WATTENBERG DISPOSAL, LLC.

WORLD TRADE CENTER
1675 BROADWAY, 28TH FLOOR
DENVER, COLORADO 80202-4628
TELEPHONE (303) 825-4822
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June 13, 2013

Mr. Nathan Wiser
United States EPA Region 8
8OC-EISC
1595 Wynkoop Street
Denver, CO 80202-1129

CO10938-02115

RE: Wattenberg Disposal, LLC
Annual Third Party Audit
MIT

Dear Mr. Wiser,

Enclosed please find the Annual Third Party Audit performed by Enertia Consulting Group and the log for Mechanical Integrity Test performed on May 23, 2013.

Please do not hesitate contacting me if you require any further information at (303) 825-4822 or slaramesa@kpk.com

Sincerely,

Susana Lara-Mesa
Engineering Project Manager

Cc: Caren Johannes, HMWMD
Troy Swain, Weld County Dept. of Public Health and Environment
KPK

ENERTIA CONSULTING GROUP LLC

1437 Larimer St.
Denver, CO 80202
720•473•3131
sean.ohearn@enertiacg.com

May 22, 2013

Ms. Susana Lara-Mesa
K.P. Kauffman Company, Inc.
1675 Broadway, Suite 2800
Denver, Colorado 80202

RE: Environmental Audit - Wattenberg Disposal Facility
UIC Permit No. C 1516-2115, Suckla Farms Injection Well No. 1
4468 County Road 19, Weld County, Colorado

Dear Ms. Lara-Mesa:

Enertia Consulting Group, LLC (Enertia) has performed an Environmental Audit at the Suckla Farms Injection Well No. 1 site, 4468 County Road 19, Weld County, Colorado (the Facility), generally located in the SE ¼ of the SE ¼ of the NW ¼ of Section 10, Township 1 North, Range 67 West of the 6th Principal Meridian. The Facility is operated under the U.S. EPA Underground Injection Control Program, Permit No. C1516-2115. The purpose of the environmental audit was to evaluate pertinent 2012 information and determine the adequacy of the Facility's surface operation and maintenance in preventing shallow groundwater contamination, in accordance with Permit C1516-2115 requirements.

The environmental audit included:

- Site reconnaissance and photo documentation (Attachment 1) of the Facility;
- On-site interview with Mr. Roy Teter, Field Manager, and telephone interview with Mr. Bill Teter, Plant Attendant;
- Review of semi-annual groundwater monitoring data collected by Apex Consulting Services in June and December 2012, and submitted to WCDPHE and the Colorado Department of Public Health and Environment (CDPHE); and
- Telephone interview with Mr. Michael Hattel, PG, PES of Apex Consulting Services (Apex).

Background

The Facility was originally constructed in 1972 by the Amoco Production Company to dispose of production water from oil and gas wells in the Denver-Julesburg Basin. Current operations at the Facility include the deep injection disposal of non-hazardous Class I and Class II liquid waste, as defined in 40 CFR 144.6. The operation at the Facility generally consists of injecting water produced from oil and gas operations and nonhazardous industrial waste into the Lyons Formation between depths of 9,276 feet and 9,418 feet below ground surface (bgs). A shallow

groundwater monitoring plan for the Facility (prepared in 2002 by Nationwide Environmental Services, Inc., and amended in 2009) includes semi-annual groundwater monitoring at four observation well locations (OW-1, OW-2, OW-3, OW-4) for:

- Oil & Grease;
- Major Anions (nitrate, nitrite, sulfate, chloride);
- Total Organic Carbon;
- Major Cations (calcium, potassium, magnesium, sodium)
- BTEX compounds;
- Alkalinity (carb/bicarb); and
- Total Dissolved Solids.

In addition, the Facility follows other environmental compliance document requirements (e.g., SPCC Plan).

2012 Groundwater Monitoring

Apex collected groundwater samples for laboratory analysis on June 19th and December 17th, 2012. During the June sampling event, shallow groundwater was measured at depths ranging from 12.5 feet bgs (OW-1) to 22.6 feet bgs (OW-4). During the December sampling event, shallow groundwater was measured at depths ranging from 14 feet bgs (OW-1) to 22 feet bgs (OW-4). The Apex groundwater monitoring reports for these sampling programs are attached to this report as Attachment 2.

Based on the analytical results, Apex determined that the results for the 2012 monitoring events were consistent with the results from previous monitoring events. The results of both the June and December 2012 sampling events indicated BTEX compounds were not detected above the laboratory detection limit.

Site Reconnaissance

Enertia performed a site reconnaissance on May 8, 2013. During this reconnaissance, Enertia visually checked for leakage or other releases at each Facility component. The Facility components included the unloading pad, holding tanks, pump building, sumps, surface pipes, storage building, and injection wellhead and well house. Photographs taken during the site reconnaissance are provided as Attachment 1. Enertia did not observe obvious evidence of staining, odors, dead/stressed vegetation, or releases to the environment at any of the above-listed Facility components.

Interviews

Interviews were conducted with Mr. Roy Teter (KPK Field Manager), Mr. Bill Teter (KPK Facility Attendant) and Mr. Michael Hattel, PG, PES (Environmental Consultant). The following information was gathered during the interview:

- Mr. Roy Teter has managed the Facility since 1998. He reported that, to his knowledge, there have been no significant environmental incidents at the Facility or environmental impacts to the property since the last audit of the Facility;
- Mr. Bill Teter is an attendant at the Facility. He reported that, to his knowledge, there have been no significant environmental incidents at the Facility or environmental impacts to the property since the last audit of the Facility; and
- Mr. Michael Hattel, PG, PES of Apex Consulting Services has been collecting groundwater samples from the Facility monitoring wells (OW-1 thru OW-4) and preparing monitoring reports for several years. He reported that 2012 groundwater sample results are consistent with past years and that all analytical results are within acceptable limits.

Conclusions and Recommendations

Enertia identified no obvious evidence of significant spills, releases, or other on-site surface activities that may result in impacts to shallow groundwater quality. The June and December groundwater monitoring program (i) indicates that concentrations of oil & grease, major anions, TOC, major cations, BTEX compounds and TDS are within acceptable limits; and (ii) provides continued surveillance for shallow groundwater impacts.

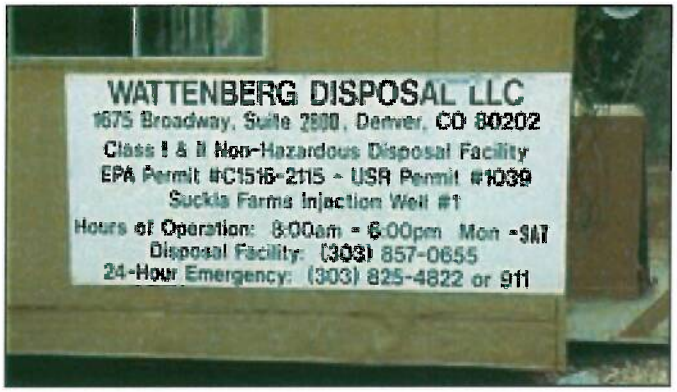
We trust that this Environmental Audit is acceptable and complete. Please contact me at (720) 473-3131 or sean.ohearn@enertiacg.com should you have any questions on the content of the audit.

Sincerely,
ENERTIA CONSULTING GROUP, LLC

J. Sean O'Hearn. PE, PG
Managing Partner

attachments

Attachment 1
Facility Photographs - Suckla Farms Injection Well No. 1



Facility Information
Suckla Farms Injection Well No.1

Injection Well No.1

Tank Truck Unloading Area

Injection No.1

Holding Tanks

KPK
K.P. KAUFFMAN COMPANY, INC.

ATTACHMENT 2

APEX CONSULTING SERVICES, INC
JUNE/DECEMBER 2012 GROUNDWATER MONITORING RESULTS
UIC C1516-2115
WATTENBERG DISPOSAL FACILITY, WELD COUNTY, CO

APEX CONSULTING SERVICES, INC.

APEX

566 West Willow Court
Reply to: P.O. Box 369
Louisville, CO 80027-0369
Phone: 303-665-1400
Fax: 303-665-0620
email: apexcsi@comcast.net

July 12, 2012

Ms. Susana Lara-Mesa
K.P. Kaufman Company, Inc.
World Trade Center
1675 Broadway, Suite 2800
Denver, CO 80202-4825

Re: June 2012, Groundwater Monitoring, Wattenberg Disposal Facility, Weld County, Colorado

Dear Ms. Lara-Mesa:

Apex Consulting Services, Inc. (APEX) has completed the June 2012 (semi-annual) groundwater monitoring at the Wattenberg Disposal Facility (Facility) in Weld County, Colorado (Figure 1). This letter report presents a summary of the work performed, the results of the groundwater analysis, and our conclusions.

BACKGROUND

The Facility was originally constructed in 1972 by the Amoco Production Company to dispose of production water from oil and gas wells in the D-J Basin. Wright's Disposal, Inc. purchased the Facility from Amoco in June 1989 and K.P. Kaufman Company, Inc. (KPK) purchased the Facility in June 1998. KPK currently operates the Facility for deep injection disposal of non-hazardous Class I and Class II liquid waste as defined in 40 CFR 144.6. The Facility is operated under the U.S. EPA Underground Injection Control Program, Final Permit No. CO 1516-2115. Three groundwater observation wells (OW-1, OW-2, and OW-3) are located around the periphery of the Facility to monitor groundwater flow direction, gradient, and quality. A groundwater monitoring plan was prepared by Nationwide Environmental Services, Inc. on January 3, 2002. The monitoring plan was subsequently approved by the Solid Waste Unit of the Colorado Department of Public Health and Environment. The monitoring plan included semi-annual groundwater monitoring (OW-1, OW-2, and OW-3) for major cations (calcium, magnesium, potassium, and sodium), major anions (bicarbonate, carbonate, chloride, nitrate, nitrite, and sulfate), Total Organic Carbon (TOC), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and Total Petroleum Hydrocarbons (TPH). During the January 2007 sampling event, product was encountered on the groundwater in observation well OW-3. Contaminated soils in the vicinity of observation well OW-3 were excavated and replaced with clean fill. Observation well OW-3 was removed during the excavation of the contaminated soils. Following the removal of the contaminated soil, a new observation well (OW-3) was installed at the previous location. At the request of the Colorado Department of Public Health and Environment, an additional observation well (OW-4) was installed to the north of the Facility in June 2009.

GROUNDWATER SAMPLING

Groundwater samples were collected for laboratory analyses from observation wells OW-1, OW-2, OW-3 and OW-4 on June 19, 2012. Prior to groundwater sampling, groundwater elevations were measured and recorded in each of the aforementioned observation wells located at the Property. The locations of the observation wells are illustrated on Figure 2. Each of the wells was surveyed to a local datum. Shallow groundwater was present in the wells at depths ranging from approximately 12.5 (OW-1) to 22.6 (OW-4) feet below the ground surface (bgs). Relative groundwater elevations are shown on Figure 2. Groundwater flow direction was determined to be to the north-northwest for this monitoring period. Free product was not present on the groundwater in any of the wells. The observation wells were prepared for sampling by purging three wet well volumes of groundwater from each well with a dedicated bailer. During purging of each observation well, pH, specific conductance, and temperature

were measured. The probes were calibrated before (within 2 hours) taking the measurements. Specific conductance was measured using equivalent EPA standard method 9050. Temperature and pH were measured using a standard probe equivalent to EPA standard method 9040 or 150.1. Groundwater was sampled from the observation wells with a dedicated bailer when pH, specific conductance, and temperature parameters were stable. The pH, specific conductance, and temperature measurements recorded for each sample are summarized on Tables 1, 2, and 3.

GROUNDWATER LABORATORY ANALYSES

The groundwater samples were handled with clean, new, nitrile gloves and placed in laboratory supplied vials and bottles. The samples and a trip blank (distilled water) were stored on ice in a cooler and delivered to Accutest Laboratories (ACCUTEST) under chain-of-custody documentation. The groundwater samples collected from the observation wells were analyzed for calcium, magnesium, potassium, sodium, chloride, nitrate, nitrite, sulfate, TOC, bicarbonate, carbonate, BTEX, and TPH. Laboratory results are summarized on Tables 1, 2, and 3. Laboratory reports provided by ACCUTEST are included in Attachment I.

CONCLUSIONS

Groundwater samples were collected for laboratory analysis from the observation wells OW-1, OW-2, OW-3 and OW-4 on June 19, 2012. Shallow groundwater was present in the observation and monitoring wells at depths ranging from approximately 12.5 to 22.6 feet bgs. Groundwater flow direction was determined to be to the north-northwest for this monitoring period. The analytical results for this monitoring event are consistent with the results from previous monitoring events except for results from observation well OW-2. The detected calcium, magnesium, potassium and sodium concentrations are slightly less than historical concentrations.

