



July 8, 2015

Washington State Department of Ecology
1250 West Alder Street
Union Gap, Washington 98903-0009

Attn: Ms. Valerie Bound, Section Manager
Toxics Cleanup Program Central Region Office

Transmitted via email to: valerie.bound@ecy.wa.gov

**RE: APRIL 2015 GROUNDWATER SAMPLING AND ANALYSIS
SMITH KEM ELLENSBURG
200 SOUTH RAILROAD AVENUE
ELLENSBURG, WASHINGTON
PARCEL NO. 226833
FACILITY/SITE ID No. 12832256**

Dear Ms. Bound:

This letter is to provide the Washington State Department of Ecology (Ecology) with the results of the baseline groundwater sampling and analysis conducted at the property located at 200 South Railroad Avenue in Ellensburg, Washington (site). The McGregor Company (TMC) recently purchased the operating agricultural business and began leasing the structures and real property on the site, with an agreement for future purchase of the physical property/ground and structures at the site.

The groundwater sampling and analysis was conducted to document the current concentrations of hazardous substances of potential concern in site groundwater to establish a baseline concurrent with the start of TMC operations at the site, and to provide groundwater data for comparison with the data collected in 2013 and 2014. The hazardous substances of potential concern, which have been identified based on products handled, used, or stored during previous or current site (pre-TMC) operations are outlined below, and include those constituents that have been identified by Ecology as being present at concentrations above the applicable cleanup levels during previous sampling events at the site.

Ecology issued Notice of Potential Liability letters naming the pre-TMC owner/operator [Smith Kem Ellensburg, Inc. and Ad Gro, LLC (Andrew C. Erickson)] and the historical owner/operator (Shell Oil Products US) as Potentially Liable Persons (PLPs) for releases of petroleum hydrocarbons and pesticides (including lindane, chlordane, dieldrin, endosulfan II, and endrin aldehyde) to soil and/or groundwater at the site.

The hazardous substances of potential concern for the site include the constituents identified by Ecology, as noted above, and those constituents detected at concentrations above the laboratory reporting limits in previous groundwater grab or monitoring well samples collected in 2013 and 2014 at the site. These substances consist of:

- Gasoline-, diesel- and oil-range total petroleum hydrocarbons (TPH-G, -D, and -O)
- Benzene, toluene, and xylenes
- Organochlorine pesticides, including lindane, chlordane, dieldrin, endosulfan II, and endrin aldehyde.

Other hazardous substances of potential concern for the site, based on historical operations, that were not analyzed for in groundwater during previous sampling events include:

- Nitrate
- Ammonia
- Chlorinated herbicides, including dinoseb and 2,4-dichlorophenoxyacetic acid (2,4-D).

The data collected during the April 2015 sampling event indicate that TPH-D, organochlorine pesticides (chlordane, dieldrin, and toxaphene), a chlorinated herbicide (2,4-D), and nitrate are present in site groundwater at one or more sampling locations at concentrations greater than the screening levels, which are based on the Ecology Model Toxics Control Act (MTCA) Method A or B cleanup levels. TPH-D, TPH-O, organochlorine pesticides (lindane and chlordane), chlorinated herbicides (2,4-D, dinoseb, and dicamba), and nitrate are also present in groundwater at one or more other sampling locations at concentrations greater than laboratory reporting limits, but less than the screening levels.

In April 2015, five of eight monitoring wells (MW-1, MW-4, MW-6, MW-7, and MW-8) contained one or more of the hazardous substances of potential concern at concentrations greater than the laboratory reporting limits. In addition, ammonia was detected in the samples from all of the monitoring wells at concentrations greater than the laboratory reporting limit. There are no available screening criteria for ammonia in groundwater. The highest ammonia concentration was detected in the sample collected from MW-4 and is indicative of a release to groundwater.

The April 2015 groundwater data indicate that TPH, pesticide, herbicide, and nitrate contamination is present in groundwater at the site at concentrations above the screening levels, which are based on the Ecology MTCA Method A or B cleanup levels. The April 2015 groundwater data are consistent with the data collected in 2013 and 2014, and also indicate that chlorinated herbicides, nitrate, and ammonia should be added to the list of hazardous substances of potential concern for cleanup of the site.

* * * * *

Please contact me if you have any questions regarding this letter or the attached report, or if you need any additional information.

LANDAU ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Timothy L. Syverson". The signature is fluid and cursive, with a large initial "T" and "S".

Timothy L. Syverson, L.G.
Senior Associate Geologist

CLB/TLS/ccy

ATTACHMENT

Letter Report: 2015 Baseline Groundwater Sampling Results

ATTACHMENT

**Letter Report:
2015 Baseline Groundwater Sampling Results**

June 23, 2015

The McGregor Company
401 Airport Road/P.O. Box 740
Colfax, Washington 99111

Attn: Mr. Clark Capwell

Transmitted via e-mail to: clark.capwell@mcgregor.com

**RE: 2015 BASELINE GROUNDWATER SAMPLING RESULTS
SMITH-KEM PROPERTY
200 SOUTH RAILROAD AVENUE
ELLENSBURG, WASHINGTON**

Dear Mr. Capwell:

This letter presents the results of the baseline groundwater sampling and analysis conducted at the Smith-Kem property located at the above-noted address in Ellensburg, Washington (site; Figure 1). The McGregor Company (TMC) recently purchased the operating agricultural services business and began leasing the structures and real property on the site, with an agreement for future purchase of the physical property/ground at the site. The groundwater sampling was conducted to document baseline groundwater conditions concurrent with the start of TMC operations at the site. Below is a description of the groundwater sampling activities, a summary of analytical results, and conclusions based on the data collected.

BACKGROUND

The groundwater sampling and analysis was conducted to document the current concentrations of hazardous substances of potential concern in site groundwater to establish a baseline concurrent with the start of TMC operations at the site. The hazardous substances of potential concern, which have been identified based on products handled, used, or stored during previous or current site (pre-TMC) operations are outlined below, and include those constituents that have been identified by the Washington State Department of Ecology (Ecology) as being present at concentrations above the applicable cleanup levels during previous sampling events at the site.

Ecology issued Notice of Potential Liability letters naming the pre-TMC owner/operator [Smith Kem Ellensburg, Inc. and Ad Gro, LLC (Andrew C. Erickson)] and the historical owner/operator (Shell Oil Products US) as Potentially Liable Persons (PLPs) for releases of petroleum hydrocarbons and pesticides

(including lindane, chlordane, dieldrin, endosulfan II, and endrin aldehyde) to soil and/or groundwater at the site.

The hazardous substances of potential concern for the site include the constituents identified by Ecology, as noted above, and those constituents detected at concentrations above the laboratory reporting limits in previous groundwater grab or monitoring well samples collected in 2013 and 2014 at the site. These substances consist of:

- Gasoline-, diesel- and oil-range total petroleum hydrocarbons (TPH-G, -D, and -O)
- Benzene, toluene, and xylenes
- Organochlorine pesticides, including lindane, chlordane, dieldrin, endosulfan II, and endrin aldehyde.

