

ORIGINAL



0000081342

57

RECEIVED

1 FENNEMORE CRAIG, P.C.
 2 Jay L. Shapiro (014650)
 3 Patrick J. Black (017141)
 3003 N. Central Ave.
 Suite 2600
 4 Phoenix, Arizona 85012
 5 Attorneys for Litchfield Park Service Company

BEFORE THE ARIZONA CORPORATION COMMISSION

8 IN THE MATTER OF THE APPLICATION
 9 OF LITCHFIELD PARK SERVICE
 10 COMPANY FOR A CAPACITY
 11 RESERVATION CHARGE TARIFF FOR
 12 ITS NEW WASTEWATER CERTIFICATE
 OF CONVENIENCE AND NECESSITY
 EXTENSION AREAS

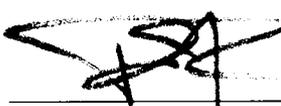
DOCKET NO. SW-01428A-06-0444

**NOTICE OF FILING FINAL REPORT
ON ODOR COMPLIANCE**

13 Litchfield Park Service Company ("LPSCO" or "Company") hereby files this
 14 Notice of Filing in the above-captioned docket. Attached hereto as Exhibit A is the Final
 15 Report submitted by LambTech, dated January 18, 2008, entitled "Palm Valley WRF
 16 Ionstein Odor Scrubber and Sludge Process Change from Class B Sludge to Class C
 17 Sludge."

18 RESPECTFULLY SUBMITTED this 30th day of January, 2008.

FENNEMORE CRAIG, P.C.

21 By 
 22 _____

Jay L. Shapiro
 Patrick J. Black
 3003 N. Central Avenue, Suite 2600
 Phoenix, AZ 85012
 (602) 916-5346
 Attorneys for Litchfield Park Service Company

23 Arizona Corporation Commission
 24 DOCKETED
 25 JAN 30 2008

26 DOCKETED BY nr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

An ORIGINAL and 13 copies of the foregoing was hand-delivered this 30th day of January, 2008 to:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

COPY hand-delivered this 30th day of January, 2008 to:

Ernest Johnson, Director
Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Marlin Scott, Engineer
Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Christopher C. Kempley, Chief Counsel
Legal Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

By: *Maria San Jose*
2026312.1/60199.004

Exhibit A

LAMBTECH

P.O. BOX 6117

CHINO VALLEY, AZ 86323

Odor and Hydrogen Sulfide Monitoring Specialists Since 1991

PALM VALLEY WRF

**IONSTEIN ODOR SCRUBBER AND SLUDGE
PROCESS CHANGE FROM CLASS B SLUDGE
TO CLASS C SLUDGE**

PERFORMANCE TEST REPORT

Final Report

January 18, 2008

Executive Summary

Ionstein Scrubber Performance Testing

Two Ionstein odor scrubbers were installed on the headworks and the solids handling building at the end of 2007, initially as trial systems, and if they performed to specification they would be purchased by LPSCO. The Ionstein odor scrubber that was attached to the headworks of the facility was the only system to be evaluated as the process changes made to the sludge virtually eliminated any significant odors in the solids handling building. The evaluation on the Ionstein system treating the headworks building was completed over a one-week period using two part-per-billion Odalog hydrogen sulfide analyzers. The middle of the headworks building and the outlet of the Ionstein system were evaluated for hydrogen sulfide concentrations every 10 minutes with the Odalog monitors. Test data indicated that the concentrations in the headworks were relatively low, not unusual for the winter months. Peak concentrations in the building were 0.092 PPM, and outlet concentrations on the Ionstein system never exceeded 0.010PPM. This indicates at least 90% hydrogen sulfide removal efficiency. No odor emissions were found in or around the plant during the testing.