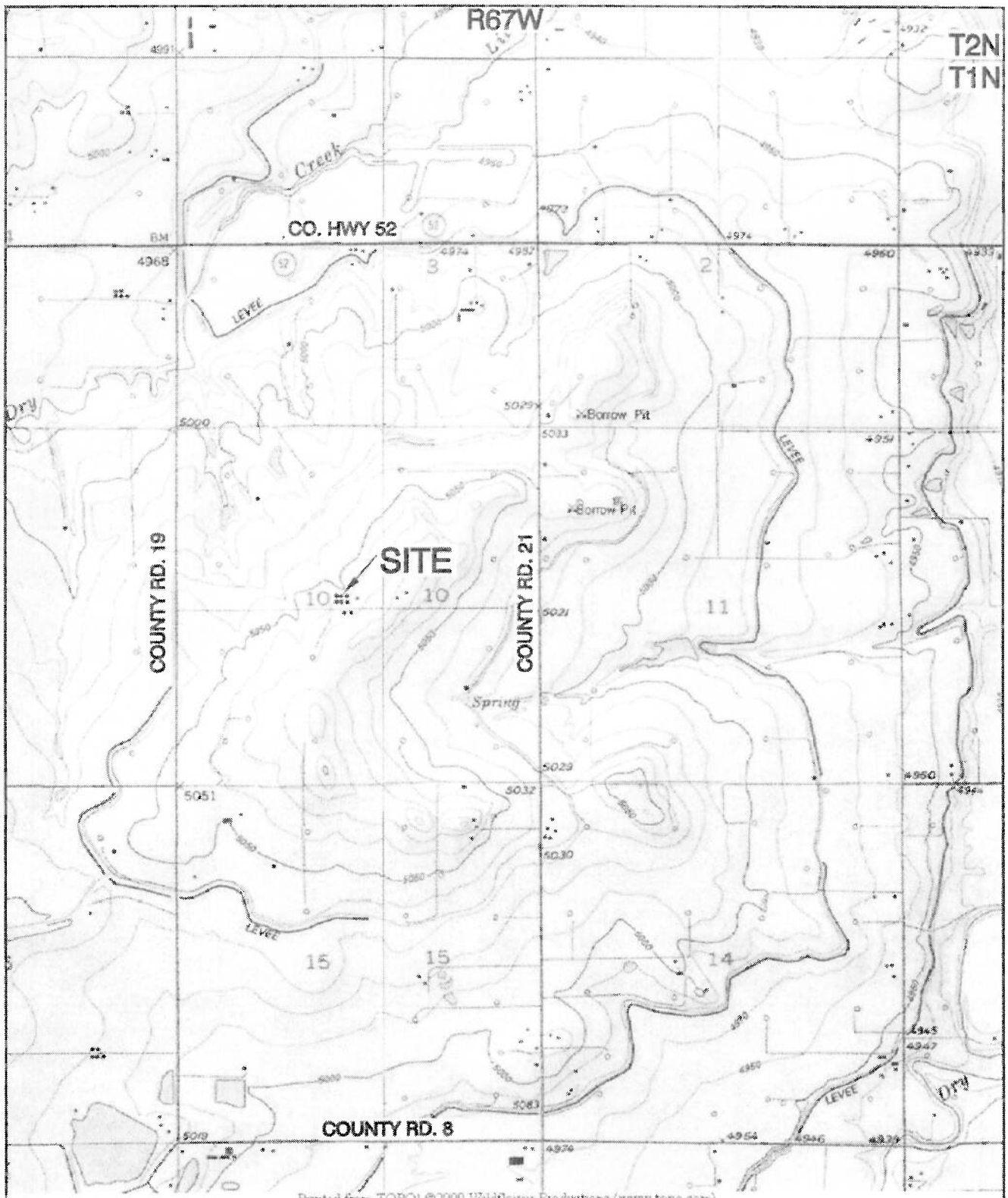
The next semi-annual groundwater monitoring event is scheduled for December 2012. Following the conclusion of the next semi-annual groundwater monitoring event, the data will be evaluated to determine if there is a significant change in groundwater elevation and/or quality.

If you have any questions or comments, please call.

Sincerely,

APEX CONSULTING SERVICES, INC.

Michael D. Hattel, P.G., P.E.S.
Principal
MDH:mh
Attachments
C:\Users\Mike Hattel\Documents\KPK\Wattenberg\Rpts\KPK GW RPT 0712.rtf



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APEX JOB: 1-0025.001.00

NORTH

0 1000 2000

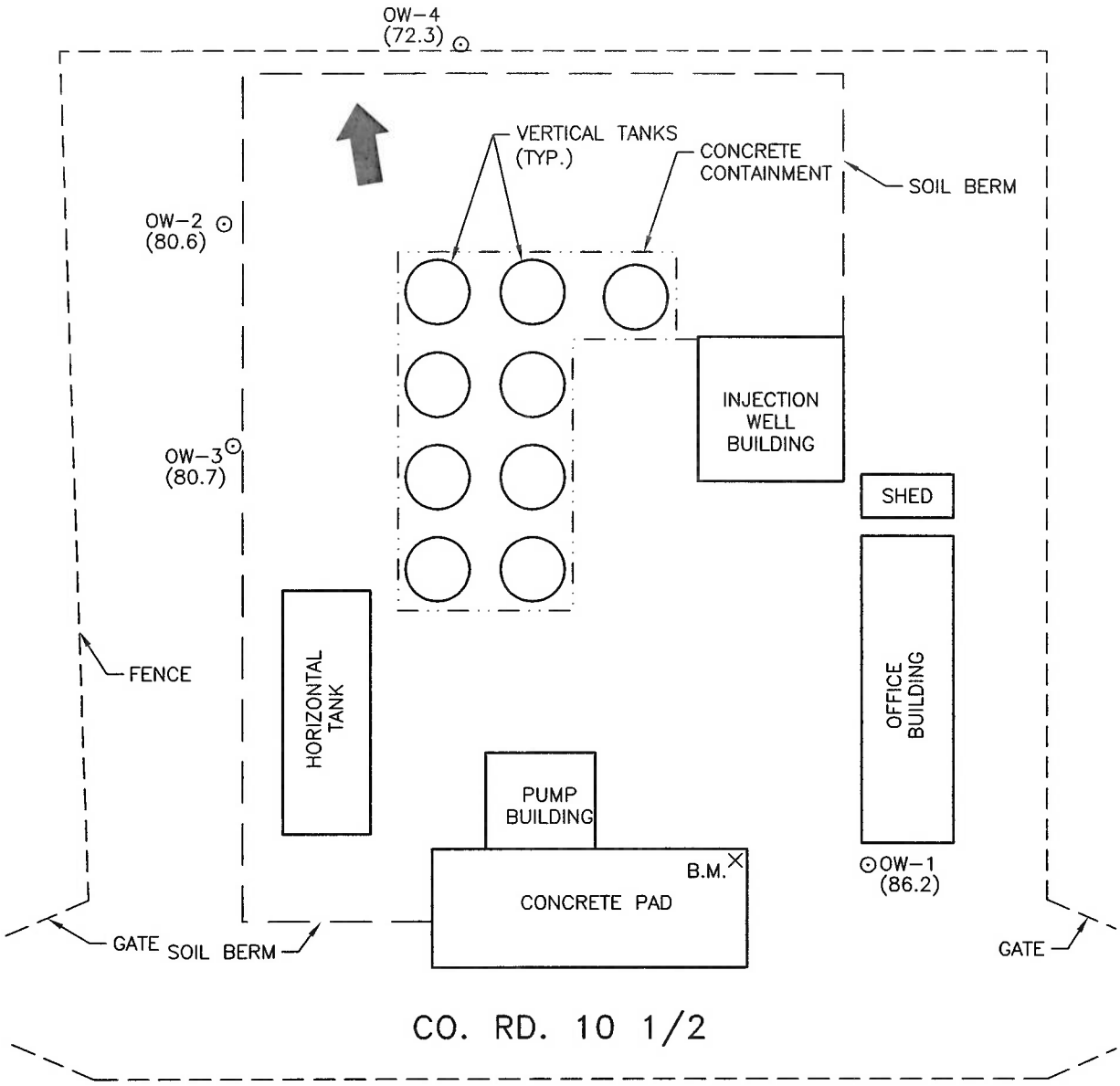
SCALE: 1" = 2000'

WATTENBERG DISPOSAL FACILITY
VICINITY MAP

APEX

FIGURE:
1

MDS FILE: 01-054\VICNITY-WATTENBERG.DWG



NOTE: DATA COLLECTED ON JUNE 19, 2012.

LEGEND:

OW-2 (80.8)	OBSERVATION WELL, NUMBER, AND RELATIVE GROUNDWATER ELEVATION
	CURRENT GROUNDWATER FLOW DIRECTION
B.M.	BENCH MARK, ELEVATION 100.00 FEET
ND	NO DATA

NORTH

0 30 60

SCALE: 1" = 60'

APEX JOB: 1-0025.001.00

WATTENBERG DISPOSAL FACILITY
SITE MAP
JUNE 19, 2012

APEX

FIGURE:
2

C:\MDS WORK FILES\files\01-054\SITEMAP-WATTENBERG_06-12

TABLE 1

Summary of BTEX[1], TPH[2] and TOC[3] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[3]	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	TPH (mg/L)	TOC[4] (mg/L)
OW-1	9/18/02	6.46	17.5	>4000	<.15	<.18	<.24	<.63	<1.6	79.00
	12/16/02	6.54	14.9	>4000	<.15	<.18	<.24	<.63	<1.6	29
	6/30/03	6.64	13.2	>4000	<1.5	<.18	<.24	<.63	<1.6	250
	12/30/03	6.54	14.1	>4000	<.15	<.18	<.24	<.63	<1.6	86
	6/30/04	6.19	13.2	>4000	<.18	<.21	<.17	<.96	<1.5	28
	12/29/04	6.30	12.9	>4000	<.18	<.21	<.17	<.96	<1.6	33
	6/30/05	6.60	13.2	>4000	<.074	<.078	<.088	<.20	<1.5	27
	12/28/05	6.85	15.5	>4000	<.074	<.078	<.088	<.20	<1.5	27
	6/29/06	6.54	13.5	>4000	1.0	<.078	1.1	5.0	<1.5	140
	7/27/06[5]	6.51	13.6	>4000	<.074	<.078	<.088	<.20	NA	NA
	1/25/07	6.81	13.3	>4000	<1.0	<2.0	<2.0	<4.0	5.3	28.7
	7/2/07	6.59	12.9	>4000	<1.0	<2.0	<2.0	<4.0	15.0	30.0
	1/31/08	6.69	12.9	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	30.3
	6/24/08	6.52	12.3	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	31.4
	12/29/08	6.50	14.7	>4000	<1.0	<2.0	<2.0	<4.0	6.2	30.1
	6/29/09	6.52	14.9	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	30.8
	12/15/09	6.51	13.3	>4000	<1.0	<2.0	<2.0	<4.0	5.9	30.6
	6/23/10	6.61	12.4	>4000	<1.0	<2.0	<2.0	<4.0	5.0	31.8
	12/13/10	6.80	14.6	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	31.7
	6/21/11	6.62	12.3	>4000	0.28J	<1.0	<1.0	<2.0	7.1	29.2
	7/12/11	6.58	12.4	>400	<1.0	<2.0	<2.0	<2.0	NA	NA
OW-2	9/18/02	7.05	14.8	>4000	<.15	<.18	<.24	<.63	<1.6	230
	12/16/02	7.09	14.0	>4000	<.15	<.18	<.24	<.63	<1.6	60
	6/30/03	7.28	12.9	>4000	<.15	<.18	<.24	<.63	<1.7	150
	12/30/03	7.23	13.3	>4000	<.15	<.18	<.24	<.63	<1.7	58
	6/30/04	6.86	13.0	>4000	<.18	<.21	<.17	<.96	<1.5	37
	12/29/04	6.80	12.3	>4000	<.18	<.21	<.17	<.96	<1.4	54
	6/30/05	7.18	12.5	>4000	<.074	<.078	<.088	<.20	<1.5	48
	12/28/05	7.23	14.5	>4000	<.074	<.078	<.088	<.20	<1.5	48
	6/29/06	7.22	12.9	>4000	<.074	<.078	<.088	<.20	<1.5	59
	1/25/07	7.37	12.8	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	44.4
	7/2/07	7.18	13.3	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	36.7

TABLE 1 (continued)

Summary of BTEX[1], TPH[2] and TOC[3] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[3]	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	TPH (mg/L)	TOC[4] (mg/L)
OW-2	1/31/08	7.27	12.6	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	43
(Cont)	6/24/08	7.18	12.1	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	47.1
	12/29/08	7.13	14.0	>4000	<1.0	<2.0	<2.0	<4.0	<4.0	45.4
	6/29/09	7.15	14.2	>4000	<1.0	<2.0	<2.0	<4.0	5.7	43.9
	12/15/09	7.11	13.0	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	43.1
	6/23/10	7.30	12.4	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	43.5
	12/13/10	7.14	13.6	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	44.5
	6/21/11	7.19	12.5	>4000	<0.2	<1.0	<1.0	<2.0	4.9	37.2
OW-3	9/18/02	6.88	15.4	>4000	<.15	<.18	<.24	<.63	<5.1	95
	12/16/02	7.08	15.3	>4000	<.15	<.18	<.24	<.63	<1.6	63
	6/30/03	7.05	14.6	>4000	<.15	<.18	<.24	<.63	<1.6	200
	12/30/03	7.27	13.4	>4000	<.15	<.18	<.24	<.6 3	<1.8	85
	6/30/04	6.89	12.4	>4000	3.5	1.3	<.17	<.9 6	<2.0	68
	9/9/04[5]	6.86	13.5	>4000	<.18	<.17	<.17	<. 96	NA	NA
	12/29/04	6.65	12.3	>4000	<.18	<.21	<.17	<.9 6	<1.5	78
	6/30/05	6.90	12.5	>4000	<.074	<.078	<.088	<.2 0	<1.6	80
	12/28/05	7.12	15.2	>4000	<.074	<.078	<.088	<.2 0	<1.5	92
	6/29/06	7.59	15.8	>4000	<.074	<.078	<.088	<.2 0	<1.5	82
	1/25/07	7.47	12.7	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	62.9
	7/2/07	6.90	13.7	>4000	1500	71000	19000	178000	NA	NA
	1/31/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/05/09	7.05	14.0	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	53
	6/29/09	7.15	14.1	>4000	1.0	<2.0	<2.0	<4.0	5.0	43.5
	7/27/09	7.11	14.2	>4000	NA	NA	NA	NA	NA	NA
	12/15/09	7.17	13.0	>4000	1.6	<2.0	<2.0	<4.0	<6.33	46.4
	1/04/10	7.15	13.2	>4000	<1.0	<2.0	<2.0	<4.0	NA	NA
	6/23/10	7.35	12.3	>4000	<1.0	<2.0	<2.0	<4.0	<13.0	44.8
	12/13/10	7.05	13.2	>4000	<1.0	<2.0	<2.0	<4.0	7.6	45.0
	6/21/11	7.19	12.3	>4000	1.4	<1.0	<1.0	<2.0	<6.2	40.1
	7/12/11	7.15	12.4	>4000	<1.0	<1.0	<1.0	<1.0	NA	NA

TABLE 1 (continued)

Summary of BTEX[1], TPH[2] and TOC[3] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[3]	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	TPH (mg/L)	TOC[4] (mg/L)
OW-4	12/15/09	7.14	12.9	>4000	<1.0	<2.0	<2.0	<4.0	NA	68.9
	6/23/10	7.17	13.5	>4000	<1.0	<2.0	<2.0	<4.0	<7.4	78.4
	12/13/10	7.18	13.1	>4000	<1.0	<2.0	<2.0	<4.0	<11	69.9
	6/21/11	7.23	12.2	>4000	<0.2	<1.0	<1.0	<2.0	<6.4	68.1

1 Benzene, toluene, ethylbenzene, and total xylenes by Method 8021B.
2 Total petroleum hydrocarbons by Method 1664.
3 Specific conductance in micro-siemens at 25 degrees Celsius.
4 Total organic carbon by Method 415.1.
5 Second sample collected in accordance with ground water monitoring plan.

