DATA VALIDATION REPORT

Cowboy Timber

SAMPLE DELIVERY GROUPS: F160501-F160514, F160601-F160613 and F160701

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Cowboy Timber
Contract Task Order:	20408.012.001.0263.00
Sample Delivery Group:	Multiple
Weston Project Manager:	Eric Sandusky
TDD No.:	1507-08
Matrix:	Soil
QC Level:	Stage 4
No. of Samples:	251
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Services Assistance Team Laboratory (ESAT)

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
CTSO-B2D01-20160510	F160501-11	Soil	5/10/2016 5:15:00 PM	8270 PCP
CTSO-B3D12-20160510	F160501-12	Soil	5/10/2016 5:16:00 PM	8270 PCP
CTSO-B4D23-20160510	F160501-13	Soil	5/10/2016 5:20:00 PM	8270 PCP
CTSO-B5D01-20160510	F160501-14	Soil	5/10/2016 5:20:00 PM	8270 PCP
CTSO-B6D12-20160510	F160501-15	Soil	5/10/2016 5:23:00 PM	8270 PCP
CTSO-B7D23-20160510	F160501-16	Soil	5/10/2016 5:25:00 PM	8270 PCP
CTSO-C2D01-20160510	F160501-17	Soil	5/10/2016 5:13:00 PM	8270 PCP
CTSO-C3D12-20160510	F160501-18	Soil	5/10/2016 5:10:00 PM	8270 PCP
CTSO-C4D12-20160510	F160501-19	Soil	5/10/2016 5:01:00 PM	8270 PCP
CTSO-C5D01-20160510	F160501-20	Soil	5/10/2016 4:58:00 PM	8270 PCP
CTSO-C6D01-20160510	F160501-01	Soil	5/10/2016 4:54:00 PM	8270 PCP
CTSO-C7D01-20160510	F160501-02	Soil	5/10/2016 4:48:00 PM	8270 PCP
CTSO-D2D01-20160510	F160501-03	Soil	5/10/2016 5:13:00 PM	8270 PCP
CTSO-D3D12-20160510	F160501-04	Soil	5/10/2016 5:10:00 PM	8270 PCP
CTSO-D4D12-20160510	F160501-05	Soil	5/10/2016 5:01:00 PM	8270 PCP
CTSO-D5D12-20160510	F160501-06	Soil	5/10/2016 4:58:00 PM	8270 PCP
CTSO-D6D12-20160510	F160501-07	Soil	5/10/2016 4:54:00 PM	8270 PCP
CTSO-D7D12-20160510	F160501-08	Soil	5/10/2016 4:48:00 PM	8270 PCP
CTSO-DUP-20160510	F160501-09	Soil	5/10/2016	8270 PCP
CTSO-DUP2-20160510	F160501-10	Soil	5/10/2016	8270 PCP
Blacktar	F160502-02	Soil	5/17/2016 7:11:00 AM	8270 PCP
CTSO-A5D23-20160517	F160502-03	Soil	5/17/2016 9:52:00 AM	8270 PCP
CTSO-A6D34-20160517	F160502-04	Soil	5/17/2016 9:49:00 AM	8270 PCP
CTSO-A7D34-20160517	F160502-05	Soil	5/17/2016 9:43:00 AM	8270 PCP
CTSO-B1D01-20160517	F160502-06	Soil	5/17/2016 9:55:00 AM	8270 PCP
CTSO-C1D01-20160517	F160502-07	Soil	5/17/2016 9:59:00 AM	8270 PCP

Sample Name	Lab Sample Name	Matrix Type	Collection Date	Method
CTSO-E3D12-20160517	F160502-11	Soil	5/17/2016 12:59:00 PM	8270 PCP
CTSO-E4D12-20160517	F160502-08	Soil	5/17/2016 12:57:00 PM	8270 PCP
CTSO-E5D23-20160517	F160502-12	Soil	5/17/2016 12:54:00 PM	8270 PCP
CTSO-E6D23-20160517	F160502-09	Soil	5/17/2016 12:51:00 PM	8270 PCP
CTSO-E7D23-20160517	F160502-10	Soil	5/17/2016 12:48:00 PM	8270 PCP
Foundation	F160502-01	Soil	5/17/2016 7:07:00 AM	8270 PCP
CTSO-A1D01-20160518	F160503-04	Soil	5/18/2016 1:08:00 PM	8270 PCP
CTSO-A2D01-20160518	F160503-03	Soil	5/18/2016 1:11:00 PM	8270 PCP
CTSO-A3D12-20160518	F160503-02	Soil	5/18/2016 1:14:00 PM	8270 PCP
CTSO-A4D23-20160518	F160503-01	Soil	5/18/2016 1:19:00 PM	8270 PCP
CTSO-A8D34-20160518	F160503-09	Soil	5/18/2016 1:39:00 PM	8270 PCP
CTSO-B8D34-20160518	F160503-10	Soil	5/18/2016 1:46:00 PM	8270 PCP
CTSO-C8D01-20160518	F160503-08	Soil	5/18/2016 1:49:00 PM	8270 PCP
CTSO-D1D01-20160518	F160503-05	Soil	5/18/2016 1:22:00 PM	8270 PCP
CTSO-D8D23-20160518	F160503-11	Soil	5/18/2016 1:52:00 PM	8270 PCP
CTSO-DUP3-20160518	F160503-06	Soil	5/18/2016	8270 PCP
CTSO-DUP4-20160518	F160503-07	Soil	5/18/2016	8270 PCP
CTSO-E8D23-20160518	F160503-12	Soil	5/18/2016 2:08:00 PM	8270 PCP
Foundation2	F160503-13	Soil	5/18/2016 3:50:00 PM	8270 PCP
CTSO-B5D12-20160519	F160504-04	Soil	5/19/2016 1:50:00 PM	8270 PCP
CTSO-C5D12-20160519	F160504-01	Soil	5/19/2016 7:15:00 AM	8270 PCP
CTSO-C6D12-20160519	F160504-02	Soil	5/19/2016 7:18:00 AM	8270 PCP
CTSO-C7D12-20160519	F160504-03	Soil	5/19/2016 7:22:00 AM	8270 PCP
CTSO-B1CON-20160520	F160505-01	Soil	5/20/2016 5:30:00 PM	8270 PCP
CTSO-B2I-20160521	F160505-02	Soil	5/21/2016 7:05:00 AM	8270 PCP
CTSO-C4D3-20160521	F160505-11	Soil	5/21/2016 3:07:00 PM	8270 PCP
CTSO-C5D3-20160521	F160505-09	Soil	5/21/2016 1:38:00 PM	8270 PCP
CTSO-C6D3-20160521	F160505-12	Soil	5/21/2016 3:28:00 PM	8270 PCP
CTSO-C7D3-20160521	F160505-13	Soil	5/21/2016 4:33:00 PM	8270 PCP
CTSO-D2D3-20160521	F160505-08	Soil	5/21/2016 1:33:00 PM	8270 PCP
CTSO-D4D3-20160521	F160505-04	Soil	5/21/2016 7:45:00 AM	8270 PCP
CTSO-D5D3-20160521	F160505-05	Soil	5/21/2016 7:47:00 AM	8270 PCP
CTSO-D6D3-20160521	F160505-06	Soil	5/21/2016 7:50:00 AM	8270 PCP
CTSO-D7D3-20160521	F160505-07	Soil	5/21/2016 7:53:00 AM	8270 PCP
CTSO-DUP5-20160520	F160505-03	Soil	5/20/2016	8270 PCP
CTSO-E5NS-20160521	F160505-10	Soil	5/21/2016 1:43:00 PM	8270 PCP
CTSO-B2D3-20160522	F160506-02	Soil	5/22/2016 2:17:00 PM	8270 PCP
CTSO-B3D3-20160522	F160506-03	Soil	5/22/2016 2:20:00 PM	8270 PCP
CTSO-B4D3-20160522	F160506-09	Soil	5/22/2016 5:11:00 PM	8270 PCP
CTSO-C3D3-20160522	F160506-04	Soil	5/22/2016 2:22:00 PM	8270 PCP
CTSO-C4D3-20160522	F160506-05	Soil	5/22/2016 2:43:00 PM	8270 PCP
CTSO-D3D4-20160522	F160506-06	Soil	5/22/2016 2:50:00 PM	8270 PCP

Sample Name	Lab Sample Name	Matrix Type	Collection Date	Method
CTSO-D4D4-20160522	F160506-08	Soil	5/22/2016 3:15:00 PM	8270 PCP
CTSO-D5D4-20160522	F160506-10	Soil	5/22/2016 5:15:00 PM	8270 PCP
CTSO-DPile1-20160522	F160506-01	Soil	5/22/2016 7:35:00 AM	8270 PCP
CTSO-DUP6-20160522	F160506-07	Soil	5/22/2016	8270 PCP
CTSO-B2D4-20160523	F160507-07	Soil	5/23/2016 2:47:00 PM	8270 PCP
CTSO-B3D4-20160523	F160507-09	Soil	5/23/2016 5:05:00 PM	8270 PCP
CTSO-B5D3-20160523	F160507-04	Soil	5/23/2016 11:10:00 AM	8270 PCP
CTSO-B6D3-20160523	F160507-05	Soil	5/23/2016 1:33:00 PM	8270 PCP
CTSO-B7D3-20160523	F160507-02	Soil	5/23/2016 9:20:00 AM	8270 PCP
CTSO-C3D4-20160523	F160507-10	Soil	5/23/2016 5:09:00 PM	8270 PCP
CTSO-C7D4-20160523	F160507-11	Soil	5/23/2016 5:15:00 PM	8270 PCP
CTSO-D6D4-20160523	F160507-03	Soil	5/23/2016 10:44:00 AM	8270 PCP
CTSO-D7D4-20160523	F160507-06	Soil	5/23/2016 2:42:00 PM	8270 PCP
CTSO-DPile2-20160523	F160507-01	Soil	5/23/2016 7:14:00 AM	8270 PCP
CTSO-DUP7-20160523	F160507-08	Soil	5/23/2016	8270 PCP
CTSO-DUP8-20160523	F160507-12	Soil	5/23/2016 5:15:00 PM	8270 PCP
CTSO-B4D4-20160524	F160508-05	Soil	5/23/2016 5:36:00 PM	8270 PCP
CTSO-B7D4-20160524	F160508-02	Soil	5/23/2016 1:08:00 PM	8270 PCP
CTSO-DPILE3-20160524	F160508-01	Soil	5/23/2016 7:30:00 AM	8270 PCP
CTSO-DUP9-20160524	F160508-03	Soil	5/23/2016 1:08:00 PM	8270 PCP
CTSO-E5D3-20160524	F160508-04	Soil	5/23/2016 2:42:00 PM	8270 PCP
CTSO-B4D4-20160525	F160509-02	Soil	5/25/2016 10:46:00 AM	8270 PCP
CTSO-B5D4-20160525	F160509-04	Soil	5/25/2016 1:10:00 PM	8270 PCP
CTSO-C4D4-20160525	F160509-01	Soil	5/25/2016 10:42:00 AM	8270 PCP
CTSO-C5D4-20160525	F160509-05	Soil	5/25/2016 4:40:00 PM	8270 PCP
CTSO-C6D4-20160525	F160509-06	Soil	5/25/2016 4:45:00 PM	8270 PCP
CTSO-DPILE4-20160525	F160509-03	Soil	5/25/2016 7:30:00 AM	8270 PCP
CTSO-DUP10-20160525	F160509-07	Soil	5/25/2016 4:45:00 PM	8270 PCP
CTSO-B2D5-20160526	F160510-05	Soil	5/26/2016 4:04:00 PM	8270 PCP
CTSO-B2ID3-20160526	F160510-07	Soil	5/26/2016 4:11:00 PM	8270 PCP
CTSO-B2Slope-20160526	F160510-04	Soil	5/26/2016 10:37:00 AM	8270 PCP
CTSO-B2Stain-20160526	F160510-03	Soil	5/26/2016 10:24:00 AM	8270 PCP
CTSO-B3D5-20160526	F160510-08	Soil	5/26/2016 5:10:00 PM	8270 PCP
CTSO-B6D4-20160526	F160510-02	Soil	5/26/2016 7:24:00 AM	8270 PCP
CTSO-C2D5-20160526	F160510-06	Soil	5/26/2016 4:07:00 PM	8270 PCP
CTSO-DPILE5-20160526	F160510-01	Soil	5/26/2016 6:54:00 AM	8270 PCP
CTSO-DUP11-20160526	F160510-09	Soil	5/26/2016 5:10:00 PM	8270 PCP
CTSO-B4D5-20160527	F160511-05	Soil	5/27/2016 12:14:00 PM	8270 PCP
CTSO-BORROW-20160527	F160511-07	Soil	5/27/2016 12:26:00 PM	8270 PCP
CTSO-C3D5-20160527	F160511-02	Soil	5/27/2016 11:58:00 AM	8270 PCP
CTSO-C4D5-20160527	F160511-06	Soil	5/27/2016 12:17:00 PM	8270 PCP
CTSO-C5D5-20160527	F160511-08	Soil	5/27/2016 3:52:00 PM	8270 PCP

Sample Name	Lab Sample Name	Matrix Type	Collection Date	Method
CTSO-C6D5-20160527	F160511-09	Soil	5/27/2016 4:15:00 PM	8270 PCP
CTSO-DPILE6-20160527	F160511-01	Soil	5/27/2016 7:15:00 AM	8270 PCP
CTSO-DRIPPADE-20160527	F160511-03	Soil	5/27/2016 12:05:00 PM	8270 PCP
CTSO-DRIPPADN-20160527	F160511-04	Soil	5/27/2016 12:09:00 PM	8270 PCP
CTSO-B2D6-20160529	F160512-04	Soil	5/29/2016 5:25:00 PM	8270 PCP
CTSO-B6D5-20160529	F160512-01	Soil	5/29/2016 2:00:00 PM	8270 PCP
CTSO-B7D5-20160529	F160512-02	Soil	5/29/2016 2:23:00 PM	8270 PCP
CTSO-C7D5-20160529	F160512-03	Soil	5/29/2016 4:45:00 PM	8270 PCP
CTSO-DUP12-20160529	F160512-05	Soil	5/29/2016 5:25:00 PM	8270 PCP
CTSO-A1RAMP-20160530	F160513-04	Soil	5/30/2016 1:15:00 PM	8270 PCP
CTSO-B3D6-20160530	F160513-06	Soil	5/30/2016 3:48:00 PM	8270 PCP
CTSO-B4D6-20160530	F160513-08	Soil	5/30/2016 3:16:00 PM	8270 PCP
CTSO-C3D6-20160530	F160513-05	Soil	5/30/2016 3:46:00 PM	8270 PCP
CTSO-C4D6-20160530	F160513-07	Soil	5/30/2016 3:52:00 PM	8270 PCP
CTSO-C5D8-20160530	F160513-09	Soil	5/30/2016 4:37:00 PM	8270 PCP
CTSO-C5DIRTY-20160530	F160513-03	Soil	5/30/2016 10:04:00 AM	8270 PCP
CTSO-C6D8-20160530	F160513-10	Soil	5/30/2016 4:40:00 PM	8270 PCP
CTSO-C6DIRTY-20160530	F160513-02	Soil	5/30/2016 10:02:00 AM	8270 PCP
CTSO-C7D8-20160530	F160513-11	Soil	5/30/2016 4:45:00 PM	8270 PCP
CTSO-C7DIRTY-20160530	F160513-01	Soil	5/30/2016 10:00:00 AM	8270 PCP
CTSO-B2D7-20160531	F160514-09	Soil	5/31/2016 12:50:00 PM	8270 PCP
CTSO-B2WSLOPE-20160531	F160514-14	Soil	5/31/2016 5:15:00 PM	8270 PCP
CTSO-B3SLOPE-20160531	F160514-04	Soil	5/31/2016 7:55:00 AM	8270 PCP
CTSO-B4D7-20160531	F160514-10	Soil	5/31/2016 3:46:00 PM	8270 PCP
CTSO-C3D7-20160531	F160514-11	Soil	5/31/2016 3:47:00 PM	8270 PCP
CTSO-C3PILE-20160531	F160514-08	Soil	5/31/2016 9:15:00 AM	8270 PCP
CTSO-C4D7-20160531	F160514-12	Soil	5/31/2016 4:12:00 PM	8270 PCP
CTSO-C5D8-20160531	F160514-01	Soil	5/31/2016 7:45:00 AM	8270 PCP
CTSO-C5WSIDEWALL-20160531	F160514-05	Soil	5/31/2016 8:08:00 AM	8270 PCP
CTSO-C5WSIDEWALL-20160531	F160514-13	Soil	5/31/2016 5:02:00 PM	8270 PCP
CTSO-C6D8-20160531	F160514-02	Soil	5/31/2016 7:48:00 AM	8270 PCP
CTSO-C7D8-20160531	F160514-03	Soil	5/31/2016 7:50:00 AM	8270 PCP
CTSO-DPILE7-20160531	F160514-06	Soil	5/31/2016 8:15:00 AM	8270 PCP
CTSO-DUP13-20160531	F160514-07	Soil	5/31/2016 8:15:00 AM	8270 PCP
CTSO-A1D1-20160601	F160601-02	Soil	6/1/2016 8:20:00 AM	8270 PCP
CTSO-B2SIDEWALL-20160601	F160601-03	Soil	6/1/2016 10:05:00 AM	8270 PCP
CTSO-B2SIDEWALL2-20160601	F160601-04	Soil	6/1/2016 1:09:00 PM	8270 PCP
CTSO-DPILE8-20160601	F160601-01	Soil	6/1/2016 7:55:00 AM	8270 PCP

Sample Name	Lab Sample Name	Matrix Type	Collection Date	Method
CTSO-B2D8-20160602	F160602-02	Soil	6/2/2016 1:15:00 PM	8270 PCP
CTSO-B4D8-20160602	F160602-08	Soil	6/2/2016 5:20:00 PM	8270 PCP
CTSO-C3D8-20160602	F160602-07	Soil	6/2/2016 4:20:00 PM	8270 PCP
CTSO-C3ND8-20160602	F160602-09	Soil	6/2/2016 5:25:00 PM	8270 PCP
CTSO-C5D11-20160602	F160602-05	Soil	6/2/2016 2:50:00 PM	8270 PCP
CTSO-C5NSW-20160602	F160602-06	Soil	6/2/2016 2:51:00 PM	8270 PCP
CTSO-C6D11-20160602	F160602-03	Soil	6/2/2016 1:47:00 PM	8270 PCP
CTSO-DPILE9-20160602	F160602-01	Soil	6/2/2016 7:40:00 AM	8270 PCP
CTSO-DUP14-20160602	F160602-04	Soil	6/2/2016 1:47:00 PM	8270 PCP
CTSO-B2D9-20160603	F160603-02	Soil	6/3/2016 10:20:00 AM	8270 PCP
CTSO-B4D9-20160603	F160603-03	Soil	6/3/2016 11:40:00 AM	8270 PCP
CTSO-C3D11-20160603	F160603-08	Soil	6/3/2016 4:28:00 PM	8270 PCP
CTSO-C3ESW-20160603	F160603-06	Soil	6/3/2016 4:26:00 PM	8270 PCP
CTSO-C3NSW-20160603	F160603-07	Soil	6/3/2016 4:28:00 PM	8270 PCP
CTSO-C4D11-20160603	F160603-04	Soil	6/3/2016 4:10:00 PM	8270 PCP
CTSO-C4ESW-20160603	F160603-05	Soil	6/3/2016 4:12:00 PM	8270 PCP
CTSO-DPILE10-20160603	F160603-01	Soil	6/3/2016 7:20:00 AM	8270 PCP
CTSO-A10D1-20160615	F160604-09	Soil	6/15/2016 3:35:00 PM	8270 PCP
CTSO-A11D1-20160615	F160604-01	Soil	6/15/2016 2:20:00 PM	8270 PCP
CTSO-A9D1-20160615	F160604-12	Soil	6/15/2016 4:45:00 PM	8270 PCP
CTSO-B10D1-20160615	F160604-10	Soil	6/15/2016 3:42:00 PM	8270 PCP
CTSO-B11D1-20160615	F160604-03	Soil	6/15/2016 2:25:00 PM	8270 PCP
CTSO-C11D1-20160615	F160604-04	Soil	6/15/2016 2:30:00 PM	8270 PCP
CTSO-D11D1-20160615	F160604-05	Soil	6/15/2016 2:35:00 PM	8270 PCP
CTSO-DUP16-20160615	F160604-02	Soil	6/15/2016	8270 PCP
CTSO-DUP17-20160615	F160604-11	Soil	6/15/2016	8270 PCP
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CTSO-E9D1-20160615	F160604-08	Soil	6/15/2016 2:47:00 PM	8270 PCP
CTSO-C10D1-20160616	F160605-03	Soil	6/16/2016 9:45:00 AM	8270 PCP
CTSO-C11D1S-20160616	F160605-01	Soil	6/16/2016 7:50:00 AM	8270 PCP
CTSO-C11STAIN-20160616	F160605-02	Soil	6/16/2016 8:00:00 AM	8270 PCP
CTSO-D10D1-20160616	F160605-04	Soil	6/16/2016 9:50:00 AM	8270 PCP
CTSO-B9D1-20160617	F160606-01	Soil	6/17/2016 7:30:00 AM	8270 PCP
CTSO-D10D4-20160617	F160606-08	Soil	6/17/2016 2:18:00 PM	8270 PCP
CTSO-D11D1S-20160617	F160606-03	Soil	6/17/2016 7:43:00 AM	8270 PCP
CTSO-D11D3-20160617	F160606-07	Soil	6/17/2016 2:15:00 PM	8270 PCP
CTSO-E10D2-20160617	F160606-05	Soil	6/17/2016 8:55:00 AM	8270 PCP
CTSO-E11D1S-20160617	F160606-02	Soil	6/17/2016 7:37:00 AM	8270 PCP
CTSO-E11D2-20160617	F160606-06	Soil	6/17/2016 2:00:00 PM	8270 PCP
CTSO-E9D2-20160617	F160606-04	Soil	6/17/2016 8:47:00 AM	8270 PCP
CTSO-A10D2-20160619	F160607-03	Soil	6/19/2016 11:40:00 AM	8270 PCP

