SIMCOE LLC

(formerly BPX Energy Inc.)

REVIEWED
By Mike Buchanan at 3:44 pm, Jan 16, 2024

Review of the 2020 Remediation Report for Sandoval Gas Com A 001A: **Content Satisfactory**
1. Continue operating and conducting O&M as prescribed for the SVE system on site.
2. When appropriate, advance soil borings in soil to confirm closure requirements have been met for TPH, BTEX and chlorides in soil.
3. Options for re-drilling or replacement will need to be considered for MW#1 and MW3# as both have not produced a viable sample due to insufficient volume since 2013.
4. Continue to submit annual reports and documentation as necessary by April 1 of every calendar year.

REMEDIATION REPORT

SANDOVAL GAS COM A 001A
(C) SECTION 35, T30N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO

PREPARED FOR:
NEW MEXICO OIL CONSERVATION DIVISION

JANUARY 2021

PREPARED BY:
SIMCOE LLC
1100 Main Ave., Suite 101
Durango, Colorado 81301

SIMCOE LLC
Sandoval GC A # 1A
Unit Letter C, Sec. 35, T30N, R09W
Incident #: nCS1803742861 API #: 3004522294

Monitor Well Installation Dates: **BH-1 (09/20/2006), MW #2 (08/22/2011), MW #1 (12/02/2011), MW #3 (12/05/2011), MW #4 (12/06/2011).**

Monitor Well Sampling Dates: **08/30/11, 12/09/11, 02/09/12, 06/21/12, 09/20/12, 12/20/12, 03/28/19, 06/24/19, 09/19/19, 12/10/19, 03/30/20, 06/01/20, 09/14/20, 12/15/20.**

Soil Vapor Extraction System Installation: **October 2018.**

Impact Discovery Background:

10/28/2003	Unlined/earthen pit closure initiated. Vertical extent not established with backhoe.
09/20/2006	Boring advanced with drill rig to determine vertical extent. Hollow stem auger refusal at 17 feet below grade (large cobbles encountered).
08/22/2011	Installed monitor/test well within source area (MW #2) using air powered hammer drilling method.
12/02/2011	Installed up gradient monitor/test well (MW #1) using same method noted for MW #2.
12/05/2011	Installed suspected side gradient monitor/test well (MW #3) using same method noted for MW #2.
12/05/2011	Installed suspected down gradient monitor/test well (MW #4) using same method noted for MW #2.
01/30/2018	Form C-141 initial report submitted to the New Mexico Oil Conservation Division (**NMOCD**). Included were the earthen pit closure documentation with lab analyses, bore hole logs, 1998 NMOCD correspondence letter, and transmission operator site map.
02/06/2018	NMOCD approved Form C-141 and stated additional remediation is required. Assigned administrative & order # 3RP-1057 and incident # nCS1803742861 [NMOCD filename [FN]: pcs1731132655_1_ao.pdf].
03/05/2018	Remediation plan submitted to the NMOCD.
04/13/2018	NMOCD approves remediation plan with stated conditions [NMOCD online well file FN: nCS1803742861_18_wf.pdf].

Groundwater Monitor Well Sampling Procedures:

Test/monitor wells were initially purged using a battery-operated 1½ inch submersible pump and utilizing new vinyl tubing. Starting in 2019, new disposable bailers have been employed per event during the sampling of MW #2. Water samples were collected following US EPA: SW-846 protocol, placed into laboratory supplied containers with appropriate preservative, and stored in an ice chest for express delivery to an analytical laboratory for testing under strict chain-of-custody procedures. Analytical testing for benzene, toluene, ethylbenzene, and total xylenes (**BTEX**) by US EPA Method 8021B or 8260B was conducted as well as regulated general chemistry parameters from MW #1 only.

Fluids generated during test/monitor well purging were managed by discarding into the separator's pre-existing below-grade tank (BGT) or the currently used above-grade tank (AGT) located on the well site. The BGT and AGT contents were eventually disposed through approved NMOCD operational procedures for removal of produced fluids.

Soil Vapor Extraction System Data:

The soil vapor extraction system (**SVE**) was installed and commenced operation in October 2018. Weekly to monthly monitoring and/or inspections have been ongoing to the present. Volatile organic compounds exhaust [organic vapor meter (OVM) readings] and exhaust vacuum pressure have been recorded and documented (see Soil Vapor Extraction Data Section). The initial and subsequent annual effluent air samples were collected and are included within this report.

Water Quality and Gradient Information:

Quarterly sampling of the groundwater monitor wells was conducted from August 2011 to June 2013. Afterward, insufficient water quantity within MW #1 was measured and has not changed since. Light non-aqueous phase liquid (LNAPL) was initially observed within MW #2 in March 2013. After the SVE start up in October 2018, LNAPL in MW #2 appears to have been removed and quarterly sampling resumed in March 2019. A historical summary of laboratory analytical results as well as field/laboratory reports are included within this report.

Due to LNAPL and the SVE effects in MW #2 as well as lack of water observed within MW #1 and MW #3 since June 2013, contour maps could not be generated within the relative degree of accuracy required.

Summary and/or Recommendations:

The SVE system appears to have effectively removed the LNAPL observed within MW #2. Continued operation and monitoring of the SVE system is recommended. In the future, SIMCOE will eventually advance subsurface borings to verify closure standards for Total Petroleum Hydrocarbons, BTEX, and chlorides in soils are met.

Since this discovery of impacts originated from an earthen/unlined pit, management of the sampling and testing was pursuant to the previous operator's (BP America Production Company) NMOCD approved Groundwater Management Plan (**GMP**). MW #2 continues to record elevated benzene, toluene, and total xylenes above the New Mexico Water Quality Control Commission allowable concentrations. This condition is most likely caused by the quantity of impacts remaining that is not directly acted upon by the SVE system. It is recommended to continue monitoring and testing from MW #2 on an annual basis at a minimum. This site will continue to utilize and maintain site specific sampling frequency stated within the GMP.

SIMCOE LLC

WATER/FLUID FIELD DATA & LAB RESULTS

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

REVISED DATE: December 31, 2020
Submitted by Blagg Engineering, Inc.

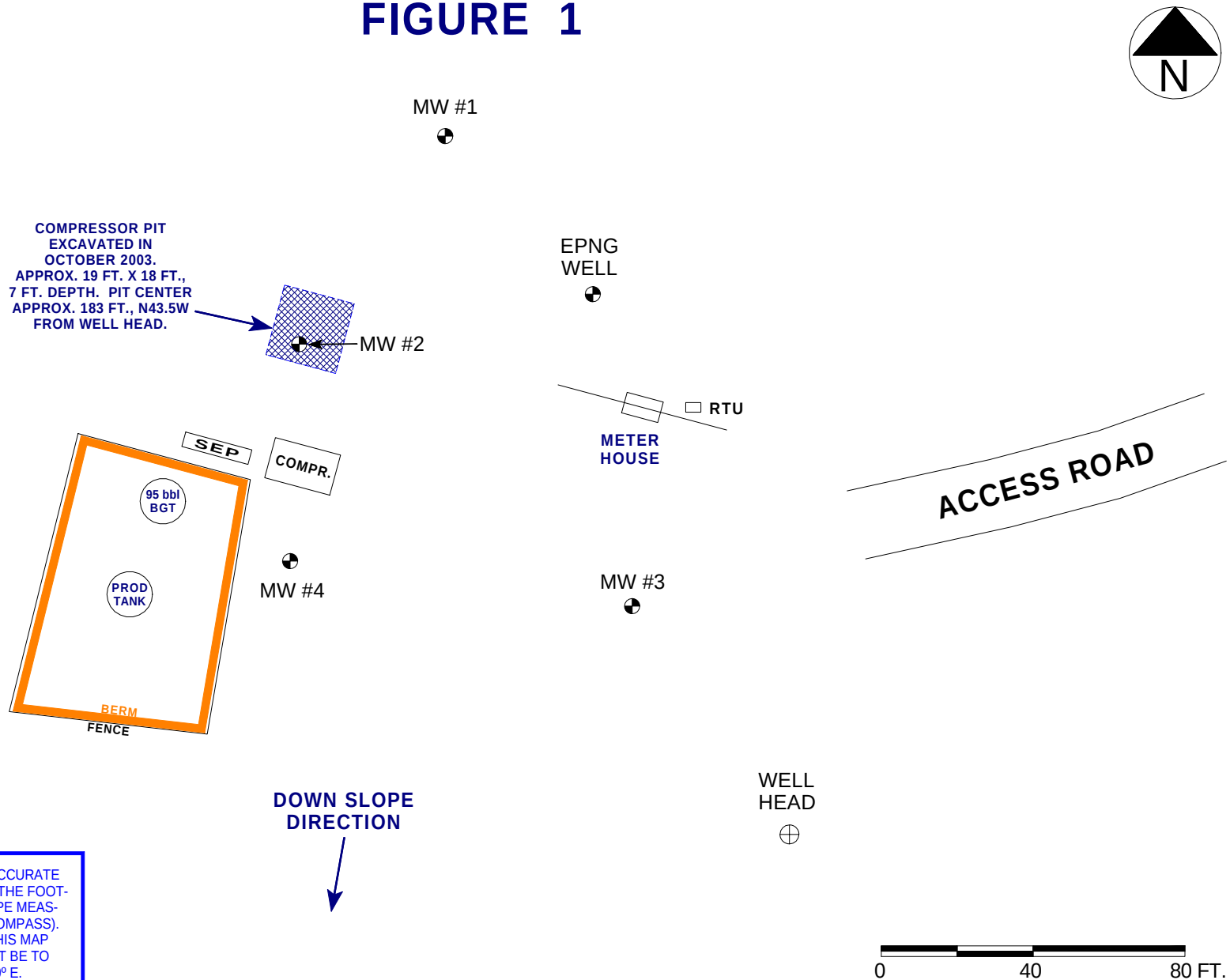
SAMPLE DATE	WELL NAME / NUMBER	DEPTH TO WATER (ft)	WELL DEPTH (ft)	TDS (mg/L)	CONDUCT. (umhos)	pH	FREE PHASE PRODUCT (ft)	BTEX US EPA METHOD 8021B or 8260B BENZENE (ppb)	TOLUENE (ppb)	ETHYL BENZENE (ppb)	TOTAL XYLENES (ppb)
12/09/11	MW #1	34.97	40.00		3,100	7.46		280	1,000	50	540
02/09/12		35.01			3,300	6.82		210	<5.0	9.3	230
06/21/12		37.13			3,300	6.78		<1.0	<1.0	<1.0	1.3
09/20/12		36.08			3,700	6.94		55	<1.0	<1.0	<2.0
12/20/12		37.22			2,700	6.90		22	<1.0	<1.0	<2.0
03/19/13		38.29			2,600	7.21		1.4	4.3	<1.0	41
06/19/13		39.31			2,100	7.31		<1.0	<1.0	<1.0	<2.0
08/30/11	MW #2	33.54	40.00		2,400	7.38		990	6,700	710	10,000
12/09/11		33.57			3,300	7.04		1,900	8,600	930	13,000
02/09/12		33.56			2,800	6.90		1,900	7,500	800	12,000
06/21/12		33.70			2,600	6.87		2,600	10,000	700	18,000
09/20/12		33.78			2,600	6.90		2,200	9,900	970	47,000
12/20/12		33.85			2,200	7.01		2,800	7,600	640	18,000
03/19/13		33.95					0.21				
06/19/13		34.01					0.26				
08/26/13		33.98					0.11				
12/17/13		34.23					0.38				
03/11/14		34.21					0.39				
06/25/14		34.31					0.42				
08/28/14		34.05					0.23				
12/03/14		34.48					0.64				
03/31/15		34.60					0.68				
05/26/15		35.13					0.54				
08/29/15		34.39					>2.25				
11/30/15		34.66					>2.50				
02/24/16		35.95					?				
05/24/16		37.55					3.61				
09/23/16		37.89					3.24				
12/08/16		36.99					2.88				
03/31/17		36.83					?				
05/28/17		36.97					3.06				
09/12/17		36.74					?				
06/30/18		36.38					2.10				
09/27/18		?					>3.23				
03/28/19		34.15			1,700	7.01		1,400	230	1,500	23,000
06/24/19		34.11			1,350	7.12		920	200	1,000	21,000
09/19/19		34.31			1,050	6.92		920	<100	840	17,000
12/10/20		34.13			1,200	7.17		800	<100	780	16,000
03/30/20		34.13			1,500	7.14		570	<100	850	18,000
06/01/20		35.53			1,300	6.98		570	<50	870	17,000
09/14/20		36.96			1,300	7.01		620	150	790	15,000
12/15/20		35.85			1,400	7.07		1,400	13	830	13,000
NMWQCC GROUNDWATER STANDARDS								**10**	**750**	**750**	**620**

SAMPLE DATE	WELL NAME /NUMBER	Fluoride (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate-N (mg/L)	TDS (mg/L)	Iron (mg/L)
06/19/13	MW #1	0.15	91	2,200	<0.10	3,880	2.3
NMWQCC GROUNDWATER STANDARDS		**1.60**	**250**	**600**	**10**	**1,000**	**1.0**

NOTES :

1) **RESULTS IN BOLD RED TYPE INDICATE EXCEEDING NMWQCC STANDARDS &/OR BACKGROUND .**
2) **RESULTS IN BOLD BLUE TYPE INDICATE BELOW NMWQCC STANDARDS AFTER PREVIOUS EXCEEDED.**
3) **NMWQCC INDICATES NEW MEXICO WATER QUALITY CONTROL COMMISSION**
(levels not to exceed allowable threshold noted or background levels - MW #1 serves as background data when applicable)
4) ***SOIL VAPOR EXTRACTION SYSTEM (SVE) OFFICIAL START UP DATE - OCTOBER 29, 2018.***
5) **Depth to Water measured from top of well casing**
6) **TDS - Total Dissolved Solids**
7) **mg/L - Milligrams per liter**
8) **µmhos - Micro ohms**
9) **NMWQCC pH allowable range between 6-9**
10) **µg/L - Micrograms per liter**
11) **(-) - Not analyzed**

FIGURE 1



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE. MAGNETIC DECLINATION USED ~ 10º E.

BP AMERICA PRODUCTION CO.

SANDOVAL GC A # 1A

NE/4 NW/4 SEC. 35, T30N, R9W

SAN JUAN COUNTY, NEW MEXICO

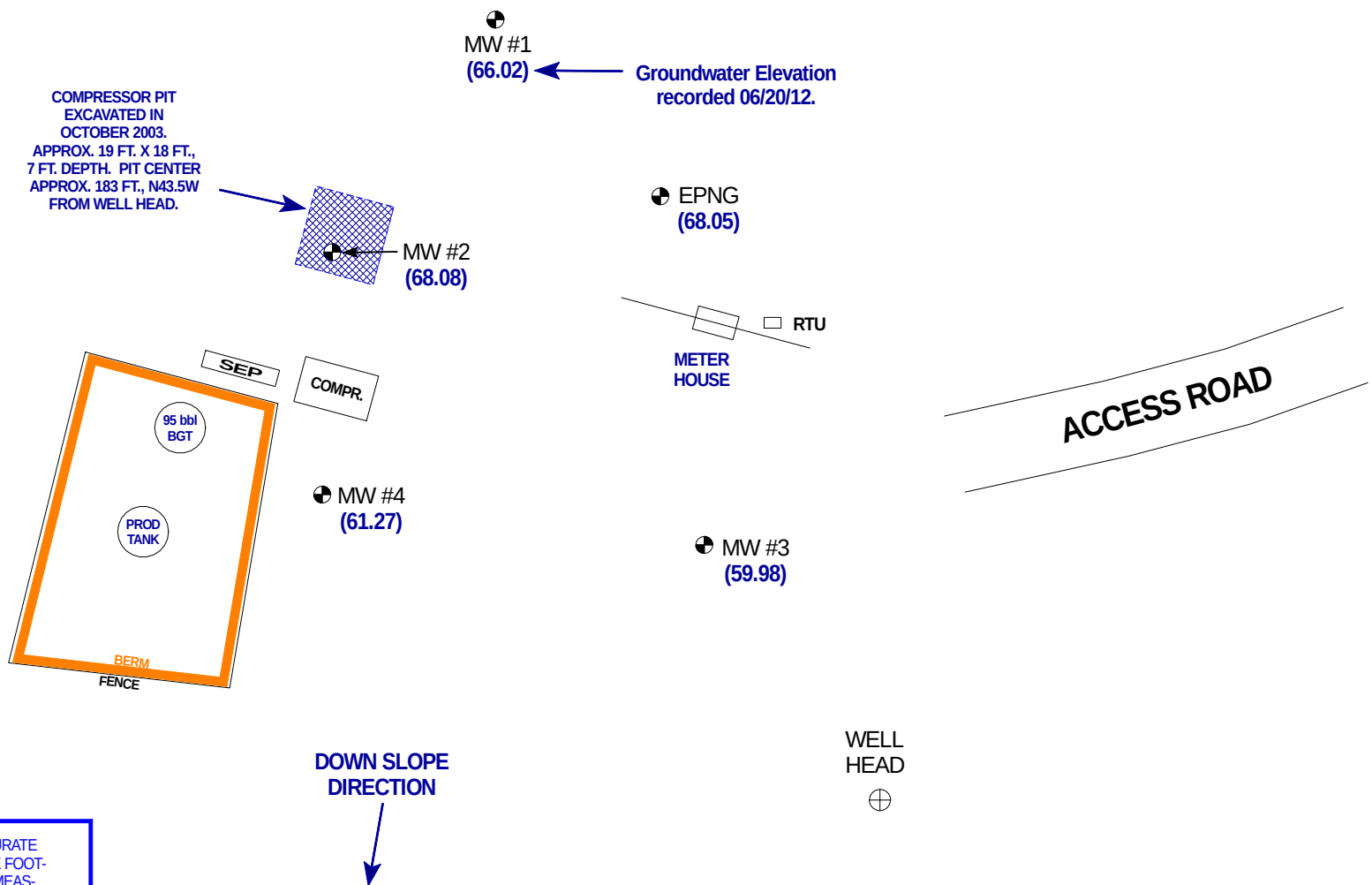
BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW INSTALLATIONS
DRAWN BY: NJV
FILENAME: SANDOVAL GC A 1A-SM3.SKF
REVISED: 12-08-11

SITE MAP

11/11

FIGURE 2
(2nd 1/4, 2012)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE. MAGNETIC DECLINATION USED ~ 10º E.

BP AMERICA PRODUCTION CO.