J Estimated value.
mg/L milligrams per liter.
NA Not Analyzed
ug/L micrograms per liter.
NS No Sample

TABLE 2

Summary of Major Cation[1] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[2]	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
OW-1	9/18/02	6.46	17.5	>4000	330	310	11	2300
	12/16/02	6.54	14.9	>4000	370	320	15	2500
	6/30/03	6.64	13.2	>4000	370	350	12	2600
	12/30/03	6.54	14.1	>4000	500	340	12	2600
	6/30/04	6.19	13.2	>4000	300	300	11	2000
	12/29/04	6.30	12.9	>4000	420	360	14	2600
	6/30/05	6.73	13.2	>4000	410	370	12	2500
	12/28/05	6.85	15.5	>4000	420	380	18	2700
	6/29/06	6.54	13.5	>4000	440	410	26	2700
	1/25/07	6.81	13.3	>4000	380	350	14	2300
	7/2/07	6.59	12.9	>4000	450	400	21	2700
	1/31/08	6.69	12.9	>4000	460	420	14	2900B
	6/24/08	6.52	12.3	>4000	410	380	11	2800
	12/29/08	6.50	14.7	>4000	460	420	12	2700
	6/29/09	6.52	14.9	>4000	440	410	11	2800
	12/15/09	6.51	13.3	>4000	470	470	15	2400
	6/23/10	6.61	12.4	>4000	554	501	<50	2810
	12/13/10	6.80	14.6	>4000	472	450	13	2540
	6/21/11	6.62	12.3	>4000	457	415	11.7	2400
OW-2	9/18/02	7.05	14.8	>4000	600	680	18	3800
	12/16/02	7.09	14.0	>4000	690	700	23	3700
	6/30/03	7.28	12.9	>4000	600	660	21	4200
	12/30/03	7.23	13.3	>4000	770	640	21	4300
	6/30/04	6.86	13.0	>4000	480	610	18	3500
	12/29/04	6.80	12.3	>4000	600	630	19	4000
	6/30/05	7.18	12.5	>4000	640	670	19	3800
	12/28/05	7.23	14.5	>4000	550	640	22	4000
	6/29/06	7.22	12.9	>4000	580	670	24	4700

TABLE 2 (continued)

Summary of Major Cation[1] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[2]	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
OW-2	1/25/07	7.37	12.8	>4000	550	620	25	3600
(Cont.)	7/2/07	7.18	13.3	>4000	620	660	38	4300
	1/31/08	7.27	12.6	>4000	600	640	20	4100B
	6/24/08	7.18	12.1	>4000	530	580	18	4000
	12/29/08	7.13	14.0	>4000	570	630	19	4100
	6/29/09	7.15	14.2	>4000	510	560	17	4000
	12/15/0	7.11	13.0	>4000	560	670	22	3300
	6/23/10	7.30	12.4	>4000	648	698	<50	4000
	12/13/10	7.14	13.6	>4000	573	669	17.7	3730
	6/21/11	7.19	12.5	>4000	536	606	17.3	347
OW-3	9/18/02	6.88	15.4	>4000	480	690	16	3900
	12/16/02	7.08	15.3	>4000	530	720	20	4100
	6/30/03	7.13	14.6	>4000	490	670	17	4200
	12/30/03	7.27	13.4	>4000	640	650	17	4300
	6/30/04	6.89	12.4	>4000	490	610	18	3500
	12/29/04	6.65	12.3	>4000	530	660	18	4100
	6/30/05	6.90	12.5	>4000	530	710	18	4100
	12/28/05	7.12	15.2	>4000	520	730	20	4200
	6/29/06	7.29	15.8	>4000	510	730	22	4400
	1/25/07	7.47	12.7	>4000	510	640	24	3700
	7/2/07	6.90	13.7	>4000	NA	NA	NA	NA
	1/31/08	NS	NS	NS	NS	NS	NS	NS
	6/24/08	NS	NS	NS	NS	NS	NS	NS
	1/05/09	7.05	14.0	>4000	500	630	20	4400
	6/29/09	7.15	14.1	>4000	520	570	17	4200
	12/15/09	7.17	13.0	>4000	460	630	26	3900
	6/23/10	7.35	12.3	>4000	564	695	<50	4310
	12/13/10	7.05	13.2	>4000	512	639	18.9	4030
	6/21/11	7.19	12.3	>4000	422	511	15.5	3130

TABLE 2 (continued)

Summary of Major Cation[1] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[2]	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
OW-4	12/15/09	7.14	12.9	>4000	500	600	29	3800
	6/23/10	7.17	13.5	>4000	602	617	<50	4610
	12/13/10	7.18	13.1	>4000	497	583	21.4	3800
	6/21/11	7.23	12.2	>4000	501	559	21	3890

1 By Method 6010B.
B Analyte detected in blank
2 Specific conductance in micro-siemens at 25 degrees Celsius.
mg/L milligrams per liter.
NS No Sample

TABLE 3

Summary of Major Anion Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[1]	Bicarbonate (mg/L)	Carbonate (mg/L)	Nitrate as N[3] (mg/L)	Nitrite as N[3] (mg/L)	Sulfate[3] (mg/L)	Chloride[3] (mg/L)
OW-1	9/18/02	6.46	17.5	>4000	890	<1	<.36	<.34	2500	3300
	12/16/02	6.54	14.9	>4000	880	<1	<1.4	<1.3	2400	3800
	6/303/03	6.64	13.2	>4000	NS	NS	<1.8	<2.5	1900	3400
	12/30/03	6.54	14.1	>4000	880	<1.2	<0.01	<0.02	2300	1000
	6/30/04	6.19	13.2	>4000	780	<1.2	<0.02	<0.02	2100	3800
	12/29/04	6.30	12.9	>4000	840	<3.4	<0.07	<0.04	2100	3400
	6/30/05	6.73	13.2	>4000	850	<1.2	<0.02	<0.02	2400	3900
	12/28/05	6.85	15.5	>4000	860	<1.2	<0.02	<0.02	2600	4500
	6/29/06	6.54	13.5	>4000	850	<1.2	<0.02	<0.02	2700	4800
	1/25/07	6.81	13.3	>4000	1000	<5.0	<0.56	<0.76	2030	3880
	7/2/07	6.59	12.9	>4000	976	<5.0	<0.10	<0.40	1970	3940
	1/31/08	6.69	12.9	>4000	977	<5.0	<0.25	<0.40	1870	4210
	6/24/08	6.52	12.3	>4000	936	<5.0	<2.3	<6.1	1830	4400
	12/29/08	6.50	14.7	>4000	754	<5.0	<.45	<15	1730	9070
	6/29/09	6.52	14.9	>4000	763	<5.0	<.90	<3.1	1690	4690
	12/15/09	6.51	13.3	>4000	742	<5.0	<1.5	<1.5	1640	4880
	6/23/10	6.61	12.4	>4000	707	<5.0	<0.90	<6.1	1650	4780
	12/13/10	6.80	14.6	>4000	740	<5.0	<0.90	<15	1740	5080
	6/21/11	6.62	12.3	>4000	705	<5.0	<0.45	<15	1680	4650
OW-2	9/18/02	7.05	14.8	>4000	1100	<1	13	<.84	5200	5300
	12/16/02	7.09	14.0	>4000	1100	<1	5	<1.7	4700	5800
	6/30/03	7.28	12.9	>4000	NS	NS	16	<2.5	5300	4200
	12/30/03	7.23	13.3	>4000	1100	<1.2	16	<0.09	5200	4500
	6/30/04	6.86	13.0	>4000	960	<1.2	16	<0.25	5700	5000
	12/29/04	6.80	12.3	>4000	1000	<3.4	13	<0.04	5000	4300
	6/30/05	7.18	12.5	>4000	1100	<1.2	12	<0.25	5800	4500
	12/28/05	7.23	14.5	>4000	1000	<1.2	14	16	5600	5400
	6/29/06	7.22	12.9	>4000	970	<1.2	9	<0.25	5600	6100

TABLE 3 (continued)

Summary of Major Anion Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[1]	Bicarbonate (mg/L)	Carbonate (mg/L)	Nitrate as N[3] (mg/L)	Nitrite as N[3] (mg/L)	Sulfate[3] (mg/L)	Chloride[3] (mg/L)
OW-2	1/25/07	7.37	12.8	>4000	1210	<5.0	7.1	<1.9	4930	5000
(cont)	7/2/07	7.18	13.3	>4000	1190	<5.0	9	<1.0	5270	4790
	1/31/08	7.27	12.6	>4000	1200	<5.0	6.6	<.40	4640	4500
	6/24/08	7.18	12.1	>4000	1170	<5.0	4.26	<6.1	4400	5200
	12/29/08	7.13	14.0	>4000	950	<5.0	7.8	<15	4830	4940
	6/29/09	7.15	14.2	>4000	931	<5.0	7.2	<6.1	4900	5070
	12/15/09	7.11	13.0	>4000	930	<5.0	12.2	<1.5	6240	4230
	6/23/10	7.30	12.4	>4000	904	<5.0	6.4	<15.0	4960	5160
	12/13/10	7.14	13.6	>4000	930	<5.0	7.9	<15.0	6160	5750
	6/21/11	7.19	12.5	>4000	948	<5.0	5.7	<15.0	4740	4870
OW-3	9/18/02	6.88	15.4	>4000	NS	NS	NS	NS	NS	NS
	12/16/02	7.08	15.3	>4000	1100	<1	<1.8	<1.7	8400	3800
	6/30/03	7.13	14.6	>4000	NS	NS	2.0J	<2.5	6100	3800
	12/30/03	7.27	13.4	>4000	1200	<1.2	0.24	<0.09	6300	1200
	6/30/04	6.89	12.4	>4000	920	<1.2	0.20	<0.02	5400	4900
	12/29/04	6.65	12.3	>4000	1100	<3.4	<0.07	<0.07	6700	3200
	6/30/05	6.90	12.5	>4000	1100	<1.2	<0.28	<0.25	8000	3800
	12/28/05	7.12	15.2	>4000	1100	<1.2	6.2	11	6800	3800
	6/29/06	6.54	13.5	>4000	1100	<1.2	2.7	<0.25	680	4800
	1/25/07	7.47	12.7	>4000	1100	<5.0	<1.4	<1.9	5900	4750
	7/2/07	6.9	13.7	>4000	NA	NA	NA	NA	NA	NA
	1/31/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/05/09	7.05	14.0	>4000	1200	<5.0	4.3	1.9	6100	4390
	6/29/09	7.15	14.1	>4000	919	<5.0	7.4	<6.1	5010	4970
	12/15/09	7.17	13.0	>4000	920	<5.0	6.2	<1.5	4740	5050
	6/23/10	7.35	12.3	>4000	960	<5.0	8.0	<6.1	5960	3920
	12/13/10	7.05	13.2	>4000	960	<5.0	9.5	<15.0	5960	4690
	6/21/11	7.19	12.3	>4000	973	<5.0	4.0	<15.0	5100	3490

TABLE 3 (continued)

Summary of Major Anion Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[1]	Bicarbonate (mg/L)	Carbonate (mg/L)	Nitrate as N[3] (mg/L)	Nitrite as N[3] (mg/L)	Sulfate[3] (mg/L)	Chloride[3] (mg/L)
OW-4	12/15/09	7.14	12.9	>4000	276	<5.0	89.3	<1.5	6450	4350
	6/23/10	7.17	13.5	>4000	257	<5.0	80.2	<6.1	6650	3580
	12/13/10	7.18	13.1	>4000	300	<5.0	69.1	<15.0	7880	3840
	6/21/11	7.23	12.2	>4000	262	<5.0	71.0	<15.0	6880	3690

1 Specific conductance in micro-siemens at 25 degrees Celsius.
2 By Method 310.1.
3 By Method 300.
J Analyte was detected above the Reporting Limit but below the Quantitation Limit.

mg/L milligrams per liter.
NS No sample.

ATTACHMENT I

Mountain States
ACCUTEST
LABORATORIES

07/12/12

Technical Report for

K.P. Kauffmann Company, Inc.

