
Lab Blanks	**Significant detects reported**	**Y**	**Not detected or <10% of Sample**
Matrix Spike	**87 – 113%** ***Out: Se (55%)***	**Y**	**75 - 125% Recovery**
Lab Duplicate	**≤ 11% or ± CRQL** ***Out: Be, Sb > CRQL***	**Y**	**≤ 20% RPD or ± CRQL**
LCS (blank spike)	90 - 114%	N	70 - 130% Recovery Ag, Sb 50 – 150% Recovery
Serial Dilution[3]	**Fe (13%), Mn (16%)**	**Y**	**≤ 10% Difference**

[1] Lab QC (matrix spike, lab duplicate, serial dilution) were performed on sample MJLNC4.

[2] See the "*Data Qualifications*" section below for QC excursions and qualification of affected data.

[3] The evaluation was limited to **Iron** and **Manganese** as the native concentrations of the remaining elements in the sample were too low for conducting a 1:5 Serial Dilution.

II. DATA QUALIFICATIONS

Summary of Data Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

1. **Blanks:** The following analytes have positively detected sample results < CRQLs (below the range of quantitation) and the associated laboratory blanks were also detected at concentrations < CRQLs.

Data Qualifications: Sample results are qualified U and the values elevated to the CRQLs.	
Qualified Analytical Results:	
Barium -	MJLNB8, MJLNB9, MJLNC3, MJLNC4, MJLNC5, MJLND7, MJLNE0
Chromium –	MJLNB8, MJLNB9, MJLNC3, MJLNC5, MJLNE0
Copper -	MJLNB8, MJLNB9, MJLNC3, MJLNC4, MJLNC6, MJLNC7, MJLND7
Manganese -	MJLNC7
Potassium -	MJLNB8, MJLNB9, MJLNC3, MJLNC4, MJLNC5, MJLND7, MJLNE0
Thallium -	MJLNC5
Zinc –	All samples

2. **Detection / Quantitation Limits:** The following analytes have positively detected results < CRQLs (below the range of quantitation) and the associated laboratory blanks were not detected.

Data Qualifications: Sample results are qualified JQ with no indication of bias.	
Qualified Analytical Results:	
Arsenic -	MJLNC3, MJLNC4, MJLNC6, MJLNC7, MJLND7, MJLNE0
Cadmium -	MJLND7
Cobalt -	MJLNC3
Iron –	MJLNC6
Magnesium -	MJLND7, MJLNE0
Nickel –	MJLNB8, MJLNB9, MJLNC3, MJLNC6, MJLNE0
Vanadium –	MJLNB8, MJLNB9, MJLNC3, MJLNC5, MJLNE0

3. Matrix Spike: The spike recovery for **Selenium** (55%) was below the 75-125% criteria and the post spike recovery was > 75%. All Selenium data were qualified UJL.

4. Duplicate: The duplicate sample results for **Antimony** and **Beryllium** exceeded the ± CRQL criteria. All Antimony and Beryllium data were qualified UJK.

5. Serial Dilution: The percent differences for **Iron** (13%) and **Manganese** (16%) exceeded the 10%D serial dilution criteria. Sample results > CRQLs were qualified JH for these analytes.

Data Qualifications: Sample results are qualified JH and may be biased high.	
Qualified Analytical Results:	
Iron -	MJLNB8, MJLNB9, MJLNC3, MJLNC4, MJLNC5, MJLND7, MJLNE0
Manganese –	MJLNB8, MJLNB9, MJLNC3, MJLNC4, MJLNC5, MJLND7, MJLNE0

6. **Note:** The Laboratory reported **Antimony, Arsenic, Beryllium & Thallium** by both ICP-AES and ICP-MS though these were only scheduled for ICP-MS analysis. The ICP-AES data for these analytes were qualified R (rejected) in favor of the lower reporting limits for the ICP-MS data.

Data Qualifiers

The data qualifiers and their respective definitions applied to the sample result(s) are provided as follows.

U	The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.
R	The data are rejected and unusable. The analyte may or may not be present in the sample.
L	The sample result is biased low.
H	The sample result is biased high.
K	The bias of the sample is not known.
Q	Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.

III. SAMPLE INDEX

The sample listing dates of sample collection, laboratory receipt and analysis are provided below.

Sample ID	Matrix	Sample Date	Date Rec'd	ICP-AES Analysis	ICP-MS Analysis	Mercury Analysis
MJLNB8	Water	10/23/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNB9	Water	10/23/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNC3	Water	10/22/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNC4	Water	10/22/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNC5	Water	10/22/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNC6	Rinse Blank	10/24/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNC7	Rinse Blank	10/24/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLND7	Water	10/22/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019
MJLNE0	Water	10/23/2019	10/26/2019	11/6/2019	11/9/2019	11/7/2019

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	424		ug/L	424		1	YES	S4VEM
Antimony	Spike	126	R	ug/L	126		1	YES	S4VEM
Arsenic	Spike	19.7	R	ug/L	19.7		1	YES	S4VEM
Barium	Spike	421		ug/L	421		1	YES	S4VEM
Beryllium	Spike	10.3	R	ug/L	10.3		1	YES	S4VEM
Cadmium	Spike	10.9		ug/L	10.9		1	YES	S4VEM
Calcium	Spike	10800		ug/L	10800		1	YES	S4VEM
Chromium	Spike	21.7		ug/L	21.7		1	YES	S4VEM
Cobalt	Spike	108		ug/L	108		1	YES	S4VEM
Copper	Spike	53.0		ug/L	53.0		1	YES	S4VEM
Iron	Spike	217		ug/L	217		1	YES	S4VEM
Lead	Spike	22.8		ug/L	22.8		1	YES	S4VEM
Magnesium	Spike	10500		ug/L	10500		1	YES	S4VEM
Manganese	Spike	33.2		ug/L	33.2		1	YES	S4VEM
Nickel	Spike	84.5		ug/L	84.5		1	YES	S4VEM
Potassium	Spike	10200		ug/L	10200		1	YES	S4VEM
Selenium	Spike	77.2		ug/L	77.2		1	YES	S4VEM
Silver	Spike	17.9		ug/L	17.9		1	YES	S4VEM
Sodium	Spike	10300		ug/L	10300		1	YES	S4VEM
Thallium	Spike	55.2	R	ug/L	55.2		1	YES	S4VEM
Vanadium	Spike	104		ug/L	104		1	YES	S4VEM
Zinc	Spike	128		ug/L	128		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	3.8		ug/L	3.8		1	YES	S4VEM
Arsenic	Spike	2.2		ug/L	2.2		1	YES	S4VEM
Beryllium	Spike	2.0		ug/L	2.0		1	YES	S4VEM
Thallium	Spike	1.9		ug/L	1.9		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB8	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: BH01GW	pH:	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNB8	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: BH01GW	pH:	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	1520		ug/L	1520		1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	27.5	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	22100		ug/L	22100	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	5.3	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	2.9	J	1	YES	S4VEM
Iron	Target	5170	JH	ug/L	5170	*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	9970		ug/L	9970	*	1	YES	S4VEM
Manganese	Target	218	JH	ug/L	218	*	1	YES	S4VEM
Nickel	Target	1.5	JQ	ug/L	1.5	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	1780	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	11700		ug/L	11700	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	25.0	U	1	YES	S4VEM
Vanadium	Target	6.8	JQ	ug/L	6.8	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	6.1	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB8	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: BH01GW	pH:	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	1.1		ug/L	1.1		1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB9	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: BH02GW	pH:	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB9	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: BH02GW	pH:	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	618		ug/L	618		1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	2.2	R	ug/L	2.2	J	1	YES	S4VEM
Barium	Target	200	U	ug/L	15.5	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	24200		ug/L	24200	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	2.0	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	2.4	J	1	YES	S4VEM
Iron	Target	910	JH	ug/L	910	*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	10700		ug/L	10700	*	1	YES	S4VEM
Manganese	Target	140	JH	ug/L	140	*	1	YES	S4VEM
Nickel	Target	1.1	JQ	ug/L	1.1	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	2200	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	13600		ug/L	13600	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	1.1	J	1	YES	S4VEM
Vanadium	Target	1.8	JQ	ug/L	1.8	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	9.4	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNB9	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: BH02GW	pH:	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	3.2		ug/L	3.2		1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNC3	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: MW01GW	pH:	Sample Date: 10/22/2019	Sample Time: 12:50:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC3 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: MW01GW | pH: | Sample Date: 10/22/2019 | Sample Time: 12:50:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	1270		ug/L	1270		1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	17.4	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	18500		ug/L	18500	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	2.9	J	1	YES	S4VEM
Cobalt	Target	0.44	JQ	ug/L	0.44	J	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	2.5	J	1	YES	S4VEM
Iron	Target	1340	JH	ug/L	1340	*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	9640		ug/L	9640	*	1	YES	S4VEM
Manganese	Target	21.0	JH	ug/L	21.0	*	1	YES	S4VEM
Nickel	Target	2.5	JQ	ug/L	2.5	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	1540	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	9150		ug/L	9150	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	25.0	U	1	YES	S4VEM
Vanadium	Target	4.0	JQ	ug/L	4.0	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	5.8	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC3 | Method: Metals by ICP-MS | Matrix: Water | MA Number:

Sample Location: MW01GW | pH: | Sample Date: 10/22/2019 | Sample Time: 12:50:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	0.75	JQ	ug/L	0.75	J	1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: MW355	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: MW355	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	22.1	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	23900		ug/L	23900	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	1.3	J	1	YES	S4VEM
Iron	Target	758	JH	ug/L	758	*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	10600		ug/L	10600	*	1	YES	S4VEM
Manganese	Target	460	JH	ug/L	460	*	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	2440	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	11400		ug/L	11400	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	0.94	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	2.9	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: MW355	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	0.67	JQ	ug/L	0.67	J	1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4A	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Selenium	Spike	73.1		ug/L	73.1		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNC4D	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4D	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	20.1	J	ug/L	20.1	J	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	21600		ug/L	21600		1	YES	S4VEM
Chromium	Target	0.46	J	ug/L	0.46	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	0.70	J	ug/L	0.70	J	1	YES	S4VEM
Iron	Target	678		ug/L	678		1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	9680		ug/L	9680		1	YES	S4VEM
Manganese	Target	418		ug/L	418		1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	2240	J	ug/L	2240	J	1	YES	S4VEM
Selenium	Target	35.0	U	ug/L	35.0	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	10500		ug/L	10500		1	YES	S4VEM
Thallium	Target	1.0	R	ug/L	1.0	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	4.0	J	ug/L	4.0	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4D	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	3.0		ug/L	3.0	*	1	YES	S4VEM
Arsenic	Target	0.63	J	ug/L	0.63	J	1	YES	S4VEM
Beryllium	Target	1.4		ug/L	1.4	*	1	YES	S4VEM
Thallium	Target	0.78	J	ug/L	0.78	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4L	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	1000	U	ug/L	1000	U	5	YES	S4VEM
Antimony	Target	300	R	ug/L	300	U	5	YES	S4VEM
Arsenic	Target	50.0	R	ug/L	50.0	U	5	YES	S4VEM
Barium	Target	18.9	J	ug/L	18.9	J*	5	YES	S4VEM
Beryllium	Target	25.0	R	ug/L	25.0	U	5	YES	S4VEM
Cadmium	Target	25.0	U	ug/L	25.0	U	5	YES	S4VEM
Calcium	Target	20100	J	ug/L	20100	J*	5	YES	S4VEM
Chromium	Target	50.0	U	ug/L	50.0	U	5	YES	S4VEM
Cobalt	Target	250	U	ug/L	250	U	5	YES	S4VEM
Copper	Target	125	U	ug/L	125	U	5	YES	S4VEM
Iron	Target	657		ug/L	657	*	5	YES	S4VEM
Lead	Target	50.0	U	ug/L	50.0	U	5	YES	S4VEM
Magnesium	Target	8950		ug/L	8950	J*	5	YES	S4VEM
Manganese	Target	386		ug/L	386	*	5	YES	S4VEM
Nickel	Target	200	U	ug/L	200	U	5	YES	S4VEM
Potassium	Target	2080	J	ug/L	2080	J*	5	YES	S4VEM
Selenium	Target	175	U	ug/L	175	U	5	YES	S4VEM
Silver	Target	50.0	U	ug/L	50.0	U	5	YES	S4VEM
Sodium	Target	9620	J	ug/L	9620	J*	5	YES	S4VEM
Thallium	Target	125	R	ug/L	125	U	5	YES	S4VEM
Vanadium	Target	250	U	ug/L	250	U	5	YES	S4VEM
Zinc	Target	300	U	ug/L	300	U	5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4L	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	8.2	J	ug/L	8.2	J	5	YES	S4VEM
Arsenic	Target	10.1		ug/L	10.1		5	YES	S4VEM
Beryllium	Target	7.5		ug/L	7.5		5	YES	S4VEM
Thallium	Target	6.2		ug/L	6.2		5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4S	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Spike	0.87		ug/L	0.87		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4S | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: | pH: | Sample Date: 10/22/2019 | Sample Time: 13:20:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	2250		ug/L	2250		1	YES	S4VEM
Antimony	Spike	112	R	ug/L	112		1	YES	S4VEM
Arsenic	Spike	43.0	R	ug/L	43.0		1	YES	S4VEM
Barium	Spike	2240		ug/L	2240		1	YES	S4VEM
Beryllium	Spike	54.0	R	ug/L	54.0		1	YES	S4VEM
Cadmium	Spike	56.7		ug/L	56.7		1	YES	S4VEM
Chromium	Spike	224		ug/L	224		1	YES	S4VEM
Cobalt	Spike	560		ug/L	560		1	YES	S4VEM
Copper	Spike	274		ug/L	274		1	YES	S4VEM
Iron	Spike	1840		ug/L	1840		1	YES	S4VEM
Lead	Spike	24.1		ug/L	24.1		1	YES	S4VEM
Manganese	Spike	1000		ug/L	1000		1	YES	S4VEM
Nickel	Spike	547		ug/L	547		1	YES	S4VEM
Selenium	Spike	56.1		ug/L	56.1	*	1	YES	S4VEM
Silver	Spike	48.5		ug/L	48.5		1	YES	S4VEM
Thallium	Spike	57.0	R	ug/L	57.0		1	YES	S4VEM
Vanadium	Spike	543		ug/L	543		1	YES	S4VEM
Zinc	Spike	551		ug/L	551		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC4S	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date: 10/22/2019	Sample Time: 13:20:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	113		ug/L	113		1	YES	S4VEM
Arsenic	Spike	44.8		ug/L	44.8		1	YES	S4VEM
Beryllium	Spike	56.3		ug/L	56.3		1	YES	S4VEM
Thallium	Spike	52.8		ug/L	52.8		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC5 | Method: Mercury by Cold Vapor | Matrix: Water | MA Number:

Sample Location: MW356 | pH: | Sample Date: 10/22/2019 | Sample Time: 14:50:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC5	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: MW356	pH:	Sample Date: 10/22/2019	Sample Time: 14:50:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	3.4	R	ug/L	3.4	J	1	YES	S4VEM
Barium	Target	200	U	ug/L	15.8	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	15600		ug/L	15600	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	0.85	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	3600	JH	ug/L	3600	*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	7360		ug/L	7360	*	1	YES	S4VEM
Manganese	Target	431	JH	ug/L	431	*	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	1320	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	7400		ug/L	7400	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	1.7	J	1	YES	S4VEM
Vanadium	Target	1.3	JQ	ug/L	1.3	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	2.2	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC5	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: MW356	pH:	Sample Date: 10/22/2019	Sample Time: 14:50:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	4.0		ug/L	4.0		1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	0.067	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNC6	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: RI01WT	pH:	Sample Date: 10/24/2019	Sample Time: 11:00:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14029/MJLNB8 | Lab Name: Bonner Analytical Testing Co.

Sample Number: MJLNC6 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: RI01WT | pH: | Sample Date: 10/24/2019 | Sample Time: 11:00:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	200	U*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000		ug/L	5000	U*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	0.76	J	1	YES	S4VEM
Iron	Target	12.5	JQ	ug/L	12.5	J*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U*	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	15.0	U*	1	YES	S4VEM
Nickel	Target	2.2	JQ	ug/L	2.2	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	5000	U*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	1.1	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	3.1	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC6	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: RI01WT	pH:	Sample Date: 10/24/2019	Sample Time: 11:00:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	0.13	JQ	ug/L	0.13	J	1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNC7	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: RI02WT	pH:	Sample Date: 10/24/2019	Sample Time: 11:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC7 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: RI02WT | pH: | Sample Date: 10/24/2019 | Sample Time: 11:30:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	200	U*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000		ug/L	5000	U*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	0.75	J	1	YES	S4VEM
Iron	Target	100	U	ug/L	100	U*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U*	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	0.71	J*	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	5000	U*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	0.99	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	4.7	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNC7 | Method: Metals by ICP-MS | Matrix: Water | MA Number:

Sample Location: RI02WT | pH: | Sample Date: 10/24/2019 | Sample Time: 11:30:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	0.13	JQ	ug/L	0.13	J	1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLND7	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: MW02GW	pH:	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND7 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: MW02GW | pH: | Sample Date: 10/22/2019 | Sample Time: 15:40:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	0.49	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	0.12	JQ	ug/L	0.12	J	1	YES	S4VEM
Calcium	Target	9260		ug/L	9260	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	5.4	J	1	YES	S4VEM
Iron	Target	8700	JH	ug/L	8700	*	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	4800	JQ	ug/L	4800	J*	1	YES	S4VEM
Manganese	Target	199	JH	ug/L	199	*	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	2410	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	10000		ug/L	10000	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	0.89	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	13.1	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLND7 | Method: Metals by ICP-MS | Matrix: Water | MA Number:

Sample Location: MW02GW | pH: | Sample Date: 10/22/2019 | Sample Time: 15:40:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	0.26	JQ	ug/L	0.26	J	1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLNE0	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: BK01GW	pH:	Sample Date: 10/23/2019	Sample Time: 17:55:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE0 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: BK01GW | pH: | Sample Date: 10/23/2019 | Sample Time: 17:55:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	429		ug/L	429		1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	8.8	J*	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	10600		ug/L	10600	*	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	2.6	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	377	JH	ug/L	377	*	1	YES	S4VEM
Lead	Target	2.9	JQ	ug/L	2.9	J	1	YES	S4VEM
Magnesium	Target	2830	JQ	ug/L	2830	J*	1	YES	S4VEM
Manganese	Target	18.4	JH	ug/L	18.4	*	1	YES	S4VEM
Nickel	Target	2.5	JQ	ug/L	2.5	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	666	J*	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	8740		ug/L	8740	*	1	YES	S4VEM
Thallium	Target	25.0	R	ug/L	1.8	J	1	YES	S4VEM
Vanadium	Target	4.1	JQ	ug/L	4.1	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	11.6	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE0	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: BK01GW	pH:	Sample Date: 10/23/2019	Sample Time: 17:55:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	UJK	ug/L	2.0	U*	1	YES	S4VEM
Arsenic	Target	0.46	JQ	ug/L	0.46	J	1	YES	S4VEM
Beryllium	Target	1.0	UJK	ug/L	1.0	U*	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLNB8 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: PBW01	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Antimony	Target	60.0	R	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	R	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	200	U	1	YES	S4VEM
Beryllium	Target	5.0	R	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	100	U	ug/L	100	U	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	15.0	U	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Selenium	Target	35.0	U	ug/L	35.0	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Thallium	Target	1.1	R	ug/L	1.1	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	2.2	J	ug/L	2.2	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLNB8** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

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LABORATORY SERVICES &
APPLIED SCIENCE
DIVISION

November 14, 2019

MEMORANDUM

SUBJECT: Data Validation Report for the Gunshy Manor, Redmond, Washington
Case# 48514, SDG: MJLND2, Inorganic Analyses

FROM: Don Matheny, Chemist
LSASD, Environmental Characterization Branch

TO: Brandon Perkins, Site Assessment Manager
Superfund & Emergency Management Division

CC: Derek Pulvino, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of five waters collected from the above referenced site has been completed. These samples were analyzed for dissolved metals (including mercury) by Bonner Analytical located in Hattiesburg, MS.

Sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in:

- Sampling and Quality Assurance Plan for Gunshy Manor, E&E, (October 2019)
- USEPA CLP Statement of Work for Inorganic Superfund Methods (ISM02.4)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-2017-001)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The table below summarizes the major sample quality control (QC) tests, associated test results, criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP specific and different from the National Functional Guidelines. Certain QC tests are electronically evaluated the results of which are not summarized in the table below though any excursions of these tests will appear in the *Data Qualifications* section. In addition to the QC tests, calculations from minimally 10% of the samples are verified against the raw data.

QC Results Summary

Quality Control Test[1]	Result Ranges	Outliers[2] (Y or N)	Evaluation Criteria
Preservation / Holding Times	Preservation & Holding Times met	N	Cool ≤ 6°C, pH<2 Metals 180 Days; Hg 28 Days
MS Tune	Tune criteria met	N	≤ 0.1 amu; ≤ 5% RSD
Instrument Calibration	Calibration criteria met	N	± 30% Difference; Corr. Coeff. ≥ 0.995
Calibration Verification	All checks passed	N	Metals 90 – 110% Recovery Hg 85 – 115% Recovery
Interference Check Std.	85 – 115% or ± 2xCRQL	N	80 – 120% Recovery or ± 2xCRQL
Lab Blanks	**Significant detects reported**	**Y**	**Not detected or <10% of Sample**
Matrix Spike	**97 – 120%** ***Out: Se (53%)***	**Y**	**75 - 125% Recovery**
Lab Duplicate	≤ 4% or ± CRQL	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	94 - 127%	N	70 - 130% Recovery Ag, Sb 50 – 150% Recovery
Serial Dilution[3]	4%	N	≤ 10% Difference

[1] Lab QC (matrix spike, lab duplicate, serial dilution) were performed on sample MJLND8.

[2] See the "*Data Qualifications*" section below for QC excursions and qualification of affected data.

[3] The evaluation was limited to **Manganese** as the native concentrations of the remaining elements in the sample were too low for conducting a 1:5 Serial Dilution.

II. DATA QUALIFICATIONS

Summary of Data Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

1. **Blanks:** The following analytes have positively detected sample results < CRQLs (below the range of quantitation) and the associated laboratory blanks were also detected at concentrations < CRQLs.

Data Qualifications: Sample results are qualified U and the values elevated to the CRQLs.	
Qualified Analytical Results:	
Barium -	All samples
Chromium –	MJLND2, MJLNE1
Iron -	MJLNE1
Manganese -	MJLNE1
Potassium -	MJLND2, MJLND3, MJLND8, MJLNE1
Vanadium -	MJLND2, MJLNE1
Zinc –	All samples

2. **Detection / Quantitation Limits:** The following analytes have positively detected results < CRQLs (below the range of quantitation) and the associated laboratory blanks were not detected.

Data Qualifications: Sample results are qualified JQ with no indication of bias.	
Qualified Analytical Results:	
Aluminum -	MJLND2
Arsenic -	MJLND2, MJLND8, MJLNE1, MJLNE2
Magnesium -	MJLNE1
Nickel –	MJLNE1

3. Matrix Spike: The spike recovery for **Selenium** (53%) was below the 75-125% criteria and the post spike recovery was > 75%. All Selenium data were qualified UJL.

Data Qualifiers

The data qualifiers and their respective definitions applied to the sample result(s) are provided as follows.

U	The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.
R	The data are rejected and unusable. The analyte may or may not be present in the sample.
L	The sample result is biased low.
H	The sample result is biased high.
K	The bias of the sample is not known.
Q	Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.

III. SAMPLE INDEX

The sample listing dates of sample collection, laboratory receipt and analysis are provided below.

Sample ID	Matrix	Sample Date	Date Rec'd	ICP-AES Analysis	ICP-MS Analysis	Mercury Analysis
MJLND2	Water	10/23/2019	10/26/2019	11/6/2019	11/8/2019	11/7/2019
MJLND3	Water	10/23/2019	10/26/2019	11/6/2019	11/8/2019	11/7/2019
MJLND8	Water	10/22/2019	10/26/2019	11/6/2019	11/8/2019	11/7/2019
MJLNE1	Water	10/23/2019	10/26/2019	11/6/2019	11/8/2019	11/7/2019
MJLNE2	Filter Blank	10/24/2019	10/26/2019	11/6/2019	11/8/2019	11/7/2019

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLND2 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: LCS01 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	433		ug/L	433		1	YES	S4VEM
Barium	Spike	391		ug/L	391		1	YES	S4VEM
Cadmium	Spike	11.0		ug/L	11.0		1	YES	S4VEM
Calcium	Spike	10500		ug/L	10500		1	YES	S4VEM
Chromium	Spike	23.0		ug/L	23.0		1	YES	S4VEM
Cobalt	Spike	107		ug/L	107		1	YES	S4VEM
Copper	Spike	51.3		ug/L	51.3		1	YES	S4VEM
Iron	Spike	194		ug/L	194		1	YES	S4VEM
Lead	Spike	25.4		ug/L	25.4		1	YES	S4VEM
Magnesium	Spike	10800		ug/L	10800		1	YES	S4VEM
Manganese	Spike	33.5		ug/L	33.5		1	YES	S4VEM
Nickel	Spike	84.1		ug/L	84.1		1	YES	S4VEM
Potassium	Spike	10400		ug/L	10400		1	YES	S4VEM
Selenium	Spike	75.7		ug/L	75.7		1	YES	S4VEM
Silver	Spike	19.6		ug/L	19.6		1	YES	S4VEM
Sodium	Spike	9390		ug/L	9390		1	YES	S4VEM
Vanadium	Spike	119		ug/L	119		1	YES	S4VEM
Zinc	Spike	138		ug/L	138		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	4.1		ug/L	4.1		1	YES	S4VEM
Arsenic	Spike	2.0		ug/L	2.0		1	YES	S4VEM
Beryllium	Spike	2.0		ug/L	2.0		1	YES	S4VEM
Thallium	Spike	2.0		ug/L	2.0		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND2	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: BH01GW-D	pH: 1.	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND2 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: BH01GW-D | pH: 1. | Sample Date: 10/23/2019 | Sample Time: 15:45:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	24.4	JQ	ug/L	24.4	J	1	YES	S4VEM
Barium	Target	200	U	ug/L	18.1	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	22200		ug/L	22200		1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	1.1	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	4330		ug/L	4330		1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	10300		ug/L	10300		1	YES	S4VEM
Manganese	Target	226		ug/L	226		1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	1820	J	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	11100		ug/L	11100		1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	2.8	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	4.5	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLND2 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLND2	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: BH01GW-D	pH: 1.	Sample Date: 10/23/2019	Sample Time: 15:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	0.71	JQ	ug/L	0.71	J	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND3	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: BH02GW-D	pH: 1.	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14029/MJLND2 | Lab Name: Bonner Analytical Testing Co.