SANDOVAL GC A # 1A

NE/4 NW/4 SEC. 35, T30N, R9W

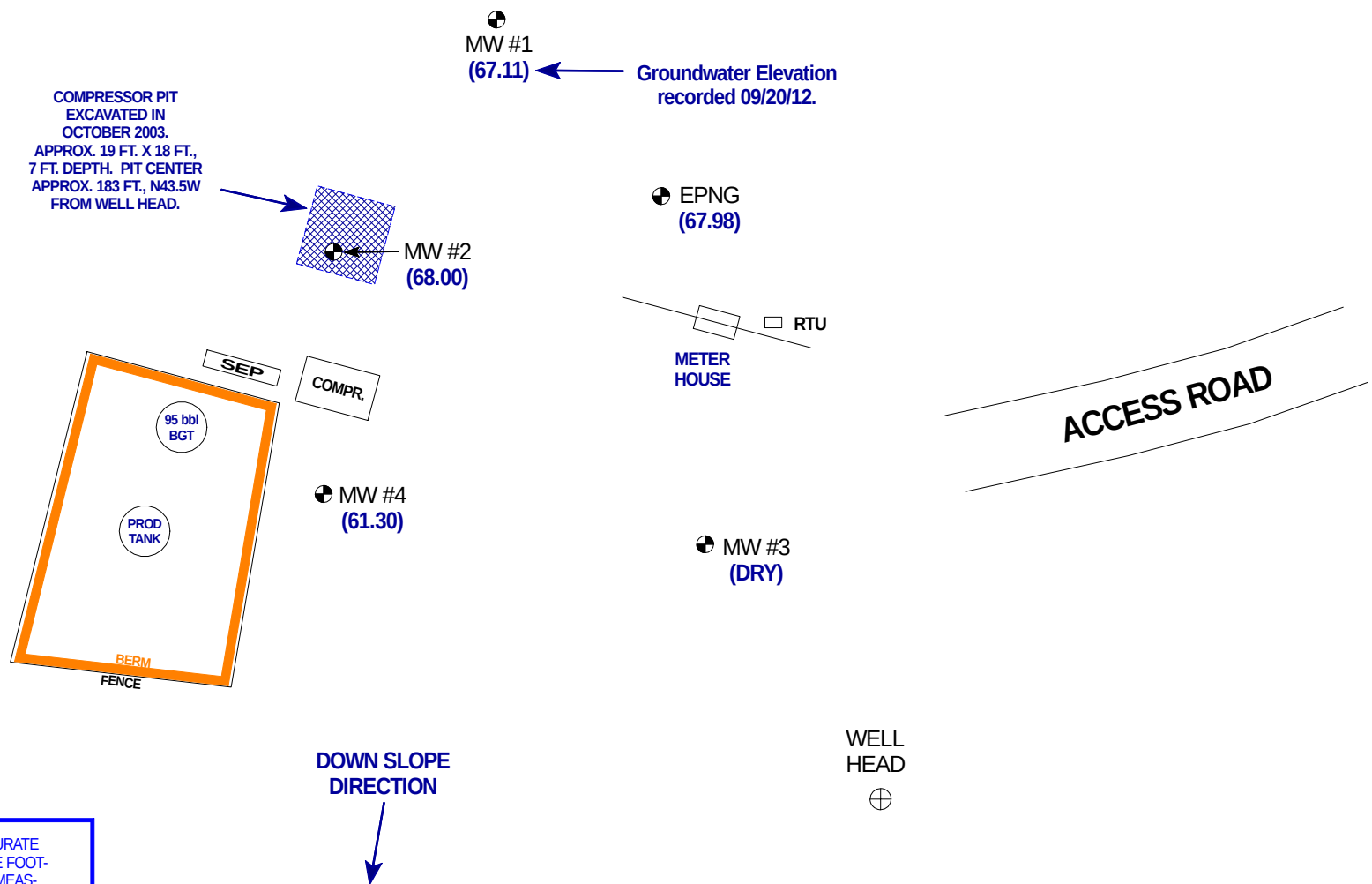
SAN JUAN COUNTY, NEW MEXICO

B LAGG ENGINEERING, I NC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: SANDOVAL GC A 1A-SM5.SKF
REVISED: 07-26-12

SITE MAP
06/12

FIGURE 3
(3rd 1/4, 2012)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE. MAGNETIC DECLINATION USED ~ 10º E.

BP AMERICA PRODUCTION CO.

SANDOVAL GC A # 1A

NE/4 NW/4 SEC. 35, T30N, R9W

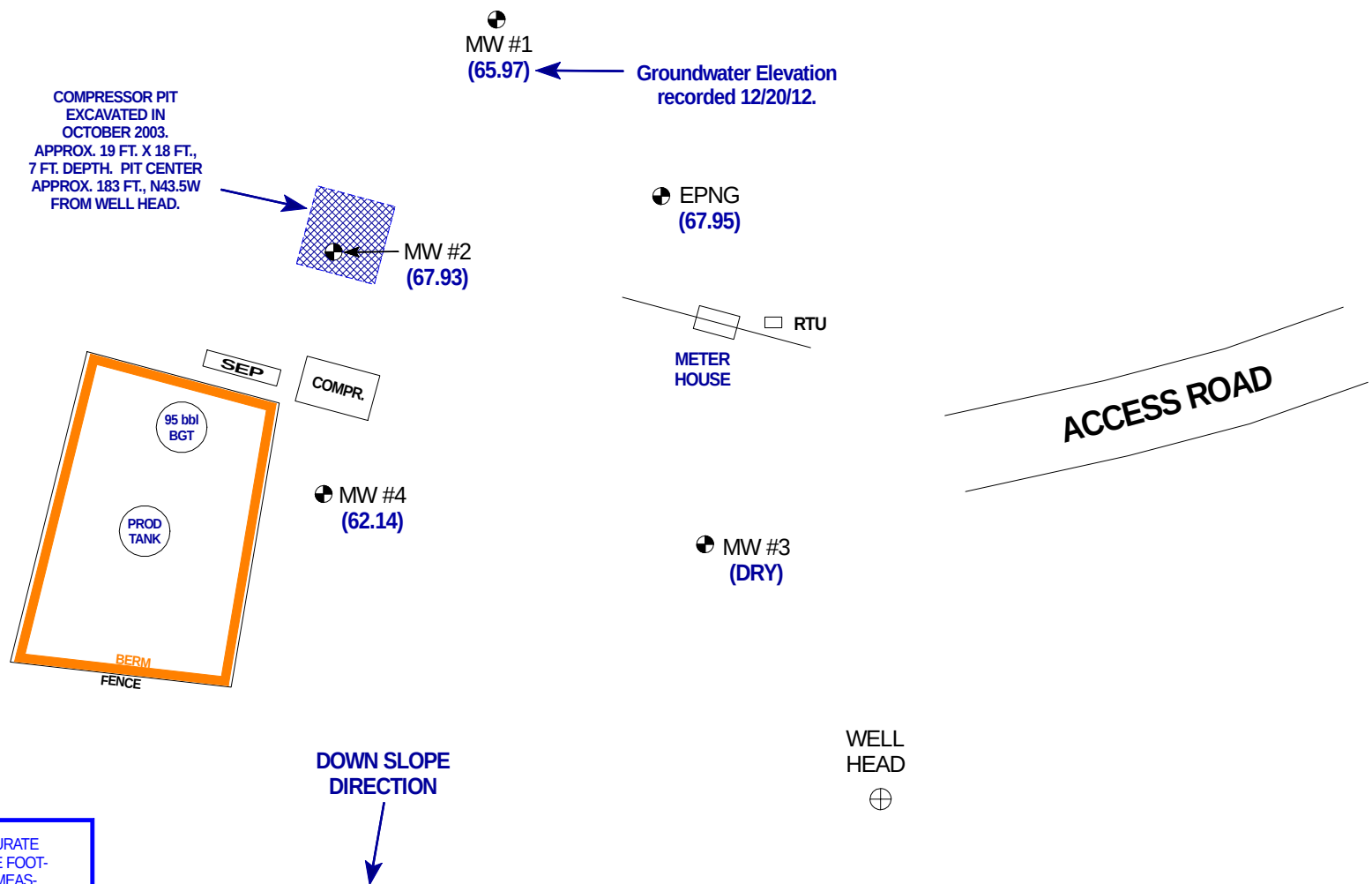
SAN JUAN COUNTY, NEW MEXICO

B LAGG ENGINEERING, I NC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: SANDOVAL GC A 1A-SM6.SKF
REVISED: 10-23-12

SITE MAP
09/12

FIGURE 4
(4th 1/4, 2012)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE. MAGNETIC DECLINATION USED ~ 10º E.

BP AMERICA PRODUCTION CO.

SANDOVAL GC A # 1A

NE/4 NW/4 SEC. 35, T30N, R9W

SAN JUAN COUNTY, NEW MEXICO

B LAGG ENGINEERING, I NC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: SANDOVAL GC A 1A-SM7.SKF
REVISED: 12-31-12

SITE MAP

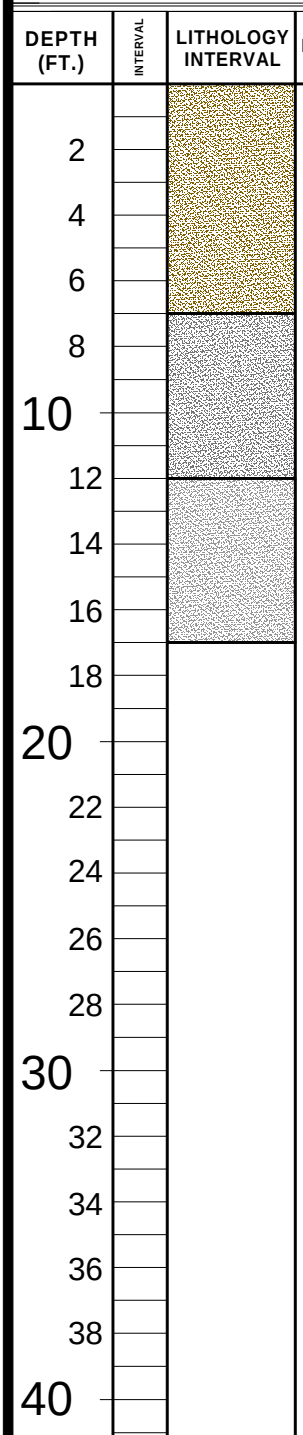
12/12

BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / ENVIROTECH, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75)
BORING LOCATION:	180 FEET, N40W FROM WELL HEAD.

BORING #.....	BH1
MW #.....	NA
PAGE #.....	1
DATE STARTED	09/20/06
DATE FINISHED	09/20/06
OPERATOR.....	DP
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

DARK YELLOWISH ORANGE TO DARK YELLOWISH BROWN SAND (FILL MATERIAL), NON COHESIVE, SLIGHTLY MOIST, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 7.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN / MEDIUM GRAY SAND INTERMIXED, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (7.0 - 12.0 FT. BELOW GRADE).

MEDIUM GRAY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDRO-CARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (12.0 - 17.0 FT. BELOW GRADE).

BH1 @ 15-17 FT. TIME: 1218 BLOW COUNT = 50 PER 20 INCHES COLLECTED WITH SPLIT SPOON SAMPLER.
TPH = 10,000 ppm , BENZENE = 19 ppm , TOTAL BTEX = 1,183 ppm , CHLORIDE = 5.5 ppm.

AUGER REFUSAL - COBBLES ENCOUNTERED AT 17 FEET BELOW GRADE.

NOTES:
- SAND.
- **OVM** - Organic Vapor Meter or Photo-ionization Detector (PID).
- **TPH** - Total Petroleum Hydrocarbons EPA Method 8015B.
- **BTEX** - benzene , toluene, ethylbenzene, total xylenes EPA Method 8021B.
- **ppm** - Parts per million (unit value).

OVM CALIBRATION = 51.3 ppm with 100 ppm Isobutylence gas & response factor set @ 0.52 ; DATE - 09/19/06, TIME - 1535.

DRAWING: SANDOVAL GC A 1A BH1.SKF | DATE: 03/19/07 | DWN BY: NJV

Hall Environmental Analysis Laboratory, Inc.

Date: *06-Oct-06*

CLIENT:	Blagg Engineering	**Client Sample ID:**	BH1 @15'-17' COMPRESSOR P
Lab Order:	0609259	**Collection Date:**	9/20/2006 12:18:00 PM
Project:	Sandoval GC A #1A	**Date Received:**	9/21/2006
Lab ID:	0609259-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	1800	200		mg/Kg	20	9/26/2006 11:49:36 PM
Motor Oil Range Organics (MRO)	6800	1000		mg/Kg	20	9/26/2006 11:49:36 PM
Surr: DNOP	0	61.7-135	S	%REC	20	9/26/2006 11:49:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **BDH**
Gasoline Range Organics (GRO)	8200	250		mg/Kg	50	9/29/2006 2:50:06 PM
Surr: BFB	348	84.5-129	S	%REC	50	9/29/2006 2:50:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BDH**
Benzene	19	2.5		mg/Kg	50	9/29/2006 2:50:06 PM
Toluene	320	5.0		mg/Kg	100	10/1/2006 6:10:42 PM
Ethylbenzene	64	2.5		mg/Kg	50	9/29/2006 2:50:06 PM
Xylenes, Total	780	15		mg/Kg	100	10/1/2006 6:10:42 PM
Surr: 4-Bromofluorobenzene	124	76.8-115	S	%REC	50	9/29/2006 2:50:06 PM
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	5.5	1.5		mg/Kg	5	9/26/2006 3:18:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Value above quantitation range
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
RL	Reporting Limit

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG ENER. / BP AMERICA
Address: P.O. BOX 87
BLFD., NM 87413
Phone #: 632-1199
Fax #:

Project Name: SANDOVAL GC A #1A
Project #: 7N
Project Manager: NV
Sampler: NV
Sample Temperature: 6°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative: cool	HEAL No.
9/20/06	1218	SOIL	BH1 @ 15'-17'	1-4oz.			✓	0609259-1
			COMPRESSOR PIT					

BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles or Headspace (Y or N)
✓		✓										✓				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
9/21/06	0730			9-21-06 @ 1610
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **BLAGG** Work Order Number: **2006046** RcptNo: **1**

Received By: **Emily Mocho** **6/2/2020 8:00:00 AM**

Completed By: **Isaiah Ortiz** **6/2/2020 8:29:08 AM** I-OL

Reviewed By: JR 6/4/20 2 JR 6/2/20

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. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
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: EM 6/2/20

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	6.6	Good	Not Present			

Hall Environmental Analysis Laboratory, Inc. Date: *06-Oct-06*

CLIENT: Blagg Engineering
Project: Sandoval GC A #1A
Lab Order: 0609259

CASE NARRATIVE

Analytical Comments for METHOD 8015DRO_S, SAMPLE 0609259-01A: DNOP not recovered due to dilution

Hall Environmental Analysis Laboratory, Inc. Date: 06-Oct-06

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Sandoval GC A #1A
Work Order: 0609259

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11355		*MBLK*			Batch ID:	11355	Analysis Date:	9/26/2006 1:34:07 PM	
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11355		*LCS*			Batch ID:	11355	Analysis Date:	9/26/2006 12:24:29 PM	
Chloride	14.68	mg/Kg	0.30	97.9	90	110			
Method: SW8015									
Sample ID: MB-11335		*MBLK*			Batch ID:	11335	Analysis Date:	9/22/2006 8:31:32 PM	
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-11335		*LCS*			Batch ID:	11335	Analysis Date:	9/22/2006 9:06:03 PM	
Diesel Range Organics (DRO)	39.52	mg/Kg	10	79.0	64.6	116			
Sample ID: LCSD-11335		*LCSD*			Batch ID:	11335	Analysis Date:	9/22/2006 9:40:51 PM	
Diesel Range Organics (DRO)	37.46	mg/Kg	10	74.9	64.6	116	5.35	17.4	
Method: SW8015									
Sample ID: MB-11343		*MBLK*			Batch ID:	11343	Analysis Date:	9/26/2006 1:06:36 AM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-11343		*LCS*			Batch ID:	11343	Analysis Date:	9/26/2006 1:36:35 AM	
Gasoline Range Organics (GRO)	21.20	mg/Kg	5.0	80.8	73.4	115			
Sample ID: LCSD-11343		*LCSD*			Batch ID:	11343	Analysis Date:	9/26/2006 2:06:38 AM	
Gasoline Range Organics (GRO)	20.60	mg/Kg	5.0	78.4	73.4	115	2.87	11.6	
Method: SW8021									
Sample ID: MB-11343		*MBLK*			Batch ID:	11343	Analysis Date:	9/26/2006 1:06:36 AM	
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-11343		*LCS*			Batch ID:	11343	Analysis Date:	9/26/2006 1:36:35 AM	
Benzene	0.2887	mg/Kg	0.050	111	77.5	123			
Toluene	2.015	mg/Kg	0.050	110	85.3	129			
Ethylbenzene	0.3749	mg/Kg	0.050	104	79.6	121			
Xylenes, Total	2.318	mg/Kg	0.15	107	80	130			
Sample ID: LCSD-11343		*LCSD*			Batch ID:	11343	Analysis Date:	9/26/2006 2:06:38 AM	
Benzene	0.2927	mg/Kg	0.050	113	77.5	123	1.38	27	
Toluene	2.044	mg/Kg	0.050	112	85.3	129	1.42	19	
Ethylbenzene	0.3802	mg/Kg	0.050	106	79.6	121	1.40	10	
Xylenes, Total	2.342	mg/Kg	0.15	108	80	130	1.05	13	

Qualifiers:

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
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG Date and Time Received: 9/21/2006

Work Order Number 0609259 Received by GLS

Checklist completed by [signature] 9-21-06
Signature Date

Matrix Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 6° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

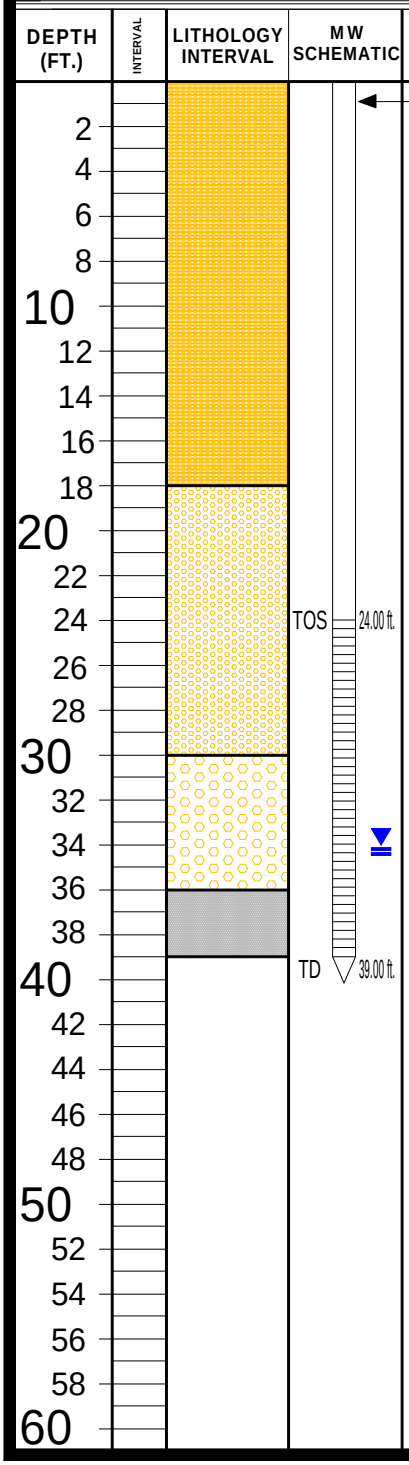
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 1

BORE / TEST HOLE REPORT

BORING #..... BH - 3
MW #..... 1
PAGE #..... 2
DATE STARTED 12/01/11
DATE FINISHED 12/02/11
OPERATOR..... KP
LOGGED BY..... JCB

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 205 FEET, N26W FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.75 FT. ABOVE GRADE.