Other hazardous substances of potential concern for the site, based on historical operations, that were not analyzed for in groundwater during previous sampling events include:

- Nitrate
- Ammonia
- Chlorinated herbicides, including dinoseb and 2,4-dichlorophenoxyacetic acid (2,4,-D).

GROUNDWATER SAMPLING AND ANALYSIS

On April 15, 2015, Landau Associates conducted baseline groundwater sampling at the eight existing monitoring wells (MW-1 through MW-8) at the site (Figure 2). Groundwater was measured at depths between approximately 3 ft and 5 ft below ground surface prior to sample collection.

Low-flow sampling techniques with a peristaltic pump were used to collect the groundwater samples directly into laboratory-supplied containers. The groundwater samples were delivered to ALS Laboratory Group in Everett, Washington via courier on April 16, 2015 and analyzed for the following:

- TPH-G by Method NWTPH-Gx
- TPH-D and TPH-O by Method NWTPH-Dx (with acid silica gel cleanup)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8021
- Organochlorine pesticides by EPA Method 8081
- Chlorinated herbicides by EPA Method 8151
- Nitrate by EP Method 300.0
- Ammonia-N by Method SM4500-NH3.

The attached Table 1 presents the groundwater analytical results including comparison of the data to screening levels based on the Washington State Model Toxics Control Act (MTCA) Method A cleanup levels when available. Preliminary MTCA Method B cleanup levels were used when MTCA Method A cleanup levels were not available. The MTCA Method A or B cleanup levels were used as screening levels

to evaluate the concentrations detected in the groundwater samples. The laboratory data package is provided as Attachment 1.

SUMMARY OF RESULTS

As shown in Table 1 and on Figure 3, one or more hazardous substances of potential concern were detected at concentrations greater than the screening levels in groundwater samples from five of the eight monitoring wells (MW-1, MW-4, MW-6, MW-7, and MW-8). As discussed below, ammonia was detected at concentrations above the laboratory reporting limit in samples from each of the wells. There are no available screening criteria for ammonia in groundwater. The sample analytical results are discussed below.

Total Petroleum Hydrocarbons (TPH-G, TPH-D, TPH-O, and BTEX)

Total petroleum hydrocarbons (TPH) and BTEX have been identified as hazardous substances of potential concern for the site and/or have been detected at the site at concentrations greater than laboratory reporting limits during previous sampling events. Analytical results for TPH and BTEX from the current round of groundwater sampling are as follows:

- TPH-G was not detected at concentrations greater than the laboratory reporting limits in the samples from any of the monitoring wells.
- TPH-D was detected at a concentration greater than the MTCA Method A cleanup level of 500 micrograms per liter ($\mu\text{g/L}$) in the sample from MW-4 (580 $\mu\text{g/L}$). At MW-6, TPH-D was detected at a concentration (150 $\mu\text{g/L}$) above the laboratory reporting limit, but less than the MTCA Method A cleanup level. TPH-D was not detected at concentrations greater than the laboratory reporting limits in the samples from the remaining six monitoring wells (MW-1, MW-2, MW-3, MW-5, MW-7, and MW-8).
- TPH-O was detected at a concentration greater than the laboratory reporting limit, but less than the MTCA Method A cleanup level (500 $\mu\text{g/L}$) at monitoring well MW-4 (250 $\mu\text{g/L}$). TPH-O was not detected at concentrations greater than the laboratory reporting limits in the samples from the remaining seven monitoring wells (MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) were not detected at concentrations greater than the laboratory reporting limits in samples from any of the monitoring wells.

Organochlorine Pesticides

Organochlorine pesticides have been identified as hazardous substances of potential concern for the site, as discussed above, and have been detected at the site at concentrations greater than laboratory reporting limits during previous sampling events. The organochlorine pesticide results for the current round of groundwater sampling are as follows:

- G-BHC (Lindane) was detected in the samples from MW-1 (0.035 $\mu\text{g/L}$), MW-4 (0.17 $\mu\text{g/L}$), and MW-6 (0.022 $\mu\text{g/L}$) at concentrations greater than the laboratory reporting limit, but less

than the MTCA Method A cleanup level (0.2 µg/L). The concentration of Lindane that was detected in the sample from MW-4 (0.17 µg/L) is greater than the MTCA Method B cleanup level of 0.08 µg/L. Lindane was not detected at concentrations greater than the laboratory reporting limit in samples from the remaining five monitoring wells (MW-2, MW-3, MW-5, MW-7, and MW-8).

- Chlordane was detected in the sample from MW-4 at a concentration (0.28 µg/L) greater than the MTCA Method B cleanup level (0.25 µg/L). The concentrations of chlordane detected in the samples from MW-1 (0.089 µg/L), MW-6 (0.14 µg/L), MW-7 (0.021 µg/L), and MW-8 (0.012 µg/L) were greater than laboratory reporting limit, but less than the MTCA Method B cleanup level. Chlordane was not detected at concentrations greater than the laboratory reporting limit in samples from the remaining three monitoring wells (MW-2, MW-3, and MW-5).
- Dieldrin was detected in the samples from MW-1 (0.23 µg/L), MW-4 (2.0 µg/L), MW-6 (0.53 µg/L), MW-7 (0.17 µg/L), and MW-8 (0.031 µg/L) at concentrations greater than the MTCA Method B cleanup level (0.005 µg/L). Dieldrin was not detected at concentrations greater than the laboratory reporting limits in samples from the remaining three monitoring wells (MW-2, MW-3, and MW-5).
- Endosulfan II was not detected at concentrations greater than the laboratory reporting limits in samples from any of the monitoring wells.
- Endrin aldehyde was not detected at concentrations greater than the laboratory reporting limits in samples from any of the monitoring wells.
- Toxaphene was detected in the samples from MW-1 (2.4 µg/L), MW-4 (17 µg/L), MW-6 (9.9 µg/L), and MW-7 (1.0 µg/L) at concentrations greater than the MTCA Method B cleanup level (0.08 µg/L). Toxaphene was not detected at concentrations above the laboratory reporting limit in samples from the remaining four monitoring wells (MW-2, MW-3, MW-5, and MW-8).

Chlorinated Herbicides

Chlorinated herbicides are considered hazardous substances of potential concern for the site based on historical site operations, but have not been analyzed for during previous sampling events. The following herbicides were detected at concentrations greater than laboratory reporting limits in the groundwater samples from the current round of sampling:

- 2,4-D was detected in the sample collected from MW-4 at a concentration (260 µg/L) that is greater than the MTCA Method B cleanup level (160 µg/L). The 2,4-D concentration detected in the sample from MW-6 (2.1 µg/L) is greater than the laboratory reporting limit, but less than the MTCA Method B cleanup level. The 2,4-D concentrations were less than the laboratory reporting limit in samples from the remaining six monitoring wells (MW-1, MW-2, MW-3, MW-5, MW-7, and MW-8).
- Dinoseb was detected in the samples collected from MW-1 (estimated at 3.0 µg/L) and MW-6 (1.2 µg/L) at concentrations greater than laboratory reporting limit, but less than the MTCA Method B cleanup level (16 µg/L). The dinoseb concentrations were less than the laboratory reporting limit in the samples from the remaining six monitoring wells (MW-2, MW-3, MW-4, MW-5, MW-7, and MW-8).
- Dicamba was detected in the samples collected from MW-1 (estimated at 30 µg/L), MW-4 (160 µg/L), MW-6 (110 µg/L), MW-7 (0.40 µg/L), and MW-8 (1.0 µg/L) at concentrations

greater than the laboratory reporting limit, but less than the MTCA Method B cleanup level (480 µg/L). The detected concentrations of dicamba were less than the laboratory reporting limit in the samples from the remaining three monitoring wells (MW-2, MW-3, and MW-5).

