



Nathan Putnam  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
Albany, New York 12233-7015

Subject:

July 2011 through June 2012 System Status Report  
Soil Vapor Recovery System  
United Stellar Industries Property  
131 Sunnyside Boulevard Site, Plainview, New York

Dear Mr. Putnam:

of New York, Inc. (ARCADIS) has prepared this system status report for the Vapor Recovery System (VRS), on behalf of 131 Sunnyside, LLC (Sunnyside) and the Estate of Gertrude Discount (Discount), at the United Stellar Industries Property located at 131 Sunnyside Blvd. in Plainview, New York. A letter report, summarizing the results of the VRS pilot test was submitted to the New York State Department of Environmental Conservation (NYSDEC) by ARCADIS on May 11, 2005. The VRS was restarted and is being operated in accordance with the VRS pilot test extension letter originally submitted to the NYSDEC on September 7, 2005, with NYSDEC comments, dated October 11, 2005, then revised and submitted by ARCADIS on November 18, 2005, with NYSDEC comments, dated February 2, 2006 and ARCADIS responses, dated May 15, 2006.

On September 22, 2009, the NYSDEC accepted the system modifications proposed in the August 20, 2009 submittal, "Air Emission Regulatory Review and Current Status, Related Calculations, and Proposed Modifications to Current System Configuration and Monitoring Procedures" (Regulatory Review). As recommended in the Regulatory Review, the vapor phase granular activated carbon (VPGAC) was taken off-line on December 3, 2009 and the frequency of performance and compliance monitoring was decreased from monthly to quarterly beginning with the fourth quarter 2009. No complications were encountered during the system modification. The following report provides documentation of all monitoring activities completed during the period beginning on July 1, 2011 and ending on June 30, 2012. During this reporting period (July 1, 2011 to June 30, 2012) the system was operated and the following four performance monitoring events were performed:

Imagine the result

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ARCADIS of New York, Inc.  
Two Huntington Quadrangle  
Suite 1S10  
Melville  
New York 11747  
Tel 631 249 7600  
Fax 631 249 7610  
[www.arcadis-us.com](http://www.arcadis-us.com)

ENVIRONMENT

Date:  
November 27, 2012

Contact:  
Doug Smolensky

Phone:  
(631) 391-5290

Email:  
[doug.smolensky@arcadis-us.com](mailto:doug.smolensky@arcadis-us.com)

Our ref:  
NY001422.0004.00002

- September 29, 2011
- December 28, 2011
- March 14, 2012
- June 28, 2012

Operational and volatile organic compound (VOC) data collected during the monitoring events are summarized in Tables 1, 2, and 3. A brief analysis of performance monitoring data is provided below.

### **Vapor Recovery System Operation**

The VRS consists of three vacuum extraction locations (SVE-1, SVE-2 and SVE-3), six induced vacuum/vapor monitoring points (MP-1 through MP-6), a 5-horsepower regenerative blower, and a moisture separator. The two 400 pound VPGACs were removed from system operation on December 3, 2009. Control valves, monitoring gauges, and sample ports were installed as necessary to adjust system operation and provide a means for collecting the data provided within this report. All vapor samples were submitted to Air Toxics Laboratory in Folsom, CA for laboratory analysis via Method TO-14 (Direct Inject).

### **Article I. Results**

Operational measurements including applied vacuum levels at each extraction point, extraction air flow rates, and photo-ionization detector (PID) readings are summarized in Table 1. In summary, the VRS is operating as designed. Key observations are as follows:

- Air flow rates at the vacuum extraction points measured during this reporting period ranged from approximately 31.6 to 78.2 actual cubic feet per minute (acfm).
- VRS wellhead vacuum measurements during this reporting period ranged from -36.0 inches water column (i.w.c.) to -42.0 i.w.c.
- PID measurements during this reporting period were 0.0 parts per million (ppm).

- Induced vacuum levels measured at the monitoring point locations (MP-1 through MP-6) are summarized below:
  - Negative vacuum levels were measured in monitoring points MP-1, MP-2, MP-5, and MP-6 during this reporting period.
  - Negative vacuum levels were measured in monitoring point MP-3 during the December 2011 to March 2012 monitoring events. There was no induced vacuum measured at monitoring point MP-3 during the September 29, 2011 and June 28, 2012 monitoring events.
  - Negative vacuum level was measured in monitoring point MP-4 during the December 28, 2011 monitoring event. There was no induced vacuum measured at monitoring point MP-4 during the September 29, 2011, March 14, 2012, and June 28, 2012 monitoring events.
  - In all, 19 of the 24 measurements taken, showed negative vacuum levels.

Due to limited access to the monitoring point locations, monitoring points MP-3 and MP-4 could not be examined to determine the cause of the lack of induced vacuum levels. However, the changes in induced vacuum measured at these monitoring points may be due to seasonal variations and/or changes in atmospheric barometric pressure.

Vapor sample analytical results are summarized in Tables 2 and 3. In all extraction points, VOC concentrations were significantly less than levels observed during the last monitoring event of the pilot test (June 1, 2005). A summary of VOC analytical results is as follows:

- During this reporting period, extraction point SVE-1 had Trichloroethene (TCE) concentrations ranging from 230 ug/m<sup>3</sup> to 500 ug/m<sup>3</sup>. Total volatile organic compounds (TVOC) concentrations for SVE-1 ranged from 300 ug/m<sup>3</sup> to 570 ug/m<sup>3</sup>. TCE and TVOC concentrations remained consistent with the previous sampling rounds conducted during the October 2009 to June 2011 operational period for all sampling events completed during this reporting period. TCE and TVOC concentrations are well below the June 2006 levels for all sampling events completed during this reporting period.

- During this reporting period, extraction point SVE-2 had TCE concentrations ranging from 520 ug/m<sup>3</sup> to 760 ug/m<sup>3</sup>. TVOC concentrations for SVE-2 ranged from 568 ug/m<sup>3</sup> to 808 ug/m<sup>3</sup>. TCE and TVOC concentrations remained consistent with the previous sampling rounds conducted during the October 2009 to June 2011 operational period for all sampling events completed during the reporting period. TCE and TVOC concentrations are well below the June 2006 levels for all sampling events completed during this reporting period.
- During this reporting period, extraction point SVE-3 had TCE concentrations ranging from not detected to 86 ug/m<sup>3</sup>. TVOC concentrations for SVE-3 remained consistent with the previous sampling rounds conducted during the October 2009 to June 2011 operational period for all sampling events completed during the reporting period. TCE and TVOC concentrations are well below the June 2006 levels for all sampling events completed during this reporting period.
- In addition to the field and laboratory analytical results provided herein, ARCADIS calculated and is providing air modeling results for the monitoring events completed during the current reporting period. Air modeling calculations were performed using the effluent concentrations, and the NYSDEC DAR-1 Annual Guidance Concentration (AGC) model. Modeling results are provided in Tables A1 through A4. As shown on the Tables A1 through A4, modeling results indicate that the effluent vapor stream has been below NYSDEC AGCs during the last four monitoring events.

## Article II. Conclusions

ARCADIS has drawn the following conclusions based on the results provided herein:

- The VRS operated as intended (i.e., a negative vacuum was maintained and contaminant mass was removed).
- TCE and TVOC concentrations have decreased significantly (from 2006 levels) in each of the three VRS extraction points.
- The highest VOC concentrations were observed in SVE-2 with lower concentrations present at SVE-1 and SVE-3; and,

- NYSDEC DAR-1 AGC emissions calculations indicate that the effluent vapor stream has been below the NYSDEC AGC limits for the last four monitoring events.


ARCADIS of New York, Inc. recommends the following based on the results provided herein:

- Continued operation of the VRS;
- Eliminate influent vapor sample collection from all individual extraction points (SVE-1 through SVE-3). Influent concentrations from individual extraction points have remained constant over the past four years of system operation and are not used for the evaluation of system performance. Note that this does not preclude the implementation of non-routine monitoring events to collect additional data if system troubleshooting is required. Total effluent samples would continue to be collected on a quarterly basis to document vapor concentrations recovered from the system. We would like to proceed with this revised strategy beginning with the next scheduled performance monitoring event of December 2012.

Please call if you have questions or require additional information, or to provide your approval.

Sincerely,

ARCADIS of New York, Inc.

  
Douglas A. Smolensky  
Associate Vice President

  
Christina Berardi Tuohy, P.E.  
New York Professional Engineer  
License Number NY-078743-1

Copies:

Fred Werfel, Spiegel Associates  
Renata Ockerby - NYSDOH  
File

Table 1. System Operational Data, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Date     | SVE - 1 Extraction Well Parameters |                    |                                     |                                   | SVE - 2 Extraction Well Parameters |                    |                                     |                                   | SVE - 3 Extraction Well Parameters |                    |                                     |                                   |
|----------|------------------------------------|--------------------|-------------------------------------|-----------------------------------|------------------------------------|--------------------|-------------------------------------|-----------------------------------|------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|          | Wellhead Vacuum (in.W.C.)          | Air Velocity (fpm) | Air Flow Rate <sup>(2)</sup> (acfm) | PID Measured Concentration (ppmv) | Wellhead Vacuum (in.W.C.)          | Air Velocity (fpm) | Air Flow Rate <sup>(2)</sup> (acfm) | PID Measured Concentration (ppmv) | Wellhead Vacuum (in.W.C.)          | Air Velocity (fpm) | Air Flow Rate <sup>(2)</sup> (acfm) | PID Measured Concentration (ppmv) |
| 09/29/11 | -36.0                              | 2,950              | 67.6                                | 0.0                               | -38.0                              | 1,660              | 38.0                                | 0.0                               | -36.0                              | 2,380              | 54.5                                | 0.0                               |
| 28/12/11 | -38.0                              | 2,996              | 68.6                                | 0.0                               | -40.0                              | 1,380              | 31.6                                | 0.0                               | -38.0                              | 2,693              | 61.7                                | 0.0                               |
| 03/14/12 | -40.0                              | 3,413              | 78.2                                | 0.0                               | -42.0                              | 2,476              | 56.7                                | 0.0                               | -40.0                              | 2,915              | 66.7                                | 0.0                               |
| 06/28/12 | -38.0                              | 2,939              | 67.3                                | 0.0                               | -39.0                              | 1,836              | 42.0                                | 0.0                               | -38.0                              | 2,592              | 59.4                                | 0.0                               |

**Notes:**

1. Data in this table corresponds to the current reporting period (July 1, 2011 to June 30, 2012).
2. The air flow rate was calculated by multiplying the measured air velocity in feet per minute by the cross sectional area of the pipe.
3. With prior New York State Department of Environmental Conservation approval, carbon treatment was removed from system operation on December 3, 2009. Therefore, GAC 500 was subsequently removed from system operation.