DARK YELLOWISH BROWN SILTY SAND, NON COHESIVE, DRY TO MOIST, FIRM, THIN LAYERS OF ROUNDED PEBBLES TO 5.0 FEET BELOW GRADE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 18.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH GRAVEL (18.0 - 30.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH COBBLE TO BOULDER SIZE GRAVEL (30.0 - 36.0 FT. BELOW GRADE).

GROUNDWATER ~ 33.97 ft. BELOW GRADE ; MEASURED 12/09/11.

BLUE/VERY LIGHT GRAY SILTSTONE TO CLAYSTONE, NON COHESIVE, DRY, DENSE TO VERY DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (36.0 - 39.0 FT. BELOW GRADE).

Monitor well dry to TD (5,677.94' elevation) (40.4' below casing top), measured on 11/09/2017

NOTES:
- SILTY SAND.
- SILTY SAND & GRAVEL.
- SILTSTONE / CLAYSTONE.

TOS - Top of screen of monitor well.
TD - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 1.00 ft. above grade to 24.00 ft. below grade, 0.020 slotted screen between 24.00 to 39.00 ft. below grade, sand packed annular to 22.0 ft. below grade, bentonite grout between 20.0 to 22.0 ft. below grade. Steel protector encompassing above grade casing and secured with padlock.

DRAWING: SANDOVAL GC A 1A MW1-BH3. SKF | DATE: 12/07/11 | DWN BY: NJV

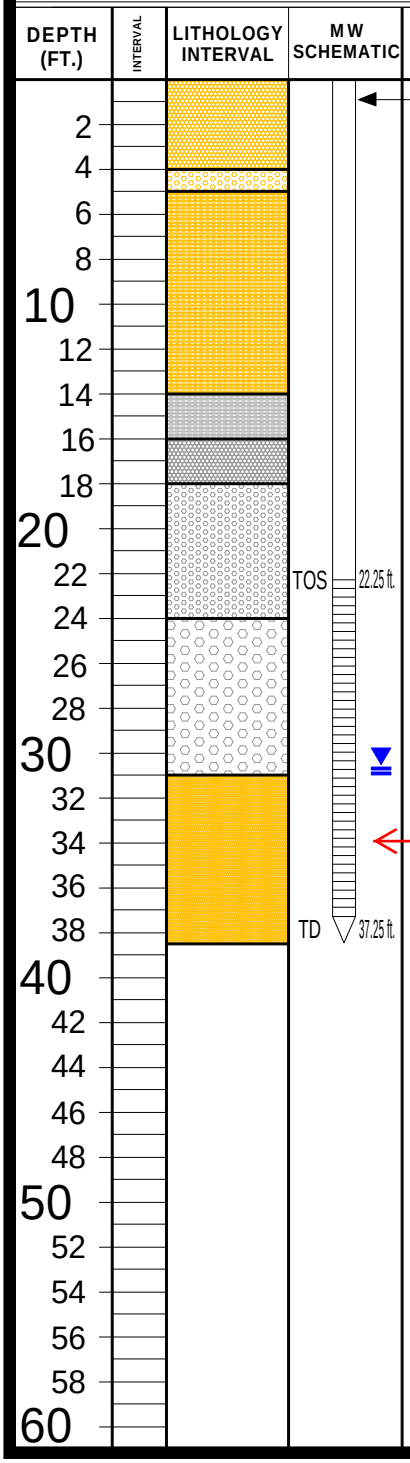
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 2

BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 182.7 FEET, N45W FROM WELL HEAD.

BORING #..... BH - 2
MW #..... 2
PAGE #..... 3
DATE STARTED 08/11/11
DATE FINISHED 08/22/11
OPERATOR..... KP
LOGGED BY..... NJV/JCB



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.75 FT. ABOVE GRADE.

PALE YELLOWISH BROWN SAND, NON COHESIVE, DRY TO MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 4.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH MINOR PEA SIZE GRAVEL (4.0 - 5.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, COHESIVE, DRY TO MOIST, FIRM TO STIFF, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (4.0 - 14.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT LIGHT GRAY AND WITH AN APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY (14.0 - 16.0 FT. BELOW GRADE).

LIGHT TO MEDIUM GRAY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDRO - CARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (16.0 - 18.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH GRAVEL (18.0 - 24.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH COBBLE TO BOULDER SIZE GRAVEL (24.0 - 31.0 FT. BELOW GRADE).

GROUNDWATER ~ 30.79 ft. BELOW GRADE ; MEASURED 08/25/11.

PALE YELLOWISH ORANGE SILTSTONE TO CLAYSTONE, NON COHESIVE, DRY, DENSE TO VERY DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (31.0 - 38.5 FT. BELOW GRADE).

2.7' product, top at 5,680.72' elevation (36.22' below casing top), measured on 11/08/2017

NOTES:
- SAND.
- SILTY SAND TO SILTY CLAY.
- SAND & GRAVEL.
- SILTSTONE / CLAYSTONE.

TOS - Top of screen of monitor well.
TD - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.75 ft. above grade to 22.25 ft. below grade, 0.020 slotted screen between 22.25 to 37.25 ft. below grade, sand packed annular to 20.0 ft. below grade, bentonite grout between 17.0 to 20.0 ft. below grade. Steel protector encompassing above grade casing and secured with padlock.

DRAWING: SANDOVAL GC A 1A MW2-BH2. SKF | DATE: 08/25/11 | DWN BY: NJV

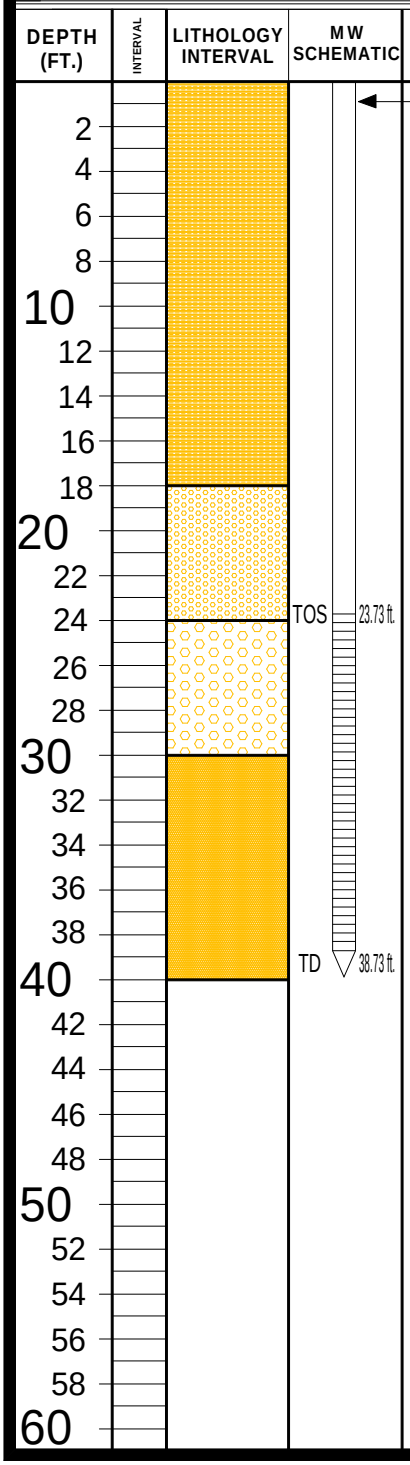
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 3

BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 73 FEET, N34.5W FROM WELL HEAD.

BORING #..... BH - 4
MW #..... 3
PAGE #..... 4
DATE STARTED 12/05/11
DATE FINISHED 12/05/11
OPERATOR..... KP
LOGGED BY..... JCB



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. AT GRADE.

DARK YELLOWISH BROWN SILTY SAND, NON COHESIVE, DRY TO MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 18.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH GRAVEL (18.0 - 24.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH COBBLE TO BOULDER SIZE GRAVEL (24.0 - 30.0 FT. BELOW GRADE).

DARK YELLOWISH ORAGEN SILTSTONE TO CLAYSTONE, NON COHESIVE, DRY, DENSE TO VERY DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (30.0 - 40.0 FT. BELOW GRADE).

Monitor well dry to TD (5,675.08' elevation) (39.2' below casing top), measured on 11/09/2017

NOTES:
- SILTY SAND.
- SILTY SAND & GRAVEL.
- SILTSTONE / CLAYSTONE.

TOS - Top of screen of monitor well.
TD - Total depth/bottom extent of monitor well.

GROUNDWATER NOT PRESENT DURING 12/09/11 GAUGING.

Monitor well consist of 2 inch PVC piping - casing from grade to 23.73 ft. below grade, 0.020 slotted screen between 23.73 to 38.73 ft. below grade, sand packed annular to 22.0 ft. below grade, bentonite grout between 20.0 to 22.0 ft. below grade. Flush mount protector encompassing exposed casing. Secured well with locking cap and padlock.

DRAWING: SANDOVAL GC A 1A MW3-BH4. SKF | DATE: 12/07/11 | DWN BY: NJV

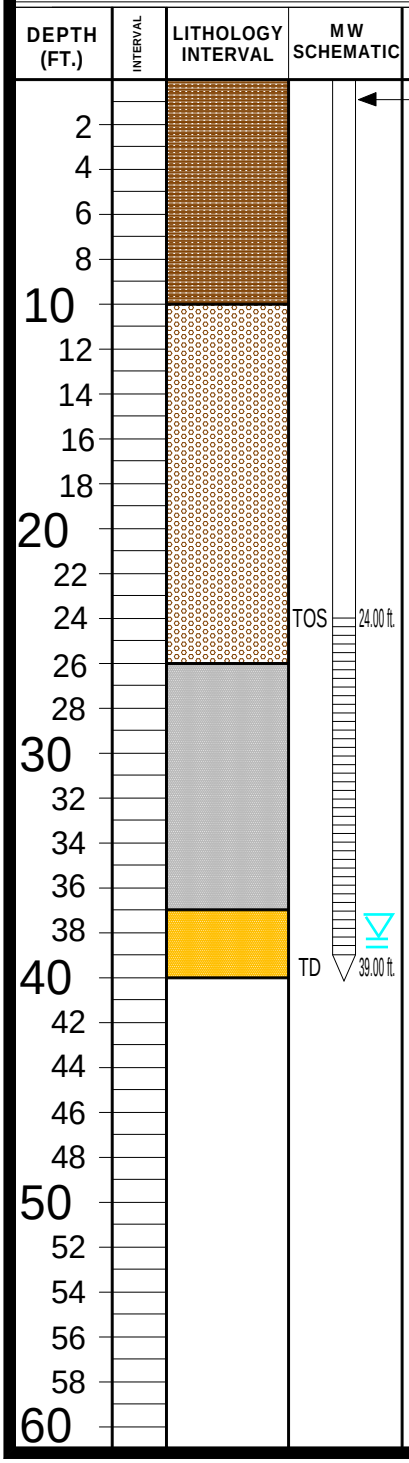
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 4

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION:	150 FEET, N61W FROM WELL HEAD.

BORING #..... BH - 5
MW #..... 4
PAGE #..... 5
DATE STARTED 12/06/11
DATE FINISHED 12/06/11
OPERATOR..... KP
LOGGED BY..... NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 0.25 FT. BELOW GRADE.

MODERATE YELLOWISH BROWN SILTY SAND, NON COHESIVE, DRY TO MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 10.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH GRAVEL (10.0 - 26.0 FT. BELOW GRADE).

BLUE/VERY LIGHT GRAY SILTSTONE TO CLAYSTONE, NON COHESIVE, DRY, DENSE TO VERY DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (26.0 - 37.0 FT. BELOW GRADE).

GW measured at 5,676.07' elevation (38.25' below casing top), measured on 11/20/2017

SAME AS ABOVE EXCEPT PALE YELLOWISH ORANGE (37.0 - 40.0 FT. BELOW GRADE).

NOTES:
- SILTY SAND.
- SILTY SAND & GRAVEL.
- SILTSTONE / CLAYSTONE.

TOS - Top of screen of monitor well.
TD - Total depth/bottom extent of monitor well.

GROUNDWATER NOT PRESENT DURING 12/09/11 GAUGING.

Monitor well consist of 2 inch PVC piping - casing from 0.25 ft. to 24.00 ft. below grade, 0.020 slotted screen between 24.00 to 39.00 ft. below grade, sand packed annular to 22.0 ft. below grade, bentonite grout between 20.0 to 22.0 ft. below grade. Flush mount protector encompassing exposed casing. Secured well with locking cap and padlock.

DRAWING: SANDOVAL GC A 1A MW4-BH5. SKF | DATE: 12/07/11 | DWN BY: NJV

SOIL VAPOR

EXTRACTION

DATA

SIMCOE LLC - Sandoval GC A #1A

Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
10/22/2018	MW-2				NO	NO		Hose transferred from Irvin Com 1E
10/26/2018	MW-2				NO	NO		PVC installation completed from unit to MW #2.
10/29/2018	MW-2	2,766	32	-	-	NO		Initial start up | bailed 3 gal. of prod. from MW #2
10/30/2018	MW-2	2,720	34	-	YES	NO		Dry drum
10/31/2018	MW-2	2,525	34	-	YES	NO		Dry drum
11/1/2018	MW-2	2,355	34	-	YES	NO		Dry drum, effluent air sample collected
11/2/2018	MW-2	1,978	33	-	YES	YES	2.00	Drained drum, restarted
11/5/2018	MW-2	1,433	32	-	YES	YES	4.00	Installed 1 inch PVC drain piping to LLPT, drained drum, restarted
11/13/2018	MW-2	890	34	-	YES	YES	23.00	Drained drum, restarted
11/16/2018	MW-2	1,016	32	-	YES	YES	7.00	Drained drum, restarted
11/21/2018	MW-2	370	34	-	YES	YES	12.00	Drained drum, restarted
11/26/2018	MW-2	555	34	-	YES	YES	13.00	Drained drum, restarted
12/4/2018	MW-2	629	34	-	YES	YES	25.50	Drained drum, restarted
12/10/2018	MW-2	501	34	-	YES	YES	18.50	Drained drum, restarted
12/17/2018	MW-2	325	34	-	YES	YES	22.00	Drained drum, restarted
12/24/2018	MW-2	342	33	-	YES	YES	20.50	Drained drum, restarted
12/31/2018	MW-2	355	34	-	YES	YES	23.50	Drained drum, restarted
1/4/2019	MW-2	-	-	-	YES	YES	17.00	Drained drum only, restarted
1/9/2019	MW-2	383	34	-	YES	YES	18.50	Drained drum, restarted
1/15/2019	MW-2	372	34	-	YES	YES	19.50	
1/21/2019	MW-2	338	34	-	YES	YES	18.00	
1/26/2019	MW-2	350	34	-	YES	YES	17.00	
2/1/2019	MW-2	313	34	-	YES	YES	19.50	
2/7/2019	MW-2	316	33	-	YES	YES	15.50	
2/14/2019	MW-2	319	34	-	YES	YES	23.50	
2/20/2019	MW-2	260	33	-	YES	YES	22.00	
2/27/2019	MW-2	253	33	-	YES	YES	23.50	
3/5/2019	MW-2	252	32	-	YES	YES	12.00	
3/10/2019	MW-2	233	32	-	YES	YES	7.00	
3/18/2019	MW-2	254	32	-	YES	YES	18.00	
3/28/2019	MW-2	243	33	-	YES	YES	11.50	
4/16/2019	MW-2	222	32	-	YES	YES	20.50	

SIMCOE LLC - Sandoval GC A #1A

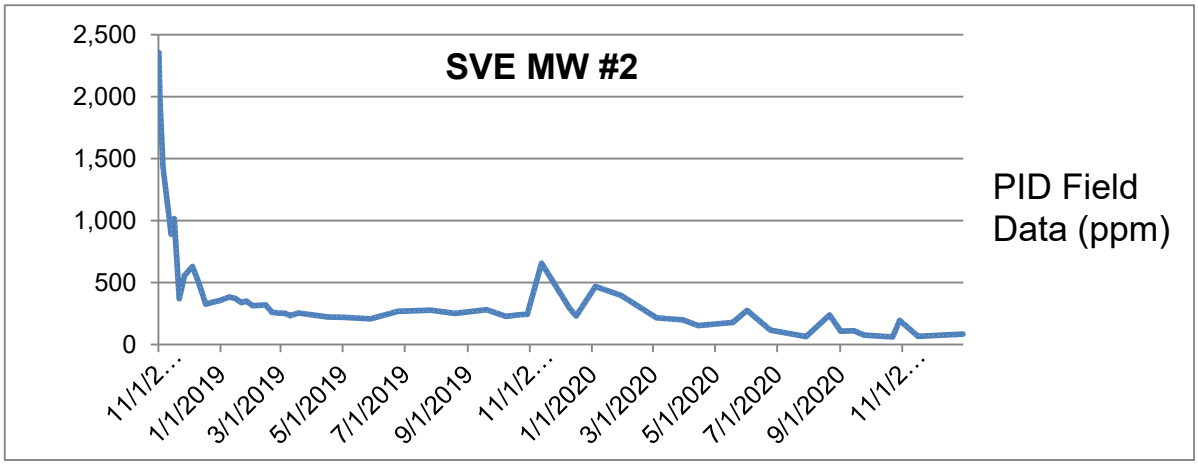
Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
5/2/2019	MW-2	219	32	-	YES	YES	4.50	
5/28/2019	MW-2	207	32	-	YES	YES	10.50	
6/24/2019	MW-2	268	32	-	YES	NO		Water in drum below drain port, effluent air sample collected
7/26/2019	MW-2	277	32	-	YES	NO		Dry drum
8/19/2019	MW-2	251	32	-	YES	NO		Dry drum
9/19/2019	MW-2	281	32	-	YES	NO		Dry drum
10/8/2019	MW-2	227	25	-	YES	NO		Water in drum 0.50" above drain port
10/22/2019	MW-2	241	35	-	YES	YES	14.00	
10/29/2019	MW-2	244	33	-	YES	YES	12.00	
11/12/2019	MW-2	656	33	-	NO	YES	25.50	Drained, restarted, collect data
11/22/2019	MW-2	NA	33	-	YES	YES	18.50	
12/6/2019	MW-2	NA	33	-	NO	YES	22.00	Drained, restarted
12/10/2019	MW-2	287	33	-	YES	YES	9.00	Drained, restarted after water sample collected
12/16/2019	MW-2	230	34	-	YES	YES	17.00	Drained, restarted
12/21/2019	MW-2	NA	34	-	NO	NO		Restarted, then collected data
12/24/2019	MW-2	NA	34	-	YES	YES	14.00	Drained, restarted
12/30/2019	MW-2	NA	34	-	NO	YES	12.00	Restarted, then collected data
1/4/2020	MW-2	468	33	-	NO	NO		Restarted, then collected data
1/6/2020	MW-2	NA	NA	-	NO	NO		
1/9/2020	MW-2	NA	16	-	NO	YES	10.50	Drained, restarted, then collected data
1/10/2020	MW-2	NA	18	-	NO	YES	10.50	Drained, restarted, then collected data
1/11/2020	MW-2	NA	34	-	NO	YES	5.50	Drained, restarted, then collected data
1/14/2020	MW-2	NA	33	-	YES	YES	9.00	Drained, restarted
1/22/2020	MW-2	NA	NA	-	NO	YES	14.00	Drained, restarted, then collected data
1/29/2020	MW-2	397	33	-	NO	NO		Water in drum below drain port
2/4/2020	MW-2	NA	32	-	NO	YES	20.50	Drained, restarted, then collected data
2/10/2020	MW-2	NA	32	-	YES	YES	23.50	Drained, restarted
2/18/2020	MW-2	NA	34	-	YES	YES	21.00	Drained, restarted
2/19/2020	MW-2	NA	34	-	YES	NO		Water level in drum not measured
2/25/2020	MW-2	NA	32	-	YES	YES	15.50	
3/4/2020	MW-2	215	30	-	NO	YES	15.50	Drained, restarted, then collected data
3/12/2020	MW-2	NA	29	-	NO	NO		Water in drum below drain port, restarted, then collected data
3/25/2020	MW-2	NA	30	-	YES	YES	14.00	
3/30/2020	MW-2	199	30	-	YES	YES	5.50	Shut down during MW sampling, drained, restarted
4/14/2020	MW-2	153	30	-	NO	YES	11.50	Drained, restarted, then collected data