Nitrate and Ammonia

Nitrate and ammonia are considered hazardous substances of potential concern for the site based on historical site operations, but have not been analyzed for during previous sampling at the site. Analytical results for nitrate and ammonia for the April 2015 round of sampling are as follows:

- Nitrate was detected in the samples from MW-1 [610 milligrams per liter (mg/L)], MW-4 (2,600 mg/L), MW-6 (960 mg/L), MW-7 (93 mg/L), and MW-8 (320 mg/L) at concentrations greater than the MTCA Method B cleanup level (10 mg/L). The nitrate concentrations detected in the samples collected from MW-2 (2.1 mg/L) and MW-5 (3.6 mg/L) were greater than the laboratory reporting limit, but less than the MTCA Method B cleanup level. The nitrate concentration was less than the laboratory reporting limit in the sample collected from MW-3.
- Ammonia was detected at concentrations greater than laboratory reporting limit in the samples from all of the monitoring wells with the detected concentrations ranging from 0.075 mg/L (MW-2) to 1,300 mg/L (MW-4). There is no screening level available for ammonia in groundwater.

CONCLUSIONS

The data collected during April 2015 sampling event indicate that TPH-D, organochlorine pesticides (chlordane, dieldrin, and toxaphene), a chlorinated herbicide (2,4-D), and nitrate are present in site groundwater at one or more locations at concentrations greater than the screening levels, which are based on the Ecology MTCA cleanup levels. TPH-D, TPH-O, organochlorine pesticides (lindane and chlordane), chlorinated herbicides (2,4-D, dinoseb, and dicamba), and nitrate are also present in groundwater at one or more other locations at concentrations greater than laboratory reporting limits, but less than the screening levels.

In April 2015, five of eight monitoring wells (MW-1, MW-4, MW-6, MW-7, and MW-8) contained one or more of the hazardous substances of potential concern at concentrations greater than the laboratory reporting limits. In addition, ammonia was detected in the samples from all of the monitoring wells at concentrations greater than the laboratory reporting limit. There are no available screening criteria for ammonia in groundwater. The highest ammonia concentration was detected in the sample collected from MW-4 and is indicative of a release to groundwater.

The April 2015 groundwater data document that TPH, pesticide, herbicide, and nitrate, contamination is present in groundwater at the site at concentrations above the screening levels, which are based on the Ecology MTCA cleanup levels. The April 2015 groundwater data are consistent with the data collected in 2013 and 2014 (Figure 3), and also indicate that chlorinated herbicides, nitrate, and ammonia should be added to the list of hazardous substances of potential concern for cleanup of the site.

* * * * *

We appreciate the opportunity to continue to assist TMC with this project. Please contact us if you have any questions regarding this letter, or need any additional information.

LANDAU ASSOCIATES, INC.



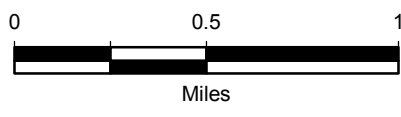
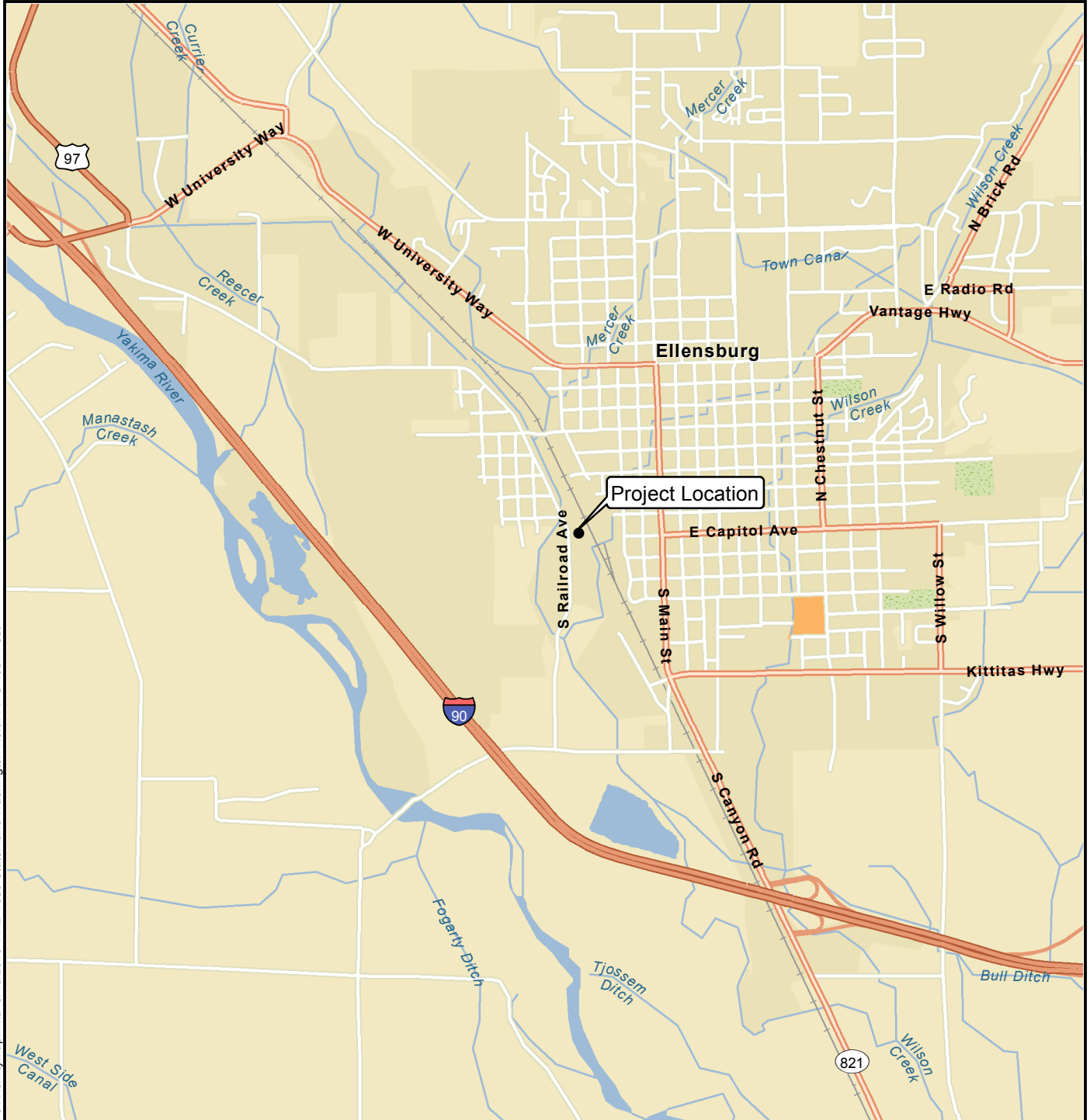
Timothy L. Syverson, L.G.
Senior Associate Geologist