NA Not applicable.

Table 1. System Operational Data, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Date     | Blower Parameters         |                             | GAC 500 Parameters <sup>(3)</sup> |                                  |                    |                                     |                                   | Discharge Parameters         |                                   |                    |                                     |                                   |
|----------|---------------------------|-----------------------------|-----------------------------------|----------------------------------|--------------------|-------------------------------------|-----------------------------------|------------------------------|-----------------------------------|--------------------|-------------------------------------|-----------------------------------|
|          | Influent Vacuum (in.W.C.) | Effluent Pressure (in.W.C.) | Influent Pressure (in.W.C.)       | Influent Temperature (Degrees F) | Air Velocity (fpm) | Air Flow Rate <sup>(2)</sup> (acfm) | PID Measured Concentration (ppmv) | Discharge Pressure (in.W.C.) | Discharge Temperature (Degrees F) | Air Velocity (fpm) | Air Flow Rate <sup>(2)</sup> (acfm) | PID Measured Concentration (ppmv) |
| 09/29/11 | -58.0                     | 0.0                         | NA                                | NA                               | NA                 | NA                                  | NA                                | 0.0                          | 100.5                             | 1,738              | 155.4                               | 0.0                               |
| 28/12/11 | -58.0                     | 0.0                         | NA                                | NA                               | NA                 | NA                                  | NA                                | 0.0                          | 84.8                              | 1,748              | 156.3                               | 0.0                               |
| 03/14/12 | -58.0                     | 0.0                         | NA                                | NA                               | NA                 | NA                                  | NA                                | 0.0                          | 93.6                              | 1,890              | 169.0                               | 0.0                               |
| 06/28/12 | -56.0                     | 0.0                         | NA                                | NA                               | NA                 | NA                                  | NA                                | 0.0                          | 105.0                             | 1,881              | 168.2                               | 0.0                               |

**Notes:**

1. Data in this table corresponds to the current reporting period (July 1, 2011 to June 30, 2012).
2. The air flow rate was calculated by multiplying the measured air velocity in feet per minute by the cross sectional area of the pipe.
3. With prior New York State Department of Environmental Conservation approval, carbon treatment was removed from system operation on December 3, 2009. Therefore, GAC 500 was subsequently removed from system operation.

NA Not applicable.

Table 1. System Operational Data, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Date     | Induced Vacuum Measurements |                   |                   |                   |                   |                   |
|----------|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|          | MP-1<br>(in.W.C.)           | MP-2<br>(in.W.C.) | MP-3<br>(in.W.C.) | MP-4<br>(in.W.C.) | MP-5<br>(in.W.C.) | MP-6<br>(in.W.C.) |
| 09/29/11 | -0.05                       | -0.08             | 0.00              | 0.00              | -0.07             | -0.07             |
| 28/12/11 | -0.09                       | -0.05             | -0.02             | -0.01             | -0.07             | -0.08             |
| 03/14/12 | -0.02                       | -0.03             | -0.01             | 0.00              | -0.04             | -0.04             |
| 06/28/12 | -0.04                       | -0.05             | 0.00              | 0.01              | -0.04             | -0.04             |

**Notes:**

1. Data in this table corresponds to the current reporting period (July 1, 2011 to June 30, 2012).
2. The air flow rate was calculated by multiplying the measured air velocity in feet per minute by the cross sectional area of the pipe.
3. With prior New York State Department of Environmental Conservation approval, carbon treatment was removed from system operation on December 3, 2009. Therefore, GAC 500 was subsequently removed from system operation.

NA Not applicable.



Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-1 <sup>(3)</sup><br>6/16/2006 | SVE-1<br>6/30/2006 | SVE-1<br>7/14/2006 | SVE-1<br>7/28/2006 | SVE-1<br>8/11/2006 | SVE-1<br>8/25/2006 | SVE-1<br>9/8/2006 | SVE-1<br>10/5/2006 | SVE-1<br>11/3/2006 |
|---|---------------------|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | 150 J                             | 1,100              | 220                | 210                | 340                | 87                 | 98                | 110                | 76                 |
| 1,1-Dichloroethane                            |                     | ND J                              | ND                 | ND                 | 20                 | 32                 | ND                 | ND                | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2-Propanol                                    |                     | 200 J                             | 130                | ND                 | ND                 | 14                 | ND                 | 100               | 45                 | 16                 |
| 4-Ethyltoluene                                |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Acetone                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Benzene                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Carbon Disulfide                              |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Chloroform                                    |                     | 51 J                              | 160                | ND                 | ND                 | 33                 | ND                 | ND                | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | 140 J                             | 160                | 42                 | 80                 | 180                | 71                 | 90                | 130                | 110                |
| Ethanol                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Ethyl Benzene                                 |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Freon 113                                     |                     | 280 J                             | 410                | 61                 | 70                 | 100                | 44                 | 52                | 67                 | 51                 |
| Freon 12                                      |                     | ND J                              | ND                 | ND                 | ND                 | 29                 | ND                 | ND                | 25                 | 29                 |
| Heptane                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Hexane  |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Methylene Chloride                            |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| MTBE  |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| o-Xylene                                      |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Tetrachloroethene                             |                     | 210 J                             | 220                | ND                 | 46                 | 140                | ND                 | 60                | 130                | 110                |
| Tetrahydrofuran                               |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Toluene                                       |                     | 32 J                              | ND                 | ND                 | ND                 | ND                 | 24                 | ND                | ND                 | ND                 |
| Trichloroethene                               |                     | 5,200 J                           | 5,900              | 840                | 1,400              | 3,200              | 980                | 1,700             | 3,000              | 2,300              |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>6263 J</b>                     | <b>8,080</b>       | <b>1,163</b>       | <b>1,826</b>       | <b>4,068</b>       | <b>1,206</b>       | <b>2,100</b>      | <b>3,507</b>       | <b>2,692</b>       |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-1<br>12/5/2006 | SVE-1<br>4/26/2007 | SVE-1<br>5/29/2007 | SVE-1<br>6/27/2007 | SVE-1<br>7/26/2007 | SVE-1 <sup>(4)</sup><br>9/6/2007 | SVE-1<br>9/28/2007 | SVE-1<br>10/25/2007 | SVE-1 <sup>(5)</sup><br>12/13/2007 |
|---|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------------|--------------------|---------------------|------------------------------------|
| 1,1,1-Trichloroethane                         |                     | 53                 | 27                 | 34                 | 34                 | 48                 | 28                               | ND                 | ND                  | 42                                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 2-Butanone                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 2-Propanol                                    |                     | 12                 | ND                 | ND                 | 36                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Acetone                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Benzene                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Carbon Disulfide                              |                     | ND                 | ND                 | ND                 | ND                 | ND                 | 28                               | ND                 | ND                  | ND                                 |
| Chloroform                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| cis-1,2-Dichloroethene                        |                     | 97                 | 42                 | 71                 | 70                 | 86                 | 52                               | 51                 | 59                  | 76                                 |
| Ethanol                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Ethyl Benzene                                 |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Freon 113                                     |                     | 45                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Freon 12                                      |                     | 28                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | 33                                 |
| Heptane                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Hexane  |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| m,p-Xylene                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Methylene Chloride                            |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| MTBE  |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| o-Xylene                                      |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Tetrachloroethene                             |                     | ND                 | ND                 | 38                 | 51                 | 68                 | ND                               | ND                 | ND                  | 36                                 |
| Tetrahydrofuran                               |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Toluene                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | 30                               | ND                 | ND                  | 30                                 |
| Trichloroethene                               |                     | 1,400              | 650                | 1,300              | 1,300              | 1,700              | 900                              | 1,300              | 1,200               | 1,200                              |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>1,635</b>       | <b>719</b>         | <b>1,443</b>       | <b>1,491</b>       | <b>1,902</b>       | <b>1,038</b>                     | <b>1,351</b>       | <b>1,259</b>        | <b>1,417</b>                       |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-1<br>12/27/2007 | SVE-1 <sup>(6)</sup><br>2/5/2008 | SVE-1<br>2/26/2008 | SVE-1 <sup>(7)</sup><br>4/3/2008 | SVE-1<br>4/30/2008 | SVE-1<br>5/27/2008 | SVE-1<br>6/26/2008 | SVE-1<br>7/23/2008 | SVE-1<br>8/28/2008 |
|---|---------------------|---------------------|----------------------------------|--------------------|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | 59                  | 45                               | 29                 | ND                               | 36                 | 42                 | 29                 | 33                 | 44                 |
| 1,1-Dichloroethane                            |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    |                     | 30                  | ND                               | ND                 | 22                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       |                     | ND                  | ND                               | ND                 | 60                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       |                     | ND                  | ND                               | ND                 | 25                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Carbon Disulfide                              |                     | ND                  | ND                               | ND                 | ND                               | ND                 | 16                 | ND                 | 19                 | ND                 |
| Chloroform                                    |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | 120                 | 110                              | 84                 | 45                               | 120                | 140                | 110                | 100                | 140                |
| Ethanol                                       |                     | ND                  | ND                               | ND                 | 62                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Ethyl Benzene                                 |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 12                                      |                     | 53                  | 33                               | 28                 | ND                               | 35                 | 43                 | 40                 | 36                 | 58                 |
| Heptane                                       |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Hexane  |                     | ND                  | ND                               | ND                 | 64                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            |                     | 34                  | ND                               | ND                 | 17                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| MTBE  |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             |                     | 100                 | 75                               | 59                 | ND                               | 66                 | 100                | 98                 | 91                 | 120                |
| Tetrahydrofuran                               |                     | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       |                     | 71                  | ND                               | 40                 | 230                              | ND                 | ND                 | ND                 | ND                 | ND                 |
| Trichloroethene                               |                     | 2,500               | 2,000                            | 1,400              | 700                              | 2,000              | 2,600              | 2,200              | 1,900              | 2,500              |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>2,967</b>        | <b>2,263</b>                     | <b>1,640</b>       | <b>1,225</b>                     | <b>2,257</b>       | <b>2,941</b>       | <b>2,477</b>       | <b>2,179</b>       | <b>2,862</b>       |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-1<br>9/30/2008 | SVE-1<br>10/30/2008 | SVE-1 <sup>(8)</sup><br>11/25/2008 | SVE-1 <sup>(9)</sup><br>1/14/2009 | SVE-1<br>2/25/2009 | SVE-1<br>3/31/2009 | SVE-1 <sup>(10)</sup><br>5/12/2009 | SVE-1<br>5/28/2009 | SVE-1<br>6/30/2009 |
|---|---------------------|--------------------|---------------------|------------------------------------|-----------------------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         | 28                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 1,1-Dichloroethane                            | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 1,1-Dichloroethene                            | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        | ND                  | 94                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 74                 |
| 1,2-Dichloropropane                           | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        | ND                  | 57                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 26                 |
| 2,2,4-Trimethylpentane                        | ND                  | 94                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 2-Butanone                                    | ND                  | 16                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 2-Propanol                                    | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| 4-Ethyltoluene                                | ND                  | 79                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 74                 |
| Acetone                                       | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| Benzene                                       | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| Carbon Disulfide                              | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 23                 |
| Chloroform                                    | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        | 87                  | 56                 | --                  | 48                                 | 31                                | 44                 | 46                 | 92                                 | 70                 | 70                 |
| Ethanol                                       | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| Ethyl Benzene                                 | ND                  | 32                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 42                 |
| Freon 113                                     | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| Freon 12                                      | 40                  | 28                 | --                  | ND                                 | ND                                | ND                 | ND                 | 29                                 | 36                 | 36                 |
| Heptane                                       | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| Hexane  | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| m,p-Xylene                                    | ND                  | 140                | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 180                |
| Methylene Chloride                            | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | 23                                 | ND                 | ND                 |
| MTBE  | ND                  | ND                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| o-Xylene                                      | ND                  | 78                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 69                 |
| Tetrachloroethene                             | 72                  | ND                 | --                  | 36                                 | ND                                | 38                 | ND                 | 70                                 | 36                 | 36                 |
| Tetrahydrofuran                               | ND                  | 63                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 |
| Toluene                                       | ND                  | 58                 | --                  | ND                                 | ND                                | ND                 | ND                 | ND                                 | ND                 | 68                 |
| Trichloroethene                               | 1,600               | 840                | --                  | 880                                | 500                               | 740                | 720                | 1,500                              | 1,100              | 1,100              |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>1,827</b>       | <b>1,635</b>        | <b>--</b>                          | <b>964</b>                        | <b>531</b>         | <b>822</b>         | <b>766</b>                         | <b>1,714</b>       | <b>1,798</b>       |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-1 <sup>(11)</sup><br>8/3/2009 | SVE-1<br>8/31/2009 | SVE-1 <sup>(12)</sup><br>9/30/2009 | SVE-1<br>12/30/2009 | SVE-1<br>3/25/2010 | SVE-1<br>6/16/2010 | SVE-1<br>9/28/2010 | SVE-1<br>12/8/2010 | SVE-1<br>3/22/2011 |
|---|---------------------|-----------------------------------|--------------------|------------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Carbon Disulfide                              |                     | 30                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Chloroform                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | 31                 | ND                 | ND                 |
| Ethanol                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Ethyl Benzene                                 |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 12                                      |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | 25                 | ND                 | ND                 |
| Heptane                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Hexane  |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| MTBE  |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | 38                 | ND                 | ND                 |
| Tetrahydrofuran                               |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | 47                 | ND                 |
| Trichloroethene                               |                     | 310                               | 150                | 130                                | 83                  | 81                 | ND                 | 590                | 240                | 270                |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>340</b>                        | <b>150</b>         | <b>130</b>                         | <b>83</b>           | <b>81</b>          | <b>ND</b>          | <b>684</b>         | <b>287</b>         | <b>270</b>         |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-1<br>6/28/2011 | SVE-1<br>9/29/2011 | SVE-1<br>12/28/2011 | SVE-1<br>3/14/2012 | SVE-1<br>6/28/2012 |
|---|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Acetone                                       |                     | 69                 | ND                 | ND                  | ND                 | ND                 |
| Benzene                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Carbon Disulfide                              |                     | ND                 | 21                 | ND                  | ND                 | 17                 |
| Chloroform                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | ND                 | 22                 | ND                  | ND                 | ND                 |
| Ethanol                                       |                     | ND                 | ND                 | ND                  | 110                | ND                 |
| Ethyl Benzene                                 |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Freon 113                                     |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Freon 12                                      |                     | ND                 | 27                 | ND                  | ND                 | ND                 |
| Heptane                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Hexane  |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| MTBE  |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| o-Xylene                                      |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Tetrahydrofuran                               |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Toluene                                       |                     | 26                 | ND                 | ND                  | 43                 | ND                 |
| Trichloroethene                               |                     | 270                | 500                | 300                 | 230                | 380                |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>365</b>         | <b>570</b>         | <b>300</b>          | <b>383</b>         | <b>397</b>         |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-2 <sup>(3)</sup><br>6/16/2006 | SVE-2<br>6/30/2006 | SVE-2<br>7/14/2006 | SVE-2<br>7/28/2006 | SVE-2<br>8/11/2006 | SVE-2<br>8/25/2006 | SVE-2<br>9/8/2006 | SVE-2<br>10/5/2006 | SVE-2<br>11/3/2006 |
|---|---------------------|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | 64 J                              | 52                 | ND                 | ND                 | 46                 | ND                 | 39                | 35                 | 36                 |
| 1,1-Dichloroethane                            |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2-Butanone                                    |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2-Propanol                                    |                     | 150 J                             | 130                | ND                 | ND                 | 27                 | 12                 | 120               | 41                 | 16                 |
| 4-Ethyltoluene                                |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Acetone                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Benzene                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Carbon Disulfide                              |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Chloroform                                    |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | 320 J                             | 290                | 88                 | 84                 | 160                | 82                 | 140               | 100                | 89                 |
| Ethanol                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Ethyl Benzene                                 |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Freon 113                                     |                     | 580 J                             | 580                | 190                | 180                | 310                | ND                 | ND                | 250                | 240                |
| Freon 12                                      |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | 170                | 280               | ND                 | ND                 |
| Heptane                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Hexane  |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Methylene Chloride                            |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| MTBE  |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| o-Xylene                                      |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Tetrachloroethene                             |                     | 180 J                             | 190                | 46                 | 39                 | 140                | 45                 | 120               | 130                | 130                |
| Tetrahydrofuran                               |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Toluene                                       |                     | 30 J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Trichloroethene                               |                     | 12,000 J                          | 16,000             | 3,300              | 3,200              | 8,100              | 3,400              | 6,700             | 5,500              | 4,200              |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>13,324 J</b>                   | <b>17,242</b>      | <b>3,624</b>       | <b>3,503</b>       | <b>8,783</b>       | <b>3,709</b>       | <b>7,399</b>      | <b>6,056</b>       | <b>4,711</b>       |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-2<br>12/5/2006 | SVE-2<br>4/26/2007 | SVE-2<br>5/29/2007 | SVE-2<br>6/27/2007 | SVE-2<br>7/26/2007 | SVE-2 <sup>(4)</sup><br>9/6/2007 | SVE-2<br>9/28/2007 | SVE-2<br>10/25/2007 | SVE-2 <sup>(5)</sup><br>12/13/2007 |
|---|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------------|--------------------|---------------------|------------------------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                 | 29                 | ND                 | 40                 | 29                               | ND                 | ND                  | ND                                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 2-Butanone                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 2-Propanol                                    |                     | 13                 | ND                 | ND                 | 170                | ND                 | ND                               | ND                 | ND                  | ND                                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Acetone                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Benzene                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Carbon Disulfide                              |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Chloroform                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| cis-1,2-Dichloroethene                        |                     | 65                 | 38                 | 300                | ND                 | 84                 | 63                               | ND                 | ND                  | 39                                 |
| Ethanol                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Ethyl Benzene                                 |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Freon 113                                     |                     | 210                | 110                | 190                | ND                 | 210                | 170                              | ND                 | ND                  | 76                                 |
| Freon 12                                      |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Heptane                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Hexane  |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| m,p-Xylene                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Methylene Chloride                            |                     | ND                 | ND                 | ND                 | 50                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| MTBE  |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| o-Xylene                                      |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Tetrachloroethene                             |                     | 53                 | ND                 | 110                | ND                 | 130                | 58                               | ND                 | ND                  | 73                                 |
| Tetrahydrofuran                               |                     | ND                 | ND                 | ND                 | ND                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Toluene                                       |                     | 21                 | ND                 | ND                 | 95                 | ND                 | ND                               | ND                 | ND                  | ND                                 |
| Trichloroethene                               |                     | 2,300              | 1,400              | 4,300              | 240                | 3,700              | 2,600                            | 3,400              | 2,100               | 1,600                              |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>2,662</b>       | <b>1,548</b>       | <b>4,929</b>       | <b>555</b>         | <b>4,164</b>       | <b>2,920</b>                     | <b>3,400</b>       | <b>2,100</b>        | <b>1,788</b>                       |

See notes on last page.



Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-2<br>12/27/2007 | SVE-2 <sup>(6)</sup><br>2/5/2008 | SVE-2<br>2/26/2008 | SVE-2 <sup>(7)</sup><br>4/3/2008 | SVE-2<br>4/30/2008 | SVE-2<br>5/27/2008 | SVE-2<br>6/26/2008 | SVE-2<br>7/23/2008 | SVE-2<br>8/28/2008 |
|---|---------------------|---------------------|----------------------------------|--------------------|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         | 29                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethane                            | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    | ND                  | ND                  | ND                               | 18                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    | ND                  | ND                  | ND                               | 51                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| 4-Ethyltoluene                                | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       | ND                  | ND                  | ND                               | 60                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       | ND                  | ND                  | ND                               | 24                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Carbon Disulfide                              | ND                  | ND                  | ND                               | ND                 | ND                               | 18                 | ND                 | 20                 | ND                 | ND                 |
| Chloroform                                    | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        | 54                  | 43                  | 38                               | ND                 | 53                               | 60                 | 51                 | 48                 | 63                 |                    |
| Ethanol                                       | ND                  | ND                  | ND                               | 59                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Ethyl Benzene                                 | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     | 92                  | 94                  | 97                               | ND                 | 100                              | 100                | 73                 | 80                 | 95                 |                    |
| Freon 12                                      | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Heptane                                       | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Hexane  | ND                  | ND                  | ND                               | 82                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| m,p-Xylene                                    | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            | ND                  | ND                  | ND                               | 18                 | 28                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| MTBE  | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             | 210                 | 120                 | 110                              | ND                 | 89                               | 110                | 110                | 100                | 130                |                    |
| Tetrahydrofuran                               | ND                  | ND                  | ND                               | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       | ND                  | 24                  | ND                               | 210                | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 |
| Trichloroethene                               | 3,400               | 2,100               | 2,000                            | 780                | 2,500                            | 3,300              | 2,600              | 2,400              | 2,900              |                    |
| <b>Total VOCs <sup>(2)</sup></b>              | <b>3,785</b>        | <b>2,381</b>        | <b>2,245</b>                     | <b>1,302</b>       | <b>2,770</b>                     | <b>3,588</b>       | <b>2,834</b>       | <b>2,648</b>       | <b>3,188</b>       |                    |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-2<br>9/30/2008 | SVE-2<br>10/30/2008 | SVE-2<br>11/25/2008 | SVE-2 <sup>(9)</sup><br>1/14/2009 | SVE-2<br>2/25/2009 | SVE-2<br>3/31/2009 | SVE-2 <sup>(10)</sup><br>5/12/2009 | SVE-2<br>5/28/2009 | SVE-2<br>6/30/2009 | SVE-2 <sup>(11)</sup><br>8/3/2009 |
|---|---------------------|--------------------|---------------------|---------------------|-----------------------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|-----------------------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 1,1-Dichloroethane                            |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 1,1-Dichloroethene                            |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | 32                 | ND                                |
| 1,2-Dichloropropane                           |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 2-Butanone                                    |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 2-Propanol                                    |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| 4-Ethyltoluene                                |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | 32                 | ND                                |
| Acetone                                       |                     | 66                 | ND                  | 68                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Benzene                                       |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Carbon Disulfide                              |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | 22                 | 28                                |
| Chloroform                                    |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| cis-1,2-Dichloroethene                        |                     | 42                 | ND                  | ND                  | 25                                | 21                 | 32                 | 35                                 | 59                 | 41                 | ND                                |
| Ethanol                                       |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Ethyl Benzene                                 |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Freon 113                                     |                     | 63                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | 59                 | 68                 | ND                                |
| Freon 12                                      |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Heptane                                       |                     | ND                 | 27                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Hexane  |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| m,p-Xylene                                    |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | 61                 | ND                                |
| Methylene Chloride                            |                     | ND                 | 23                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| MTBE  |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| o-Xylene                                      |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | 23                 | ND                                |
| Tetrachloroethene                             |                     | 93                 | ND                  | 45                  | 66                                | 51                 | 58                 | 59                                 | 100                | 49                 | ND                                |
| Tetrahydrofuran                               |                     | ND                 | ND                  | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | ND                 | ND                                |
| Toluene                                       |                     | ND                 | 370                 | ND                  | ND                                | ND                 | ND                 | ND                                 | ND                 | 20                 | ND                                |
| Trichloroethene                               |                     | 1,800              | 310                 | 840                 | 1,200                             | 1,200              | 1,600              | 1,800                              | 2,700              | 1,700              | 480                               |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>2,064</b>       | <b>730</b>          | <b>953</b>          | <b>1,291</b>                      | <b>1,272</b>       | <b>1,690</b>       | <b>1,894</b>                       | <b>2,918</b>       | <b>2,048</b>       | <b>508</b>                        |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-2<br>8/31/2009 | SVE-2 <sup>(12)</sup><br>9/30/2009 | SVE-2<br>12/30/2009 | SVE-2<br>3/25/2010 | SVE-2<br>6/16/2010 | SVE-2<br>9/28/2010 | SVE-2<br>12/8/2010 | SVE-2<br>3/22/2011 |
|---|---------------------|--------------------|------------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Carbon Disulfide                              |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Chloroform                                    |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | 20                 | ND                 |
| Ethanol                                       |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | 330                | ND                 | 460 J              |
| Ethyl Benzene                                 |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 12                                      |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Heptane                                       |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Hexane  |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | 19                 | ND                 |
| m,p-Xylene                                    |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| MTBE  |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | 64                 | 66                 | ND                 |
| Tetrahydrofuran                               |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       |                     | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Trichloroethene                               |                     | 240                | 200                                | 160                 | 160                | 200                | 840                | 940                | ND                 |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>240</b>         | <b>200</b>                         | <b>160</b>          | <b>160</b>         | <b>200</b>         | <b>1,234</b>       | <b>1,045</b>       | <b>460 J</b>       |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-2<br>6/28/2011 | SVE-2<br>9/29/2011 | SVE-2<br>12/28/2011 | SVE-2<br>3/14/2012 | SVE-2<br>6/28/2012 |
|---|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Acetone                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Benzene                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Carbon Disulfide                              |                     | 18                 | ND                 | ND                  | ND                 | 16                 |
| Chloroform                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Ethanol                                       |                     | ND                 | ND                 | ND                  | 52                 | ND                 |
| Ethyl Benzene                                 |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Freon 113                                     |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Freon 12                                      |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Heptane                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Hexane  |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| MTBE  |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| o-Xylene                                      |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                 | 48                 | 48                  | 37                 | ND                 |
| Tetrahydrofuran                               |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Toluene                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Trichloroethene                               |                     | 650                | 760                | 520                 | 650                | 750                |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>668</b>         | <b>808</b>         | <b>568</b>          | <b>739</b>         | <b>766</b>         |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-3 <sup>(3)</sup><br>6/16/2006 | SVE-3<br>6/30/2006 | SVE-3<br>7/14/2006 | SVE-3<br>7/28/2006 | SVE-3<br>8/11/2006 | SVE-3<br>8/25/2006 | SVE-3<br>9/8/2006 | SVE-3<br>10/5/2006 | SVE-3<br>11/3/2006 |
|---|---------------------|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2-Butanone                                    |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| 2-Propanol                                    |                     | 160 J                             | 150                | ND                 | 26                 | ND                 | ND                 | 72                | 32                 | 14                 |
| 4-Ethyltoluene                                |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Acetone                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Benzene                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Carbon Disulfide                              |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Chloroform                                    |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | 27 J                              | 150                | 71                 | 38                 | 60                 | 76                 | 140               | 170                | 240                |
| Ethanol                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Ethyl Benzene                                 |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Freon 113                                     |                     | 130 J                             | 320                | 110                | 73                 | 79                 | 93                 | 110               | 91                 | 110                |
| Freon 12                                      |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Heptane                                       |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Hexane  |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Methylene Chloride                            |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| MTBE  |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| o-Xylene                                      |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND J                              | 49                 | ND                 | ND                 | ND                 | ND                 | 34                | ND                 | 37                 |
| Tetrahydrofuran                               |                     | ND                                | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Toluene                                       |                     | ND J                              | ND                 | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 |
| Trichloroethene                               |                     | 600 J                             | 1,000              | 290                | 180                | 310                | 270                | 480               | 450                | 480                |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>917 J</b>                      | <b>1,669</b>       | <b>471</b>         | <b>317</b>         | <b>449</b>         | <b>439</b>         | <b>836</b>        | <b>743</b>         | <b>881</b>         |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-3 <sup>(11)</sup><br>8/3/2009 | SVE-3<br>8/31/2009 | SVE-3 <sup>(12)</sup><br>9/30/2009 | SVE-3<br>12/30/2009 | SVE-3<br>3/25/2010 | SVE-3<br>6/16/2010 | SVE-3<br>9/28/2010 | SVE-3<br>12/8/2010 | SVE-3<br>3/22/2011 |
|---|---------------------|-----------------------------------|--------------------|------------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Carbon Disulfide                              |                     | 37                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Chloroform                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | 40                                | ND                 | 28                                 | 27                  | 21                 | ND                 | 210                | ND                 | ND                 |
| Ethanol                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | 220                | 74                 | ND                 |
| Ethyl Benzene                                 |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 12                                      |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Heptane                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Hexane  |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | 20                 | ND                 |
| m,p-Xylene                                    |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| MTBE  |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrahydrofuran                               |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       |                     | ND                                | ND                 | ND                                 | ND                  | ND                 | ND                 | ND                 | 29                 | ND                 |
| Trichloroethene                               |                     | 28                                | ND                 | ND                                 | ND                  | ND                 | ND                 | 93                 | ND                 | ND                 |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>105</b>                        | <b>ND</b>          | <b>28</b>                          | <b>27</b>           | <b>21</b>          | <b>ND</b>          | <b>523</b>         | <b>123</b>         | <b>ND</b>          |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | SVE-3<br>6/28/2011 | SVE-3<br>9/29/2011 | SVE-3<br>12/28/2011 | SVE-3<br>3/14/2012 | SVE-3<br>6/28/2012 |
|---|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 2-Propanol                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Acetone                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Benzene                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Carbon Disulfide                              |                     | 22                 | 22                 | ND                  | ND                 | 18                 |
| Chloroform                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | 100                | 220                | 160                 | 24                 | 110                |
| Ethanol                                       |                     | 180                | ND                 | 760                 | ND                 | 40                 |
| Ethyl Benzene                                 |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Freon 113                                     |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Freon 12                                      |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Heptane                                       |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Hexane  |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| MTBE  |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| o-Xylene                                      |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Tetrahydrofuran                               |                     | ND                 | ND                 | ND                  | ND                 | ND                 |
| Toluene                                       |                     | 35                 | ND                 | ND                  | ND                 | ND                 |
| Trichloroethene                               |                     | 34                 | 86                 | 44                  | ND                 | 44                 |
| <b>Total VOCs<sup>(2)</sup></b>               |                     | <b>371</b>         | <b>328</b>         | <b>964</b>          | <b>24</b>          | <b>212</b>         |