Wattenberg Tank

Accutest Job Number: D35614

Sampling Date: 06/19/12

Report to:

Apex Consulting Services
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ATTN: Mike Hattel

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Brad Madadian
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 4
Section 3: Summary of Hits 6
Section 4: Sample Results 8
4.1: D35614-1: OW-1 9
4.2: D35614-1F: OW-1 11
4.3: D35614-2: OW-2 12
4.4: D35614-2F: OW-2 14
4.5: D35614-3: OW-3 15
4.6: D35614-3F: OW-3 17
4.7: D35614-4: OW-4 18
4.8: D35614-4F: OW-4 20
Section 5: Misc. Forms 21
5.1: Chain of Custody 22
Section 6: GC Volatiles - QC Data Summaries 24
6.1: Method Blank Summary 25
6.2: Blank Spike Summary 26
6.3: Matrix Spike/Matrix Spike Duplicate Summary 27
Section 7: GC Volatiles - Raw Data 28
7.1: Samples 29
7.2: Method Blanks 49
Section 8: Metals Analysis - QC Data Summaries 54
8.1: Prep QC MP7763: Ca,Mg,K,Na 55
Section 9: General Chemistry - QC Data Summaries 65
9.1: Method Blank and Spike Results Summary 66
9.2: Blank Spike Duplicate Results Summary 67
9.3: Duplicate Results Summary 68
9.4: Matrix Spike Results Summary 69
9.5: Matrix Spike Duplicate Results Summary 70

Sample Summary

K.P. Kauffmann Company, Inc.

Job No: D35614

Wattenberg Tank

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D35614-1	06/19/12	08:05 MH	06/19/12	AQ	Ground Water	OW-1
D35614-1F	06/19/12	08:05 MH	06/19/12	AQ	Groundwater Filtered	OW-1
D35614-2	06/19/12	09:00 MH	06/19/12	AQ	Ground Water	OW-2
D35614-2F	06/19/12	09:00 MH	06/19/12	AQ	Groundwater Filtered	OW-2
D35614-3	06/19/12	10:00 MH	06/19/12	AQ	Ground Water	OW-3
D35614-3F	06/19/12	10:00 MH	06/19/12	AQ	Groundwater Filtered	OW-3
D35614-4	06/19/12	07:00 MH	06/19/12	AQ	Ground Water	OW-4
D35614-4F	06/19/12	07:00 MH	06/19/12	AQ	Groundwater Filtered	OW-4

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	K.P. Kauffmann Company, Inc.	Job No	D35614
Site:	Wattenberg Tank	Report Date	7/3/2012 1:59:30 PM

On 06/19/2012, 4 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.0 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D35614 was assigned to the project. The lab sample IDs, client sample IDs, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GC By Method SW846 8021B

Matrix AQ	Batch ID: GTA937

- All samples were analyzed within the recommended method holding time.
- Sample(s) D35500-5MS, D35500-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix AQ	Batch ID: MP7763

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35556-1MS, D35556-1MSD, D35556-1SDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Magnesium are outside control limits for sample MP7763-SD1. Probable cause due to sample homogeneity.
- MP7763-SD1 for Magnesium: Serial dilution indicates possible matrix interference.

Wet Chemistry By Method EPA 1664A

Matrix AQ	Batch ID: GP7619

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35613-1MS were used as the QC samples for the HEM Oil and Grease analysis.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ	Batch ID: GP7531

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35605-2MS, D35605-2MSD were used as the QC samples for the Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Chloride analysis.
- D35614-1 for Nitrogen, Nitrate: Elevated detection limit due to matrix interference.
- All samples for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.

Wet Chemistry By Method SM20 2320B

Matrix AQ	Batch ID: GN15605

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35590-1DUP, D35590-1MS, D35590-1MSD were used as the QC samples for the Alkalinity, Total as CaCO3 analysis.

Matrix AQ	Batch ID: GN15606

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix AQ	Batch ID: GN15607

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM20 2540C

Matrix AQ	Batch ID: GN15581

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35590-1DUP were used as the QC samples for the Solids, Total Dissolved analysis.

Wet Chemistry By Method SM20 5310B

Matrix AQ	Batch ID: GP7527

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35259-1MS, D35259-1MSD, D35259-2DUP were used as the QC samples for the Total Organic Carbon analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D35614
Account: K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank
Collected: 06/19/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D35614-1	**OW-1**					
Alkalinity, Bicarbonate as CaCO3		822	5.0		mg/l	SM20 2320B
Alkalinity, Total as CaCO3		822	5.0		mg/l	SM20 2320B
Chloride		4170	130		mg/l	EPA 300/SW846 9056
Solids, Total Dissolved		10100	10		mg/l	SM20 2540C
Sulfate		1790	50		mg/l	EPA 300/SW846 9056
Total Organic Carbon		33.3	2.0		mg/l	SM20 5310B
D35614-1F	**OW-1**					
Calcium		510000	4000		ug/l	SW846 6010C
Magnesium		463000	2000		ug/l	SW846 6010C
Potassium		12600	10000		ug/l	SW846 6010C
Sodium		2720000	4000		ug/l	SW846 6010C
D35614-2	**OW-2**					
Alkalinity, Bicarbonate as CaCO3		951	5.0		mg/l	SM20 2320B
Alkalinity, Total as CaCO3		951	5.0		mg/l	SM20 2320B
Chloride		4890	130		mg/l	EPA 300/SW846 9056
Nitrogen, Nitrate		4.3	0.90		mg/l	EPA 300/SW846 9056
Solids, Total Dissolved		15900	10		mg/l	SM20 2540C
Sulfate		4730	130		mg/l	EPA 300/SW846 9056
Total Organic Carbon		45.4	5.0		mg/l	SM20 5310B
D35614-2F	**OW-2**					
Calcium		405000	4000		ug/l	SW846 6010C
Magnesium		425000	2000		ug/l	SW846 6010C
Potassium		10400	10000		ug/l	SW846 6010C
Sodium		2400000	4000		ug/l	SW846 6010C
D35614-3	**OW-3**					
Alkalinity, Bicarbonate as CaCO3		959	5.0		mg/l	SM20 2320B
Alkalinity, Total as CaCO3		959	5.0		mg/l	SM20 2320B
Chloride		3560	130		mg/l	EPA 300/SW846 9056
Nitrogen, Nitrate		8.8	0.90		mg/l	EPA 300/SW846 9056
Solids, Total Dissolved		15500	10		mg/l	SM20 2540C
Sulfate		5690	130		mg/l	EPA 300/SW846 9056
Total Organic Carbon		40.5	5.0		mg/l	SM20 5310B

Summary of Hits

Job Number: D35614
Account: K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank
Collected: 06/19/12

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D35614-3F	**OW-3**					
Calcium		447000	4000		ug/l	SW846 6010C
Magnesium		528000	2000		ug/l	SW846 6010C
Potassium		16800	10000		ug/l	SW846 6010C
Sodium		3530000	4000		ug/l	SW846 6010C
D35614-4	**OW-4**					
Alkalinity, Bicarbonate as CaCO3		261	5.0		mg/l	SM20 2320B
Alkalinity, Total as CaCO3		261	5.0		mg/l	SM20 2320B
Chloride		3920	130		mg/l	EPA 300/SW846 9056
Nitrogen, Nitrate		87.5	4.5		mg/l	EPA 300/SW846 9056
Solids, Total Dissolved		17200	10		mg/l	SM20 2540C
Sulfate		6990	130		mg/l	EPA 300/SW846 9056
Total Organic Carbon		71.3	5.0		mg/l	SM20 5310B
D35614-4F	**OW-4**					
Calcium		504000	4000		ug/l	SW846 6010C
Magnesium		539000	2000		ug/l	SW846 6010C
Potassium		17900	10000		ug/l	SW846 6010C
Sodium		3740000	4000		ug/l	SW846 6010C

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-1		
Lab Sample ID:	D35614-1	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg Tank		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA16587.D	1	06/20/12	SK	n/a	n/a	GTA937
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	87%		60-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-1		
Lab Sample ID:	D35614-1	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	822	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Total as CaCO3	822	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Chloride	4170	130	mg/l	250	06/19/12 17:51	JML	EPA 300/SW846 9056
HEM Oil and Grease	< 4.9	4.9	mg/l	1	07/03/12	SWT	EPA 1664A
Nitrogen, Nitrate [a]	< 0.90	0.90	mg/l	20	06/19/12 14:44	JML	EPA 300/SW846 9056
Nitrogen, Nitrite [a]	< 2.5	2.5	mg/l	250	06/19/12 17:51	JML	EPA 300/SW846 9056
Solids, Total Dissolved	10100	10	mg/l	1	06/26/12	JD	SM20 2540C
Sulfate	1790	50	mg/l	100	06/19/12 17:37	JML	EPA 300/SW846 9056
Total Organic Carbon	33.3	2.0	mg/l	2	06/20/12 15:18	NS	SM20 5310B

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-1		
Lab Sample ID:	D35614-1F	**Date Sampled:**	06/19/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	510000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Magnesium	463000	2000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Potassium	12600	10000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Sodium	2720000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA2553
(2) Prep QC Batch: MP7763

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-2		
Lab Sample ID:	D35614-2	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg Tank		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA16588.D	1	06/20/12	SK	n/a	n/a	GTA937
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	84%		60-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-2		
Lab Sample ID:	D35614-2	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

4.3

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	951	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Total as CaCO3	951	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Chloride	4890	130	mg/l	250	06/19/12 18:06	JML	EPA 300/SW846 9056
HEM Oil and Grease	< 4.8	4.8	mg/l	1	07/03/12	SWT	EPA 1664A
Nitrogen, Nitrate	4.3	0.90	mg/l	20	06/19/12 14:58	JML	EPA 300/SW846 9056
Nitrogen, Nitrite [a]	< 2.5	2.5	mg/l	250	06/19/12 18:06	JML	EPA 300/SW846 9056
Solids, Total Dissolved	15900	10	mg/l	1	06/26/12	JD	SM20 2540C
Sulfate	4730	130	mg/l	250	06/19/12 18:06	JML	EPA 300/SW846 9056
Total Organic Carbon	45.4	5.0	mg/l	5	06/20/12 15:29	NS	SM20 5310B

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OW-2		
Lab Sample ID:	D35614-2F	**Date Sampled:**	06/19/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	405000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Magnesium	425000	2000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Potassium	10400	10000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Sodium	2400000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA2553
(2) Prep QC Batch: MP7763

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-3		
Lab Sample ID:	D35614-3	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg Tank		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA16589.D	1	06/20/12	SK	n/a	n/a	GTA937
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	83%		60-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OW-3		
Lab Sample ID:	D35614-3	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	959	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Total as CaCO3	959	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Chloride	3560	130	mg/l	250	06/19/12 18:20	JML	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/03/12	SWT	EPA 1664A
Nitrogen, Nitrate	8.8	0.90	mg/l	20	06/19/12 15:13	JML	EPA 300/SW846 9056
Nitrogen, Nitrite [a]	< 2.5	2.5	mg/l	250	06/19/12 18:20	JML	EPA 300/SW846 9056
Solids, Total Dissolved	15500	10	mg/l	1	06/26/12	JD	SM20 2540C
Sulfate	5690	130	mg/l	250	06/19/12 18:20	JML	EPA 300/SW846 9056
Total Organic Carbon	40.5	5.0	mg/l	5	06/20/12 15:41	NS	SM20 5310B

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OW-3		
Lab Sample ID:	D35614-3F	**Date Sampled:**	06/19/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	447000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Magnesium	528000	2000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Potassium	16800	10000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Sodium	3530000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA2553
(2) Prep QC Batch: MP7763

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-4		
Lab Sample ID:	D35614-4	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg Tank		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA16590.D	1	06/20/12	SK	n/a	n/a	GTA937
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	81%		60-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OW-4		
Lab Sample ID:	D35614-4	**Date Sampled:**	06/19/12
Matrix:	AQ - Ground Water	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

4.7

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	261	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Alkalinity, Total as CaCO3	261	5.0	mg/l	1	06/27/12	CT	SM20 2320B
Chloride	3920	130	mg/l	250	06/19/12 19:18	JML	EPA 300/SW846 9056
HEM Oil and Grease	< 5.2	5.2	mg/l	1	07/03/12	SWT	EPA 1664A
Nitrogen, Nitrate	87.5	4.5	mg/l	100	06/19/12 18:35	JML	EPA 300/SW846 9056
Nitrogen, Nitrite [a]	< 2.5	2.5	mg/l	250	06/19/12 19:18	JML	EPA 300/SW846 9056
Solids, Total Dissolved	17200	10	mg/l	1	06/26/12	JD	SM20 2540C
Sulfate	6990	130	mg/l	250	06/19/12 19:18	JML	EPA 300/SW846 9056
Total Organic Carbon	71.3	5.0	mg/l	5	06/20/12 16:14	NS	SM20 5310B

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-4		
Lab Sample ID:	D35614-4F	**Date Sampled:**	06/19/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	06/19/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

4.8

4

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	504000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Magnesium	539000	2000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Potassium	17900	10000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]
Sodium	3740000	4000	ug/l	1	06/27/12	06/28/12	JB	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA2553
(2) Prep QC Batch: MP7763

RL = Reporting Limit

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX 303-425-6854

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: D35614

Client / Reporting Information

Company Name: K.P. Kauffman Company, Inc.
Address: 1675 Broadway, Suite 2800
City: Denver State: CO Zip: 80202-4628
Project Contact: Susana Lara-Mesa SLaraMesa@kpk.com
Phone #: 303-665-1400
Samplers's Name: MICHAEL HATTEL (303-665-1400)

Project Information

Project Name: WATTENBERG GROUNDWATER
Street:
City: Fort Lupton State: CO
Project #:
Fax #:
Client Purchase Order #: 7591

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	OIL & GREASE 1664	ANIONS (NITRATE, NITRITE, SULFATE, CHLORIDE)	TOC	CATIONS (Ca, K, Mg, NA)	BTEX 8021	ALKALINITY (CARB/BICARB)	TDS					LAB USE ONLY
	OW-1		6/19/12	0805	MDH	GW	8	X			X					X	X	X	X	X	X	X					01
	OW-2			0900	MDH	GW	8	X			X					X	X	X	X	X	X	X					02
	OW-3			1000	MDH	GW	8	X			X					X	X	X	X	X	X	X					03
	OW-4			0700	MDH	GW	8	X			X					X	X	X	X	X	X	X					04

DR 6/19

Matrix Codes: DW- Drinking Water; GW- Ground Water; WW- Water; SW- Surface Water; SO- Soil; SL-Sludge; Of-Oil; LIQ- Other Liquid; AIR- Air; SOL-Other Solid; WP-Wipe

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- Approved By:/ Date:

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [x] Hard Copy
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] PDF

Comments / Remarks

PDF copy to Susana Lara-Mesa with KPK at SLaraMesa@kpk.com

PDF copy also to Mike Hattel with APEX at mhattel@msn.com

Hard copy ONLY to Mike Hattel with APEX, P.O. Box 369, Louisville, CO 80027-0369

NO TDS BOTTLE RECEIVED DR 6/19. [illegible]

Emergency T/A data available VIA Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	6/19/12 1215	1 [signature] 6/19 1215	2		2
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # HD	Preserved where applicable R	On Ice Y Cooler Temp. 4.0

D35614: Chain of Custody
Page 1 of 2

APEX CONSULTING SERVICES, INC.