CLB/TLS/ccy

ATTACHMENTS

- Figure 1: Vicinity Map
- Figure 2: Site Plan
- Figure 3: Analytes Detected at Concentrations Above Screening Levels
- Table 1: Groundwater Analytical Results
- Attachment 1: Laboratory Analytical Data

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Data Source: Esri 2012

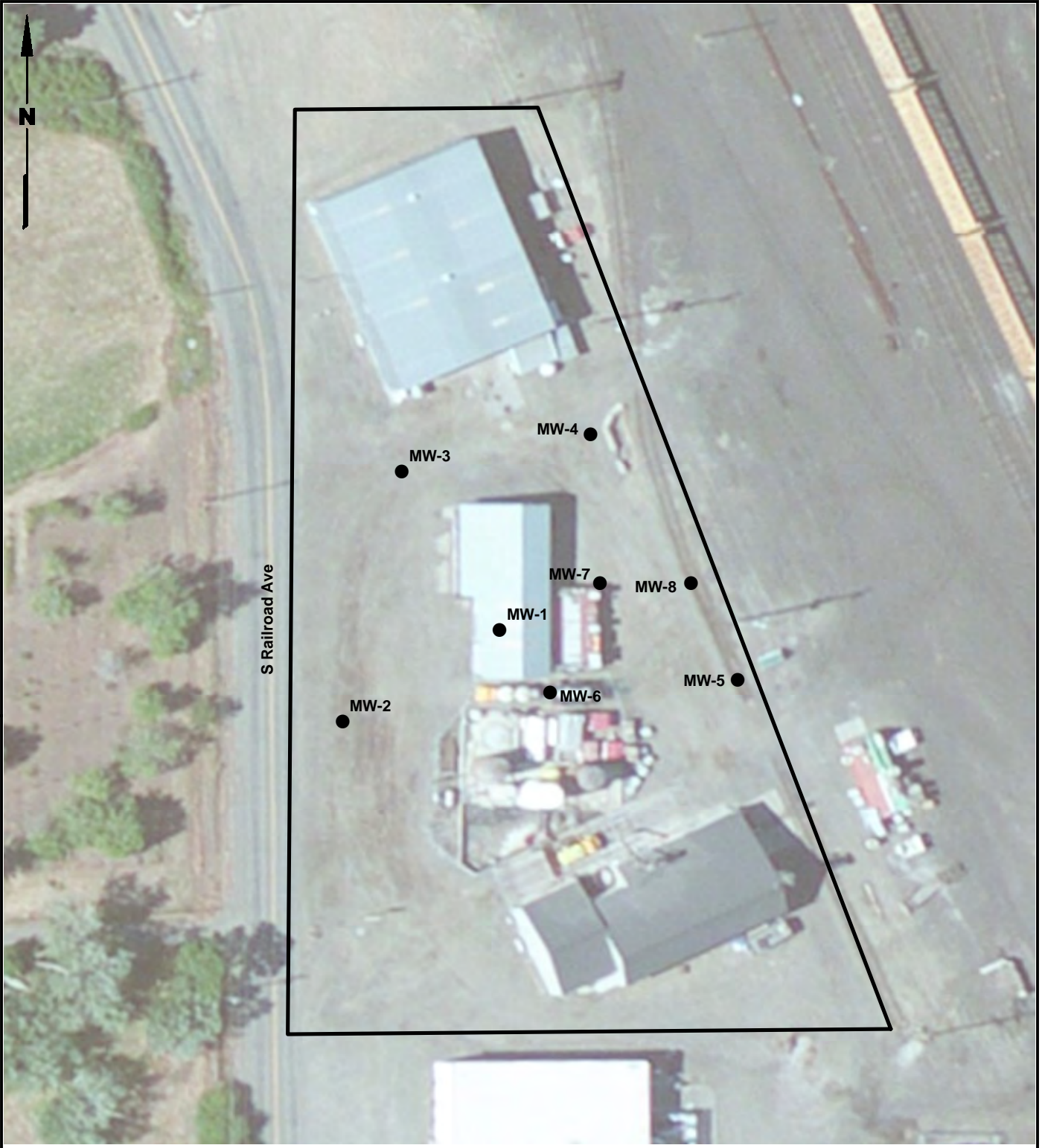


Smith-Kem Facility
200 South Railroad Avenue
Ellensburg, Washington

Vicinity Map

Figure
1

G:\Projects\1474\02\02020\021\Baseline GW Sampling\F02SitePlan.mxd 5/18/2015 NAD 1983 StatePlane Washington South FIPS 4602 Feet



Legend

- Monitoring Wells
- Property Boundary

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Data Sources: Kittitas County GIS; Esri World Imagery.