Sample Name	Lab Sample Name	Matrix Type	Collection Date	Method
CTSO-A9D2-20160619	F160607-05	Soil	6/19/2016 3:30:00 PM	8270 PCP
CTSO-B9D2-20160619	F160607-06	Soil	6/19/2016 4:00:00 PM	8270 PCP
CTSO-C10D2-20160619	F160607-01	Soil	6/19/2016 9:15:00 AM	8270 PCP
CTSO-C11D2-20160619	F160607-02	Soil	6/19/2016 9:20:00 AM	8270 PCP
CTSO-DUP18-20160619	F160607-04	Soil	6/19/2016	8270 PCP
CTSO-A10D3-20160620	F160608-03	Soil	6/20/2016 2:42:00 PM	8270 PCP
CTSO-A10WSW-20160620	F160608-05	Soil	6/20/2016 2:46:00 PM	8270 PCP
CTSO-A9D3-20160620	F160608-07	Soil	6/20/2016 4:17:00 PM	8270 PCP
CTSO-A9WSW-20160620	F160608-06	Soil	6/20/2016 3:55:00 PM	8270 PCP
CTSO-C11D4-20160620	F160608-02	Soil	6/20/2016 9:55:00 AM	8270 PCP
CTSO-D11D3-20160620	F160608-01	Soil	6/20/2016 9:50:00 AM	8270 PCP
CTSO-DUP19-20160620	F160608-04	Soil	6/20/2016	8270 PCP
CTSO-A10D4-20160621	F160609-02	Soil	6/21/2016 9:45:00 AM	8270 PCP
CTSO-A8D2-20160621	F160609-03	Soil	6/21/2016 10:17:00 AM	8270 PCP
CTSO-B9D3-20160621	F160609-01	Soil	6/21/2016 8:55:00 AM	8270 PCP
CTSO-C8D1-20160621	F160609-06	Soil	6/21/2016 12:05:00 PM	8270 PCP
CTSO-C9D1-20160621	F160609-04	Soil	6/21/2016 11:55:00 AM	8270 PCP
CTSO-D9D1-20160621	F160609-05	Soil	6/21/2016 12:01:00 PM	8270 PCP
CTSO-A8D3-20160622	F160610-07	Soil	6/22/2016 3:40:00 PM	8270 PCP
CTSO-A8WSW-20160622	F160610-08	Soil	6/22/2016 3:43:00 PM	8270 PCP
CTSO-AA10D1-20160622	F160610-05	Soil	6/22/2016 3:25:00 PM	8270 PCP
CTSO-AA9D1-20160622	F160610-06	Soil	6/22/2016 3:35:00 PM	8270 PCP
CTSO-C8D3-20160622	F160610-04	Soil	6/22/2016 11:18:00 AM	8270 PCP
CTSO-C9D3-20160622	F160610-01	Soil	6/22/2016 8:50:00 AM	8270 PCP
CTSO-D9D3-20160622	F160610-03	Soil	6/22/2016 8:54:00 AM	8270 PCP
CTSO-DUP20-20160622	F160610-02	Soil	6/22/2016	8270 PCP
CTSO-07-20160623	F160611-04	Soil	6/23/2016 9:00:00 AM	8270 PCP
CTSO-A11D2-20160623	F160611-08	Soil	6/23/2016 2:05:00 PM	8270 PCP
CTSO-A8NSW-20160623	F160611-03	Soil	6/23/2016 8:50:00 AM	8270 PCP
CTSO-AA10D4-20160623	F160611-05	Soil	6/23/2016 10:35:00 AM	8270 PCP
CTSO-AA7D1-20160623	F160611-02	Soil	6/23/2016 8:47:00 AM	8270 PCP
CTSO-AA8D1-20160623	F160611-01	Soil	6/23/2016 8:40:00 AM	8270 PCP
CTSO-AA9D4-20160623	F160611-11	Soil	6/23/2016 2:19:00 PM	8270 PCP
CTSO-AA9WSW-20160623	F160611-12	Soil	6/23/2016 2:30:00 PM	8270 PCP
CTSO-AASSW-20160623	F160611-06	Soil	6/23/2016 10:39:00 AM	8270 PCP
CTSO-AAWSW-20160623	F160611-07	Soil	6/23/2016 10:41:00 AM	8270 PCP
CTSO-B10D2-20160623	F160611-10	Soil	6/23/2016 2:15:00 PM	8270 PCP
CTSO-B11D2-20160623	F160611-09	Soil	6/23/2016 2:07:00 PM	8270 PCP
CTSO-A11D3-20160624	F160612-11	Soil	6/24/2016 4:50:00 PM	8270 PCP
CTSO-AA10TP-20160624	F160612-07	Soil	6/24/2016 10:01:00 AM	8270 PCP
CTSO-AA7D4-20160624	F160612-08	Soil	6/24/2016 11:15:00 AM	8270 PCP
CTSO-AA7NSW-20160624	F160612-10	Soil	6/24/2016 11:22:00 AM	8270 PCP

Sample Name	Lab Sample Name	Matrix Type	Collection Date	Method
CTSO-AA7TP-20160624	F160612-04	Soil	6/24/2016 9:45:00 AM	8270 PCP
CTSO-AA7WSW-20160624	F160612-09	Soil	6/24/2016 11:19:00 AM	8270 PCP
CTSO-AA8D4-20160624	F160612-01	Soil	6/24/2016 8:25:00 AM	8270 PCP
CTSO-AA8TP-20160624	F160612-05	Soil	6/24/2016 9:50:00 AM	8270 PCP
CTSO-AA8WSW-20160624	F160612-03	Soil	6/24/2016 8:28:00 AM	8270 PCP
CTSO-AA9TP-20160624	F160612-06	Soil	6/24/2016 9:57:00 AM	8270 PCP
CTSO-DUP21-20160624	F160612-02	Soil	6/24/2016	8270 PCP
CTSO-AA10D3-20160625	F160613-06	Soil	6/25/2016 9:00:00 AM	8270 PCP
CTSO-AA10SSW-20160625	F160613-09	Soil	6/25/2016 9:07:00 AM	8270 PCP
CTSO-AA10SSW2-20160625	F160613-10	Soil	6/25/2016 4:25:00 PM	8270 PCP
CTSO-AA10WSW-20160625	F160613-08	Soil	6/25/2016 9:04:00 AM	8270 PCP
CTSO-AA7D4-20160625	F160613-02	Soil	6/25/2016 7:04:00 AM	8270 PCP
CTSO-AA7NSW-20160625	F160613-01	Soil	6/25/2016 7:00:00 AM	8270 PCP
CTSO-AA7WSW-20160625	F160613-03	Soil	6/25/2016 7:12:00 AM	8270 PCP
CTSO-B10D3-20160625	F160613-04	Soil	6/25/2016 7:25:00 AM	8270 PCP
CTSO-B11D3-20160625	F160613-05	Soil	6/25/2016 7:30:00 AM	8270 PCP
CTSO-DUP22-20160625	F160613-07	Soil	6/25/2016 9:00:00 AM	8270 PCP
CTSO-CELL-20160630	F160701-01	Soil	6/30/2016 4:20:00 PM	8270 PCP
CTSO-DUP23-20160630	F160701-02	Soil	6/30/2016	8270 PCP

II. Sample Management

Two hundred fifty one (251) soil samples were collected between May 10 and June 30, 2016. According to the case narrative and/or COC, the samples in SDG F160501 were received within the temperature limits of 4°C ±2°C; however, all remaining samples were received at ambient temperature, as samples were continuously hand-delivered directly from the field to the on-site mobile laboratory, where they were routinely extracted and analyzed immediately. If extraction and/or analysis was not performed upon receipt, the samples and/or extracts were refrigerated and cooled to within temperature limits. Upon completion of the analytical process, samples were appropriately disposed of and the sample extracts were stored within temperature limits. The chains-of-custody (COCs) were appropriately signed and dated by field and laboratory personnel. Custody seals were not utilized, as field personnel relinquished the samples directly to on-site laboratory personnel.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material 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. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential positive bias.
J-	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential negative bias.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.

Qualifier	Organics	Inorganics
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995 or calibration was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
L1	LCS/LCSD RPD was outside control limits.	LCS/LCSD RPD was outside control limits.
Q	MS/MSD recovery was poor.	MS recovery was poor.
Q1	MS/MSD RPD was outside control limits.	MS/MSD RPD was outside control limits.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	ICPMS tune was not compliant.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
F1	Field duplicate results were outside the control limit.	Field duplicate results were outside the control limit.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualifier	Organics	Inorganics
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analysis

1. EPA METHOD 8270C Modified—Pentachlorophenol

Reviewed By: L. Calvin
Date Reviewed: September 12, 2016

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13 and 2015 update), *EPA Method 8270C*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (8/14).

- Holding Times: Extraction and analytical holding times were met. The samples were extracted within 14 days of collection and analyzed within 40 days of extraction. All re-extractions and/or reanalyses were performed within holding time.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. All samples were analyzed within 12 hours of the DFTPP injection time.

- Calibration: Calibration criteria were met. Five initial calibrations, five ICVs, and 56 continuing calibrations were associated with the samples in these SDGs. Initial calibration average RRFs were ≥0.05 and r^2 were ≥0.990. ICV and continuing calibration RRFs were ≥0.05 and all recoveries were within the control limit of ±20%.

- Laboratory Blanks: Twenty eight (28) method blanks were associated with the samples in these SDGs. The method blanks had no detects above the MDL for pentachlorophenol.

- Blank Spikes and Laboratory Control Samples: Twenty eight (28) LCSs were associated with the samples in these SDGs. All recoveries for pentachlorophenol were within the control limits of 70-130%.

- Laboratory Duplicate Samples: A laboratory duplicate analysis was performed on sample CTSO-C7D3-20160521 (SDG F160505). The RPD for pentachlorophenol was within the laboratory control limit of ≤47%.

- Surrogate Recovery: Surrogate recoveries were not evaluated in samples analyzed at dilutions of 10× or greater, as the surrogate concentration was considered diluted out. Remaining recoveries for surrogate 2,4,6-tribromophenol were within the control limits of 50-150%. The laboratory re-extracted and reanalyzed sample CTSO-C7D3-20160521 (SDG F160505) to verify the surrogate recovery of 51%; within the control limits, but uncharacteristically low. The reanalysis indicated a matrix effect on the surrogate for that sample. No qualification was necessary.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on twenty eight (28) samples; one from each SDG: CTSO-C7D01-20160510, Foundation, CTSO-A4D23-20160518, CTSO-C5D12-20160519, CTSO-B1CON-20160520, CTSO-D3D4-20160522, CTSO-DPile2-20160523, CTSO-DUP9-20160524, CTSO-B4D4-20160525, CTSO-B6D4-20160526, CTSO-C3D5-20160527,

CTSO-C7D5-20160529, CTSO-A1RAMP-20160530, CTSO-DPILE7-20160531, CTSO-A1D1-20160601, CTSO-DPILE9-20160602, CTSO-DPILE10-20160603, CTSO-A11D1-20160615, CTSO-C11D1S-20160616, CTSO-D11D1S-20160617, CTSO-C11D2-20160619, CTSO-D11D3-20160620, CTSO-B9D3-20160621, CTSO-C9D3-20160622, CTSO-A8NSW-20160623, CTSO-DUP21-20160624, CTSO-AA7NSW-20160625, and CTSO-CELL-20160630.

The concentration of pentachlorophenol in parent sample CTSO-DPILE7-20160531 exceeded 4× the spike concentration; therefore, the recoveries and RPD were not evaluated. Recoveries were above the control limits for the MS and MSD of samples CTSO-DPILE9-20160602 (267%/284%) CTSO-C11D2-20160619 (110%/128%), and CTSO-A8NSW-20160623 (110%/136%). Parent sample results for pentachlorophenol were qualified as estimated with a potential positive bias (J+). Remaining recoveries and all RPDs were within the laboratory control limits of 17-109% and ≤47%, respectively.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

    - Field Duplicates: Twenty two (22) field duplicate pairs were identified in these SDGs, as noted in the table below. With one exception, RPDs for pentachlorophenol detects were within the control limit of ≤50%. Results for pentachlorophenol in samples CTSO-C7D4-20160523 and CTSO-DUP8-20160523 were qualified as estimated (J).

SDG	Parent Sample	Field Duplicate	RPD
F160501	CTSO-B5D01-20160510	CTSO-DUP-20160510	9.3%
F160501	CTSO-C3D12-20160510	CTSO-DUP2-20160510	5.7%
F160503	CTSO-A2D01-20160518	CTSO-DUP3-20160518	2.2%
F160503	CTSO-D1D01-20160518	CTSO-DUP4-20160518	N/A (ND)
F160505	CTSO-B1CON-20160520	CTSO-DUP5-20160520	23%
F160506	CTSO-D3D4-20160522	CTSO-DUP6-20160522	N/A (ND)
F160507	CTSO-B2D4-20160523	CTSO-DUP7-20160523	23%
F160507	CTSO-C7D4-20160523	CTSO-DUP8-20160523	**98%**
F160508	CTSO-B7D4-20160524	CTSO-DUP9-20160524	26%
F160509	CTSO-C6D4-20160525	CTSO-DUP10-20160525	7.6%
F160510	CTSO-B3D5-20160526	CTSO-DUP11-20160526	13%
F160512	CTSO-B2D6-20160529	CTSO-DUP12-20160529	16%
F160514	CTSO-DPILE7-20160531	CTSO-DUP13-20160531	9.6%
F160602	CTSO-C6D11-20160602	CTSO-DUP14-20160602	13%
F160604	CTSO-A11D1-20160615	CTSO-DUP16-20160615	6.2%
F160604	CTSO-B10D1-20160615	CTSO-DUP17-20160615	3.0%

SDG	Parent Sample	Field Duplicate	RPD
F160607	CTSO-A10D2-20160619	CTSO-DUP18-20160619	2.0%
F160608	CTSO-A10D3-20160620	CTSO-DUP19-20160620	3.4%
F160610	CTSO-C9D3-20160622	CTSO-DUP20-20160622	N/A (ND)
F160612	CTSO-AA8D4-20160624	CTSO-DUP21-20160624	2.9%
F160613	CTSO-AA10D3-20160625	CTSO-DUP22-20160625	N/A (ND)
F160701	CTSO-CELL-20160630	CTSO-DUP23-20160630	2.4%

- Internal Standards Performance: The internal standard area counts and retention times were within the control limits established by the continuing calibration standards, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the calibration, QC, and sample chromatograms and retention times indicated no issues with target compound identification. Spectra were not provided.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDL. Results reported between the MDL and the reporting limit were qualified as estimated (J). Reported nondetects are valid to the reporting limit.

  The laboratory performed a percent solids (% solids) determination on all of the samples; however, all results for pentachlorophenol were reported on a wet-weight basis. The percent solid results ranged from 77.1% to 98.8%; however, the reviewer noted that most were >90%.

  Sixty five samples were analyzed at dilutions in an attempt to report pentachlorophenol within the linear range of the calibration, as noted in the table below, pentachlorophenol was reported above the linear calibration range in eight samples: CTSO-C3D3-20160522, CTSO-B5D3-20160523, CTSO-C4D5-20160527, CTSO-C5D5-20160527, CTSO-C6D5-20160527, CTSO-A10WSW-20160620, CTSO-A9WSW-20160620, and CTSO-AAWSW-20160623. Results above linear range were qualified as estimated (J).

Dilution	Samples
2×	CTSO-C4D4-20160525, CTSO-C6D4-20160525, CTSO-DUP10-20160525, CTSO-B2Stain-20160526, CTSO-C3PILE-20160531, CTSO-C5WSIDEWALL-20160531, CTSO-DPILE7-20160531, CTSO-DUP13-20160531, CTSO-DPILE9-20160602, CTSO-B4D9-20160603, CTSO-DPILE10-20160603, CTSO-C10D1-20160616, CTSO-D10D1-20160616, CTSO-B9D2-20160619, CTSO-C8D1-20160621, CTSO-07-20160623, CTSO-A11D2-20160623, CTSO-AA9WSW-20160623, CTSO-AASSW-20160623
5×	CTSO-C6D8-20160531, CTSO-B2SIDEWALL-20160601, CTSO-DPILE8-20160601, CTSO-B2D8-20160602, CTSO-C3D8-20160602, CTSO-C5NSW-20160602, CTSO-A10D2-20160619, CTSO-A9D2-20160619, CTSO-DUP18-20160619,

Dilution	Samples
	CTSO-A10WSW-20160620, CTSO-A9WSW-20160620, CTSO-A8D2-20160621, CTSO-AA7NSW-20160624, CTSO-AA7WSW-20160624, CTSO-AA8WSW-20160624
10×	CTSO-C4D12-20160510, CTSO-C5D01-20160510, CTSO-DRIPPADE-20160527, CTSO-DRIPPADN-20160527, CTSO-C6D8-20160530, CTSO-C6DIRTY-20160530, CTSO-C7DIRTY-20160530, CTSO-B2D7-20160531, CTSO-B2WSLOPE-20160531, CTSO-B3SLOPE-20160531, CTSO-B4D7-20160531, CTSO-C3D7-20160531, CTSO-C3D7-20160531, CTSO-C7D8-20160531, CTSO-B2SIDEWALL2-20160601, CTSO-C5D11-20160602, CTSO-C6D11-20160602, CTSO-DUP14-20160602, CTSO-A8WSW-20160622, CTSO-AA10D1-20160622, CTSO-AA9D1-20160622, CTSO-AA7D1-20160623
20×	CTSO-B2D01-20160510, CTSO-C4D3-20160522, CTSO-C4D6-20160530, CTSO-C5D8-20160530,
50×	CTSO-AA8D1-20160623
100×	CTSO-C6D01-20160510, CTSO-D2D01-20160510

- Tentatively Identified Compounds: A TIC search was not performed for the samples in this SDG as the analysis was focused upon pentachlorophenol.

- System Performance: Review of the raw data indicated no problems with system performance.

Validated Sample Result Forms

Sample Delivery Group F160501

Sample Name CTSO-C6D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-01 **Sample Date:** 5/10/2016 4:54:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	744	200	132	mg/kg	D		
% Solids	NA	97.4			% by Weight			

Sample Name CTSO-C7D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-02 **Sample Date:** 5/10/2016 4:48:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	4.67	2.00	1.32	mg/kg			
% Solids	NA	97.0			% by Weight			

Sample Name CTSO-D2D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-03 **Sample Date:** 5/10/2016 5:13:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	377	200	132	mg/kg	D		
% Solids	NA	94.6			% by Weight			

Sample Name CTSO-D3D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-04 **Sample Date:** 5/10/2016 5:10:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.48	2.00	1.32	mg/kg			
% Solids	NA	97.9			% by Weight			

Sample Name CTSO-D4D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-05 **Sample Date:** 5/10/2016 5:01:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.0			% by Weight			

Sample Name CTSO-D5D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-06 **Sample Date:** 5/10/2016 4:58:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.8			% by Weight			

Sample Name CTSO-D6D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-07 **Sample Date:** 5/10/2016 4:54:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.57	2.00	1.32	mg/kg			
% Solids	NA	98.6			% by Weight			

Sample Name CTSO-D7D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-08 **Sample Date:** 5/10/2016 4:48:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.29	2.00	1.32	mg/kg			
% Solids	NA	98.8			% by Weight			

Sample Name CTSO-DUP-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-09 **Sample Date:** 5/10/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	4.94	2.00	1.32	mg/kg			
% Solids	NA	96.9			% by Weight			

Sample Name CTSO-DUP2-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-10 **Sample Date:** 5/10/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	30.8	2.00	1.32	mg/kg			
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-B2D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-11 **Sample Date:** 5/10/2016 5:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	234	40.0	26.4	mg/kg	D		
% Solids	NA	93.1			% by Weight			

Sample Name CTSO-B3D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-12 **Sample Date:** 5/10/2016 5:16:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	92.1	2.00	1.32	mg/kg			
% Solids	NA	96.4			% by Weight			

Sample Name CTSO-B4D23-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-13 **Sample Date:** 5/10/2016 5:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.26	2.00	1.32	mg/kg			
% Solids	NA	97.3			% by Weight			

Sample Name CTSO-B5D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-14 **Sample Date:** 5/10/2016 5:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	4.50	2.00	1.32	mg/kg			
% Solids	NA	96.8			% by Weight			

Sample Name CTSO-B6D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-15 **Sample Date:** 5/10/2016 5:23:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	11.7	2.00	1.32	mg/kg			
% Solids	NA	97.9			% by Weight			

Sample Name CTSO-B7D23-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-16 **Sample Date:** 5/10/2016 5:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.6			% by Weight			

Sample Name CTSO-C2D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-17 **Sample Date:** 5/10/2016 5:13:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.58	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.5			% by Weight			

Sample Name CTSO-C3D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-18 **Sample Date:** 5/10/2016 5:10:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	32.6	2.00	1.32	mg/kg			
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-C4D12-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-19 **Sample Date:** 5/10/2016 5:01:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	163	20.0	13.2	mg/kg	D		
% Solids	NA	95.6			% by Weight			

Sample Name CTSO-C5D01-20160510 **Matrix Type:** Soil

Lab Sample Name: F160501-20 **Sample Date:** 5/10/2016 4:58:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	93.2	20.0	13.2	mg/kg	D		
% Solids	NA	95.7			% by Weight			

Sample Delivery Group F160502

Sample Name Foundation **Matrix Type:** Soil

Lab Sample Name: F160502-01 **Sample Date:** 5/17/2016 7:07:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.4			% by Weight			

Sample Name Blacktar **Matrix Type:** Soil

Lab Sample Name: F160502-02 **Sample Date:** 5/17/2016 7:11:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<20.0	20.0	13.2	mg/kg	U	U	
% Solids	NA	77.3			% by Weight			

Sample Name CTSO-A5D23-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-03 **Sample Date:** 5/17/2016 9:52:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	89.5			% by Weight			

Sample Name CTSO-A6D34-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-04 **Sample Date:** 5/17/2016 9:49:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	83.1			% by Weight			

Sample Name CTSO-A7D34-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-05 **Sample Date:** 5/17/2016 9:43:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	85.8			% by Weight			

Sample Name CTSO-B1D01-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-06 **Sample Date:** 5/17/2016 9:55:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	82.2			% by Weight			

Sample Name CTSO-C1D01-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-07 **Sample Date:** 5/17/2016 9:59:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	84.9			% by Weight			

Sample Name CTSO-E4D12-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-08 **Sample Date:** 5/17/2016 12:57:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	90.1			% by Weight			

Sample Name CTSO-E6D23-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-09 **Sample Date:** 5/17/2016 12:51:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.72	2.00	1.32	mg/kg	J	J	
% Solids	NA	87.8			% by Weight			

Sample Name CTSO-E7D23-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-10 **Sample Date:** 5/17/2016 12:48:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	86.6			% by Weight			

Sample Name CTSO-E3D12-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-11 **Sample Date:** 5/17/2016 12:59:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	5.58	2.00	1.32	mg/kg			
% Solids	NA	91.4			% by Weight			

Sample Name CTSO-E5D23-20160517 **Matrix Type:** Soil

Lab Sample Name: F160502-12 **Sample Date:** 5/17/2016 12:54:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	10.5	2.00	1.32	mg/kg			
% Solids	NA	91.4			% by Weight			

Sample Delivery Group F160503

Sample Name CTSO-A4D23-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-01 **Sample Date:** 5/18/2016 1:19:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.36	2.00	1.32	mg/kg	J	J	
% Solids	NA	97.0			% by Weight			

Sample Name CTSO-A3D12-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-02 **Sample Date:** 5/18/2016 1:14:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.26	2.00	1.32	mg/kg			
% Solids	NA	96.8			% by Weight			

Sample Name CTSO-A2D01-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-03 **Sample Date:** 5/18/2016 1:11:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.84	2.00	1.32	mg/kg	J	J	
% Solids	NA	93.4			% by Weight			

Sample Name CTSO-A1D01-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-04 **Sample Date:** 5/18/2016 1:08:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	20.1	2.00	1.32	mg/kg			
% Solids	NA	96.6			% by Weight			

Sample Name CTSO-D1D01-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-05 **Sample Date:** 5/18/2016 1:22:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.3			% by Weight			

Sample Name CTSO-DUP3-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-06 **Sample Date:** 5/18/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.80	2.00	1.32	mg/kg	J	J	
% Solids	NA	93.8			% by Weight			

Sample Name CTSO-DUP4-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-07 **Sample Date:** 5/18/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.4			% by Weight			

Sample Name CTSO-C8D01-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-08 **Sample Date:** 5/18/2016 1:49:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	10.6	2.00	1.32	mg/kg			
% Solids	NA	96.0			% by Weight			

Sample Name CTSO-A8D34-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-09 **Sample Date:** 5/18/2016 1:39:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.37	2.00	1.32	mg/kg			
% Solids	NA	94.2			% by Weight			

Sample Name CTSO-B8D34-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-10 **Sample Date:** 5/18/2016 1:46:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	96.7			% by Weight			

Sample Name CTSO-D8D23-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-11 **Sample Date:** 5/18/2016 1:52:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	7.46	2.00	1.32	mg/kg			
% Solids	NA	97.2			% by Weight			

Sample Name CTSO-E8D23-20160518 **Matrix Type:** Soil

Lab Sample Name: F160503-12 **Sample Date:** 5/18/2016 2:08:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.68	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.5			% by Weight			

Sample Name Foundation2 **Matrix Type:** Soil

Lab Sample Name: F160503-13 **Sample Date:** 5/18/2016 3:50:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	94.8			% by Weight			

Sample Delivery Group F160504

Sample Name CTSO-C5D12-20160519 **Matrix Type:** Soil

Lab Sample Name: F160504-01 **Sample Date:** 5/19/2016 7:15:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	22.8	2.00	1.32	mg/kg			
% Solids	NA	95.7			% by Weight			

Sample Name CTSO-C6D12-20160519 **Matrix Type:** Soil

Lab Sample Name: F160504-02 **Sample Date:** 5/19/2016 7:18:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	18.8	2.00	1.32	mg/kg			
% Solids	NA	96.7			% by Weight			