Sample Number: MJLND3 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: BH02GW-D | pH: 1. | Sample Date: 10/23/2019 | Sample Time: 16:12:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	11.5	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	23300		ug/L	23300		1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	241		ug/L	241		1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	10700		ug/L	10700		1	YES	S4VEM
Manganese	Target	134		ug/L	134		1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	2180	J	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	12000		ug/L	12000		1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	10.6	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND3	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: BH02GW-D	pH: 1.	Sample Date: 10/23/2019	Sample Time: 16:12:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	2.5		ug/L	2.5		1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLND2 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLND8	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: MW02GW-D	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: MW02GW-D	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	1.3	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	9530		ug/L	9530		1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	253		ug/L	253		1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5100		ug/L	5100		1	YES	S4VEM
Manganese	Target	165		ug/L	165		1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	2590	J	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	9500		ug/L	9500		1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	10.3	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: MW02GW-D	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	0.21	JQ	ug/L	0.21	J	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8A	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Selenium	Spike	68.7		ug/L	68.7		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID:** 48514/EPW14029/MJLND2 | **Lab Name:** Bonner Analytical Testing Co.

Sample Number: MJLND8D	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14029/MJLND2 | Lab Name: Bonner Analytical Testing Co.

Sample Number: MJLND8D | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: | pH: 1. | Sample Date: 10/22/2019 | Sample Time: 15:40:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Barium	Target	1.3	J	ug/L	1.3	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	9160		ug/L	9160		1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	0.35	J	ug/L	0.35	J	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	249		ug/L	249		1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	4980		ug/L	4980	J	1	YES	S4VEM
Manganese	Target	160		ug/L	160		1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	2520	J	ug/L	2520	J	1	YES	S4VEM
Selenium	Target	35.0	U	ug/L	35.0	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	9100		ug/L	9100		1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	10.1	J	ug/L	10.1	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8D	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	0.14	J	ug/L	0.14	J	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8L	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	1000	U	ug/L	1000	U	5	YES	S4VEM
Barium	Target	6.0	J	ug/L	6.0	J	5	YES	S4VEM
Cadmium	Target	25.0	U	ug/L	25.0	U	5	YES	S4VEM
Calcium	Target	9070	J	ug/L	9070	J	5	YES	S4VEM
Chromium	Target	50.0	U	ug/L	50.0	U	5	YES	S4VEM
Cobalt	Target	250	U	ug/L	250	U	5	YES	S4VEM
Copper	Target	125	U	ug/L	125	U	5	YES	S4VEM
Iron	Target	179	J	ug/L	179	J	5	YES	S4VEM
Lead	Target	50.0	U	ug/L	50.0	U	5	YES	S4VEM
Magnesium	Target	4920	J	ug/L	4920	J	5	YES	S4VEM
Manganese	Target	159		ug/L	159		5	YES	S4VEM
Nickel	Target	200	U	ug/L	200	U	5	YES	S4VEM
Potassium	Target	2520	J	ug/L	2520	J	5	YES	S4VEM
Selenium	Target	175	U	ug/L	175	U	5	YES	S4VEM
Silver	Target	50.0	U	ug/L	50.0	U	5	YES	S4VEM
Sodium	Target	8840	J	ug/L	8840	J	5	YES	S4VEM
Vanadium	Target	250	U	ug/L	250	U	5	YES	S4VEM
Zinc	Target	11.7	J	ug/L	11.7	J	5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8L	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	10.0	U	ug/L	10.0	U	5	YES	S4VEM
Arsenic	Target	3.0	J	ug/L	3.0	J	5	YES	S4VEM
Beryllium	Target	5.0	U	ug/L	5.0	U	5	YES	S4VEM
Thallium	Target	5.0	U	ug/L	5.0	U	5	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8S | Method: Mercury by Cold Vapor | Matrix: Water | MA Number:

Sample Location: | pH: 1. | Sample Date: 10/22/2019 | Sample Time: 15:40:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Spike	0.97		ug/L	0.97		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | GroupID: 48514/EPW14029/MJLND2 | Lab Name: Bonner Analytical Testing Co.

Sample Number: MJLND8S | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: | pH: 1. | Sample Date: 10/22/2019 | Sample Time: 15:40:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	2350		ug/L	2350		1	YES	S4VEM
Barium	Spike	2090		ug/L	2090		1	YES	S4VEM
Cadmium	Spike	56.0		ug/L	56.0		1	YES	S4VEM
Chromium	Spike	213		ug/L	213		1	YES	S4VEM
Cobalt	Spike	544		ug/L	544		1	YES	S4VEM
Copper	Spike	260		ug/L	260		1	YES	S4VEM
Iron	Spike	1400		ug/L	1400		1	YES	S4VEM
Lead	Spike	22.7		ug/L	22.7		1	YES	S4VEM
Manganese	Spike	766		ug/L	766		1	YES	S4VEM
Nickel	Spike	531		ug/L	531		1	YES	S4VEM
Selenium	Spike	53.7		ug/L	53.7	*	1	YES	S4VEM
Silver	Spike	49.8		ug/L	49.8		1	YES	S4VEM
Vanadium	Spike	554		ug/L	554		1	YES	S4VEM
Zinc	Spike	573		ug/L	573		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLND8S	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 10/22/2019	Sample Time: 15:40:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	118		ug/L	118		1	YES	S4VEM
Arsenic	Spike	45.0		ug/L	45.0		1	YES	S4VEM
Beryllium	Spike	52.8		ug/L	52.8		1	YES	S4VEM
Thallium	Spike	55.8		ug/L	55.8		1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE1	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: BK01GW-D	pH: 1.	Sample Date: 10/23/2019	Sample Time: 17:55:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE1 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: BK01GW-D | pH: 1. | Sample Date: 10/23/2019 | Sample Time: 17:55:00

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	7.0	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	10800		ug/L	10800		1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	1.4	J	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	100	U	ug/L	11.1	J	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	2890	JQ	ug/L	2890	J	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	14.7	J	1	YES	S4VEM
Nickel	Target	1.5	JQ	ug/L	1.5	J	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	681	J	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	8070		ug/L	8070		1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	3.1	J	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	10.1	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE1	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: BK01GW-D	pH: 1.	Sample Date: 10/23/2019	Sample Time: 17:55:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	0.46	JQ	ug/L	0.46	J	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE2	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: FL01WT	pH: 1.	Sample Date: 10/24/2019	Sample Time: 12:00:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE2	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: FL01WT	pH: 1.	Sample Date: 10/24/2019	Sample Time: 12:00:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	0.93	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	25.0	U	1	YES	S4VEM
Iron	Target	100	U	ug/L	100	U	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	15.0	U	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Selenium	Target	35.0	UJL	ug/L	35.0	U*	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	3.2	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MJLNE2	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: FL01WT	pH: 1.	Sample Date: 10/24/2019	Sample Time: 12:00:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	0.17	JQ	ug/L	0.17	J	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	-0.10	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01 | Method: Metals by ICP-AES | Matrix: Water | MA Number:

Sample Location: | pH: | Sample Date: | Sample Time:

% Moisture: | % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	200	U	1	YES	S4VEM
Barium	Target	1.2	J	ug/L	1.2	J	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	-0.12	J	1	YES	S4VEM
Calcium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	-1.5	J	1	YES	S4VEM
Iron	Target	100	U	ug/L	-13	J	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	15.0	U	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Selenium	Target	35.0	U	ug/L	35.0	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	-45	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	3.6	J	ug/L	3.6	J	1	YES	S4VEM

Sample Summary Report

Project Name: GUNSHY MANOR PRELIMINARY ASSESSMENT Project | **GroupID: 48514/EPW14029/MJLND2** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S4VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S4VEM

E Photographic Documentation

Photo 0001 Thompson Field.

Direction: NE Date:4/11/2019 Time: 11:12 By: JF

Photo 0002 Thompson Field.

Direction: E Date:4/112019 Time: 11:12 By: JF

Photo 0003 Southern portion of Thompson field.

Direction: SE Date:4/11/2019 Time: 11:12 By: JF

Photo 0004 Wetland/Evans Creek Natural Area south of Thompson Field.

Direction: S Date:4/11/2019 Time: 11:12 By: JF

Photo 0005 Area west of Thompson Field

Direction: SW Date:4/11/2019 Time: 11:12 By: JF

Photo 0006 Area west of Thompson Field

Direction: W Date:4/11/2019 Time: 11:12 By: JF

Photo 0008 Area west of Thompson Field

Direction: NW Date:4/11/2019 Time: 11:12 By: JF

Photo 0009 Test pit excavated for geotechnical purposes

Direction: DN Date:4/11/2019 Time: 11:23 By: JF

Photo 0011 Field east of Thompson field

Direction: S Date:4/11/2019 Time: 11:33 By: JF

Photo 0013 Thompson Field

Direction: SW Date:4/11/2019 Time: 11:33 By: JF

Photo 0015 Thompson Field

Direction: W/SW Date:4/11/2019 Time: 11:33 By: JF

Photo 0019 Irrigation well in eastern portion of property

Direction: E Date:4/11/2019 Time: 11:42 By: JF

Photo 0024 Irrigation well in eastern portion of property

Direction: DN Date: 1/11/2019 Time: 11:42 By: JF

Photo 0027 Gunshy Property from eastern hill side

Direction: NW Date: 4/112/2019 Time: 11:45 By: JF

Photo 0029 Surface water drainage to Wetland/Evans Creek Natural Area south of Thompson Field

Direction: S Date: 4/11/2019 Time: 11:47 By: JF

Photo 0030 Surface water drainage to Wetland/Evans Creek Natural Area south of Thompson Field.