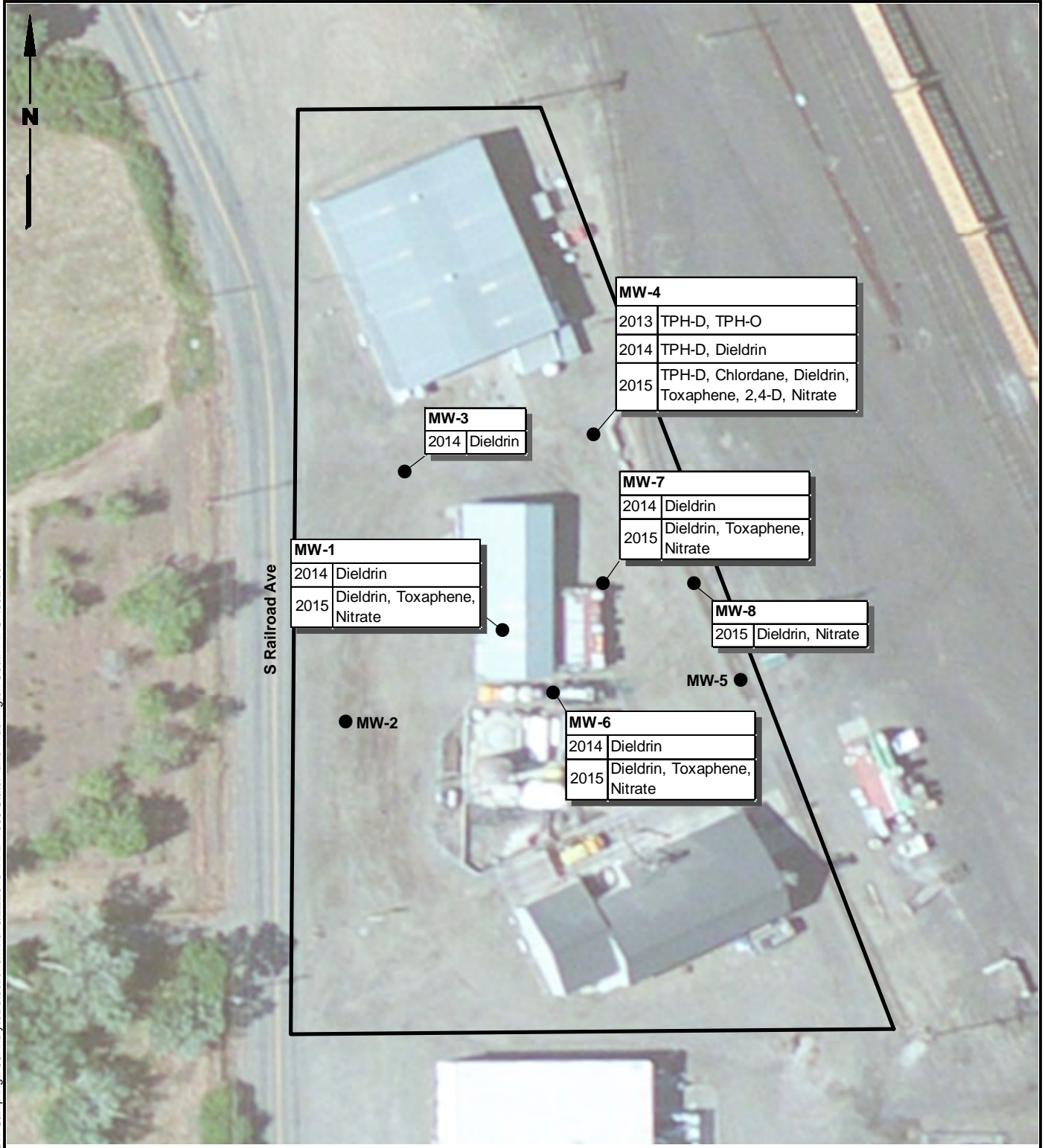


Smith-Kem Facility
 200 South Railroad Avenue
 Ellensburg, Washington

Site Plan

Figure
2

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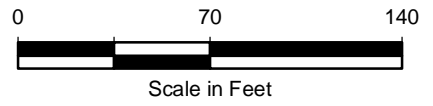
Legend

- Monitoring Wells
- Property Boundary

2015 - Dieldrin, Nitrate = Year of sampling and analyte(s) detected above the screening level(s).

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Data Sources: Kittitas County GIS; Esri World Imagery.



Smith-Kem Facility
200 South Railroad Avenue
Ellensburg, Washington

Analytes Detected at Concentrations Above Screening Levels

Figure
3

**TABLE 1
GROUNDWATER ANALYTICAL RESULTS
SMITH-KEM PROPERTY
ELLENSBURG, WASHINGTON**

	Screening Level (a)	MW-1-041515 EV15040087-05 04/15/2015	MW-2-041515 EV15040087-08 04/15/2015	MW-3-041515 EV15040087-07 04/15/2015	MW-4-041515 EV15040087-06 04/15/2015	MW-5-041515 EV15040087-02 04/15/2015	MW-6-041515 EV15040087-01 04/15/2015	MW-7-041515 EV15040087-04 04/15/2015	MW-8-041515 EV15040087-03 04/15/2015
TOTAL PETROLEUM HYDROCARBONS (µg/L)									
Method NWTPH-Gx									
Gasoline		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Method NWTPH-DxSG									
Diesel	500	130 U	130 U	130 U	580	130 U	150	130 U	130 U
Motor Oil	500	250 U	250 U	250 U	250	250 U	250 U	250 U	250 U
BTEX (µg/L)									
EPA Method 8021									
Benzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes		3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
PESTICIDES (µg/L)									
EPA Method 8081									
A-BHC		0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U
G-BHC (Lindane)	0.2	0.035	0.011 U	0.011 U	0.17	0.010 U	0.022	0.011 U	0.010 U
B-BHC		0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U
Heptachlor		0.17 U	0.011 U	0.011 U	0.062 U	0.010 U	0.058 U	0.011 U	0.014 U
D-BHC		0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U
Aldrin		0.010 U	0.011 U	0.011 U	0.012 U	0.010 U	0.010 U	0.011 U	0.010 U
Heptachlor Epoxide		0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U
Chlordane	0.25	0.089	0.011 U	0.011 U	0.28	0.010 U	0.14	0.021	0.012
Endosulfan I		0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U
4,4'-DDE		0.010 U	0.011 U	0.011 U	0.033 U	0.010 U	0.010 U	0.011 U	0.010 U
Dieldrin	0.005	0.23	0.011 U	0.011 U	2.0	0.010 U	0.53	0.17	0.031
Endrin		0.013 U	0.011 U	0.011 U	0.13 U	0.010 U	0.026 U	0.011 U	0.010 U
4,4'-DDD		0.025 U	0.011 U	0.011 U	0.13 U	0.010 U	0.059 U	0.011 U	0.010 U
Endosulfan II		0.013 U	0.011 U	0.011 U	0.14 U	0.010 U	0.017 U	0.011 U	0.010 U
4,4'-DDT		0.020 U	0.011 U	0.011 U	0.20 U	0.010 U	0.071 U	0.011 U	0.010 U
Endrin Aldehyde		0.028 U	0.011 U	0.011 U	0.25 U	0.010 U	0.073 U	0.017 U	0.010 U
Endosulfan Sulfate		0.010 U	0.011 U	0.011 U	0.014 U	0.010 U	0.015 U	0.011 U	0.010 U
Methoxychlor		0.13 U	0.011 U	0.011 U	0.045 U	0.010 U	0.13 U	0.013 U	0.010 U
Hexachlorobenzene		0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U
Toxaphene	0.08	2.4	0.51 U	0.51 U	17	0.50 U	9.9	1.0	0.50 U

**TABLE 1
GROUNDWATER ANALYTICAL RESULTS
SMITH-KEM PROPERTY
ELLENSBURG, WASHINGTON**

	Screening Level (a)	MW-1-041515 EV15040087-05 04/15/2015	MW-2-041515 EV15040087-08 04/15/2015	MW-3-041515 EV15040087-07 04/15/2015	MW-4-041515 EV15040087-06 04/15/2015	MW-5-041515 EV15040087-02 04/15/2015	MW-6-041515 EV15040087-01 04/15/2015	MW-7-041515 EV15040087-04 04/15/2015	MW-8-041515 EV15040087-03 04/15/2015
HERBICIDES (µg/L)									
EPA Method 8151									
2,4,5-T		0.19 U	0.19 U	0.19 U	2.5 U	0.19 U	0.25 U	0.19 U	0.19 U
2,4,5-TP (Silvex)		1.7 U	0.19 U	0.19 U	790 U	0.19 U	0.19 U	0.21 U	0.19 U
2,4-D	160	7.6 U	0.38 U	0.38 U	260	0.38 U	2.1	0.38 U	0.38 U
2,4-DB		2.9 U	0.38 U	0.38 U	8.9 U	0.38 U	2.9 U	0.60 U	0.52 U
Dalapon		0.38 U	0.38 U	0.38 U	0.39 U	0.38 U	0.38 U	0.38 U	0.38 U
Dichloroprop		0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Dinoseb	16	3.0 J	0.19 U	0.19 U	2.3 U	0.19 U	1.2	0.19 U	0.19 U
MCPA		95 U	95 U	95 U	140 U	95 U	95 U	95 U	95 U
MCPP		95 U	95 U	95 U	97 U	95 U	95 U	95 U	95 U
Dicamba	480	30 J	0.19 U	0.19 U	160	0.19 U	110	0.40	1.0
GENERAL CHEMISTRY (mg/L)									
Nitrate (mg/L; EPA 300.0)	10	610	2.1	0.15 U	2,600	3.6	960	93	320
Ammonia-N (mg/L; SM4500-NH3)	NA	64	0.075	0.20	1,300	0.21	15	8.7	28