Sample Name CTSO-C7D12-20160519 **Matrix Type:** Soil

Lab Sample Name: F160504-03 **Sample Date:** 5/19/2016 7:22:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	70.9	2.00	1.32	mg/kg			
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-B5D12-20160519 **Matrix Type:** Soil

Lab Sample Name: F160504-04 **Sample Date:** 5/19/2016 1:50:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	55.9	2.00	1.32	mg/kg			
% Solids	NA	96.0			% by Weight			

Sample Delivery Group F160505

Sample Name CTSO-B1CON-20160520 **Matrix Type:** Soil

Lab Sample Name: F160505-01 **Sample Date:** 5/20/2016 5:30:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.75	2.00	1.32	mg/kg			
% Solids	NA	95.7			% by Weight			

Sample Name CTSO-B2I-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-02 **Sample Date:** 5/21/2016 7:05:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	57.5	2.00	1.32	mg/kg			
% Solids	NA	91.1			% by Weight			

Sample Name CTSO-DUP5-20160520 **Matrix Type:** Soil

Lab Sample Name: F160505-03 **Sample Date:** 5/20/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.45	2.00	1.32	mg/kg			
% Solids	NA	96.5			% by Weight			

Sample Name CTSO-D4D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-04 **Sample Date:** 5/21/2016 7:45:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.38	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.6			% by Weight			

Sample Name CTSO-D5D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-05 **Sample Date:** 5/21/2016 7:47:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.2			% by Weight			

Sample Name CTSO-D6D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-06 **Sample Date:** 5/21/2016 7:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.71	2.00	1.32	mg/kg			
% Solids	NA	96.8			% by Weight			

Sample Name CTSO-D7D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-07 **Sample Date:** 5/21/2016 7:53:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.71	2.00	1.32	mg/kg			
% Solids	NA	96.7			% by Weight			

Sample Name CTSO-D2D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-08 **Sample Date:** 5/21/2016 1:33:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	5.84	2.00	1.32	mg/kg			
% Solids	NA	92.3			% by Weight			

Sample Name CTSO-C5D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-09 **Sample Date:** 5/21/2016 1:38:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	33.2	2.00	1.32	mg/kg			
% Solids	NA	95.9			% by Weight			

Sample Name CTSO-E5NS-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-10 **Sample Date:** 5/21/2016 1:43:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	9.03	2.00	1.32	mg/kg			
% Solids	NA	99.5			% by Weight			

Sample Name CTSO-C4D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-11 **Sample Date:** 5/21/2016 3:07:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	43.2	2.00	1.32	mg/kg			
% Solids	NA	92.3			% by Weight			

Sample Name CTSO-C6D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-12 **Sample Date:** 5/21/2016 3:28:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	39.9	2.00	1.32	mg/kg			
% Solids	NA	94.7			% by Weight			

Sample Name CTSO-C7D3-20160521 **Matrix Type:** Soil

Lab Sample Name: F160505-13 **Sample Date:** 5/21/2016 4:33:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	4.16	2.00	1.32	mg/kg			
% Solids	NA	94.9			% by Weight			

Sample Delivery Group F160506

Sample Name CTSO-DPile1-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-01 **Sample Date:** 5/22/2016 7:35:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	76.1	2.00	1.32	mg/kg			
% Solids	NA	95.5			% by Weight			

Sample Name CTSO-B2D3-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-02 **Sample Date:** 5/22/2016 2:17:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	69.9	2.00	1.32	mg/kg			
% Solids	NA	92.4			% by Weight			

Sample Name CTSO-B3D3-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-03 **Sample Date:** 5/22/2016 2:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	90.2	2.00	1.32	mg/kg			
% Solids	NA	89.0			% by Weight			

Sample Name CTSO-C3D3-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-04 **Sample Date:** 5/22/2016 2:22:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	166	2.00	1.32	mg/kg	E	J	*III
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-C4D3-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-05 **Sample Date:** 5/22/2016 2:43:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	440	40.0	26.4	mg/kg	D		
% Solids	NA	95.0			% by Weight			

Sample Name CTSO-D3D4-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-06 **Sample Date:** 5/22/2016 2:50:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	91.3			% by Weight			

Sample Name CTSO-DUP6-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-07 **Sample Date:** 5/22/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	91.5			% by Weight			

Sample Name CTSO-D4D4-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-08 **Sample Date:** 5/22/2016 3:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.41	2.00	1.32	mg/kg	J	J	
% Solids	NA	90.5			% by Weight			

Sample Name CTSO-B4D3-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-09 **Sample Date:** 5/22/2016 5:11:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	52.7	2.00	1.32	mg/kg			
% Solids	NA	88.4			% by Weight			

Sample Name CTSO-D5D4-20160522 **Matrix Type:** Soil

Lab Sample Name: F160506-10 **Sample Date:** 5/22/2016 5:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	88.7			% by Weight			

Sample Delivery Group F160507

Sample Name CTSO-DPile2-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-01 **Sample Date:** 5/23/2016 7:14:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	41.2	2.00	1.32	mg/kg			
% Solids	NA	95.6			% by Weight			

Sample Name CTSO-B7D3-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-02 **Sample Date:** 5/23/2016 9:20:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.53	2.00	1.32	mg/kg			
% Solids	NA	94.2			% by Weight			

Sample Name CTSO-D6D4-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-03 **Sample Date:** 5/23/2016 10:44:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.3			% by Weight			

Sample Name CTSO-B5D3-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-04 **Sample Date:** 5/23/2016 11:10:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	174	2.00	1.32	mg/kg	E	J	*III
% Solids	NA	96.1			% by Weight			

Sample Name CTSO-B6D3-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-05 **Sample Date:** 5/23/2016 1:33:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	7.12	2.00	1.32	mg/kg			
% Solids	NA	93.1			% by Weight			

Sample Name CTSO-D7D4-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-06 **Sample Date:** 5/23/2016 2:42:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.5			% by Weight			

Sample Name CTSO-B2D4-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-07 **Sample Date:** 5/23/2016 2:47:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	54.7	2.00	1.32	mg/kg			
% Solids	NA	91.1			% by Weight			

Sample Name CTSO-DUP7-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-08 **Sample Date:** 5/23/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	43.5	2.00	1.32	mg/kg			
% Solids	NA	90.0			% by Weight			

Sample Name CTSO-B3D4-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-09 **Sample Date:** 5/23/2016 5:05:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.79	2.00	1.32	mg/kg			
% Solids	NA	88.0			% by Weight			

Sample Name CTSO-C3D4-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-10 **Sample Date:** 5/23/2016 5:09:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	90.4	2.00	1.32	mg/kg			
% Solids	NA	90.9			% by Weight			

Sample Name CTSO-C7D4-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-11 **Sample Date:** 5/23/2016 5:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	10.2	2.00	1.32	mg/kg		J	F1
% Solids	NA	93.3			% by Weight			

Sample Name CTSO-DUP8-20160523 **Matrix Type:** Soil

Lab Sample Name: F160507-12 **Sample Date:** 5/23/2016 5:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.51	2.00	1.32	mg/kg		J	F1
% Solids	NA	93.4			% by Weight			

Sample Delivery Group F160508

Sample Name CTSO-DPILE3-20160524 **Matrix Type:** Soil

Lab Sample Name: F160508-01 **Sample Date:** 5/23/2016 7:30:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	34.2	2.00	1.32	mg/kg			
% Solids	NA	93.9			% by Weight			

Sample Name CTSO-B7D4-20160524 **Matrix Type:** Soil

Lab Sample Name: F160508-02 **Sample Date:** 5/23/2016 1:08:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	7.23	2.00	1.32	mg/kg			
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-DUP9-20160524 **Matrix Type:** Soil

Lab Sample Name: F160508-03 **Sample Date:** 5/23/2016 1:08:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	5.57	2.00	1.32	mg/kg			
% Solids	NA	96.7			% by Weight			

Sample Name CTSO-E5D3-20160524 **Matrix Type:** Soil

Lab Sample Name: F160508-04 **Sample Date:** 5/23/2016 2:42:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.1			% by Weight			

Sample Name CTSO-B4D4-20160524 **Matrix Type:** Soil

Lab Sample Name: F160508-05 **Sample Date:** 5/23/2016 5:36:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	7.64	2.00	1.32	mg/kg			
% Solids	NA	93.8			% by Weight			

Sample Delivery Group F160509

Sample Name CTSO-C4D4-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-01 **Sample Date:** 5/25/2016 10:42:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	137	4.00	2.64	mg/kg	D		
% Solids	NA	90.0			% by Weight			

Sample Name CTSO-B4D4-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-02 **Sample Date:** 5/25/2016 10:46:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	74.3	2.00	1.32	mg/kg			
% Solids	NA	90.2			% by Weight			

Sample Name CTSO-DPILE4-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-03 **Sample Date:** 5/25/2016 7:30:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	30.1	2.00	1.32	mg/kg			
% Solids	NA	89.2			% by Weight			

Sample Name CTSO-B5D4-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-04 **Sample Date:** 5/25/2016 1:10:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	6.52	2.00	1.32	mg/kg			
% Solids	NA	94.0			% by Weight			

Sample Name CTSO-C5D4-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-05 **Sample Date:** 5/25/2016 4:40:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	11.7	2.00	1.32	mg/kg			
% Solids	NA	85.4			% by Weight			

Sample Name CTSO-C6D4-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-06 **Sample Date:** 5/25/2016 4:45:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	114	4.00	2.64	mg/kg	D		
% Solids	NA	89.5			% by Weight			

Sample Name CTSO-DUP10-20160525 **Matrix Type:** Soil

Lab Sample Name: F160509-07 **Sample Date:** 5/25/2016 4:45:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	123	4.00	2.64	mg/kg	D		
% Solids	NA	89.2			% by Weight			

Sample Delivery Group F160510

Sample Name CTSO-DPILE5-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-01 **Sample Date:** 5/26/2016 6:54:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	25.3	2.00	1.32	mg/kg			
% Solids	NA	89.3			% by Weight			

Sample Name CTSO-B6D4-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-02 **Sample Date:** 5/26/2016 7:24:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	29.2	2.00	1.32	mg/kg			
% Solids	NA	91.1			% by Weight			

Sample Name CTSO-B2Stain-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-03 **Sample Date:** 5/26/2016 10:24:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	195	4.00	2.64	mg/kg	D		
% Solids	NA	84.8			% by Weight			

Sample Name CTSO-B2Slope-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-04 **Sample Date:** 5/26/2016 10:37:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	92.6			% by Weight			

Sample Name CTSO-B2D5-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-05 **Sample Date:** 5/26/2016 4:04:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	12.7	2.00	1.32	mg/kg			
% Solids	NA	79.7			% by Weight			

Sample Name CTSO-C2D5-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-06 **Sample Date:** 5/26/2016 4:07:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	86.6			% by Weight			

Sample Name CTSO-B2ID3-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-07 **Sample Date:** 5/26/2016 4:11:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.89	2.00	1.32	mg/kg	J	J	
% Solids	NA	86.3			% by Weight			

Sample Name CTSO-B3D5-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-08 **Sample Date:** 5/26/2016 5:10:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	29.2	2.00	1.32	mg/kg			
% Solids	NA	91.5			% by Weight			

Sample Name CTSO-DUP11-20160526 **Matrix Type:** Soil

Lab Sample Name: F160510-09 **Sample Date:** 5/26/2016 5:10:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	33.2	2.00	1.32	mg/kg			
% Solids	NA	90.8			% by Weight			

Sample Delivery Group F160511

Sample Name CTSO-DPILE6-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-01 **Sample Date:** 5/27/2016 7:15:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	18.8	2.00	1.32	mg/kg			
% Solids	NA	88.7			% by Weight			

Sample Name CTSO-C3D5-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-02 **Sample Date:** 5/27/2016 11:58:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	11.6	2.00	1.32	mg/kg			
% Solids	NA	91.1			% by Weight			

Sample Name CTSO-DRIPPADE-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-03 **Sample Date:** 5/27/2016 12:05:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	152	20.0	13.2	mg/kg	D		
% Solids	NA	89.7			% by Weight			

Sample Name CTSO-DRIPPADN-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-04 **Sample Date:** 5/27/2016 12:09:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	321	20.0	13.2	mg/kg	D		
% Solids	NA	77.1			% by Weight			

Sample Name CTSO-B4D5-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-05 **Sample Date:** 5/27/2016 12:14:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	7.87	2.00	1.32	mg/kg			
% Solids	NA	95.1			% by Weight			

Sample Name CTSO-C4D5-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-06 **Sample Date:** 5/27/2016 12:17:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	471	2.00	1.32	mg/kg	E	J	*III
% Solids	NA	91.4			% by Weight			

Sample Name CTSO-BORROW-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-07 **Sample Date:** 5/27/2016 12:26:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<4.00	4.00	2.64	mg/kg	U	U	
% Solids	NA	97.4			% by Weight			

Sample Name CTSO-C5D5-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-08 **Sample Date:** 5/27/2016 3:52:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	362	2.00	1.32	mg/kg	E	J	*III
% Solids	NA	89.7			% by Weight			

Sample Name CTSO-C6D5-20160527 **Matrix Type:** Soil

Lab Sample Name: F160511-09 **Sample Date:** 5/27/2016 4:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	334	2.00	1.32	mg/kg	E	J	*III
% Solids	NA	89.6			% by Weight			

Sample Delivery Group F160512

Sample Name CTSO-B6D5-20160529 **Matrix Type:** Soil

Lab Sample Name: F160512-01 **Sample Date:** 5/29/2016 2:00:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	93.5			% by Weight			

Sample Name CTSO-B7D5-20160529 **Matrix Type:** Soil

Lab Sample Name: F160512-02 **Sample Date:** 5/29/2016 2:23:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	91.1			% by Weight			

Sample Name CTSO-C7D5-20160529 **Matrix Type:** Soil

Lab Sample Name: F160512-03 **Sample Date:** 5/29/2016 4:45:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	41.5	2.00	1.32	mg/kg			
% Solids	NA	92.5			% by Weight			

Sample Name CTSO-B2D6-20160529 **Matrix Type:** Soil

Lab Sample Name: F160512-04 **Sample Date:** 5/29/2016 5:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	94.0	2.00	1.32	mg/kg			
% Solids	NA	84.7			% by Weight			

Sample Name CTSO-DUP12-20160529 **Matrix Type:** Soil

Lab Sample Name: F160512-05 **Sample Date:** 5/29/2016 5:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	80.4	2.00	1.32	mg/kg			
% Solids	NA	84.7			% by Weight			

Sample Delivery Group F160513

Sample Name CTSO-C7DIRTY-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-01 **Sample Date:** 5/30/2016 10:00:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	833	20.0	13.2	mg/kg	D		
% Solids	NA	93.6			% by Weight			

Sample Name CTSO-C6DIRTY-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-02 **Sample Date:** 5/30/2016 10:02:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	378	20.0	13.2	mg/kg	D		
% Solids	NA	90.1			% by Weight			

Sample Name CTSO-C5DIRTY-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-03 **Sample Date:** 5/30/2016 10:04:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	526	20.0	13.2	mg/kg	D		
% Solids	NA	91.6			% by Weight			

Sample Name CTSO-A1RAMP-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-04 **Sample Date:** 5/30/2016 1:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	96.3			% by Weight			

Sample Name CTSO-C3D6-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-05 **Sample Date:** 5/30/2016 3:46:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	9.73	2.00	1.32	mg/kg			
% Solids	NA	92.6			% by Weight			

Sample Name CTSO-B3D6-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-06 **Sample Date:** 5/30/2016 3:48:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.73	2.00	1.32	mg/kg			
% Solids	NA	90.5			% by Weight			

Sample Name CTSO-C4D6-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-07 **Sample Date:** 5/30/2016 3:52:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	77.8	40.0	26.4	mg/kg	D		
% Solids	NA	92.6			% by Weight			

Sample Name CTSO-B4D6-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-08 **Sample Date:** 5/30/2016 3:16:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	10.2	2.00	1.32	mg/kg			
% Solids	NA	93.0			% by Weight			

Sample Name CTSO-C5D8-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-09 **Sample Date:** 5/30/2016 4:37:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	148	40.0	26.4	mg/kg	D		
% Solids	NA	97.1			% by Weight			

Sample Name CTSO-C6D8-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-10 **Sample Date:** 5/30/2016 4:40:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	124	20.0	13.2	mg/kg	D		
% Solids	NA	97.3			% by Weight			

Sample Name CTSO-C7D8-20160530 **Matrix Type:** Soil

Lab Sample Name: F160513-11 **Sample Date:** 5/30/2016 4:45:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	24.0	2.00	1.32	mg/kg			
% Solids	NA	98.1			% by Weight			

Sample Delivery Group F160514

Sample Name CTSO-C5D8-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-01 **Sample Date:** 5/31/2016 7:45:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	95.4	20.0	13.2	mg/kg	D		
% Solids	NA	96.4			% by Weight			

Sample Name CTSO-C6D8-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-02 **Sample Date:** 5/31/2016 7:48:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	139	10.0	6.60	mg/kg	D		
% Solids	NA	96.4			% by Weight			

Sample Name CTSO-C7D8-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-03 **Sample Date:** 5/31/2016 7:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	36.0	20.0	13.2	mg/kg	D		
% Solids	NA	96.5			% by Weight			

Sample Name CTSO-B3SLOPE-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-04 **Sample Date:** 5/31/2016 7:55:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	127	20.0	13.2	mg/kg	D		
% Solids	NA	82.4			% by Weight			

Sample Name CTSO-C5WSIDEWALL-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-05 **Sample Date:** 5/31/2016 8:08:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	185	4.00	2.64	mg/kg	D		
% Solids	NA	95.6			% by Weight			

Sample Name CTSO-DPILE7-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-06 **Sample Date:** 5/31/2016 8:15:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	164	4.00	2.64	mg/kg	D		
% Solids	NA	93.2			% by Weight			

Sample Name CTSO-DUP13-20160531 **Matrix Type:** Soil

Lab Sample Name: F160514-07 **Sample Date:** 5/31/2016 8:15:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	149	4.00	2.64	mg/kg	D		
% Solids	NA	93.7			% by Weight			

Sample Name	CTSO-C3PILE-20160531					**Matrix Type:**	Soil	
Lab Sample Name:	F160514-08	**Sample Date:**	5/31/2016 9:15:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	77.7	4.00	2.64	mg/kg	D		
% Solids	NA	95.6			% by Weight			
Sample Name	CTSO-B2D7-20160531					**Matrix Type:**	Soil	
Lab Sample Name:	F160514-09	**Sample Date:**	5/31/2016 12:50:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	190	20.0	13.2	mg/kg	D		
% Solids	NA	88.1			% by Weight			
Sample Name	CTSO-B4D7-20160531					**Matrix Type:**	Soil	
Lab Sample Name:	F160514-10	**Sample Date:**	5/31/2016 3:46:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	170	20.0	13.2	mg/kg	D		
% Solids	NA	86.5			% by Weight			
Sample Name	CTSO-C3D7-20160531					**Matrix Type:**	Soil	
Lab Sample Name:	F160514-11	**Sample Date:**	5/31/2016 3:47:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	57.6	20.0	13.2	mg/kg	D		
% Solids	NA	93.1			% by Weight			
Sample Name	CTSO-C4D7-20160531					**Matrix Type:**	Soil	
Lab Sample Name:	F160514-12	**Sample Date:**	5/31/2016 4:12:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	16.9	2.00	1.32	mg/kg			
% Solids	NA	91.1			% by Weight			
Sample Name	CTSO-C5WSIDEWALL-20160531					**Matrix Type:**	Soil	
Lab Sample Name:	F160514-13	**Sample Date:**	5/31/2016 5:02:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	6.64	2.00	1.32	mg/kg			
% Solids	NA	95.7			% by Weight			

Sample Name	CTSO-B2WSLOPE-20160531					Matrix Type:	Soil		
Lab Sample Name:	F160514-14	**Sample Date:**	5/31/2016 5:15:00 PM			**Anaylsis Method:**	**8270 PCP**		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	187	20.0	13.2	mg/kg	D			
% Solids	NA	88.3			% by Weight				

Sample Delivery Group F160601

Sample Name	CTSO-DPILE8-20160601					Matrix Type:	Soil		
Lab Sample Name:	F160601-01	**Sample Date:**	6/1/2016 7:55:00 AM			**Anaylsis Method:**	**8270 PCP**		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	25.0	10.0	6.60	mg/kg	D			
% Solids	NA	93.1			% by Weight				

Sample Name	CTSO-A1D1-20160601					Matrix Type:	Soil		
Lab Sample Name:	F160601-02	**Sample Date:**	6/1/2016 8:20:00 AM			**Anaylsis Method:**	**8270 PCP**		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U		
% Solids	NA	92.5			% by Weight				

Sample Name	CTSO-B2SIDEWALL-20160601					Matrix Type:	Soil		
Lab Sample Name:	F160601-03	**Sample Date:**	6/1/2016 10:05:00 AM			**Anaylsis Method:**	**8270 PCP**		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	47.2	10.0	6.60	mg/kg	D			
% Solids	NA	85.6			% by Weight				

Sample Name	CTSO-B2SIDEWALL2-20160601					Matrix Type:	Soil		
Lab Sample Name:	F160601-04	**Sample Date:**	6/1/2016 1:09:00 PM			**Anaylsis Method:**	**8270 PCP**		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	80.1	20.0	13.2	mg/kg	D			
% Solids	NA	86.8			% by Weight				

Sample Delivery Group F160602

Sample Name CTSO-DPILE9-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-01 **Sample Date:** 6/2/2016 7:40:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	30.2	4.00	2.64	mg/kg	D	J+	Q
% Solids	NA	87.6			% by Weight			

Sample Name CTSO-B2D8-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-02 **Sample Date:** 6/2/2016 1:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	85.6	10.0	6.60	mg/kg	D		
% Solids	NA	98.8			% by Weight			

Sample Name CTSO-C6D11-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-03 **Sample Date:** 6/2/2016 1:47:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	98.0	20.0	13.2	mg/kg	D		
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-DUP14-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-04 **Sample Date:** 6/2/2016 1:47:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	112	20.0	13.2	mg/kg	D		
% Solids	NA	96.0			% by Weight			

Sample Name CTSO-C5D11-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-05 **Sample Date:** 6/2/2016 2:50:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	110	20.0	13.2	mg/kg	D		
% Solids	NA	94.1			% by Weight			

Sample Name CTSO-C5NSW-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-06 **Sample Date:** 6/2/2016 2:51:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	134	10.0	6.60	mg/kg	D		
% Solids	NA	94.8			% by Weight			

Sample Name CTSO-C3D8-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-07 **Sample Date:** 6/2/2016 4:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	127	10.0	6.60	mg/kg	D		
% Solids	NA	92.7			% by Weight			

Sample Name CTSO-B4D8-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-08 **Sample Date:** 6/2/2016 5:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	22.5	2.00	1.32	mg/kg			
% Solids	NA	94.6			% by Weight			

Sample Name CTSO-C3ND8-20160602 **Matrix Type:** Soil

Lab Sample Name: F160602-09 **Sample Date:** 6/2/2016 5:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.91	2.00	1.32	mg/kg			
% Solids	NA	94.9			% by Weight			

Sample Delivery Group F160603

Sample Name CTSO-DPILE10-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-01 **Sample Date:** 6/3/2016 7:20:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	57.5	4.00	2.64	mg/kg	D		
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-B2D9-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-02 **Sample Date:** 6/3/2016 10:20:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	51.9	20.0	13.2	mg/kg	D		
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-B4D9-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-03 **Sample Date:** 6/3/2016 11:40:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	13.2	4.00	2.64	mg/kg	D		
% Solids	NA	98.8			% by Weight			

Sample Name CTSO-C4D11-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-04 **Sample Date:** 6/3/2016 4:10:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	83.3	2.00	1.32	mg/kg			
% Solids	NA	96.9			% by Weight			

Sample Name CTSO-C4ESW-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-05 **Sample Date:** 6/3/2016 4:12:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	83.7	2.00	1.32	mg/kg			
% Solids	NA	96.7			% by Weight			

Sample Name CTSO-C3ESW-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-06 **Sample Date:** 6/3/2016 4:26:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	59.3	2.00	1.32	mg/kg			
% Solids	NA	96.3			% by Weight			