SIMCOE LLC - Sandoval GC A #1A

Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
4/28/2020	MW-2	NA	29	-	YES	NO		Water in drum below drain port, restarted
5/18/2020	MW-2	178	28	-	NO	NO		Water in drum below drain port, restarted
5/20/2020	MW-2	NA	29	-	YES	NO		Water level in drum not measured
6/1/2020	MW-2	275	28	-	NO	NO		Water in drum below drain port, restarted, effluent air sample collected
6/24/2020	MW-2	116	26	-	NO	NO		Water in drum below drain port, restarted
7/29/2020	MW-2	64	26	-	NO	NO		Water level in drum not measured, restarted, then collected readings
8/21/2020	MW-2	238	27	-	NO	NO		Dry drum, restarted, then collected readings
9/1/2020	MW-2	107	28	-	YES	NO		Water level in drum not measured
9/14/2020	MW-2	111	29	-	YES	NO		Shut down prior to sampling, water in drum below drain port, restarted
9/24/2020	MW-2	76	29	-	YES	NO		Water in drum below drain port, restarted
10/9/2020	MW-2	NA	30	-	YES	NO		Water in drum just above drain port
10/22/2020	MW-2	61	29	-	YES	YES	9.50	
10/29/2020	MW-2	194	29	-	NO	YES	4.00	Drained, restarted, then collected data
11/5/2020	MW-2	NA	29	-	NO	YES		Water in drum below drain port, restarted, then collected readings
11/11/2020	MW-2	NA	30	-	YES	YES	10.50	
11/16/2020	MW-2	66	30	-	YES	YES	11.50	
11/23/2020	MW-2	NA	29	-	YES	YES	9.00	
12/4/2020	MW-2	NA	30	-	NO	YES	25.50	Drained, restarted, then collected data
12/10/2020	MW-2	NA	30	-	YES	YES	20.50	
12/15/2020	MW-2	NA	29	-	YES	YES	18.50	
12/21/2020	MW-2	NA	29	-	YES	YES	20.50	
12/30/2020	MW-2	84	29	-	NO	YES	27.00	Drained, restarted, then collected data


SVE MW #2
2,500
2,000
1,500
1,000
500
0
11/1/2…
1/1/2019
3/1/2019
5/1/2019
7/1/2019
9/1/2019
11/1/2…
1/1/2020
3/1/2020
5/1/2020
7/1/2020
9/1/2020
11/1/2…
PID Field Data (ppm)

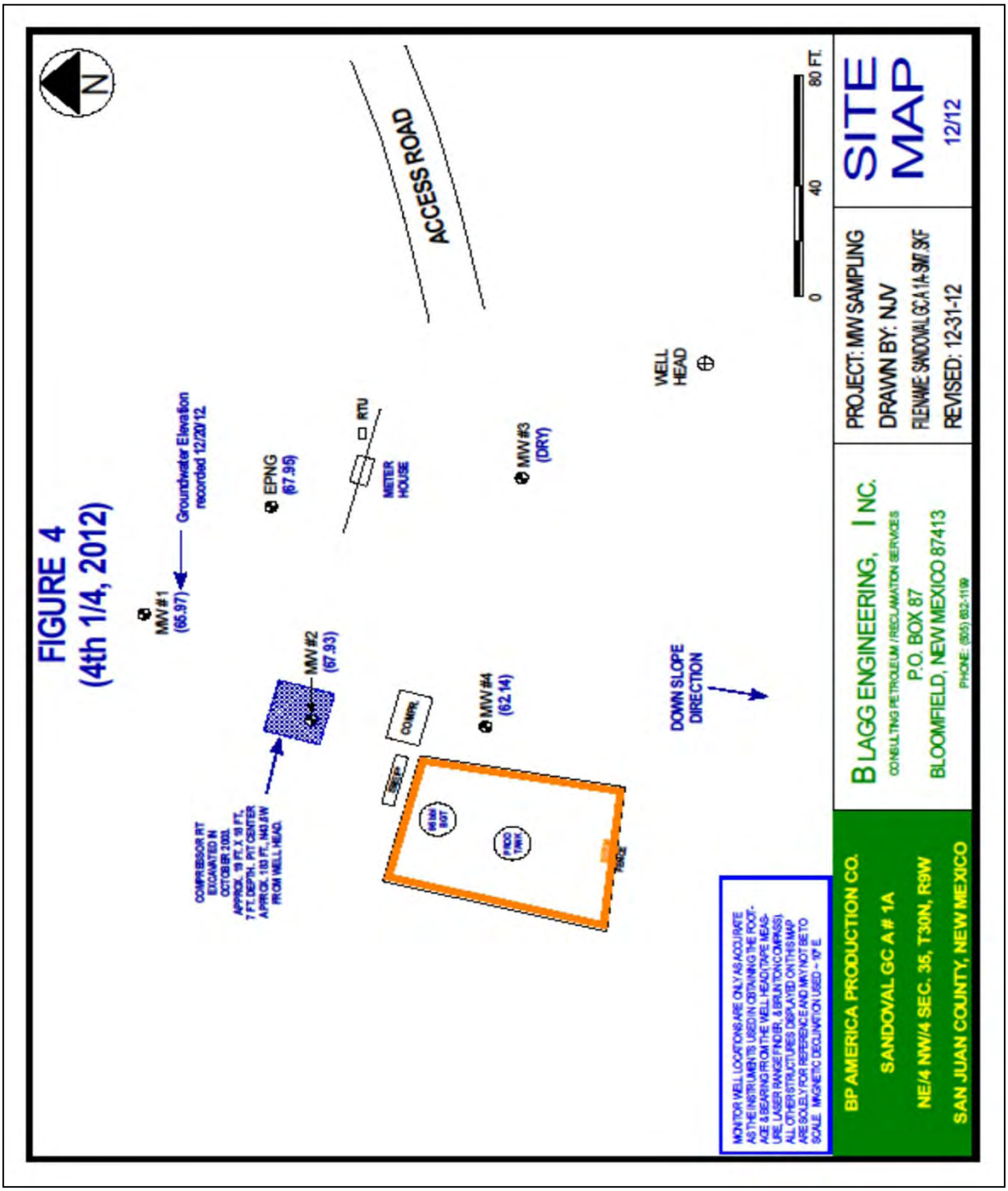


FIGURE 4
(4th 1/4, 2012)
N
ACCESS ROAD
Groundwater Elevation recorded 12/20/12
MW #1 (65.97)
EPNG (67.99)
RTU
METER HOUSE
MW #3 (DRY)
WELL HEAD
MW #2 (67.93)
MW #4 (62.14)
COMPR.
DOWN SLOPE DIRECTION
COMPRESSOR PIT EXCAVATED IN OCTOBER 2001. APPROX. 19 FT. X 19 FT. 7 FT. DEPTH. PIT CENTER APPROX. 113 FT., N43.8°W FROM WELL HEAD.
MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGEFINDER, & BRUNTON COMPASS) ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE MAGNETIC DECLINATION USED – 10° E
0
40
80 FT.
SITE MAP
12/12
PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME SANDOVAL GC A 1A-SMP.SKF
REVISED: 12-31-12
BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199
BP AMERICA PRODUCTION CO.
SANDOVAL GC A # 1A
NE/4 NW/4 SEC. 35, T30N, R9W
SAN JUAN COUNTY, NEW MEXICO

SIMCOE LLC - Sandoval GC A 1A

SVE MW #2 OVM Data

Date	Exhaust OVM (ppm)
11/1/2018	2,355
11/2/2018	1,978
11/5/2018	1,433
11/13/2018	890
11/16/2018	1,016
11/21/2018	370
11/26/2018	555
12/4/2018	629
12/10/2018	501
12/17/2018	325
12/24/2018	342
12/31/2018	355
1/9/2019	383
1/15/2019	372
1/21/2019	338
1/26/2019	350
2/1/2019	313
2/7/2019	316
2/14/2019	319
2/20/2019	260
2/27/2019	253
3/5/2019	252
3/10/2019	233
3/18/2019	254
3/28/2019	243
4/16/2019	222
5/2/2019	219
5/28/2019	207
6/24/2019	268
7/26/2019	277
8/19/2019	251
9/19/2019	281
10/8/2019	227
10/22/2019	241
10/29/2019	244
11/12/2019	656
12/10/2019	287
12/16/2019	230
1/4/2020	468
1/29/2020	397
3/4/2020	215
3/30/2020	199
4/14/2020	153
5/18/2020	178
6/1/2020	275

Date	Exhaust OVM (ppm)
6/24/2020	116
7/29/2020	64
8/21/2020	238
9/1/2020	107.1
9/14/2020	110.6
9/24/2020	76
10/22/2020	61
10/29/2020	194
11/16/2020	66
12/30/2020	84

SIMCOE LLC

SOIL VAPOR EXTRACTION (SVE) SYSTEM EFFLUENT AIR TEST RESULTS

Official Start Up Date - October 29, 2020

SANDOVAL GC A # 1A
UNIT C, SEC. 35, T30N, R9W

Revised Date: December 31, 2020
Submitted by Cottonwood Consulting LLC

SAMPLE DATE	SAMPLE ID	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	O_2 Mol %	CO_2 Mol %
11/01/18	SVE (BH-1)	2.7	17	5.5	130	-	-
09/19/19	"	<0.10	2.2	0.37	20	22.355	0.259
06/01/20	"	<0.10	<0.10	<0.10	1.8	22.614	0.061

NOTES :
1) µg/L - Micrograms per liter
2) Mol % - Mole percentage
3) (-) - Not analyzed

Analytical Report
Lab Order **1811103**
Date Reported: **11/6/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: SVE Effluent
Project: SANDOVAL GC A 1A
Collection Date: 11/1/2018 10:30:00 AM
Lab ID: 1811103-001 **Matrix:** AIR
Received Date: 11/2/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	2.7	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Toluene	17	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Ethylbenzene	5.5	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2,4-Trimethylbenzene	7.3	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,3,5-Trimethylbenzene	12	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2-Dichloroethane (EDC)	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2-Dibromoethane (EDB)	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Naphthalene	ND	5.0		µg/L	25	11/5/2018 12:02:10 PM	W55411
1-Methylnaphthalene	ND	10		µg/L	25	11/5/2018 12:02:10 PM	W55411
2-Methylnaphthalene	ND	10		µg/L	25	11/5/2018 12:02:10 PM	W55411
Acetone	ND	25		µg/L	25	11/5/2018 12:02:10 PM	W55411
Bromobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Bromodichloromethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Bromoform	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Bromomethane	ND	5.0		µg/L	25	11/5/2018 12:02:10 PM	W55411
2-Butanone	ND	25		µg/L	25	11/5/2018 12:02:10 PM	W55411
Carbon disulfide	ND	25		µg/L	25	11/5/2018 12:02:10 PM	W55411
Carbon tetrachloride	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Chlorobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Chloroethane	ND	5.0		µg/L	25	11/5/2018 12:02:10 PM	W55411
Chloroform	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Chloromethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
2-Chlorotoluene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
4-Chlorotoluene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
cis-1,2-DCE	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
cis-1,3-Dichloropropene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	25	11/5/2018 12:02:10 PM	W55411
Dibromochloromethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Dibromomethane	ND	5.0		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2-Dichlorobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,3-Dichlorobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,4-Dichlorobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Dichlorodifluoromethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,1-Dichloroethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,1-Dichloroethene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2-Dichloropropane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,3-Dichloropropane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
2,2-Dichloropropane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411

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

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1811103**
Date Reported: **11/6/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: SVE Effluent
Project: SANDOVAL GC A 1A
Collection Date: 11/1/2018 10:30:00 AM
Lab ID: 1811103-001 **Matrix:** AIR
Received Date: 11/2/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Hexachlorobutadiene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
2-Hexanone	ND	25		µg/L	25	11/5/2018 12:02:10 PM	W55411
Isopropylbenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
4-Isopropyltoluene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
4-Methyl-2-pentanone	ND	25		µg/L	25	11/5/2018 12:02:10 PM	W55411
Methylene chloride	ND	7.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
n-Butylbenzene	ND	7.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
n-Propylbenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
sec-Butylbenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Styrene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
tert-Butylbenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,1,1,2-Tetrachloroethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,1,2,2-Tetrachloroethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Tetrachloroethene (PCE)	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
trans-1,2-DCE	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
trans-1,3-Dichloropropene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2,3-Trichlorobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2,4-Trichlorobenzene	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,1,1-Trichloroethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,1,2-Trichloroethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Trichloroethene (TCE)	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Trichlorofluoromethane	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
1,2,3-Trichloropropane	ND	5.0		µg/L	25	11/5/2018 12:02:10 PM	W55411
Vinyl chloride	ND	2.5		µg/L	25	11/5/2018 12:02:10 PM	W55411
Xylenes, Total	130	3.8		µg/L	25	11/5/2018 12:02:10 PM	W55411
Surr: Dibromofluoromethane	101	70-130		%Rec	25	11/5/2018 12:02:10 PM	W55411
Surr: 1,2-Dichloroethane-d4	86.6	70-130		%Rec	25	11/5/2018 12:02:10 PM	W55411
Surr: Toluene-d8	107	70-130		%Rec	25	11/5/2018 12:02:10 PM	W55411
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	25	11/5/2018 12:02:10 PM	W55411

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

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1909A94**
Date Reported: **10/2/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: SVE (MW2)
Project: Sandoval GC A 1A
Collection Date: 9/19/2019 8:40:00 AM
Lab ID: 1909A94-001 **Matrix:** AIR
Received Date: 9/20/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Toluene	2.2	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Ethylbenzene	0.37	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2,4-Trimethylbenzene	1.5	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,3,5-Trimethylbenzene	2.3	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Naphthalene	ND	0.20		µg/L	1	9/20/2019 11:22:17 AM	R63092
1-Methylnaphthalene	ND	0.40		µg/L	1	9/20/2019 11:22:17 AM	R63092
2-Methylnaphthalene	ND	0.40		µg/L	1	9/20/2019 11:22:17 AM	R63092
Acetone	ND	1.0		µg/L	1	9/20/2019 11:22:17 AM	R63092
Bromobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Bromodichloromethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Bromoform	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Bromomethane	ND	0.20		µg/L	1	9/20/2019 11:22:17 AM	R63092
2-Butanone	ND	1.0		µg/L	1	9/20/2019 11:22:17 AM	R63092
Carbon disulfide	ND	1.0		µg/L	1	9/20/2019 11:22:17 AM	R63092
Carbon tetrachloride	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Chlorobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Chloroethane	ND	0.20		µg/L	1	9/20/2019 11:22:17 AM	R63092
Chloroform	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Chloromethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
2-Chlorotoluene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
4-Chlorotoluene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
cis-1,2-DCE	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/20/2019 11:22:17 AM	R63092
Dibromochloromethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Dibromomethane	ND	0.20		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,1-Dichloroethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,1-Dichloroethene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2-Dichloropropane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,3-Dichloropropane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
2,2-Dichloropropane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **1909A94**
Date Reported: **10/2/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Sandoval GC A 1A
Lab ID: 1909A94-001 **Matrix:** AIR

Client Sample ID: SVE (MW2)
Collection Date: 9/19/2019 8:40:00 AM
Received Date: 9/20/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Hexachlorobutadiene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
2-Hexanone	ND	1.0		µg/L	1	9/20/2019 11:22:17 AM	R63092
Isopropylbenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
4-Isopropyltoluene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/20/2019 11:22:17 AM	R63092
Methylene chloride	ND	0.30		µg/L	1	9/20/2019 11:22:17 AM	R63092
n-Butylbenzene	ND	0.30		µg/L	1	9/20/2019 11:22:17 AM	R63092
n-Propylbenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
sec-Butylbenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Styrene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
tert-Butylbenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
trans-1,2-DCE	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Trichlorofluoromethane	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/20/2019 11:22:17 AM	R63092
Vinyl chloride	ND	0.10		µg/L	1	9/20/2019 11:22:17 AM	R63092
Xylenes, Total	20	0.15		µg/L	1	9/20/2019 11:22:17 AM	R63092
Surr: Dibromofluoromethane	83.0	53.9-127		%Rec	1	9/20/2019 11:22:17 AM	R63092
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	9/20/2019 11:22:17 AM	R63092
Surr: Toluene-d8	98.3	70-130		%Rec	1	9/20/2019 11:22:17 AM	R63092
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	9/20/2019 11:22:17 AM	R63092