(a) Model Toxics Control Act (MTCA) Method A Cleanup Level used when available; otherwise, MTCA Method B Cleanup Level was applied to detected compounds only.

U = The compound was not detected at the reported concentration.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Bold = Detected compound.

Box = Exceedance of screening level.

NA = No screening level available.

Laboratory Analytical Data



May 7, 2015

Mr. Tim Syverson
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Syverson,

On April 16th, 9 samples were received by our laboratory and assigned our laboratory project number EV15040087. The project was identified as your Smith-Kem / #1474002.020. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-01
CLIENT SAMPLE ID:	MW-6-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 10:30:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	150	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	0.022	0.010	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.058	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	0.14	0.010	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	0.53	0.050	5	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.026	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.059	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.017	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.071	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.073	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.015	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.13	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	9.9	2.5	5	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	960	15	100	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.25	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4-D	EPA-8151	2.1	0.38	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	2.9	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	1.2	0.19	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
MCPP	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
Dicamba	EPA-8151	110	9.5	50	ug/L	05/05/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-01
CLIENT SAMPLE ID	MW-6-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 10:30:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	15	0.25	5	MG/L	04/23/2015	CAS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	76.8	04/16/2015	PAB
TFT	EPA-8021	97.4	04/16/2015	PAB
C25	NWTPH-DX w/ SGA	69.0	04/16/2015	EBS
TCMX	EPA-8081	84.0	04/25/2015	CAS
DCB	EPA-8081	44.0	04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	83.0	05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered diesel.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-02
CLIENT SAMPLE ID	MW-5-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 11:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	U	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	U	0.50	1	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	3.6	0.15	1	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4-D	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dicamba	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
MCP	EPA-8151	U	95	1	ug/L	05/01/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-02
CLIENT SAMPLE ID	MW-5-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 11:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	0.21	0.050	1	MG/L	04/23/2015	CAS
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	78.9				04/16/2015	PAB
TFT	EPA-8021	101				04/16/2015	PAB
C25	NWTPH-DX w/ SGA	94.6				04/16/2015	EBS
TCMX	EPA-8081	79.0				04/25/2015	CAS
DCB	EPA-8081	81.0				04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	28.0				05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-03
CLIENT SAMPLE ID	MW-8-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 11:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	U	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.014	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	0.012	0.010	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	0.031	0.010	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	U	0.50	1	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	320	15	100	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/05/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.19	1	ug/L	05/05/2015	CAS
2,4-D	EPA-8151	U	0.38	1	ug/L	05/05/2015	CAS
2,4-DB	EPA-8151	U	0.52	1	ug/L	05/05/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/05/2015	CAS
Dicamba	EPA-8151	1.0	0.19	1	ug/L	05/05/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/05/2015	CAS
Dinoseb	EPA-8151	U	0.19	1	ug/L	05/05/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/05/2015	CAS
MCPP	EPA-8151	U	95	1	ug/L	05/05/2015	CAS



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-03
CLIENT SAMPLE ID	MW-8-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 11:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	28	0.50	10	MG/L	04/23/2015	CAS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	79.0	04/16/2015	PAB
TFT	EPA-8021	96.2	04/16/2015	PAB
C25	NWTPH-DX w/ SGA	97.0	04/16/2015	EBS
TCMX	EPA-8081	75.0	04/25/2015	CAS
DCB	EPA-8081	54.0	04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	65.0	05/05/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-04
CLIENT SAMPLE ID	MW-7-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 12:40:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	U	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	0.021	0.011	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	0.17	0.011	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.017	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.013	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	1.0	0.52	1	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	93	1.5	10	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.21	1	ug/L	05/01/2015	CAS
2,4-D	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	0.60	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dicamba	EPA-8151	0.40	0.19	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
MCPD	EPA-8151	U	95	1	ug/L	05/01/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-04
CLIENT SAMPLE ID	MW-7-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 12:40:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	8.7	0.25	5	MG/L	04/23/2015	CAS
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	81.9				04/16/2015	PAB
TFT	EPA-8021	98.7				04/16/2015	PAB
C25	NWTPH-DX w/ SGA	88.3				04/16/2015	EBS
TCMX	EPA-8081	80.0				04/25/2015	CAS
DCB	EPA-8081	47.0				04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	53.0				05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-05
CLIENT SAMPLE ID	MW-1-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 1:10:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	U	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	0.035	0.010	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.17	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	0.089	0.010	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	0.23	0.010	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.013	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.025	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.013	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.020	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.028	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.13	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	2.4	0.50	1	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	610	15	100	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	1.7	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	2.9	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	3.0	0.19	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
MCPP	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
2,4-D	EPA-8151	U	7.6	20	ug/L	05/05/2015	CAS
Dicamba	EPA-8151	30	3.8	20	ug/L	05/05/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-05
CLIENT SAMPLE ID	MW-1-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 1:10:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	64	2.5	50	MG/L	04/23/2015	CAS
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	82.9				04/16/2015	PAB
TFT	EPA-8021	102				04/16/2015	PAB
C25	NWTPH-DX w/ SGA	78.4				04/16/2015	EBS
TCMX	EPA-8081	74.0				04/25/2015	CAS
DCB	EPA-8081	45.0				04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	136				05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-06
CLIENT SAMPLE ID	MW-4-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 2:00:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	580	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	250	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	0.17	0.010	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.062	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.012	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	0.28	0.010	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.033	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	2.0	0.10	10	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.13	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.13	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.14	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.20	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.25	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.014	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.045	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	17	5.0	10	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	2600	150	1000	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	2.5	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	8.9	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.39	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	U	2.3	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	140	1	ug/L	05/01/2015	CAS
MCPP	EPA-8151	U	97	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	790	100	ug/L	05/05/2015	CAS
2,4-D	EPA-8151	260	39	100	ug/L	05/05/2015	CAS
Dicamba	EPA-8151	160	20	100	ug/L	05/05/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-06
CLIENT SAMPLE ID	MW-4-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 2:00:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	1300	25	500	MG/L	04/23/2015	CAS
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	78.1				04/16/2015	PAB
TFT	EPA-8021	96.5				04/16/2015	PAB
C25	NWTPH-DX w/ SGA	80.9				04/16/2015	EBS
TCMX	EPA-8081	65.0				04/25/2015	CAS
DCB	EPA-8081	39.0				04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	67.0				05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains an unidentified diesel range product and an unidentified oil range product.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-07
CLIENT SAMPLE ID	MW-3-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 2:40:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	U	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	U	0.51	1	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	U	0.15	1	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4-D	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dicamba	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
MCPP	EPA-8151	U	95	1	ug/L	05/01/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-07
CLIENT SAMPLE ID	MW-3-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 2:40:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	0.20	0.050	1	MG/L	04/23/2015	CAS
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	77.3				04/16/2015	PAB
TFT	EPA-8021	96.4				04/16/2015	PAB
C25	NWTPH-DX w/ SGA	90.5				04/16/2015	EBS
TCMX	EPA-8081	76.0				04/25/2015	CAS
DCB	EPA-8081	81.0				04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	38.0				05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-08
CLIENT SAMPLE ID	MW-2-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 3:35:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB
TPH-Diesel Range	NWTPH-DX w/ SGA	U	130	1	ug/L	04/16/2015	EBS
TPH-Oil Range	NWTPH-DX w/ SGA	U	250	1	ug/L	04/16/2015	EBS
A-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Endosulfan Sulfate	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.011	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	U	0.51	1	ug/L	04/25/2015	CAS
Nitrate	EPA-300.0	2.1	0.15	1	MG/L	04/17/2015	GAP
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/02/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.19	1	ug/L	05/02/2015	CAS
2,4-D	EPA-8151	U	0.38	1	ug/L	05/02/2015	CAS
2,4-DB	EPA-8151	U	0.38	1	ug/L	05/02/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/02/2015	CAS
Dicamba	EPA-8151	U	0.19	1	ug/L	05/02/2015	CAS
Dichloroprop	EPA-8151	U	0.040	1	ug/L	05/02/2015	CAS
Dinoseb	EPA-8151	U	0.19	1	ug/L	05/02/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/02/2015	CAS
MCPP	EPA-8151	U	95	1	ug/L	05/02/2015	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-08
CLIENT SAMPLE ID	MW-2-041515	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015 3:35:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	0.075	0.050	1	MG/L	04/23/2015	CAS
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	81.8				04/16/2015	PAB
TFT	EPA-8021	99.8				04/16/2015	PAB
C25	NWTPH-DX w/ SGA	90.1				04/16/2015	EBS
TCMX	EPA-8081	80.0				04/25/2015	CAS
DCB	EPA-8081	77.0				04/25/2015	CAS
2,4-Dichlorophenylacetic Acid	EPA-8151	57.0				05/02/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS JOB#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	ALS SAMPLE#:	EV15040087-09
CLIENT SAMPLE ID	Trip Blanks	DATE RECEIVED:	04/16/2015
		COLLECTION DATE:	4/15/2015
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/16/2015	PAB
Benzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/16/2015	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	81.5	04/16/2015	PAB
TFT	EPA-8021	99.3	04/16/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc. DATE: 5/7/2015
 130 - 2nd Ave. S. ALS SDG#: EV15040087
 Edmonds, WA 98020 WDOE ACCREDITATION: C601