Direction: E Date: 4/11/2019 Time: 11:47 By: JF

Photo 1 Sampling at MW02, a former domestic drinking water well.

Direction: DN Date: 10/22/2019 Time: 15:17 By: JF

Photo 2 Location of MW01 looking toward intersection of 196th Ave NE and NE Union Hill Road.

Direction: NW Date: 10/22/2019 Time: 15:19 By: JF

Photo 3 BH01 0-4' core.

Direction: DN Date: 10/23/2019 Time: 10:27 By: JF

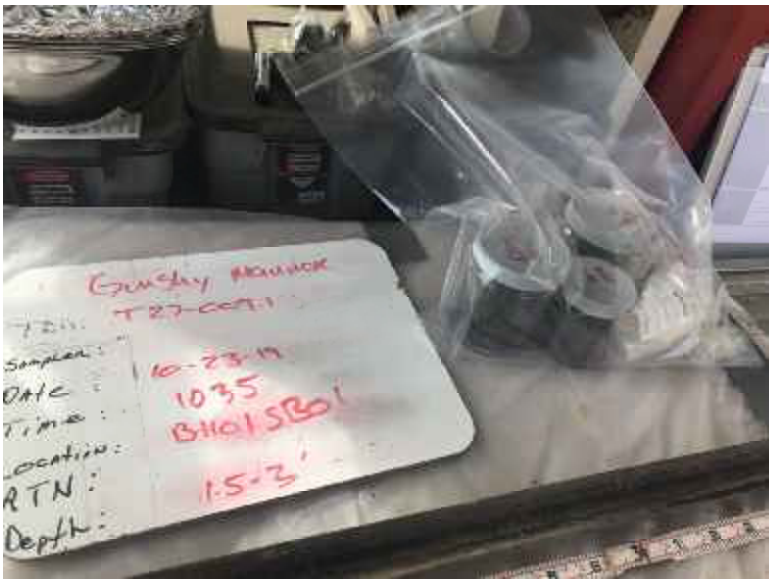

Photo 4 Sample BH01SB01.

Direction: DN Date: 10/23/2019 Time: 10:36 By: JF

Photo 5 BH01 4-8' core.

Direction: DN Date: 10/23/2019 Time: 10:41 By: JF

Photo 6 Sample BH01SB02.

Direction: DN Date: 10/23/2019 Time: 11:05 By: JF

Photo 7 BH01 8-12' core.

Direction: DN Date: 10/23/2019 Time: 11:14 By: JF

Photo 8 Sample BH01SB03.

Direction: DN Date: 10/23/2019 Time: 11:20 By: JF

Photo 9 Drilling at BH02.

Direction: DN Date: 10/23/2019 Time: 11:52 By: JF

Photo 10 BH02 0-4' core.

Direction: DN Date: 10/23/2019 Time: 12:12 By: JF

Photo 11 BH02 4-8' core.

Direction: DN Date: 10/23/2019 Time: 12:32 By: JF

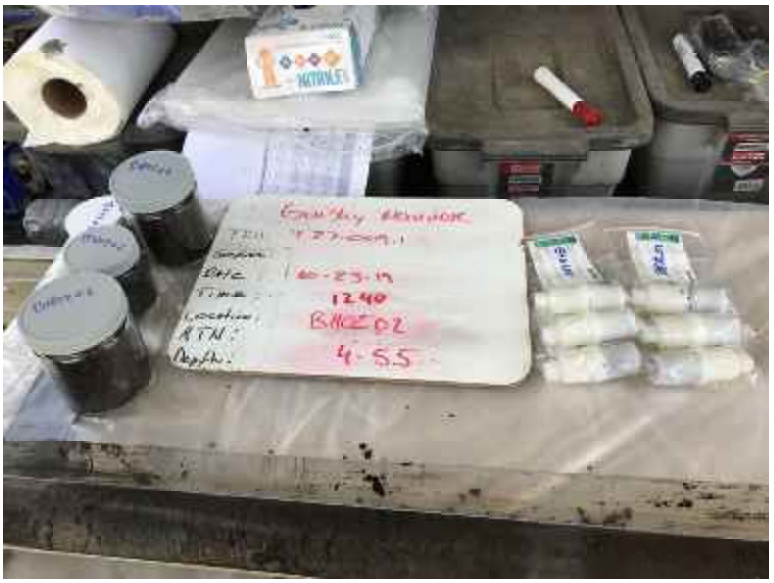

Photo 12 Sample BH02SB02.

Direction: DN Date: 10/23/2019 Time: 12:49 By: JF

Photo 13 BH02 8-12' core.

Direction: DN Date: 10/23/2019 Time: 12:55 By: JF

Photo 14 Sample BH02SB03.

Direction: DN Date: 10/23/2019 Time: 13:02 By: JF

Photo 15 BH03 0-4' core.

Direction: DN Date: 10/23/2019 Time: 13:50 By: JF

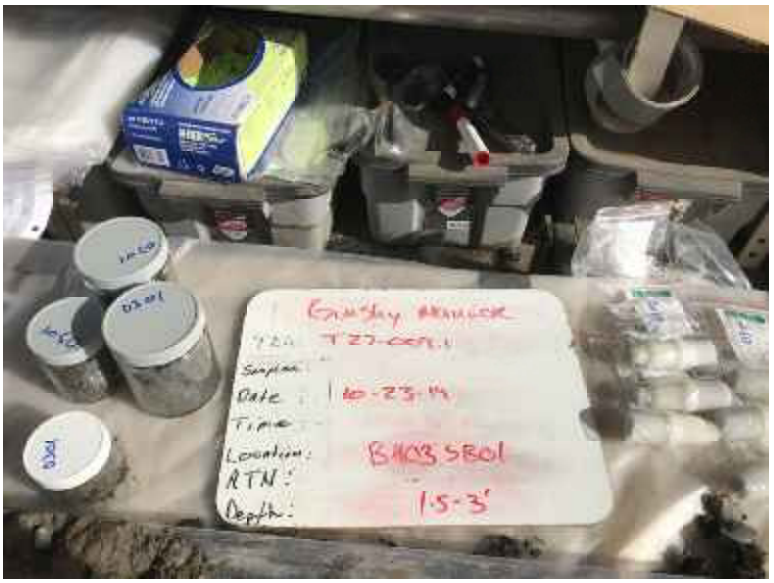

Photo 16 Sample BH03SB01.

Direction: DN Date: 10/23/2019 Time: 14:02 By: JF

Photo 17 BH03 4-8' core.

Direction: DN Date: 10/23/2019 Time: 14:05 By: JF

Photo 18 BK01 0-4' core.

Direction: DN Date: 10/23/2019 Time: 14:10 By: JF

Photo 19 Sample BH03SB02.

Direction: DN Date: 10/23/2019 Time: 14:16 By: JF

Photo 20 BH03 8-12' core.

Direction: DN Date: 10/23/2019 Time: 14:22 By: JF

Photo 21 BK01 12-16' core.

Direction: DN Date: 10/23/2019 Time: 16:08 By: JF

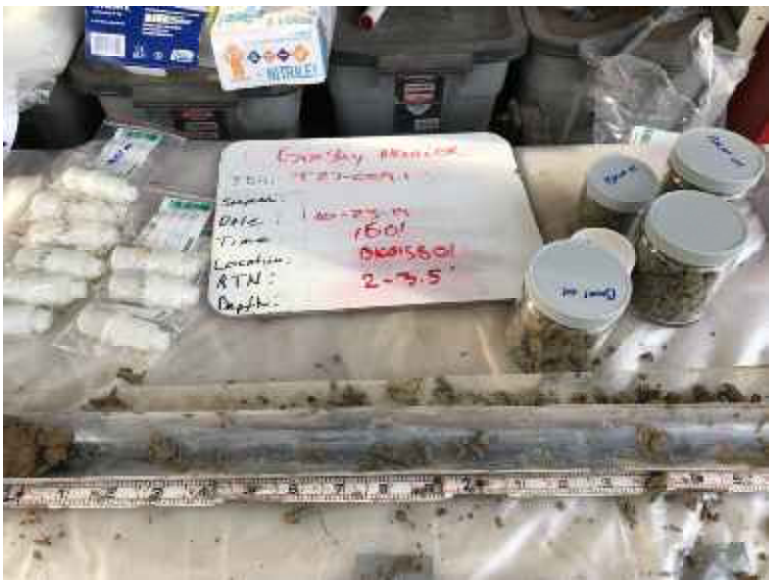

Photo 22 Sample BK01SB01.

Direction: DN Date: 10/23/2019 Time: 16:08 By: JF

Photo 23 BK01 4-8' core.