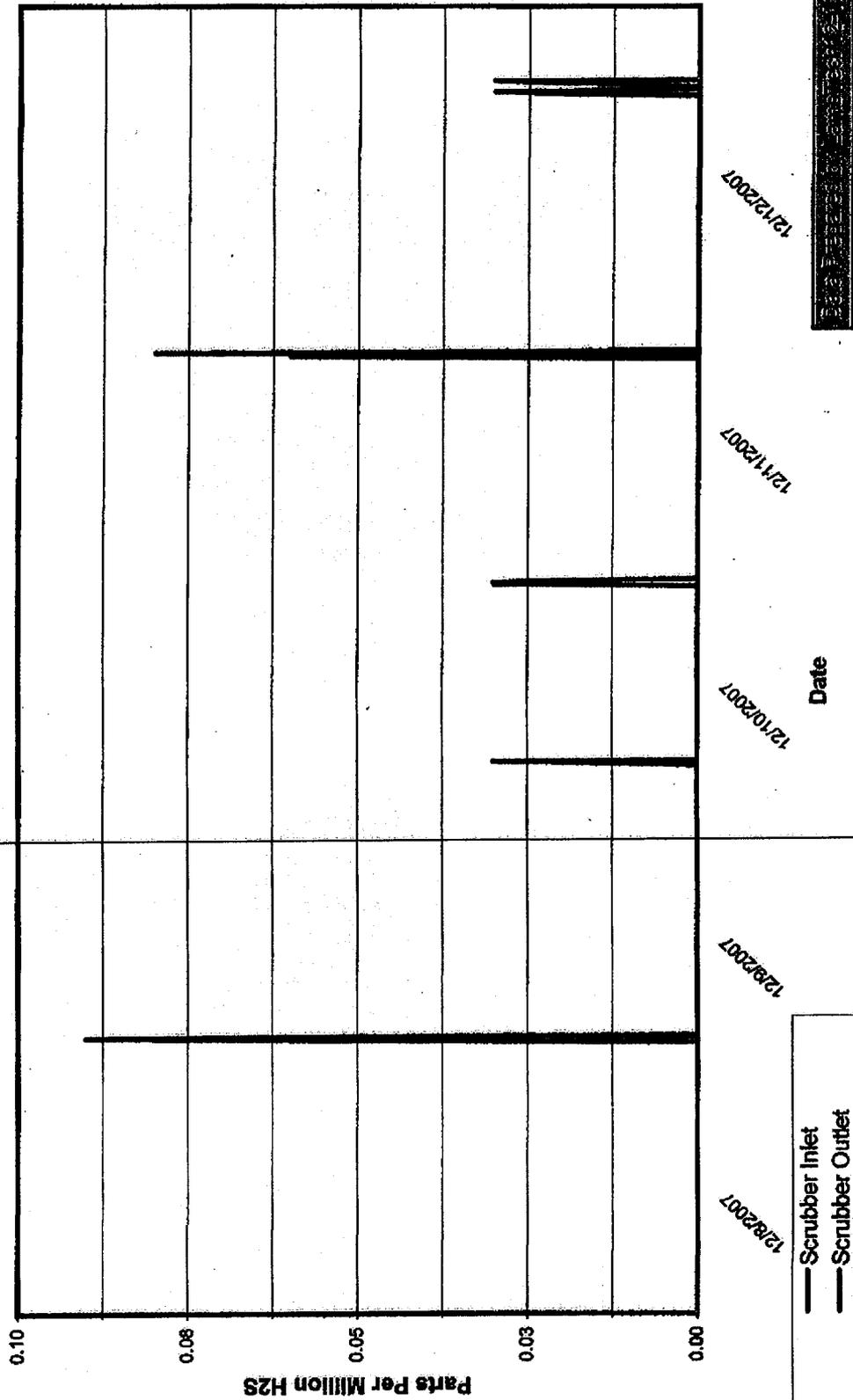
Sludge Process Control Change from Class B to Class C

Total reduced sulfur samples were collected prior to the process change in two locations, one over the outside of the open basins, and one or more in the sludge building. The process change dramatically dropped the TRS levels above the open basins and in the solids building to below detection limits, with the exception of carbonyl sulfide, which still recorded single-digit part-per-billion concentrations. The plant process change, from previously producing Class "B" sludge to Class "C" sludge, produces much lower hydrogen sulfide concentrations and reduces the loading to the carbon system that is treating both the solids building and the headworks building. This should allow the media to last many years before replacement is needed with the low part-per-billion inlet loads.