Sample Name CTSO-C3NSW-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-07 **Sample Date:** 6/3/2016 4:28:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	38.7	2.00	1.32	mg/kg			
% Solids	NA	96.3			% by Weight			

Sample Name CTSO-C3D11-20160603 **Matrix Type:** Soil

Lab Sample Name: F160603-08 **Sample Date:** 6/3/2016 4:28:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	70.6	2.00	1.32	mg/kg			
% Solids	NA	97.5			% by Weight			

Sample Delivery Group F160604

Sample Name CTSO-A11D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-01 **Sample Date:** 6/15/2016 2:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.95	2.00	1.32	mg/kg			
% Solids	NA	98.7			% by Weight			

Sample Name CTSO-DUP16-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-02 **Sample Date:** 6/15/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.14	2.00	1.32	mg/kg			
% Solids	NA	99.4			% by Weight			

Sample Name CTSO-B11D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-03 **Sample Date:** 6/15/2016 2:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.55	2.00	1.32	mg/kg			
% Solids	NA	97.7			% by Weight			

Sample Name CTSO-C11D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-04 **Sample Date:** 6/15/2016 2:30:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	93.0	2.00	1.32	mg/kg			
% Solids	NA	97.6			% by Weight			

Sample Name CTSO-D11D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-05 **Sample Date:** 6/15/2016 2:35:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	85.3	2.00	1.32	mg/kg			
% Solids	NA	97.8			% by Weight			

Sample Name CTSO-E11D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-06 **Sample Date:** 6/15/2016 2:40:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	8.13	2.00	1.32	mg/kg			
% Solids	NA	99.1			% by Weight			

Sample Name CTSO-E10D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-07 **Sample Date:** 6/15/2016 2:44:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	32.0	2.00	1.32	mg/kg			
% Solids	NA	98.1			% by Weight			

Sample Name CTSO-E9D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-08 **Sample Date:** 6/15/2016 2:47:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	23.1	2.00	1.32	mg/kg			
% Solids	NA	97.9			% by Weight			

Sample Name CTSO-A10D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-09 **Sample Date:** 6/15/2016 3:35:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	13.6	2.00	1.32	mg/kg			
% Solids	NA	97.5			% by Weight			

Sample Name CTSO-B10D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-10 **Sample Date:** 6/15/2016 3:42:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.38	2.00	1.32	mg/kg			
% Solids	NA	93.4			% by Weight			

Sample Name CTSO-DUP17-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-11 **Sample Date:** 6/15/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.31	2.00	1.32	mg/kg			
% Solids	NA	94.1			% by Weight			

Sample Name CTSO-A9D1-20160615 **Matrix Type:** Soil

Lab Sample Name: F160604-12 **Sample Date:** 6/15/2016 4:45:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	14.5	2.00	1.32	mg/kg			
% Solids	NA	94.9			% by Weight			

Sample Delivery Group F160605

Sample Name CTSO-C11D1S-20160616 **Matrix Type:** Soil

Lab Sample Name: F160605-01 **Sample Date:** 6/16/2016 7:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	98.6			% by Weight			

Sample Name CTSO-C11STAIN-20160616 **Matrix Type:** Soil

Lab Sample Name: F160605-02 **Sample Date:** 6/16/2016 8:00:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.0			% by Weight			

Sample Name CTSO-C10D1-20160616 **Matrix Type:** Soil

Lab Sample Name: F160605-03 **Sample Date:** 6/16/2016 9:45:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	24.0	4.00	2.64	mg/kg	D		
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-D10D1-20160616 **Matrix Type:** Soil

Lab Sample Name: F160605-04 **Sample Date:** 6/16/2016 9:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	80.1	4.00	2.64	mg/kg	D		
% Solids	NA	95.5			% by Weight			

Sample Delivery Group F160606

Sample Name CTSO-B9D1-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-01 **Sample Date:** 6/17/2016 7:30:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	16.2	2.00	1.32	mg/kg			
% Solids	NA	96.7			% by Weight			

Sample Name CTSO-E11D1S-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-02 **Sample Date:** 6/17/2016 7:37:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	99.2			% by Weight			

Sample Name CTSO-D11D1S-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-03 **Sample Date:** 6/17/2016 7:43:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.57	2.00	1.32	mg/kg			
% Solids	NA	98.6			% by Weight			

Sample Name CTSO-E9D2-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-04 **Sample Date:** 6/17/2016 8:47:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.6			% by Weight			

Sample Name CTSO-E10D2-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-05 **Sample Date:** 6/17/2016 8:55:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	95.5			% by Weight			

Sample Name CTSO-E11D2-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-06 **Sample Date:** 6/17/2016 2:00:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.0			% by Weight			

Sample Name CTSO-D11D3-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-07 **Sample Date:** 6/17/2016 2:15:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	8.69	2.00	1.32	mg/kg			
% Solids	NA	93.9			% by Weight			

Sample Name CTSO-D10D4-20160617 **Matrix Type:** Soil

Lab Sample Name: F160606-08 **Sample Date:** 6/17/2016 2:18:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.32	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.2			% by Weight			

Sample Delivery Group F160607

Sample Name CTSO-C10D2-20160619 **Matrix Type:** Soil

Lab Sample Name: F160607-01 **Sample Date:** 6/19/2016 9:15:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	6.42	2.00	1.32	mg/kg			
% Solids	NA	95.9			% by Weight			

Sample Name CTSO-C11D2-20160619 **Matrix Type:** Soil

Lab Sample Name: F160607-02 **Sample Date:** 6/19/2016 9:20:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	43.2	2.00	1.32	mg/kg		J+	Q
% Solids	NA	95.2			% by Weight			

Sample Name CTSO-A10D2-20160619 **Matrix Type:** Soil

Lab Sample Name: F160607-03 **Sample Date:** 6/19/2016 11:40:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	201	10.0	6.60	mg/kg	D		
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-DUP18-20160619 **Matrix Type:** Soil

Lab Sample Name: F160607-04 **Sample Date:** 6/19/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	197	10.0	6.60	mg/kg	D		
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-A9D2-20160619 **Matrix Type:** Soil

Lab Sample Name: F160607-05 **Sample Date:** 6/19/2016 3:30:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	352	10.0	6.60	mg/kg	D		
% Solids	NA	96.6			% by Weight			

Sample Name CTSO-B9D2-20160619 **Matrix Type:** Soil

Lab Sample Name: F160607-06 **Sample Date:** 6/19/2016 4:00:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	41.4	4.00	2.64	mg/kg	D		
% Solids	NA	93.8			% by Weight			

Sample Delivery Group F160608

Sample Name CTSO-D11D3-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-01 **Sample Date:** 6/20/2016 9:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.1			% by Weight			

Sample Name CTSO-C11D4-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-02 **Sample Date:** 6/20/2016 9:55:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-A10D3-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-03 **Sample Date:** 6/20/2016 2:42:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	9.47	2.00	1.32	mg/kg			
% Solids	NA	96.0			% by Weight			

Sample Name CTSO-DUP19-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-04 **Sample Date:** 6/20/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	9.15	2.00	1.32	mg/kg			
% Solids	NA	96.1			% by Weight			

Sample Name CTSO-A10WSW-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-05 **Sample Date:** 6/20/2016 2:46:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	723	10.0	6.60	mg/kg	DE	J	*III
% Solids	NA	96.2			% by Weight			

Sample Name CTSO-A9WSW-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-06 **Sample Date:** 6/20/2016 3:55:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	636	10.0	6.60	mg/kg	DE	J	*III
% Solids	NA	95.8			% by Weight			

Sample Name CTSO-A9D3-20160620 **Matrix Type:** Soil

Lab Sample Name: F160608-07 **Sample Date:** 6/20/2016 4:17:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.77	2.00	1.32	mg/kg	J	J	
% Solids	NA	95.7			% by Weight			

Sample Delivery Group F160609

Sample Name	CTSO-B9D3-20160621					**Matrix Type:**	Soil	
Lab Sample Name:	F160609-01	**Sample Date:**	6/21/2016 8:55:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	4.76	2.00	1.32	mg/kg			
% Solids	NA	98.1			% by Weight			
Sample Name	CTSO-A10D4-20160621					**Matrix Type:**	Soil	
Lab Sample Name:	F160609-02	**Sample Date:**	6/21/2016 9:45:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	1.82	2.00	1.32	mg/kg	J	J	
% Solids	NA	98.1			% by Weight			
Sample Name	CTSO-A8D2-20160621					**Matrix Type:**	Soil	
Lab Sample Name:	F160609-03	**Sample Date:**	6/21/2016 10:17:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	252	10.0	6.60	mg/kg	D		
% Solids	NA	96.2			% by Weight			
Sample Name	CTSO-C9D1-20160621					**Matrix Type:**	Soil	
Lab Sample Name:	F160609-04	**Sample Date:**	6/21/2016 11:55:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	21.6	2.00	1.32	mg/kg			
% Solids	NA	98.2			% by Weight			
Sample Name	CTSO-D9D1-20160621					**Matrix Type:**	Soil	
Lab Sample Name:	F160609-05	**Sample Date:**	6/21/2016 12:01:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	22.9	2.00	1.32	mg/kg			
% Solids	NA	97.3			% by Weight			
Sample Name	CTSO-C8D1-20160621					**Matrix Type:**	Soil	
Lab Sample Name:	F160609-06	**Sample Date:**	6/21/2016 12:05:00 PM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	61.3	4.00	2.64	mg/kg	D		
% Solids	NA	97.3			% by Weight			

Sample Delivery Group F160610

Sample Name CTSO-C9D3-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-01 **Sample Date:** 6/22/2016 8:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	96.9			% by Weight			

Sample Name CTSO-DUP20-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-02 **Sample Date:** 6/22/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	96.5			% by Weight			

Sample Name CTSO-D9D3-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-03 **Sample Date:** 6/22/2016 8:54:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.54	2.00	1.32	mg/kg			
% Solids	NA	96.6			% by Weight			

Sample Name CTSO-C8D3-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-04 **Sample Date:** 6/22/2016 11:18:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	4.83	2.00	1.32	mg/kg			
% Solids	NA	93.5			% by Weight			

Sample Name CTSO-AA10D1-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-05 **Sample Date:** 6/22/2016 3:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	31.8	20.0	13.2	mg/kg	D		
% Solids	NA	96.5			% by Weight			

Sample Name CTSO-AA9D1-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-06 **Sample Date:** 6/22/2016 3:35:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	56.0	20.0	13.2	mg/kg	D		
% Solids	NA	90.9			% by Weight			

Sample Name CTSO-A8D3-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-07 **Sample Date:** 6/22/2016 3:40:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.18	2.00	1.32	mg/kg			
% Solids	NA	97.8			% by Weight			

Sample Name CTSO-A8WSW-20160622 **Matrix Type:** Soil

Lab Sample Name: F160610-08 **Sample Date:** 6/22/2016 3:43:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	431	20.0	13.2	mg/kg	D		
% Solids	NA	94.7			% by Weight			

Sample Delivery Group F160611

Sample Name CTSO-AA8D1-20160623 **Matrix Type:** Soil

Lab Sample Name: F160611-01 **Sample Date:** 6/23/2016 8:40:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	156	100	66.0	mg/kg	D		
% Solids	NA	89.5			% by Weight			

Sample Name CTSO-AA7D1-20160623 **Matrix Type:** Soil

Lab Sample Name: F160611-02 **Sample Date:** 6/23/2016 8:47:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	112	20.0	13.2	mg/kg	D		
% Solids	NA	93.8			% by Weight			

Sample Name CTSO-A8NSW-20160623 **Matrix Type:** Soil

Lab Sample Name: F160611-03 **Sample Date:** 6/23/2016 8:50:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	13.4	2.00	1.32	mg/kg		J+	Q
% Solids	NA	96.9			% by Weight			

Sample Name CTSO-07-20160623 **Matrix Type:** Soil

Lab Sample Name: F160611-04 **Sample Date:** 6/23/2016 9:00:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	70.2	4.00	2.64	mg/kg	D		
% Solids	NA	96.1			% by Weight			

Sample Name	CTSO-AA10D4-20160623					**Matrix Type:**	Soil		
Lab Sample Name:	F160611-05	**Sample Date:**	6/23/2016 10:35:00 AM			**Anaylsis Method:**	8270 PCP		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	4.30	2.00	1.32	mg/kg				
% Solids	NA	99.1			% by Weight				
Sample Name	CTSO-AASSW-20160623					**Matrix Type:**	Soil		
Lab Sample Name:	F160611-06	**Sample Date:**	6/23/2016 10:39:00 AM			**Anaylsis Method:**	8270 PCP		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	241	4.00	2.64	mg/kg	D			
% Solids	NA	97.8			% by Weight				
Sample Name	CTSO-AAWSW-20160623					**Matrix Type:**	Soil		
Lab Sample Name:	F160611-07	**Sample Date:**	6/23/2016 10:41:00 AM			**Anaylsis Method:**	8270 PCP		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	101	2.00	1.32	mg/kg	E	J	*III	
% Solids	NA	96.2			% by Weight				
Sample Name	CTSO-A11D2-20160623					**Matrix Type:**	Soil		
Lab Sample Name:	F160611-08	**Sample Date:**	6/23/2016 2:05:00 PM			**Anaylsis Method:**	8270 PCP		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	52.7	4.00	2.64	mg/kg	D			
% Solids	NA	97.0			% by Weight				
Sample Name	CTSO-B11D2-20160623					**Matrix Type:**	Soil		
Lab Sample Name:	F160611-09	**Sample Date:**	6/23/2016 2:07:00 PM			**Anaylsis Method:**	8270 PCP		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	11.2	2.00	1.32	mg/kg				
% Solids	NA	96.2			% by Weight				
Sample Name	CTSO-B10D2-20160623					**Matrix Type:**	Soil		
Lab Sample Name:	F160611-10	**Sample Date:**	6/23/2016 2:15:00 PM			**Anaylsis Method:**	8270 PCP		
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**	
Pentachlorophenol	87-86-5	44.6	2.00	1.32	mg/kg				
% Solids	NA	97.1			% by Weight				

Sample Name CTSO-AA9D4-20160623 **Matrix Type:** Soil

Lab Sample Name: F160611-11 **Sample Date:** 6/23/2016 2:19:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	23.8	2.00	1.32	mg/kg			
% Solids	NA	98.4			% by Weight			

Sample Name CTSO-AA9WSW-20160623 **Matrix Type:** Soil

Lab Sample Name: F160611-12 **Sample Date:** 6/23/2016 2:30:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	161	4.00	2.64	mg/kg	D		
% Solids	NA	97.8			% by Weight			

Sample Delivery Group F160612

Sample Name CTSO-AA8D4-20160624 **Matrix Type:** Soil

Lab Sample Name: F160612-01 **Sample Date:** 6/24/2016 8:25:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	3.81	2.00	1.32	mg/kg			
% Solids	NA	98.7			% by Weight			

Sample Name CTSO-DUP21-20160624 **Matrix Type:** Soil

Lab Sample Name: F160612-02 **Sample Date:** 6/24/2016 **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	2.85	2.00	1.32	mg/kg			
% Solids	NA	98.8			% by Weight			

Sample Name CTSO-AA8WSW-20160624 **Matrix Type:** Soil

Lab Sample Name: F160612-03 **Sample Date:** 6/24/2016 8:28:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	236	10.0	6.60	mg/kg	D		
% Solids	NA	97.6			% by Weight			

Sample Name CTSO-AA7TP-20160624 **Matrix Type:** Soil

Lab Sample Name: F160612-04 **Sample Date:** 6/24/2016 9:45:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.50	2.00	1.32	mg/kg	J	J	
% Solids	NA	94.9			% by Weight			

Sample Name	CTSO-AA8TP-20160624					**Matrix Type:**	Soil	
Lab Sample Name:	F160612-05	**Sample Date:**	6/24/2016 9:50:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	1.44	2.00	1.32	mg/kg	J	J	
% Solids	NA	95.9			% by Weight			
Sample Name	CTSO-AA9TP-20160624					**Matrix Type:**	Soil	
Lab Sample Name:	F160612-06	**Sample Date:**	6/24/2016 9:57:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	1.40	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.0			% by Weight			
Sample Name	CTSO-AA10TP-20160624					**Matrix Type:**	Soil	
Lab Sample Name:	F160612-07	**Sample Date:**	6/24/2016 10:01:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	1.79	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.2			% by Weight			
Sample Name	CTSO-AA7D4-20160624					**Matrix Type:**	Soil	
Lab Sample Name:	F160612-08	**Sample Date:**	6/24/2016 11:15:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	19.2	2.00	1.32	mg/kg			
% Solids	NA	97.9			% by Weight			
Sample Name	CTSO-AA7WSW-20160624					**Matrix Type:**	Soil	
Lab Sample Name:	F160612-09	**Sample Date:**	6/24/2016 11:19:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	25.0	10.0	6.60	mg/kg	D		
% Solids	NA	89.2			% by Weight			
Sample Name	CTSO-AA7NSW-20160624					**Matrix Type:**	Soil	
Lab Sample Name:	F160612-10	**Sample Date:**	6/24/2016 11:22:00 AM			**Anaylsis Method:**	**8270 PCP**	
Analyte	**CAS No**	**Result Value**	**Sample Adjusted CRQL**	**Sample Adjusted MDL**	**Result Units**	**Lab Qualifier**	**Validation Qualifier**	**Validation Notes**
Pentachlorophenol	87-86-5	183	10.0	6.60	mg/kg	D		
% Solids	NA	89.2			% by Weight			

Sample Name CTSO-A11D3-20160624 **Matrix Type:** Soil

Lab Sample Name: F160612-11 **Sample Date:** 6/24/2016 4:50:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.65	2.00	1.32	mg/kg	J	J	
% Solids	NA	93.3			% by Weight			

Sample Delivery Group F160613

Sample Name CTSO-AA7NSW-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-01 **Sample Date:** 6/25/2016 7:00:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.4			% by Weight			

Sample Name CTSO-AA7D4-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-02 **Sample Date:** 6/25/2016 7:04:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.3			% by Weight			

Sample Name CTSO-AA7WSW-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-03 **Sample Date:** 6/25/2016 7:12:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.58	2.00	1.32	mg/kg	J	J	
% Solids	NA	96.5			% by Weight			

Sample Name CTSO-B10D3-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-04 **Sample Date:** 6/25/2016 7:25:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	1.91	2.00	1.32	mg/kg	J	J	
% Solids	NA	95.1			% by Weight			

Sample Name CTSO-B11D3-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-05 **Sample Date:** 6/25/2016 7:30:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.2			% by Weight			

Sample Name CTSO-AA10D3-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-06 **Sample Date:** 6/25/2016 9:00:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	98.8			% by Weight			

Sample Name CTSO-DUP22-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-07 **Sample Date:** 6/25/2016 9:00:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	98.9			% by Weight			

Sample Name CTSO-AA10WSW-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-08 **Sample Date:** 6/25/2016 9:04:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	93.7			% by Weight			

Sample Name CTSO-AA10SSW-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-09 **Sample Date:** 6/25/2016 9:07:00 AM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	7.97	2.00	1.32	mg/kg			
% Solids	NA	97.2			% by Weight			

Sample Name CTSO-AA10SSW2-20160625 **Matrix Type:** Soil

Lab Sample Name: F160613-10 **Sample Date:** 6/25/2016 4:25:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	<2.00	2.00	1.32	mg/kg	U	U	
% Solids	NA	97.1			% by Weight			

Sample Delivery Group F160701

Sample Name CTSO-CELL-20160630 **Matrix Type:** Soil

Lab Sample Name: F160701-01 **Sample Date:** 6/30/2016 4:20:00 PM **Anaylsis Method: 8270 PCP**

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	54.5	2.00	1.32	mg/kg			
% Solids	NA	94.2			% by Weight			

Sample Name	CTSO-DUP23-20160630	**Matrix Type:**	Soil
Lab Sample Name:	F160701-02	**Sample Date:**	6/30/2016
Anaylsis Method:	**8270 PCP**		

Analyte	CAS No	Result Value	Sample Adjusted CRQL	Sample Adjusted MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Pentachlorophenol	87-86-5	55.8	2.00	1.32	mg/kg			
% Solids	NA	94.8			% by Weight			

DATA VALIDATION REPORT

Cowboy Timber

SAMPLE DELIVERY GROUP: L835437

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Cowboy Timber
Contract Task Order:	20408.012.001.0263.00
Sample Delivery Group:	L835437
Weston Project Manager:	Eric Sandusky
TDD No.:	1507-08
Matrix:	Soil/Water
QC Level:	Stage 4
No. of Samples:	5
No. of Reanalyses/Dilutions:	0
Laboratory:	ESC Lab Sciences

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
CTSO-01-20160511	L835437-01	S	5/11/2016	8260B
CTSO-02-20160511	L835437-02	S	5/11/2016	8260B
CTSO-03-20160511	L835437-03	S	5/11/2016	8260B
CTSO-04-20160511	L835437-04	S	5/11/2016	8260B
CTGW-01-20160511	L835437-05	W	5/11/2016	8260B, 8270C

II. Sample Management

The samples were received within the temperature limits of 4°C ±2°C. The sample containers were received intact, with exceptions noted below. The chain-of-custody (COC) was appropriately signed and dated by field and laboratory personnel. Corrections to the COC were initialed but were not dated, and corrections to the number of containers for each sample were made by overwriting the original entry. The laboratory receipt information indicated custody seals were present and intact on the cooler. A non-conformance form from the laboratory indicated that due to insufficient packing material, the four-ounce container for sample CTSO-05-20160511 was received broken and was not salvageable, and one of four one-liter amber bottles for sample CTGW-01-20160511 was received broken. Sufficient sample volume remained for analysis of sample CTGW-01-20160511. The laboratory was instructed to proceed with analysis of the available samples. Sample CTGW-01-20160511 was preserved for the 8260B analysis; therefore, the nondetected result for 2-chloroethyl vinyl ether was rejected (R), as the preservative causes degradation of 2-chloroethyl vinyl ether.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material 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. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential positive bias.
J-	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential negative bias.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.

Qualifier	Organics	Inorganics
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995 or calibration was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
L1	LCS/LCSD RPD was outside control limits.	LCS/LCSD RPD was outside control limits.
Q	MS/MSD recovery was poor.	MS recovery was poor.
Q1	MS/MSD RPD was outside control limits.	MS/MSD RPD was outside control limits.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	ICPMS tune was not compliant.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
F1	Field duplicate results were outside the control limit.	Field duplicate results were outside the control limit.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualifier	Organics	Inorganics
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analysis

1. EPA METHOD 8270C—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin
Date Reviewed: October 13, 2016

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), *EPA Method 8270C*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (2014).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted within seven days of collection and analyzed within 40 days of extraction.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. Samples were analyzed within 12 hours of the DFTPP injection time.

- Calibration: Calibration criteria were met. Initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. Continuing calibration %Ds were ≤20%. The reviewer noted a second-source initial calibration verification (ICV) analysis was not performed.

- Laboratory Blanks: The method blank had no target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: LCS and LCSD recoveries were above the laboratory control limits of 33.1-134% for 3,3'-dichlorobenzidine at 139% and 135%, respectively; however, as 3,3'-dichlorobenzidine was not detected in the associated sample, no qualification was necessary. Remaining recoveries and all RPDs were within the laboratory control limits.

- Surrogate Recovery: Recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample from this SDG. MEC^X evaluated method accuracy and precision based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

    - Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: The internal standard area counts and retention times were within the control limits established by the continuing calibration standard, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatogram, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The sample did not require dilution. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.

- System Performance: Review of the raw data indicated no issues with system performance.

2. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: October 13, 2016

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The preserved water sample and the soil samples were analyzed within 14 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: Most calibration criteria were met, with exceptions noted below. The reviewer noted second-source initial calibration verification (ICV) analyses were not performed.

  The soil initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. As target compound 2-chloroethyl vinyl ether is not listed, the reviewer considered it appropriate to apply the minimum RRF of 0.010. With the exception of the initial calibration %RSD of 15.2% for bromoform, %RSDs were ≤15%, or r^2 ≥0.990. The soil sample results for bromoform, all nondetects, were qualified as estimated (UJ). The CCV %Ds exceeded 20% for 1,2,3-trichlorobenzene (21.0%) and naphthalene (23.0%). The nondetected results for both outliers were qualified as estimated (UJ) in the soil samples. Remaining CCV %Ds were ≤20%.

