

**3Q 2019**

**SVE/MPE  
Report**

October 31, 2019

Mr. Cory Smith  
New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

Report Was sent in With Q4 2019,  
Reviewed Any Conditions sent with Q4  
Report. Q3-19 accepted for Record.



**RE: Quarterly Remediation System Operation and Monitoring Report  
Remediation Permit Number 3RP-364  
Florence Gas Com J No. 16A  
Harvest Four Corners, LLC  
San Juan County, New Mexico**

Dear Mr. Smith:

The following report provides a quarterly summary of remediation system operation and monitoring (O&M) completed during the third quarter of 2019 at the Florence Gas Com J No. 16A (GC J#16A) (Site) (Remediation Permit Number 3RP-364) located in San Juan County, New Mexico. The activity included in this report is for the period from July 12, 2019 through September 30, 2019. The report was prepared by LT Environmental, Inc. (LTE) on behalf of Harvest Four Corners, LLC (Harvest). Harvest assumed operation of the assets associated with the location from Williams Four Corners LLC (Williams) on October 1, 2018 and is continuing site remediation activities.

The report is provided in accordance with the conditions of approval from the New Mexico Oil Conservation Division (NMOCD) pertaining to the multi-phase extraction (MPE) remediation system described in the *Remedial Assessment Report* submitted by Aptim Environmental & Infrastructure, Inc. in November 2017. Per the requirements, this report includes the following:

- A summary of remediation activities during the quarter;
- The system run time summary (90% run time required);
- The petroleum mass removal and fluid product recovery from the remediation system;
- Amount of liquid captured from the concrete trap/secondary seep tank; and
- Quarterly gas sample analysis results.

As stated in the *2018 Annual Groundwater and Remediation Update Report* submitted in June 2019, the quarterly remediation summary reports also include the quarterly groundwater sampling events data and summaries.



## SYSTEM DESCRIPTION

The remediation system at the Site includes an MPE system which uses high vacuum blowers to initiate vacuum in remediation wells connected to the blowers via subsurface conduits. The extracted air, petroleum vapors, and fluid enter a fluid/air separation tank. Air and petroleum vapors are passed through two extraction blowers and emitted out exhaust stacks. Separated fluid which includes light non-aqueous phase liquids (LNAPL) and groundwater is pumped to an above ground storage tank for storage and offsite disposal. Operation of the remediation wells is cycled through four zones, with four to six remediation wells per zone. The system layout is depicted on Figure 1. A report summarizing remediation system operation for the previous quarters of system operation have been submitted to the NMOCD by Harvest and Williams.

## REMEDIATION SYSTEM OPERATION AND MONITORING

Routine bi-weekly system monitoring has been conducted from system startup through the third quarter 2019. The results of these efforts are summarized in tables attached to this report including the following information through the final bi-weekly site visit for the quarter conducted on September 20, 2019.

### Vapor Recovery

- The run time for the remediation system listed in Table 1 indicates an average run time for the third quarter of 97 percent (%), with a cumulative overall run time of 94%. Temporary system operation interruptions occurred due to routine maintenance requirements and groundwater sampling activities.
- Air/vapor samples from the MPE system inlet piping were collected following cycling of different extraction well zones, typically one sample per zone per quarter. Four samples were collected during this reporting period. Samples were collected using a high-vacuum sampling pump to fill a 1-Liter Tedlar® bag from the system inlet manifold and submitted for analysis for benzene, toluene, ethylbenzene, and Xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method 8021B, and total petroleum hydrocarbons (TPH) by EPA Method 8015D, to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico. The analytical results from the third quarter of 2019 are summarized in Table 2. Copies of the laboratory analytical reports for the vapor samples are provided in Attachment 1.
- The calculated mass removal rate based on field and analytical results is provided in Table 3. Results indicate that since startup, the system has removed 2,447 pounds (lbs) of VOCs. In the third quarter 2019, the calculated mass removal rate based on VOC data varied from 0.2 lbs per day to 1.3 lbs per day. A total of 66 lbs of VOCs were removed during the third quarter of 2019 through September 20, 2019.



## Fluid Recovery

- Fluid recovery efforts are summarized in Table 4. During the third quarter of 2019 total fluid recovery was measured using a flow metering device and LNAPL recovery was calculated based on periodic measurement of recovered fluid in the storage tank. Since startup of the system through September 20, 2019, approximately 127,846 gallons of impacted groundwater have been recovered.
- Table 5 provides a summary of operational data for the SVE system including measurements of applied vacuum and measured flow rates for the individual recovery well lines for the third quarter of 2019. The specific zones and period of operation are indicated in this table.

## **CONCRETE TRAP/SECONDARY SEEP MONITORING**

During the third quarter of 2019, the collection sump associated with the seep areas and collection piping were examined for fluid recovery during scheduled O&M visits. Approximately 500 gallons of fluid were removed from the seep collection tank on July 3, 2019. The increase of accumulating liquids in the seep recovery tank are likely a result from recent precipitation events and stormwater runoff in the concrete trap. No phase separated hydrocarbons (PSH) were observed in the seep collection tank.

## **GROUNDWATER MONITORING**

Groundwater monitoring activities were conducted at the Site on September 19, 2019. LTE measured groundwater elevations and investigated the presence of PSH in all monitoring wells. Groundwater samples were collected from all monitoring wells that did not contain PSH and had sufficient water to sample.

### **Water and PSH Level Measurements**

Prior to collecting any groundwater measurements, the MPE system was shutdown 48 hours in advance to allow groundwater elevations to stabilize. Groundwater level monitoring included recording depth to groundwater and/or PSH in all existing monitoring wells with an oil/water interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. Groundwater elevations are summarized in Table 6.

### **Groundwater Contour Maps**

LTE used existing top-of-casing well elevations and measured groundwater elevations to draft groundwater contours and determine groundwater flow direction in September 2019 (Figure 2).



Contours were inferred based on groundwater elevations obtained and observations of physical characteristics at the Site (topography, proximity to springs, etc.).

### Groundwater Sampling

Groundwater samples were collected from monitoring wells that did not contain PSH. Groundwater samples were submitted under strict chain-of-custody protocol to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico, for analysis of BTEX by EPA Method 8021B. Groundwater samples were collected using the volume of water in the monitoring wells to calculate a minimum of three well casing volumes of groundwater and were purged from each well using a new disposable polyethylene bailer, or until the well was purged dry. LTE used a YSI 556 hand-held multi-probe water quality field meter to record pH, electric conductivity (EC), and temperature of the groundwater during purging. Monitoring wells were purged until these properties stabilized, or until the well was purged dry, indicating that the purge water was representative of aquifer conditions.

### Results

Groundwater elevations measured during site monitoring event in September 2019 indicated a general southeast trending gradient toward the natural seeps and an unnamed, second-order tributary of the San Juan River. However, localized topography and geology, including previously excavated and backfill material may contribute to variations in groundwater elevations and flow. Figure 2 depicts groundwater elevations and estimated groundwater flow direction. Figure 3 depicts groundwater analytical results and PSH thickness for the 2019 monitoring events. A summary of measured depths to groundwater and PSH thickness is presented in Table 6. During the third quarter 2019 monitoring event, PSH was measurable in six monitoring wells and PSH was observed in two additional wells during purging. Measurable product thickness ranged from 0.02 feet in SB18 to 0.76 feet in MW-3R.

A total of 24 groundwater samples were collected from the following monitoring wells: SB03, SB04, SB05, SB06, SB11, SB13, SB15, SB16, SB19, MW-6, MW-8, MW-10, MW-11, MW-13, MW-14, MW-15, MW-17, MW-18, MW-20, MW-21, MW-22, MW-23, MW-24, and MW-25. Monitoring wells SB04, SB13, SB15, SB16, MW-6, MW-8, MW-11, MW-14, MW-17, MW-18, MW-20, MW-21, MW-22, MW-23, MW-24 and MW-25 did not exceed the NMWQQC standards for any constituent of BETX during the September 2019 sampling event. Benzene concentrations exceeding the NMWQQC standards ranged from 62 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in SB03 to 9,700  $\mu\text{g}/\text{L}$  in MW-15. Toluene concentrations exceeding the NMWQQC standards ranged from 1,100  $\mu\text{g}/\text{L}$  in SB06 to 14,000  $\mu\text{g}/\text{L}$  in MW-15. An ethylbenzene concentration exceeding the NMWQQC standard was only reported in MW-15 with a concentration of 840  $\mu\text{g}/\text{L}$ . Total xylene concentrations exceeding the NMWQQC standards ranged from 690  $\mu\text{g}/\text{L}$  in SB03 to 10,000  $\mu\text{g}/\text{L}$  in MW-15.



Table 7 summarizes groundwater analytical results and Figure 3 depicts groundwater analytical results for the September 2019 monitoring events. Laboratory analytical results are included as Attachment 1.

## **PLAN FOR NEXT QUARTER OF OPERATION**

### **System Operation**

Operation of the remediation system will continue with the goal of optimizing vapor and liquid recovery. Remediation system operation indicates a decline in VOC concentrations for each zone sampled, as expected with this type of system. Based on these data, the frequency for air emission VOC sampling will remain the same in the fourth quarter of 2019. Sampling will continue to comply with the NMOCD Conditions of Approval.

During the fourth quarter of 2019, the following will be completed:

- Bi-weekly (every other week) system operation monitoring including cycling operations between the four zones;
- During bi-weekly O&M visits, temporary operation of wells where LNAPL has been observed will occur for approximately one hour, then the zone of operation will be changed;
- Periodic fluid elevation monitoring in selected remediation wells to evaluate the presence or absence of LNAPL;
- One influent air extraction sample per operational zone, per quarter will be analyzed for BTEX and TPH; and
- When influent air extraction samples are not collected, a photoionization detector (PID) will be used to measure MPE air/vapor exhaust concentrations.

### **Groundwater Monitoring**

A groundwater monitoring event will be conducted on a quarterly basis and periodic fluid elevation measurements will be obtained throughout the quarter.

The results of the fluid elevation measurements are reviewed and system operational adjustments made based on these data. Groundwater monitoring results will be provided in the upcoming fourth quarterly 2019 report.

LTE recommends the following reduced groundwater monitoring schedule:

- Reduce to annual sampling: SB04, SB15, SB16, MW-4, MW-8, MW-11, MW-14, MW-17, and MW-22;



- Reduce to semi-annual sampling: SB19, MW-18, MW-22, and MW-24.

### **Reporting**

Quarterly system operation reports will continue to be prepared and submitted to NMOCD within 30 days following the end of each quarter and will continue to include:

- A summary of remediation activities during the quarter;
- The system run time summary;
- The petroleum mass removal and fluid product recovery from the remediation system;
- Amount of liquid captured from the concrete trap/secondary seep tank; and
- Quarterly gas sample analysis results.
- Groundwater monitoring results.

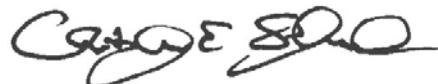
Please contact Danny Burns with LTE at 970-385-1096 or Monica Sandoval (Harvest) at 505-632-4625 if you have any questions or concerns.

Sincerely,

LT ENVIRONMENTAL, INC.



Daniel Burns  
Project Geologist



Chris Shephard  
Chief Engineer

cc: Monica Sandoval, Harvest Four Corners, LLC

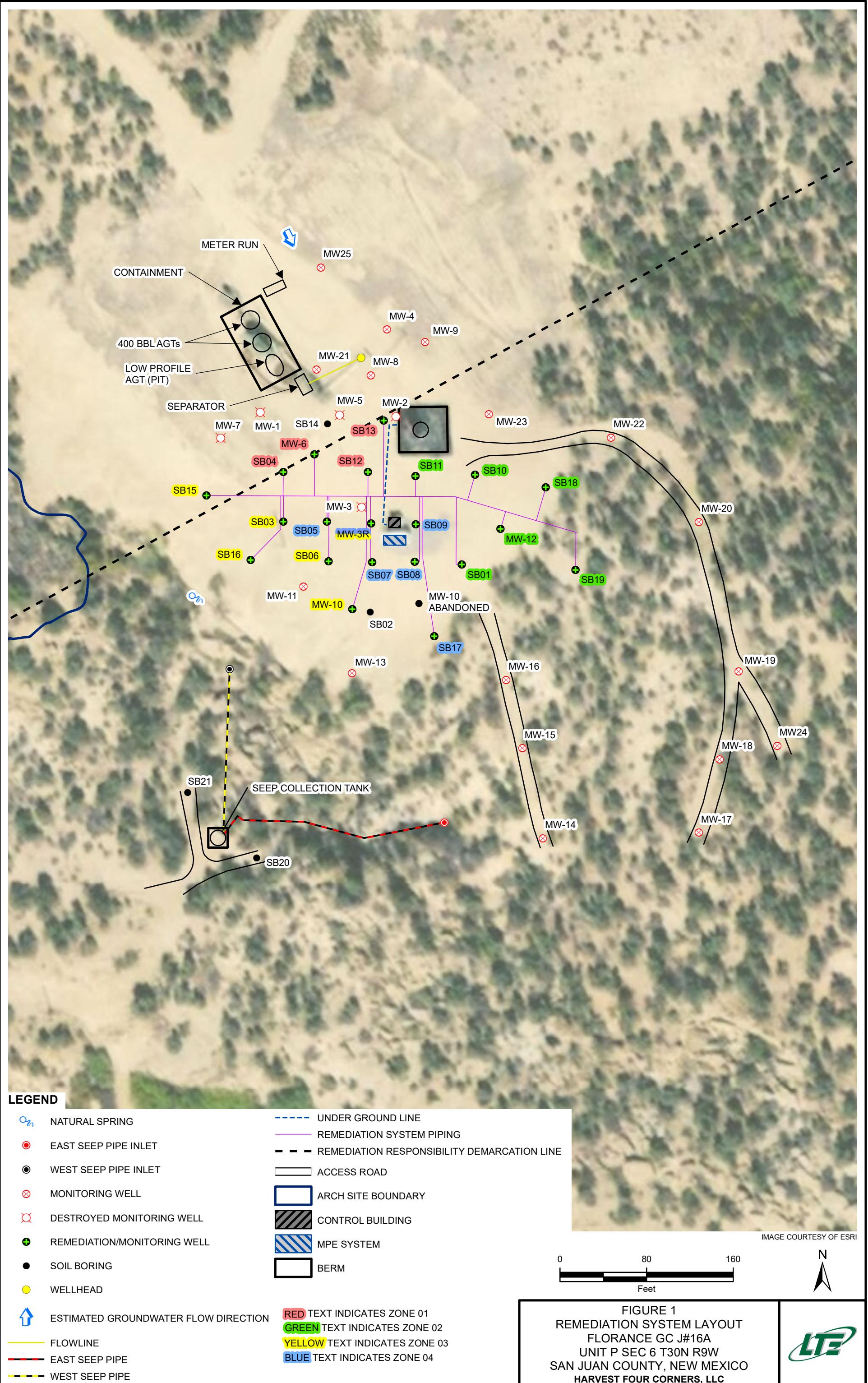


Attachments:

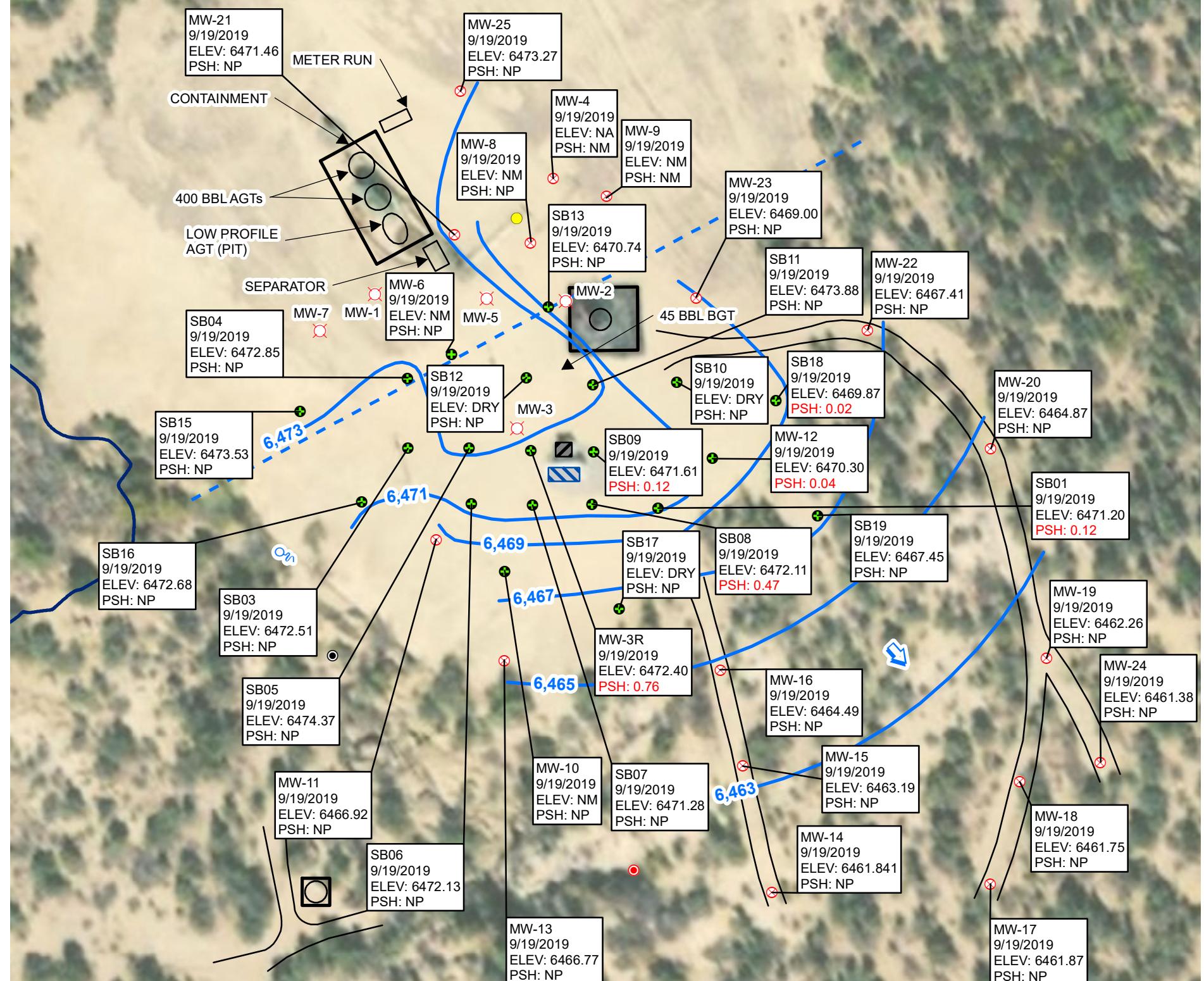
- Figure 1 Remediation System Well Layout
- Figure 2 September 2019 Groundwater Potentiometric Map
- Figure 3 September 2019 Groundwater Analytical Results
- Table 1 Remediation System Operational Run Time
- Table 2 Extracted Air VOC Data - Third Quarter 2019
- Table 3 Mass Removal Vapor Phase - Third Quarter 2019
- Table 4 Fluid Recovery - Third Quarter 2019
- Table 5 MPE System Operations - Third Quarter 2019
- Table 6 Groundwater Elevation Summary
- Table 7 Groundwater Analytical Results
- Attachment 1 Laboratory Analytical Reports



## FIGURES



**WELL ID**  
**GROUNDWATER ELEVATION SURVEY DATE**  
**ELEV: GROUNDWATER ELEVATION MEASURED IN FEET**  
**ABOVE MEAN SEA LEVEL**  
**PSH: PHASE-SEPARATED HYDROCARBON THICKNESS**  
**MEASURED IN FEET**  
**NM: NOT MEASURED**  
**NP: NO PRODUCT**



#### LEGEND

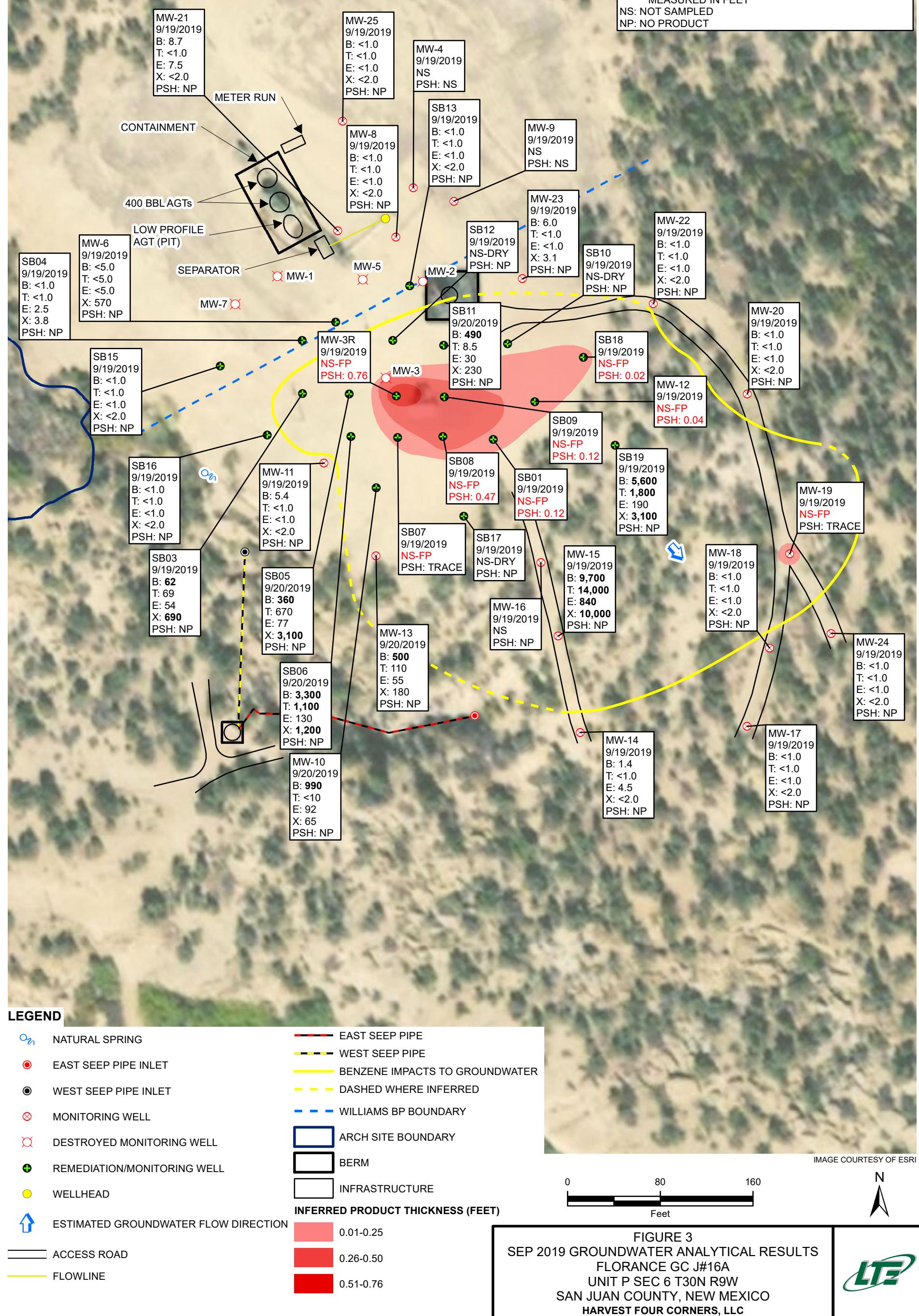
- |  |                                      |                             |  |
|--|--------------------------------------|-----------------------------|--|
|  | NATURAL SPRING                       |                             | ACCESS ROAD                            |
|  | EAST SEEP PIPE INLET                 |                             | RELATIVE GROUNDWATER ELEVATION CONTOUR |
|  | WEST SEEP PIPE INLET                 | CONTOUR INTERVAL = 2.0 FEET |  |
|  | MONITORING WELL                      |                             |  |
|  | DESTROYED MONITORING WELL            |                             | WILLIAMS BP BOUNDARY                   |
|  | REMEDIATION/MONITORING WELL          |                             | ARCH SITE BOUNDARY                     |
|  | WELLHEAD                             |                             | CONTROL BUILDING                       |
|  | ESTIMATED GROUNDWATER FLOW DIRECTION |                             | MPE SYSTEM                             |

IMAGE COURTESY OF ESRI

**FIGURE 2**  
**SEP 2019 GROUNDWATER POTENSIOMETRIC MAP**  
**FLORANCE GC J#16A**  
**UNIT P SEC 6 T30N R9W**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**



**WELL ID**  
**GROUNDWATER SURVEY DATE**  
**B: BENZENE ( $\mu\text{g/L}$ )**  
**T: TOLUENE ( $\mu\text{g/L}$ )**  
**E: ETHYLBENZENE ( $\mu\text{g/L}$ )**  
**X: TOTAL XYLENES ( $\mu\text{g/L}$ )**  
 **$\mu\text{g/L}$ : MICROGRAMS PER LITER**  
**BOLD INDICATES RESULT EXCEEDS NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD**  
**NS-FP: NOT SAMPLED DUE TO PRESENCE OF FREE PHASE HYDROCARBONS**  
**PSH: PHASE-SEPARATED HYDROCARBON THICKNESS MEASURED IN FEET**  
**NS: NOT SAMPLED**  
**NP: NO PRODUCT**



## TABLES

**TABLE 1**  
**REMEDIATION SYSTEMS OPERATIONAL RUN-TIME**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Date/Time of Reading	Blower Hour Meter Reading	Cumulative Run Time (%)	Quarterly Run Time (%)	Notes
5/4/18 9:00	42	START UP		
Earlier Data Provided in Previous Quarterly Reports				
7/3/2019 12:00	9,549	93%	94%	Online after sampling
7/12/2019 10:40	9,732	93%	100%	Start of Q3, 2019
8/2/2019 10:15	10,236	93%	100%	Monthly Gauging
8/16/2019 10:15	10,572	94%	100%	
8/29/2019 11:15	10,884	94%	100%	Monthly Gauging
9/20/2019 0:00	11,347	94%	97%	Quarterly GW Monitoring for Q3 2019
<b>Average Q3 2019 Run Time</b>			97%	

**Notes:**

% - percent

Dashed line indicates quarter change

**TABLE 2**  
**EXTRACTED AIR VOC DATA - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Collection Date:	7/12/2019	8/2/2019	8/16/2019	8/29/2019
Collection Time:	12:30	13:00	13:00	14:00
Active Remediation Zone:	4	1	2	3
Benzene (µg/L)	2.7	0.72	2.2	0.63
Toluene (µg/L)	9.7	1.8	5.6	1.6
Ethylbenzene (µg/L)	1.5	1.3	0.87	<0.50
Xylenes, Total (µg/L)	28	5.6	6.9	29
Gasoline Range Organics (GRO)	1,900	950	800	1,500
Total VOCs (µg/L):	41.9	9.42	15.57	31.23
PID Reading (ppm)	357	214	>15,000*	249