APEX

566 West Willow Court
Reply to: P.O. Box 369
Louisville, CO 80027-0369
Phone: 303-665-1400
Fax: 303-665-0620
email: apexcsi@comcast.net

January 9, 2013

Ms. Susana Lara-Mesa
K.P. Kauffman Company, Inc.
World Trade Center
1675 Broadway, Suite 2800
Denver, CO 80202-4825

Re: December 2012, Groundwater Monitoring, Wattenberg Disposal Facility, Weld County, Colorado

Dear Ms. Lara-Mesa:

Apex Consulting Services, Inc. (APEX) has completed the December 2012 (semi-annual) groundwater monitoring at the Wattenberg Disposal Facility (Facility) in Weld County, Colorado (Figure 1). This letter report presents a summary of the work performed, the results of the groundwater analysis, and our conclusions.

BACKGROUND

The Facility was originally constructed in 1972 by the Amoco Production Company to dispose of production water from oil and gas wells in the D-J Basin. Wright's Disposal, Inc. purchased the Facility from Amoco in June 1989 and K.P. Kaufman Company, Inc. (KPK) purchased the Facility in June 1998. KPK currently operates the Facility for deep injection disposal of non-hazardous Class I and Class II liquid waste as defined in 40 CFR 144.6. The Facility is operated under the U.S. EPA Underground Injection Control Program, Final Permit No. CO 1516-2115. Three groundwater observation wells (OW-1, OW-2, and OW-3) are located around the periphery of the Facility to monitor groundwater flow direction, gradient, and quality. A groundwater monitoring plan was prepared by Nationwide Environmental Services, Inc. on January 3, 2002. The monitoring plan was subsequently approved by the Solid Waste Unit of the Colorado Department of Public Health and Environment. The monitoring plan included semi-annual groundwater monitoring (OW-1, OW-2, and OW-3) for major cations (calcium, magnesium, potassium, and sodium), major anions (bicarbonate, carbonate, chloride, nitrate, nitrite, and sulfate), Total Organic Carbon (TOC), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and Total Petroleum Hydrocarbons (TPH). During the January 2007 sampling event, product was encountered on the groundwater in observation well OW-3. Contaminated soils in the vicinity of observation well OW-3 were excavated and replaced with clean fill. Observation well OW-3 was removed during the excavation of the contaminated soils. Following the removal of the contaminated soil, a new observation well (OW-3) was installed at the previous location. At the request of the Colorado Department of Public Health and Environment, an additional observation well (OW-4) was installed to the north of the Facility in June 2009.

GROUNDWATER SAMPLING

Groundwater samples were collected for laboratory analyses from observation wells OW-1, OW-2, OW-3 and OW-4 on December 17, 2012. Prior to groundwater sampling, groundwater elevations were measured and recorded in each of the aforementioned observation wells located at the Property. The locations of the observation wells are illustrated on Figure 2. Each of the wells was surveyed to a local datum. Shallow groundwater was present in the wells at depths ranging from approximately 14 (OW-1) to 22 (OW-4) feet below the ground surface (bgs). Relative groundwater elevations are shown on Figure 2. Groundwater flow direction was determined to be to the west for this monitoring period. Free product was not present on the groundwater in any of the wells. The observation wells were prepared for sampling by purging three wet well volumes of groundwater from each well with a dedicated bailer. During purging of each observation well, pH, specific conductance, and temperature were

measured. The probes were calibrated before (within 2 hours) taking the measurements. Specific conductance was measured using equivalent EPA standard method 9050. Temperature and pH were measured using a standard probe equivalent to EPA standard method 9040 or 150.1. Groundwater was sampled from the observation wells with a dedicated bailer when pH, specific conductance, and temperature parameters were stable. The pH, specific conductance, and temperature measurements recorded for each sample are summarized on Tables 1, 2, and 3.

GROUNDWATER LABORATORY ANALYSES

The groundwater samples were handled with clean, new, nitrile gloves and placed in laboratory supplied vials and bottles. The samples and a trip blank (distilled water) were stored on ice in a cooler and delivered to Accutest Laboratories (ACCUTEST) under chain-of-custody documentation. The groundwater samples collected from the observation wells were analyzed for calcium, magnesium, potassium, sodium, chloride, nitrate, nitrite, sulfate, TOC, bicarbonate, carbonate, BTEX, and TPH. Laboratory results are summarized on Tables 1, 2, and 3. Laboratory reports provided by ACCUTEST are included in Attachment 1.

CONCLUSIONS

Groundwater samples were collected for laboratory analysis from the observation wells OW-1, OW-2, OW-3 and OW-4 on December 17, 2012. Shallow groundwater was present in the observation and monitoring wells at depths ranging from approximately 14 to 22 feet bgs. The analytical results for this monitoring event are consistent with the results from previous monitoring events.

The next semi-annual groundwater monitoring event is scheduled for June 2013. Following the conclusion of the next semi-annual groundwater monitoring event, the data will be evaluated to determine if there is a significant change in groundwater elevation and/or quality.

If you have any questions or comments, please call.

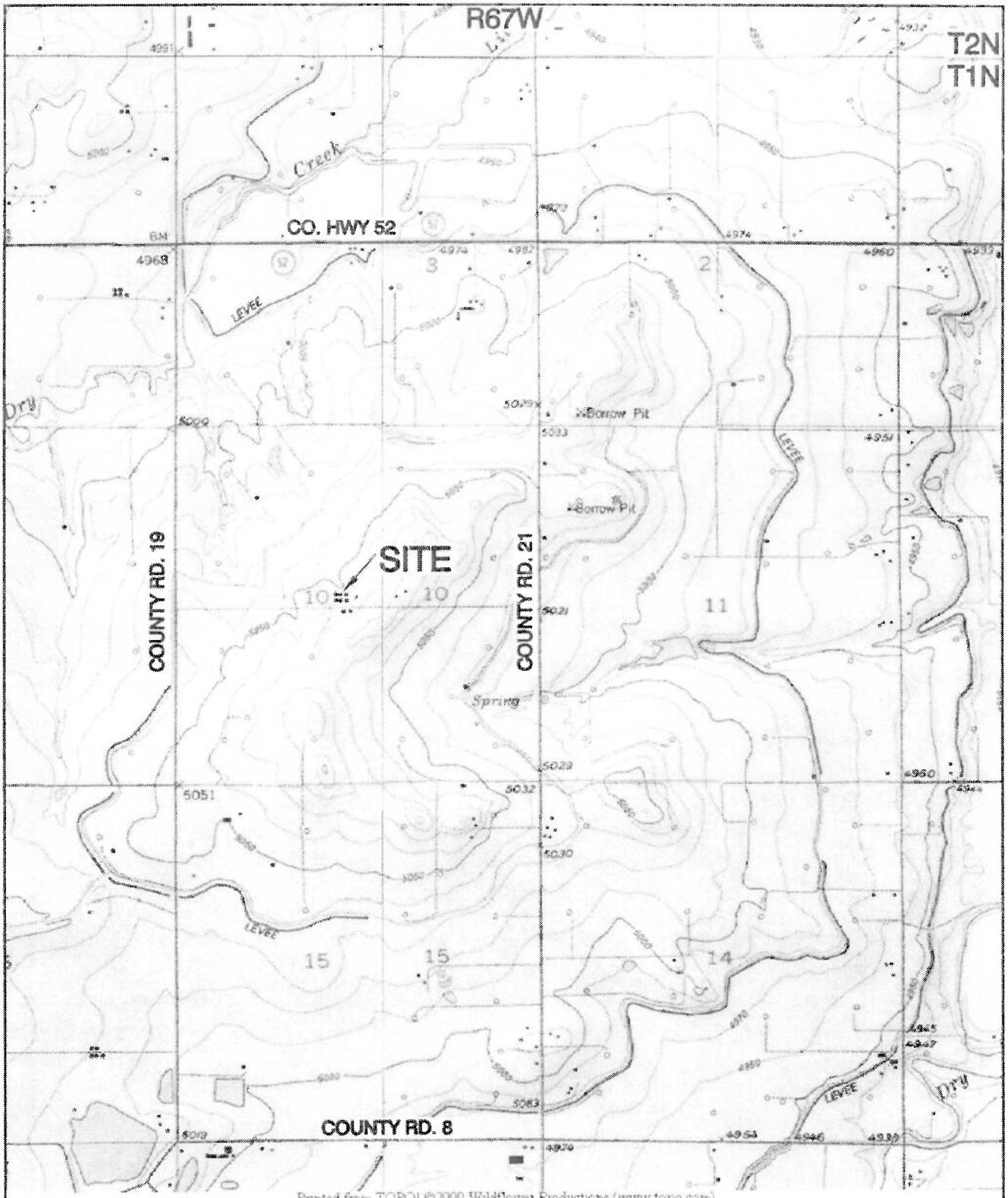
Sincerely,

APEX CONSULTING SERVICES, INC.

Michael D. Hattel, P.G., P.E.S.
Principal

Attachments

t:\Apex KPK Wattenberg Rpts KPK GW RPT 1211.rtf



APEX JOB: 1-0025.001.00

NORTH

0 1000 2000

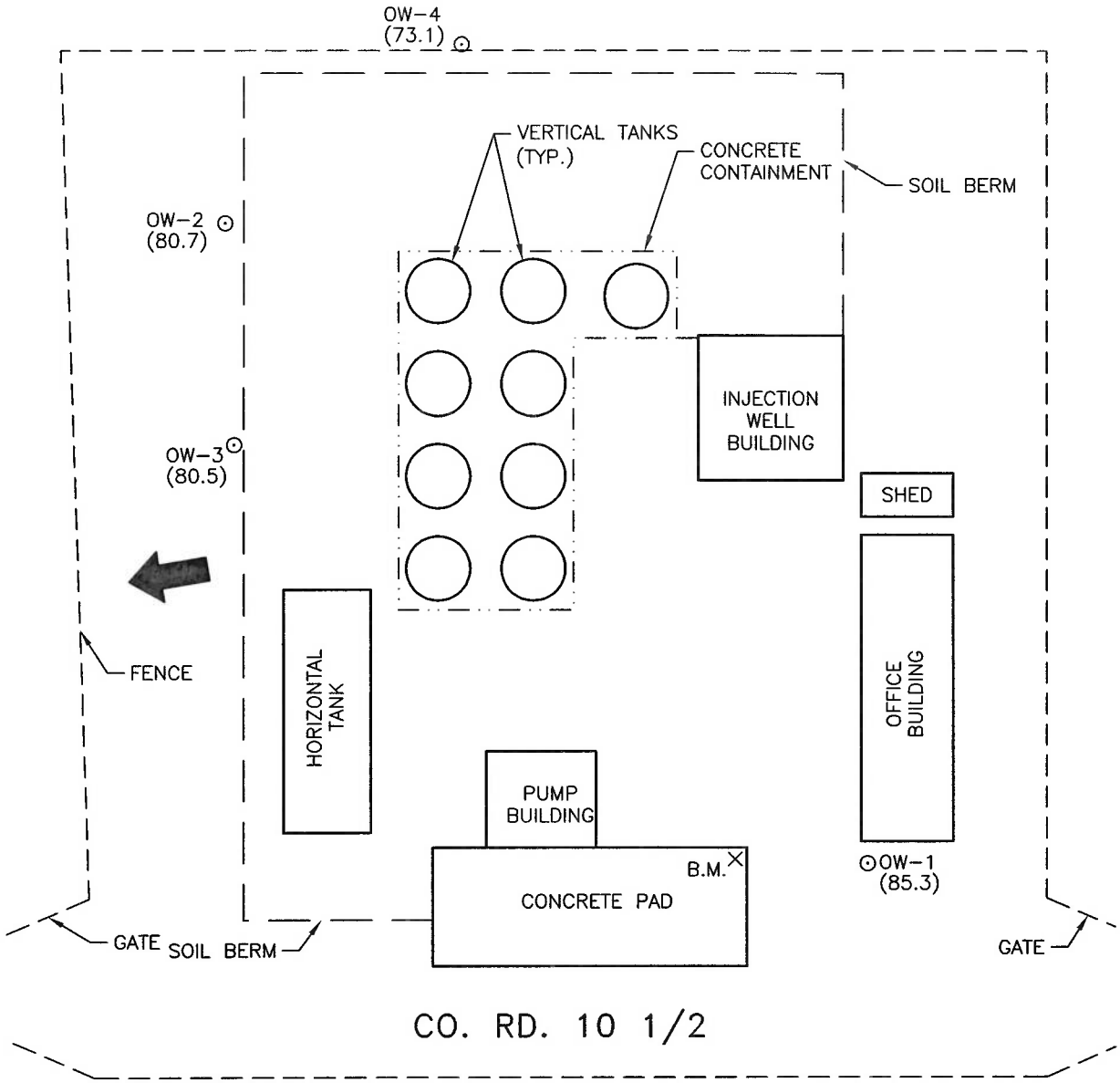
SCALE: 1" = 2000'

WATTENBERG DISPOSAL FACILITY
VICINITY MAP

APEX

FIGURE:
1

MDS FILE: 01-054\VICNITY-WATTENBERG.DWG



NOTE: DATA COLLECTED ON DECEMBER 17, 2012.