See notes on last page.

Table 2. Summary of Extraction Well Vapor Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

**Notes:**

1. Samples collected by ARCADIS personnel on the dates shown and submitted to Air Toxics Laboratories in Folsom, CA for VOC analyses using Direct Inject Method TO-14. Only VOCs detected at or above their respective laboratory quantification limits at any sample location during the project are presented in this table.
  2. "Total VOCs" represents the sum of individual concentrations of compounds listed in this table.
  3. Due to laboratory error, samples SVE-1, SVE-2, and SVE-3 were analyzed outside of the recommended hold time. Although subsequent laboratory testing indicating the results are representative, these results are nonetheless considered estimated, and are noted with a J qualifier.
  4. The August, 2007 monthly compliance sampling event was completed on September 6, 2007.
  5. Sample SVE-1 collected on November 29, 2007 arrived at the laboratory flat. All monthly compliance samples were re-collected on December 13, 2007.
  6. Samples collected on January 31, 2008 were delivered to the laboratory outside of the recommended holding time. January monthly compliance sampling was re-conducted on February 5, 2008.
  7. Sample SVE-2 collected on March 26, 2008 arrived at the laboratory flat. All monthly compliance samples were re-collected on April 3, 2008.
  8. Sample SVE-1 was not collected during the November 2008 operational period due to a lack of a sufficient quantity of sample bags.
  9. Samples were not collected during the December 2008 operational period as a result of the system being intermittently offline due to water accumulation in the system knock-out tank.
  10. April monthly compliance sampling was completed on May 12, 2009.
  11. July monthly compliance sampling was completed on August 3, 2009.
  12. With prior approval, the frequency of compliance monitoring was decreased from monthly to quarterly beginning with the fourth quarter 2009.
- J Estimated value.
- ND Analyte not detected at, or above its laboratory quantification limit.
- ug/m<sup>3</sup> Micrograms per cubic meter.
- VOC Volatile organic compound.
- Not analyzed.




Table 3. Summary of Carbon Effluent Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | EFF-1<br>6/30/2006 | EFF-1<br>7/28/2006 | EFF-1<br>8/11/2006 | EFF-1<br>8/25/2006 | EFF-1<br>9/8/2006 | EFF-1<br>10/5/2006 | EFF-1<br>11/3/2006 | EFF-1<br>12/5/2006 | EFF-1<br>4/26/2007 |
|---|---------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | 28                 | ND                 | ND                 |
| 1,1-Dichloroethane                            |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    |                     | 170                | 58                 | 27                 | ND                 | 70                | 46                 | 12                 | 20                 | 61                 |
| 4-Ethyltoluene                                |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       |                     | 18                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | 54                 |
| Carbon Disulfide                              |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Chloroform                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        |                     | ND                 | 21                 | 79                 | 110                | 140               | 140                | 98                 | 93                 | 68                 |
| Ethanol                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Ethyl Benzene                                 |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     |                     | ND                 | ND                 | ND                 | ND                 | 49                | 72                 | 61                 | 64                 | 74                 |
| Freon 12                                      |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Heptane                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Hexane  |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| m,p-Xylene                                    |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| MTBE  |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Propylbenzene                                 |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Tetrahydrofuran                               |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       |                     | ND                 | ND                 | ND                 | ND                 | ND                | ND                 | ND                 | ND                 | ND                 |
| Trichloroethene                               |                     | 140                | 54                 | ND                 | ND                 | ND                | 120                | 82                 | 160                | 200                |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>328</b>         | <b>133</b>         | <b>106</b>         | <b>110</b>         | <b>259</b>        | <b>378</b>         | <b>281</b>         | <b>337</b>         | <b>457</b>         |

See notes on last page.

Table 3. Summary of Carbon Effluent Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | EFF-1<br>11/25/2008 | EFF-1 <sup>(7)</sup><br>1/14/2009 | EFF-1<br>2/25/2009 | EFF-1<br>3/31/2009 | EFF-1 <sup>(8)</sup><br>5/12/2009 | EFF-1<br>5/28/2009 | EFF-1<br>6/30/2009 | EFF-1 <sup>(9)</sup><br>8/3/2009 | EFF-1<br>8/31/2009 |
|---|---------------------|---------------------|-----------------------------------|--------------------|--------------------|-----------------------------------|--------------------|--------------------|----------------------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,1-Dichloroethane                            |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,1-Dichloroethene                            |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,2-Dichloropropane                           |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 2-Butanone                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 2-Propanol                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 4-Ethyltoluene                                |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Acetone                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Benzene                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | 33                 | ND                               | ND                 |
| Carbon Disulfide                              |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | 21                 | 19                               | ND                 |
| Chloroform                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| cis-1,2-Dichloroethene                        |                     | ND                  | 83                                | 25                 | 62                 | 79                                | 140                | 120                | 24                               | ND                 |
| Ethanol                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Ethyl Benzene                                 |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Freon 113                                     |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | 53                 | ND                               | ND                 |
| Freon 12                                      |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Heptane                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Hexane  |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| m,p-Xylene                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Methylene Chloride                            |                     | ND                  | ND                                | ND                 | ND                 | ND                                | 25                 | ND                 | ND                               | ND                 |
| MTBE  |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| o-Xylene                                      |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Propylbenzene                                 |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Tetrachloroethene                             |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Tetrahydrofuran                               |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Toluene                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Trichloroethene                               |                     | 56                  | 490                               | 330                | 580                | 680                               | 1,600              | 2,300              | 520                              | 260                |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>56</b>           | <b>573</b>                        | <b>355</b>         | <b>642</b>         | <b>759</b>                        | <b>1,765</b>       | <b>2,527</b>       | <b>563</b>                       | <b>260</b>         |

See notes on last page.

Table 3. Summary of Carbon Effluent Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | EFF-2<br>2/26/2008 | EFF-2 <sup>(6)</sup><br>4/3/2008 | EFF-2<br>4/30/2008 | EFF-2<br>5/27/2008 | EFF-2<br>6/26/2008 | EFF-2<br>7/23/2008 | EFF-2<br>8/28/2008 | EFF-2<br>9/30/2008 | EFF-2<br>10/30/2008 |
|---|---------------------|--------------------|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| 1,1,1-Trichloroethane                         |                     | 45                 | 47                               | 48                 | 74                 | 48                 | 47                 | 74                 | 45                 | ND                  |
| 1,1-Dichloroethane                            |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| 1,1-Dichloroethene                            |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| 1,2,4-Trimethylbenzene                        |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 65                  |
| 1,2-Dichloropropane                           |                     | ND                 | ND                               | ND                 | ND                 | ND                 | 41                 | ND                 | ND                 | ND                  |
| 1,3,5-Trimethylbenzene                        |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 38                  |
| 2,2,4-Trimethylpentane                        |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 53                  |
| 2-Butanone                                    |                     | ND                 | ND                               | ND                 | ND                 | ND                 | 18                 | ND                 | ND                 | ND                  |
| 2-Propanol                                    |                     | 59                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| 4-Ethyltoluene                                |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 50                  |
| Acetone                                       |                     | ND                 | ND                               | ND                 | ND                 | ND                 | 54                 | ND                 | ND                 | ND                  |
| Benzene                                       |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Carbon Disulfide                              |                     | ND                 | ND                               | ND                 | 18                 | 16                 | 26                 | ND                 | ND                 | ND                  |
| Chloroform                                    |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| cis-1,2-Dichloroethene                        |                     | 140                | 140                              | 150                | 160                | 120                | 93                 | 150                | 110                | 32                  |
| Ethanol                                       |                     | ND                 | 57                               | 70                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Ethyl Benzene                                 |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Freon 113                                     |                     | 99                 | 71                               | 100                | 98                 | 110                | 96                 | 120                | 49                 | ND                  |
| Freon 12                                      |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Heptane                                       |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Hexane  |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| m,p-Xylene                                    |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 95                  |
| Methylene Chloride                            |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| MTBE  |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| o-Xylene                                      |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 51                  |
| Propylbenzene                                 |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Tetrachloroethene                             |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                  |
| Tetrahydrofuran                               |                     | ND                 | ND                               | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | 39                  |
| Toluene                                       |                     | 32                 | ND                               | ND                 | ND                 | ND                 | 110                | ND                 | ND                 | 140                 |
| Trichloroethene                               |                     | 260                | 330                              | 570                | 1,000              | 1,000              | 1,300              | 2,400              | 1,900              | 380                 |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>635</b>         | <b>645</b>                       | <b>938</b>         | <b>1,350</b>       | <b>1,294</b>       | <b>1,785</b>       | <b>2,744</b>       | <b>2,104</b>       | <b>943</b>          |

See notes on last page.