**Note:**

GRO - gasoline range organics

µg/L - micrograms per liter

ppm - parts per million

PID - photo-ionization detector

VOCs - volatile organic compounds

\* - PID correction factor led to anomalously high reading

**TABLE 3**  
**MASS REMOVAL VAPOR PHASE - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Date/Time	Influent VOCs (mg/m <sup>3</sup> )	Active Remediation Zone	Air Flow Rate (scfm)	Time Period (hr:min:sec)	Time Period (min)	VOC Mass Removed (lbs)	Gal Removed (@0.755 g/cm <sup>3</sup> )	Mass Removal Rate (lbs/day)	Mass Removal Rate (ton/yr)
7/3/19 0:00	54.6	3	250	971:45:00	58,305	67.1	10.6	1.7	0.3
7/12/19 12:30	41.9	4	356	228:30:00	13,710	11.7	1.9	1.2	0.2
8/2/19 13:00	9.4	1	218	504:30:00	30,270	28.1	4.5	1.3	0.2
8/16/19 13:00	15.6	2	292	336:00:00	20,160	2.6	0.4	0.2	0.0
8/29/19 14:30	31.2	3	302	313:30:00	18,810	5.3	0.8	0.4	0.1
9/20/19 13:45		4	261	527:15:00	31,635	18.6	3.0	0.8	0.2
<b>Total Quantity of Hydrocarbon VOC Removed 3rd quarter 2019</b>					66 lbs	10.5 gal		0.3 bbl	
<b>Total Quantity of Hydrocarbon VOC Removed Since Start-up May 2018</b>					2,447 lbs	478.5 gal		11.4 bbl	

**Notes:**

bbl - barrel	lbs/day - pounds per day	ton/yr - ton per year
gal - gallons	mg/m <sup>3</sup> - milligrams per cubic meter	VOCs - volatile organic compounds
g/cm <sup>3</sup> - grams per cubic centimeter	min - minute	yr - year
hr - hour	scfm - standard cubic foot per minute	Dashed line indicates a quarter change
lbs - pounds	sec - second	

**TABLE 4**  
**FLUID RECOVERY - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Date/Time	Hour Meter Reading	Flow Meter Reading (gal)	Gallons Recovered this Period	Cumulative Volume Recovered (gal)	LNAPL Thickness (ft)	LNAPL Volume (gal)	Gallons Removed From Tank (Off-Site)	Time Period (hr:min:sec)	Time Period (min)	Recovery Rate		Notes
										(gpm)	(gal/day)	
3/28/19 10:30	7,398	57,525	57,525	84,825	0.03	25		331:50:00	19,910	2.89	4161	
4/11/19 10:00	7,688	61,875	4,350	89,175	0.03	25.38		335:30:00	20,130	0.22	311	
4/26/19 10:35	8,031	63,294	1,419	90,594	---	---	6,720	360:35:00	21,635	0.07	94	2 loads removed
5/9/19 13:15	8,345	69,721	6,427	97,021	---	---		314:40:00	18,880	0.34	490	
5/23/19 11:10	8,621	71,221	1,500	98,521	---	---	3,360	333:55:00	20,035	0.07	108	1 load removed
7/3/19 11:00	9,549	86,031	14,810	113,331	---	---		983:50:00	59,030	0.25	361	Frac tank replaced with permanent 400 bbl steel recovery tank
7/12/19 10:40	9,732	88,342	2,311	115,642	---	---		215:40:00	12,940	0.18	257	
8/2/19 10:15	10,236	89,840	1,498	117,140	---	---		503:35:00	30,215	0.05	71	
8/16/19 10:15	10,572	92,311	2,471	119,611	---	---		336:00:00	20,160	0.12	177	
8/29/19 10:00	10,884	94,213	1,902	121,513	---	---	6,720	311:45:00	18,705	0.10	146	2 loads removed
9/20/19 13:45	11,347	100,546	6,333	127,846	---	---		531:45:00	31,905	0.20	286	

**Notes:**

bbl - barrel

in - inch

ft - feet

LNAPL - light non-aqueous phase liquid

gal - gallon

min - minute

gal/day - gallon per day

sec - second

gpm - gallon per minute

Dashed line indicated quarter change

hr - hour

**Total Quantity of Groundwater Removed: 127,846 Gal**

3,044 bbl

**TABLE 5**  
**MPE SYSTEM OPERATIONS - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well ID		Unit	7/12/2019	8/2/2019	8/16/2019	8/29/2019	9/20/2019
Active Zone			4	1	2	3	4
MW-06	WH Vac (Online)	inHg		27.0			
Zone 1	WH Vac (Offline)	inH2O					
	Mani Vac	inHg		17.5			
	PID	ppm		225.0			
	Flow	scfm		36.0			
SB-04	WH Vac (Online)	inHg		20.0			
Zone 1	WH Vac (Offline)	inH2O					
	Mani Vac	inHg		18.0			
	PID	ppm		440.0			
	Flow	scfm		76.0			
SB-12	WH Vac (Online)	inHg		17.5			
Zone 1	WH Vac (Offline)	inH2O					
	Mani Vac	inHg		18.0			
	PID	ppm		200.0			
	Flow	scfm		44.0			
SB-13	WH Vac (Online)	inHg		16.5			
Zone 1	WH Vac (Offline)	inH2O					
	Mani Vac	inHg		18.0			
	PID	ppm		488.0			
	Flow	scfm		62.0			

**TABLE 5**  
**MPE SYSTEM OPERATIONS - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well ID		Unit	7/12/2019	8/2/2019	8/16/2019	8/29/2019	9/20/2019
Active Zone			4	1	2	3	4
MW-12	WH Vac (Online)	inHg			14.0		
Zone 2	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			14.0		
	PID	ppm			1,106		
	Flow	scfm			58.0		
SB-01	WH Vac (Online)	inHg			14.5		
Zone 2	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			14.5		
	PID	ppm			6,733		
	Flow	scfm			52.0		
SB-10	WH Vac (Online)	inHg			14.5		
Zone 2	WH Vac (Offline)	inH2O			15.0		
	Mani Vac	inHg			15.0		
	PID	ppm			372		
	Flow	scfm			70.0		
SB-11	WH Vac (Online)	inHg			16.0		
Zone 2	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			14.0		
	PID	ppm			4,777		
	Flow	scfm			50.0		
SB-18	WH Vac (Online)	inHg			5.0		
Zone 2	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			15.0		
	PID	ppm			281.0		
	Flow	scfm			56.0		
SB-19	WH Vac (Online)	inHg			14.0		
Zone 2	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			14.5		
	PID	ppm			319.0		
	Flow	scfm			76.0		

**TABLE 5**  
**MPE SYSTEM OPERATIONS - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well ID		Unit	7/12/2019	8/2/2019	8/16/2019	8/29/2019	9/20/2019
Active Zone			4	1	2	3	4
MW-3R	WH Vac (Online)	inHg				14.0	
Zone 3	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			4.5		
	PID	ppm			154.0		
	Flow	scfm			62.0		
MW-10	WH Vac (Online)	inHg			14.5		
Zone 3	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			15.0		
	PID	ppm			118.0		
	Flow	scfm			0.0		
SB-03	WH Vac (Online)	inHg			14.0		
Zone 3	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			14.5		
	PID	ppm			96.0		
	Flow	scfm			38.0		
SB-06	WH Vac (Online)	inHg			14.5		
Zone 3	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			15.5		
	PID	ppm			12.3		
	Flow	scfm			64.0		
SB-15	WH Vac (Online)	inHg			14.0		
Zone 3	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			15.0		
	PID	ppm			31.0		
	Flow	scfm			58.0		
SB-16	WH Vac (Online)	inHg			15.0		
Zone 3	WH Vac (Offline)	inH2O					
	Mani Vac	inHg			16.0		
	PID	ppm			23.0		
	Flow	scfm			80.0		

**TABLE 5**  
**MPE SYSTEM OPERATIONS - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well ID		Unit	7/12/2019	8/2/2019	8/16/2019	8/29/2019	9/20/2019
Active Zone			4	1	2	3	4
MW-3R	WH Vac (Online)	inHg	15.0				14.0
	WH Vac (Offline)	inH2O					
	Mani Vac	inHg	15.5				7.0
	PID	ppm	112.0				112
	Flow	scfm	78.0				75
SB-05	WH Vac (Online)	inHg	15.5				
	WH Vac (Offline)	inH2O					
	Mani Vac	inHg	15.0				
	PID	ppm	92.0				
	Flow	scfm	48.0				
SB-07	WH Vac (Online)	inHg	16.0				13.5
	WH Vac (Offline)	inH2O					
	Mani Vac	inHg	15.0				13.5
	PID	ppm	75.0				86
	Flow	scfm	56.0				58
SB-08	WH Vac (Online)	inHg	16.0				13.5
	WH Vac (Offline)	inH2O					
	Mani Vac	inHg	16.0				13.5
	PID	ppm	180.0				193
	Flow	scfm	62.0				62
SB-09	WH Vac (Online)	inHg	17.0				15.0
	WH Vac (Offline)	inH2O					
	Mani Vac	inHg	16.5				14.0
	PID	ppm	325.0				333
	Flow	scfm	72.0				66
SB-17	WH Vac (Online)	inHg	18.5				
	WH Vac (Offline)	inH2O					
	Mani Vac	inHg	15.5				
	PID	ppm	42.1				
	Flow	scfm	40.0				

**TABLE 5**  
**MPE SYSTEM OPERATIONS - THIRD QUARTER 2019**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well ID	Unit	7/12/2019	8/2/2019	8/16/2019	8/29/2019	9/20/2019
Active Zone		4	1	2	3	4
<b>Well Field</b>						
Total Flow in Active Zone	scfm	356.0	218.0	292.0	302.0	261

**Notes:**

in HG - inches of mercury

inH<sub>2</sub>O - inches of water

Mani Vac - vacuum gauge reading on remediation well manifold

PID - photoionization detector

ppm - parts per million

scfm - standard cubic feet per minute

% - percent

WH Vac - vacuum gauge reading on remediation well head

\*\*\* The flow sensor at the MS Inlet and for the dilution flow do not account for the density of the air or the water entrained, and are anticipated to read low.

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
SB01	5/20/2017	6,501.96	34.58	NP	NP	6,467.38
	6/14/2017		34.53	NP	NP	6,467.43
	6/22/2018		31.12	31.09	0.03	6,470.87
	9/17/2018		31.58	31.34	0.24	6,470.58
	12/20/2018		31.61	31.54	0.07	6,470.41
	4/8/2019		22.76	22.31	0.45	6,479.56
	6/13/2019		31.32	30.95	0.37	6,470.94
	9/19/2019		30.85	30.73	0.12	6,471.21
SB03	5/20/2017	6,495.01	24.90	NP	NP	6,470.11
	6/15/2017		24.86	NP	NP	6,470.15
	6/21/2018		23.21	22.88	0.33	6,472.06
	9/17/2018		23.34	23.19	0.15	6,471.79
	12/20/2018		23.28	NP	NP	6,471.73
	4/8/2019		23.28	23.17	0.11	6,471.81
	6/13/2019		22.42	NP	NP	6,472.59
	9/19/2019		22.49	NP	NP	6,472.52
SB04	5/20/2017	6,499.61	29.82	29.17	0.65	6,470.31
	6/15/2017		29.44	29.20	0.24	6,470.36
	6/21/2018		27.62	27.58	0.04	6,472.02
	9/17/2018		27.83	NP	NP	6,471.78
	12/20/2018		27.75	NP	NP	6,471.86
	4/8/2019		27.81	NP	NP	6,471.80
	6/13/2019		26.98	NP	NP	6,472.63
	9/19/2019		26.75	NP	NP	6,472.86
SB05	5/20/2017	6,498.76	28.27	NP	NP	6,470.49
	6/15/2017		28.24	NP	NP	6,470.52
	6/21/2018		25.47	NP	NP	6,473.29
	9/17/2018		25.65	NP	NP	6,473.11
	12/20/2018		25.05	NP	NP	6,473.71
	4/8/2019		25.52	25.46	0.06	6,473.29

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
SB05	6/13/2019	6,498.76	24.10	NP	NP	6,474.66
	9/19/2019		24.38	NP	NP	6,474.38
SB06	5/20/2017	6,496.12	27.43	NP	NP	6,468.69
	6/16/2017		27.52	NP	NP	6,468.60
	6/22/2018		24.64	NP	NP	6,471.48
	9/17/2018		25.29	25.13	0.16	6,470.95
	12/20/2018		25.16	NP	NP	6,470.96
	4/8/2019		24.81	NP	NP	6,471.31
	6/13/2019		23.81	NP	NP	6,472.31
	9/19/2019		23.98	NP	NP	6,472.14
SB07	5/20/2017	6,500.29	32.15	NP	NP	6,468.14
	6/16/2017		32.20	NP	NP	6,468.09
	6/22/2018		29.44	NP	NP	6,470.85
	9/17/2018		30.73	NP	NP	6,469.56
	12/20/2018		29.62	29.60	0.02	6,470.69
	4/8/2019		32.46	32.24	0.22	6,468.01
	6/13/2019		29.27	NP	NP	6,471.02
	9/19/2019		29.01	NP	NP	6,471.28
SB08	5/20/2017	6,502.25	34.41	NP	NP	6,467.84
	6/16/2017		34.38	NP	NP	6,467.87
	6/22/2018		30.78	NP	NP	6,471.47
	9/17/2018		31.20	NP	NP	6,471.05
	12/20/2018		29.98	NP	NP	6,472.27
	4/8/2019		31.26	31.17	0.09	6,471.06
	6/13/2019		30.53	30.49	0.04	6,471.75
	9/19/2019		30.51	30.04	0.47	6,472.12
SB09	5/20/2017	6,504.18	36.31	NP	NP	6,467.87
	6/16/2017		36.29	NP	NP	6,467.89
	6/22/2018		33.00	32.83	0.17	6,471.31
	9/17/2018		33.15	33.14	0.01	6,471.04
	12/20/2018		33.09	33.08	0.01	6,471.10

