



**Robert G Berge #2 – Remediation No. 15743**  
**Colorado Boulevard, Weld County, CO**

**SUMMARY**

K.P. Kauffman Company (KPK) will retain Apex Consulting Services, Inc. (APEX) for installation of groundwater monitoring wells at the Lawrence Totems Consolidation release location (Facility), Colorado Oil and Gas Conservation Commission (COGCC) Remediation Project No. 15743, located immediately north of Powerline Road and west of Weld County Road 23 in Weld County, Colorado.

**SCOPE OF WORK**

**Notifications**

APEX will arrange to have the utilities located by the Utility Notification Center of Colorado (UNCC) and the tank battery operator. APEX will not be responsible for damage to utilities that cannot be located by UNCC or the operator.

KPK will provide notification to landowners regarding the installation of monitoring wells. If a landowner refuses the installation of monitoring well(s), KPK will immediately notify the COGCC of the issue.

**Temporary Well Installation**

APEX will utilize Drill Pro of Thornton, Colorado for drilling services. Four (4) probe borings will be installed to depths of approximately 20 feet or refusal. Each of the borings will be completed as a temporary monitoring well (see attached map for proposed well locations). The borings will be completed to the north, south, and west of the Facility's current excavation. The soils encountered in each monitoring well boring will be logged by a geologist in the field using USCS soil descriptions and field screening results.

The monitoring wells will be constructed of 1-inch diameter, threaded, polyvinyl chloride (PVC) pipe, a 10/20 gravel pack, and hydrated bentonite. Ten (10) feet of factory slotted (10-slot) PVC piping and approximately five (5) feet of solid PVC piping will be placed in each well. Well logs and drilling records will be recorded in a logbook. APEX will survey the location (GPS) and top of each well casing to a local datum.

**Soil Sampling**

Soils collected during the well installation will be screened for the presence of contamination utilizing visual and odor indications, and by screening for volatile organic compounds (VOC's) with a photoionization detector (PID). A least one soil sample will be collected from the unsaturated zone in the boring. The sample will be stored on ice in a cooler and delivered to Summit Scientific of Golden, Colorado under chain-of-custody documentation. The soil sample will be analyzed for hydrocarbon analytes listed in Table 915-1.



## **REPORT**

Final report will be prepared by APEX will include temporary monitoring well/soil boring completion logs; PID readings from the cores and/or soils; sampling procedures: results of the laboratory analysis: tables: boring/well/sample location maps and our conclusions and recommendations for additional work.

## **SCHEDULE**

KPK estimates the following schedule to complete groundwater monitoring well implementation:

- Groundwater monitoring well installation – Late October, 2021
- Soil screening and sampling work during groundwater well installation – Late October, 2021
- Initial groundwater sampling on newly drilled groundwater monitoring well – Late November, 2021.

Due to the time necessary for COGCC review of site investigation and remediation workplans, KPK cannot commit a firm date to perform field activities. Once approval for the site investigation and remediation workplan is received, KPK will finalize dates and communicate those dates to the COGCC.



Legend



Direction of Groundwater  
Flow Based on Topo Maps



Release Location  
Lat:40.07498 Long:-104.85437



Proposed Boring

Date:	June 2020
Designed By:	K.P. Kauffman Co.
Drawn By:	MWK



K.P. Kauffman Company, Inc.  
1675 Broadway, Suite 2800  
Denver CO, 80202

**K.P. Kauffman Company, Inc.**  
**Robert G. Berge #2Release**  
SWSE, Section 2, Township 1 North, Range 67 West  
Weld County, Colorado

**Figure #1**  
Site Map