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2006046**
Date Reported: **6/11/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: SVE (MW2)
Project: Sandoval GC A #1A
Collection Date: 6/1/2020 11:35:00 AM
Lab ID: 2006046-001 **Matrix:** AIR
Received Date: 6/2/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Toluene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Ethylbenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2,4-Trimethylbenzene	0.47	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,3,5-Trimethylbenzene	0.69	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Naphthalene	ND	0.20		µg/L	1	6/8/2020 12:29:40 PM	A69471
1-Methylnaphthalene	ND	0.40		µg/L	1	6/8/2020 12:29:40 PM	A69471
2-Methylnaphthalene	ND	0.40		µg/L	1	6/8/2020 12:29:40 PM	A69471
Acetone	ND	1.0		µg/L	1	6/8/2020 12:29:40 PM	A69471
Bromobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Bromodichloromethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Bromoform	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Bromomethane	ND	0.20		µg/L	1	6/8/2020 12:29:40 PM	A69471
2-Butanone	ND	1.0		µg/L	1	6/8/2020 12:29:40 PM	A69471
Carbon disulfide	ND	1.0		µg/L	1	6/8/2020 12:29:40 PM	A69471
Carbon tetrachloride	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Chlorobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Chloroethane	ND	0.20		µg/L	1	6/8/2020 12:29:40 PM	A69471
Chloroform	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Chloromethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
2-Chlorotoluene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
4-Chlorotoluene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
cis-1,2-DCE	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	6/8/2020 12:29:40 PM	A69471
Dibromochloromethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Dibromomethane	ND	0.20		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2-Dichlorobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,3-Dichlorobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,4-Dichlorobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Dichlorodifluoromethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,1-Dichloroethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,1-Dichloroethene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2-Dichloropropane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,3-Dichloropropane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
2,2-Dichloropropane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2006046**
Date Reported: **6/11/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: SVE (MW2)
Project: Sandoval GC A #1A
Collection Date: 6/1/2020 11:35:00 AM
Lab ID: 2006046-001 **Matrix:** AIR
Received Date: 6/2/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Hexachlorobutadiene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
2-Hexanone	ND	1.0		µg/L	1	6/8/2020 12:29:40 PM	A69471
Isopropylbenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
4-Isopropyltoluene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
4-Methyl-2-pentanone	ND	1.0		µg/L	1	6/8/2020 12:29:40 PM	A69471
Methylene chloride	ND	0.30		µg/L	1	6/8/2020 12:29:40 PM	A69471
n-Butylbenzene	ND	0.30		µg/L	1	6/8/2020 12:29:40 PM	A69471
n-Propylbenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
sec-Butylbenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Styrene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
tert-Butylbenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
trans-1,2-DCE	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,1,1-Trichloroethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,1,2-Trichloroethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Trichloroethene (TCE)	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Trichlorofluoromethane	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
1,2,3-Trichloropropane	ND	0.20		µg/L	1	6/8/2020 12:29:40 PM	A69471
Vinyl chloride	ND	0.10		µg/L	1	6/8/2020 12:29:40 PM	A69471
Xylenes, Total	1.8	0.15		µg/L	1	6/8/2020 12:29:40 PM	A69471
Surr: Dibromofluoromethane	83.6	70-130		%Rec	1	6/8/2020 12:29:40 PM	A69471
Surr: 1,2-Dichloroethane-d4	84.7	70-130		%Rec	1	6/8/2020 12:29:40 PM	A69471
Surr: Toluene-d8	102	70-130		%Rec	1	6/8/2020 12:29:40 PM	A69471
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	6/8/2020 12:29:40 PM	A69471

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Hall Environmental
Project: Not Indicated
Client Sample ID: 1909A94-001B; SVE (MW2)
Location:
Lab ID: G19090499-001

Report Date: 10/02/19
Collection Date: 09/19/19 08:40
Date Received: 09/24/19
Sampled By: Not Provided

Analyses	Result	Units	Qualifier	Method	Analysis Date / By
NATURAL GAS CHROMATOGRAPHIC ANALYSIS REPORT					
Oxygen	22.355	Mol %		GPA 2261	10/01/19 11:33 / djb
Nitrogen	77.386	Mol %		GPA 2261	10/01/19 11:33 / djb
Carbon Dioxide	0.259	Mol %		GPA 2261	10/01/19 11:33 / djb
Hydrogen Sulfide	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
Methane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
Ethane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
Propane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
Isobutane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
n-Butane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
Isopentane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
n-Pentane	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
Hexanes plus	< 0.001	Mol %		GPA 2261	10/01/19 11:33 / djb
GPM @ STD COND/1000 CU.FT., MOISTURE FREE GAS					
GPM Ethane	< 0.0003	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM Propane	< 0.0003	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM Isobutane	< 0.0003	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM n-Butane	< 0.0003	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM Isopentane	< 0.0004	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM n-Pentane	< 0.0004	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM Hexanes plus	< 0.0004	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM Pentanes plus	< 0.0004	gal/MCF		GPA 2261	10/01/19 11:33 / djb
GPM Total	< 0.0004	gal/MCF		GPA 2261	10/01/19 11:33 / djb
CALCULATED PROPERTIES					
Calculation Pressure Base	14.730	psia		GPA 2261	10/01/19 11:33 / djb
Calculation Temperature Base	60	°F		GPA 2261	10/01/19 11:33 / djb
Compressibility Factor, Z	1.0000	unitless		GPA 2261	10/01/19 11:33 / djb
Molecular Weight	28.94	unitless		GPA 2261	10/01/19 11:33 / djb
Pseudo-critical Pressure, psia	549	psia		GPA 2261	10/01/19 11:33 / djb
Pseudo-critical Temperature, deg R	240	deg R		GPA 2261	10/01/19 11:33 / djb
Specific Gravity (air=1.000)	1.002	unitless		GPA 2261	10/01/19 11:33 / djb
Gross BTU per cu ft @ std cond, dry	< 0.01	BTU/cu ft		GPA 2261	10/01/19 11:33 / djb
Gross BTU per cu ft @ std cond, wet	< 0.01	BTU/cu ft		GPA 2261	10/01/19 11:33 / djb

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES
Trust our People. Trust our Data.
www.energylab.com
Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Hall Environmental
Project: Not Indicated
Client Sample ID: 2006046-001B; SVE (MW2)
Location:
Lab ID: G20060137-001

Report Date: 06/11/20
Collection Date: 06/01/20 11:35
Date Received: 06/05/20
Sampled By: Not Provided

Analyses	Result	Units	Qualifier	Method	Analysis Date / By
NATURAL GAS CHROMATOGRAPHIC ANALYSIS REPORT					
Oxygen	22.614	Mol %		GPA 2261	06/09/20 15:54 / djb
Nitrogen	77.325	Mol %		GPA 2261	06/09/20 15:54 / djb
Carbon Dioxide	0.061	Mol %		GPA 2261	06/09/20 15:54 / djb
Hydrogen Sulfide	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
Methane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
Ethane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
Propane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
Isobutane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
n-Butane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
Isopentane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
n-Pentane	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
Hexanes plus	< 0.001	Mol %		GPA 2261	06/09/20 15:54 / djb
GPM @ STD COND/1000 CU.FT., MOISTURE FREE GAS					
GPM Ethane	< 0.0003	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM Propane	< 0.0003	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM Isobutane	< 0.0003	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM n-Butane	< 0.0003	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM Isopentane	< 0.0004	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM n-Pentane	< 0.0004	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM Hexanes plus	< 0.0004	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM Pentanes plus	< 0.0004	gal/MCF		GPA 2261	06/09/20 15:54 / djb
GPM Total	< 0.0004	gal/MCF		GPA 2261	06/09/20 15:54 / djb
CALCULATED PROPERTIES					
Calculation Pressure Base	14.730	psia		GPA 2261	06/09/20 15:54 / djb
Calculation Temperature Base	60	°F		GPA 2261	06/09/20 15:54 / djb
Compressibility Factor, Z	1.0000	unitless		GPA 2261	06/09/20 15:54 / djb
Molecular Weight	28.92	unitless		GPA 2261	06/09/20 15:54 / djb
Pseudo-critical Pressure, psia	548	psia		GPA 2261	06/09/20 15:54 / djb
Pseudo-critical Temperature, deg R	239	deg R		GPA 2261	06/09/20 15:54 / djb
Specific Gravity (air=1.000)	1.002	unitless		GPA 2261	06/09/20 15:54 / djb
Gross BTU per cu ft @ std cond, dry	< 0.01	BTU/cu ft		GPA 2261	06/09/20 15:54 / djb
Gross BTU per cu ft @ std cond, wet	< 0.01	BTU/cu ft		GPA 2261	06/09/20 15:54 / djb

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

Chain-of-Custody Record

Client: BP AMERICA

BLAGG ENGINEERING INC.

Mailing Address:

Phone #: 505-320-1183

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: SANDOVAL GC A 1A

Project #:

Project Manager: STEVE MOSKAL

Sampler: JEFF BLAGG

On Ice: ☐ Yes ☐ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 21811103	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8260				Air Bubbles (Y or N)
11/1/2018	1030	~~GAS~~ AIR	SVE EFFLUENT	TEDLAR BAG	COOL	001												X				
			NV 01/28/2021																			

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/1/2018	1346			11/1/18	1340
11/1/18	1810			11/02/18	0645

Remarks: BILL BP
CONTACT: STEVE MOSKAL
PO BEING GENERATED

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
Sandoval GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: **NELSON VELEZ**

On Ice: ☑ Yes ☐ No 9/20/19

Sample Temperature: ~~5.3-0.3=5.0~~ ~~6.2-0.3=5.9~~

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Chloride (soil - 300.0 / water - 300.1)	Carbon Dioxide	Oxygen	Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
Analysis Request																						
9/19/19	0840	AIR	SVE (MW2)	tedlar bag - 2	n/a	1909A94-001										√		√	√	√		

Date: 9/19/19 Time: 1343 Relinquished by: [signature]
Received by: [signature] Date: 9/19/19 Time: 1343

Date: 9/19/19 Time: 1806 Relinquished by: [signature]
Received by: [signature] courier Date: 9/20/19 Time: 8:15

Remarks: One tedlar received empty. mg 9/20

BILL DIRECTLY TO BPX: Contact: Steve Moskal

Should receive/Should've received PO from BPX.

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: NELSON VELEZ NV

On Ice: ☑ Yes ☐ No

Sample Temperature: 6.7 - 0.1 = 6.6 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2006046	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Chloride (soil - 300.0 / water - 300.1)	Carbon Dioxide	Oxygen	Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
6/1/20	1135	AIR	SVE (MW2)	tedlar bag - 2	n/a	-001										√		√	√	√		
~~6/1/20~~	~~1218~~	~~WATER~~	~~MW #2~~	~~40 ml - 2~~	~~HCl~~	~~-002~~	~~NV~~									√						

Remarks: BILL DIRECTLY TO BPX USING INFORMATION BELOW.

CONTACT: Steve Moskal

PO #: Provided by BPX (SVE O&M 1H 2020)

Date	Time	Relinquished by:	Received by:	Date	Time
6/1/20	1520		Christa Waller	6/1/2020	1520
6/1/2020	1807	Christa Waller	EKM courier	6/2/20	8:00

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 notated on the analytical report.

ENERGY LABORATORIES Trust our People. Trust our Data.
Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

ANALYTICAL SUMMARY REPORT

October 02, 2019

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: G19090499

Project Name: Not Indicated

Energy Laboratories Inc. Gillette WY received the following 1 sample for Hall Environmental on 9/24/2019 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
G19090499-001	1909A94-001B; SVE (MW2)	09/19/19 8:40	09/24/19	Gas	Natural Gas Analysis - BTU Natural Gas Analysis - Compressibility Factor Natural Gas Analysis - GPM Natural Gas Analysis - Molecular Weight Natural Gas Analysis - Routine Natural Gas Analysis - Pressure Base Natural Gas Analysis - Psuedo-Critical Pressure Natural Gas Analysis - Psuedo-Critical Temperature Natural Gas Analysis - Specific Gravity Natural Gas Analysis - Temperature Base

The analyses presented in this report were performed by Energy Laboratories, Inc., 400 W. Boxelder Rd., Gillette, WY 82718, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these tests results, please contact your Project Manager.

Report Approved By:

Julie Weisz
Gillette QA Officer

Digitally signed by
Julie L. Weisz
Date: 2019.10.02 08:18:59 -06:00

QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental **Work Order:** G19090499 **Report Date:** 10/02/19

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261									Analytical Run: R253209
Lab ID: ICV-1910011111	Initial Calibration Verification Standard								10/01/19 11:11
Oxygen	0.397	Mol %	0.001	83	75	110			
Nitrogen	5.005	Mol %	0.001	99	90	110			
Carbon Dioxide	4.905	Mol %	0.001	99	90	110			
Hydrogen Sulfide	0.127	Mol %	0.001	126	100	136			
Methane	73.107	Mol %	0.001	100	90	110			
Ethane	5.017	Mol %	0.001	101	90	110			
Propane	5.132	Mol %	0.001	101	90	110			
Isobutane	2.022	Mol %	0.001	100	90	110			
n-Butane	1.999	Mol %	0.001	99	90	110			
Isopentane	0.995	Mol %	0.001	100	90	110			
n-Pentane	0.988	Mol %	0.001	99	90	110			
Hexanes plus	0.306	Mol %	0.001	101	90	110			
Lab ID: CCV-1910011119	Continuing Calibration Verification Standard								10/01/19 11:19
Oxygen	0.572	Mol %	0.001	95	90	110			
Nitrogen	1.236	Mol %	0.001	88	85	110			
Carbon Dioxide	0.963	Mol %	0.001	96	90	110			
Hydrogen Sulfide	0.022	Mol %	0.001	88	70	130			
Methane	93.621	Mol %	0.001	100	90	110			
Ethane	1.027	Mol %	0.001	102	90	110			
Propane	1.013	Mol %	0.001	101	90	110			
Isobutane	0.505	Mol %	0.001	101	90	110			
n-Butane	0.491	Mol %	0.001	98	90	110			
Isopentane	0.201	Mol %	0.001	100	90	110			
n-Pentane	0.196	Mol %	0.001	98	90	110			
Hexanes plus	0.153	Mol %	0.001	101	90	110			
Lab ID: CCV-1910011439	Continuing Calibration Verification Standard								10/01/19 14:39
Oxygen	0.601	Mol %	0.001	100	90	110			
Nitrogen	1.329	Mol %	0.001	95	85	110			
Carbon Dioxide	0.969	Mol %	0.001	97	90	110			
Hydrogen Sulfide	0.024	Mol %	0.001	96	70	130			
Methane	93.461	Mol %	0.001	100	90	110			
Ethane	1.029	Mol %	0.001	102	90	110			
Propane	1.025	Mol %	0.001	102	90	110			
Isobutane	0.507	Mol %	0.001	101	90	110			
n-Butane	0.498	Mol %	0.001	100	90	110			
Isopentane	0.202	Mol %	0.001	101	90	110			
n-Pentane	0.199	Mol %	0.001	99	90	110			
Hexanes plus	0.156	Mol %	0.001	103	90	110			
Method: GPA 2261									Batch: R253209
Lab ID: G19090499-001ADUP	Sample Duplicate				Run: Varian GC_191001A				10/01/19 11:38
Oxygen	22.354	Mol %	0.001				0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental **Work Order:** G19090499 **Report Date:** 10/02/19

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261									Batch: R253209
Lab ID: G19090499-001ADUP	Sample Duplicate				Run: Varian GC_191001A				10/01/19 11:38
Nitrogen	77.386	Mol %	0.001				0.0	10	
Carbon Dioxide	0.260	Mol %	0.001				0.4	10	
Hydrogen Sulfide	< 0.001	Mol %	0.001					10	
Methane	< 0.001	Mol %	0.001					10	
Ethane	< 0.001	Mol %	0.001					10	
Propane	< 0.001	Mol %	0.001					10	
Isobutane	< 0.001	Mol %	0.001					10	
n-Butane	< 0.001	Mol %	0.001					10	
Isopentane	< 0.001	Mol %	0.001					10	
n-Pentane	< 0.001	Mol %	0.001					10	
Hexanes plus	< 0.001	Mol %	0.001					10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

ENERGY LABORATORIES
Tel: 800.735.4489 Fax: 888.235.0515
Casper, WY 866.686.7175 Gillette, WY 877.472.0711

Work Order Receipt Checklist

Hall Environmental

G19090499

Login completed by: Misty Stephens
Reviewed by: Kasey Vidick
Reviewed Date: 9/24/2019

Date Received: 9/24/2019
Received by: mas
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	°C		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

SUB CONTRATOR: Bil-Energy	COMPANY: Energy Laboratories	PHONE: (800) 735-4489	FAX: (406) 252-6069
ADDRESS: 1120 South 27th Street		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: Billings, MT 59107			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	1909A94-001B	SVE (MW2)	TEDLAR	Air	9/19/2019 8:40:00 AM	1	Natural Gas Analysis

1909094

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 9/20/2019	Time: 10:36 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ✓ RUSH Next BD | 2nd BD | 3rd BD

REPORT TRANSMITTAL DESIRED
| HARDCOPY (extra cost) | FAX | EMAIL | ONLINE

FOR LAB USE ONLY
Temp of samples °C Attempt to Cool ?
Comments:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 1909A94 RcptNo: 1

Received By: **Yazmine Garduno** 9/20/2019 8:15:00 AM Yazmine Garduno

Completed By: **Michelle Garcia** 9/20/2019 9:51:45 AM Michelle Garcia

Reviewed By: AT 09/20/19

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 ☐
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: AT 09/20/19

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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			
2	NA	Good	Yes			

ENERGY LABORATORIES
Trust our People. Trust our Data.
www.energylab.com
Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

ANALYTICAL SUMMARY REPORT

June 11, 2020

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: G20060137
Project Name: Not Indicated

Energy Laboratories Inc. Gillette WY received the following 1 sample for Hall Environmental on 6/5/2020 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
G20060137-001	2006046-001B; SVE (MW2)	06/01/20 11:35	06/05/20	Air	Natural Gas Analysis - BTU Natural Gas Analysis - Compressibility Factor Natural Gas Analysis - GPM Natural Gas Analysis - Molecular Weight Natural Gas Analysis - Routine Natural Gas Analysis - Pressure Base Natural Gas Analysis - Psuedo-Critical Pressure Natural Gas Analysis - Psuedo-Critical Temperature Natural Gas Analysis - Specific Gravity Natural Gas Analysis - Temperature Base

The analyses presented in this report were performed by Energy Laboratories, Inc., 400 W. Boxelder Rd., Gillette, WY 82718, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these tests results, please contact your Project Manager.