CLIENT CONTACT: Tim Syverson
 CLIENT PROJECT: Smith-Kem / #1474002.020

LABORATORY BLANK RESULTS

MBG-041515W - Batch 92451 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	04/15/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MB-041515W - Batch 92451 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	ug/L	04/15/2015	PAB
Toluene	EPA-8021	U	1.0	1	ug/L	04/15/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	04/15/2015	PAB
Xylenes	EPA-8021	U	3.0	1	ug/L	04/15/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MB-041415W - Batch 92398 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	130	1	ug/L	04/14/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	ug/L	04/14/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB1-04/25/2015 - Batch R254217 - Water by EPA-8081

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
G-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
B-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
D-BHC	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Aldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Heptachlor Epoxide	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Chlordane	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan I	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDE	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Dieldrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endrin	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDD	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endosulfan II	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
4,4'-DDT	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Endrin Aldehyde	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc. DATE: 5/7/2015
 130 - 2nd Ave. S. ALS SDG#: EV15040087
 Edmonds, WA 98020 WDOE ACCREDITATION: C601

CLIENT CONTACT: Tim Syverson
 CLIENT PROJECT: Smith-Kem / #1474002.020

LABORATORY BLANK RESULTS

MB1-04/25/2015 - Batch R254217 - Water by EPA-8081

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Endosulfan Sulfate	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Methoxychlor	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Hexachlorobenzene	EPA-8081	U	0.010	1	ug/L	04/25/2015	CAS
Toxaphene	EPA-8081	U	0.50	1	ug/L	04/25/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-4172015 - Batch R253232 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	0.15	1	MG/L	04/17/2015	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

MB1-05/01/2015 - Batch R254218 - Water by EPA-8151

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
2,4,5-T	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4,5-TP (Silvex)	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
2,4-D	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
2,4-DB	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dalapon	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dicamba	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
Dichloroprop	EPA-8151	U	0.38	1	ug/L	05/01/2015	CAS
Dinoseb	EPA-8151	U	0.19	1	ug/L	05/01/2015	CAS
MCPA	EPA-8151	U	95	1	ug/L	05/01/2015	CAS
MCPP	EPA-8151	U	95	1	ug/L	05/01/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

MB1-04/23/2015 - Batch R254220 - Water by SM 4500-NH3

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Ammonia as N	SM 4500-NH3	U	0.050	1	MG/L	04/23/2015	CAS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS SDG#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	WDOE ACCREDITATION:	C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 92451 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	84.9			04/15/2015	PAB
TPH-Volatile Range - BSD	NWTPH-GX	88.4	4		04/15/2015	PAB

ALS Test Batch ID: 92451 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	114			04/15/2015	PAB
Benzene - BSD	EPA-8021	118	4		04/15/2015	PAB
Toluene - BS	EPA-8021	108			04/15/2015	PAB
Toluene - BSD	EPA-8021	112	3		04/15/2015	PAB
Ethylbenzene - BS	EPA-8021	108			04/15/2015	PAB
Ethylbenzene - BSD	EPA-8021	112	4		04/15/2015	PAB
Xylenes - BS	EPA-8021	107			04/15/2015	PAB
Xylenes - BSD	EPA-8021	112	4		04/15/2015	PAB

ALS Test Batch ID: 92398 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	94.9			04/14/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	95.1	0		04/14/2015	EBS