LEGEND:

⊙ OW-2 (80.7)	OBSERVATION WELL, NUMBER, AND RELATIVE GROUNDWATER ELEVATION
➡	CURRENT GROUNDWATER FLOW DIRECTION
B.M.	BENCH MARK, ELEVATION 100.00 FEET
ND	NO DATA

NORTH

0 30 60

SCALE: 1" = 60'

APEX JOB: 1-0025.001.00

WATTENBERG DISPOSAL FACILITY
SITE MAP
DECEMBER 17, 2012

APEX

FIGURE:
2

C:\MDS WORK FILES\files\01-054\SITEMAP-WATTENBERG_12-12

TABLE 1

Summary of BTEX[1], TPH[2] and TOC[3] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[3]	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	TPH (mg/L)	TOC[4] (mg/L)
OW-1	9/18/02	6.46	17.5	>4000	<.15	<.18	<.24	<.63	<1.6	79.0
	12/16/02	6.54	14.9	>4000	<.15	<.18	<.24	<.63	<1.6	29.0
	6/30/03	6.64	13.2	>4000	<1.5	<.18	<.24	<.63	<1.6	250.0
	12/30/03	6.54	14.1	>4000	<.15	<.18	<.24	<.63	<1.6	86.0
	6/30/04	6.19	13.2	>4000	<.18	<.21	<.17	<.96	<1.5	28.0
	12/29/04	6.30	12.9	>4000	<.18	<.21	<.17	<.96	<1.6	33.0
	6/30/05	6.60	13.2	>4000	<.07	<.07	<.07	<.20	<1.5	27.0
	12/28/05	6.85	15.5	>4000	<.07	<.07	<.08	<.20	<1.5	27.0
	6/29/06	6.54	13.5	>4000	1.00	<.07	1.1	5.00	<1.5	140.0
	7/27/06[5]	6.51	13.6	>4000	<.07	<.07	<.08	<.20	NA	NA
	1/25/07	6.81	13.3	>4000	<1.0	<2.0	<2.0	<4.0	5.3	28.7
	7/2/07	6.59	12.9	>4000	<1.0	<2.0	<2.0	<4.0	15.0	30.0
	1/31/08	6.69	12.9	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	30.3
	6/24/08	6.52	12.3	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	31.4
	12/29/08	6.50	14.7	>4000	<1.0	<2.0	<2.0	<4.0	6.2	30.1
	6/29/09	6.52	14.9	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	30.8
	12/15/09	6.51	13.3	>4000	<1.0	<2.0	<2.0	<4.0	5.9	30.6
	6/23/10	6.61	12.4	>4000	<1.0	<2.0	<2.0	<4.0	5.0	31.8
	12/13/10	6.80	14.6	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	31.7
	6/21/11	6.62	12.3	>4000	0.28	<1.0	<1.0	<2.0	7.1	29.2
	7/12/11	6.58	12.4	>4000	<1.0	<2.0	<2.0	<2.0	NA	NA
	12/21/11	6.56	13.8	>4000	1.00	<2.0	<2.0	<2.0	10.3	34.5
	1/13/12	6.55	14.0	>4000	<1.0	<2.0	<2.0	<2.0	NA	NA
	6/19/12	6.76	13.4	>4000	<2.0	<2.0	<2.0	<2.0	<4.9	33.3
	12/17/12	6.80	14.3	>4000	<0.2	<1.0	<1.0	<2.0	5.8	31.8
OW-2	9/18/02	7.05	14.8	>4000	<.15	<.18	<.24	<.63	<1.6	230.0
	12/16/02	7.09	14.0	>4000	<.15	<.18	<.24	<.63	<1.6	60.0
	6/30/03	7.28	12.9	>4000	<.15	<.18	<.24	<.63	<1.7	150.0
	12/30/03	7.23	13.3	>4000	<.15	<.18	<.24	<.63	<1.7	58.0
	6/30/04	6.86	13.0	>4000	<.18	<.21	<.17	<.96	<1.5	37.0
	12/29/04	6.80	12.3	>4000	<.18	<.21	<.17	<.96	<1.4	54.0
	6/30/05	7.18	12.5	>4000	<.07	<.07	<.07	<.20	<1.5	48.0

TABLE 1 (continued)

Summary of BTEX[1], TPH[2] and TOC[3] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[3]	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	TPH (mg/L)	TOC[4] (mg/L)
OW-2	12/28/05	7.23	14.5	>4000	<.07	<.07	<.07	<.20	<1.5	48.0
(Cont)	6/29/06	7.22	12.9	>4000	<.07	<.07	<.08	<.20	<1.5	59.0
	1/25/07	7.37	12.8	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	44.4
	7/2/07	7.18	13.3	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	36.7
	1/31/08	7.27	12.6	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	43.0
	6/24/08	7.18	12.1	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	47.1
	12/29/08	7.13	14.0	>4000	<1.0	<2.0	<2.0	<4.0	<4.0	45.4
	6/29/09	7.15	14.2	>4000	<1.0	<2.0	<2.0	<4.0	5.7	43.9
	12/15/09	7.11	13.0	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	43.1
	6/23/10	7.30	12.4	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	43.5
	12/13/10	7.14	13.6	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	44.5
	6/21/11	7.19	12.5	>4000	<0.2	<1.0	<1.0	<2.0	4.9	37.2
	12/21/11	7.21	12.5	>4000	0.25	<2.0	<2.0	<2.0	12.8	46.4
	1/13/12	7.20	13.0	>4000	<1.0	<2.0	<2.0	<2.0	NA	NA
	6/19/12	7.30	12.4	>4000	<1.0	<2.0	<2.0	<2.0	<4.8	45.4
	12/17/12	7.34	13.2	>4000	<0.2	<1.0	<1.0	<2.0	<4.8	46.2
OW-3	9/18/02	6.88	15.4	>4000	<.15	<.18	<.24	<.63	<5.1	95.0
	12/16/02	7.08	15.3	>4000	<.15	<.18	<.24	<.63	<1.6	63.0
	6/30/03	7.05	14.6	>4000	<.15	<.18	<.24	<.63	<1.6	200.0
	12/30/03	7.27	13.4	>4000	<.15	<.18	<.24	<.63	<1.8	85.0
	6/30/04	6.89	12.4	>4000	3.5	1.3	<.17	<.96	<2.0	68.0
	9/9/04[5]	6.86	13.5	>4000	<.18	<.17	<.17	<.96	NA	NA
	12/29/04	6.65	12.3	>4000	<.18	<.21	<.17	<.96	<1.5	78.0
	6/30/05	6.90	12.5	>4000	<.07	<.07		<.20	<1.6	80.0
	12/28/05	7.12	15.2	>4000	<.07	<.07		<.20	<1.5	92.0
	6/29/06	7.59	15.8	>4000	<.07	<.07		<.20	<1.5	82.0
	1/25/07	7.47	12.7	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	62.9
	7/2/07	6.90	13.7	>4000	1500	71000	19000	178000	NA	NA
	1/31/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/05/09	7.05	14.0	>4000	<1.0	<2.0	<2.0	<4.0	<5.0	53.0

TABLE 1 (continued)

Summary of BTEX[1], TPH[2] and TOC[3] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[3]	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	TPH (mg/L)	TOC[4] (mg/L)
OW-3	6/29/09	7.15	14.1	>4000	1.0	<2.0	<2.0	<4.0	5.0	43.5
(Cont)	7/27/09	7.11	14.2	>4000	NA	NA	NA	NA	NA	NA
	12/15/09	7.17	13.0	>4000	1.6	<2.0	<2.0	<4.0	<6.33	46.4
	1/04/10	7.15	13.2	>4000	<1.0	<2.0	<2.0	<4.0	NA	NA
	6/23/10	7.35	12.3	>4000	<1.0	<2.0	<2.0	<4.0	<13.0	44.8
	12/13/10	7.05	13.2	>4000	<1.0	<2.0	<2.0	<4.0	7.6	45.0
	6/21/11	7.19	12.3	>4000	1.4	<1.0	<1.0	<2.0	<6.2	40.1
	7/12/11	7.15	12.4	>4000	<1.0	<1.0	<1.0	<1.0	NA	NA
	12/21/11	7.20	12.0	>4000	1.3	<2.0	<2.0	<2.0	7.3	45.9
	1/13/12	7.15	11.9	>4000	<1.0	<2.0	<2.0	<2.0	NA	NA
	6/19/12	7.41	13.3	>4000	<1.0	<2.0	<2.0	<2.0	<5.0	40.5
	12/17/12	7.33	13.5	>4000	<0.2	<1.0	<1.0	<2.0	<5.0	37.3
OW-4	12/15/09	7.14	12.9	>4000	<1.0	<2.0	<2.0	<4.0	NA	68.9
	6/23/10	7.17	13.5	>4000	<1.0	<2.0	<2.0	<4.0	<7.4	78.4
	12/13/10	7.18	13.1	>4000	<1.0	<2.0	<2.0	<4.0	<11	69.9
	6/21/11	7.23	12.2	>4000	<0.2	<1.0	<1.0	<2.0	<6.4	68.1
	12/21/11	7.12	11.7	>4000	<0.2	<2.0	<2.0	<2.0	8.1	73.8
	6/19/12	7.41	14.0	>4000	<1.0	<2.0	<2.0	<2.0	<5.2	71.3
	12/17/12	7.33	12.7	>4000	<0.2	<1.0	<1.0	<2.0	<6.3	70.5

1 Benzene, toluene, ethylbenzene, and total xylenes by Method 8021B.
2 Total petroleum hydrocarbons by Method 1664.
3 Specific conductance in micro-siemens at 25 degrees Celsius.
4 Total organic carbon by Method 415.1.
5 Second sample collected in accordance with ground water monitoring plan.

J Estimated value.
mg/L milligrams per liter.
NA Not Analyzed
ug/L micrograms per liter.
NS No Sample

TABLE 2

Summary of Major Cation[1] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[2]	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
OW-1	9/18/02	6.46	17.5	>4000	330	310	11	2300
	12/16/02	6.54	14.9	>4000	370	320	15	2500
	6/30/03	6.64	13.2	>4000	370	350	12	2600
	12/30/03	6.54	14.1	>4000	500	340	12	2600
	6/30/04	6.19	13.2	>4000	300	300	11	2000
	12/29/04	6.30	12.9	>4000	420	360	14	2600
	6/30/05	6.73	13.2	>4000	410	370	12	2500
	12/28/05	6.85	15.5	>4000	420	380	18	2700
	6/29/06	6.54	13.5	>4000	440	410	26	2700
	1/25/07	6.81	13.3	>4000	380	350	14	2300
	7/2/07	6.59	12.9	>4000	450	400	21	2700
	1/31/08	6.69	12.9	>4000	460	420	14	2900B
	6/24/08	6.52	12.3	>4000	410	380	11	2800
	12/29/08	6.50	14.7	>4000	460	420	12	2700
	6/29/09	6.52	14.9	>4000	440	410	11	2800
	12/15/09	6.51	13.3	>4000	470	470	15	2400
	6/23/10	6.61	12.4	>4000	554	501	<50	2810
	12/13/10	6.80	14.6	>4000	472	450	13	2540
	6/21/11	6.62	12.3	>4000	457	415	11.7	2400
	12/21/11	6.56	13.8	>4000	427	407	11.9	2530
	6/19/12	6.76	13.4	>4000	510	463	12.6	2720
	12/17/12	6.80	14.3	>4000	437	417	13.5	2300
OW-2	9/18/02	7.05	14.8	>4000	600	680	18	3800
	12/16/02	7.09	14.0	>4000	690	700	23	3700
	6/30/03	7.28	12.9	>4000	600	660	21	4200
	12/30/03	7.23	13.3	>4000	770	640	21	4300
	6/30/04	6.86	13.0	>4000	480	610	18	3500
	12/29/04	6.80	12.3	>4000	600	630	19	4000
	6/30/05	7.18	12.5	>4000	640	670	19	3800

TABLE 2 (continued)

Summary of Major Cation[1] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[2]	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
OW-2	12/28/05	7.23	14.5	>4000	550	640	22	4000
(Cont.)	6/29/06	7.22	12.9	>4000	580	670	24	4700
	1/25/07	7.37	12.8	>4000	550	620	25	3600
	7/2/07	7.18	13.3	>4000	620	660	38	4300
	1/31/08	7.27	12.6	>4000	600	640	20	4100B
	6/24/08	7.18	12.1	>4000	530	580	18	4000
	12/29/08	7.13	14.0	>4000	570	630	19	4100
	6/29/09	7.15	14.2	>4000	510	560	17	4000
	12/15/0	7.11	13.0	>4000	560	670	22	3300
	6/23/10	7.30	12.4	>4000	648	698	<50	4000
	12/13/10	7.14	13.6	>4000	573	669	17.7	3730
	6/21/11	7.19	12.5	>4000	536	606	17.3	3470
	12/21/11	7.21	12.5	>4000	568	682	19.9	4050
	6/19/12	7.30	12.4	>4000	405	425	10.4	2400
	12/17/12	7.34	13.2	>4000	593	760	20.1	3920
OW-3	9/18/02	6.88	15.4	>4000	480	690	16	3900
	12/16/02	7.08	15.3	>4000	530	720	20	4100
	6/30/03	7.13	14.6	>4000	490	670	17	4200
	12/30/03	7.27	13.4	>4000	640	650	17	4300
	6/30/04	6.89	12.4	>4000	490	610	18	3500
	12/29/04	6.65	12.3	>4000	530	660	18	4100
	6/30/05	6.90	12.5	>4000	530	710	18	4100
	12/28/05	7.12	15.2	>4000	520	730	20	4200
	6/29/06	7.29	15.8	>4000	510	730	22	4400
	1/25/07	7.47	12.7	>4000	510	640	24	3700
	7/2/07	6.90	13.7	>4000	NA	NA	NA	NA
	1/31/08	NS	NS	NS	NS	NS	NS	NS
	6/24/08	NS	NS	NS	NS	NS	NS	NS
	1/05/09	7.05	14.0	>4000	500	630	20	4400