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
SB09	4/8/2019		32.46	32.24	0.22	6,471.89
	6/13/2019	6,504.18	32.79	32.71	0.08	6,471.45
	9/19/2019		32.66	32.54	0.12	6,471.61
SB10	5/20/2017		39.27	NP	NP	6,466.77
	6/16/2017		39.11	NP	NP	6,466.93
	6/21/2018		DRY	NP	NP	DRY
	9/17/2018	6,506.04	DRY	NP	NP	DRY
	12/20/2018		DRY	NP	NP	DRY
	4/8/2019		DRY	NP	NP	DRY
	6/13/2019		DRY	NP	NP	DRY
	9/19/2019		DRY	NP	NP	DRY
SB11	5/20/2017		36.15	NP	NP	6,469.46
	6/16/2017		36.09	NP	NP	6,469.52
	6/22/2018		32.17	NP	NP	6,473.44
	9/17/2018	6,505.61	32.49	NP	NP	6,473.12
	12/20/2018		32.48	NP	NP	6,473.13
	4/8/2019		32.48	NP	NP	6,473.13
	6/13/2019		32.11	NP	NP	6,473.50
	9/19/2019		31.73	NP	NP	6,473.88
SB12	5/20/2017		38.84	38.62	0.22	6,469.76
	6/16/2017		39.44	38.42	1.02	6,469.80
	6/21/2018		35.19	34.96	0.23	6,473.41
	9/17/2018	6,508.42	35.55	35.50	0.05	6,472.91
	12/20/2018		35.45	35.32	0.13	6,473.07
	4/8/2019		DRY	NP	NP	DRY
	6/13/2019		34.91	NP	NP	6,473.51
	9/19/2019		DRY	NP	NP	DRY
SB13	5/20/2017		35.26	NP	NP	6,469.63
	6/16/2017	6,504.89	35.21	NP	NP	6,469.68
	6/22/2018		34.57	NP	NP	6,470.32
	9/17/2018		34.89	NP	NP	6,470.00

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
SB13	12/20/2018	6,504.89	34.89	NP	NP	6,470.00
	4/8/2019		34.72	NP	NP	6,470.17
	6/13/2019		34.48	NP	NP	6,470.41
	9/19/2019		34.15	NP	NP	6,470.74
SB15	5/20/2017	6,494.31	24.11	NP	NP	6,470.20
	6/13/2017		24.08	NP	NP	6,470.23
	6/21/2018		21.27	NP	NP	6,473.04
	9/17/2018		DRY	NP	NP	DRY
	12/20/2018		21.75	NP	NP	6,472.56
	4/8/2019		21.52	NP	NP	6,472.79
	6/13/2019		20.57	NP	NP	6,473.74
	9/19/2019		20.78	NP	NP	6,473.53
SB16	5/20/2017	6,492.07	22.54	NP	NP	6,469.53
	6/13/2017		22.61	NP	NP	6,469.46
	6/22/2018		19.59	NP	NP	6,472.48
	9/17/2018		21.19	NP	NP	6,470.88
	12/20/2018		20.69	NP	NP	6,471.38
	4/8/2019		20.34	NP	NP	6,471.73
	6/13/2019		18.86	NP	NP	6,473.21
	9/19/2019		19.38	NP	NP	6,472.69
SB17	5/20/2017	6,492.57	24.91	NP	NP	6,467.66
	6/13/2017		24.90	NP	NP	6,467.67
	6/21/2018		DRY	NP	NP	DRY
	9/17/2018		DRY	NP	NP	DRY
	12/20/2018		DRY	NP	NP	DRY
	4/8/2019		DRY	NP	NP	DRY
	6/13/2019		DRY	NP	NP	DRY
	9/19/2019		DRY	NP	NP	DRY
SB18	5/20/2017	6,506.38	40.92	40.89	0.03	6,465.48
	6/15/2017		41.24	40.65	0.59	6,465.61
	6/22/2018		35.25	35.16	0.09	6,471.20

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
SB18	9/17/2018		36.58	36.56	0.02	6,469.81
	12/20/2018		36.91	36.50	0.41	6,469.80
	4/8/2019	6,506.38	37.01	36.74	0.27	6,469.58
	6/13/2019		37.00	36.52	0.48	6,469.76
	9/19/2019		36.52	36.50	0.02	6,469.87
SB19	5/20/2017		39.54	NP	NP	6,464.45
	6/14/2017		39.44	NP	NP	6,464.55
	6/22/2018		34.88	NP	NP	6,469.11
	9/17/2018	6,503.99	36.10	NP	NP	6,467.89
	12/20/2018		35.29	NP	NP	6,468.70
	4/8/2019		35.04	NP	NP	6,468.95
	6/13/2019		35.23	NP	NP	6,468.76
	9/19/2019		36.53	NP	NP	6,467.46
MW-3R	5/20/2017		33.86	NP	NP	6,469.00
	6/16/2017		33.88	NP	NP	6,468.98
	6/21/2018		30.76	30.53	0.23	6,472.29
	9/17/2018	6,502.86	31.21	30.92	0.29	6,471.89
	12/20/2018		31.18	30.98	0.20	6,471.84
	4/8/2019		30.97	30.88	0.09	6,471.97
	6/13/2019		32.32	32.27	0.05	6,470.58
	9/19/2019		31.07	30.31	0.76	6,472.40
MW-4*	6/15/2017	--	32.67	NP	NP	--
	6/13/2019	--	32.76	NP	NP	--
MW-6*	6/15/2017		32.95	NP	NP	--
	6/22/2018		32.58	NP	NP	--
	9/17/2018		33.00	32.88	0.12	--
	12/20/2018	--	33.00	32.98	0.02	--
	4/8/2019		32.96	NP	NP	--
	6/13/2019		32.43	NP	NP	--
	9/19/2019		32.24	NP	NP	--
MW-8*	6/15/2017	--	34.78	NP	NP	--

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-8*	6/22/2018		35.51	NP	NP	--
	9/17/2018	--	35.78	NP	NP	--
	6/13/2019		35.36	NP	NP	--
	9/19/2019		34.96	NP	NP	--
MW-9*	6/15/2017	--	35.71	NP	NP	--
	6/13/2019	--	42.57	NP	NP	--
MW-10*	6/13/2017		24.45	NP	NP	--
	6/21/2018		25.62	NP	NP	--
	9/17/2019		22.90	NP	NP	--
	12/20/2018	--	22.13	NP	NP	--
	4/8/2019		22.79	NP	NP	--
	6/13/2019		22.00	NP	NP	--
	9/19/2019		22.06	NP	NP	--
	5/20/2017		24.66	NP	NP	6,468.19
MW-11	6/13/2017		24.72	NP	NP	6,468.13
	6/21/2018		26.25	NP	NP	6,466.60
	9/17/2018	6,492.85	26.71	NP	NP	6,466.14
	12/20/2018		26.83	NP	NP	6,466.02
	4/8/2019		26.56	NP	NP	6,466.29
	6/13/2019		25.54	NP	NP	6,467.31
	9/19/2019		25.93	NP	NP	6,466.92
	5/20/2017		37.71	NP	NP	6,465.86
MW-12	6/14/2017		37.57	NP	NP	6,466.00
	6/22/2018		33.49	33.30	0.19	6,470.23
	9/17/2018	6,503.57	33.99	33.72	0.27	6,469.80
	12/20/2018		33.89	33.09	0.80	6,470.32
	4/8/2019		34.16	33.85	0.31	6,469.66
	6/13/2019		33.75	33.59	0.16	6,469.95
	9/19/2019		33.30	33.26	0.04	6,470.30
	5/20/2017	6,490.03	22.17	NP	NP	6,467.86
MW-13	6/13/2017		22.29	NP	NP	6,467.74

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-13	6/21/2018	6,490.03	23.90	NP	NP	6,466.13
	9/17/2018		24.21	NP	NP	6,465.82
	12/20/2018		24.58	NP	NP	6,465.45
	4/8/2019		23.87	NP	NP	6,466.16
	6/13/2019		23.14	NP	NP	6,466.89
	9/19/2019		23.25	NP	NP	6,466.78
MW-14	5/20/2017	6,476.22	12.90	NP	NP	6,463.32
	6/14/2017		13.24	NP	NP	6,462.98
	6/21/2018		14.51	NP	NP	6,461.71
	9/17/2018		14.84	NP	NP	6,461.38
	12/20/2018		15.08	NP	NP	6,461.14
	9/19/2019		14.38	NP	NP	6,461.84
MW-15	5/20/2017	6,478.37	14.58	NP	NP	6,463.79
	6/14/2017		14.59	NP	NP	6,463.78
	6/21/2018		15.21	NP	NP	6,463.16
	9/17/2018		15.45	NP	NP	6,462.92
	12/20/2018		15.65	NP	NP	6,462.72
	4/8/2019		15.02	15.04	0.02	6,463.36
	6/13/2019		15.01	NP	NP	6,463.36
	9/19/2019		15.17	NP	NP	6,463.20
MW-16	5/20/2017	6,487.57	21.99	NP	NP	6,465.58
	6/14/2017		22.69	NP	NP	6,464.88
	6/22/2018		22.71	NP	NP	6,464.86
	9/17/2018		23.09	NP	NP	6,464.48
	12/20/2018		DRY	NP	NP	DRY
	4/8/2019		DRY	NP	NP	DRY
	6/13/2019		DRY	NP	NP	DRY
	9/19/2019		23.08	NP	NP	6,464.49
MW-17	10/16/2017	6,483.30	25.23	NP	NP	6,458.07
	6/20/2018		22.58	NP	NP	6,460.72
	9/17/2018		21.54	NP	NP	6,461.76

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-17	12/20/2018	6,483.30	22.78	NP	NP	6,460.52
	4/8/2019		21.97	NP	NP	6,461.33
	6/13/2019		21.61	NP	NP	6,461.69
	9/19/2019		21.43	NP	NP	6,461.87
MW-18	10/16/2017	6,485.22	23.39	NP	NP	6,461.83
	6/20/2018		23.46	NP	NP	6,461.76
	9/17/2018		23.38	NP	NP	6,461.84
	12/20/2018		23.48	NP	NP	6,461.74
	4/8/2019		23.70	NP	NP	6,461.52
	6/13/2019		23.59	NP	NP	6,461.63
	9/19/2019		23.47	NP	NP	6,461.75
MW-19	10/16/2017	6,492.35	30.06	NP	NP	6,462.29
	6/20/2018		30.00	NP	NP	6,462.35
	9/17/2018		30.05	29.96	0.09	6,462.37
	12/20/2018		30.14	30.12	0.02	6,462.22
	4/8/2019		30.31	NP	NP	6,462.04
	6/13/2019		30.26	NP	NP	6,462.09
	9/19/2019		30.08	NP	NP	6,462.27
MW-20	10/16/2017	6,493.38	28.50	NP	NP	6,464.88
	6/20/2018		28.79	NP	NP	6,464.59
	9/17/2018		28.77	NP	NP	6,464.61
	12/20/2018		28.93	NP	NP	6,464.45
	4/8/2019		29.11	NP	NP	6,464.27
	6/13/2019		28.72	NP	NP	6,464.66
	9/19/2019		28.50	NP	NP	6,464.88
MW-21	10/16/2017	6,508.15	36.81	NP	NP	6,471.34
	6/22/2018		37.28	NP	NP	6,470.87
	9/17/2018		37.30	NP	NP	6,470.85
	12/20/2018		30.48	NP	NP	6,477.67
	4/8/2019		37.31	NP	NP	6,470.84
	6/13/2019		36.79	NP	NP	6,471.36

**TABLE 6**  
**GROUNDWATER ELEVATIONS SUMMARY**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-21	9/19/2019	6,508.15	36.69	NP	NP	6,471.46
MW-22	10/16/2017		29.67	NP	NP	6,467.48
	6/22/2018		30.01	NP	NP	6,467.14
	9/17/2018		30.19	NP	NP	6,466.96
	12/20/2018	6,497.15	30.46	NP	NP	6,466.69
MW-23	4/8/2019		29.98	NP	NP	6,467.17
	6/13/2019		29.58	NP	NP	6,467.57
	9/19/2019		29.74	NP	NP	6,467.41
	10/16/2017		36.80	NP	NP	6,469.15
MW-24	6/22/2018		37.35	NP	NP	6,468.60
	9/17/2018		37.58	NP	NP	6,468.37
	12/20/2018	6,505.95	37.75	NP	NP	6,468.20
	4/8/2019		37.35	NP	NP	6,468.60
MW-25	6/13/2019		37.37	NP	NP	6,468.58
	9/19/2019		36.95	NP	NP	6,469.00
	9/17/2018		29.19	NP	NP	6,461.52
	12/20/2018		29.28	NP	NP	6,461.43
MW-24	4/8/2019	6,490.71	29.44	NP	NP	6,461.27
	6/13/2019		29.44	NP	NP	6,461.27
	9/19/2019		29.33	NP	NP	6,461.38
	9/17/2018		34.61	NP	NP	6,473.04
MW-25	12/20/2018		34.69	NP	NP	6,472.96
	4/8/2019	6,507.65	34.61	NP	NP	6,473.04
	6/13/2019		34.40	NP	NP	6,473.25
	9/19/2019		34.38	NP	NP	6,473.27