Report Approved By:

ENERGY LABORATORIES
Trust our People. Trust our Data.
www.energylab.com
Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental **Work Order:** G20060137 **Report Date:** 06/11/20

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261**									Analytical Run: R257868
Lab ID: **ICV-2006091524**	Initial Calibration Verification Standard								06/09/20 15:24
Oxygen	0.390	Mol %	0.001	81	75	110			
Nitrogen	5.004	Mol %	0.001	99	90	110			
Carbon Dioxide	4.925	Mol %	0.001	99	90	110			
Hydrogen Sulfide	0.131	Mol %	0.001	130	100	136			
Methane	73.079	Mol %	0.001	100	90	110			
Ethane	5.023	Mol %	0.001	101	90	110			
Propane	5.132	Mol %	0.001	101	90	110			
Isobutane	2.020	Mol %	0.001	100	90	110			
n-Butane	1.996	Mol %	0.001	99	90	110			
Isopentane	0.997	Mol %	0.001	100	90	110			
n-Pentane	0.991	Mol %	0.001	99	90	110			
Hexanes plus	0.312	Mol %	0.001	103	90	110			
Lab ID: **CCV-2006091530**	Continuing Calibration Verification Standard								06/09/20 15:30
Oxygen	0.573	Mol %	0.001	95	90	110			
Nitrogen	1.283	Mol %	0.001	91	85	110			
Carbon Dioxide	0.956	Mol %	0.001	95	90	110			
Hydrogen Sulfide	0.024	Mol %	0.001	96	70	130			
Methane	93.567	Mol %	0.001	100	90	110			
Ethane	1.029	Mol %	0.001	102	90	110			
Propane	1.013	Mol %	0.001	101	90	110			
Isobutane	0.507	Mol %	0.001	101	90	110			
n-Butane	0.492	Mol %	0.001	98	90	110			
Isopentane	0.202	Mol %	0.001	101	90	110			
n-Pentane	0.198	Mol %	0.001	99	90	110			
Hexanes plus	0.156	Mol %	0.001	103	90	110			
Lab ID: **CCV-2006100757**	Continuing Calibration Verification Standard								06/10/20 07:58
Oxygen	0.593	Mol %	0.001	99	90	110			
Nitrogen	1.331	Mol %	0.001	95	85	110			
Carbon Dioxide	0.972	Mol %	0.001	97	90	110			
Hydrogen Sulfide	0.028	Mol %	0.001	112	70	130			
Methane	93.500	Mol %	0.001	100	90	110			
Ethane	1.024	Mol %	0.001	102	90	110			
Propane	1.006	Mol %	0.001	101	90	110			
Isobutane	0.502	Mol %	0.001	100	90	110			
n-Butane	0.489	Mol %	0.001	98	90	110			
Isopentane	0.201	Mol %	0.001	100	90	110			
n-Pentane	0.198	Mol %	0.001	99	90	110			
Hexanes plus	0.156	Mol %	0.001	103	90	110			
Method: **GPA 2261**									Batch: R257868
Lab ID: **G20060137-001ADUP**	Sample Duplicate				Run: Varian GC_200610A				06/09/20 15:59
Oxygen	22.613	Mol %	0.001				0.0	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

ENERGY LABORATORIES
Trust our People. Trust our Data.
www.energylab.com
Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental **Work Order:** G20060137 **Report Date:** 06/11/20

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261**									Batch: R257868
Lab ID: **G20060137-001ADUP**	Sample Duplicate				Run: Varian GC_200610A			06/09/20 15:59	
Nitrogen	77.328	Mol %	0.001				0.0	10	
Carbon Dioxide	0.059	Mol %	0.001				3.3	10	
Hydrogen Sulfide	< 0.001	Mol %	0.001					10	
Methane	< 0.001	Mol %	0.001					10	
Ethane	< 0.001	Mol %	0.001					10	
Propane	< 0.001	Mol %	0.001					10	
Isobutane	< 0.001	Mol %	0.001					10	
n-Butane	< 0.001	Mol %	0.001					10	
Isopentane	< 0.001	Mol %	0.001					10	
n-Pentane	< 0.001	Mol %	0.001					10	
Hexanes plus	< 0.001	Mol %	0.001					10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

ENERGY LABORATORIES
Trust our People. Trust our Data.
www.energylab.com
Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

Work Order Receipt Checklist

Hall Environmental

G20060137

Login completed by: Chantel S. Johnson
Date Received: 6/5/2020
Reviewed by: Misty Stephens
Received by: csj
Reviewed Date: 6/8/2020
Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	°C		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None

ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD 1 1

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

SUB CONTRATOR: **Energy Labs-Gillette**	COMPANY: **Energy Laboratories**	PHONE: **(866) 686-7175**	FAX:
ADDRESS: **400 W Boxelder Rd**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Gillette, WY 82718**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2006046-001B	SVE (MW2)	TEDLAR	Air	6/1/2020 11:35:00 AM	1	Natural Gas Analysis

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By: T. Q	Date: 6/2/2020	Time: 8:32 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☒ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: G2006137

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006046**
11-Jun-20

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **100NG LCS** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W69341** RunNo: **69341**
Prep Date: Analysis Date: **6/2/2020** SeqNo: **2405014** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	114	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.1	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.3		10.00		93.2	70	130			

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A69471** RunNo: **69471**
Prep Date: Analysis Date: **6/8/2020** SeqNo: **2410459** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006046**
11-Jun-20

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A69471**	RunNo: **69471**
Prep Date:	Analysis Date: **6/8/2020**	SeqNo: **2410459** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.9	70	130			

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 Quanitative 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#: **2006046**
11-Jun-20

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A69471** RunNo: **69471**
Prep Date: Analysis Date: **6/8/2020** SeqNo: **2410459** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		99.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A69471** RunNo: **69471**
Prep Date: Analysis Date: **6/8/2020** SeqNo: **2410460** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	87.8	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.5	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.7	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.0	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.6	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

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 Quanitative 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

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: **BLAGG** Work Order Number: **2006046** RcptNo: **1**

Received By: **Emily Mocho** **6/2/2020 8:00:00 AM**

Completed By: **Isaiah Ortiz** **6/2/2020 8:29:08 AM** I-OL

Reviewed By: JR 6/4/20 2 JR 6/2/20

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. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
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)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by: EM 6/2/20

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	6.6	Good	Not Present			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1811103 | RcptNo: 1

Received By: Anne Thorne 11/2/2018 6:45:00 AM Anne Thorne

Completed By: Anne Thorne 11/2/2018 1:06:26 PM Anne Thorne

Reviewed By: JAB 11/02/18

Labeled by: 11/2/18 AT

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: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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		Good	Yes			

WATER/FLUID

FIELD LOG

SHEETS

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : August 30, 2011

DEVELOPER / SAMPLER : N J V

Filename : 08-30-11.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
2			33.54	40.00	1135	7.28	2700	17.8	3.75

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	08/30/2011	1130

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2 , murky brown appearance , undistinguishable odor detected within purged water . Collected sample for BTEX per US EPA Method 8021B .

EPNG well monitor well top elevation = 101.46 ft.

Top of casing MW # 2 ~ 2.75 ft. above grade .

on-site	11:00	temp	80 F
off-site	11:45	temp	84 F
sky cond.	Sunny		
wind speed	0 - 5	direct.	ESE - WNW

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : December 9, 2011

DEVELOPER / SAMPLER : N J V

Filename : 12-09-11.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	68.22	34.97	40.00	1430	7.38	2,200	14.9	2.50
2	101.78	68.21	33.57	40.00	1530	7.09	2,700	14.9	3.25
3	99.13		DRY	38.73	-	-	-	-	-
4	98.96		DRY	38.62	-	-	-	-	-
EPNG	101.46	68.20	33.26		-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	12/09/2011	1035

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2 , murky brown appearance , undistinguishable odor detected within purged water . Collected sample for BTEX per US EPA Method 8021B . Purged wells using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing . Inserted 5 new ORC filter socks within MW # 1 water column after sample collection within MW # 2 .

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	**1:10**	temp	**34 F**
off-site	**3.55**	temp	**39 F**
sky cond.	**Sunny**		
wind speed	**CALM**	direct.	**S**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : February 9, 2012

DEVELOPER / SAMPLER : N J V

Filename : 02-09-12.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	68.18	35.01	40.00	1300	6.82	3,300	16.3	2.50
2	101.78	68.22	33.56	40.00	1345	6.90	2,800	16.1	3.25
3	99.13	60.61	38.52	38.73	-	-	-	-	-
4	98.96	61.90	37.06	38.62	-	-	-	-	-
EPNG	101.46	68.20	33.26		-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	02/07/2012	0830

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 1 & # 2 , undistinguishable odor detected within purged water from MW # 2 . Collected samples for BTEX per US EPA Method 8021B from MW # 1 & # 2 only . Purged wells using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing .

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	**12:14**	temp	**47 F**
off-site	**2:38**	temp	**51 F**
sky cond.	**Mostly sunny**		
wind speed	**5 - 15**	direct.	**W - WNW**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : June 21, 2012

DEVELOPER / SAMPLER : N J V

Filename : 06-21-12.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	66.06	37.13	40.00	1400	6.78	3,300	19.6	1.00
2	101.78	68.08	33.70	40.00	1505	6.87	2,600	18.4	3.00
3	99.13	59.98	39.15	38.73	-	-	-	-	-
4	98.96	61.27	37.69	38.62	-	-	-	-	-
EPNG	101.46	68.05	33.41		-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	06/20/12	1010

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Good recovery in MW # 1 & # 2 , undistinguishable odor detected within purged water from MW # 2 . Collected samples for BTEX per US EPA Method 8021B from MW # 1 & # 2 only . Purged wells using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing .

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	**1:10**	temp	**91 F**
off-site	**3:15**	temp	**96 F**
sky cond.	**Sunny**		
wind speed	**0 - 5**	direct.	**Calm**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : September 20, 2012

DEVELOPER / SAMPLER : N J V

Filename : 09-20-12.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	67.11	36.08	40.00	1220	6.94	3,700	15.2	2.00
2	101.78	68.00	33.78	40.00	1320	6.90	2,600	15.6	3.00
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	09/20/12	0700

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 1 & # 2 , undistinguishable odor detected within purged water from MW # 2 . Collected samples for BTEX per US EPA Method 8021B from MW # 1 & # 2 only . Purged wells using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing .

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	11:30	temp	75 F
off-site	1:30	temp	83 F
sky cond.	Sunny		
wind speed	5 - 10	direct.	WSW

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : December 20, 2012

DEVELOPER / SAMPLER : N J V

Filename : 12-20-12.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	65.97	37.22	40.00	1345	6.90	2,700	13.8	1.25
2	101.78	67.93	33.85	40.00	1420	7.01	2,200	14.8	2.50
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	62.14	36.82	38.62	-	-	-	-	-
EPNG	101.46	67.95	33.51	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	12/20/12	0820

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Good recovery in MW # 1 & # 2 , undistinguishable odor detected within purged water from MW # 2 . Collected samples for BTEX per US EPA Method 8021B from MW # 1 & # 2 only . Purged wells using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing .

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	1:00	temp	23 F
off-site	2:30	temp	26 F
sky cond.	Sunny		
wind speed	0 - 5	direct.	Calm

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : March 19, 2013

DEVELOPER / SAMPLER : N J V

Filename : 03-19-13.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	64.90	38.29	40.00	1025	7.21	2,600	10.4	0.75
2	101.78	67.83	33.95 *	28.50	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		33.88	DEPTH TO WATER (FT.) =		34.09	PRODUCT THICKNESS (FT.) =		0.21
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	62.09	36.87	38.62	-	-	-	-	-
EPNG	101.46	67.87	33.59	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	03/12/13	0900

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

* INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .

Very poor recovery in MW # 1 . Collected sample for BTEX per US EPA Method 8021B from MW # 1 only . Purged well using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing .

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	9:30	temp	44 F
off-site	10:40	temp	50 F
sky cond.	Sunny		
wind speed	0 - 5	direct.	SE - W

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Sandoval GC A # 1A - Compr. pit
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : June 19, 2013

DEVELOPER / SAMPLER : N J V

Filename : 06-19-13.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.88	39.31	40.00	0905	7.31	2,100	16.5	0.50
2	101.78	67.77	34.01 *	28.50	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		33.92	DEPTH TO WATER (FT.) =		34.18	PRODUCT THICKNESS (FT.) =		0.26
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	64.26	34.70	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	06/18/13	0630

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

* INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .

Very poor recovery in MW # 1 . Collected sample for BTEX per US EPA Method 8021B from MW # 1 only . Purged well using 2 inch submersible electrical pump , new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing . No access to EPNG well.

Top of casing MW # 1 ~ 1.00 ft. , MW # 2 ~ 2.75 ft. above grade , MW # 3 ~ @ grade , MW # 4 ~ 0.25 ft. below grade .

on-site	8:00	temp	68 F
off-site	10:00	temp	81 F
sky cond.	Sunny		
wind speed	0 - 10	direct.	E - SE

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : September 26, 2013

DEVELOPER / SAMPLER : N J V

Filename : 09-26-13.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.34	39.85	40.00	-	-	-	-	-
2	101.78		33.98 *	28.50	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		33.94	DEPTH TO WATER (FT.) =		34.05	PRODUCT THICKNESS (FT.) =		0.11
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	09/26/13	0700

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)
Ideally a minimum of three (3) wellbore volumes:
2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

* INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW # 1 ~ 1.00 ft., MW # 2 ~ 2.75 ft. above grade, MW # 3 ~ @ grade,
MW # 4 ~ 0.25 ft. below grade .

on-site	12:45	temp	76 F
off-site	1:05	temp	76 F
sky cond.	Sunny		
wind speed	10 - 20	direct.	SSW

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : December 17, 2013

DEVELOPER / SAMPLER : N J V

Filename : 12-17-13.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.30	39.89	40.00	-	-	-	-	-
2	101.78	67.55	34.23 *	28.50	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		34.10	DEPTH TO WATER (FT.) =		34.48	PRODUCT THICKNESS (FT.) =		0.38
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	62.04	36.92	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	12/16/13	0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)
Ideally a minimum of three (3) wellbore volumes:
2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

* INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW # 1 ~ 1.00 ft., MW # 2 ~ 2.75 ft. above grade, MW # 3 ~ @ grade,
MW # 4 ~ 0.25 ft. below grade .

on-site	8:45	temp	21 F
off-site	9:45	temp	26 F
sky cond.	Sunny		
wind speed	0 - 5	direct.	ESE

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **March 11, 2014**

Filename : **Sandoval GC A 1A mw log 03-11-14.xls**

DEVELOPER / SAMPLER : N J V

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.25	39.94	40.00	-	-	-	-	-
2	101.78	67.57	34.21 *	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	34.07		DEPTH TO WATER (FT.) =	34.46		PRODUCT THICKNESS (FT.) =	0.39
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	62.06	36.90	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	02/24/14	0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	10:15 AM	temp	48 F
off-site	10:45 AM	temp	49 F
sky cond.		Sunny	
wind speed	5 - 10	direct.	NW

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 25, 2014**

Filename : **Sandoval GC A 1A mw log 06-25-14.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.24	39.95	40.00	-	-	-	-	-
2	101.78	67.47	34.31 *	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	34.16		DEPTH TO WATER (FT.) =	34.58	PRODUCT THICKNESS (FT.) =		0.42
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	06/24/14	1730

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	9:00 AM	temp	75 F
off-site	9:30 AM	temp	77 F
sky cond.		Sunny	
wind speed	0 - 10	direct.	ESE - E

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 28, 2014**
Filename : **Sandoval GC A 1A mw log 08-28-14.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.24	39.95	40.00	-	-	-	-	-
2	101.78	67.73	34.05 *	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	33.97		DEPTH TO WATER (FT.) =	34.20		PRODUCT THICKNESS (FT.) =	0.23
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	08/25/14	0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. Measured free product thickness from disposable bailer.

No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	11:00 AM	temp	73 F
off-site	11:30 AM	temp	74 F
sky cond.		Sunny	
wind speed	5 - 15	direct.	WNW

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **December 3, 2014**

Filename : **Sandoval GC A 1A mw log 2014-12-03.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.25	39.94	40.00	-	-	-	-	-
2	101.78	67.30	34.48 *	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	34.26		DEPTH TO WATER (FT.) =	34.90		PRODUCT THICKNESS (FT.) =	0.64
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	12/03/14	0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	3:45 PM	temp	49 F
off-site	4:15 PM	temp	49 F
sky cond.		Cloudy/Light Rain	
wind speed	Calm	direct.	NA

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **May 26, 2015**

Filename : **Sandoval GC A 1A mw log 2015-05-26.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	66.65	35.13 *	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	34.94		DEPTH TO WATER (FT.) =	35.48		PRODUCT THICKNESS (FT.) =	0.54
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS = 4.01/7.00/10.00 | 2,800

DATE & TIME = 05/26/15 | 0630

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	8:45 AM	temp	58 F
off-site	9:15 AM	temp	60 F
sky cond.		Mostly sunny	
wind speed	0 - 5	direct.	E - SE

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 29, 2015**

Filename : **Sandoval GC A 1A mw log 2014-12-03.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	67.39	34.39	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	?		DEPTH TO WATER (FT.) =	34.39		PRODUCT THICKNESS (FT.) =	.2.25
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS = 4.01/7.00/10.00 | 2,800

DATE & TIME = 12/03/14 | 0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	11:00 AM	temp	49 F
off-site	11:30 AM	temp	49 F
sky cond.		Cloudy/Light Rain	
wind speed	Calm	direct.	NA

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **November 30, 2015**

Filename : **Sandoval GC A 1A mw log 2015-11-30.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	67.12	34.66	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	?		DEPTH TO WATER (FT.) =	34.66		PRODUCT THICKNESS (FT.) =	>2.50
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
EPNG	101.46	-	-	?	-	-	-	-	-

INSTRUMENT CALIBRATIONS = 4.01/7.00/10.00 | 2,800

DATE & TIME = 11/30/15 | 0630

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	10:15 AM	temp	28 F
off-site	11:15 AM	temp	30 F
sky cond.		Sunny	
wind speed	5 - 10	direct.	W

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **February 24, 2016**
Filename : **Sandoval GC A 1A mw log 2016-02-24.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.24	39.95	40.00	-	-	-	-	-
2	101.78	-	35.95 *	28.50	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		?	DEPTH TO WATER (FT.) =		35.95	PRODUCT THICKNESS (FT.) =		?
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	61.26	37.70	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	08/25/14	0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	**1:30 PM**	temp	**36 F**
off-site	**2:15 PM**	temp	**40 F**
sky cond.		**Partly cloudy**	
wind speed	**0 - 5**	direct.	**Calm - WSW**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **May 24, 2016**
Filename : **Sandoval GC A 1A mw log 2016-05-24.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.24	39.95	40.00	-	-	-	-	-
2	101.78	64.23	37.55 *	28.50	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	36.29		DEPTH TO WATER (FT.) =	39.90	PRODUCT THICKNESS (FT.) =		3.61
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	60.78	38.18	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS = 4.01/7.00/10.00 | 2,800
DATE & TIME = 05/23/16 | 0600