The water initial calibration average RRFs and CCV RRFs met criteria. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. The CCV %Ds exceeded 20% for 1,1,2,2-tetrachloroethane (20.3%), 2-chloroethyl vinyl ether (53.3%) and hexachloro-1,3-butadiene (20.9%). The result for 2-chloroethyl vinyl ether in associated sample CTGW-01-20160511 was previously rejected and was not further qualified (see Sample Management section). The nondetected results for the remaining outliers were qualified as estimated (UJ) in the water sample. Remaining CCV %Ds were ≤20%.

- Laboratory Blanks: The method blank associated with the soil samples had a detect below the reporting limit for acetone at 11.2 µg/L; however, acetone was not detected in the soil samples. The soil and water method blanks had no other target compound detects above the MDL and no qualifications were required.

- Blank Spikes and Laboratory Control Samples: Water LCS and LCSD recoveries were below the laboratory control limits of 79.3-123% for 1,1,2,2-tetrachloroethane at 78.3% and 75.6%, respectively; therefore, the nondetected result for 1,1,2,2-tetrachloroethane in sample CTGW-01-20160511 was qualified as estimated (UJ). Remaining recoveries and all RPDs were within the laboratory control limits for both soil and water LCS/LCSDs.

- Surrogate Recovery: Recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample from this SDG. MEC^X evaluated method accuracy and precision based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Trip Blanks: This SDG had no identified trip blank.

    - Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

    - Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: Internal standard area counts and retention times were within the control limits established by the continuing calibration standards, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory

MDLs. Results detected between the MDL and the reporting limit were qualified as estimated (J). Reported nondetects are valid to the reporting limit.

All soil samples were analyzed at 5× dilutions. The reason for the dilution was not apparent, as the sample chromatograms exhibited little or no interference. The reviewer also noted that a percent moisture determination was not requested on the COC and was therefore not performed for the soils. All soil results were reported on a wet-weight basis.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no issues with system performance.

Validated Sample Result Forms: L835437

Analysis Method 8260B

Sample Name CTSO-01-20160511 **Matrix Type:** S

Lab Sample Name: L835437-01 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	

Analysis Method 8260B

Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTSO-02-20160511 **Matrix Type:** S

Lab Sample Name: L835437-02 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	

Analysis Method 8260B

1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	
Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	

Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTSO-03-20160511 **Matrix Type:** S

Lab Sample Name: L835437-03 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	

Analysis Method 8260B

2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	
Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	

Analysis Method 8260B

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTSO-04-20160511 **Matrix Type:** S

Lab Sample Name: L835437-04 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	
Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	

Analysis Method 8260B

Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTGW-01-20160511 **Matrix Type:** W

Lab Sample Name: L835437-05 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	1	1	0.385	ug/L	U	U	
1,1,1-Trichloroethane	U	71-55-6	1	1	0.319	ug/L	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	1	1	0.13	ug/L	J4U	UJ	C, L
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	1	1	0.303	ug/L	U	U	
1,1,2-Trichloroethane	U	79-00-5	1	1	0.383	ug/L	U	U	
1,1-Dichloroethane	U	75-34-3	1	1	0.259	ug/L	U	U	
1,1-Dichloroethene	U	75-35-4	1	1	0.398	ug/L	U	U	
1,1-Dichloropropene	U	563-58-6	1	1	0.352	ug/L	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	1	1	0.23	ug/L	U	U	

Analysis Method 8260B

1,2,3-Trichloropropane	U	96-18-4	2.5	2.5	0.807	ug/L	U	U	
1,2,3-Trimethylbenzene	U	TMB123	1	1	0.321	ug/L	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	1	1	0.355	ug/L	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	1	1	0.373	ug/L	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	5	5	1.33	ug/L	U	U	
1,2-Dibromoethane	U	106-93-4	1	1	0.381	ug/L	U	U	
1,2-Dichlorobenzene	U	95-50-1	1	1	0.349	ug/L	U	U	
1,2-Dichloroethane	U	107-06-2	1	1	0.361	ug/L	U	U	
1,2-Dichloropropane	U	78-87-5	1	1	0.306	ug/L	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	1	1	0.387	ug/L	U	U	
1,3-Dichlorobenzene	U	541-73-1	1	1	0.22	ug/L	U	U	
1,3-Dichloropropane	U	142-28-9	1	1	0.366	ug/L	U	U	
1,4-Dichlorobenzene	U	106-46-7	1	1	0.274	ug/L	U	U	
2,2-Dichloropropane	U	594-20-7	1	1	0.321	ug/L	U	U	
2-Butanone (MEK)	U	78-93-3	10	10	3.93	ug/L	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	50	50	3.01	ug/L	U	R	*II
2-Chlorotoluene	U	95-49-8	1	1	0.375	ug/L	U	U	
4-Chlorotoluene	U	106-43-4	1	1	0.351	ug/L	U	U	
4-Methyl-2-pentanone	U	108-10-1	10	10	2.14	ug/L	U	U	
Acetone	U	67-64-1	50	50	10	ug/L	U	U	
Acrolein	U	107-02-8	50	50	8.87	ug/L	U	U	
Acrylonitrile	U	107-13-1	10	10	1.87	ug/L	U	U	
Benzene	U	71-43-2	1	1	0.331	ug/L	U	U	
Bromobenzene	U	108-86-1	1	1	0.352	ug/L	U	U	
Bromodichloromethane	U	75-27-4	1.97	1	0.38	ug/L			
Bromoform	U	75-25-2	1	1	0.469	ug/L	U	U	
Bromomethane	U	74-83-9	5	5	0.866	ug/L	U	U	
Carbon tetrachloride	U	56-23-5	1	1	0.379	ug/L	U	U	
Chlorobenzene	U	108-90-7	1	1	0.348	ug/L	U	U	
Chlorodibromomethane	U	124-48-1	0.865	1	0.327	ug/L	J	J	
Chloroethane	U	75-00-3	5	5	0.453	ug/L	U	U	
Chloroform	U	67-66-3	2.95	5	0.324	ug/L	J	J	
Chloromethane	U	74-87-3	2.5	2.5	0.276	ug/L	U	U	
cis-1,2-Dichloroethene	U	156-59-2	0.372	1	0.26	ug/L	J	J	
cis-1,3-Dichloropropene	U	10061-01-5	1	1	0.418	ug/L	U	U	
Dibromomethane	U	74-95-3	1	1	0.346	ug/L	U	U	
Dichlorodifluoromethane	U	75-71-8	5	5	0.551	ug/L	U	U	
Di-isopropyl ether	U	108-20-3	1	1	0.32	ug/L	U	U	
Ethylbenzene	U	100-41-4	1	1	0.384	ug/L	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	1	1	0.256	ug/L	U	UJ	C
Isopropylbenzene	U	98-82-8	1	1	0.326	ug/L	U	U	
Methyl tert-butyl ether	U	1634-04-4	1	1	0.367	ug/L	U	U	
Methylene Chloride	U	75-09-2	5	5	1	ug/L	U	U	

Analysis Method 8260B

Naphthalene	U	91-20-3	5	5	1	ug/L	U	U
n-Butylbenzene	U	104-51-8	1	1	0.361	ug/L	U	U
n-Propylbenzene	U	103-65-1	1	1	0.349	ug/L	U	U
p-Isopropyltoluene	U	99-87-6	1	1	0.35	ug/L	U	U
sec-Butylbenzene	U	135-98-8	1	1	0.365	ug/L	U	U
Styrene	U	100-42-5	1	1	0.307	ug/L	U	U
tert-Butylbenzene	U	98-06-6	1	1	0.399	ug/L	U	U
Tetrachloroethene	U	127-18-4	1	1	0.372	ug/L	U	U
Toluene	U	108-88-3	5	5	0.78	ug/L	U	U
Total Xylenes	U	1330-20-7	3	3	1.06	ug/L	U	U
trans-1,2-Dichloroethene	U	156-60-5	1	1	0.396	ug/L	U	U
trans-1,3-Dichloropropene	U	10061-02-6	1	1	0.419	ug/L	U	U
Trichloroethene	U	79-01-6	1	1	0.398	ug/L	U	U
Trichlorofluoromethane	U	75-69-4	5	5	1.2	ug/L	U	U
Vinyl chloride	U	75-01-4	1	1	0.259	ug/L	U	U

Analysis Method 8270C

Sample Name CTGW-01-20160511 **Matrix Type:** W

Lab Sample Name: L835437-05 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	10	10	0.355	ug/L	U	U	
2,4,6-Trichlorophenol	U	88-06-2	10	10	0.278	ug/L	U	U	
2,4-Dichlorophenol	U	120-83-2	10	10	0.972	ug/L	U	U	
2,4-Dimethylphenol	U	105-67-9	10	10	1.34	ug/L	U	U	
2,4-Dinitrophenol	U	51-28-5	10	10	2.3	ug/L	U	U	
2,4-Dinitrotoluene	U	121-14-2	10	10	0.219	ug/L	U	U	
2,6-Dinitrotoluene	U	606-20-2	10	10	1.43	ug/L	U	U	
2-Chloronaphthalene	U	91-58-7	1	1	0.204	ug/L	U	U	
2-Chlorophenol	U	95-57-8	10	10	0.19	ug/L	U	U	
2-Nitrophenol	U	88-75-5	10	10	0.279	ug/L	U	U	
3,3-Dichlorobenzidine	U	91-94-1	10	10	1.69	ug/L	J4U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	10	10	2.6	ug/L	U	U	
4-Bromophenyl-phenylether	U	101-55-3	10	10	0.18	ug/L	U	U	
4-Chloro-3-methylphenol	U	59-50-7	10	10	0.229	ug/L	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	10	10	0.17	ug/L	U	U	
4-Nitrophenol	U	100-02-7	10	10	2.73	ug/L	U	U	
Acenaphthene	U	83-32-9	1	1	0.316	ug/L	U	U	
Acenaphthylene	U	208-96-8	1	1	0.309	ug/L	U	U	
Anthracene	U	120-12-7	1	1	0.291	ug/L	U	U	
Benzidine	U	92-87-5	10	10	2.1	ug/L	U	U	
Benzo(a)anthracene	U	56-55-3	1	1	0.111	ug/L	U	U	
Benzo(a)pyrene	U	50-32-8	1	1	0.269	ug/L	U	U	

Analysis Method 8270C

Benzo(b)fluoranthene	U	205-99-2	1	1	0.0896	ug/L	U	**U**
Benzo(g,h,i)perylene	U	191-24-2	1	1	0.161	ug/L	U	**U**
Benzo(k)fluoranthene	U	207-08-9	1	1	0.265	ug/L	U	**U**
Benzylbutyl phthalate	U	85-68-7	3	3	0.395	ug/L	U	**U**
Bis(2-chlorethoxy)methane	U	111-91-1	10	10	0.214	ug/L	U	**U**
Bis(2-chloroethyl)ether	U	111-44-4	10	10	0.214	ug/L	U	**U**
Bis(2-chloroisopropyl)ether	U	108-60-1	10	10	0.308	ug/L	U	**U**
Bis(2-Ethylhexyl)phthalate	U	117-81-7	3	3	0.496	ug/L	U	**U**
Chrysene	U	218-01-9	1	1	0.133	ug/L	U	**U**
Dibenz(a,h)anthracene	U	53-70-3	1	1	0.251	ug/L	U	**U**
Diethyl phthalate	U	84-66-2	3	3	0.356	ug/L	U	**U**
Dimethyl phthalate	U	131-11-3	3	3	0.338	ug/L	U	**U**
Di-n-butyl phthalate	U	84-74-2	3	3	0.275	ug/L	U	**U**
Di-n-octyl phthalate	U	117-84-0	3	3	0.277	ug/L	U	**U**
Fluoranthene	U	206-44-0	1	1	0.342	ug/L	U	**U**
Fluorene	U	86-73-7	1	1	0.177	ug/L	U	**U**
Hexachloro-1,3-butadiene	U	87-68-3	10	10	2.64	ug/L	U	**U**
Hexachlorobenzene	U	118-74-1	1	1	0.227	ug/L	U	**U**
Hexachlorocyclopentadiene	U	77-47-4	10	10	1.8	ug/L	U	**U**
Hexachloroethane	U	67-72-1	10	10	3.13	ug/L	U	**U**
Indeno(1,2,3-cd)pyrene	U	193-39-5	1	1	0.333	ug/L	U	**U**
Isophorone	U	78-59-1	10	10	0.238	ug/L	U	**U**
Naphthalene	U	91-20-3	1	1	0.413	ug/L	U	**U**
Nitrobenzene	U	98-95-3	10	10	0.2	ug/L	U	**U**
n-Nitrosodimethylamine	U	62-75-9	10	10	2.56	ug/L	U	**U**
n-Nitrosodi-n-propylamine	U	621-64-7	10	10	0.311	ug/L	U	**U**
n-Nitrosodiphenylamine	U	86-30-6	10	10	0.137	ug/L	U	**U**
Pentachlorophenol	U	87-86-5	10	10	0.407	ug/L	U	**U**
Phenanthrene	U	85-01-8	1	1	0.205	ug/L	U	**U**
Phenol	U	108-95-2	10	10	1.13	ug/L	U	**U**
Pyrene	U	129-00-0	1	1	0.295	ug/L	U	**U**

DATA VALIDATION REPORT

Cowboy Timber

SAMPLE DELIVERY GROUP: L838049

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Cowboy Timber
Contract Task Order:	20408.012.001.0263.00
Sample Delivery Group:	L838049
Weston Project Manager:	Eric Sandusky
TDD No.:	1507-08
Matrix:	Soil
QC Level:	Stage 4
No. of Samples:	6
No. of Reanalyses/Dilutions:	0
Laboratory:	ESC Lab Sciences

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
CTSO-B4D4-20160525	L838049-03	S	5/25/2016 10:46:00 AM	8270C
CTSO-B5D4-20160525	L838049-04	S	5/25/2016 1:10:00 PM	8270C
CTSO-C404-20160525	L838049-06	S	5/25/2016 10:43:00 AM	8270C
CTSO-C5D4-20160525	L838049-02	S	5/25/2016 4:40:00 PM	8270C
CTSO-DPILE3-20160524	L838049-05	S	5/24/2016 7:30:00 AM	8270C
CTSO-E5D3-20160523	L838049-01	S	5/23/2016 2:42:00 PM	8270C

II. Sample Management

The samples were received within the temperature limits of 4°C ±2°C. The sample containers were received intact. The chain-of-custody (COC) was appropriately signed and dated by field and laboratory personnel. One correction to the COC was not initialed or dated. The laboratory receipt information indicated custody seals were present and intact on the cooler. No other issues with sample management were noted.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material 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. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential positive bias.
J-	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential negative bias.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.

Qualifier	Organics	Inorganics
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995 or calibration was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
L1	LCS/LCSD RPD was outside control limits.	LCS/LCSD RPD was outside control limits.
Q	MS/MSD recovery was poor.	MS recovery was poor.
Q1	MS/MSD RPD was outside control limits.	MS/MSD RPD was outside control limits.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	ICPMS tune was not compliant.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
F1	Field duplicate results were outside the control limit.	Field duplicate results were outside the control limit.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualifier	Organics	Inorganics
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analysis

1. EPA METHOD 8270C—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin
Date Reviewed: October 28, 2016

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), *EPA Method 8270C*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (2014).

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. Samples were analyzed within 12 hours of the DFTPP injection time.

- Calibration: Calibration criteria were met. Initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. Continuing calibration %Ds were within the control limit of ≤20%. The reviewer noted second-source initial calibration verification (ICV) analysis was not performed.

- Laboratory Blanks: The method blank had no target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within the laboratory control limits.

- Surrogate Recovery: Recoveries were not evaluated in samples analyzed at dilutions of 10× or greater, as the surrogates were considered diluted out. Remaining recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on sample CTSO-E5D3-20160523 from this SDG. Benzidine was not recovered above the MDL in either the MS or MSD; therefore, the nondetected parent sample result for benzidine was rejected (R). Remaining recoveries and all RPDs were within the laboratory control limits.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

- Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: Internal standard area counts and retention times were within the control limits established by the continuing calibration standard, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatogram, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Results detected between the MDL and the reporting limit were qualified as estimated (J). Reported nondetects are valid to the reporting limit.

  All samples except CTSO-E5D3-20160523 were analyzed at one or more dilutions for high concentrations of target compounds and/or due to matrix interference. Samples CTSO-C5D4-20160525 and CTSO-DPILE3-20160524 were initially analyzed at 5× dilutions, and were analyzed at secondary 100× and 20x dilutions, respectively, for pentachlorophenol. Sample CTSO-B5D4-20160525 was analyzed undiluted and reanalyzed at 5× for pentachlorophenol. Samples CTSO-B4D4-20160525 and CTSO-C404-20160525 had final extract volumes of five milliliters (mL) rather than 0.5 mL, resulting in an initial 10× dilution, and both were reanalyzed at 50× dilutions for pentachlorophenol. Pentachlorophenol was reported from the reanalyses, and all remaining results were reported from the undiluted or least dilute initial analysis.

  The reviewer also noted that a percent moisture determination was not requested on the COC and was therefore not performed. All results were reported on a wet-weight basis.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.

- System Performance: Review of the raw data indicated no issues with system performance.

Validated Sample Result Forms: L838049

Analysis Method 8270C

Sample Name CTSO-E5D3-20160523 **Matrix Type:** S

Lab Sample Name: L838049-01 **Sample Date:** 5/23/2016 2:42:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	333	333	8.76	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	333	333	7.79	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	333	333	7.46	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	333	333	47.1	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	333	333	98	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	333	333	6.07	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	333	333	7.37	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	33	33	6.39	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	333	333	8.31	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	333	333	13	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	333	333	79.4	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	333	333	124	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	333	333	11.4	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	333	333	4.77	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	333	333	6.27	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	333	333	52.5	ug/kg	U	U	
Acenaphthene	U	83-32-9	33	33	6.42	ug/kg	U	U	
Acenaphthylene	U	208-96-8	33	33	6.71	ug/kg	U	U	
Anthracene	U	120-12-7	33	33	6.32	ug/kg	U	U	
Benzidine	U	92-87-5	333	333	63.7	ug/kg	U	R	Q
Benzo(a)anthracene	U	56-55-3	33	33	4.28	ug/kg	U	U	
Benzo(a)pyrene	U	50-32-8	33	33	5.48	ug/kg	U	U	
Benzo(b)fluoranthene	U	205-99-2	33	33	6.95	ug/kg	U	U	
Benzo(g,h,i)perylene	U	191-24-2	33	33	7.21	ug/kg	U	U	
Benzo(k)fluoranthene	U	207-08-9	33	33	5.82	ug/kg	U	U	
Benzylbutyl phthalate	U	85-68-7	333	333	10.3	ug/kg	U	U	
Bis(2-chlorethoxy)methane	U	111-91-1	333	333	7.7	ug/kg	U	U	
Bis(2-chloroethyl)ether	U	111-44-4	333	333	8.96	ug/kg	U	U	
Bis(2-chloroisopropyl)ether	U	108-60-1	333	333	7.6	ug/kg	U	U	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	22	333	12	ug/kg	J	J	
Chrysene	U	218-01-9	33	33	5.55	ug/kg	U	U	
Dibenz(a,h)anthracene	U	53-70-3	33	33	8.21	ug/kg	U	U	
Diethyl phthalate	U	84-66-2	333	333	6.91	ug/kg	U	U	
Dimethyl phthalate	U	131-11-3	333	333	5.4	ug/kg	U	U	
Di-n-butyl phthalate	U	84-74-2	333	333	10.9	ug/kg	U	U	
Di-n-octyl phthalate	U	117-84-0	333	333	9.07	ug/kg	U	U	

Analysis Method 8270C

Fluoranthene	U	206-44-0	33	33	4.96	ug/kg	U	U
Fluorene	U	86-73-7	33	33	6.82	ug/kg	U	U
Hexachloro-1,3-butadiene	U	87-68-3	333	333	10	ug/kg	U	U
Hexachlorobenzene	U	118-74-1	333	333	8.56	ug/kg	U	U
Hexachlorocyclopentadiene	U	77-47-4	333	333	58.7	ug/kg	U	U
Hexachloroethane	U	67-72-1	333	333	13.4	ug/kg	U	U
Indeno(1,2,3-cd)pyrene	U	193-39-5	33	33	7.72	ug/kg	U	U
Isophorone	U	78-59-1	333	333	5.22	ug/kg	U	U
Naphthalene	U	91-20-3	33	33	8.89	ug/kg	U	U
Nitrobenzene	U	98-95-3	333	333	6.95	ug/kg	U	U
n-Nitrosodimethylamine	U	62-75-9	333	333	64.7	ug/kg	U	U
n-Nitrosodi-n-propylamine	U	621-64-7	333	333	9.06	ug/kg	U	U
n-Nitrosodiphenylamine	U	86-30-6	333	333	5.94	ug/kg	U	U
Pentachlorophenol	U	87-86-5	176	333	48	ug/kg	J	J
Phenanthrene	U	85-01-8	33	33	5.28	ug/kg	U	U
Phenol	U	108-95-2	333	333	6.95	ug/kg	U	U
Pyrene	U	129-00-0	33	33	12.3	ug/kg	U	U

Sample Name CTSO-C5D4-20160525 **Matrix Type:** S

Lab Sample Name: L838049-02 **Sample Date:** 5/25/2016 4:40:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	1670	1670	43.8	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	1670	1670	39	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	1670	1670	37.3	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	1670	1670	236	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	1670	1670	490	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	1670	1670	30.4	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	1670	1670	36.8	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	165	165	32	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	1670	1670	41.6	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	1670	1670	65	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	1670	1670	397	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	1670	1670	620	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	1670	1670	57	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	1670	1670	23.8	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	1670	1670	31.4	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	1670	1670	262	ug/kg	U	U	
Acenaphthene	U	83-32-9	701	165	32.1	ug/kg			
Acenaphthylene	U	208-96-8	176	165	33.6	ug/kg			
Anthracene	U	120-12-7	165	165	31.6	ug/kg	U	U	
Benzidine	U	92-87-5	1670	1670	318	ug/kg	U	U	
Benzo(a)anthracene	U	56-55-3	39	165	21.4	ug/kg	J	J	

Analysis Method 8270C

Benzo(a)pyrene	U	50-32-8	165	165	27.4	ug/kg	U	U
Benzo(b)fluoranthene	U	205-99-2	37	165	34.8	ug/kg	J	J
Benzo(g,h,i)perylene	U	191-24-2	165	165	36	ug/kg	U	U
Benzo(k)fluoranthene	U	207-08-9	165	165	29.1	ug/kg	U	U
Benzylbutyl phthalate	U	85-68-7	1670	1670	51.5	ug/kg	U	U
Bis(2-chlorethoxy)methane	U	111-91-1	1670	1670	38.5	ug/kg	U	U
Bis(2-chloroethyl)ether	U	111-44-4	1670	1670	44.8	ug/kg	U	U
Bis(2-chloroisopropyl)ether	U	108-60-1	1670	1670	38	ug/kg	U	U
Bis(2-Ethylhexyl)phthalate	U	117-81-7	1670	1670	60	ug/kg	U	U
Chrysene	U	218-01-9	87	165	27.8	ug/kg	J	J
Dibenz(a,h)anthracene	U	53-70-3	165	165	41	ug/kg	U	U
Diethyl phthalate	U	84-66-2	1670	1670	34.6	ug/kg	U	U
Dimethyl phthalate	U	131-11-3	1670	1670	27	ug/kg	U	U
Di-n-butyl phthalate	U	84-74-2	1670	1670	54.5	ug/kg	U	U
Di-n-octyl phthalate	U	117-84-0	1670	1670	45.4	ug/kg	U	U
Fluoranthene	U	206-44-0	278	165	24.8	ug/kg		
Fluorene	U	86-73-7	589	165	34.1	ug/kg		
Hexachloro-1,3-butadiene	U	87-68-3	1670	1670	50	ug/kg	U	U
Hexachlorobenzene	U	118-74-1	1670	1670	42.8	ug/kg	U	U
Hexachlorocyclopentadiene	U	77-47-4	1670	1670	294	ug/kg	U	U
Hexachloroethane	U	67-72-1	1670	1670	67	ug/kg	U	U
Indeno(1,2,3-cd)pyrene	U	193-39-5	165	165	38.6	ug/kg	U	U
Isophorone	U	78-59-1	1670	1670	26.1	ug/kg	U	U
Naphthalene	U	91-20-3	56	165	44.4	ug/kg	J	J
Nitrobenzene	U	98-95-3	1670	1670	34.8	ug/kg	U	U
n-Nitrosodimethylamine	U	62-75-9	1670	1670	324	ug/kg	U	U
n-Nitrosodi-n-propylamine	U	621-64-7	1670	1670	45.3	ug/kg	U	U
n-Nitrosodiphenylamine	U	86-30-6	1670	1670	29.7	ug/kg	U	U
Pentachlorophenol	U	87-86-5	83400	33300	4800	ug/kg		
Phenanthrene	U	85-01-8	4550	165	26.4	ug/kg		
Phenol	U	108-95-2	1670	1670	34.8	ug/kg	U	U
Pyrene	U	129-00-0	829	165	61.5	ug/kg		