**Notes:**

AMSL - above mean sea level

BTOC - below top of casing

NP - no product, no free phase hydrocarbons were observed in the well

\* - monitoring well installed by BP/Blagg Engineering, not surveyed

Groundwater elevation calculation in wells with product: (top of casing elevation - depth to water) + (product thickness \* 0.8)

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
SB01	6/14/2017	12,000	1,200	270	2,400	37	5.1	<5.0
	10/20/2017	15,000	2,600	470	4,600	56	5.1	<5.0
	6/20/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
SB03	6/15/2017	3,200	5,000	390	3,800	43	11	<5.0
	10/21/2017				NS-LNAPL			
	6/20/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
SB04	9/19/2019	62	69	54	690	NS	NS	NS
	6/15/2017				NS-LNAPL			
	10/15/2017				NS-LNAPL			
	6/20/2018				NS-LNAPL			
	9/18/2018				NS			
	12/20/2018				NS			
	4/8/2019				NS			
SB05	6/14/2019	<5.0	<5.0	19	57	NS	NS	NS
	9/19/2019	<1.0	<1.0	2.5	3.8	NS	NS	NS
	6/15/2017	16,000	16,000	310	3,600	100	21	<5.0
	10/21/2017	15,000	20,000	350	4,100	72	29	<5.0
	6/20/2018				NS			
	9/18/2018				NS			
	12/20/2018				NS			
SB06	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
	9/20/2019	360	670	77	3,100	NS	NS	NS
	6/16/2017	210	230	11	110	3.6	2.5	<5.0
SB06	10/20/2017	810	110	27	150	5.6	2.9	<5.0
	6/20/2018				NS			
	9/18/2018				NS-LNAPL			

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
SB06	12/20/2018				NS			
	4/8/2019				NS			
	6/14/2019	4,400	1,500	190	2,900	NS	NS	NS
	9/20/2019	3,330	1,100	130	1,200	NS	NS	NS
SB07	6/16/2017	14,000	15,000	670	7,600	110	12	<5.0
	10/20/2017	11,000	12,000	<500	5,000	60	10	<5.0
	6/20/2018				NS			
	9/18/2018				NS			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
	9/19/2019				NS-LNAPL			
	6/16/2017	15,000	15,000	690	7,000	110	7.7	<5.0
SB08	10/21/2017	9,500	6,900	370	4,500	64	6.3	<5.0
	6/20/2018				NS			
	9/18/2018				NS			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
	9/19/2019				NS-LNAPL			
	6/16/2017	11,000	9,700	430	3,900	78	5.2	<5.0
	10/21/2017	11,000	12,000	370	5,100	52	8.0	<5.0
SB09	6/20/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
	9/19/2019				NS-LNAPL			
	6/16/2017	11,000	9,000	590	4,300	82	2.1	<5.0
	10/20/2017				NS-LNAPL			
	6/20/2018				NS-DRY			
SB10	9/17/2018				NS-DRY			
	12/20/2018				NS-DRY			
	4/8/2019				NS-DRY			
	6/13/2019				NS-DRY			
	9/19/2019				NS-DRY			

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
SB11	6/16/2017	13,000	20,000	750	6,500	120	3.9	<5.0
	10/21/2017	5,200	6,100	<500	3,400	38	3.9	<5.0
	6/20/2018				NS			
	9/18/2019				NS			
	12/20/2018				NS			
	4/8/2019				NS			
	6/14/2019	1,200	7.1	94	760	NS	NS	NS
SB12	9/20/2019	490	8.5	30	230	NS	NS	NS
	6/16/2017				NS-LNAPL			
	10/18/2017				NS-LNAPL			
	6/20/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-DRY			
SB13	6/13/2019				NS-LNAPL			
	9/19/2019				NS-DRY			
	6/16/2017	150	86	9.3	52	3.9	<1.0	<5.0
	10/23/2017	220	<5.0	6.4	12	3.8	<1.0	<5.0
	6/22/2018	40	9.5	2.1	83	1.2	<1.0	<5.0
	9/18/2018	11	2.9	<1.0	7.1	0.26	1.1	<5.0
	12/21/2018	16	44	8	170	1.5	1.2	<5.0
SB15	4/8/2019				NS-LNAPL			
	6/14/2019	1.5	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	6/13/2017	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	10/20/2017	3.3	3.5	<1.0	2.6	<0.050	<1.0	<5.0
	6/20/2018				NS-DRY			
	9/17/2018				NS-DRY			
SB16	12/20/2018				NS-DRY			
	4/8/2019				NS-DRY			
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	6/13/2017	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	10/20/2017	20	18	1.4	17	0.21	<1.0	<5.0
	6/22/2018	13	1.1	<1.0	10	0.12	<1.0	<5.0
	9/18/2018	3.3	<1.0	<1.0	<1.5	0.078	<1.0	<5.0

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
SB16	12/20/2018	<1.0	<1.0	<1.0	2.2	0.064	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
SB17	6/13/2017	<b>11</b>	3.5	<1.0	<1.5	0.16	<1.0	<5.0
	10/20/2017				NS-DRY			
	6/20/2018				NS-DRY			
	9/18/2018				NS-DRY			
	12/20/2018				NS-DRY			
	4/8/2019				NS-DRY			
SB18	6/13/2019				NS-DRY			
	6/15/2017				NS-LNAPL			
	10/18/2017				NS-LNAPL			
	6/20/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
SB19	6/13/2019				NS-LNAPL			
	6/14/2017	<b>10,000</b>	<b>7,400</b>	330	<b>3,300</b>	50	5.0	<5.0
	10/20/2017	<b>10,000</b>	<b>6,100</b>	400	<b>3,500</b>	46	4.0	<5.0
	6/22/2018	<b>9,800</b>	<b>7,500</b>	380	<b>5,000</b>	68	5.6	<5.0
	9/19/2018	<b>6,100</b>	<b>4,700</b>	150	<b>2,900</b>	36	7.0	<5.0
	12/20/2018	<b>7,200</b>	<b>1,300</b>	270	<b>3,800</b>	33	6.9	<5.0
	4/8/2019	<b>5,600</b>	<b>4,000</b>	300	<b>4,700</b>	NS	NS	NS
	6/14/2019	<b>5,200</b>	<b>2,100</b>	250	<b>3,600</b>	NS	NS	NS
	9/20/2019	<b>5,600</b>	<b>1,800</b>	190	<b>3,100</b>	NS	NS	NS
MW-1	Destroyed during excavation/remediation activities							
MW-2	Destroyed during excavation/remediation activities							
MW-3R	6/16/2017	<b>15,000</b>	<b>14,000</b>	530	<b>5,500</b>	99	10	<5.0
	10/21/2017	<b>11,000</b>	<b>11,000</b>	460	<b>5,000</b>	84	5.8	<5.0
	6/22/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
	9/19/2019				NS-LNAPL			

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl- benzene ( $\mu\text{g}/\text{L}$ )	Xylenes, Total ( $\mu\text{g}/\text{L}$ )	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
MW-4	6/15/2017	6.6	9.5	<1.0	8.7	0.27	<1.0	<5.0
	10/23/2017	1.8	2.3	<1.0	<1.5	0.059	<1.0	<5.0
	6/22/2018	1.2	1.6	<1.0	3.0	0.073	<1.0	<5.0
	9/17/2018				Well Locked			
	12/20/2019				Well Locked			
	4/8/2019				Well Locked			
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
MW-5	9/19/2019				Well Locked			
	Destroyed during excavation/remediation activities							
	6/15/2017	9.5	17	2.3	18			
	10/23/2017	1.9	2.0	<1.0	<1.5			
	6/22/2018	89	15	150	1,600	12	4.3	<5.0
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019	<10	<10	15	830	NS	NS	NS
MW-7	6/13/2019	13	7.5	<5.0	1,100	NS	NS	NS
	9/19/2019	<5.0	<5.0	<5.0	570	NS	NS	NS
	Destroyed during excavation/remediation activities							
	6/15/2017	5.1	4.3	2.6	6.4	0.30	<1.0	<5.0
	10/23/2017	2.6	1.1	1.1	<1.5	0.19	<1.0	<5.0
	6/20/2018				Well Locked			
	9/18/2018				Well Locked			
	12/20/2018				Well Locked			
MW-8	4/8/2019				Well Locked			
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	6/15/2017	28	46	4.3	42	0.47	<1.0	<5.0
	10/23/2017	1.4	1.7	<1.0	<1.5	<0.050	<1.0	<5.0
	6/20/2018				Well Locked			
	9/18/2018				Well Locked			
	12/20/2018				Well Locked			
MW-9	4/8/2019				Well Locked			
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019				Well Locked			
	6/15/2017							
	10/23/2017							
	6/20/2018							
	9/18/2018							
	12/20/2018							
MW-10	4/8/2019							
	6/14/2017	13,000	8,800	510	2,900	66	8.1	<5.0
	10/23/2017				NS-LNAPL			

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
MW-10	6/21/2018	<b>8,600</b>	<b>2,400</b>	260	<b>2,000</b>	40	19	<5.0
	9/18/2018	<b>4,000</b>	<b>2,300</b>	140	<b>3,000</b>	31	11	<5.0
	12/20/2018	<b>960</b>	180	24	170	3.7	31	13
	4/8/2019	<b>520</b>	<5.0	14	83	NS	NS	NS
	6/14/2019	<b>420</b>	<10	19	130	NS	NS	NS
	9/20/2019	<b>990</b>	<10	92	65	NS	NS	NS
MW-11	6/13/2017	<b>36</b>	7.6	2.7	11	0.67	<1.0	<5.0
	10/20/2017	<b>28</b>	6.8	2.4	9.5	0.94	<1.0	<5.0
	6/21/2018	4.2	6.4	2.2	21	0.44	<1.0	<5.0
	9/18/2018	<1.0	<1.0	<1.0	<1.5	0.079	1.4	<5.0
	12/20/2018	1.2	10	11	34	0.24	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	5.4	<1.0	<1.0	<2.0	NS	NS	NS
	6/14/2017	<b>14,000</b>	<b>11,000</b>	460	<b>5,400</b>	75	4.6	<5.0
MW-12	10/20/2017	<b>11,000</b>	<b>9,900</b>	310	<b>4,400</b>	59	5.9	<5.0
	6/22/2018				NS-LNAPL			
	9/18/2018				NS-LNAPL			
	12/20/2018				NS-LNAPL			
	4/8/2019				NS-LNAPL			
	6/13/2019				NS-LNAPL			
	9/19/2019				NS-LNAPL			
MW-13	6/13/2017	<b>76</b>	8.0	33	27	1.6	<1.0	<5.0
	10/20/2017	<b>1,300</b>	<b>1,700</b>	150	<b>1,200</b>	10	2.8	<5.0
	6/21/2018	<b>1,300</b>	<b>810</b>	100	<b>850</b>	12	5.1	<5.0
	9/18/2018	<b>2,100</b>	120	<20	580	9.2	6.6	<5.0
	12/20/2018	<b>1,900</b>	140	150	580	7.8	5.4	<5.0
	4/8/2019	<b>2,000</b>	<20	200	480	NS	NS	NS
	6/14/2019	<b>740</b>	21	96	200	NS	NS	NS
	9/20/2019	<b>500</b>	110	55	180	NS	NS	NS
	6/14/2017	<b>11</b>	8.6	<1.0	2.9	0.088	<1.0	<5.0
MW-14	10/19/2017	<b>12</b>	<1.0	<1.0	<1.5	0.13	1.8	<5.0
	6/21/2018	<b>11</b>	<1.0	2.2	<1.5	0.29	1.9	<5.0
	9/18/2018	<b>95</b>	<1.0	5.5	<1.5	0.47	1.4	<5.0
	12/21/2018	<1.0	<1.0	1.4	<2.0	0.11	1.3	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
MW-14	6/13/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	1.4	<1.0	4.5	<2.0	NS	NS	NS
MW-15	6/14/2017	<b>11,000</b>	<b>11,000</b>	<b>840</b>	<b>5,500</b>	100	2.9	<5.0
	10/19/2017	<b>13,000</b>	<b>15,000</b>	<b>810</b>	<b>8,900</b>	100	5.2	<5.0
	6/21/2018	<b>12,000</b>	<b>14,000</b>	<b>940</b>	<b>9,200</b>	110	5.7	<5.0
	9/18/2018	<b>9,400</b>	<b>12,000</b>	660	<b>7,900</b>	93	4.4	<5.0
	12/21/2018	<b>8,000</b>	<b>10,000</b>	<b>780</b>	<b>8,400</b>	81	5.0	<5.0
	4/8/2019				NS-LNAPL			
	6/13/2019	<b>8,100</b>	<b>14,000</b>	<b>960</b>	<b>11,000</b>	NS	NS	NS
	9/19/2019	<b>9,700</b>	<b>14,000</b>	<b>840</b>	<b>10,000</b>	NS	NS	NS
MW-16	6/14/2017				NS-DRY			
	10/20/2017				NS-DRY			
	6/20/2018				NS-DRY			
	9/17/2018				NS-DRY			
	12/20/2018				NS-DRY			
	4/8/2019				NS-DRY			
	6/13/2019				NS-DRY			
	9/19/2019				Insufficient amount of water to sample			
MW-17	10/19/2017	<1.0	1.4	<1.0	2.2	<0.050	3.1	<5.0
	6/20/2018	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	9/17/2018	<1.0	<1.0	<1.0	<1.5	0.063	<1.0	<5.0
	12/21/2018	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/13/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	10/19/2017	1.1	1.5	<1.0	1.7	0.11	2.8	<5.0
MW-18	6/20/2018	<1.0	<1.0	<1.0	<1.5	0.26	3.0	<5.0
	9/17/2018	<1.0	<1.0	<1.0	<1.5	0.19	1.4	<5.0
	12/21/2018	<1.0	<1.0	<1.0	<2.0	0.094	1.1	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/13/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	10/18/2017	<b>500</b>	<1.0	<1.0	1.7	1.1	<1.0	<5.0
	6/20/2018	<b>1,400</b>	3.0	1.3	70	2.9	<1.0	<5.0
MW-19	9/19/2018	<b>1,100</b>	<b>1,600</b>	590	<b>6,100</b>	7.0	8.5	<5.0
	12/20/2018				NS-LNAPL			