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

*

on-site	**12:00 PM**	temp	**73 F**
off-site	**12:45 PM**	temp	**74 F**
sky cond.		**Sunny**	
wind speed	**0 - 10**	direct.	**SSE - S**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **September 23, 2016**
Filename : **Sandoval GC A 1A mw log 2016-09-23.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.23	39.96	40.00	-	-	-	-	-
2	101.78	63.89	37.89 *	40.00	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	36.76		DEPTH TO WATER (FT.) =	40.00		PRODUCT THICKNESS (FT.) =	3.24
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **December 8, 2016**
Filename : **Sandoval GC A 1A mw log 2016-12-08.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.23	39.96	40.00	-	-	-	-	-
2	101.78	64.79	36.99 *	40.00	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	35.98		DEPTH TO WATER (FT.) =	38.86		PRODUCT THICKNESS (FT.) =	2.88
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only. No access to EPNG well.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**12:20 PM**	temp	**37 F**
off-site	**1:20 PM**	temp	**38 F**
sky cond.	**Mostly cloudy**		
wind speed	**0 - 5**	direct.	**E**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **March 31, 2017**
Filename : **Sandoval GC A 1A mw log 2017-03-31.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.24	39.95	40.00	-	-	-	-	-
MW - 2	101.78	64.95	36.83	40.00	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	?		DEPTH TO WATER (FT.) =	36.83		PRODUCT THICKNESS (FT.) =	?
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

*

on-site	**10:00 AM**	temp	**44 F**
off-site	**10:45 AM**	temp	**45 F**
sky cond.		**Cloudy**	
wind speed	**5 - 15**	direct.	**West**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **May 28, 2017**
Filename : **Sandoval GC A 1A mw log 2017-05-28.xls**

DEVELOPER / SAMPLER : **N J V**
PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	63.24	39.95	40.00	-	-	-	-	-
MW - 2	101.78	66.80	34.98 *	40.00	-	-	-	-	-
		DEPTH TO PRODUCT (FT.) =	33.91		DEPTH TO WATER (FT.) =	36.97		PRODUCT THICKNESS (FT.) =	3.06
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

*** - Indicates product specific gravity assumed to = 0.65 (if applicable) .**

Insufficient quantity within MW # 1 . Completed gauging of MW #2 only.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**7:15 AM**	temp	**50 F**
off-site	**8:00 AM**	temp	**52 F**
sky cond.		**Sunny**	
wind speed	**Calm**	direct.	**NA**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **September 12, 2017**

Filename : **Sandoval GC A 1A mw log 2017-09-12.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **N J V**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	39.97	40.00	-	-	-	-	-
MW - 2	101.78	-	?	40.00	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		36.93	DEPTH TO WATER (FT.) =		?	PRODUCT THICKNESS (FT.) =		?
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Insufficient quantity within MW # 1 . Unable to confirm depth to water below free product.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 30, 2018**

Filename : **Sandoval GC A 1A mw log 2018-06-30.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **STEVE MOSKAL**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	-	36.38 *	40.00	-	-	-	-	2.15 [1]
		DEPTH TO PRODUCT (FT.) =	35.64		DEPTH TO WATER (FT.) =	37.74		PRODUCT THICKNESS (FT.) =	2.10
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	32.81	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **September 27, 2018**

Filename : **Sandoval GC A 1A mw log 2018-09-27.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **STEVE MOSKAL**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
MW - 2	101.78		?	40.00	-	-	-	-	
		DEPTH TO PRODUCT (FT.) =	36.77		DEPTH TO WATER (FT.) =	>40.00		PRODUCT THICKNESS (FT.) =	>3.23
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	61.25	37.71	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	NA	NA

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Completed gauging of MW #2 only.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

1

on-site	**8:25 AM**	temp	**57 F**
off-site	**9:25 AM**	temp	**59 F**
sky cond.		**Sunny**	
wind speed	**0 - 5**	direct.	**ESE - SE**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **March 28, 2019**

Filename : **Sandoval GC A 1A mw log 2019-03-28.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **STEVE MOSKAL**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	67.63	34.15	40.00	1000	7.01	1,700	15.8	2.00
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	03/26/19	0900		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".
Fair/poor recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

* 1

on-site	**8:23 AM**	temp	**52 F**
off-site	**10:23 AM**	temp	**63 F**
sky cond.		**Sunny**	
wind speed	**0 - 5**	direct.	**E - SE**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BPX ENERGY INC.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 24, 2019**

Filename : **Sandoval GC A 1A mw log 2019-06-24.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **STEVE MOSKAL**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	67.67	34.11	40.00	1350	7.12	1,350	19.5	2.75
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	06/20/19	0630		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**12:45 PM**	temp	**77 F**
off-site	**2:00 PM**	temp	**80 F**
sky cond.		**Sunny**	
wind speed	**0 - 10**	direct.	**SW**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BPX ENERGY INC.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **September 19, 2019**

Filename : **Sandoval GC A 1A mw log 2019-09-19.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **STEVE MOSKAL**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	67.47	34.31	40.00	1000	6.92	1,050	17.0	2.75
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	37.70	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	09/17/19	0600		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**8:15 AM**	temp	**59 F**
off-site	**10:22 AM**	temp	**71 F**
sky cond.	**Partly cloudy**		
wind speed	**0 - 10**	direct.	**E - ESE**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BPX ENERGY INC.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **December 10, 2019**

Filename : **Sandoval GC A 1A mw log 2019-12-10.xls**

DEVELOPER / SAMPLER : **N J V**

PROJECT MANAGER : **STEVE MOSKAL**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	DRY	40.00	-	-	-	-	-
2	101.78	67.65	34.13	40.00	1210	7.17	1,200	14.7	3.00
3	99.13	-	DRY	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	12/10/19	0700		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**11:30 AM**	temp	**38 F**
off-site	**12:30 PM**	temp	**41 F**
sky cond.	**Mostly sunny**		
wind speed	**0 - 5**	direct.	**W**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BPX ENERGY INC.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **March 30, 2020**

Filename : **Sandoval GC A 1A mw log 2020-03-30.xls**

DEVELOPER / SAMPLER : N J V

PROJECT MANAGER : S. MOSKAL

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	-	40.00	-	-	-	-	-
2	101.78	67.65	34.13	40.00	1130	7.14	1,500	14.4	3.00
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	03/23/20	0930		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**10:18 AM**	temp	**47 F**
off-site	**11:45 AM**	temp	**49 F**
sky cond.	**Mostly cloudy**		
wind speed	**10 - 20**	direct.	**W - WNW**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BPX ENERGY INC.**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 1, 2020**

Filename : **Sandoval GC A 1A mw log 2020-06-01.xls**

DEVELOPER / SAMPLER : N J V

PROJECT MANAGER : S. MOSKAL

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	-	40.00	-	-	-	-	-
2	101.78	66.25	35.53	40.00	1210	6.98	1,300	17.9	1.50
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	06/01/20	0630		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**11:20 AM**	temp	**79 F**
off-site	**12:30 PM**	temp	**82 F**
sky cond.		**Cloudy**	
wind speed	**0 - 5**	direct.	**SW - W**

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **SIMCOE LLC**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **September 14, 2020**
Filename : **Sandoval GC A 1A mw log 2020-09-14.xls**

DEVELOPER / SAMPLER : N J V
PROJECT MANAGER : S. MOSKAL

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19		DRY	40.00	-	-	-	-	-
2	101.78	64.82	36.96	40.00	1100	7.01	1,300	18.3	1.50
3	99.13		DRY	38.73	-	-	-	-	-
4	98.96	61.94	37.02	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	09/05/20	0700		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".
Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**10:15 AM**	temp	**74 F**
off-site	**11:25 AM**	temp	**78 F**
sky cond.		**Sunny**	
wind speed	**Calm**	direct.	**NA**

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **SIMCOE LLC**

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **December 15, 2020**

Filename : **Sandoval GC A 1A mw log 2020-12-15.xls**

DEVELOPER / SAMPLER : N J V

PROJECT MANAGER : S. MOSKAL

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	-	-	40.00	-	-	-	-	-
2	101.78	65.93	35.85	40.00	1300	7.07	1,400	13.6	2.00
3	99.13	-	-	38.73	-	-	-	-	-
4	98.96	-	-	38.62	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	12/15/20	0700		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Fair/good recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	**11:55 AM**	temp	**33 F**
off-site	**1:15 PM**	temp	**34 F**
sky cond.	**Mostly sunny**		
wind speed	**0 - 10**	direct.	**W**

WATER/FLUID

LABORATORY

REPORTS

Hall Environmental Analysis Laboratory, Inc.

Date: *06-Sep-11*

Analytical Report

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW #2
Lab Order:	1108C18	**Collection Date:**	8/30/2011 11:35:00 AM
Project:	Sandoval GC A #1A	**Date Received:**	8/31/2011
Lab ID:	1108C18-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **NSB**
Benzene	990	100		µg/L	100	9/1/2011 10:35:16 PM
Toluene	6700	100		µg/L	100	9/1/2011 10:35:16 PM
Ethylbenzene	710	100		µg/L	100	9/1/2011 10:35:16 PM
Xylenes, Total	10000	200		µg/L	100	9/1/2011 10:35:16 PM
Surr: 1,2-Dichloroethane-d4	89.5	70-130		%REC	100	9/1/2011 10:35:16 PM
Surr: 4-Bromofluorobenzene	131	73-131		%REC	100	9/1/2011 10:35:16 PM
Surr: Dibromofluoromethane	87.9	70-130		%REC	100	9/1/2011 10:35:16 PM
Surr: Toluene-d8	97.5	70-130		%REC	100	9/1/2011 10:35:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Dec-11*

Analytical Report

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW#1
Lab Order:	1112525	**Collection Date:**	12/9/2011 2:30:00 PM
Project:	Sandoval GC A #1A	**Date Received:**	12/12/2011
Lab ID:	1112525-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	280	20		µg/L	20	12/14/2011 10:46:48 AM
Toluene	1000	20		µg/L	20	12/14/2011 10:46:48 AM
Ethylbenzene	50	20		µg/L	20	12/14/2011 10:46:48 AM
Xylenes, Total	540	40		µg/L	20	12/14/2011 10:46:48 AM
Surr: 4-Bromofluorobenzene	99.8	76.5-115		%REC	20	12/14/2011 10:46:48 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Dec-11*

Analytical Report

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW#2
Lab Order:	1112525	**Collection Date:**	12/9/2011 3:30:00 PM
Project:	Sandoval GC A #1A	**Date Received:**	12/12/2011
Lab ID:	1112525-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	1900	100		µg/L	100	12/13/2011 3:12:00 PM
Toluene	8600	100		µg/L	100	12/13/2011 3:12:00 PM
Ethylbenzene	930	100		µg/L	100	12/13/2011 3:12:00 PM
Xylenes, Total	13000	200		µg/L	100	12/13/2011 3:12:00 PM
Surr: 4-Bromofluorobenzene	104	76.5-115		%REC	100	12/13/2011 3:12:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Analytical Report
Lab Order **1202366**
Date Reported: **2/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering **Client Sample ID:** MW #1
Project: SANDOVAL GC A #A **Collection Date:** 2/9/2012 1:00:00 PM
Lab ID: 1202366-001 **Matrix:** AQUEOUS **Received Date:** 2/10/2012 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	210	5.0		µg/L	5	2/13/2012 1:33:13 PM
Toluene	ND	5.0		µg/L	5	2/13/2012 1:33:13 PM
Ethylbenzene	9.3	5.0		µg/L	5	2/13/2012 1:33:13 PM
Xylenes, Total	230	10		µg/L	5	2/13/2012 1:33:13 PM
Surr: 4-Bromofluorobenzene	94.8	76.5-115		%REC	5	2/13/2012 1:33:13 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit

Analytical Report
Lab Order **1202366**
Date Reported: **2/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering **Client Sample ID:** MW #2
Project: SANDOVAL GC A #A **Collection Date:** 2/9/2012 1:45:00 PM
Lab ID: 1202366-002 **Matrix:** AQUEOUS **Received Date:** 2/10/2012 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	1,900	100		µg/L	100	2/11/2012 2:25:08 AM
Toluene	7,500	100		µg/L	100	2/11/2012 2:25:08 AM
Ethylbenzene	800	100		µg/L	100	2/11/2012 2:25:08 AM
Xylenes, Total	12,000	200		µg/L	100	2/11/2012 2:25:08 AM
Surr: 4-Bromofluorobenzene	101	76.5-115		%REC	100	2/11/2012 2:25:08 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit

Analytical Report
Lab Order: **1206B08**
Date Reported: **6/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Sandoval GC A #1A
Lab Order: 1206B08

Lab ID: 1206B08-001 **Collection Date:** 6/21/2012 2:00:00 PM
Client Sample ID: MW #1 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/28/2012 4:15:58 PM
Toluene	ND	1.0		µg/L	1	6/28/2012 4:15:58 PM
Ethylbenzene	ND	1.0		µg/L	1	6/28/2012 4:15:58 PM
Xylenes, Total	3.3	2.0		µg/L	1	6/28/2012 4:15:58 PM
Surr: 4-Bromofluorobenzene	103	55-140		%REC	1	6/28/2012 4:15:58 PM

Lab ID: 1206B08-002 **Collection Date:** 6/21/2012 3:05:00 PM
Client Sample ID: MW #2 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	2600	100		µg/L	100	6/28/2012 2:59:08 AM
Toluene	10000	200		µg/L	200	6/28/2012 4:46:14 PM
Ethylbenzene	700	100		µg/L	100	6/28/2012 2:59:08 AM
Xylenes, Total	18000	200		µg/L	100	6/28/2012 2:59:08 AM
Surr: 4-Bromofluorobenzene	107	55-140		%REC	100	6/28/2012 2:59:08 AM

Qualifiers:					
	*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Analytical Report
Lab Order **1209D07**
Date Reported: **10/5/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #1
Project: SANDOVAL GC A #1A
Collection Date: 9/20/2012 12:20:00 PM
Lab ID: 1209D07-001
Matrix: AQUEOUS
Received Date: 9/25/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	55	1.0		µg/L	1	10/1/2012 3:21:48 PM
Toluene	ND	1.0		µg/L	1	10/1/2012 3:21:48 PM
Ethylbenzene	ND	1.0		µg/L	1	10/1/2012 3:21:48 PM
Xylenes, Total	ND	2.0		µg/L	1	10/1/2012 3:21:48 PM
Surr: 4-Bromofluorobenzene	77.9	69.7-152		%REC	1	10/1/2012 3:21:48 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	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 greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1209D07**
Date Reported: **10/5/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: SANDOVAL GC A #1A
Collection Date: 9/20/2012 1:20:00 PM
Lab ID: 1209D07-002 **Matrix:** AQUEOUS **Received Date:** 9/25/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	2200	200		µg/L	200	10/1/2012 3:52:00 PM
Toluene	9900	200		µg/L	200	10/1/2012 3:52:00 PM
Ethylbenzene	970	200		µg/L	200	10/1/2012 3:52:00 PM
Xylenes, Total	47000	400		µg/L	200	10/1/2012 3:52:00 PM
Surr: 4-Bromofluorobenzene	97.4	69.7-152		%REC	200	10/1/2012 3:52:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	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 greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1212986**
Date Reported: **12/28/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering **Client Sample ID:** MW#1
Project: Sandoval GC A #1A **Collection Date:** 12/20/2012 1:45:00 PM
Lab ID: 1212986-001 **Matrix:** AQUEOUS **Received Date:** 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	22	1.0		µg/L	1	12/26/2012 1:06:52 PM
Toluene	ND	1.0		µg/L	1	12/26/2012 1:06:52 PM
Ethylbenzene	ND	1.0		µg/L	1	12/26/2012 1:06:52 PM
Xylenes, Total	ND	2.0		µg/L	1	12/26/2012 1:06:52 PM
Surr: 4-Bromofluorobenzene	122	69.7-152		%REC	1	12/26/2012 1:06:52 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	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 greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1212986**
Date Reported: **12/28/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW#2
Project: Sandoval GC A #1A
Collection Date: 12/20/2012 2:20:00 PM
Lab ID: 1212986-002 **Matrix:** AQUEOUS **Received Date:** 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	2800	200		µg/L	200	12/26/2012 1:36:51 PM
Toluene	7600	200		µg/L	200	12/26/2012 1:36:51 PM
Ethylbenzene	640	200		µg/L	200	12/26/2012 1:36:51 PM
Xylenes, Total	18000	400		µg/L	200	12/26/2012 1:36:51 PM
Surr: 4-Bromofluorobenzene	133	69.7-152		%REC	200	12/26/2012 1:36:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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 greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1303817**
Date Reported: **3/25/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW#1
Project: Sandoval GC A #1A
Collection Date: 3/19/2013 10:25:00 AM
Lab ID: 1303817-001
Matrix: AQUEOUS
Received Date: 3/20/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1.4	1.0		µg/L	1	3/23/2013 1:17:47 AM
Toluene	4.3	1.0		µg/L	1	3/23/2013 1:17:47 AM
Ethylbenzene	ND	1.0		µg/L	1	3/23/2013 1:17:47 AM
Xylenes, Total	41	2.0		µg/L	1	3/23/2013 1:17:47 AM
Surr: 4-Bromofluorobenzene	96.5	69.4-129		%REC	1	3/23/2013 1:17:47 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	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 greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1306874**
Date Reported: **7/2/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #1
Project: Sandoval GC A #1A
Collection Date: 6/19/2013 9:00:00 AM
Lab ID: 1306874-001
Matrix: AQUEOUS
Received Date: 6/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	1.0		µg/L	1	6/21/2013 8:37:32 PM	R11503
Toluene	ND	1.0		µg/L	1	6/21/2013 8:37:32 PM	R11503
Ethylbenzene	ND	1.0		µg/L	1	6/21/2013 8:37:32 PM	R11503
Xylenes, Total	ND	2.0		µg/L	1	6/21/2013 8:37:32 PM	R11503
Surr: 4-Bromofluorobenzene	106	69.4-129		%REC	1	6/21/2013 8:37:32 PM	R11503
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.15	0.10		mg/L	1	6/20/2013 9:19:00 PM	R11471
Chloride	91	10		mg/L	20	6/20/2013 9:31:24 PM	R11471
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	6/20/2013 9:19:00 PM	R11471
Sulfate	2200	50		mg/L	100	6/26/2013 11:21:07 PM	R11597
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Iron	2.3	0.10	*	mg/L	5	6/27/2013 9:53:21 AM	R11609
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	**KS**
Total Dissolved Solids	3880	200	*	mg/L	1	6/24/2013 6:36:00 PM	8063