ALS Test Batch ID: R254217 - Water by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
A-BHC - BS	EPA-8081	76.5			04/25/2015	CAS
A-BHC - BSD	EPA-8081	77.0	1		04/25/2015	CAS
G-BHC - BS	EPA-8081	77.5			04/25/2015	CAS
G-BHC - BSD	EPA-8081	77.5	0		04/25/2015	CAS
B-BHC - BS	EPA-8081	80.0			04/25/2015	CAS
B-BHC - BSD	EPA-8081	80.5	1		04/25/2015	CAS
Heptachlor - BS	EPA-8081	71.0			04/25/2015	CAS
Heptachlor - BSD	EPA-8081	68.0	4		04/25/2015	CAS
D-BHC - BS	EPA-8081	78.0			04/25/2015	CAS
D-BHC - BSD	EPA-8081	79.0	1		04/25/2015	CAS
Aldrin - BS	EPA-8081	56.5			04/25/2015	CAS
Aldrin - BSD	EPA-8081	50.5	11		04/25/2015	CAS
Heptachlor Epoxide - BS	EPA-8081	75.5			04/25/2015	CAS
Heptachlor Epoxide - BSD	EPA-8081	74.5	1		04/25/2015	CAS



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	5/7/2015
CLIENT CONTACT:	Tim Syverson	ALS SDG#:	EV15040087
CLIENT PROJECT:	Smith-Kem / #1474002.020	WDOE ACCREDITATION:	C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Chlordane - BS	EPA-8081	72.0			04/25/2015	CAS
Chlordane - BSD	EPA-8081	71.0	1		04/25/2015	CAS
Endosulfan I - BS	EPA-8081	54.5			04/25/2015	CAS
Endosulfan I - BSD	EPA-8081	53.5	2		04/25/2015	CAS
4,4'-DDE - BS	EPA-8081	73.0			04/25/2015	CAS
4,4'-DDE - BSD	EPA-8081	72.0	1		04/25/2015	CAS
Dieldrin - BS	EPA-8081	76.5			04/25/2015	CAS
Dieldrin - BSD	EPA-8081	76.0	1		04/25/2015	CAS
Endrin - BS	EPA-8081	80.0			04/25/2015	CAS
Endrin - BSD	EPA-8081	79.5	1		04/25/2015	CAS
4,4'-DDD - BS	EPA-8081	75.0			04/25/2015	CAS
4,4'-DDD - BSD	EPA-8081	74.5	1		04/25/2015	CAS
Endosulfan II - BS	EPA-8081	59.5			04/25/2015	CAS
Endosulfan II - BSD	EPA-8081	59.5	0		04/25/2015	CAS
4,4'-DDT - BS	EPA-8081	77.0			04/25/2015	CAS
4,4'-DDT - BSD	EPA-8081	75.0	3		04/25/2015	CAS
Endrin Aldehyde - BS	EPA-8081	75.0			04/25/2015	CAS
Endrin Aldehyde - BSD	EPA-8081	76.0	1		04/25/2015	CAS
Endosulfan Sulfate - BS	EPA-8081	75.0			04/25/2015	CAS
Endosulfan Sulfate - BSD	EPA-8081	75.0	0		04/25/2015	CAS
Methoxychlor - BS	EPA-8081	79.0			04/25/2015	CAS
Methoxychlor - BSD	EPA-8081	77.5	2		04/25/2015	CAS
Hexachlorobenzene - BS	EPA-8081	70.5			04/25/2015	CAS
Hexachlorobenzene - BSD	EPA-8081	70.0	1		04/25/2015	CAS
Toxaphene - BS	EPA-8081	92.1			04/25/2015	CAS
Toxaphene - BSD	EPA-8081	86.6	6		04/25/2015	CAS

ALS Test Batch ID: R253232 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Nitrate - BS	EPA-300.0	102			04/17/2015	GAP
Nitrate - BSD	EPA-300.0	97.0	5		04/17/2015	GAP

ALS Test Batch ID: R254218 - Water by EPA-8151

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
2,4,5-T - BS	EPA-8151	100			05/01/2015	CAS
2,4,5-T - BSD	EPA-8151	104	3		05/01/2015	CAS
2,4,5-TP (Silvex) - BS	EPA-8151	93.6			05/01/2015	CAS



CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: 5/7/2015 ALS SDG#: EV15040087 WDOE ACCREDITATION: C601
CLIENT CONTACT:	Tim Syverson	
CLIENT PROJECT:	Smith-Kem / #1474002.020	

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
2,4,5-TP (Silvex) - BSD	EPA-8151	96.0	3		05/01/2015	CAS
2,4-D - BS	EPA-8151	94.4			05/01/2015	CAS
2,4-D - BSD	EPA-8151	98.0	4		05/01/2015	CAS
2,4-DB - BS	EPA-8151	67.6			05/01/2015	CAS
2,4-DB - BSD	EPA-8151	61.2	10		05/01/2015	CAS
Dalapon - BS	EPA-8151	80.8			05/01/2015	CAS
Dalapon - BSD	EPA-8151	75.2	7		05/01/2015	CAS
Dicamba - BS	EPA-8151	84.4			05/01/2015	CAS
Dicamba - BSD	EPA-8151	86.0	2		05/01/2015	CAS
Dichloroprop - BS	EPA-8151	76.0			05/01/2015	CAS
Dichloroprop - BSD	EPA-8151	78.8	4		05/01/2015	CAS
Dinoseb - BS	EPA-8151	80.4			05/01/2015	CAS
Dinoseb - BSD	EPA-8151	78.0	3		05/01/2015	CAS
MCPA - BS	EPA-8151	85.2			05/01/2015	CAS
MCPA - BSD	EPA-8151	89.6	5		05/01/2015	CAS
MCPP - BS	EPA-8151	78.8			05/01/2015	CAS
MCPP - BSD	EPA-8151	90.4	14		05/01/2015	CAS

ALS Test Batch ID: R254220 - Water by SM 4500-NH3

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Ammonia as N 5X Dilution - BS	SM 4500-NH3	97.5			04/23/2015	CAS

APPROVED BY

Laboratory Director

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau

ALS Job #: EV15040087

Project: Smith Kern

Received Date: 4/16/15 Received Time: 10:10 By: RB

Type of shipping container: Cooler Box Other

Shipped via: FedEx Ground UPS Mail Courier ALS Hand Delivered
FedEx Express

Were custody seals on outside of sample? X Yes ___ No ___ N/A ___
If yes, how many? 1 each Where? Top
Custody seal date: 4/16 Seal name: Landau.

Was Chain of Custody properly filled out (ink, signed, dated, etc.)? X Yes ___ No ___ N/A ___

Did all bottles have labels? X Yes ___ No ___ N/A ___

Did all bottle labels and tags agree with Chain of Custody? X Yes ___ No ___ N/A ___

Were samples received within hold time? X Yes ___ No ___ N/A ___

Did all bottles arrive in good condition (unbroken, etc.)? X Yes ___ No ___ N/A ___

Was sufficient amount of sample sent for the tests indicated? X Yes ___ No ___ N/A ___

Was correct preservation added to samples? X Yes ___ No ___ N/A ___

If no, Sample Control added preservative to the following:

<u>Sample Number</u>	<u>Reagent</u>	<u>Analyte</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Were VOA vials checked for absence of air bubbles? X Yes ___ No ___ N/A ___

Bubbles present in sample #: None

Temperature of cooler upon receipt: 3 4.7 5.4 5.3 on Ice Cold Cool Ambient N/A

Explain any discrepancies: _____

Was client contacted? _____ Who was called? _____ By whom? _____ Date: _____

Outcome of call: _____