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes, Total (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
MW-19	4/8/2019	1,400	950	490	5,100	NS	NS	NS
	6/13/2019	740	520	240	3,400	NS	NS	NS
	9/19/2019				NS-LNAPL			
MW-20	10/18/2017	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	6/20/2018	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	9/17/2018	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	12/21/2018	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/13/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
MW-21	10/18/2017	940	340	180	2,000	7.8	2.5	<5.0
	6/22/2018	660	120	89	540	5.2	2.7	<5.0
	9/19/2018	320	28	120	110	3.0	2.7	<5.0
	12/21/2018	75	<1.0	52	14	0.6	1.3	<5.0
	4/8/2019	5.2	<1.0	2.7	5.3	NS	NS	NS
	6/14/2019	2.6	<1.0	5.5	2.6	NS	NS	NS
	9/19/2019	8.7	<1.0	7.5	<2.0	NS	NS	NS
MW-22	10/18/2017	6.1	5.5	<1.0	6.4	0.14	<1.0	<5.0
	6/22/2018	<1.0	<1.0	<1.0	<1.5	0.057	<1.0	<5.0
	9/17/2018	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	12/21/2018	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/13/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
MW-23	10/18/2017	<5.0	<5.0	<5.0	<7.5	<0.25	1.6	<5.0
	6/22/2018	<1.0	<1.0	<1.0	<1.5	0.093	<1.0	<5.0
	9/17/2018	44	<1.0	<1.0	<1.5	0.17	1.0	<5.0
	12/20/2018	65	<1.0	<1.0	<2.0	0.13	<1.0	<5.0
	4/8/2019	30	<1.0	<1.0	<1.5	NS	NS	NS
	6/23/2019				NS-DRY			
	9/19/2019	6.0	<1.0	<1.0	3.1	NS	NS	NS
MW-24	9/17/2018	<1.0	<1.0	<1.0	<1.5	0.14	<1.0	<5.0
	12/21/2018	<1.0	<1.0	<1.0	<2.0	0.07	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/13/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS

**TABLE 7**  
**GROUNDWATER ANALYTICAL RESULTS**

**FLORANCE GCJ #16A**  
**SAN JUAN COUNTY, NEW MEXICO**  
**HARVEST FOUR CORNERS, LLC**

Well Name	Sample Date	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl- benzene ( $\mu\text{g}/\text{L}$ )	Xylenes, Total ( $\mu\text{g}/\text{L}$ )	TPH-GRO (mg/L)	TPH-DRO (mg/L)	TPH-MRO (mg/L)
MW-25	9/19/2018	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
	12/21/2018	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
	4/8/2019	<1.0	<1.0	<1.0	<1.5	NS	NS	NS
	6/14/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
	9/19/2019	<1.0	<1.0	<1.0	<2.0	NS	NS	NS
NMWQCC Standard		10	750	750	620	NE	NE	NE

Notes:

DRO - diesel range organics

GRO - gasoline range organics

LNAPL - light non-aqueous phase liquid

$\mu\text{g}/\text{L}$  - microgram per liter

mg/L - milligram per liter

MRO - motor oil range organics

NE - not established

NMWQCC - New Mexico Water Quality Control Commission

NS - not sampled

NS-DRY - not sampled, well was dry or insufficient water to collect sample

NS-LNAPL - not sampled due to presence of LNAPL in well

< - indicates result is below laboratory reporting limit

**BOLD** indicates result exceeds applicable standard

\* - Standard is for Total Metals, not dissolved. Ferrous

**ATTACHMENT 1: LABORATORY ANALYTICAL REPORTS**





*Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)*

July 18, 2019

Danny Burns  
Harvest  
1755 Arroyo Dr.  
Bloomfield, NM 87413  
TEL: (505) 632-4475  
FAX

RE: Florance OrderNo.: 1907660

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/13/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907660

Date Reported: 7/18/2019

**CLIENT:** Harvest

**Client Sample ID:** Zone 4 Influent

**Project:** Florence

**Collection Date:** 7/12/2019 12:30:00 PM

**Lab ID:** 1907660-001

**Matrix:** AQUEOUS

**Received Date:** 7/13/2019 8:30:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Batch</b>
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	1900	25		µg/L	5	7/17/2019 9:40:04 AM	G61441
Surr: BFB	545	53-256	S	%Rec	5	7/17/2019 9:40:04 AM	G61441
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	2.7	0.50		µg/L	5	7/17/2019 9:40:04 AM	B61441
Toluene	9.7	0.50		µg/L	5	7/17/2019 9:40:04 AM	B61441
Ethylbenzene	1.5	0.50		µg/L	5	7/17/2019 9:40:04 AM	B61441
Xylenes, Total	28	1.0		µg/L	5	7/17/2019 9:40:04 AM	B61441
Surr: 4-Bromofluorobenzene	122	81.6-133		%Rec	5	7/17/2019 9:40:04 AM	B61441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1907660

18-Jul-19

**Client:** Harvest  
**Project:** Florence

Sample ID: 1907660-001ADUP	SampType: DUP	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Zone 4 Influent	Batch ID: G61441	RunNo: 61441								
Prep Date:	Analysis Date: 7/17/2019	SeqNo: 2083124 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1800	25						2.68	20	
Surr: BFB	53000		10000		530	53	256	0	0	S

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1907660

18-Jul-19

**Client:** Harvest  
**Project:** Florence

Sample ID: <b>1907660-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>Zone 4 Influent</b>	Batch ID: <b>B61441</b>	RunNo: <b>61441</b>								
Prep Date:	Analysis Date: <b>7/17/2019</b>	SeqNo: <b>2083149</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.6	0.50						1.90	20	
Toluene	9.5	0.50						1.28	20	
Ethylbenzene	1.5	0.50						3.23	20	
Xylenes, Total	27	1.0						2.87	20	
Surr: 4-Bromofluorobenzene	12		10.00			121	81.6	133	0	0

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

## Sample Log-In Check List

Client Name: Harvest

Work Order Number: 1907660

RcptNo: 1

Received By: Isaiah Ortiz 7/13/2019 8:30:00 AM *I.O.*

Completed By: Yazmine Garduno 7/15/2019 9:37:40 AM *Yazmine Garduno*

Reviewed By: SB 7/15/19

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C? Yes  No  NA   
Not required
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: <2 or >12 unless noted)
Adjusted?
Checked by: <i>DAD 7/15/19</i>

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	Date:
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 08, 2019

Monica Sandoval

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Florence GC J 16A

OrderNo.: 1908202

Dear Monica Sandoval:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/3/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1908202

Date Reported: 8/8/2019

**CLIENT:** Harvest

**Project:** Florance GC J 16A

**Lab ID:** 1908202-001

**Matrix:** AIR

**Client Sample ID:** Zone 1 Influent

**Collection Date:** 8/2/2019 1:00:00 PM

**Received Date:** 8/3/2019 9:30:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Batch</b>
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	950	25		µg/L	5	8/7/2019 12:36:12 PM	B61961
Surr: BFB	304	53-256	S	%Rec	5	8/7/2019 12:36:12 PM	B61961
<b>EPA METHOD 8021B: VOLATILES</b>							
Methyl tert-butyl ether (MTBE)	ND	1.2		µg/L	5	8/7/2019 12:36:12 PM	D61961
Benzene	0.72	0.50		µg/L	5	8/7/2019 12:36:12 PM	D61961
Toluene	1.8	0.50		µg/L	5	8/7/2019 12:36:12 PM	D61961
Ethylbenzene	1.3	0.50		µg/L	5	8/7/2019 12:36:12 PM	D61961
Xylenes, Total	5.6	1.0		µg/L	5	8/7/2019 12:36:12 PM	D61961
Surr: 4-Bromofluorobenzene	99.6	81.6-133		%Rec	5	8/7/2019 12:36:12 PM	D61961

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908202

08-Aug-19

**Client:** Harvest  
**Project:** Florance GC J 16A

Sample ID: <b>1908202-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>Zone 1 Influent</b>	Batch ID: <b>B61961</b>	RunNo: <b>61961</b>								
Prep Date:	Analysis Date:	<b>8/7/2019</b> SeqNo: <b>2101889</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	980	25						3.29	20	
Surr: BFB	31000		10000		309	53	256	0	0	S

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1908202

08-Aug-19

**Client:** Harvest  
**Project:** Florance GC J 16A

Sample ID: 1908202-001ADUP		SampType: DUP		TestCode: EPA Method 8021B: Volatiles						
Client ID: Zone 1 Influent		Batch ID: D61961		RunNo: 61961						
Prep Date:		Analysis Date: 8/7/2019		SeqNo: 2101927		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.2						0	20	
Benzene	0.72	0.50						0.695	20	
Toluene	1.8	0.50						0.0568	20	
Ethylbenzene	1.3	0.50						1.50	20	
Xylenes, Total	5.4	1.0						3.30	20	
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	81.6	133	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

## Sample Log-In Check List

Client Name: Harvest      Work Order Number: 1908202      RcptNo: 1

Received By: Erin Melendrez      8/3/2019 9:30:00 AM

*UML*

Completed By: Isaiah Ortiz      8/5/2019 3:28:08 PM

*Isaiah*

Reviewed By: LB      8/5/19

### Chain of Custody

1. Is Chain of Custody complete?      Yes       No       Not Present

2. How was the sample delivered?      Courier

### Log In

3. Was an attempt made to cool the samples?      Yes       No       NA

4. Were all samples received at a temperature of >0° C to 6.0° C      Yes       No       NA

5. Sample(s) in proper container(s)?      Yes       No

6. Sufficient sample volume for indicated test(s)?      Yes       No

7. Are samples (except VOA and ONG) properly preserved?      Yes       No

8. Was preservative added to bottles?      Yes       No       NA

9. VOA vials have zero headspace?      Yes       No       No VOA Vials

10. Were any sample containers received broken?      Yes       No

# of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted: _____
Checked by: <i>ENM8/5/19</i>

11. Does paperwork match bottle labels?

(Note discrepancies on chain of custody)

Yes       No

No

12. Are matrices correctly identified on Chain of Custody?

Yes

13. Is it clear what analyses were requested?

Yes

14. Were all holding times able to be met?

Yes

(If no, notify customer for authorization.)

No

No

No

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order?      Yes       No       NA

Person Notified:	Date:
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

16. Additional remarks:

17. Cooler Information

Cooler No:	Temp °C:	Condition:	Seal Intact:	Seal No:	Seal Date:	Signed By:
1	NA	Good	Yes			

## Chain-of-Custody Record

Client: **Harvest Four Corners**  
**Monica Sandoval**  
Mailing Address:  
Phone #: **920 - 363 - 1046**

email or Fax#: **monica.sandoval@harvestmidstream.com**  
QA/QC Package:  
 Standard       Level 4 (Full Validation)

Accreditation:     Az Compliance  
 NELAC

EDD (Type) **PDF**  
 EDD (Type) **PDF**

Office: **Eric Carroll**  
 Yes       No

# of Coolers: **1**  
Cooler Temp (including CF): **N/A**

Container Type and #  
Preservative Type  
HEAL No.  
**Q280**

Date Time Matrix Sample Name  
**8/21/19 13:00 Air Zone 1 influent**

21ed (ar) non i -oo i

Turn-Around Time:

Standard       Rush

Project Name:

**Florane & C JKMA**

Project #:

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975      Fax 505-345-4107

### Analysis Request

			Total Coliform (Present/Absent)
			8270 (Semi-VOA)
			8260 (VOA)
			RCRA 8 Metals
			PAHs by 8310 or 8270SIMS
			EDB (Method 504.1)
			8081 Pesticides/8082 PCB's
			TPH:8015D(GRO / DRO / MRO)
			BTEx / MTBE / TMBs (8021)

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

Received by: **Eric Carroll**      Via: **Mail**      Date: **8/21/19**      Time: **1444**  
Received by: **Eric Carroll**      Via: **Carrier**      Date: **8/31/19**      Time: **0930**  
*E. Carroll*      *Eric Carroll*  
*8/21/19 1445*      *8/31/19 0930*  
*8/21/19 1810*      *8/31/19 0930*  
*Monty Marks*      *Monty Marks*



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 22, 2019

Danny Burns  
Harvest  
1755 Arroyo Dr.  
Bloomfield, NM 87413  
TEL: (505) 632-4475  
FAX

RE: Florance GC J 16A

OrderNo.: 1908975

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/17/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1908975