Sample Name CTSO-B4D4-20160525 **Matrix Type:** W

Lab Sample Name: L838049-03 **Sample Date:** 5/25/2016 10:46:00 AM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	3330	3330	87.6	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	3330	3330	77.9	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	3330	3330	74.6	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	3330	3330	471	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	3330	3330	980	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	3330	3330	60.7	ug/kg	U	U	

Analysis Method 8270C

2,6-Dinitrotoluene	U	606-20-2	3330	3330	73.7	ug/kg	U	**U**
2-Chloronaphthalene	U	91-58-7	330	330	63.9	ug/kg	U	**U**
2-Chlorophenol	U	95-57-8	3330	3330	83.1	ug/kg	U	**U**
2-Nitrophenol	U	88-75-5	3330	3330	130	ug/kg	U	**U**
3,3-Dichlorobenzidine	U	91-94-1	3330	3330	794	ug/kg	U	**U**
4,6-Dinitro-2-methylphenol	U	534-52-1	3330	3330	1240	ug/kg	U	**U**
4-Bromophenyl-phenylether	U	101-55-3	3330	3330	114	ug/kg	U	**U**
4-Chloro-3-methylphenol	U	59-50-7	3330	3330	47.7	ug/kg	U	**U**
4-Chlorophenyl-phenylether	U	7005-72-3	3330	3330	62.7	ug/kg	U	**U**
4-Nitrophenol	U	100-02-7	3330	3330	525	ug/kg	U	**U**
Acenaphthene	U	83-32-9	93	330	64.2	ug/kg	J	**J**
Acenaphthylene	U	208-96-8	330	330	67.1	ug/kg	U	**U**
Anthracene	U	120-12-7	330	330	63.2	ug/kg	U	**U**
Benzidine	U	92-87-5	3330	3330	637	ug/kg	U	**U**
Benzo(a)anthracene	U	56-55-3	330	330	42.8	ug/kg	U	**U**
Benzo(a)pyrene	U	50-32-8	330	330	54.8	ug/kg	U	**U**
Benzo(b)fluoranthene	U	205-99-2	330	330	69.5	ug/kg	U	**U**
Benzo(g,h,i)perylene	U	191-24-2	330	330	72.1	ug/kg	U	**U**
Benzo(k)fluoranthene	U	207-08-9	330	330	58.2	ug/kg	U	**U**
Benzylbutyl phthalate	U	85-68-7	3330	3330	103	ug/kg	U	**U**
Bis(2-chlorethoxy)methane	U	111-91-1	3330	3330	77	ug/kg	U	**U**
Bis(2-chloroethyl)ether	U	111-44-4	3330	3330	89.6	ug/kg	U	**U**
Bis(2-chloroisopropyl)ether	U	108-60-1	3330	3330	76	ug/kg	U	**U**
Bis(2-Ethylhexyl)phthalate	U	117-81-7	3330	3330	120	ug/kg	U	**U**
Chrysene	U	218-01-9	330	330	55.5	ug/kg	U	**U**
Dibenz(a,h)anthracene	U	53-70-3	330	330	82.1	ug/kg	U	**U**
Diethyl phthalate	U	84-66-2	3330	3330	69.1	ug/kg	U	**U**
Dimethyl phthalate	U	131-11-3	3330	3330	54	ug/kg	U	**U**
Di-n-butyl phthalate	U	84-74-2	3330	3330	109	ug/kg	U	**U**
Di-n-octyl phthalate	U	117-84-0	3330	3330	90.7	ug/kg	U	**U**
Fluoranthene	U	206-44-0	330	330	49.6	ug/kg	U	**U**
Fluorene	U	86-73-7	330	330	68.2	ug/kg	U	**U**
Hexachloro-1,3-butadiene	U	87-68-3	3330	3330	100	ug/kg	U	**U**
Hexachlorobenzene	U	118-74-1	3330	3330	85.6	ug/kg	U	**U**
Hexachlorocyclopentadiene	U	77-47-4	3330	3330	587	ug/kg	U	**U**
Hexachloroethane	U	67-72-1	3330	3330	134	ug/kg	U	**U**
Indeno(1,2,3-cd)pyrene	U	193-39-5	330	330	77.2	ug/kg	U	**U**
Isophorone	U	78-59-1	3330	3330	52.2	ug/kg	U	**U**
Naphthalene	U	91-20-3	330	330	88.9	ug/kg	U	**U**
Nitrobenzene	U	98-95-3	3330	3330	69.5	ug/kg	U	**U**
n-Nitrosodimethylamine	U	62-75-9	3330	3330	647	ug/kg	U	**U**
n-Nitrosodi-n-propylamine	U	621-64-7	3330	3330	90.6	ug/kg	U	**U**
n-Nitrosodiphenylamine	U	86-30-6	3330	3330	59.4	ug/kg	U	**U**

Analysis Method 8270C

Pentachlorophenol	U	87-86-5	46900	16700	2400	ug/kg		
Phenanthrene	U	85-01-8	187	330	52.8	ug/kg	J	J
Phenol	U	108-95-2	3330	3330	69.5	ug/kg	U	U
Pyrene	U	129-00-0	226	330	123	ug/kg	J	J

Sample Name CTSO-B5D4-20160525 **Matrix Type:** S

Lab Sample Name: L838049-04 **Sample Date:** 5/25/2016 1:10:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	333	333	8.76	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	333	333	7.79	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	333	333	7.46	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	333	333	47.1	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	333	333	98	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	333	333	6.07	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	333	333	7.37	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	33	33	6.39	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	333	333	8.31	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	333	333	13	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	333	333	79.4	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	333	333	124	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	333	333	11.4	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	333	333	4.77	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	333	333	6.27	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	333	333	52.5	ug/kg	U	U	
Acenaphthene	U	83-32-9	7	33	6.42	ug/kg	J	J	
Acenaphthylene	U	208-96-8	33	33	6.71	ug/kg	U	U	
Anthracene	U	120-12-7	33	33	6.32	ug/kg	U	U	
Benzidine	U	92-87-5	333	333	63.7	ug/kg	U	U	
Benzo(a)anthracene	U	56-55-3	33	33	4.28	ug/kg	U	U	
Benzo(a)pyrene	U	50-32-8	33	33	5.48	ug/kg	U	U	
Benzo(b)fluoranthene	U	205-99-2	33	33	6.95	ug/kg	U	U	
Benzo(g,h,i)perylene	U	191-24-2	33	33	7.21	ug/kg	U	U	
Benzo(k)fluoranthene	U	207-08-9	33	33	5.82	ug/kg	U	U	
Benzylbutyl phthalate	U	85-68-7	333	333	10.3	ug/kg	U	U	
Bis(2-chlorethoxy)methane	U	111-91-1	333	333	7.7	ug/kg	U	U	
Bis(2-chloroethyl)ether	U	111-44-4	333	333	8.96	ug/kg	U	U	
Bis(2-chloroisopropyl)ether	U	108-60-1	333	333	7.6	ug/kg	U	U	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	333	333	12	ug/kg	U	U	
Chrysene	U	218-01-9	33	33	5.55	ug/kg	U	U	
Dibenz(a,h)anthracene	U	53-70-3	33	33	8.21	ug/kg	U	U	
Diethyl phthalate	U	84-66-2	333	333	6.91	ug/kg	U	U	
Dimethyl phthalate	U	131-11-3	333	333	5.4	ug/kg	U	U	

Di-n-butyl phthalate	U	84-74-2	333	333	10.9	ug/kg	U	U
Di-n-octyl phthalate	U	117-84-0	333	333	9.07	ug/kg	U	U
Fluoranthene	U	206-44-0	33	33	4.96	ug/kg	U	U
Fluorene	U	86-73-7	9	33	6.82	ug/kg	J	J
Hexachloro-1,3-butadiene	U	87-68-3	333	333	10	ug/kg	U	U
Hexachlorobenzene	U	118-74-1	333	333	8.56	ug/kg	U	U
Hexachlorocyclopentadiene	U	77-47-4	333	333	58.7	ug/kg	U	U
Hexachloroethane	U	67-72-1	333	333	13.4	ug/kg	U	U
Indeno(1,2,3-cd)pyrene	U	193-39-5	33	33	7.72	ug/kg	U	U
Isophorone	U	78-59-1	333	333	5.22	ug/kg	U	U
Naphthalene	U	91-20-3	33	33	8.89	ug/kg	U	U
Nitrobenzene	U	98-95-3	333	333	6.95	ug/kg	U	U
n-Nitrosodimethylamine	U	62-75-9	333	333	64.7	ug/kg	U	U
n-Nitrosodi-n-propylamine	U	621-64-7	333	333	9.06	ug/kg	U	U
n-Nitrosodiphenylamine	U	86-30-6	333	333	5.94	ug/kg	U	U
Pentachlorophenol	U	87-86-5	2850	1670	240	ug/kg		
Phenanthrene	U	85-01-8	29	33	5.28	ug/kg	J	J
Phenol	U	108-95-2	333	333	6.95	ug/kg	U	U
Pyrene	U	129-00-0	19	33	12.3	ug/kg	J	J

Sample Name CTSO-DPILE3-20160524 **Matrix Type:** W

Lab Sample Name: L838049-05 **Sample Date:** 5/24/2016 7:30:00 AM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	1670	1670	43.8	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	1670	1670	39	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	1670	1670	37.3	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	1670	1670	236	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	1670	1670	490	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	1670	1670	30.4	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	1670	1670	36.8	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	165	165	32	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	1670	1670	41.6	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	1670	1670	65	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	1670	1670	397	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	1670	1670	620	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	1670	1670	57	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	1670	1670	23.8	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	1670	1670	31.4	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	1670	1670	262	ug/kg	U	U	
Acenaphthene	U	83-32-9	147	165	32.1	ug/kg	J	J	
Acenaphthylene	U	208-96-8	43	165	33.6	ug/kg	J	J	
Anthracene	U	120-12-7	165	165	31.6	ug/kg	U	U	

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Benzidine	U	92-87-5	1670	1670	318	ug/kg	U	U
Benzo(a)anthracene	U	56-55-3	165	165	21.4	ug/kg	U	U
Benzo(a)pyrene	U	50-32-8	165	165	27.4	ug/kg	U	U
Benzo(b)fluoranthene	U	205-99-2	165	165	34.8	ug/kg	U	U
Benzo(g,h,i)perylene	U	191-24-2	165	165	36	ug/kg	U	U
Benzo(k)fluoranthene	U	207-08-9	165	165	29.1	ug/kg	U	U
Benzylbutyl phthalate	U	85-68-7	1670	1670	51.5	ug/kg	U	U
Bis(2-chlorethoxy)methane	U	111-91-1	1670	1670	38.5	ug/kg	U	U
Bis(2-chloroethyl)ether	U	111-44-4	1670	1670	44.8	ug/kg	U	U
Bis(2-chloroisopropyl)ether	U	108-60-1	1670	1670	38	ug/kg	U	U
Bis(2-Ethylhexyl)phthalate	U	117-81-7	1670	1670	60	ug/kg	U	U
Chrysene	U	218-01-9	165	165	27.8	ug/kg	U	U
Dibenz(a,h)anthracene	U	53-70-3	165	165	41	ug/kg	U	U
Diethyl phthalate	U	84-66-2	1670	1670	34.6	ug/kg	U	U
Dimethyl phthalate	U	131-11-3	1670	1670	27	ug/kg	U	U
Di-n-butyl phthalate	U	84-74-2	1670	1670	54.5	ug/kg	U	U
Di-n-octyl phthalate	U	117-84-0	1670	1670	45.4	ug/kg	U	U
Fluoranthene	U	206-44-0	74	165	24.8	ug/kg	J	J
Fluorene	U	86-73-7	108	165	34.1	ug/kg	J	J
Hexachloro-1,3-butadiene	U	87-68-3	1670	1670	50	ug/kg	U	U
Hexachlorobenzene	U	118-74-1	1670	1670	42.8	ug/kg	U	U
Hexachlorocyclopentadiene	U	77-47-4	1670	1670	294	ug/kg	U	U
Hexachloroethane	U	67-72-1	1670	1670	67	ug/kg	U	U
Indeno(1,2,3-cd)pyrene	U	193-39-5	165	165	38.6	ug/kg	U	U
Isophorone	U	78-59-1	1670	1670	26.1	ug/kg	U	U
Naphthalene	U	91-20-3	165	165	44.4	ug/kg	U	U
Nitrobenzene	U	98-95-3	1670	1670	34.8	ug/kg	U	U
n-Nitrosodimethylamine	U	62-75-9	1670	1670	324	ug/kg	U	U
n-Nitrosodi-n-propylamine	U	621-64-7	1670	1670	45.3	ug/kg	U	U
n-Nitrosodiphenylamine	U	86-30-6	1670	1670	29.7	ug/kg	U	U
Pentachlorophenol	U	87-86-5	22500	6660	960	ug/kg		
Phenanthrene	U	85-01-8	478	165	26.4	ug/kg		
Phenol	U	108-95-2	1670	1670	34.8	ug/kg	U	U
Pyrene	U	129-00-0	266	165	61.5	ug/kg		

Sample Name CTSO-C404-20160525 **Matrix Type:** S

Lab Sample Name: L838049-06 **Sample Date:** 5/25/2016 10:43:00 AM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	3330	3330	87.6	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	3330	3330	77.9	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	3330	3330	74.6	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	3330	3330	471	ug/kg	U	U	

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2,4-Dinitrophenol	U	51-28-5	3330	3330	980	ug/kg	U	U
2,4-Dinitrotoluene	U	121-14-2	3330	3330	60.7	ug/kg	U	U
2,6-Dinitrotoluene	U	606-20-2	3330	3330	73.7	ug/kg	U	U
2-Chloronaphthalene	U	91-58-7	330	330	63.9	ug/kg	U	U
2-Chlorophenol	U	95-57-8	3330	3330	83.1	ug/kg	U	U
2-Nitrophenol	U	88-75-5	3330	3330	130	ug/kg	U	U
3,3-Dichlorobenzidine	U	91-94-1	3330	3330	794	ug/kg	U	U
4,6-Dinitro-2-methylphenol	U	534-52-1	3330	3330	1240	ug/kg	U	U
4-Bromophenyl-phenylether	U	101-55-3	3330	3330	114	ug/kg	U	U
4-Chloro-3-methylphenol	U	59-50-7	3330	3330	47.7	ug/kg	U	U
4-Chlorophenyl-phenylether	U	7005-72-3	3330	3330	62.7	ug/kg	U	U
4-Nitrophenol	U	100-02-7	3330	3330	525	ug/kg	U	U
Acenaphthene	U	83-32-9	330	330	64.2	ug/kg	U	U
Acenaphthylene	U	208-96-8	330	330	67.1	ug/kg	U	U
Anthracene	U	120-12-7	330	330	63.2	ug/kg	U	U
Benzidine	U	92-87-5	3330	3330	637	ug/kg	U	U
Benzo(a)anthracene	U	56-55-3	330	330	42.8	ug/kg	U	U
Benzo(a)pyrene	U	50-32-8	330	330	54.8	ug/kg	U	U
Benzo(b)fluoranthene	U	205-99-2	330	330	69.5	ug/kg	U	U
Benzo(g,h,i)perylene	U	191-24-2	330	330	72.1	ug/kg	U	U
Benzo(k)fluoranthene	U	207-08-9	330	330	58.2	ug/kg	U	U
Benzylbutyl phthalate	U	85-68-7	3330	3330	103	ug/kg	U	U
Bis(2-chlorethoxy)methane	U	111-91-1	3330	3330	77	ug/kg	U	U
Bis(2-chloroethyl)ether	U	111-44-4	3330	3330	89.6	ug/kg	U	U
Bis(2-chloroisopropyl)ether	U	108-60-1	3330	3330	76	ug/kg	U	U
Bis(2-Ethylhexyl)phthalate	U	117-81-7	3330	3330	120	ug/kg	U	U
Chrysene	U	218-01-9	85	330	55.5	ug/kg	J	J
Dibenz(a,h)anthracene	U	53-70-3	330	330	82.1	ug/kg	U	U
Diethyl phthalate	U	84-66-2	3330	3330	69.1	ug/kg	U	U
Dimethyl phthalate	U	131-11-3	3330	3330	54	ug/kg	U	U
Di-n-butyl phthalate	U	84-74-2	3330	3330	109	ug/kg	U	U
Di-n-octyl phthalate	U	117-84-0	3330	3330	90.7	ug/kg	U	U
Fluoranthene	U	206-44-0	65	330	49.6	ug/kg	J	J
Fluorene	U	86-73-7	330	330	68.2	ug/kg	U	U
Hexachloro-1,3-butadiene	U	87-68-3	3330	3330	100	ug/kg	U	U
Hexachlorobenzene	U	118-74-1	3330	3330	85.6	ug/kg	U	U
Hexachlorocyclopentadiene	U	77-47-4	3330	3330	587	ug/kg	U	U
Hexachloroethane	U	67-72-1	3330	3330	134	ug/kg	U	U
Indeno(1,2,3-cd)pyrene	U	193-39-5	330	330	77.2	ug/kg	U	U
Isophorone	U	78-59-1	3330	3330	52.2	ug/kg	U	U
Naphthalene	U	91-20-3	330	330	88.9	ug/kg	U	U
Nitrobenzene	U	98-95-3	3330	3330	69.5	ug/kg	U	U
n-Nitrosodimethylamine	U	62-75-9	3330	3330	647	ug/kg	U	U

Analysis Method 8270C

n-Nitrosodi-n-propylamine	U	621-64-7	3330	3330	90.6	ug/kg	U	**U**
n-Nitrosodiphenylamine	U	86-30-6	3330	3330	59.4	ug/kg	U	**U**
Pentachlorophenol	U	87-86-5	66200	16700	2400	ug/kg		
Phenanthrene	U	85-01-8	129	330	52.8	ug/kg	J	**J**
Phenol	U	108-95-2	3330	3330	69.5	ug/kg	U	**U**
Pyrene	U	129-00-0	363	330	123	ug/kg		

DATA VALIDATION REPORT

Cowboy Timber

SAMPLE DELIVERY GROUP: L836976

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Cowboy Timber
Contract Task Order:	20408.012.001.0263.00
Sample Delivery Group:	L836976
Weston Project Manager:	Eric Sandusky
TDD No.:	1507-08
Matrix:	Soil
QC Level:	Stage 4
No. of Samples:	5
No. of Reanalyses/Dilutions:	0
Laboratory:	ESC Lab Sciences

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
CTSO-06-20160518	L836976-01	S	5/18/2016 4:50:00 PM	8260B, 8270C
CTSO-C6D12-20160519	L836976-04	S	5/19/2016 7:15:00 AM	8270C
CTSO-C7D12-20160519	L836976-05	S	5/19/2016 7:22:00 AM	8270C
CTSO-D8D23-20160518	L836976-03	S	5/18/2016 1:52:00 PM	8270C
CTSO-E3D01-20160517	L836976-02	S	5/17/2016 12:59:00 PM	8270C

II. Sample Management

The samples were received within the temperature limits of 4°C ±2°C. The sample containers were received intact. The chain-of-custody (COC) was appropriately signed and dated by field and laboratory personnel. The laboratory receipt information indicated custody seals were present and intact on the cooler. No issues with sample management were noted.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material 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. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential positive bias.
J-	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential negative bias.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.

Qualifier	Organics	Inorganics
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995 or calibration was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
L1	LCS/LCSD RPD was outside control limits.	LCS/LCSD RPD was outside control limits.
Q	MS/MSD recovery was poor.	MS recovery was poor.
Q1	MS/MSD RPD was outside control limits.	MS/MSD RPD was outside control limits.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	ICPMS tune was not compliant.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
F1	Field duplicate results were outside the control limit.	Field duplicate results were outside the control limit.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualifier	Organics	Inorganics
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analysis

1. EPA METHOD 8270C—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin
Date Reviewed: October 18, 2016

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), *EPA Method 8270C*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (2014).

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. Samples were analyzed within 12 hours of the DFTPP injection time.

- Calibration: Calibration criteria were met. Initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. Continuing calibration %Ds were within the control limit of ≤20%. The reviewer noted a second-source initial calibration verification (ICV) analysis was not performed.

- Laboratory Blanks: The method blank had no target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: Benzidine was reported as not recovered in the LCS, and recovered at 10.3% in the LCSD; however, review of the raw data indicated benzidine was detected in the LCS with a calculated recovery of 9.56%. Both recoveries were within the laboratory control limits of 0.00-48.0%; however, the reviewer considered 10% to be a more conservative and appropriate lower control limit. In the professional judgment of the reviewer, the nondetected sample results for benzidine were rejected (R). Remaining recoveries and all RPDs were within the laboratory control limits.

- Surrogate Recovery: Recoveries were not evaluated in samples analyzed at dilutions of 10× or greater, as the surrogates were considered diluted out. Remaining recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on sample CTSO-06-20160518 from this SDG. Benzidine was not recovered above the MDL in either the MS or MSD; therefore, the nondetected parent sample result for benzidine was rejected (R). Remaining recoveries and all RPDs were within the laboratory control limits.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining

detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

- Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: Internal standard chrysene-d12 was recovered below the control limits in the undiluted analyses of samples CTSO-D8D23-20160518 (46%) and CTSO-C7D12-20160519 (38%), and perylene-d12 was recovered below the control limits in the undiluted analyses of samples CTSO-D8D23-20160518 (16%), CTSO-C6D12-20160519 (20%), and CTSO-C7D12-20160519 (7.9%) Significant matrix interference was evident in the samples, and all required further dilution for both matrix interference and high concentrations of target compounds. The laboratory chose to report the specific target compounds associated with the internal standard outliers from the dilution analyses, with acceptable internal standard recoveries; therefore, no qualification was necessary. Remaining internal standard area counts and retention times were within the control limits established by the continuing calibration standard, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatogram, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Results detected between the MDL and the reporting limit were qualified as estimated (J). Reported nondetects are valid to the reporting limit.

  The following dilutions were performed for high concentrations of target compounds and/or to reduce matrix interference (see Internal Standards Performance section): CTSO-D8D23-20160518 (10×), CTSO-C6D12-20160519 (20×), and CTSO-C7D12-20160519 (50×). Sample CTSO-E3D01-20160517 had a final extract volume of five milliliters (mL) rather than 0.5 mL, resulting in an initial 10× dilution, and all results were reported from the dilution. Selected target compounds were reported from the remaining dilutions, and remaining target compounds in those samples were reported from the undiluted analysis.

  The reviewer also noted that a percent moisture determination was not requested on the COC and was therefore not performed. All results were reported on a wet-weight basis.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.

- System Performance: Review of the raw data indicated no issues with system performance.

2. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: October 19, 2016

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), and the *National Functional Guidelines for Superfund Organic Methods Data Review* (2014).

- Holding Times: Analytical holding times were met. The soil sample was analyzed within 14 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: Most calibration criteria were met, with exceptions noted below.

  Initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. As target compound 2-chloroethyl vinyl ether is not listed, the reviewer considered it appropriate to apply the minimum RRF of 0.010 for low responders. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. The CCV %Ds exceeded 20% with high responses for 1,2-dibromo-3-chloropropane (21.3%), 2-chloroethyl vinyl ether (76.9%), and bromomethane (70.3%), and low responses for bromoform (-21.4%) and tetrachloroethene (-23.6%). The nondetected results for all %D outliers were qualified as estimated (UJ) in associated sample CTSO-06-20160518. Remaining CCV %Ds were within the control limit of ≤20%.

- Laboratory Blanks: The method blank associated with the soil sample had no target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: Recoveries were above the laboratory control limits in both the LCS and LCSD for 2-chloroethyl vinyl ether (187% and 179%--limits 16.7-162%), bromomethane (209% and 200%--limits 23.0-191%), and vinyl chloride (137% and 139%--limits 58.4-134%), and in the LCSD only for chloroethane (150%--limits 47.2-147%); however, as none of the outlier compounds were detected in the associated sample, no qualification was necessary. Remaining recoveries and all RPDs were within the laboratory control limits.

- Surrogate Recovery: Recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample from this SDG. MEC^X evaluated method accuracy and precision based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining

detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Trip Blanks: This SDG had no identified trip blank.
- Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.
- Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: Internal standard area counts and retention times were within the control limits established by the continuing calibration standard, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.

  The soil sample was analyzed at a 5× dilution. The reason for the dilution was not apparent, as the sample chromatogram exhibited little or no interference. The reviewer also noted that a percent moisture determination was not requested on the COC and was therefore not performed. All results were reported on a wet-weight basis.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.

- System Performance: Review of the raw data indicated no issues with system performance.

Validated Sample Result Forms: L836976

Analysis Method 8260B

Sample Name CTSO-06-20160518 **Matrix Type:** S

Lab Sample Name: L836976-01 **Sample Date:** 5/18/2016 4:50:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	U	
1,2,3-Trichloropropane	U	96-18-4	12.5	12	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	1.74	5	1.06	ug/kg	J	J	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	UJ	C
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	J4U	UJ	C
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	J4U	UJ	C

Analysis Method 8260B

Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	J4U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	12.2	25	5	ug/kg	J	J	
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	UJ	C
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	J4U	U	

Analysis Method 8270C

Sample Name CTSO-06-20160518 **Matrix Type:** S

Lab Sample Name: L836976-01 **Sample Date:** 5/18/2016 4:50:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	333	333	8.76	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	333	333	7.79	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	333	333	7.46	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	333	333	47.1	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	333	333	98	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	333	333	6.07	ug/kg	U	U	

Analysis Method 8270C

2,6-Dinitrotoluene	U	606-20-2	333	333	7.37	ug/kg	U	**U**	
2-Chloronaphthalene	U	91-58-7	33	33	6.39	ug/kg	U	**U**	
2-Chlorophenol	U	95-57-8	333	333	8.31	ug/kg	U	**U**	
2-Nitrophenol	U	88-75-5	333	333	13	ug/kg	U	**U**	
3,3-Dichlorobenzidine	U	91-94-1	333	333	79.4	ug/kg	U	**U**	
4,6-Dinitro-2-methylphenol	U	534-52-1	333	333	124	ug/kg	U	**U**	
4-Bromophenyl-phenylether	U	101-55-3	333	333	11.4	ug/kg	U	**U**	
4-Chloro-3-methylphenol	U	59-50-7	333	333	4.77	ug/kg	U	**U**	
4-Chlorophenyl-phenylether	U	7005-72-3	333	333	6.27	ug/kg	U	**U**	
4-Nitrophenol	U	100-02-7	333	333	52.5	ug/kg	U	**U**	
Acenaphthene	U	83-32-9	27.5	33	6.42	ug/kg	J	**J**	
Acenaphthylene	U	208-96-8	33	33	6.71	ug/kg	U	**U**	
Anthracene	U	120-12-7	11.1	33	6.32	ug/kg	J	**J**	
Benzidine	U	92-87-5	333	333	63.7	ug/kg	U	**R**	**L, Q**
Benzo(a)anthracene	U	56-55-3	33	33	4.28	ug/kg	U	**U**	
Benzo(a)pyrene	U	50-32-8	33	33	5.48	ug/kg	U	**U**	
Benzo(b)fluoranthene	U	205-99-2	33	33	6.95	ug/kg	U	**U**	
Benzo(g,h,i)perylene	U	191-24-2	33	33	7.21	ug/kg	U	**U**	
Benzo(k)fluoranthene	U	207-08-9	33	33	5.82	ug/kg	U	**U**	
Benzylbutyl phthalate	U	85-68-7	333	333	10.3	ug/kg	U	**U**	
Bis(2-chlorethoxy)methane	U	111-91-1	333	333	7.7	ug/kg	U	**U**	
Bis(2-chloroethyl)ether	U	111-44-4	333	333	8.96	ug/kg	U	**U**	
Bis(2-chloroisopropyl)ether	U	108-60-1	333	333	7.6	ug/kg	U	**U**	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	333	333	12	ug/kg	U	**U**	
Chrysene	U	218-01-9	33	33	5.55	ug/kg	U	**U**	
Dibenz(a,h)anthracene	U	53-70-3	33	33	8.21	ug/kg	U	**U**	
Diethyl phthalate	U	84-66-2	333	333	6.91	ug/kg	U	**U**	
Dimethyl phthalate	U	131-11-3	333	333	5.4	ug/kg	U	**U**	
Di-n-butyl phthalate	U	84-74-2	333	333	10.9	ug/kg	U	**U**	
Di-n-octyl phthalate	U	117-84-0	333	333	9.07	ug/kg	U	**U**	
Fluoranthene	U	206-44-0	25.3	33	4.96	ug/kg	J	**J**	
Fluorene	U	86-73-7	29.7	33	6.82	ug/kg	J	**J**	
Hexachloro-1,3-butadiene	U	87-68-3	333	333	10	ug/kg	U	**U**	
Hexachlorobenzene	U	118-74-1	333	333	8.56	ug/kg	U	**U**	
Hexachlorocyclopentadiene	U	77-47-4	333	333	58.7	ug/kg	U	**U**	
Hexachloroethane	U	67-72-1	333	333	13.4	ug/kg	U	**U**	
Indeno(1,2,3-cd)pyrene	U	193-39-5	33	33	7.72	ug/kg	U	**U**	
Isophorone	U	78-59-1	333	333	5.22	ug/kg	U	**U**	
Naphthalene	U	91-20-3	33	33	8.89	ug/kg	U	**U**	
Nitrobenzene	U	98-95-3	333	333	6.95	ug/kg	U	**U**	
n-Nitrosodimethylamine	U	62-75-9	333	333	64.7	ug/kg	U	**U**	
n-Nitrosodi-n-propylamine	U	621-64-7	333	333	9.06	ug/kg	U	**U**	
n-Nitrosodiphenylamine	U	86-30-6	333	333	5.94	ug/kg	U	**U**	

Analysis Method 8270C

Pentachlorophenol	U	87-86-5	333	333	48	ug/kg	U	U	
Phenanthrene	U	85-01-8	60.1	33	5.28	ug/kg			
Phenol	U	108-95-2	333	333	6.95	ug/kg	U	U	
Pyrene	U	129-00-0	16.5	33	12.3	ug/kg	J	J	

Sample Name CTSO-E3D01-20160517 **Matrix Type:** S

Lab Sample Name: L836976-02 **Sample Date:** 5/17/2016 12:59:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	3330	3330	87.6	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	3330	3330	77.9	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	3330	3330	74.6	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	3330	3330	471	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	3330	3330	980	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	3330	3330	60.7	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	3330	3330	73.7	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	330	330	63.9	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	3330	3330	83.1	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	3330	3330	130	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	3330	3330	794	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	3330	3330	1240	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	3330	3330	114	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	3330	3330	47.7	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	3330	3330	62.7	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	3330	3330	525	ug/kg	U	U	
Acenaphthene	U	83-32-9	330	330	64.2	ug/kg	U	U	
Acenaphthylene	U	208-96-8	330	330	67.1	ug/kg	U	U	
Anthracene	U	120-12-7	330	330	63.2	ug/kg	U	U	
Benzidine	U	92-87-5	3330	3330	637	ug/kg	J3U	R	L
Benzo(a)anthracene	U	56-55-3	330	330	42.8	ug/kg	U	U	
Benzo(a)pyrene	U	50-32-8	330	330	54.8	ug/kg	U	U	
Benzo(b)fluoranthene	U	205-99-2	330	330	69.5	ug/kg	U	U	
Benzo(g,h,i)perylene	U	191-24-2	330	330	72.1	ug/kg	U	U	
Benzo(k)fluoranthene	U	207-08-9	330	330	58.2	ug/kg	U	U	
Benzylbutyl phthalate	U	85-68-7	3330	3330	103	ug/kg	U	U	
Bis(2-chlorethoxy)methane	U	111-91-1	3330	3330	77	ug/kg	U	U	
Bis(2-chloroethyl)ether	U	111-44-4	3330	3330	89.6	ug/kg	U	U	
Bis(2-chloroisopropyl)ether	U	108-60-1	3330	3330	76	ug/kg	U	U	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	998	3330	120	ug/kg	J	J	
Chrysene	U	218-01-9	330	330	55.5	ug/kg	U	U	
Dibenz(a,h)anthracene	U	53-70-3	330	330	82.1	ug/kg	U	U	
Diethyl phthalate	U	84-66-2	3330	3330	69.1	ug/kg	U	U	
Dimethyl phthalate	U	131-11-3	3330	3330	54	ug/kg	U	U	

Analysis Method 8270C

Di-n-butyl phthalate	U	84-74-2	3330	3330	109	ug/kg	U	U
Di-n-octyl phthalate	U	117-84-0	307	3330	90.7	ug/kg	J	J
Fluoranthene	U	206-44-0	156	330	49.6	ug/kg	J	J
Fluorene	U	86-73-7	330	330	68.2	ug/kg	U	U
Hexachloro-1,3-butadiene	U	87-68-3	3330	3330	100	ug/kg	U	U
Hexachlorobenzene	U	118-74-1	3330	3330	85.6	ug/kg	U	U
Hexachlorocyclopentadiene	U	77-47-4	3330	3330	587	ug/kg	U	U
Hexachloroethane	U	67-72-1	3330	3330	134	ug/kg	U	U
Indeno(1,2,3-cd)pyrene	U	193-39-5	330	330	77.2	ug/kg	U	U
Isophorone	U	78-59-1	3330	3330	52.2	ug/kg	U	U
Naphthalene	U	91-20-3	330	330	88.9	ug/kg	U	U
Nitrobenzene	U	98-95-3	3330	3330	69.5	ug/kg	U	U
n-Nitrosodimethylamine	U	62-75-9	3330	3330	647	ug/kg	U	U
n-Nitrosodi-n-propylamine	U	621-64-7	3330	3330	90.6	ug/kg	U	U
n-Nitrosodiphenylamine	U	86-30-6	3330	3330	59.4	ug/kg	U	U
Pentachlorophenol	U	87-86-5	2210	3330	480	ug/kg	J	J
Phenanthrene	U	85-01-8	82.8	330	52.8	ug/kg	J	J
Phenol	U	108-95-2	3330	3330	69.5	ug/kg	U	U
Pyrene	U	129-00-0	192	330	123	ug/kg	J	J

Sample Name CTSO-D8D23-20160518 **Matrix Type:** S

Lab Sample Name: L836976-03 **Sample Date:** 5/18/2016 1:52:00 PM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	333	333	8.76	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	333	333	7.79	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	333	333	7.46	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	333	333	47.1	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	333	333	98	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	333	333	6.07	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	333	333	7.37	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	33	33	6.39	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	333	333	8.31	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	333	333	13	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	3330	3330	794	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	333	333	124	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	333	333	11.4	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	333	333	4.77	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	333	333	6.27	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	333	333	52.5	ug/kg	U	U	
Acenaphthene	U	83-32-9	33	33	6.42	ug/kg	U	U	
Acenaphthylene	U	208-96-8	33	33	6.71	ug/kg	U	U	
Anthracene	U	120-12-7	22.8	33	6.32	ug/kg	J	J	

Analysis Method 8270C

Benzidine	U	92-87-5	3330	3330	637	ug/kg	J3U	R	L
Benzo(a)anthracene	U	56-55-3	330	330	42.8	ug/kg	U	U	
Benzo(a)pyrene	U	50-32-8	330	330	54.8	ug/kg	U	U	
Benzo(b)fluoranthene	U	205-99-2	330	330	69.5	ug/kg	U	U	
Benzo(g,h,i)perylene	U	191-24-2	330	330	72.1	ug/kg	U	U	
Benzo(k)fluoranthene	U	207-08-9	330	330	58.2	ug/kg	U	U	
Benzylbutyl phthalate	U	85-68-7	3330	3330	103	ug/kg	U	U	
Bis(2-chlorethoxy)methane	U	111-91-1	333	333	7.7	ug/kg	U	U	
Bis(2-chloroethyl)ether	U	111-44-4	333	333	8.96	ug/kg	U	U	
Bis(2-chloroisopropyl)ether	U	108-60-1	333	333	7.6	ug/kg	U	U	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	3330	3330	120	ug/kg	U	U	
Chrysene	U	218-01-9	330	330	55.5	ug/kg	U	U	
Dibenz(a,h)anthracene	U	53-70-3	330	330	82.1	ug/kg	U	U	
Diethyl phthalate	U	84-66-2	333	333	6.91	ug/kg	U	U	
Dimethyl phthalate	U	131-11-3	333	333	5.4	ug/kg	U	U	
Di-n-butyl phthalate	U	84-74-2	333	333	10.9	ug/kg	U	U	
Di-n-octyl phthalate	U	117-84-0	3330	3330	90.7	ug/kg	U	U	
Fluoranthene	U	206-44-0	56.3	33	4.96	ug/kg			
Fluorene	U	86-73-7	33	33	6.82	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	333	333	10	ug/kg	U	U	
Hexachlorobenzene	U	118-74-1	333	333	8.56	ug/kg	U	U	
Hexachlorocyclopentadiene	U	77-47-4	333	333	58.7	ug/kg	U	U	
Hexachloroethane	U	67-72-1	333	333	13.4	ug/kg	U	U	
Indeno(1,2,3-cd)pyrene	U	193-39-5	330	330	77.2	ug/kg	U	U	
Isophorone	U	78-59-1	333	333	5.22	ug/kg	U	U	
Naphthalene	U	91-20-3	33	33	8.89	ug/kg	U	U	
Nitrobenzene	U	98-95-3	333	333	6.95	ug/kg	U	U	
n-Nitrosodimethylamine	U	62-75-9	333	333	64.7	ug/kg	U	U	
n-Nitrosodi-n-propylamine	U	621-64-7	333	333	9.06	ug/kg	U	U	
n-Nitrosodiphenylamine	U	86-30-6	333	333	5.94	ug/kg	U	U	
Pentachlorophenol	U	87-86-5	8840	3330	480	ug/kg			
Phenanthrene	U	85-01-8	173	33	5.28	ug/kg			
Phenol	U	108-95-2	333	333	6.95	ug/kg	U	U	
Pyrene	U	129-00-0	168	330	123	ug/kg	J	J	

Sample Name CTSO-C6D12-20160519 **Matrix Type:** S

Lab Sample Name: L836976-04 **Sample Date:** 5/19/2016 7:15:00 AM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	333	333	8.76	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	333	333	7.79	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	333	333	7.46	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	333	333	47.1	ug/kg	U	U	

Analysis Method 8270C

2,4-Dinitrophenol	U	51-28-5	333	333	98	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	333	333	6.07	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	333	333	7.37	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	33	33	6.39	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	333	333	8.31	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	333	333	13	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	333	333	79.4	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	333	333	124	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	333	333	11.4	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	333	333	4.77	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	333	333	6.27	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	333	333	52.5	ug/kg	U	U	
Acenaphthene	U	83-32-9	33	33	6.42	ug/kg	U	U	
Acenaphthylene	U	208-96-8	33	33	6.71	ug/kg	U	U	
Anthracene	U	120-12-7	20	33	6.32	ug/kg	J	J	
Benzidine	U	92-87-5	333	333	63.7	ug/kg	J3U	R	L
Benzo(a)anthracene	U	56-55-3	15.5	33	4.28	ug/kg	J	J	
Benzo(a)pyrene	U	50-32-8	660	660	110	ug/kg	U	U	
Benzo(b)fluoranthene	U	205-99-2	660	660	139	ug/kg	U	U	
Benzo(g,h,i)perylene	U	191-24-2	660	660	144	ug/kg	U	U	
Benzo(k)fluoranthene	U	207-08-9	660	660	116	ug/kg	U	U	
Benzylbutyl phthalate	U	85-68-7	333	333	10.3	ug/kg	U	U	
Bis(2-chlorethoxy)methane	U	111-91-1	333	333	7.7	ug/kg	U	U	
Bis(2-chloroethyl)ether	U	111-44-4	333	333	8.96	ug/kg	U	U	
Bis(2-chloroisopropyl)ether	U	108-60-1	333	333	7.6	ug/kg	U	U	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	17.4	333	12	ug/kg	J	J	
Chrysene	U	218-01-9	52	33	5.55	ug/kg			
Dibenz(a,h)anthracene	U	53-70-3	660	660	164	ug/kg	U	U	
Diethyl phthalate	U	84-66-2	333	333	6.91	ug/kg	U	U	
Dimethyl phthalate	U	131-11-3	333	333	5.4	ug/kg	U	U	
Di-n-butyl phthalate	U	84-74-2	333	333	10.9	ug/kg	U	U	
Di-n-octyl phthalate	U	117-84-0	333	333	9.07	ug/kg	U	U	
Fluoranthene	U	206-44-0	33	33	4.96	ug/kg	U	U	
Fluorene	U	86-73-7	33	33	6.82	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	333	333	10	ug/kg	U	U	
Hexachlorobenzene	U	118-74-1	333	333	8.56	ug/kg	U	U	
Hexachlorocyclopentadiene	U	77-47-4	333	333	58.7	ug/kg	U	U	
Hexachloroethane	U	67-72-1	333	333	13.4	ug/kg	U	U	
Indeno(1,2,3-cd)pyrene	U	193-39-5	660	660	154	ug/kg	U	U	
Isophorone	U	78-59-1	333	333	5.22	ug/kg	U	U	
Naphthalene	U	91-20-3	33	33	8.89	ug/kg	U	U	
Nitrobenzene	U	98-95-3	333	333	6.95	ug/kg	U	U	
n-Nitrosodimethylamine	U	62-75-9	333	333	64.7	ug/kg	U	U	

Analysis Method 8270C

n-Nitrosodi-n-propylamine	U	621-64-7	333	333	9.06	ug/kg	U	U
n-Nitrosodiphenylamine	U	86-30-6	333	333	5.94	ug/kg	U	U
Pentachlorophenol	U	87-86-5	17200	6660	960	ug/kg		
Phenanthrene	U	85-01-8	152	33	5.28	ug/kg		
Phenol	U	108-95-2	333	333	6.95	ug/kg	U	U
Pyrene	U	129-00-0	232	33	12.3	ug/kg		

Sample Name CTSO-C7D12-20160519 **Matrix Type:** S

Lab Sample Name: L836976-05 **Sample Date:** 5/19/2016 7:22:00 AM

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	333	333	8.76	ug/kg	U	U	
2,4,6-Trichlorophenol	U	88-06-2	333	333	7.79	ug/kg	U	U	
2,4-Dichlorophenol	U	120-83-2	333	333	7.46	ug/kg	U	U	
2,4-Dimethylphenol	U	105-67-9	333	333	47.1	ug/kg	U	U	
2,4-Dinitrophenol	U	51-28-5	333	333	98	ug/kg	U	U	
2,4-Dinitrotoluene	U	121-14-2	333	333	6.07	ug/kg	U	U	
2,6-Dinitrotoluene	U	606-20-2	333	333	7.37	ug/kg	U	U	
2-Chloronaphthalene	U	91-58-7	33	33	6.39	ug/kg	U	U	
2-Chlorophenol	U	95-57-8	333	333	8.31	ug/kg	U	U	
2-Nitrophenol	U	88-75-5	333	333	13	ug/kg	U	U	
3,3-Dichlorobenzidine	U	91-94-1	16700	16700	3970	ug/kg	U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	333	333	124	ug/kg	U	U	
4-Bromophenyl-phenylether	U	101-55-3	333	333	11.4	ug/kg	U	U	
4-Chloro-3-methylphenol	U	59-50-7	333	333	4.77	ug/kg	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	333	333	6.27	ug/kg	U	U	
4-Nitrophenol	U	100-02-7	333	333	52.5	ug/kg	U	U	
Acenaphthene	U	83-32-9	33	33	6.42	ug/kg	U	U	
Acenaphthylene	U	208-96-8	33	33	6.71	ug/kg	U	U	
Anthracene	U	120-12-7	33	33	6.32	ug/kg	U	U	
Benzidine	U	92-87-5	16700	16700	3180	ug/kg	J3U	R	L
Benzo(a)anthracene	U	56-55-3	1650	1650	214	ug/kg	U	U	
Benzo(a)pyrene	U	50-32-8	1650	1650	274	ug/kg	U	U	
Benzo(b)fluoranthene	U	205-99-2	1650	1650	348	ug/kg	U	U	
Benzo(g,h,i)perylene	U	191-24-2	1650	1650	360	ug/kg	U	U	
Benzo(k)fluoranthene	U	207-08-9	1650	1650	291	ug/kg	U	U	
Benzylbutyl phthalate	U	85-68-7	16700	16700	515	ug/kg	U	U	
Bis(2-chlorethoxy)methane	U	111-91-1	333	333	7.7	ug/kg	U	U	
Bis(2-chloroethyl)ether	U	111-44-4	333	333	8.96	ug/kg	U	U	
Bis(2-chloroisopropyl)ether	U	108-60-1	333	333	7.6	ug/kg	U	U	
Bis(2-Ethylhexyl)phthalate	U	117-81-7	16700	16700	600	ug/kg	U	U	
Chrysene	U	218-01-9	1650	1650	278	ug/kg	U	U	
Dibenz(a,h)anthracene	U	53-70-3	1650	1650	410	ug/kg	U	U	

Analysis Method 8270C

Diethyl phthalate	U	84-66-2	333	333	6.91	ug/kg	U	**U**
Dimethyl phthalate	U	131-11-3	333	333	5.4	ug/kg	U	**U**
Di-n-butyl phthalate	U	84-74-2	333	333	10.9	ug/kg	U	**U**
Di-n-octyl phthalate	U	117-84-0	16700	16700	454	ug/kg	U	**U**
Fluoranthene	U	206-44-0	214	33	4.96	ug/kg		
Fluorene	U	86-73-7	174	33	6.82	ug/kg		
Hexachloro-1,3-butadiene	U	87-68-3	333	333	10	ug/kg	U	**U**
Hexachlorobenzene	U	118-74-1	333	333	8.56	ug/kg	U	**U**
Hexachlorocyclopentadiene	U	77-47-4	333	333	58.7	ug/kg	U	**U**
Hexachloroethane	U	67-72-1	333	333	13.4	ug/kg	U	**U**
Indeno(1,2,3-cd)pyrene	U	193-39-5	1650	1650	386	ug/kg	U	**U**
Isophorone	U	78-59-1	333	333	5.22	ug/kg	U	**U**
Naphthalene	U	91-20-3	33	33	8.89	ug/kg	U	**U**
Nitrobenzene	U	98-95-3	333	333	6.95	ug/kg	U	**U**
n-Nitrosodimethylamine	U	62-75-9	333	333	64.7	ug/kg	U	**U**
n-Nitrosodi-n-propylamine	U	621-64-7	333	333	9.06	ug/kg	U	**U**
n-Nitrosodiphenylamine	U	86-30-6	333	333	5.94	ug/kg	U	**U**
Pentachlorophenol	U	87-86-5	53500	16700	2400	ug/kg		
Phenanthrene	U	85-01-8	1280	33	5.28	ug/kg		
Phenol	U	108-95-2	333	333	6.95	ug/kg	U	**U**
Pyrene	U	129-00-0	1650	1650	615	ug/kg	U	**U**

DATA VALIDATION REPORT

Cowboy Timber

SAMPLE DELIVERY GROUP: L835437

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Cowboy Timber
Contract Task Order:	20408.012.001.0263.00
Sample Delivery Group:	L835437
Weston Project Manager:	Eric Sandusky
TDD No.:	1507-08
Matrix:	Soil/Water
QC Level:	Stage 4
No. of Samples:	5
No. of Reanalyses/Dilutions:	0
Laboratory:	ESC Lab Sciences

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
CTSO-01-20160511	L835437-01	S	5/11/2016	8260B
CTSO-02-20160511	L835437-02	S	5/11/2016	8260B
CTSO-03-20160511	L835437-03	S	5/11/2016	8260B
CTSO-04-20160511	L835437-04	S	5/11/2016	8260B
CTGW-01-20160511	L835437-05	W	5/11/2016	8260B, 8270C

II. Sample Management

The samples were received within the temperature limits of 4°C ±2°C. The sample containers were received intact, with exceptions noted below. The chain-of-custody (COC) was appropriately signed and dated by field and laboratory personnel. Corrections to the COC were initialed but were not dated, and corrections to the number of containers for each sample were made by overwriting the original entry. The laboratory receipt information indicated custody seals were present and intact on the cooler. A non-conformance form from the laboratory indicated that due to insufficient packing material, the four-ounce container for sample CTSO-05-20160511 was received broken and was not salvageable, and one of four one-liter amber bottles for sample CTGW-01-20160511 was received broken. Sufficient sample volume remained for analysis of sample CTGW-01-20160511. The laboratory was instructed to proceed with analysis of the available samples. Sample CTGW-01-20160511 was preserved for the 8260B analysis; therefore, the nondetected result for 2-chloroethyl vinyl ether was rejected (R), as the preservative causes degradation of 2-chloroethyl vinyl ether.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material 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. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential positive bias.
J-	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential negative bias.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.