TABLE 2 (continued)

Summary of Major Cation[1] Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[2]	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
OW-3	6/29/09	7.15	14.1	>4000	520	570	17	4200
(Cont.)	12/15/09	7.17	13.0	>4000	460	630	26	3900
	6/23/10	7.35	12.3	>4000	564	695	<50	4310
	12/13/10	7.05	13.2	>4000	512	639	18.9	4030
	6/21/11	7.19	12.3	>4000	422	511	15.5	3130
	12/11/11	7.20	12.0	>4000	455	596	18.0	3960
	6/19/12	7.41	13.3	>4000	447	528	16.8	3530
	12/17/12	7.33	13.5	>4000	466	596	18.9	3520
OW-4	12/15/09	7.14	12.9	>4000	500	600	29	3800
	6/23/10	7.17	13.5	>4000	602	617	<50	4610
	12/13/10	7.18	13.1	>4000	497	583	21.4	3800
	6/21/11	7.23	12.2	>4000	501	559	21	3890
	12/21/11	7.12	11.7	>4000	507	578	22	3910
	6/19/12	7.41	14.0	>4000	504	539	17.9	3740
	12/17/12	7.33	12.7	>4000	519	632	21.5	3950

1 By Method 6010B.
B Analyte detected in blank
2 Specific conductance in micro-siemens at 25 degrees Celsius.
mg/L milligrams per liter.
NS No Sample

TABLE 3

Summary of Major Anion Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[1]	Bicarbonate (mg/L)	Carbonate (mg/L)	Nitrate as N[3] (mg/L)	Nitrite as N[3] (mg/L)	Sulfate[3] (mg/L)	Chloride[3] (mg/L)
OW-1	9/18/02	6.46	17.5	>4000	890	<1	<.36	<.34	2500	3300
	12/16/02	6.54	14.9	>4000	880	<1	<1.4	<1.3	2400	3800
	6/303/03	6.64	13.2	>4000	NS	NS	<1.8	<2.5	1900	3400
	12/30/03	6.54	14.1	>4000	880	<1.2	<0.01	<0.02	2300	1000
	6/30/04	6.19	13.2	>4000	780	<1.2	<0.02	<0.02	2100	3800
	12/29/04	6.30	12.9	>4000	840	<3.4	<0.07	<0.04	2100	3400
	6/30/05	6.73	13.2	>4000	850	<1.2	<0.02	<0.02	2400	3900
	12/28/05	6.85	15.5	>4000	860	<1.2	<0.02	<0.02	2600	4500
	6/29/06	6.54	13.5	>4000	850	<1.2	<0.02	<0.02	2700	4800
	1/25/07	6.81	13.3	>4000	1000	<5.0	<0.56	<0.76	2030	3880
	7/2/07	6.59	12.9	>4000	976	<5.0	<0.10	<0.40	1970	3940
	1/31/08	6.69	12.9	>4000	977	<5.0	<0.25	<0.40	1870	4210
	6/24/08	6.52	12.3	>4000	936	<5.0	<2.3	<6.1	1830	4400
	12/29/08	6.50	14.7	>4000	754	<5.0	<.45	<15	1730	9070
	6/29/09	6.52	14.9	>4000	763	<5.0	<.90	<3.1	1690	4690
	12/15/09	6.51	13.3	>4000	742	<5.0	<1.5	<1.5	1640	4880
	6/23/10	6.61	12.4	>4000	707	<5.0	<0.90	<6.1	1650	4780
	12/13/10	6.80	14.6	>4000	740	<5.0	<0.90	<15	1740	5080
	6/21/11	6.62	12.3	>4000	705	<5.0	<0.45	<15	1680	4650
	12/21/11	6.56	13.8	>4000	803	<5.0	<0.90	<6.1	1660	4150
	6/19/12	6.76	13.4	>4000	822	<5.0	<0.90	<2.5	1790	4170
	12/17/12	6.80	14.3	>4000	792	<5.0	<0.20	<0.4	1890	4120
OW-2	9/18/02	7.05	14.8	>4000	1100	<1	13	<.84	5200	5300
	12/16/02	7.09	14.0	>4000	1100	<1	5	<1.7	4700	5800
	6/30/03	7.28	12.9	>4000	NS	NS	16	<2.5	5300	4200
	12/30/03	7.23	13.3	>4000	1100	<1.2	16	<0.09	5200	4500
	6/30/04	6.86	13.0	>4000	960	<1.2	16	<0.25	5700	5000
	12/29/04	6.80	12.3	>4000	1000	<3.4	13	<0.04	5000	4300
	6/30/05	7.18	12.5	>4000	1100	<1.2	12	<0.25	5800	4500
	12/28/05	7.23	14.5	>4000	1000	<1.2	14	16	5600	5400

TABLE 3 (continued)

Summary of Major Anion Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[1]	Bicarbonate (mg/L)	Carbonate (mg/L)	Nitrate as N[3] (mg/L)	Nitrite as N[3] (mg/L)	Sulfate[3] (mg/L)	Chloride[3] (mg/L)
OW-2	6/29/06	7.22	12.9	>4000	970	<1.2	9	<0.25	5600	6100
(cont)	1/25/07	7.37	12.8	>4000	1210	<5.0	7.1	<1.9	4930	5000
	7/2/07	7.18	13.3	>4000	1190	<5.0	9	<1.0	5270	4790
	1/31/08	7.27	12.6	>4000	1200	<5.0	6.6	<.40	4640	4500
	6/24/08	7.18	12.1	>4000	1170	<5.0	4.26	<6.1	4400	5200
	12/29/08	7.13	14.0	>4000	950	<5.0	7.8	<15	4830	4940
	6/29/09	7.15	14.2	>4000	931	<5.0	7.2	<6.1	4900	5070
	12/15/09	7.11	13.0	>4000	930	<5.0	12.2	<1.5	6240	4230
	6/23/10	7.30	12.4	>4000	904	<5.0	6.4	<15.0	4960	5160
	12/13/10	7.14	13.6	>4000	930	<5.0	7.9	<15.0	6160	5750
	6/21/11	7.19	12.5	>4000	948	<5.0	5.7	<15.0	4740	4870
	12/21/11	7.21	12.5	>4000	986	<5.0	8.8	<6.1	5270	4740
	6/19/12	7.30	12.4	>4000	951	<5.0	4.3	<2.5	4730	4890
	12/17/12	7.34	13.2	>4000	950	<5.0	7.1	<1.0	5520	5060
OW-3	9/18/02	6.88	15.4	>4000	NS	NS	NS	NS	NS	NS
	12/16/02	7.08	15.3	>4000	1100	<1	<1.8	<1.7	8400	3800
	6/30/03	7.13	14.6	>4000	NS	NS	2.0J	<2.5	6100	3800
	12/30/03	7.27	13.4	>4000	1200	<1.2	0.24	<0.09	6300	1200
	6/30/04	6.89	12.4	>4000	920	<1.2	0.20	<0.02	5400	4900
	12/29/04	6.65	12.3	>4000	1100	<3.4	<0.07	<0.07	6700	3200
	6/30/05	6.90	12.5	>4000	1100	<1.2	<0.28	<0.25	8000	3800
	12/28/05	7.12	15.2	>4000	1100	<1.2	6.2	11	6800	3800
	6/29/06	6.54	13.5	>4000	1100	<1.2	2.7	<0.25	680	4800
	1/25/07	7.47	12.7	>4000	1100	<5.0	<1.4	<1.9	5900	4750
	7/2/07	6.9	13.7	>4000	NA	NA	NA	NA	NA	NA
	1/31/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/05/09	7.05	14.0	>4000	1200	<5.0	4.3	1.9	6100	4390
	6/29/09	7.15	14.1	>4000	919	<5.0	7.4	<6.1	5010	4970
	12/15/09	7.17	13.0	>4000	920	<5.0	6.2	<1.5	4740	5050

TABLE 3 (continued)

Summary of Major Anion Analytical Results for Groundwater Samples Collected from Wattenberg Disposal Facility, Weld County, Colorado

Sample	Date	pH	Temperature (Celsius)	Specific Conductance[1]	Bicarbonate (mg/L)	Carbonate (mg/L)	Nitrate as N[3] (mg/L)	Nitrite as N[3] (mg/L)	Sulfate[3] (mg/L)	Chloride[3] (mg/L)
OW-3	6/23/10	7.35	12.3	>4000	960	<5.0	8.0	<6.1	5960	3920
(Cont)	12/13/10	7.05	13.2	>4000	960	<5.0	9.5	<15.0	5960	4690
	6/21/11	7.19	12.3	>4000	973	<5.0	4.0	<15.0	5100	3490
	12/21/11	7.20	12.0	>4000	988	<5.0	4.1	<6.1	5620	3650
	6/19/12	7.40	13.3	>4000	959	<5.0	8.8	<2.5	5690	3560
	12/17/12	7.33	13.5	>4000	1030	<5.0	0.57	0.21	5810	3440
OW-4	12/15/09	7.14	12.9	>4000	276	<5.0	89.3	<1.5	6450	4350
	6/23/10	7.17	13.5	>4000	257	<5.0	80.2	<6.1	6650	3580
	12/13/10	7.18	13.1	>4000	300	<5.0	69.1	<15.0	7880	3840
	6/21/11	7.23	12.2	>4000	262	<5.0	71.0	<15.0	6880	3690
	12/21/11	7.12	11.7	>4000	322	<5.0	69.9	<6.1	7210	3430
	6/19/12	7.41	14.0	>4000	261	<5.0	87.5	<2.5	6990	3920
	12/17/12	7.33	12.7	>4000	262	<5.0	78.7	<0.08	7390	3780

1 Specific conductance in micro-siemens at 25 degrees Celsius.
2 By Method 310.1.
3 By Method 300.
J Analyte was detected above the Reporting Limit but below the Quantitation Limit.

mg/L milligrams per liter.
NS No sample.

ATTACHMENT I

Mountain States
ACCUTEST
LABORATORIES

01/03/13

Technical Report for

K.P. Kauffmann Company, Inc.

Wattenberg GW

Accutest Job Number: D41909

Sampling Date: 12/17/12

Report to:

Apex Consulting Services
PO Box 369
Louisville, CO 80027-0369
kgilbert@kpk.com; mhattel@msn.com

ATTN: Mike Hattel

Total number of pages in report: 44

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Brad Madadian
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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Sections: 1 2 3 4 5 6 7 8

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 4
Section 3: Summary of Hits 6
Section 4: Sample Results 8
4.1: D41909-1: OW-1 9
4.2: D41909-1F: OW-1 11
4.3: D41909-2: OW-2 12
4.4: D41909-2F: OW-2 14
4.5: D41909-3: OW-3 15
4.6: D41909-3F: OW-3 17
4.7: D41909-4: OW-4 18
4.8: D41909-4F: OW-4 20
Section 5: Misc. Forms 21
5.1: Chain of Custody 22
Section 6: GC Volatiles - QC Data Summaries 24
6.1: Method Blank Summary 25
6.2: Blank Spike Summary 26
6.3: Matrix Spike/Matrix Spike Duplicate Summary 27
Section 7: Metals Analysis - QC Data Summaries 28
7.1: Prep QC MP9137: Ca,Mg,K,Na 29
Section 8: General Chemistry - QC Data Summaries 39
8.1: Method Blank and Spike Results Summary 40
8.2: Blank Spike Duplicate Results Summary 41
8.3: Duplicate Results Summary 42
8.4: Matrix Spike Results Summary 43
8.5: Matrix Spike Duplicate Results Summary 44

Sample Summary

K.P. Kauffmann Company, Inc.

Job No: D41909

Wattenberg GW

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D41909-1	12/17/12	11:25 MH	12/17/12	AQ	Ground Water	OW-1
D41909-1F	12/17/12	11:25 MH	12/17/12	AQ	Groundwater Filtered	OW-1
D41909-2	12/17/12	10:35 MH	12/17/12	AQ	Ground Water	OW-2
D41909-2F	12/17/12	10:35 MH	12/17/12	AQ	Groundwater Filtered	OW-2
D41909-3	12/17/12	09:30 MH	12/17/12	AQ	Ground Water	OW-3
D41909-3F	12/17/12	09:30 MH	12/17/12	AQ	Groundwater Filtered	OW-3
D41909-4	12/17/12	08:30 MH	12/17/12	AQ	Ground Water	OW-4
D41909-4F	12/17/12	08:30 MH	12/17/12	AQ	Groundwater Filtered	OW-4

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	K.P. Kauffmann Company, Inc.	Job No	D41909
Site:	Wattenberg GW	Report Dat	1/3/2013 11:34:28 AM

On 12/17/2012, 4 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D41909 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GC By Method SW846 8021B

Matrix AQ	Batch ID: GTA1018

- All samples were analyzed within the recommended method holding time.
- Sample(s) D41909-1MS, D41909-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- D41909-3: Sample was not preserved to a pH < 2.

Metals By Method SW846 6010C

Matrix AQ	Batch ID: MP9137

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D42062-1FMS, D42062-1FMSD, D42062-1FSDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Potassium are outside control limits for sample MP9137-SD1. Probable cause due to sample homogeneity.
- MP9137-SD1 for Potassium: Serial dilution indicates possible matrix interference.