Total reduced sulfur samples were also collected and they indicated that carbonyl sulfide was the highest value from the solids building at 8.6 PPB, and after the process change, 6.6 PPB, indicating no significant change in this particular compound; but all of the other 20-sulfur species were below detection limits of the gas chromatograph analyzer after the process change was made.

The two U. S. Filter packed tower odor scrubbers and the combined carbon adsorber were not evaluated during this test. See Excel graphs for one-week Ionstein hydrogen sulfide monitoring, and the report from Columbia Analytical for the process change data.

Palm Valley WRF Einstein Hydrogen Sulfide Monitoring Performance Test Airborne H₂S Versus Time



COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: LambTech
Client Sample ID: Basin Grating
Client Project ID: Palm Valley WRF

CAS Project ID: P2702803
CAS Sample ID: P2702803-003

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang
Sampling Media: Tedlar Bag
Test Notes: H

Date Collected: 9/12/2007
Time Collected: 09:50
Date Received: 9/13/2007
Date Analyzed: 9/13/07
Time Analyzed: 11:05
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m³	µg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	21	12	8.6	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	16	7.8	5.1	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

H = Sample analyzed outside of holding time.

1520/080300p

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: LambTech
Client Sample ID: Solids Bldg W
Client Project ID: Palm Valley WRF

CAS Project ID: P2703064
CAS Sample ID: P2703064-002

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 10/2/2007
Time Collected: 15:40
Date Received: 10/3/2007
Date Analyzed: 10/3/07
Time Analyzed: 13:15
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m ³	µg/m ³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	130	7.0	91	5.0	
463-58-1	Carbonyl Sulfide	14	12	5.7	5.0	
74-93-1	Methyl Mercaptan	25	9.8	12	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	71	13	28	5.0	
75-15-0	Carbon Disulfide	9.5	7.8	3.1	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

1920/080300p

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: LambTech
Client Sample ID: Solids Bldg E
Client Project ID: Palm Valley WRF

CAS Project ID: P2703064
CAS Sample ID: P2703064-003

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 10/2/2007
Time Collected: 15:50
Date Received: 10/3/2007
Date Analyzed: 10/3/07
Time Analyzed: 13:41
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	120	7.0	86	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	20	9.8	10	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	54	13	21	5.0	
75-15-0	Carbon Disulfide	11	7.8	3.5	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

1820/080300p

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: LambTech
Client Sample ID: Over Basins
Client Project ID: LPSCO

CAS Project ID: P2703738
CAS Sample ID: P2703738-001

Test Code: ASTM D 5504-01
Instrument ID: HP5890 II/GC5/SCD
Analyst: Zheng Wang
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 12/12/07
Time Collected: 14:30
Date Received: 12/13/07
Date Analyzed: 12/13/07
Time Analyzed: 11:32
Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: LambTech
Client Sample ID: Solids Bldg
Client Project ID: LPSCO

CAS Project ID: P2703738
CAS Sample ID: P2703738-002

Test Code: ASTM D 5504-01
Instrument ID: HP5890 II/GC5/SCD
Analyst: Zheng Wang
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 12/12/07
Time Collected: 14:40
Date Received: 12/13/07
Date Analyzed: 12/13/07
Time Analyzed: 11:56
Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	16	12	6.6	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: LambTech
Client Sample ID: Method Blank
Client Project ID: LPSCO

CAS Project ID: P2703738
CAS Sample ID: P071213-MB

Test Code: ASTM D 5504-01
Instrument ID: HP5890 II/GC5/SCD
Analyst: Zheng Wang
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: NA
Time Collected: NA
Date Received: NA
Date Analyzed: 12/13/07
Time Analyzed: 09:00
Volume(s) Analyzed: 1.00 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: _____