Date Reported: 8/22/2019

CLIENT: Harvest

Project: Florance GC J 16A

Lab ID: 1908975-001

Matrix: AIR

Client Sample ID: Zone 2 Influent

Collection Date: 8/16/2019 1:00:00 PM

Received Date: 8/17/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	800	50		µg/L	10	8/21/2019 10:24:16 AM	G62309
Surr: BFB	130	53-256		%Rec	10	8/21/2019 10:24:16 AM	G62309
<b>EPA METHOD 8021B: VOLATILES</b>							
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	10	8/21/2019 10:24:16 AM	B62309
Benzene	2.2	1.0		µg/L	10	8/21/2019 10:24:16 AM	B62309
Toluene	5.6	1.0		µg/L	10	8/21/2019 10:24:16 AM	B62309
Ethylbenzene	0.87	0.50		µg/L	10	8/21/2019 10:24:16 AM	B62309
Xylenes, Total	6.9	2.0		µg/L	10	8/21/2019 10:24:16 AM	B62309
Surr: 4-Bromofluorobenzene	92.7	81.6-133		%Rec	10	8/21/2019 10:24:16 AM	B62309

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1908975

22-Aug-19

**Client:** Harvest  
**Project:** Florance GC J 16A

Sample ID: 1908975-001ADUP	SampType: DUP	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Zone 2 Influent	Batch ID: G62309	RunNo: 62309								
Prep Date:	Analysis Date: 8/21/2019	SeqNo: 2117308 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	740	50						8.57	20	
Surr: BFB	25000		20000		126	53	256	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908975

22-Aug-19

**Client:** Harvest  
**Project:** Florance GC J 16A

Sample ID: 1908975-001ADUP		SampType: DUP		TestCode: EPA Method 8021B: Volatiles						
Client ID: Zone 2 Influent		Batch ID: B62309		RunNo: 62309						
Prep Date:		Analysis Date: 8/21/2019		SeqNo: 2117348		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5						0	20	
Benzene	2.0	1.0						9.90	20	
Toluene	5.1	1.0						9.93	20	
Ethylbenzene	0.79	0.50						9.18	20	
Xylenes, Total	6.2	2.0						11.1	20	
Surr: 4-Bromofluorobenzene	18		20.00		89.7	81.6	133	0	0	

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

## Sample Log-In Check List

Client Name: Harvest

Work Order Number: 1908975

ReptNo: 1

Received By: Isaiah Ortiz 8/17/2019 8:40:00 AM

*In Ok*

Completed By: Yazmine Garduno 8/19/2019 9:53:48 AM

*Yazmine Garduno*

Reviewed By: *MJ* 08/19/19

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0°C to 6.0°C Yes  No  NA

Not required

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody)  
Yes  No

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH:	<u>&lt;2 or &gt;12 unless noted)</u>	
Adjusted? _____		
Checked by: <u>DAD 8/19/19</u>		

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	Date
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good				





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

September 09, 2019

Monica Sandoval

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Florence GC J 16A

OrderNo.: 1908I19

Dear Monica Sandoval:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/30/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1908I19

Date Reported: 9/9/2019

**CLIENT:** Harvest

**Project:** Florance GC J 16A

**Lab ID:** 1908I19-001

**Matrix:** AIR

**Client Sample ID:** Zone 3 influent

**Collection Date:** 8/29/2019 2:30:00 PM

**Received Date:** 8/30/2019 8:00:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Batch</b>
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	1500	25		µg/L	5	9/6/2019 9:33:00 AM	G62709
Surr: BFB	778	53-256	S	%Rec	5	9/6/2019 9:33:00 AM	G62709
<b>EPA METHOD 8021B: VOLATILES</b>							
Methyl tert-butyl ether (MTBE)	ND	1.2		µg/L	5	9/6/2019 9:33:00 AM	B62709
Benzene	0.63	0.50		µg/L	5	9/6/2019 9:33:00 AM	B62709
Toluene	1.6	0.50		µg/L	5	9/6/2019 9:33:00 AM	B62709
Ethylbenzene	ND	0.50		µg/L	5	9/6/2019 9:33:00 AM	B62709
Xylenes, Total	29	1.0		µg/L	5	9/6/2019 9:33:00 AM	B62709
Surr: 4-Bromofluorobenzene	107	81.6-133		%Rec	5	9/6/2019 9:33:00 AM	B62709

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1908I19

09-Sep-19

**Client:** Harvest  
**Project:** Florance GC J 16A

Sample ID: <b>1908I19-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>
Client ID: <b>Zone 3 influent</b>	Batch ID: <b>G62709</b>	RunNo: <b>62709</b>
Prep Date: <b></b>	Analysis Date: <b>9/6/2019</b>	SeqNo: <b>2136739</b> Units: <b>µg/L</b>
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	1600	25 10000 791 53 256 7.22 20
Surr: BFB	79000	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1908I19

09-Sep-19

**Client:** Harvest  
**Project:** Florance GC J 16A

Sample ID: 1908I19-001ADUP		SampType: DUP		TestCode: EPA Method 8021B: Volatiles						
Client ID: Zone 3 influent		Batch ID: B62709		RunNo: 62709						
Prep Date:		Analysis Date: 9/6/2019		SeqNo: 2136752		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.2						0	20	
Benzene	0.66	0.50						4.80	20	
Toluene	1.7	0.50						9.01	20	
Ethylbenzene	ND	0.50						0	20	
Xylenes, Total	29	1.0						0.166	20	
Surr: 4-Bromofluorobenzene	11		10.00		108	81.6	133	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

## Sample Log-In Check List

Client Name: Harvest Work Order Number: 1908199 RcptNo: 1

Received By: Anne Thorne 8/30/2019 8:00:00 AM

*Anne Thorne*

Completed By: Anne Thorne 8/30/2019 9:00:11 AM

*Anne Thorne*

Reviewed By: *TO* 8/30/19

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody)

Yes  No

# of preserved  
bottles checked  
for pH:  
<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met?

(If no, notify customer for authorization.)

No

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	Date
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

16. Additional remarks:

17. Cooler Information

## Chain-of-Custody Record

Client:	Harvest Four Corners			<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush	Turn-Around Time:			
Mailing Address:	1755 Astro 0 Drive Bloomfield, NM 87413			Project Name:	Florence GC J 16A			Project #:	
Phone #:				QA/QC Package:	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			Project Manager:	Danny Burns - LTE
email or Fax#:	monica.sandoval@harvestfourcorners.com			Accreditation:	<input type="checkbox"/> Az Compliance	<input type="checkbox"/> NELAC	<input type="checkbox"/> Other	Sampler:	Eric Corral
				EDD (Type)	<input checked="" type="checkbox"/> PPF	<input type="checkbox"/> Yes	<input type="checkbox"/> No	On Ice:	
			# of Coolers:			Cooler Temp (including CF):			H.1.6.0.5(CF = L.1.)
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	Preservative Type	HEAL No.	Remarks:	
8/29/09 14:30	Air	zone 3 influent	27edor	none		CO1	XX		
Date:	Time:	Relinquished by:	Received by:	Via:	Date:	Time:	Remarks:		
8/29/09 15:25	1752	Elli Cazier	Mark West	8/29/09 1525					
Date:	Time:	Relinquished by:	Received by:	Via:	Date:	Time:			
8/29/09 17:52		Monica Wallace	Johnathan Wallace	DOB 2019					

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

September 30, 2019

Kijun Hong  
Harvest  
1755 Arroyo Dr.  
Bloomfield, NM 87413  
TEL: (505) 632-4475  
FAX:

RE: Florance GCJ 16A

OrderNo.: 1909B70

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 24 sample(s) on 9/21/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-001 **Collection Date:** 9/19/2019 3:15:00 PM

**Client Sample ID:** MW-6 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	5.0		µg/L	5	9/25/2019 10:02:18 AM	B63198
Toluene	ND	5.0		µg/L	5	9/25/2019 10:02:18 AM	B63198
Ethylbenzene	ND	5.0		µg/L	5	9/25/2019 10:02:18 AM	B63198
Xylenes, Total	570	10		µg/L	5	9/25/2019 10:02:18 AM	B63198
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	5	9/25/2019 10:02:18 AM	B63198

**Lab ID:** 1909B70-002 **Collection Date:** 9/19/2019 1:10:00 PM

**Client Sample ID:** MW-8 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 2:49:33 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 2:49:33 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 2:49:33 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 2:49:33 PM	B63198
Surr: 4-Bromofluorobenzene	96.9	80-120		%Rec	1	9/25/2019 2:49:33 PM	B63198

**Lab ID:** 1909B70-003 **Collection Date:** 9/19/2019 2:41:00 PM

**Client Sample ID:** MW-11 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	5.4	1.0		µg/L	1	9/25/2019 3:13:03 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 3:13:03 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 3:13:03 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 3:13:03 PM	B63198
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	9/25/2019 3:13:03 PM	B63198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-004 **Collection Date:** 9/19/2019 1:30:00 PM

**Client Sample ID:** MW-14 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	1.4	1.0		µg/L	1	9/25/2019 3:36:31 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 3:36:31 PM	B63198
Ethylbenzene	4.5	1.0		µg/L	1	9/25/2019 3:36:31 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 3:36:31 PM	B63198
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	1	9/25/2019 3:36:31 PM	B63198

**Lab ID:** 1909B70-005 **Collection Date:** 9/19/2019 1:40:00 PM

**Client Sample ID:** MW-15 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	9700	200		µg/L	200	9/25/2019 3:59:59 PM	B63198
Toluene	14000	200		µg/L	200	9/25/2019 3:59:59 PM	B63198
Ethylbenzene	840	200		µg/L	200	9/25/2019 3:59:59 PM	B63198
Xylenes, Total	10000	400		µg/L	200	9/25/2019 3:59:59 PM	B63198
Surr: 4-Bromofluorobenzene	97.3	80-120		%Rec	200	9/25/2019 3:59:59 PM	B63198

**Lab ID:** 1909B70-006 **Collection Date:** 9/19/2019 11:10:00 AM

**Client Sample ID:** MW-17 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 4:23:26 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 4:23:26 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 4:23:26 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 4:23:26 PM	B63198
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	9/25/2019 4:23:26 PM	B63198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-007 **Collection Date:** 9/19/2019 11:30:00 AM

**Client Sample ID:** MW-18 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 4:47:05 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 4:47:05 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 4:47:05 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 4:47:05 PM	B63198
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	9/25/2019 4:47:05 PM	B63198

**Lab ID:** 1909B70-008 **Collection Date:** 9/19/2019 11:45:00 AM

**Client Sample ID:** MW-20 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 5:10:29 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 5:10:29 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 5:10:29 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 5:10:29 PM	B63198
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	9/25/2019 5:10:29 PM	B63198

**Lab ID:** 1909B70-009 **Collection Date:** 9/19/2019 12:45:00 PM

**Client Sample ID:** MW-21 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	8.7	1.0		µg/L	1	9/25/2019 5:33:53 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 5:33:53 PM	B63198
Ethylbenzene	7.5	1.0		µg/L	1	9/25/2019 5:33:53 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 5:33:53 PM	B63198
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/25/2019 5:33:53 PM	B63198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-010 **Collection Date:** 9/19/2019 12:05:00 PM

**Client Sample ID:** MW-22 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 5:57:16 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 5:57:16 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 5:57:16 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 5:57:16 PM	B63198
Surr: 4-Bromofluorobenzene	92.2	80-120	%Rec		1	9/25/2019 5:57:16 PM	B63198

**Lab ID:** 1909B70-011 **Collection Date:** 9/19/2019 12:20:00 PM

**Client Sample ID:** MW-23 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	6.0	1.0		µg/L	1	9/25/2019 7:31:43 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 7:31:43 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 7:31:43 PM	B63198
Xylenes, Total	3.1	2.0		µg/L	1	9/25/2019 7:31:43 PM	B63198
Surr: 4-Bromofluorobenzene	109	80-120	%Rec		1	9/25/2019 7:31:43 PM	B63198

**Lab ID:** 1909B70-012 **Collection Date:** 9/19/2019 11:40:00 AM

**Client Sample ID:** MW-24 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 7:55:10 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 7:55:10 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 7:55:10 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 7:55:10 PM	B63198
Surr: 4-Bromofluorobenzene	127	80-120	S	%Rec	1	9/25/2019 7:55:10 PM	B63198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-013 **Collection Date:** 9/19/2019 12:35:00 PM

**Client Sample ID:** MW-25 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 8:18:37 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 8:18:37 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 8:18:37 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 8:18:37 PM	B63198
Surr: 4-Bromofluorobenzene	90.2	80-120	%Rec		1	9/25/2019 8:18:37 PM	B63198

**Lab ID:** 1909B70-014 **Collection Date:** 9/19/2019 2:35:00 PM

**Client Sample ID:** SB-03 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	62	50		µg/L	50	9/25/2019 8:42:17 PM	B63198
Toluene	69	50		µg/L	50	9/25/2019 8:42:17 PM	B63198
Ethylbenzene	54	50		µg/L	50	9/25/2019 8:42:17 PM	B63198
Xylenes, Total	690	100		µg/L	50	9/25/2019 8:42:17 PM	B63198
Surr: 4-Bromofluorobenzene	95.4	80-120	%Rec		50	9/25/2019 8:42:17 PM	B63198

**Lab ID:** 1909B70-015 **Collection Date:** 9/19/2019 3:10:00 PM

**Client Sample ID:** SB-04 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 9:29:22 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 9:29:22 PM	B63198
Ethylbenzene	2.5	1.0		µg/L	1	9/25/2019 9:29:22 PM	B63198
Xylenes, Total	3.8	2.0		µg/L	1	9/25/2019 9:29:22 PM	B63198
Surr: 4-Bromofluorobenzene	103	80-120	%Rec		1	9/25/2019 9:29:22 PM	B63198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-016 **Collection Date:** 9/19/2019 1:00:00 PM

**Client Sample ID:** SB-13 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 10:16:29 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 10:16:29 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 10:16:29 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 10:16:29 PM	B63198
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	9/25/2019 10:16:29 PM	B63198