Wet Chemistry By Method EPA 1664A

Matrix AQ	Batch ID: GP9014

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 300.0/SW846 9056

Matrix AQ	Batch ID: GP8951

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D41931-2MS, D41931-2MSD were used as the QC samples for the Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Chloride analysis.
- D41909-2 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.
- D41909-1 for Nitrogen, Nitrate: Elevated detection limit due to matrix interference.
- D41909-4 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.
- D41909-1 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.

Wet Chemistry By Method SM 2320B-2011

Matrix AQ	Batch ID: GN18183

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D41977-1DUP, D41977-1MS, D41977-1MSD were used as the QC samples for the Alkalinity, Total as CaCO3 analysis.

Matrix AQ	Batch ID: GN18184

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix AQ	Batch ID: GN18185

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540C-2011

Matrix AQ	Batch ID: GN18138

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D41824-4DUP were used as the QC samples for the Solids, Total Dissolved analysis.

Wet Chemistry By Method SM 5310B-2011

Matrix AQ	Batch ID: GP9018

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D41966-2MS, D41966-2MSD, D41966-3DUP were used as the QC samples for the Total Organic Carbon analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D41909
Account: K.P. Kauffmann Company, Inc.
Project: Wattenberg GW
Collected: 12/17/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D41909-1	**OW-1**					
Alkalinity, Bicarbonate as CaCO3		792	5.0		mg/l	SM 2320B-2011
Alkalinity, Total as CaCO3		792	5.0		mg/l	SM 2320B-2011
Chloride		4120	130		mg/l	EPA 300.0/SW846 9056
HEM Oil and Grease		5.8	5.2		mg/l	EPA 1664A
Solids, Total Dissolved		9770	10		mg/l	SM 2540C-2011
Sulfate		1890	50		mg/l	EPA 300.0/SW846 9056
Total Organic Carbon		31.8	13		mg/l	SM 5310B-2011
D41909-1F	**OW-1**					
Calcium		437000	400		ug/l	SW846 6010C
Magnesium		417000	200		ug/l	SW846 6010C
Potassium		13500	1000		ug/l	SW846 6010C
Sodium		2300000	8000		ug/l	SW846 6010C
D41909-2	**OW-2**					
Alkalinity, Bicarbonate as CaCO3		950	5.0		mg/l	SM 2320B-2011
Alkalinity, Total as CaCO3		950	5.0		mg/l	SM 2320B-2011
Chloride		5060	130		mg/l	EPA 300.0/SW846 9056
Nitrogen, Nitrate		7.1	0.20		mg/l	EPA 300.0/SW846 9056
Solids, Total Dissolved		16300	10		mg/l	SM 2540C-2011
Sulfate		5520	130		mg/l	EPA 300.0/SW846 9056
Total Organic Carbon		46.2	13		mg/l	SM 5310B-2011
D41909-2F	**OW-2**					
Calcium		593000	400		ug/l	SW846 6010C
Magnesium		760000	200		ug/l	SW846 6010C
Potassium		20100	1000		ug/l	SW846 6010C
Sodium		3920000	8000		ug/l	SW846 6010C
D41909-3	**OW-3**					
Alkalinity, Bicarbonate as CaCO3		1030	5.0		mg/l	SM 2320B-2011
Alkalinity, Total as CaCO3		1030	5.0		mg/l	SM 2320B-2011
Chloride		3440	130		mg/l	EPA 300.0/SW846 9056
Nitrogen, Nitrate		0.57	0.20		mg/l	EPA 300.0/SW846 9056
Nitrogen, Nitrite		0.21	0.080		mg/l	EPA 300.0/SW846 9056
Solids, Total Dissolved		14600	10		mg/l	SM 2540C-2011
Sulfate		5810	130		mg/l	EPA 300.0/SW846 9056
Total Organic Carbon		37.3	13		mg/l	SM 5310B-2011

Summary of Hits

Job Number: D41909
Account: K.P. Kauffmann Company, Inc.
Project: Wattenberg GW
Collected: 12/17/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D41909-3F	**OW-3**					
Calcium		466000	400		ug/l	SW846 6010C
Magnesium		596000	200		ug/l	SW846 6010C
Potassium		18900	1000		ug/l	SW846 6010C
Sodium		3520000	8000		ug/l	SW846 6010C
D41909-4	**OW-4**					
Alkalinity, Bicarbonate as CaCO3		262	5.0		mg/l	SM 2320B-2011
Alkalinity, Total as CaCO3		262	5.0		mg/l	SM 2320B-2011
Chloride		3780	130		mg/l	EPA 300.0/SW846 9056
Nitrogen, Nitrate		78.7	1.0		mg/l	EPA 300.0/SW846 9056
Solids, Total Dissolved		17000	10		mg/l	SM 2540C-2011
Sulfate		7390	130		mg/l	EPA 300.0/SW846 9056
Total Organic Carbon		70.5	5.0		mg/l	SM 5310B-2011
D41909-4F	**OW-4**					
Calcium		519000	400		ug/l	SW846 6010C
Magnesium		632000	200		ug/l	SW846 6010C
Potassium		21500	1000		ug/l	SW846 6010C
Sodium		3950000	8000		ug/l	SW846 6010C

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-1		
Lab Sample ID:	D41909-1	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg GW		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA17913.D	1	12/18/12	SK	n/a	n/a	GTA1018
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	94%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-1		
Lab Sample ID:	D41909-1	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	792	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Total as CaCO3	792	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Chloride	4120	130	mg/l	250	12/18/12 19:05	JML	EPA 300.0/SW846 9056
HEM Oil and Grease	5.8	5.2	mg/l	1	12/31/12	SWT	EPA 1664A
Nitrogen, Nitrate [a]	< 0.20	0.20	mg/l	20	12/18/12 09:47	JML	EPA 300.0/SW846 9056
Nitrogen, Nitrite [a]	< 0.40	0.40	mg/l	100	12/18/12 18:50	JML	EPA 300.0/SW846 9056
Solids, Total Dissolved	9770	10	mg/l	1	12/18/12	CT	SM 2540C-2011
Sulfate	1890	50	mg/l	100	12/18/12 18:50	JML	EPA 300.0/SW846 9056
Total Organic Carbon	31.8	13	mg/l	12.5	12/31/12 11:27	JML	SM 5310B-2011

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OW-1		
Lab Sample ID:	D41909-1F	**Date Sampled:**	12/17/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

4.2

4

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	437000	400	ug/l	1	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]
Magnesium	417000	200	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Potassium	13500	1000	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Sodium	2300000	8000	ug/l	20	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA3120
(2) Instrument QC Batch: MA3130
(3) Prep QC Batch: MP9137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OW-2		
Lab Sample ID:	D41909-2	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg GW		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA17916.D	1	12/18/12	SK	n/a	n/a	GTA1018
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	92%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-2		
Lab Sample ID:	D41909-2	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

4.3

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	950	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Total as CaCO3	950	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Chloride	5060	130	mg/l	250	12/18/12 19:20	JML	EPA 300.0/SW846 9056
HEM Oil and Grease	< 4.8	4.8	mg/l	1	12/31/12	SWT	EPA 1664A
Nitrogen, Nitrate	7.1	0.20	mg/l	20	12/18/12 10:01	JML	EPA 300.0/SW846 9056
Nitrogen, Nitrite [a]	< 1.0	1.0	mg/l	250	12/18/12 19:20	JML	EPA 300.0/SW846 9056
Solids, Total Dissolved	16300	10	mg/l	1	12/18/12	CT	SM 2540C-2011
Sulfate	5520	130	mg/l	250	12/18/12 19:20	JML	EPA 300.0/SW846 9056
Total Organic Carbon	46.2	13	mg/l	12.5	12/31/12 11:38	JML	SM 5310B-2011

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-2		
Lab Sample ID:	D41909-2F	**Date Sampled:**	12/17/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	593000	400	ug/l	1	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]
Magnesium	760000	200	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Potassium	20100	1000	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Sodium	3920000	8000	ug/l	20	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA3120
(2) Instrument QC Batch: MA3130
(3) Prep QC Batch: MP9137

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-3		
Lab Sample ID:	D41909-3	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg GW		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	TA17917.D	1	12/18/12	SK	n/a	n/a	GTA1018
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	88%		60-140%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-3		
Lab Sample ID:	D41909-3	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	1030	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Total as CaCO3	1030	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Chloride	3440	130	mg/l	250	12/18/12 19:35	JML	EPA 300.0/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	12/31/12	SWT	EPA 1664A
Nitrogen, Nitrate	0.57	0.20	mg/l	20	12/18/12 10:16	JML	EPA 300.0/SW846 9056
Nitrogen, Nitrite	0.21	0.080	mg/l	20	12/18/12 10:16	JML	EPA 300.0/SW846 9056
Solids, Total Dissolved	14600	10	mg/l	1	12/18/12	CT	SM 2540C-2011
Sulfate	5810	130	mg/l	250	12/18/12 19:35	JML	EPA 300.0/SW846 9056
Total Organic Carbon	37.3	13	mg/l	12.5	12/31/12 11:49	JML	SM 5310B-2011

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OW-3		
Lab Sample ID:	D41909-3F	**Date Sampled:**	12/17/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	466000	400	ug/l	1	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]
Magnesium	596000	200	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Potassium	18900	1000	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Sodium	3520000	8000	ug/l	20	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA3120
(2) Instrument QC Batch: MA3130
(3) Prep QC Batch: MP9137

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

4.7
4

Client Sample ID:	OW-4		
Lab Sample ID:	D41909-4	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Wattenberg GW		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA17918.D	1	12/18/12	SK	n/a	n/a	GTA1018
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	91%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-4		
Lab Sample ID:	D41909-4	**Date Sampled:**	12/17/12
Matrix:	AQ - Ground Water	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate as CaC	262	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Alkalinity, Total as CaCO3	262	5.0	mg/l	1	12/20/12	JD	SM 2320B-2011
Chloride	3780	130	mg/l	250	12/18/12 20:05	JML	EPA 300.0/SW846 9056
HEM Oil and Grease	< 6.3	6.3	mg/l	1	12/31/12	SWT	EPA 1664A
Nitrogen, Nitrate	78.7	1.0	mg/l	100	12/18/12 19:50	JML	EPA 300.0/SW846 9056
Nitrogen, Nitrite [a]	< 0.080	0.080	mg/l	20	12/18/12 10:31	JML	EPA 300.0/SW846 9056
Solids, Total Dissolved	17000	10	mg/l	1	12/18/12	CT	SM 2540C-2011
Sulfate	7390	130	mg/l	250	12/18/12 20:05	JML	EPA 300.0/SW846 9056
Total Organic Carbon	70.5	5.0	mg/l	5	12/31/12 12:03	JML	SM 5310B-2011

(a) Elevated detection limit due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	OW-4		
Lab Sample ID:	D41909-4F	**Date Sampled:**	12/17/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/17/12
		Percent Solids:	n/a
Project:	Wattenberg GW		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	519000	400	ug/l	1	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]
Magnesium	632000	200	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Potassium	21500	1000	ug/l	1	12/26/12	12/26/12	JB	SW846 6010C [1]	SW846 3010A [3]
Sodium	3950000	8000	ug/l	20	12/26/12	12/28/12	JB	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA3120
(2) Instrument QC Batch: MA3130
(3) Prep QC Batch: MP9137

RL = Reporting Limit

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX 303-425-6854

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: D41909

Client / Reporting Information

Company Name: K.P. Kauffman Company, Inc.
Address: 1675 Broadway, Suite 2800
City: Denver State: CO Zip: 80202-4628
Project Contact: Susana Lara-Mesa SLaraMesa@kpk.com
Phone #: 303-665-1400
Samplers's Name: MICHAEL HATTEL (303-665-1400)

Project Information

Project Name: WATTENBERG GROUNDWATER
Street:
City: Fort Lupton State: CO
Project #:
Fax #:
Client Purchase Order #: 7591

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	NaVO3	H2SO4	NONE	Na+HSO4	MEOH	EnCORE	OIL & GREASE 1664	ANIONS (NITRATE, NITRITE, SULFATE, CHLORIDE)	TOC	CATIONS (Ca, K, Mg, NA)	BTEX 8021	ALKALINITY (CARB/BICARB)	TDS					Matrix Codes / LAB USE ONLY
	OW-1		12/19/12	1125	MDH	GW	9	X			X					X	X	X	X	X	X	X					01
	OW-2		↓	1035	MDH	GW	9	X			X					X	X	X	X	X	X	X					02
	OW-3			0930	MDH	GW	9	X			X					X	X	X	X	X	X	X					03
	OW-4			0830	MDH	GW	9	X			X					X	X	X	X	X	X	X					04
																											TB-05

Requested Analysis

Matrix Codes: DW- Drinking Water; GW- Ground Water; WW- Water; SW- Surface Water; SO- Soil; SL-Sludge; OI-Oil; LIQ- Other Liquid; AIR- Air; SOL-Other Solid; WP-Wipe

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- Approved By:/ Date:

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [X] Hard Copy
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] PDF

Comments / Remarks

PDF copy to Susana Lara-Mesa with KPK at SLaraMesa@kpk.com

PDF copy also to Mike Hattel with APEX at mhattel@msn.com

Hard copy ONLY to Mike Hattel with APEX, P.O. Box 369, Louisville, CO 80027-0369

Emergency T/A data available VIA Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	12/19/12 1240	1 [signature]	2		2
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # HO	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 3.0

5.1 5

D41909: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D41909 **Client:** KP KAUFFMAN **Immediate Client Services Action Required:** No

Date / Time Received: 12/17/2012 12:40:00 P **No. Coolers:** 1 **Client Service Action Required at Login:** No

Project: WATTENBERG GROUNDWATER **Airbill #'s:** HD

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	Infared gun	
3. Cooler media:	Ice (bag)	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☐	
2. Trip Blank listed on COC:	☐	☐	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
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4036 Youngfield Street
F: (303) 425-6854
Wheat Ridge, CO
www/accutest.com