Direction: DN Date: 10/23/2019 Time: 16:20 By: JF

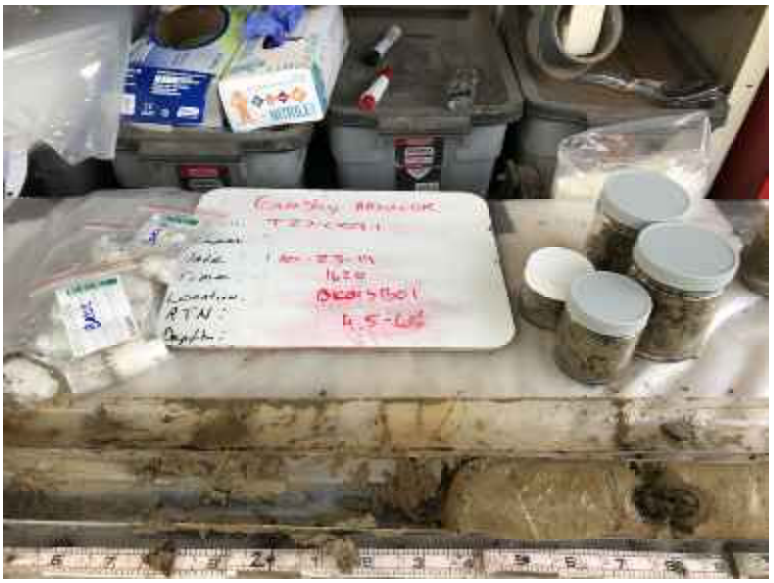

Photo 24 Sample BK01SB02.

Direction: DN Date: 10/23/2019 Time: 16:27 By: JF

Photo 25 BK01 8-12' core.

Direction: DN Date: 10/23/2019 Time: 16:32 By: JF

Photo 26 Sample BK01SB03.

Direction: DN Date: 10/23/2019 Time: 16:49 By: JF

Photo 27 IDW drum at Arthur Johnson Park

Direction: DN Date: 10/23/2019 Time: 18:44 By: JF

Photo 28 IDW drum at Arthur Johnson Park

Direction: DN Date: 10/23/2019 Time: 18:44 By: JF

Photo 29 Sample BH02SB01.

Direction: DN Date: 10/24/2019 Time: 00:16 By: JF

Photo 30 Abandoning borings at BH04.

Direction: DN Date: 11/6/2019 Time: 10:36 By: JF

Photo 31 Three attempts made at BH04 with hand auger.

Direction: DN Date: 11/6/2019 Time: 10:52 By: JF

Photo 32 Plastic pieces found at BH05.

Direction: DN Date: 11/6/2019 Time: 11:01 By: JF

Photo 33 Brick found at BH05.

Direction: DN Date:11/6/2019 Time: 11:09 By: JF

Photo 34 Brick found at BH05.

Direction: DN Date:11/6/2019 Time: 11:52 By: JF

Photo 35 Three attempts made at BH05 with hand auger.

Direction: DN Date:11/6/2019 Time: 11:53 By: JF

Photo 36 Abandoning borings at BH05.

Direction: DN Date:11/6/2019 Time: 12:11 By: JF

Photo 37 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:20 By: JF

Photo 38 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:20 By: JF

Photo 39 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:27 By: JF

Photo 40 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:27 By: JF

Photo 41 Field repair near BH01.

Direction: E Date: 11/6/2019 Time: 12:27 By: JF

Photo 42 Field repair near BH01.

Direction: DN Date: 11/6/2019 Time: 12:31 By: JF

Photo 43 Field repair near BH01.

Direction: DN Date: 11/6/2019 Time: 12:31 By: JF

Photo 44 Field repair near BH01.

Direction: DN Date: 11/6/2019 Time: 12:31 By: JF

Photo 45 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:31 By: JF

Photo 46 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:37 By: JF

Photo 47 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:37 By: JF

Photo 48 Field repair near BH01.

Direction: DN Date:11/6/2019 Time: 12:37 By: JF

Photo 49 Field repair near BH01.

Direction: DN Date: 11/6/2019 Time: 12:37 By: JF

Photo 50 Field repair near BH01.

Direction: DN Date: 11/6/2019 Time: 12:37 By: JF

Photo 51 Soil from BH06.

Direction: DN Date: 11/6/2019 Time: 13:14 By: JF

Photo 52 Soil from BH06.

Direction: DN Date: 11/6/2019 Time: 13:14 By: JF

Photo 53 Brick encountered at BH06

Direction: DN Date: 11/6/2019 Time: 13:42 By: JF

Photo 54 Soil from BH06.

Direction: DN Date: 11/6/2019 Time: 13:42 By: JF

Photo 55 Three attempts made at BH06 with hand auger.

Direction: DN Date: 11/6/2019 Time: 13:42 By: JF

F

Borehole Logs

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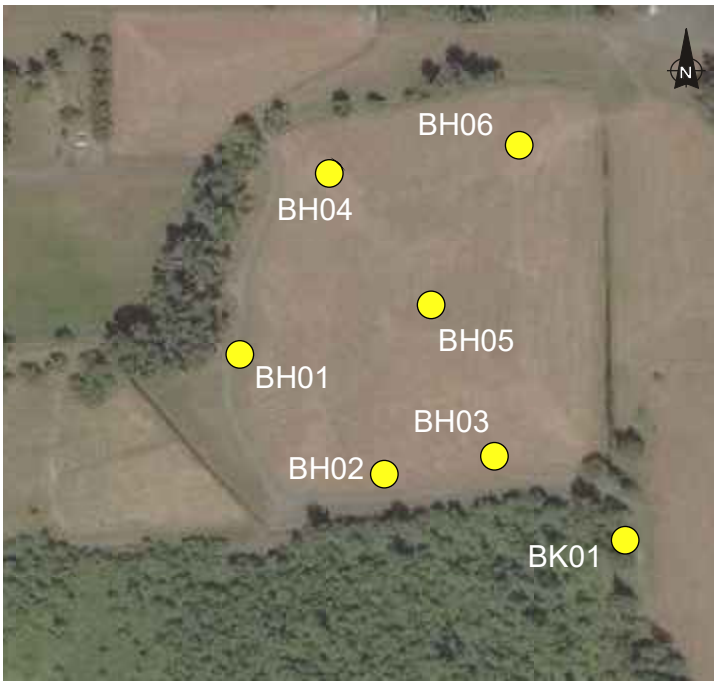
Drilling Log for BH01

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 9/23/2019
Driller's Name: A Jensen
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Geoprobe 6600
Depth to Water: 4.53 Feet bgs (static)
Total Depth of Borehole: 12 feet bgs
Temporary Well Screen Interval: 8-12 feet bgs



GPS Coordinates: 47.6696055, -122.0762836

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1–4	BH01SB01 (1.5-3' bgs)	10:35	60%	0		0-1 - Silty SAND (SM) - Sand: medium to fine, angular to sub-angular; Silt: wet, gray to grayish brown, soft; Gravel: trace, 0.5 to 1 cm, angular (similar to gravel found in adjacent road bed) 1-1.6 - Silty SAND (SM) - Sand: fine to medium, angular to sub-angular; Silt: wet, brown, to dark brown, soft, high organics (root material) 1.6-3 - Well Graded GRAVEL with Silt (GW-GM) - Gravel: 2 mm to 3 cm, rounded, some small angular (< 0.5 cm) brick red material noted; Silt: wet, gray to dark gray; Sand: fine to medium with trace coarse, angular to sub-angular
4–8	BH01SB02 (4.5-6' bgs)	10:59	75%	0		3-4 - No recovery 4-4.7 - Silty SAND (SM) - Sand: fine to medium, angular to sub-angular; Silt: saturated, grayish brown 4.7-5.3 - Wood Debris 5.3-6 - Silty SAND with Gravel (SM) - Sand: fine to medium, angular to sub-angular; Silt: saturated, grayish brown, firm; Gravel: 2 mm to 1 cm, rounded to sub-rounded, light diesel like odor noted 6-6.3 - SILT (ML) - wet, dark brown, soft, root and decayed wood noted 6.3-6.9 - Well Graded GRAVEL with Silt (GW-GM) - Gravel: 2 mm to >5 cm sub-rounded to sub-angular; Silt: gray to dark gray, wet; Sand: trace to none
8–12	BH01SB03 (8-10' bgs)	11:14	75%	0		6.9-8 - No recovery 8-9.7 - Well Graded GRAVEL with Silt (GW-GM) - Gravel: 2 mm to 3 cm, rounded; Sand: fine to coarse (predominately fine to medium); Silt; gray to grayish brown, moist, saturated below 9.2' 9.7-11- Silty GRAVEL (GM) - Gravel: 2 mm to 5 cm, angular; Silt: saturated, gray to grayish brown, groundwater measured at 9.64' bgs while drilling 11-12 - No recovery Total depth = 12 feet Borehole back filled with 3/8-inch bentonite chips from TD to surface.