Table 3. Summary of Carbon Effluent Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID:<br>Date: | EFF-2<br>11/25/2008 | EFF-2 <sup>(7)</sup><br>1/14/2009 | EFF-2<br>2/25/2009 | EFF-2<br>3/31/2009 | EFF-2 <sup>(8)</sup><br>5/12/2009 | EFF-2<br>5/28/2009 | EFF-2<br>6/30/2009 | EFF-2 <sup>(9)</sup><br>8/3/2009 | EFF-2<br>8/31/2009 |
|---|---------------------|---------------------|-----------------------------------|--------------------|--------------------|-----------------------------------|--------------------|--------------------|----------------------------------|--------------------|
| 1,1,1-Trichloroethane                         |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | 30                 | ND                               | ND                 |
| 1,1-Dichloroethane                            |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,1-Dichloroethene                            |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,2,4-Trimethylbenzene                        |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,2-Dichloropropane                           |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 1,3,5-Trimethylbenzene                        |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 2,2,4-Trimethylpentane                        |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 2-Butanone                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 2-Propanol                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| 4-Ethyltoluene                                |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Acetone                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Benzene                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Carbon Disulfide                              |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | 20                 | 30                               | ND                 |
| Chloroform                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| cis-1,2-Dichloroethene                        |                     | 35                  | 73                                | 68                 | 92                 | 66                                | 160                | 120                | 29                               | ND                 |
| Ethanol                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Ethyl Benzene                                 |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Freon 113                                     |                     | ND                  | ND                                | ND                 | ND                 | ND                                | 53                 | 54                 | ND                               | ND                 |
| Freon 12                                      |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Heptane                                       |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Hexane  |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| m,p-Xylene                                    |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Methylene Chloride                            |                     | ND                  | ND                                | ND                 | ND                 | ND                                | 21                 | ND                 | ND                               | ND                 |
| MTBE  |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| o-Xylene                                      |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Propylbenzene                                 |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Tetrachloroethene                             |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Tetrahydrofuran                               |                     | ND                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Toluene                                       |                     | 32                  | ND                                | ND                 | ND                 | ND                                | ND                 | ND                 | ND                               | ND                 |
| Trichloroethene                               |                     | 420                 | 700                               | 510                | 820                | 740                               | 1,700              | 2,500              | 590                              | 300                |
| <b>Total VOCs <sup>(2)</sup></b>              |                     | <b>487</b>          | <b>773</b>                        | <b>578</b>         | <b>912</b>         | <b>806</b>                        | <b>1,934</b>       | <b>2,724</b>       | <b>649</b>                       | <b>300</b>         |

See notes on last page.

Table 3. Summary of Carbon Effluent Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

| Constituents<br>(units in ug/m <sup>3</sup> ) | Sample ID: EFF-2 <sup>(10)</sup><br>Date: 9/30/2009 | EFF-2<br>12/30/2009 | EFF-2<br>3/25/2010 | EFF-2<br>6/16/2010 | EFF-2<br>9/28/2010 | EFF-2<br>12/8/2010 | EFF-2<br>3/22/2011 | EFF-2<br>6/28/2011 | EFF-2<br>9/29/2011 |
|---|---|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1,1,1-Trichloroethane                         | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethane                            | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,1-Dichloroethene                            | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2,4-Trimethylbenzene                        | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,2-Dichloropropane                           | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 1,3,5-Trimethylbenzene                        | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2,2,4-Trimethylpentane                        | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Butanone                                    | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 2-Propanol                                    | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| 4-Ethyltoluene                                | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Acetone                                       | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Benzene                                       | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Carbon Disulfide                              | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | 17                 | 17                 |
| Chloroform                                    | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| cis-1,2-Dichloroethene                        | ND  | ND                  | ND                 | ND                 | 110                | 100                | 63                 | ND                 | 110                |
| Ethanol                                       | ND  | ND                  | ND                 | ND                 | ND                 | 64                 | ND                 | ND                 | ND                 |
| Ethyl Benzene                                 | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 113                                     | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Freon 12                                      | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Heptane                                       | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Hexane  | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| m,p-Xylene                                    | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Methylene Chloride                            | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| MTBE  | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| o-Xylene                                      | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Propylbenzene                                 | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Tetrachloroethene                             | ND  | ND                  | ND                 | ND                 | 43                 | ND                 | ND                 | ND                 | 35                 |
| Tetrahydrofuran                               | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Toluene                                       | ND  | ND                  | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 | ND                 |
| Trichloroethene                               | 170   | 81                  | 68                 | 88                 | 580                | 460                | 350                | ND                 | 520                |
| <b>Total VOCs <sup>(2)</sup></b>              | <b>170</b>  | <b>81</b>           | <b>68</b>          | <b>88</b>          | <b>733</b>         | <b>624</b>         | <b>413</b>         | <b>17</b>          | <b>682</b>         |

See notes on last page.

Table 3. Summary of Carbon Effluent Sample Analytical Results, Vapor Recovery System, United Stellar Industries, Plainview, New York.<sup>(1)</sup>

#### Notes:

1. Samples collected by ARCADIS personnel on the dates shown and submitted to Air Toxics Laboratories in Folsom, CA for VOC analyses using Direct Inject Method TO-14. Only VOCs detected at or above their respective laboratory quantification limits at any sample location during the project are presented in this table.
2. "Total VOCs" represents the sum of individual concentrations of compounds listed in this table.
3. The August monthly compliance sampling event was completed on September 6, 2007.
4. Sample EFF-1 collected on November 29, 2007 arrived at the laboratory flat. All monthly compliance samples were re-collected on December 13, 2007.
5. Samples collected on January 31, 2008 were delivered to the laboratory outside of the recommended holding time. January monthly compliance sampling was re-conducted on February 5, 2008.
6. Sample SVE-2 collected on March 26, 2008 arrived at the laboratory flat. All monthly compliance samples were re-collected on April 3, 2008.
7. Samples were not collected during the December 2008 operational period as a result of the system being intermittently offline due to water accumulation in the system knock-out tank.
8. The April 2009 sampling event was completed on May 12, 2009.
9. The July 2009 sampling event was completed on August 3, 2009.
10. With prior New York State Department of Environmental Conservation approval, carbon treatment was removed from system operation on December 3, 2009. Therefore, sample location EFF-1 was subsequently removed from system operation.
11. With prior approval, the frequency of compliance monitoring was decreased from monthly to quarterly beginning with the fourth quarter 2009.

J Estimated value.

ND Analyte not detected at, or above its laboratory quantification limit.

VOC Volatile organic compound.

ug/m<sup>3</sup> Micrograms per cubic meter.

-- Not analyzed.

Table A1. NYSDEC DAR-1 September 29, 2011, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

| <u>Mass Balance</u>              |       |   |       |  |  |
|----------------------------------|-------|---|-------|--|--|
| Measured Effluent Flowrate =     | 155.4 | ACFM                                      |       |  |  |
|                                  |       | % of Total Flow                           |       |  |  |
| SVE-1 Measured Flowrate (ACFM) = | 67.5  | 0.42                                      |       |  |  |
| SVE-2 Measured Flowrate (ACFM) = | 38.0  | 0.24                                      |       |  |  |
| SVE-3 Measured Flowrate (ACFM) = | 54.5  | 0.34                                      |       |  |  |
| Sum of Individual Flows (ACFM) = | 160.0 |   |       |  |  |
|                                  | SVE-1 | Lab Data<br>(ug/m <sup>3</sup> )<br>SVE-2 | SVE-3 | Mass Balance<br>Concentration <sup>(1)</sup><br>(ug/m <sup>3</sup> ) | Actual Effluent<br>Concentration<br>(ug/m <sup>3</sup> ) |
| Freon 12                         | 27    | 0   | 0     | 11   | 0  |
| Trichloroethene                  | 500   | 760                                       | 86    | 421  | 520  |
| Tetrachloroethene                | 0     | 48  | 0     | 11   | 35   |
| cis-1,2-Dichloroethene           | 22    | 0   | 220   | 84   | 110  |
| Carbon Disulfide                 | 21    | 0   | 22    | 16   | 17   |

**Notes/Assumptions:**

1. Mass balance concentration = Lab Data Concentration SVE-1 x SVE-1 % of Total Flow + Lab Data Concentration SVE-2 x SVE-2 % of Total Flow + Lab Data Concentration SVE-3 x SVE-3 % of Total Flow.