Qualifier	Organics	Inorganics
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995 or calibration was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
L1	LCS/LCSD RPD was outside control limits.	LCS/LCSD RPD was outside control limits.
Q	MS/MSD recovery was poor.	MS recovery was poor.
Q1	MS/MSD RPD was outside control limits.	MS/MSD RPD was outside control limits.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	ICPMS tune was not compliant.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
F1	Field duplicate results were outside the control limit.	Field duplicate results were outside the control limit.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualifier	Organics	Inorganics
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analysis

1. EPA METHOD 8270C—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin
Date Reviewed: October 13, 2016

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), *EPA Method 8270C*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (2014).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted within seven days of collection and analyzed within 40 days of extraction.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. Samples were analyzed within 12 hours of the DFTPP injection time.

- Calibration: Calibration criteria were met. Initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. Continuing calibration %Ds were ≤20%. The reviewer noted a second-source initial calibration verification (ICV) analysis was not performed.

- Laboratory Blanks: The method blank had no target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: LCS and LCSD recoveries were above the laboratory control limits of 33.1-134% for 3,3'-dichlorobenzidine at 139% and 135%, respectively; however, as 3,3'-dichlorobenzidine was not detected in the associated sample, no qualification was necessary. Remaining recoveries and all RPDs were within the laboratory control limits.

- Surrogate Recovery: Recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample from this SDG. MEC^X evaluated method accuracy and precision based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

    - Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: The internal standard area counts and retention times were within the control limits established by the continuing calibration standard, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatogram, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The sample did not require dilution. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.

- System Performance: Review of the raw data indicated no issues with system performance.

2. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: October 13, 2016

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Quality Assurance Project Plan for U. S. EPA Region 8 CERCLA Site Assessment* (7/13), and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The preserved water sample and the soil samples were analyzed within 14 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: Most calibration criteria were met, with exceptions noted below. The reviewer noted second-source initial calibration verification (ICV) analyses were not performed.

  The soil initial calibration average RRFs and CCV RRFs met criteria as specified in the National Functional Guidelines, of ≥0.010 for poor responders, and ≥0.050 for remaining target compounds. As target compound 2-chloroethyl vinyl ether is not listed, the reviewer considered it appropriate to apply the minimum RRF of 0.010. With the exception of the initial calibration %RSD of 15.2% for bromoform, %RSDs were ≤15%, or r^2 ≥0.990. The soil sample results for bromoform, all nondetects, were qualified as estimated (UJ). The CCV %Ds exceeded 20% for 1,2,3-trichlorobenzene (21.0%) and naphthalene (23.0%). The nondetected results for both outliers were qualified as estimated (UJ) in the soil samples. Remaining CCV %Ds were ≤20%.

The water initial calibration average RRFs and CCV RRFs met criteria. Initial calibration %RSDs were ≤15%, or r^2 ≥0.990. The CCV %Ds exceeded 20% for 1,1,2,2-tetrachloroethane (20.3%), 2-chloroethyl vinyl ether (53.3%) and hexachloro-1,3-butadiene (20.9%). The result for 2-chloroethyl vinyl ether in associated sample CTGW-01-20160511 was previously rejected and was not further qualified (see Sample Management section). The nondetected results for the remaining outliers were qualified as estimated (UJ) in the water sample. Remaining CCV %Ds were ≤20%.

- Laboratory Blanks: The method blank associated with the soil samples had a detect below the reporting limit for acetone at 11.2 µg/L; however, acetone was not detected in the soil samples. The soil and water method blanks had no other target compound detects above the MDL and no qualifications were required.

- Blank Spikes and Laboratory Control Samples: Water LCS and LCSD recoveries were below the laboratory control limits of 79.3-123% for 1,1,2,2-tetrachloroethane at 78.3% and 75.6%, respectively; therefore, the nondetected result for 1,1,2,2-tetrachloroethane in sample CTGW-01-20160511 was qualified as estimated (UJ). Remaining recoveries and all RPDs were within the laboratory control limits for both soil and water LCS/LCSDs.

- Surrogate Recovery: Recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample from this SDG. MEC^X evaluated method accuracy and precision based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Trip Blanks: This SDG had no identified trip blank.

    - Field Blanks and Equipment Blanks: This SDG had no identified field blank or equipment blank samples.

    - Field Duplicates: Field duplicate samples were not identified in this SDG.

- Internal Standards Performance: Internal standard area counts and retention times were within the control limits established by the continuing calibration standards, of +100%/-50% for internal standard areas and ±30 seconds for retention times.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no issues with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory

MDLs. Results detected between the MDL and the reporting limit were qualified as estimated (J). Reported nondetects are valid to the reporting limit.

All soil samples were analyzed at 5× dilutions. The reason for the dilution was not apparent, as the sample chromatograms exhibited little or no interference. The reviewer also noted that a percent moisture determination was not requested on the COC and was therefore not performed for the soils. All soil results were reported on a wet-weight basis.

- Tentatively Identified Compounds: A TIC search was not performed by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no issues with system performance.

Validated Sample Result Forms: L835437

Analysis Method 8260B

Sample Name CTSO-01-20160511 **Matrix Type:** S

Lab Sample Name: L835437-01 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	

Analysis Method 8260B

Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTSO-02-20160511 **Matrix Type:** S

Lab Sample Name: L835437-02 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	

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1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	
Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	

Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTSO-03-20160511 **Matrix Type:** S

Lab Sample Name: L835437-03 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	

Analysis Method 8260B

2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	
Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	
Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	

Analysis Method 8260B

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTSO-04-20160511 **Matrix Type:** S

Lab Sample Name: L835437-04 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	5	5	1.32	ug/kg	U	U	
1,1,1-Trichloroethane	U	71-55-6	5	5	1.43	ug/kg	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	5	5	1.82	ug/kg	U	U	
1,1,2-Trichloroethane	U	79-00-5	5	5	1.38	ug/kg	U	U	
1,1-Dichloroethane	U	75-34-3	5	5	0.995	ug/kg	U	U	
1,1-Dichloroethene	U	75-35-4	5	5	1.52	ug/kg	U	U	
1,1-Dichloropropene	U	563-58-6	5	5	1.58	ug/kg	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	5	5	1.53	ug/kg	U	UJ	C
1,2,3-Trichloropropane	U	96-18-4	12.5	12.5	3.7	ug/kg	U	U	
1,2,3-Trimethylbenzene	U	TMB123	5	5	1.44	ug/kg	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	5	5	1.94	ug/kg	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	5	5	1.06	ug/kg	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	25	25	5.25	ug/kg	U	U	
1,2-Dibromoethane	U	106-93-4	5	5	1.72	ug/kg	U	U	
1,2-Dichlorobenzene	U	95-50-1	5	5	1.52	ug/kg	U	U	
1,2-Dichloroethane	U	107-06-2	5	5	1.32	ug/kg	U	U	
1,2-Dichloropropane	U	78-87-5	5	5	1.79	ug/kg	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	5	5	1.33	ug/kg	U	U	
1,3-Dichlorobenzene	U	541-73-1	5	5	1.2	ug/kg	U	U	
1,3-Dichloropropane	U	142-28-9	5	5	1.04	ug/kg	U	U	
1,4-Dichlorobenzene	U	106-46-7	5	5	1.13	ug/kg	U	U	
2,2-Dichloropropane	U	594-20-7	5	5	1.4	ug/kg	U	U	
2-Butanone (MEK)	U	78-93-3	50	50	23.4	ug/kg	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	250	250	11.7	ug/kg	U	U	
2-Chlorotoluene	U	95-49-8	5	5	1.5	ug/kg	U	U	
4-Chlorotoluene	U	106-43-4	5	5	1.2	ug/kg	U	U	
4-Methyl-2-pentanone	U	108-10-1	50	50	9.4	ug/kg	U	U	
Acetone	U	67-64-1	250	250	50	ug/kg	U	U	
Acrylonitrile	U	107-13-1	50	50	8.95	ug/kg	U	U	
Benzene	U	71-43-2	5	5	1.35	ug/kg	U	U	
Bromobenzene	U	108-86-1	5	5	1.42	ug/kg	U	U	
Bromodichloromethane	U	75-27-4	5	5	1.27	ug/kg	U	U	
Bromoform	U	75-25-2	5	5	2.12	ug/kg	U	UJ	C
Bromomethane	U	74-83-9	25	25	6.7	ug/kg	U	U	
Carbon tetrachloride	U	56-23-5	5	5	1.64	ug/kg	U	U	
Chlorobenzene	U	108-90-7	5	5	1.06	ug/kg	U	U	

Analysis Method 8260B

Chlorodibromomethane	U	124-48-1	5	5	1.86	ug/kg	U	U	
Chloroethane	U	75-00-3	25	25	4.73	ug/kg	U	U	
Chloroform	U	67-66-3	25	25	1.14	ug/kg	U	U	
Chloromethane	U	74-87-3	12.5	12.5	1.88	ug/kg	U	U	
cis-1,2-Dichloroethene	U	156-59-2	5	5	1.18	ug/kg	U	U	
cis-1,3-Dichloropropene	U	10061-01-5	5	5	1.31	ug/kg	U	U	
Dibromomethane	U	74-95-3	5	5	1.91	ug/kg	U	U	
Dichlorodifluoromethane	U	75-71-8	25	25	3.56	ug/kg	U	U	
Di-isopropyl ether	U	108-20-3	5	5	1.24	ug/kg	U	U	
Ethylbenzene	U	100-41-4	5	5	1.48	ug/kg	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	5	5	1.71	ug/kg	U	U	
Isopropylbenzene	U	98-82-8	5	5	1.22	ug/kg	U	U	
Methyl tert-butyl ether	U	1634-04-4	5	5	1.06	ug/kg	U	U	
Methylene Chloride	U	75-09-2	25	25	5	ug/kg	U	U	
Naphthalene	U	91-20-3	25	25	5	ug/kg	U	UJ	C
n-Butylbenzene	U	104-51-8	5	5	1.29	ug/kg	U	U	
n-Propylbenzene	U	103-65-1	5	5	1.03	ug/kg	U	U	
p-Isopropyltoluene	U	99-87-6	5	5	1.02	ug/kg	U	U	
sec-Butylbenzene	U	135-98-8	5	5	1	ug/kg	U	U	
Styrene	U	100-42-5	5	5	1.17	ug/kg	U	U	
tert-Butylbenzene	U	98-06-6	5	5	1.03	ug/kg	U	U	
Tetrachloroethene	U	127-18-4	5	5	1.38	ug/kg	U	U	
Toluene	U	108-88-3	25	25	2.17	ug/kg	U	U	
Total Xylenes	U	1330-20-7	15	15	3.49	ug/kg	U	U	
trans-1,2-Dichloroethene	U	156-60-5	5	5	1.32	ug/kg	U	U	
trans-1,3-Dichloropropene	U	10061-02-6	5	5	1.34	ug/kg	U	U	
Trichloroethene	U	79-01-6	5	5	1.4	ug/kg	U	U	
Trichlorofluoromethane	U	75-69-4	25	25	1.91	ug/kg	U	U	
Vinyl chloride	U	75-01-4	5	5	1.46	ug/kg	U	U	

Sample Name CTGW-01-20160511 **Matrix Type:** W

Lab Sample Name: L835437-05 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,1,1,2-Tetrachloroethane	U	630-20-6	1	1	0.385	ug/L	U	U	
1,1,1-Trichloroethane	U	71-55-6	1	1	0.319	ug/L	U	U	
1,1,2,2-Tetrachloroethane	U	79-34-5	1	1	0.13	ug/L	J4U	UJ	C, L
1,1,2-Trichloro-1,2,2-trifluoroethane	U	76-13-1	1	1	0.303	ug/L	U	U	
1,1,2-Trichloroethane	U	79-00-5	1	1	0.383	ug/L	U	U	
1,1-Dichloroethane	U	75-34-3	1	1	0.259	ug/L	U	U	
1,1-Dichloroethene	U	75-35-4	1	1	0.398	ug/L	U	U	
1,1-Dichloropropene	U	563-58-6	1	1	0.352	ug/L	U	U	
1,2,3-Trichlorobenzene	U	87-61-6	1	1	0.23	ug/L	U	U	

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1,2,3-Trichloropropane	U	96-18-4	2.5	2.5	0.807	ug/L	U	U	
1,2,3-Trimethylbenzene	U	TMB123	1	1	0.321	ug/L	U	U	
1,2,4-Trichlorobenzene	U	120-82-1	1	1	0.355	ug/L	U	U	
1,2,4-Trimethylbenzene	U	95-63-6	1	1	0.373	ug/L	U	U	
1,2-Dibromo-3-Chloropropane	U	96-12-8	5	5	1.33	ug/L	U	U	
1,2-Dibromoethane	U	106-93-4	1	1	0.381	ug/L	U	U	
1,2-Dichlorobenzene	U	95-50-1	1	1	0.349	ug/L	U	U	
1,2-Dichloroethane	U	107-06-2	1	1	0.361	ug/L	U	U	
1,2-Dichloropropane	U	78-87-5	1	1	0.306	ug/L	U	U	
1,3,5-Trimethylbenzene	U	108-67-8	1	1	0.387	ug/L	U	U	
1,3-Dichlorobenzene	U	541-73-1	1	1	0.22	ug/L	U	U	
1,3-Dichloropropane	U	142-28-9	1	1	0.366	ug/L	U	U	
1,4-Dichlorobenzene	U	106-46-7	1	1	0.274	ug/L	U	U	
2,2-Dichloropropane	U	594-20-7	1	1	0.321	ug/L	U	U	
2-Butanone (MEK)	U	78-93-3	10	10	3.93	ug/L	U	U	
2-Chloroethyl vinyl ether	U	110-75-8	50	50	3.01	ug/L	U	R	*II
2-Chlorotoluene	U	95-49-8	1	1	0.375	ug/L	U	U	
4-Chlorotoluene	U	106-43-4	1	1	0.351	ug/L	U	U	
4-Methyl-2-pentanone	U	108-10-1	10	10	2.14	ug/L	U	U	
Acetone	U	67-64-1	50	50	10	ug/L	U	U	
Acrolein	U	107-02-8	50	50	8.87	ug/L	U	U	
Acrylonitrile	U	107-13-1	10	10	1.87	ug/L	U	U	
Benzene	U	71-43-2	1	1	0.331	ug/L	U	U	
Bromobenzene	U	108-86-1	1	1	0.352	ug/L	U	U	
Bromodichloromethane	U	75-27-4	1.97	1	0.38	ug/L			
Bromoform	U	75-25-2	1	1	0.469	ug/L	U	U	
Bromomethane	U	74-83-9	5	5	0.866	ug/L	U	U	
Carbon tetrachloride	U	56-23-5	1	1	0.379	ug/L	U	U	
Chlorobenzene	U	108-90-7	1	1	0.348	ug/L	U	U	
Chlorodibromomethane	U	124-48-1	0.865	1	0.327	ug/L	J	J	
Chloroethane	U	75-00-3	5	5	0.453	ug/L	U	U	
Chloroform	U	67-66-3	2.95	5	0.324	ug/L	J	J	
Chloromethane	U	74-87-3	2.5	2.5	0.276	ug/L	U	U	
cis-1,2-Dichloroethene	U	156-59-2	0.372	1	0.26	ug/L	J	J	
cis-1,3-Dichloropropene	U	10061-01-5	1	1	0.418	ug/L	U	U	
Dibromomethane	U	74-95-3	1	1	0.346	ug/L	U	U	
Dichlorodifluoromethane	U	75-71-8	5	5	0.551	ug/L	U	U	
Di-isopropyl ether	U	108-20-3	1	1	0.32	ug/L	U	U	
Ethylbenzene	U	100-41-4	1	1	0.384	ug/L	U	U	
Hexachloro-1,3-butadiene	U	87-68-3	1	1	0.256	ug/L	U	UJ	C
Isopropylbenzene	U	98-82-8	1	1	0.326	ug/L	U	U	
Methyl tert-butyl ether	U	1634-04-4	1	1	0.367	ug/L	U	U	
Methylene Chloride	U	75-09-2	5	5	1	ug/L	U	U	

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Naphthalene	U	91-20-3	5	5	1	ug/L	U	U
n-Butylbenzene	U	104-51-8	1	1	0.361	ug/L	U	U
n-Propylbenzene	U	103-65-1	1	1	0.349	ug/L	U	U
p-Isopropyltoluene	U	99-87-6	1	1	0.35	ug/L	U	U
sec-Butylbenzene	U	135-98-8	1	1	0.365	ug/L	U	U
Styrene	U	100-42-5	1	1	0.307	ug/L	U	U
tert-Butylbenzene	U	98-06-6	1	1	0.399	ug/L	U	U
Tetrachloroethene	U	127-18-4	1	1	0.372	ug/L	U	U
Toluene	U	108-88-3	5	5	0.78	ug/L	U	U
Total Xylenes	U	1330-20-7	3	3	1.06	ug/L	U	U
trans-1,2-Dichloroethene	U	156-60-5	1	1	0.396	ug/L	U	U
trans-1,3-Dichloropropene	U	10061-02-6	1	1	0.419	ug/L	U	U
Trichloroethene	U	79-01-6	1	1	0.398	ug/L	U	U
Trichlorofluoromethane	U	75-69-4	5	5	1.2	ug/L	U	U
Vinyl chloride	U	75-01-4	1	1	0.259	ug/L	U	U

Analysis Method 8270C

Sample Name CTGW-01-20160511 **Matrix Type:** W

Lab Sample Name: L835437-05 **Sample Date:** 5/11/2016

Analyte	Total/Dissolved	CAS No	Result Value	Reporting Limit	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Qualifier Comments
1,2,4-Trichlorobenzene	U	120-82-1	10	10	0.355	ug/L	U	U	
2,4,6-Trichlorophenol	U	88-06-2	10	10	0.278	ug/L	U	U	
2,4-Dichlorophenol	U	120-83-2	10	10	0.972	ug/L	U	U	
2,4-Dimethylphenol	U	105-67-9	10	10	1.34	ug/L	U	U	
2,4-Dinitrophenol	U	51-28-5	10	10	2.3	ug/L	U	U	
2,4-Dinitrotoluene	U	121-14-2	10	10	0.219	ug/L	U	U	
2,6-Dinitrotoluene	U	606-20-2	10	10	1.43	ug/L	U	U	
2-Chloronaphthalene	U	91-58-7	1	1	0.204	ug/L	U	U	
2-Chlorophenol	U	95-57-8	10	10	0.19	ug/L	U	U	
2-Nitrophenol	U	88-75-5	10	10	0.279	ug/L	U	U	
3,3-Dichlorobenzidine	U	91-94-1	10	10	1.69	ug/L	J4U	U	
4,6-Dinitro-2-methylphenol	U	534-52-1	10	10	2.6	ug/L	U	U	
4-Bromophenyl-phenylether	U	101-55-3	10	10	0.18	ug/L	U	U	
4-Chloro-3-methylphenol	U	59-50-7	10	10	0.229	ug/L	U	U	
4-Chlorophenyl-phenylether	U	7005-72-3	10	10	0.17	ug/L	U	U	
4-Nitrophenol	U	100-02-7	10	10	2.73	ug/L	U	U	
Acenaphthene	U	83-32-9	1	1	0.316	ug/L	U	U	
Acenaphthylene	U	208-96-8	1	1	0.309	ug/L	U	U	
Anthracene	U	120-12-7	1	1	0.291	ug/L	U	U	
Benzidine	U	92-87-5	10	10	2.1	ug/L	U	U	
Benzo(a)anthracene	U	56-55-3	1	1	0.111	ug/L	U	U	
Benzo(a)pyrene	U	50-32-8	1	1	0.269	ug/L	U	U	

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Benzo(b)fluoranthene	U	205-99-2	1	1	0.0896	ug/L	U	**U**
Benzo(g,h,i)perylene	U	191-24-2	1	1	0.161	ug/L	U	**U**
Benzo(k)fluoranthene	U	207-08-9	1	1	0.265	ug/L	U	**U**
Benzylbutyl phthalate	U	85-68-7	3	3	0.395	ug/L	U	**U**
Bis(2-chlorethoxy)methane	U	111-91-1	10	10	0.214	ug/L	U	**U**
Bis(2-chloroethyl)ether	U	111-44-4	10	10	0.214	ug/L	U	**U**
Bis(2-chloroisopropyl)ether	U	108-60-1	10	10	0.308	ug/L	U	**U**
Bis(2-Ethylhexyl)phthalate	U	117-81-7	3	3	0.496	ug/L	U	**U**
Chrysene	U	218-01-9	1	1	0.133	ug/L	U	**U**
Dibenz(a,h)anthracene	U	53-70-3	1	1	0.251	ug/L	U	**U**
Diethyl phthalate	U	84-66-2	3	3	0.356	ug/L	U	**U**
Dimethyl phthalate	U	131-11-3	3	3	0.338	ug/L	U	**U**
Di-n-butyl phthalate	U	84-74-2	3	3	0.275	ug/L	U	**U**
Di-n-octyl phthalate	U	117-84-0	3	3	0.277	ug/L	U	**U**
Fluoranthene	U	206-44-0	1	1	0.342	ug/L	U	**U**
Fluorene	U	86-73-7	1	1	0.177	ug/L	U	**U**
Hexachloro-1,3-butadiene	U	87-68-3	10	10	2.64	ug/L	U	**U**
Hexachlorobenzene	U	118-74-1	1	1	0.227	ug/L	U	**U**
Hexachlorocyclopentadiene	U	77-47-4	10	10	1.8	ug/L	U	**U**
Hexachloroethane	U	67-72-1	10	10	3.13	ug/L	U	**U**
Indeno(1,2,3-cd)pyrene	U	193-39-5	1	1	0.333	ug/L	U	**U**
Isophorone	U	78-59-1	10	10	0.238	ug/L	U	**U**
Naphthalene	U	91-20-3	1	1	0.413	ug/L	U	**U**
Nitrobenzene	U	98-95-3	10	10	0.2	ug/L	U	**U**
n-Nitrosodimethylamine	U	62-75-9	10	10	2.56	ug/L	U	**U**
n-Nitrosodi-n-propylamine	U	621-64-7	10	10	0.311	ug/L	U	**U**
n-Nitrosodiphenylamine	U	86-30-6	10	10	0.137	ug/L	U	**U**
Pentachlorophenol	U	87-86-5	10	10	0.407	ug/L	U	**U**
Phenanthrene	U	85-01-8	1	1	0.205	ug/L	U	**U**
Phenol	U	108-95-2	10	10	1.13	ug/L	U	**U**
Pyrene	U	129-00-0	1	1	0.295	ug/L	U	**U**