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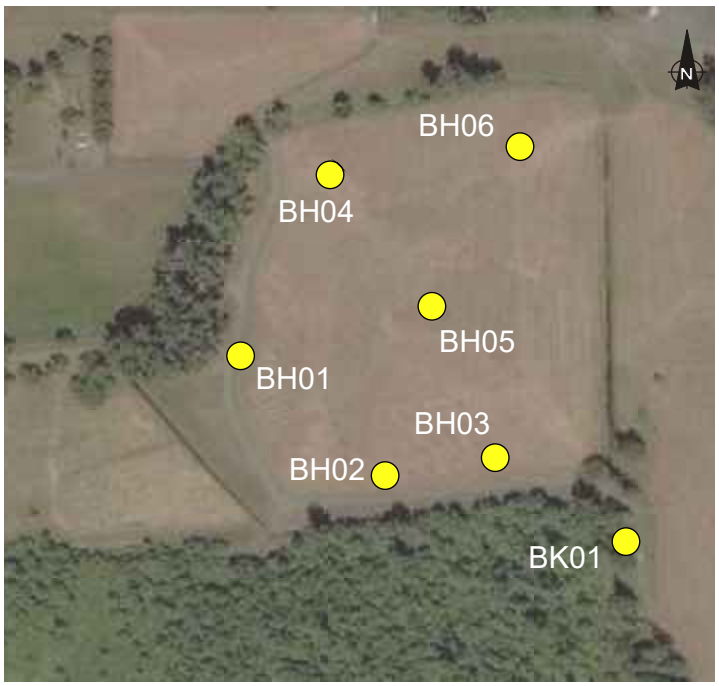
Drilling Log for BH02

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 9/23/2019
Driller's Name: A Jensen
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Geoprobe 6600
Depth to Water: 3.21 Feet bgs (static)
Total Depth of Borehole: 16 feet bgs
Temporary Well Screen Interval: 12 to 16 feet bgs



GPS Coordinates: 47.66901868, -122.0752251

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1	BH02SB01 (0.9-2' bgs)	12:16	50%	0		0-0.3 - Well Graded SAND with Silt (SW-SM) - Sand: fine to medium, angular to sub-angular; Silt: brown, moist 0.3-0.9 - Well Graded GRAVEL - rounded to sub-rounded, clean 0.9-1.5 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 3 cm; Silt: moist, gray, firm; Sand: trace, coarse, angular to sub-angular 1.5-2 - Wood debris 2-4 - No Recovery
2						
3						
4	BH02SB02 (4-5' bgs)	12:40	75%	0		4-4.7 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 3 cm; Silt: moist, gray, firm; Sand: trace, coarse, angular to sub-angular 4.7-9.9 - PEAT (PT) - moist, brown, soft
5						
6						
7						
8	BH02SB03 (8-9.9' bgs)	13:00	75%	0		9.9-11 - CLAY (CL) - moist, gray, few organics noted 11-11.5 - Well Graded GRAVEL with Silt (GW-GM) - Gravel: 2 mm to 5 cm, rounded to sub-angular: Silt: moist, gray; Sand: fine to coarse, no sign of water 11.5-12 - No recovery
9						
10						
11						
12						

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
12						12-14.1 - Well Graded SAND with Silt (SW-SM) - Sand: fine to coarse, angular to sub-angular; Silt: gray, moist; Gravel: trace, fine
13						
14						14.1-16 - Well Graded GRAVEL with Silt (GW-GM) - Gravel: 2 mm to 1.5 cm, rounded to sub-angular; Sand: fine to coarse (predominately coarse); Silt, saturated, gray, firm
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						Total depth = 16 feet Borehole back filled with 3/8-inch bentonite chips from TD to surface.
32						

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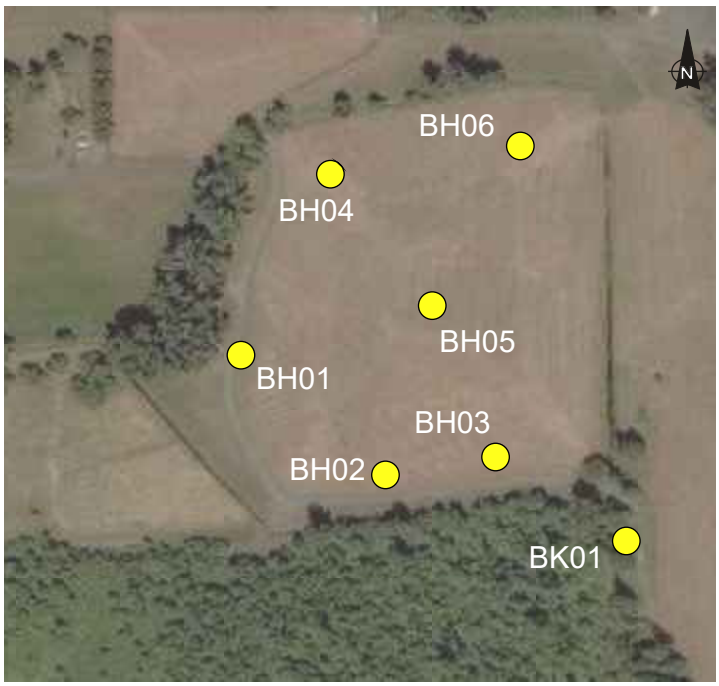
Drilling Log for BH03

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 9/23/2019
Driller's Name: A Jensen
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Geoprobe 6600
Depth to Water: 15.06 Feet bgs
Total Depth of Borehole: 16 feet bgs
Temporary Well Screen Interval: 12 to 16 feet bgs



GPS Coordinates: 47.66911005, -122.0743875

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1	BH03SB01 (1.5-3' bgs)	13:58	75%	0		0-0.6 - SILT with Sand (ML) - Silt: moist, brown, soft, high organics (root material); Sand: fine to medium, angular to sub-angular 0.6-3 - Well Graded GRAVEL with Silt (GW-GM) - Gravel: 2 mm to 3 cm, rounded to sub-rounded; Sand: fine to coarse (predominantly medium), angular to sub-angular; Silt: brown grading to gray below 2', firm, some wood debris noted at 3'
2						
3						3-4 - No Recovery
4						
5	BH03SB02 (4.5-6' bgs)	14:17	50%	0		4-4.5 - Sluff 4.5-6.7 - PEAT (PT) - moist, soft, brown to dark brown
6						
7						6.7-8 - No Recovery
8						
9			100%	0		8-12 - Organic SILT (OL) - moist, brown, soft
10						
11						
12						

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
12						12-16 - Not Logged
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						Total depth = 16 feet Borehole back filled with 3/8-inch bentonite chips from TD to surface.
32						

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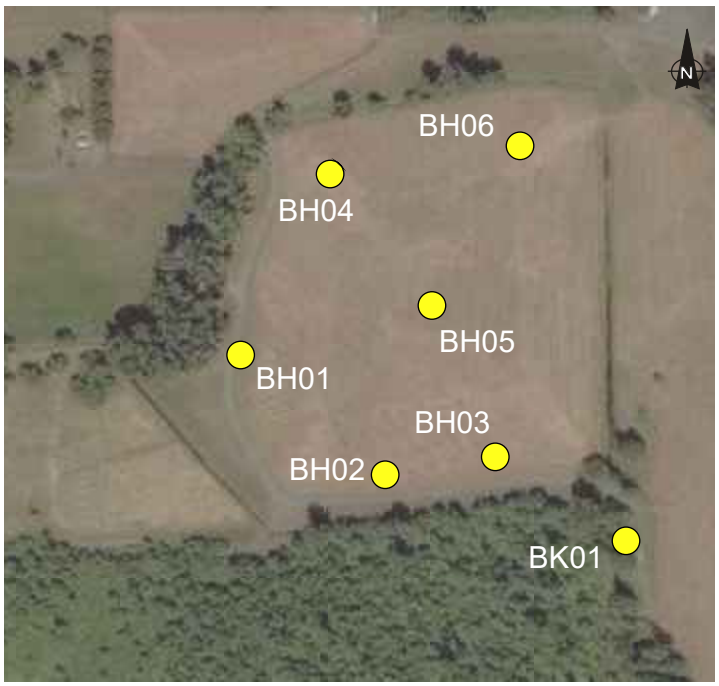
Drilling Log for BH04

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 11/6/2019
Driller's Name: NA
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Hand auger
Depth to Water: Not encountered
Total Depth of Borehole: 2.5 feet bgs
Temporary Well Screen Interval: NA



GPS Coordinates: 47.67051424, -122.0755917

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1	BH04SB02 BH04SB01 (2-2.5' bgs) (0.5-1' bgs)	10:04	NA	NA		0-0.6 - Silty Loam, high organics (root material and worms)
2						0.6-2 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 6 cm; Silt: slightly moist, grayish brown to brown, Sand: trace, fine to coarse (predominantly fine), angular to sub-angular
3		10:22				2-2.5 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 4 cm, some exhibit a weak weathering rind; Silt: slightly moist, brown, Sand: trace, fine to coarse (predominantly fine to medium), angular to sub-angular
4						
5						
6						
7						
8						
9						
10						
11						Refusal at = 2.5 feet bgs Borehole back filled with 3/8-inch bentonite chips from TD to surface.
12						