Table A1. NYSDEC DAR-1 September 29, 2011, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

### Parameters for 09/29/2011 Sampling Event

|   |  |   |                                 |
|---|--|---|---------------------------------|
| Discharge Temperature <sup>(1)</sup>                          | T  | 560   | °R                              |
| Ambient Temperature <sup>(2)</sup>                            | T <sub>a</sub>   | 521   | °R                              |
| Stack Diameter  | D  | 4.049   | in                              |
| Stack Radius  | R  | 0.169   | ft                              |
| Stack Area  | A  | 0.09  | ft <sup>2</sup>                 |
| Exit Velocity   | V  | 29.0  | fps                             |
| Exit Flow   | Q  | 155   | acfm                            |
| Exit Flow   | Q  | 146   | scfm                            |
| Stack Height  | h <sub>s</sub>   | 12  | ft                              |
| Building Height   | h <sub>b</sub>   | 10  | ft                              |
| Ratio of Heights  | h <sub>s</sub> /h <sub>b</sub>                                       | 1.20  |                                 |
| Plume rise credit? h <sub>s</sub> /h <sub>b</sub> > 1.5?      | (If no, h <sub>e</sub> =h <sub>s</sub> )                             | No  |                                 |
| Momentum Flux   | F <sub>m</sub> = T <sub>a</sub> /T * V <sup>2</sup> * R <sup>2</sup> | n/a   | ft <sup>4</sup> /s <sup>2</sup> |
| Effective Stack Height  | h <sub>e</sub>   | 12  | ft                              |
| Reduction Factor? 2.5 > h <sub>s</sub> /h <sub>b</sub> > 1.5? |  | No, do not reduce impact                            |                                 |
| Actual Annual Impact  | C <sub>a</sub>   | RF*6*Q <sub>a</sub> /h <sub>e</sub> <sup>2.25</sup> |                                 |
| Mass Flow   | Q <sub>a</sub>   | S lbs emitted for last 12 months                    |                                 |

### Abbreviations:

°R: Degrees Rankine  
 in: Inches  
 ft: Feet  
 fps: Feet per second  
 acfm: Actual cubic feet per minute  
 scfm: Standard cubic feet per minute  
 s: Second  
 lbs: Pounds

### Notes/Assumptions:

1. The stack discharge temperature is based on recorded parameters.
2. The ambient temperature based on [www.weather.newsday.com](http://www.weather.newsday.com) historic temperatures.



Table A1. NYSDEC DAR-1 September 29, 2011, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

| Calculation of AGC Based on Actual Effluent Results From 09/29/2011 Sampling Event <sup>(1)</sup> |   |  |  |                             |                             |                        |
|---|---|--|--|-----------------------------|-----------------------------|------------------------|
| Compounds   | Maximum Limit on C <sub>a</sub><br>(AGC <sup>2</sup> )<br>ug/m <sup>3</sup> | Maximum Mass<br>Flow Q <sub>a</sub><br>lb/yr | Actual Effluent<br>Emissions C <sub>a</sub><br>ug/m <sup>3</sup> | Mass Flow per Hour<br>lb/hr | Mass Flow per Year<br>lb/yr | Percent of Annual<br>% |
| Freon 12  | 12,000  | 536,028.40                                   | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| Trichloroethene   | 0.5   | 22.33  | 520.00   | 2.85E-04                    | 2.49777                     | 11.18                  |
| Tetrachloroethene   | 1   | 44.67  | 35.00  | 1.92E-05                    | 0.16812                     | 0.38                   |
| cis-1,2-Dichloroethene  | 63  | 2,814.15                                     | 110.00   | 6.03E-05                    | 0.52837                     | 0.02                   |
| Carbon Disulfide  | 700   | 31,268.32                                    | 17.00  | 9.32E-06                    | 0.08166                     | 0.00                   |
| Calculation of AGC Based on Influent Results From 09/29/2011 Sampling Event <sup>(1)</sup>        |   |  |  |                             |                             |                        |
| Compounds   | Maximum Limit on C <sub>a</sub><br>(AGC <sup>2</sup> )<br>ug/m <sup>3</sup> | Maximum Mass<br>Flow Q <sub>a</sub><br>lb/yr | Influent<br>Concentrations C <sub>a</sub><br>ug/m <sup>3</sup>   | Mass Flow per Hour<br>lb/hr | Mass Flow per Year<br>lb/yr | Percent of Annual<br>% |
| Freon 12  | 12,000  | 536,028.40                                   | 11.39  | 6.25E-06                    | 0.05471                     | 0.00                   |
| Trichloroethene   | 0.5   | 22.33  | 420.73   | 2.31E-04                    | 2.02094                     | 9.05                   |
| Tetrachloroethene   | 1   | 44.67  | 11.40  | 6.25E-06                    | 0.05476                     | 0.12                   |
| cis-1,2-Dichloroethene  | 63  | 2,814.15                                     | 84.22  | 4.62E-05                    | 0.40454                     | 0.01                   |
| Carbon Disulfide  | 700   | 31,268.32                                    | 16.35  | 8.97E-06                    | 0.07855                     | 0.00                   |

**Notes/Assumptions:**

1. Calculations assume that the system will run with the maximum allowable concentrations between quarterly readings.
2. AGC refers to the Annual Guideline Concentration as determined using the hand calculations in the DAR-1 AGC/SGC Tables dated October 18, 2010.

**Abbreviations:**

ug/m<sup>3</sup>: micrograms per cubic meter  
lb/yr: pounds per year  
lb/hr: pounds per hour

Table A2. NYSDEC DAR-1 December 28, 2011, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

| Parameters for 12/28/2011 Sampling Event                      |  |   |                                 |  |
|---|--|---|---------------------------------|--|
| Discharge Temperature <sup>(1)</sup>                          | T  | 544   | °R                              |  |
| Ambient Temperature <sup>(2)</sup>                            | T <sub>a</sub>   | 492   | °R                              |  |
| Stack Diameter  | D  | 4.049   | in                              |  |
| Stack Radius  | R  | 0.169   | ft                              |  |
| Stack Area  | A  | 0.09  | ft <sup>2</sup>                 |  |
| Exit Velocity   | V  | 29.1  | fps                             |  |
| Exit Flow   | Q  | 156   | acfm                            |  |
| Exit Flow   | Q  | 151   | scfm                            |  |
| Stack Height  | h <sub>s</sub>   | 12  | ft                              |  |
| Building Height   | h <sub>b</sub>   | 10  | ft                              |  |
| Ratio of Heights  | h <sub>s</sub> /h <sub>b</sub>                                       | 1.20  |                                 |  |
| Plume rise credit? h <sub>s</sub> /h <sub>b</sub> > 1.5?      | (If no, h <sub>e</sub> =h <sub>s</sub> )                             | No  |                                 |  |
| Momentum Flux   | F <sub>m</sub> = T <sub>a</sub> /T * V <sup>2</sup> * R <sub>2</sub> | n/a   | ft <sup>4</sup> /s <sup>2</sup> |  |
| Effective Stack Height  | h <sub>e</sub>   | 12  | ft                              |  |
| Reduction Factor? 2.5 > h <sub>s</sub> /h <sub>b</sub> > 1.5? |  | No, do not reduce impact                            |                                 |  |
| Actual Annual Impact  | C <sub>a</sub>   | RF*6*Q <sub>a</sub> /h <sub>e</sub> <sup>2.25</sup> |                                 |  |
| Mass Flow   | Q <sub>a</sub>   | S lbs emitted for last 12 months                    |                                 |  |

#### Abbreviations:

°R: Degrees Rankine  
 in: Inches  
 ft: Feet  
 fps: Feet per second  
 acfm: Actual cubic feet per minute  
 scfm: Standard cubic feet per minute  
 s: Second  
 lbs: Pounds

#### Notes/Assumptions:

1. The stack discharge temperature is based on recorded parameters.
2. The ambient temperature based on www.weather.newsday.com historic temperatures.

Table A2. NYSDEC DAR-1 December 28, 2011, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

Calculation of AGC Based on Actual Effluent Results From 12/28/2011 Sampling Event<sup>(1)</sup>

| Compounds              | Maximum Limit on C <sub>a</sub><br>(AGC <sup>2</sup> )<br>ug/m <sup>3</sup> | Maximum Mass Flow<br>Q <sub>a</sub><br>lb/yr | Actual Effluent<br>Emissions C <sub>a</sub><br>ug/m <sup>3</sup> | Mass Flow per Hour<br>lb/hr | Mass Flow per Year<br>lb/yr | Percent of Annual<br>% |
|------------------------|---|--|--|-----------------------------|-----------------------------|------------------------|
| Ethanol                | 45,000  | 2,010,106.50                                 | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| Trichloroethene        | 0.5   | 22.33  | 190.00   | 1.08E-04                    | 0.94437                     | 4.23                   |
| Tetrachloroethene      | 1   | 44.67  | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| cis-1,2-Dichloroethene | 63  | 2,814.15                                     | 49.00  | 2.78E-05                    | 0.24355                     | 0.01                   |
| 2-Propanol             | 7,000   | 312,683.23                                   | 75.00  | 4.26E-05                    | 0.37278                     | 0.00                   |
| Toluene                | 5,000   | 223,345.17                                   | 33.00  | 1.87E-05                    | 0.16402                     | 0.00                   |
| Acetone                | 30,000  | 1,340,071.00                                 | 47.00  | 2.67E-05                    | 0.23361                     | 0.00                   |
| Ethyl Benzene          | 1,000   | 44,669.03                                    | 50.00  | 2.84E-05                    | 0.24852                     | 0.00                   |
| m,p-Xylene             | 100   | 4,466.90                                     | 180.00   | 1.02E-04                    | 0.89466                     | 0.02                   |
| o-Xylene               | 100   | 4,466.90                                     | 68.00  | 3.86E-05                    | 0.33798                     | 0.01                   |
| 1,3,5-Trimethylbenzene | 290   | 12,954.02                                    | 95.00  | 5.39E-05                    | 0.47218                     | 0.00                   |
| 1,2,4-Trimethylbenzene | 290   | 12,954.02                                    | 140.00   | 7.94E-05                    | 0.69585                     | 0.01                   |
| Propylbenzene          | 1,000   | 44,669.03                                    | 35.00  | 1.99E-05                    | 0.17396                     | 0.00                   |