**Lab ID:** 1909B70-017 **Collection Date:** 9/19/2019 2:05:00 PM

**Client Sample ID:** SB-15 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 10:40:14 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 10:40:14 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 10:40:14 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 10:40:14 PM	B63198
Surr: 4-Bromofluorobenzene	97.6	80-120		%Rec	1	9/25/2019 10:40:14 PM	B63198

**Lab ID:** 1909B70-018 **Collection Date:** 9/19/2019 1:10:00 PM

**Client Sample ID:** SB-16 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/25/2019 11:04:12 PM	B63198
Toluene	ND	1.0		µg/L	1	9/25/2019 11:04:12 PM	B63198
Ethylbenzene	ND	1.0		µg/L	1	9/25/2019 11:04:12 PM	B63198
Xylenes, Total	ND	2.0		µg/L	1	9/25/2019 11:04:12 PM	B63198
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	9/25/2019 11:04:12 PM	B63198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-019 **Collection Date:** 9/20/2019 12:45:00 PM

**Client Sample ID:** MW-10 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID	Analyst: NSB
<b>EPA METHOD 8021B: VOLATILES</b>								
Benzene	990	10		µg/L	10	9/25/2019 11:27:58 PM	B63198	
Toluene	ND	10		µg/L	10	9/25/2019 11:27:58 PM	B63198	
Ethylbenzene	92	10		µg/L	10	9/25/2019 11:27:58 PM	B63198	
Xylenes, Total	65	20		µg/L	10	9/25/2019 11:27:58 PM	B63198	
Surr: 4-Bromofluorobenzene	98.3	80-120	%Rec		10	9/25/2019 11:27:58 PM	B63198	

**Lab ID:** 1909B70-020 **Collection Date:** 9/20/2019 11:45:00 AM

**Client Sample ID:** MW-13 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID	Analyst: NSB
<b>EPA METHOD 8021B: VOLATILES</b>								
Benzene	500	5.0		µg/L	5	9/25/2019 11:51:51 PM	B63198	
Toluene	110	5.0		µg/L	5	9/25/2019 11:51:51 PM	B63198	
Ethylbenzene	55	5.0		µg/L	5	9/25/2019 11:51:51 PM	B63198	
Xylenes, Total	180	10		µg/L	5	9/25/2019 11:51:51 PM	B63198	
Surr: 4-Bromofluorobenzene	105	80-120	%Rec		5	9/25/2019 11:51:51 PM	B63198	

**Lab ID:** 1909B70-021 **Collection Date:** 9/20/2019 11:40:00 AM

**Client Sample ID:** SB-05 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID	Analyst: NSB
<b>EPA METHOD 8021B: VOLATILES</b>								
Benzene	360	50		µg/L	50	9/26/2019 10:46:37 AM	B63237	
Toluene	670	50		µg/L	50	9/26/2019 10:46:37 AM	B63237	
Ethylbenzene	77	50		µg/L	50	9/26/2019 10:46:37 AM	B63237	
Xylenes, Total	3100	100		µg/L	50	9/26/2019 10:46:37 AM	B63237	
Surr: 4-Bromofluorobenzene	107	80-120	%Rec		50	9/26/2019 10:46:37 AM	B63237	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1909B70

Date Reported: 9/30/2019

<b>CLIENT:</b>	Harvest	<b>Lab Order:</b>	1909B70
<b>Project:</b>	Florance GCJ 16A		

**Lab ID:** 1909B70-022 **Collection Date:** 9/20/2019 12:10:00 PM

**Client Sample ID:** SB-06 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	3300	50		µg/L	50	9/26/2019 12:18:17 PM	B63237
Toluene	1100	50		µg/L	50	9/26/2019 12:18:17 PM	B63237
Ethylbenzene	130	50		µg/L	50	9/26/2019 12:18:17 PM	B63237
Xylenes, Total	1200	100		µg/L	50	9/26/2019 12:18:17 PM	B63237
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	50	9/26/2019 12:18:17 PM	B63237

**Lab ID:** 1909B70-023 **Collection Date:** 9/20/2019 12:05:00 PM

**Client Sample ID:** SB-11 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	490	20		µg/L	20	9/26/2019 1:27:14 PM	B63237
Toluene	8.5	5.0		µg/L	5	9/26/2019 1:50:09 PM	B63237
Ethylbenzene	30	5.0		µg/L	5	9/26/2019 1:50:09 PM	B63237
Xylenes, Total	230	10		µg/L	5	9/26/2019 1:50:09 PM	B63237
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	5	9/26/2019 1:50:09 PM	B63237

**Lab ID:** 1909B70-024 **Collection Date:** 9/20/2019 12:25:00 PM

**Client Sample ID:** SB-19 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	5600	100		µg/L	100	9/26/2019 2:36:03 PM	B63237
Toluene	1800	100		µg/L	100	9/26/2019 2:36:03 PM	B63237
Ethylbenzene	190	100		µg/L	100	9/26/2019 2:36:03 PM	B63237
Xylenes, Total	3100	200		µg/L	100	9/26/2019 2:36:03 PM	B63237
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	100	9/26/2019 2:36:03 PM	B63237

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1909B70

30-Sep-19

**Client:** Harvest  
**Project:** Florence GCJ 16A

Sample ID: <b>RB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBW</b>	Batch ID: <b>B63198</b>	RunNo: <b>63198</b>								
Prep Date:	Analysis Date: <b>9/25/2019</b>	SeqNo: <b>2156043</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		96.6	80	120			

Sample ID: <b>100NG BTEX LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>B63198</b>	RunNo: <b>63198</b>								
Prep Date:	Analysis Date: <b>9/25/2019</b>	SeqNo: <b>2156044</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	64	2.0	60.00	0	107	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	80	120			

Sample ID: <b>1909B70-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>MW-6</b>	Batch ID: <b>B63198</b>	RunNo: <b>63198</b>								
Prep Date:	Analysis Date: <b>9/25/2019</b>	SeqNo: <b>2156046</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	97	5.0	100.0	0	97.3	80	120			
Toluene	98	5.0	100.0	0	98.2	75.5	120			
Ethylbenzene	100	5.0	100.0	0	104	80	120			
Xylenes, Total	750	10	300.0	570.8	60.5	77.3	119			S
Surr: 4-Bromofluorobenzene	100		100.0		100	80	120			

Sample ID: <b>1909B70-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>MW-6</b>	Batch ID: <b>B63198</b>	RunNo: <b>63198</b>								
Prep Date:	Analysis Date: <b>9/25/2019</b>	SeqNo: <b>2156047</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	95	5.0	100.0	0	95.3	80	120	2.09	20	
Toluene	96	5.0	100.0	0	95.6	75.5	120	2.71	20	
Ethylbenzene	98	5.0	100.0	0	98.2	80	120	5.61	20	
Xylenes, Total	730	10	300.0	570.8	53.4	77.3	119	2.89	20	S
Surr: 4-Bromofluorobenzene	100		100.0		101	80	120	0	0	

Qualifiers:										
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank							
D	Sample Diluted Due to Matrix	E	Value above quantitation range							
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits							
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range							
PQL	Practical Quantitative Limit	RL	Reporting Limit							
S	% Recovery outside of range due to dilution or matrix									

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1909B70

30-Sep-19

**Client:** Harvest  
**Project:** Florence GCJ 16A

Sample ID: <b>RB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBW</b>	Batch ID: <b>B63237</b>	RunNo: <b>63237</b>								
Prep Date:	Analysis Date: <b>9/26/2019</b>	SeqNo: <b>2158109</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		97.1	80	120			

Sample ID: <b>100NG BTEX LCSB</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>B63237</b>	RunNo: <b>63237</b>								
Prep Date:	Analysis Date: <b>9/26/2019</b>	SeqNo: <b>2158110</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.6	80	120			
Toluene	20	1.0	20.00	0	98.4	80	120			
Ethylbenzene	20	1.0	20.00	0	98.9	80	120			
Xylenes, Total	59	2.0	60.00	0	98.3	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	80	120			

Sample ID: <b>1909B70-022AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SB-06</b>	Batch ID: <b>B63237</b>	RunNo: <b>63237</b>								
Prep Date:	Analysis Date: <b>9/26/2019</b>	SeqNo: <b>2158113</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4400	50	1000	3265	113	80	120			
Toluene	2200	50	1000	1097	107	75.5	120			
Ethylbenzene	1200	50	1000	129.8	105	80	120			
Xylenes, Total	4400	100	3000	1222	106	77.3	119			
Surr: 4-Bromofluorobenzene	1100		1000		108	80	120			

Sample ID: <b>1909B70-022AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SB-06</b>	Batch ID: <b>B63237</b>	RunNo: <b>63237</b>								
Prep Date:	Analysis Date: <b>9/26/2019</b>	SeqNo: <b>2158114</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4300	50	1000	3265	100	80	120	2.95	20	
Toluene	2300	50	1000	1097	125	75.5	120	8.06	20	S
Ethylbenzene	1500	50	1000	129.8	135	80	120	22.2	20	RS
Xylenes, Total	5100	100	3000	1222	131	77.3	119	15.7	20	S
Surr: 4-Bromofluorobenzene	1100		1000		108	80	120	0	0	

Qualifiers:										
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank							
D	Sample Diluted Due to Matrix	E	Value above quantitation range							
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits							
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range							
PQL	Practical Quantitative Limit	RL	Reporting Limit							
S	% Recovery outside of range due to dilution or matrix									



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Harvest Work Order Number: 1909B70 RcptNo: 1

Received By: Yazmine Garduno 9/21/2019 8:50:00 AM *yazmine garduno*

Completed By: Yazmine Garduno 9/21/2019 12:06:58 PM *yazmine garduno*

Reviewed By:

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody)

Yes  No

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH:  
<2 or >12 unless noted  
Adjusted? \_\_\_\_\_  
Checked by: DAD 9/23/19

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	Dunny Burns	Date:	9/27/19
By Whom:	Yazmine G.	Via:	<input type="checkbox"/> eMail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	The collect date on bottle w/ a label on COC 9/20/19		
Client Instructions:	LM - did not hear back, reported fine on COC		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.2	Good				

## Chain-of-Custody Record

Turn-Around Time:

Standard     Rush

Project Name:

Florence GCJ # 16A

Monica Sandaval

Mailing Address: 1755 Arroyo Dr.

Bloomfield, NM

Phone #: 505 632-4475

email or Fax#: m.sandaval@harvestmidstream.com

QA/QC Package:  
 Standard     Level 4 (Full Validation)

Accreditation:  Az Compliance  
 NELAC

EDD (Type) PDI

Sampler: E. Carroll / T. Sharp

On Ice:  Yes     No

# of Coolers:

Cooler Temp (including CF): 4.1 + 0.1 = 4.2

		Analysis Request	
		Total Coliform (Present/Absent)	
		8270 (Semi-VOA)	
		8260 (VOA)	
		RCRA 8 Metals	
		PAHs by 8310 or 8270SIMS	
		EDB (Method 504.1)	
		8081 Pesticides/8082 PCB's	
		TPH:8015D(GRO / DRO / MRO)	
		BTEX / MTBE / TMB's (8024)	
		CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	
		Detailed Analysis	

Date Time Matrix Sample Name Container Preservative Type HEAL No.

1/19/16	1515	water	MW-6	3 VOA's	HCl	-001	X
	1310		MW-8			-002	
	1441		MW-11			-003	
	1330		MW-14			-004	
	1340		MW-15			-005	
	1110		MW-17			-006	
	1130		MW-18			-007	
	1145		MW-20			-008	
	1245		MW-21			-009	
	1205		MW-22			-010	
	1220		MW-23			-011	
	1140		MW-24			-012	
Date:	Time:	Relinquished by:	Via:	Date	Time	Remarks:	
9/10	1555	Elliott Carroll	via Email	9/10/16	1555	Please cc: ecarroll@itemr.com	
Date:	Time:	Relinquished by:	Via:	Date	Time		
9/10/16	1827	Matthew Wallen	via Courier	9/11/16	05:50		

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

## Chain-of-Custody Record

Client:	Harvest Four Corners			Turn-Around Time:				
	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush						
Monica Sandavol	Project Name: Finance GC & J 16A			Sampler: E. Carroll / T. Short				
Mailing Address:	1755 Arroyo Dr Bloomfield, NM			On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Phone #:	505-632-4475			# of Coolers: 1				
email or Fax#: <a href="mailto:msandavol@harvestfourcorners.com">msandavol@harvestfourcorners.com</a>				Cooler Temp (including CF): 5.1 + 0.1 = 5.2				
QA/QC Package:	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			Container Type and #	Preservative Type	HEAL No.		
	Date	Time	Matrix	Sample Name				
Monica Sandavol	9/14/04	12:35	Water	MW-35	3 VOAs	HCl	-013	
	1435			SB-03			-014	
	1516			SB-04			-015	
	1300			SB-13			-016	
	1405			SB-15			-017	
	1340			SB-16			-018	
	9/20/04	12:45		MW-10			-019	
	1145			MW-13			-020	
	1140			SB-05			-021	
	1211			SB-06			-022	
	1205			SB-11			-023	
	1225			SB-19			-024	
	Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	
9/20/04	1555	<i>Elliott</i>	<i>John Hall</i>	<i>John Hall</i>	<i>9/20/04</i>	<i>9/20/04</i>	<i>5:55</i>	
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks:	
9/20/04	1837	<i>Monica Sandavol</i>	<i>John Hall</i>	<i>John Hall</i>	<i>9/20/04</i>	<i>9/20/04</i>	<i>8:50</i>	Please cc: <a href="mailto:ecarroll@env.com">ecarroll@env.com</a>

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