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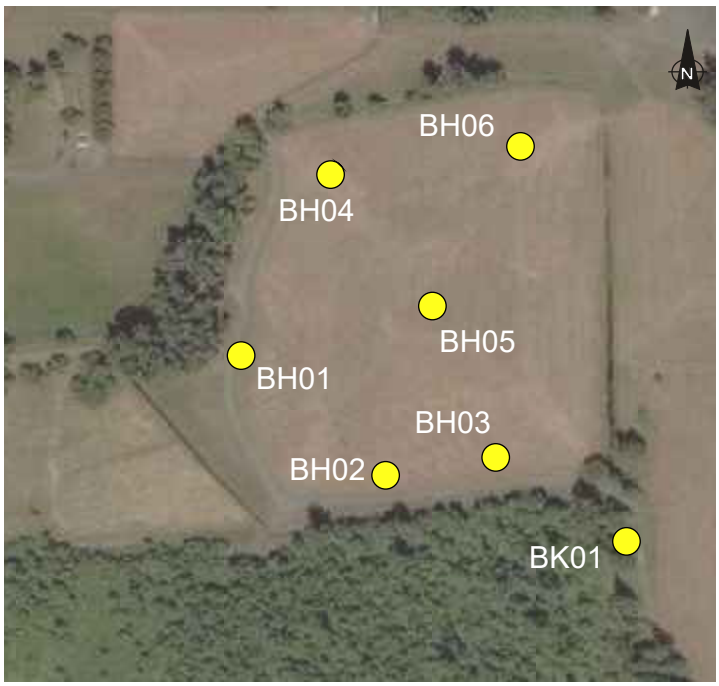
Drilling Log for BH05

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 11/6/2019
Driller's Name: NA
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Hand auger
Depth to Water: Not encountered
Total Depth of Borehole: 2.5 feet bgs
Temporary Well Screen Interval: NA



GPS Coordinates: 47.66987622, -122.0748718

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1	BH05SB02 BH05SB01 (2-2.5' bgs) (1.5-2' bgs)	11:10	NA	NA		0-0.6 - Silty Loam, high organics (root material and worms) 0.6-1.5 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 6 cm; Silt: slightly moist, grayish brown to brown, Sand: trace, fine to coarse (predominantly fine), angular to sub-angular, few white plastic pieces noted
2						
3		11:55				1.5-2.5 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 4 cm; Silt: slightly moist, gray to grayish brown, Sand: trace, fine to coarse (predominantly fine to medium), angular to sub-angular, several pieces of red brick like material noted
4						
5						
6						
7						
8						
9						
10						
11						Refusal at 2.5 feet bgs Borehole back filled with 3/8-inch bentonite chips from TD to surface.
12						

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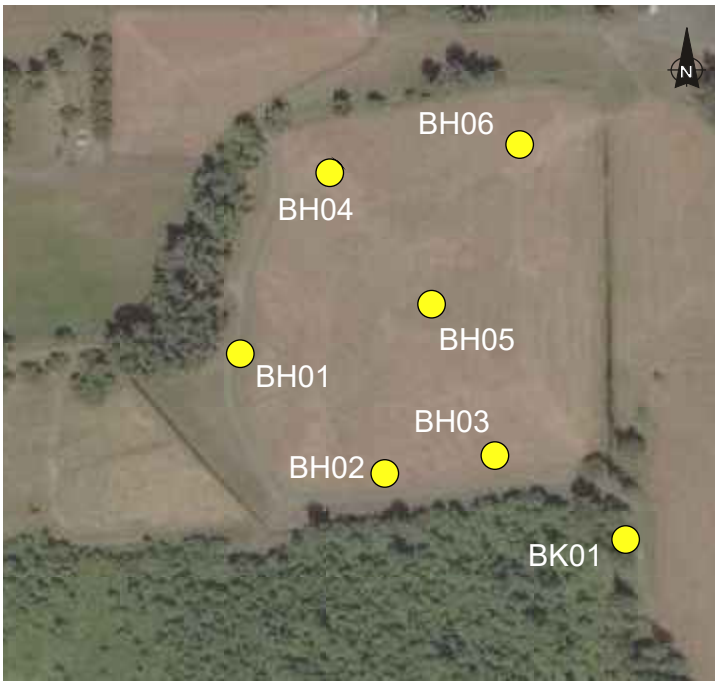
Drilling Log for BH06

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 11/6/2019
Driller's Name: NA
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Hand auger
Depth to Water: Not encountered
Total Depth of Borehole: 3 feet bgs
Temporary Well Screen Interval: NA



GPS Coordinates: 47.67067064, -122.0741953

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1	BH06SB02 BH06SB01 (2.5-3' bgs) (1-1.75' bgs)	13:05	NA	NA		0-0.6 - Silty Loam, high organics (root material and worms) 0.6-1.5 - Silty GRAVEL (GM) - Gravel: rounded, 2 mm to 3 cm (predominately > 1cm); Silt: moist, gray brown to brown, firm; Sand: trace, coarse, angular to sub-angular, red brick pieces (4"x2.5") noted at 1.5' 1.5-3 - Silty GRAVEL (GM) - Gravel: 2 mm to 4 cm, rounded; Sand: fine to medium, angular to sub-angular; Silt: gray to grayish brown, slightly moist
2						
3		13:38				
4						
5						
6						
7						
8						
9						
10						
11						Refusal at 3 feet bgs Borehole back filled with 3/8-inch bentonite chips from TD to surface.
12						

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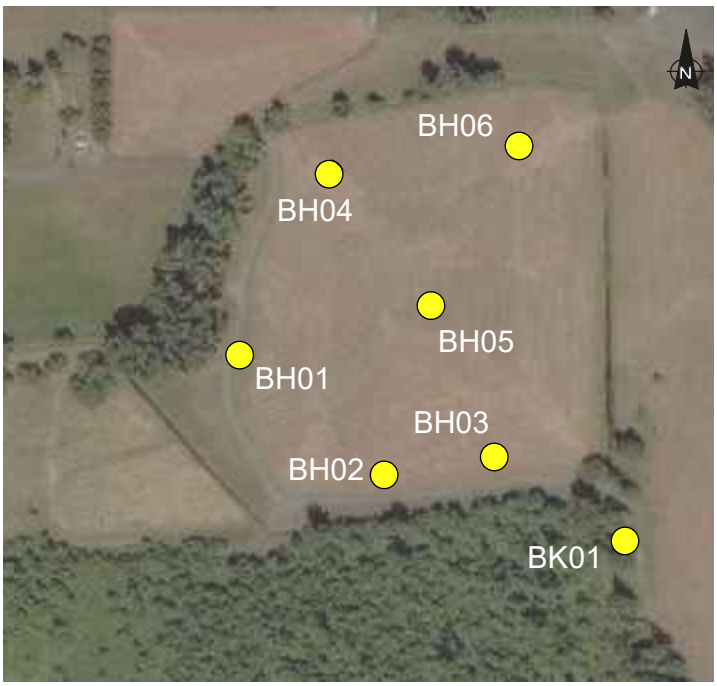
Drilling Log for BK01

Project Name: Gunshy Mannor
Site Location: Redmond, Washington
Date Started/Finished: 9/23/2019
Driller's Name: A Jensen
Geologist's Name: J Fetters
Geologist's Signature:
Rig Type(s): Geoprobe 6600
Depth to Water: 4.09 Feet bgs
Total Depth of Borehole: 16 feet bgs
Temporary Well Screen Interval: 12 to 16 feet bgs



GPS Coordinates: 47.66865187, -122.0733772

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
1	BK01SB01 (2-3.5' bgs)	16:01	90%	0		0-0.6 - SILT (ML) - moist, brown, soft 0.6-2.1 - Silty SAND (SM) - Sand; fine to medium, angular to sub-angular; Silt: light brown, to tan with gray mottling, soft
2						2.1-2.6 - SILT(ML) - gray to tan, firm, moist
3						2.6-10.8 - Silty SAND (SM) - Sand; fine to medium, angular to sub-angular; Silt: light brown, to tan with gray mottling, soft, moist
4						
5	BK01SB02 (4.5-6' bgs)	16:20	100%	0		
6						
7						
8						
9	BK01SB03 (8-10' bgs)	16:42	100%	0		
10						
11						10.8-12 - Well Graded SAND (SW) - Sand: fine to medium, gray, angular to sub-angular, saturated, trace to no silt
12						

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID (PPB)	Soil Type	Comments
12						12-16 - Not Logged
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						Total depth = 16 feet Borehole back filled with 3/8-inch bentonite chips from TD to surface.
32						

G

Investigation Derived Waste Disposal Documentation

CWMI

ESP

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
EXEMPT	2	(800)424-9300	USEPA122319-ESP1

GENERATOR

5. Generator's Name and Mailing Address
US ENV PROTECTION AGENCY
720 3RD AVE SUITE 1700
SEATTLE WA 98104
Generator's Phone: (360)891-8817

Generator's Site Address (if different than mailing address)
NE UNION HILL RD & 196TH AVE
REDMOND, WA 98053

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC. — U.S. EPA ID Number: ORD089452353

7. Transporter 2 Company Name: UPRR — U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	MATERIAL NOT REGULATED BY D.O.T. OR343819	1	DM	525	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1. OR343819-STAB01-PURGE/DECON WATER

ESP

cwmm 9/20/11

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Jeff Fetters on behalf USEPA — Signature: on behalf of USEPA — Month: 12 — Day: 18 — Year: 19

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: [illegible] — Signature: — Month: 12 — Day: 23 — Year: 19

Transporter 2 Printed/Typed Name: — Signature: — Month: — Day: — Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year