Calculation of AGC Based on Influent Results From 12/28/2011 Sampling Event<sup>(1)</sup>

| Compounds              | Maximum Limit on C <sub>a</sub><br>(AGC <sup>2</sup> )<br>ug/m <sup>3</sup> | Maximum Mass Flow<br>Q <sub>a</sub><br>lb/yr | Influent<br>Concentrations C <sub>a</sub><br>ug/m <sup>3</sup> | Mass Flow per Hour<br>lb/hr | Mass Flow per Year<br>lb/yr | Percent of Annual<br>% |
|------------------------|---|--|--|-----------------------------|-----------------------------|------------------------|
| Ethanol                | 45,000  | 2,010,106.50                                 | 289.64   | 1.64E-04                    | 1.43959                     | 0.00                   |
| Trichloroethene        | 0.5   | 22.33  | 245.38   | 1.39E-04                    | 1.21962                     | 5.46                   |
| Tetrachloroethene      | 1   | 44.67  | 9.37   | 5.32E-06                    | 0.04657                     | 0.10                   |
| cis-1,2-Dichloroethene | 63  | 2,814.15                                     | 60.98  | 3.46E-05                    | 0.30307                     | 0.01                   |
| 2-Propanol             | 7,000   | 312,683.23                                   | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| Toluene                | 5,000   | 223,345.17                                   | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| Acetone                | 30,000  | 1,340,071.00                                 | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| Ethyl Benzene          | 1,000   | 44,669.03                                    | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| m,p-Xylene             | 100   | 4,466.90                                     | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| o-Xylene               | 100   | 4,466.90                                     | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| 1,3,5-Trimethylbenzene | 290   | 12,954.02                                    | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| 1,2,4-Trimethylbenzene | 290   | 12,954.02                                    | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |
| Propylbenzene          | 1,000   | 44,669.03                                    | 0.00   | 0.00E+00                    | 0.00000                     | 0.00                   |

Table A2. NYSDEC DAR-1 December 28, 2011, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

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**Notes/Assumptions:**

1. Calculations assume that the system will run with the maximum allowable concentrations between quarterly readings.
2. AGC refers to the Annual Guideline Concentration as determined using the hand calculations in the DAR-1 AGC/SGC Tables dated October 18, 2010.

**Abbreviations:**

ug/m<sup>3</sup>: micrograms per cubic meter  
lb/yr: pounds per year  
lb/hr: pounds per hour

Table A3. NYSDEC DAR-1 March 14, 2012, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

| <u>Mass Balance</u>              |       |   |       |  |  |
|----------------------------------|-------|---|-------|--|--|
| Measured Effluent Flowrate =     | 169.0 | ACFM                                      |       |  |  |
|                                  |       | % of Total Flow                           |       |  |  |
| SVE-1 Measured Flowrate (ACFM) = | 78.2  | 0.39                                      |       |  |  |
| SVE-2 Measured Flowrate (ACFM) = | 56.7  | 0.28                                      |       |  |  |
| SVE-3 Measured Flowrate (ACFM) = | 66.7  | 0.33                                      |       |  |  |
| Sum of Individual Flows (ACFM) = | 201.6 |   |       |  |  |
|                                  | SVE-1 | Lab Data<br>(ug/m <sup>3</sup> )<br>SVE-2 | SVE-3 | Mass Balance<br>Concentration <sup>(1)</sup><br>(ug/m <sup>3</sup> ) | Actual Effluent<br>Concentration<br>(ug/m <sup>3</sup> ) |
| Ethanol                          | 110   | 52  | 0     | 57   | 93   |
| Trichloroethene                  | 230   | 650                                       | 0     | 272  | 290  |
| Tetrachloroethene                | 0     | 37  | 0     | 10   | 0  |
| cis-1,2-Dichloroethene           | 0     | 0   | 24    | 8  | 50   |
| Toluene                          | 43    | 0   | 0     | 17   | 0  |
| Carbon Disulfide                 | 0     | 0   | 0     | 0  | 0  |

**Notes/Assumptions:**

- Mass balance concentration = Lab Data Concentration SVE-1 x SVE-1 % of Total Flow + Lab Data Concentration SVE-2 x SVE-2 % of Total Flow + Lab Data Concentration SVE-3 x SVE-3 % of Total Flow.

Table A3. NYSDEC DAR-1 March 14, 2012, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

### Parameters for 03/14/2012 Sampling Event

|   |  |   |                                 |
|---|--|---|---------------------------------|
| Discharge Temperature <sup>(1)</sup>                          | T  | 553   | °R                              |
| Ambient Temperature <sup>(2)</sup>                            | T <sub>a</sub>   | 535   | °R                              |
| Stack Diameter  | D  | 4.049   | in                              |
| Stack Radius  | R  | 0.169   | ft                              |
| Stack Area  | A  | 0.09  | ft <sup>2</sup>                 |
| Exit Velocity   | V  | 31.5  | fps                             |
| Exit Flow   | Q  | 169   | acfm                            |
| Exit Flow   | Q  | 161   | scfm                            |
| Stack Height  | h <sub>s</sub>   | 12  | ft                              |
| Building Height   | h <sub>b</sub>   | 10  | ft                              |
| Ratio of Heights  | h <sub>s</sub> /h <sub>b</sub>                                       | 1.20  |                                 |
| Plume rise credit? h <sub>s</sub> /h <sub>b</sub> > 1.5?      | (If no, h <sub>e</sub> =h <sub>s</sub> )                             | No  |                                 |
| Momentum Flux   | F <sub>m</sub> = T <sub>a</sub> /T * V <sup>2</sup> * R <sup>2</sup> | n/a   | ft <sup>4</sup> /s <sup>2</sup> |
| Effective Stack Height  | h <sub>e</sub>   | 12  | ft                              |
| Reduction Factor? 2.5 > h <sub>s</sub> /h <sub>b</sub> > 1.5? |  | No, do not reduce impact                            |                                 |
| Actual Annual Impact  | C <sub>a</sub>   | RF*6*Q <sub>a</sub> /h <sub>e</sub> <sup>2.25</sup> |                                 |
| Mass Flow   | Q <sub>a</sub>   | S lbs emitted for last 12 months                    |                                 |

### Abbreviations:

°R: Degrees Rankine  
 in: Inches  
 ft: Feet  
 fps: Feet per second  
 acfm: Actual cubic feet per minute  
 scfm: Standard cubic feet per minute  
 s: Second  
 lbs: Pounds

### Notes/Assumptions:

1. The stack discharge temperature is based on recorded parameters.
2. The ambient temperature based on www.weather.newsday.com historic temperatures.

Table A4. NYSDEC DAR-1 June 28, 2012, Air Modeling Estimate for Vapor Recovery System, United Stellar Industries, Plainview, NY.

Parameters for 06/28/2012 Sampling Event

|   |  |   |                                 |
|---|--|---|---------------------------------|
| Discharge Temperature <sup>(1)</sup>                          | T  | 565   | °R                              |
| Ambient Temperature <sup>(2)</sup>                            | T <sub>a</sub>   | 532   | °R                              |
| Stack Diameter  | D  | 4.049   | in                              |
| Stack Radius  | R  | 0.169   | ft                              |
| Stack Area  | A  | 0.09  | ft <sup>2</sup>                 |
| Exit Velocity   | V  | 31.4  | fps                             |
| Exit Flow   | Q  | 168   | acfm                            |
| Exit Flow   | Q  | 157   | scfm                            |
| Stack Height  | h <sub>s</sub>   | 12  | ft                              |
| Building Height   | h <sub>b</sub>   | 10  | ft                              |
| Ratio of Heights  | h <sub>s</sub> /h <sub>b</sub>                                       | 1.20  |                                 |
| Plume rise credit? h <sub>s</sub> /h <sub>b</sub> > 1.5?      | (If no, h <sub>e</sub> =h <sub>s</sub> )                             | No  |                                 |
| Momentum Flux   | F <sub>m</sub> = T <sub>a</sub> /T * V <sup>2</sup> * R <sub>2</sub> | n/a   | ft <sup>4</sup> /s <sup>2</sup> |
| Effective Stack Height  | h <sub>e</sub>   | 12  | ft                              |
| Reduction Factor? 2.5 > h <sub>s</sub> /h <sub>b</sub> > 1.5? |  | No, do not reduce impact                            |                                 |
| Actual Annual Impact  | C <sub>a</sub>   | RF*6*Q <sub>a</sub> /h <sub>e</sub> <sup>2.25</sup> |                                 |
| Mass Flow   | Q <sub>a</sub>   | S lbs emitted for last 12 months                    |                                 |

Abbreviations:

°R: Degrees Rankine  
 in: Inches  
 ft: Feet  
 fps: Feet per second  
 acfm: Actual cubic feet per minute  
 scfm: Standard cubic feet per minute  
 s: Second  
 lbs: Pounds

Notes/Assumptions:

1. The stack discharge temperature is based on recorded parameters.
2. The ambient temperature based on www.weather.newsday.com historic temperatures.