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report
Lab Order **1904020**
Date Reported: **4/9/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: Sandoval GC A #1A
Collection Date: 3/28/2019 10:00:00 AM
Lab ID: 1904020-001 **Matrix:** AQUEOUS **Received Date:** 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	1400	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Toluene	230	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Ethylbenzene	1500	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2,4-Trimethylbenzene	3900	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,3,5-Trimethylbenzene	2900	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Naphthalene	210	200		µg/L	100	4/6/2019 9:46:58 AM	C58957
1-Methylnaphthalene	ND	400		µg/L	100	4/6/2019 9:46:58 AM	C58957
2-Methylnaphthalene	ND	400		µg/L	100	4/6/2019 9:46:58 AM	C58957
Acetone	ND	1000		µg/L	100	4/6/2019 9:46:58 AM	C58957
Bromobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Bromodichloromethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Bromoform	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Bromomethane	ND	300		µg/L	100	4/6/2019 9:46:58 AM	C58957
2-Butanone	ND	1000		µg/L	100	4/6/2019 9:46:58 AM	C58957
Carbon disulfide	ND	1000		µg/L	100	4/6/2019 9:46:58 AM	C58957
Carbon Tetrachloride	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Chlorobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Chloroethane	ND	200		µg/L	100	4/6/2019 9:46:58 AM	C58957
Chloroform	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Chloromethane	ND	300		µg/L	100	4/6/2019 9:46:58 AM	C58957
2-Chlorotoluene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
4-Chlorotoluene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
cis-1,2-DCE	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
cis-1,3-Dichloropropene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	4/6/2019 9:46:58 AM	C58957
Dibromochloromethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Dibromomethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2-Dichlorobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,3-Dichlorobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,4-Dichlorobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Dichlorodifluoromethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,1-Dichloroethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,1-Dichloroethene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2-Dichloropropane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,3-Dichloropropane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
2,2-Dichloropropane	ND	200		µg/L	100	4/6/2019 9:46:58 AM	C58957

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

Qualifiers:

E	Value above quantitation range
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **1904020**
Date Reported: **4/9/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: Sandoval GC A #1A
Collection Date: 3/28/2019 10:00:00 AM
Lab ID: 1904020-001 **Matrix:** AQUEOUS **Received Date:** 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Hexachlorobutadiene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
2-Hexanone	ND	1000		µg/L	100	4/6/2019 9:46:58 AM	C58957
Isopropylbenzene	290	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
4-Isopropyltoluene	160	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
4-Methyl-2-pentanone	ND	1000		µg/L	100	4/6/2019 9:46:58 AM	C58957
Methylene Chloride	ND	300		µg/L	100	4/6/2019 9:46:58 AM	C58957
n-Butylbenzene	ND	300		µg/L	100	4/6/2019 9:46:58 AM	C58957
n-Propylbenzene	370	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
sec-Butylbenzene	110	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Styrene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
tert-Butylbenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	4/6/2019 9:46:58 AM	C58957
Tetrachloroethene (PCE)	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
trans-1,2-DCE	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
trans-1,3-Dichloropropene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2,3-Trichlorobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2,4-Trichlorobenzene	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,1,1-Trichloroethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,1,2-Trichloroethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Trichloroethene (TCE)	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Trichlorofluoromethane	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
1,2,3-Trichloropropane	ND	200		µg/L	100	4/6/2019 9:46:58 AM	C58957
Vinyl chloride	ND	100		µg/L	100	4/6/2019 9:46:58 AM	C58957
Xylenes, Total	23000	1500		µg/L	1E+	4/8/2019 12:36:03 PM	A58989
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	100	4/6/2019 9:46:58 AM	C58957
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	100	4/6/2019 9:46:58 AM	C58957
Surr: Dibromofluoromethane	119	70-130		%Rec	100	4/6/2019 9:46:58 AM	C58957
Surr: Toluene-d8	104	70-130		%Rec	100	4/6/2019 9:46:58 AM	C58957

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

Qualifiers:

E	Value above quantitation range
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **1906D58**
Date Reported: **7/3/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW#2
Project: Sandoval GC A 1A
Collection Date: 6/24/2019 1:50:00 PM
Lab ID: 1906D58-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	920	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Toluene	200	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Ethylbenzene	1000	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2,4-Trimethylbenzene	1700	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,3,5-Trimethylbenzene	1200	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Naphthalene	ND	200		µg/L	100	6/28/2019 9:47:00 PM	R61035
1-Methylnaphthalene	ND	400		µg/L	100	6/28/2019 9:47:00 PM	R61035
2-Methylnaphthalene	ND	400		µg/L	100	6/28/2019 9:47:00 PM	R61035
Acetone	ND	1000		µg/L	100	6/28/2019 9:47:00 PM	R61035
Bromobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Bromodichloromethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Bromoform	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Bromomethane	ND	300		µg/L	100	6/28/2019 9:47:00 PM	R61035
2-Butanone	ND	1000		µg/L	100	6/28/2019 9:47:00 PM	R61035
Carbon disulfide	ND	1000		µg/L	100	6/28/2019 9:47:00 PM	R61035
Carbon Tetrachloride	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Chlorobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Chloroethane	ND	200		µg/L	100	6/28/2019 9:47:00 PM	R61035
Chloroform	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Chloromethane	ND	300		µg/L	100	6/28/2019 9:47:00 PM	R61035
2-Chlorotoluene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
4-Chlorotoluene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
cis-1,2-DCE	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
cis-1,3-Dichloropropene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	6/28/2019 9:47:00 PM	R61035
Dibromochloromethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Dibromomethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2-Dichlorobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,3-Dichlorobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,4-Dichlorobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Dichlorodifluoromethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,1-Dichloroethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,1-Dichloroethene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2-Dichloropropane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,3-Dichloropropane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
2,2-Dichloropropane	ND	200		µg/L	100	6/28/2019 9:47:00 PM	R61035

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **1906D58**
Date Reported: **7/3/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW#2
Project: Sandoval GC A 1A
Collection Date: 6/24/2019 1:50:00 PM
Lab ID: 1906D58-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Hexachlorobutadiene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
2-Hexanone	ND	1000		µg/L	100	6/28/2019 9:47:00 PM	R61035
Isopropylbenzene	150	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
4-Isopropyltoluene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
4-Methyl-2-pentanone	ND	1000		µg/L	100	6/28/2019 9:47:00 PM	R61035
Methylene Chloride	ND	300		µg/L	100	6/28/2019 9:47:00 PM	R61035
n-Butylbenzene	ND	300		µg/L	100	6/28/2019 9:47:00 PM	R61035
n-Propylbenzene	160	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
sec-Butylbenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Styrene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
tert-Butylbenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	6/28/2019 9:47:00 PM	R61035
Tetrachloroethene (PCE)	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
trans-1,2-DCE	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
trans-1,3-Dichloropropene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2,3-Trichlorobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2,4-Trichlorobenzene	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,1,1-Trichloroethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,1,2-Trichloroethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Trichloroethene (TCE)	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Trichlorofluoromethane	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
1,2,3-Trichloropropane	ND	200		µg/L	100	6/28/2019 9:47:00 PM	R61035
Vinyl chloride	ND	100		µg/L	100	6/28/2019 9:47:00 PM	R61035
Xylenes, Total	21000	150		µg/L	100	6/28/2019 9:47:00 PM	R61035
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	100	6/28/2019 9:47:00 PM	R61035
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	100	6/28/2019 9:47:00 PM	R61035
Surr: Dibromofluoromethane	92.7	70-130		%Rec	100	6/28/2019 9:47:00 PM	R61035
Surr: Toluene-d8	104	70-130		%Rec	100	6/28/2019 9:47:00 PM	R61035

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **1909B00**
Date Reported: **9/26/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: Sandoval GC A 1A
Collection Date: 9/19/2019 10:00:00 AM
Lab ID: 1909B00-001 **Matrix:** AQUEOUS **Received Date:** 9/20/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	920	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Toluene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Ethylbenzene	840	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2,4-Trimethylbenzene	1200	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,3,5-Trimethylbenzene	840	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Naphthalene	ND	200		µg/L	100	9/23/2019 6:05:10 PM	R63131
1-Methylnaphthalene	ND	400		µg/L	100	9/23/2019 6:05:10 PM	R63131
2-Methylnaphthalene	ND	400		µg/L	100	9/23/2019 6:05:10 PM	R63131
Acetone	ND	1000		µg/L	100	9/23/2019 6:05:10 PM	R63131
Bromobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Bromodichloromethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Bromoform	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Bromomethane	ND	300		µg/L	100	9/23/2019 6:05:10 PM	R63131
2-Butanone	ND	1000		µg/L	100	9/23/2019 6:05:10 PM	R63131
Carbon disulfide	ND	1000		µg/L	100	9/23/2019 6:05:10 PM	R63131
Carbon Tetrachloride	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Chlorobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Chloroethane	ND	200		µg/L	100	9/23/2019 6:05:10 PM	R63131
Chloroform	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Chloromethane	ND	300		µg/L	100	9/23/2019 6:05:10 PM	R63131
2-Chlorotoluene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
4-Chlorotoluene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
cis-1,2-DCE	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
cis-1,3-Dichloropropene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	9/23/2019 6:05:10 PM	R63131
Dibromochloromethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Dibromomethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2-Dichlorobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,3-Dichlorobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,4-Dichlorobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Dichlorodifluoromethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,1-Dichloroethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,1-Dichloroethene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2-Dichloropropane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,3-Dichloropropane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
2,2-Dichloropropane	ND	200		µg/L	100	9/23/2019 6:05:10 PM	R63131

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **1909B00**
Date Reported: **9/26/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: Sandoval GC A 1A
Collection Date: 9/19/2019 10:00:00 AM
Lab ID: 1909B00-001 **Matrix:** AQUEOUS **Received Date:** 9/20/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,1-Dichloropropene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Hexachlorobutadiene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
2-Hexanone	ND	1000		µg/L	100	9/23/2019 6:05:10 PM	R63131
Isopropylbenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
4-Isopropyltoluene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
4-Methyl-2-pentanone	ND	1000		µg/L	100	9/23/2019 6:05:10 PM	R63131
Methylene Chloride	ND	300		µg/L	100	9/23/2019 6:05:10 PM	R63131
n-Butylbenzene	ND	300		µg/L	100	9/23/2019 6:05:10 PM	R63131
n-Propylbenzene	100	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
sec-Butylbenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Styrene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
tert-Butylbenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	9/23/2019 6:05:10 PM	R63131
Tetrachloroethene (PCE)	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
trans-1,2-DCE	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
trans-1,3-Dichloropropene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2,3-Trichlorobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2,4-Trichlorobenzene	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,1,1-Trichloroethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,1,2-Trichloroethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Trichloroethene (TCE)	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Trichlorofluoromethane	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
1,2,3-Trichloropropane	ND	200		µg/L	100	9/23/2019 6:05:10 PM	R63131
Vinyl chloride	ND	100		µg/L	100	9/23/2019 6:05:10 PM	R63131
Xylenes, Total	17000	150		µg/L	100	9/23/2019 6:05:10 PM	R63131
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	100	9/23/2019 6:05:10 PM	R63131
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	100	9/23/2019 6:05:10 PM	R63131
Surr: Dibromofluoromethane	110	70-130		%Rec	100	9/23/2019 6:05:10 PM	R63131
Surr: Toluene-d8	102	70-130		%Rec	100	9/23/2019 6:05:10 PM	R63131

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **1912620**
Date Reported: **12/18/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW 2
Project: Sandoval GC A 1A
Collection Date: 12/10/2019 12:10:00 PM
Lab ID: 1912620-001 **Matrix:** AQUEOUS **Received Date:** 12/12/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	800	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Toluene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Ethylbenzene	780	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2,4-Trimethylbenzene	1000	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,3,5-Trimethylbenzene	750	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Naphthalene	ND	200		µg/L	100	12/17/2019 2:01:42 AM	R65220
1-Methylnaphthalene	ND	400		µg/L	100	12/17/2019 2:01:42 AM	R65220
2-Methylnaphthalene	ND	400		µg/L	100	12/17/2019 2:01:42 AM	R65220
Acetone	ND	1000		µg/L	100	12/17/2019 2:01:42 AM	R65220
Bromobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Bromodichloromethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Bromoform	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Bromomethane	ND	300		µg/L	100	12/17/2019 2:01:42 AM	R65220
2-Butanone	ND	1000		µg/L	100	12/17/2019 2:01:42 AM	R65220
Carbon disulfide	ND	1000		µg/L	100	12/17/2019 2:01:42 AM	R65220
Carbon Tetrachloride	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Chlorobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Chloroethane	ND	200		µg/L	100	12/17/2019 2:01:42 AM	R65220
Chloroform	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Chloromethane	ND	300		µg/L	100	12/17/2019 2:01:42 AM	R65220
2-Chlorotoluene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
4-Chlorotoluene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
cis-1,2-DCE	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
cis-1,3-Dichloropropene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	12/17/2019 2:01:42 AM	R65220
Dibromochloromethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Dibromomethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2-Dichlorobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,3-Dichlorobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,4-Dichlorobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Dichlorodifluoromethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,1-Dichloroethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,1-Dichloroethene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2-Dichloropropane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,3-Dichloropropane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
2,2-Dichloropropane	ND	200		µg/L	100	12/17/2019 2:01:42 AM	R65220

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **1912620**
Date Reported: **12/18/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW 2
Project: Sandoval GC A 1A
Collection Date: 12/10/2019 12:10:00 PM
Lab ID: 1912620-001 **Matrix:** AQUEOUS **Received Date:** 12/12/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,1-Dichloropropene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Hexachlorobutadiene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
2-Hexanone	ND	1000		µg/L	100	12/17/2019 2:01:42 AM	R65220
Isopropylbenzene	69	50		µg/L	100	12/17/2019 2:01:42 AM	R65220
4-Isopropyltoluene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
4-Methyl-2-pentanone	ND	1000		µg/L	100	12/17/2019 2:01:42 AM	R65220
Methylene Chloride	ND	300		µg/L	100	12/17/2019 2:01:42 AM	R65220
n-Butylbenzene	ND	300		µg/L	100	12/17/2019 2:01:42 AM	R65220
n-Propylbenzene	78	50		µg/L	100	12/17/2019 2:01:42 AM	R65220
sec-Butylbenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Styrene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
tert-Butylbenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	12/17/2019 2:01:42 AM	R65220
Tetrachloroethene (PCE)	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
trans-1,2-DCE	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
trans-1,3-Dichloropropene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2,3-Trichlorobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2,4-Trichlorobenzene	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,1,1-Trichloroethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,1,2-Trichloroethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Trichloroethene (TCE)	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Trichlorofluoromethane	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
1,2,3-Trichloropropane	ND	200		µg/L	100	12/17/2019 2:01:42 AM	R65220
Vinyl chloride	ND	100		µg/L	100	12/17/2019 2:01:42 AM	R65220
Xylenes, Total	16000	150		µg/L	100	12/17/2019 2:01:42 AM	R65220
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	100	12/17/2019 2:01:42 AM	R65220
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	100	12/17/2019 2:01:42 AM	R65220
Surr: Dibromofluoromethane	112	70-130		%Rec	100	12/17/2019 2:01:42 AM	R65220
Surr: Toluene-d8	109	70-130		%Rec	100	12/17/2019 2:01:42 AM	R65220

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004027**
Date Reported: **4/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: Sandoval GC A 1A
Collection Date: 3/30/2020 11:30:00 AM
Lab ID: 2004027-001 **Matrix:** AQUEOUS **Received Date:** 4/1/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	570	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Toluene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Ethylbenzene	850	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2,4-Trimethylbenzene	1400	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,3,5-Trimethylbenzene	890	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Naphthalene	ND	200		µg/L	100	4/6/2020 6:14:00 PM	R67944
1-Methylnaphthalene	ND	400		µg/L	100	4/6/2020 6:14:00 PM	R67944
2-Methylnaphthalene	ND	400		µg/L	100	4/6/2020 6:14:00 PM	R67944
Acetone	ND	1000		µg/L	100	4/6/2020 6:14:00 PM	R67944
Bromobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Bromodichloromethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Bromoform	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Bromomethane	ND	300		µg/L	100	4/6/2020 6:14:00 PM	R67944
2-Butanone	ND	1000		µg/L	100	4/6/2020 6:14:00 PM	R67944
Carbon disulfide	ND	1000		µg/L	100	4/6/2020 6:14:00 PM	R67944
Carbon Tetrachloride	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Chlorobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Chloroethane	ND	200		µg/L	100	4/6/2020 6:14:00 PM	R67944
Chloroform	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Chloromethane	ND	300		µg/L	100	4/6/2020 6:14:00 PM	R67944
2-Chlorotoluene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
4-Chlorotoluene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
cis-1,2-DCE	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
cis-1,3-Dichloropropene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	4/6/2020 6:14:00 PM	R67944
Dibromochloromethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Dibromomethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2-Dichlorobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,3-Dichlorobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,4-Dichlorobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Dichlorodifluoromethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,1-Dichloroethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,1-Dichloroethene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2-Dichloropropane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,3-Dichloropropane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
2,2-Dichloropropane	ND	200		µg/L	100	4/6/2020 6:14:00 PM	R67944

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004027**
Date Reported: **4/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Project: Sandoval GC A 1A
Collection Date: 3/30/2020 11:30:00 AM
Lab ID: 2004027-001 **Matrix:** AQUEOUS **Received Date:** 4/1/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Hexachlorobutadiene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
2-Hexanone	ND	1000		µg/L	100	4/6/2020 6:14:00 PM	R67944
Isopropylbenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
4-Isopropyltoluene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
4-Methyl-2-pentanone	ND	1000		µg/L	100	4/6/2020 6:14:00 PM	R67944
Methylene Chloride	ND	300		µg/L	100	4/6/2020 6:14:00 PM	R67944
n-Butylbenzene	ND	300		µg/L	100	4/6/2020 6:14:00 PM	R67944
n-Propylbenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
sec-Butylbenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Styrene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
tert-Butylbenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	4/6/2020 6:14:00 PM	R67944
Tetrachloroethene (PCE)	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
trans-1,2-DCE	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
trans-1,3-Dichloropropene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2,3-Trichlorobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2,4-Trichlorobenzene	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,1,1-Trichloroethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,1,2-Trichloroethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Trichloroethene (TCE)	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Trichlorofluoromethane	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
1,2,3-Trichloropropane	ND	200		µg/L	100	4/6/2020 6:14:00 PM	R67944
Vinyl chloride	ND	100		µg/L	100	4/6/2020 6:14:00 PM	R67944
Xylenes, Total	18000	150		µg/L	100	4/6/2020 6:14:00 PM	R67944
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	100	4/6/2020 6:14:00 PM	R67944
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	100	4/6/2020 6:14:00 PM	R67944
Surr: Dibromofluoromethane	97.0	70-130		%Rec	100	4/6/2020 6:14:00 PM	R67944
Surr: Toluene-d8	104	70-130		%Rec	100	4/6/2020 6:14:00 PM	R67944

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006046**
Date Reported: **6/11/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW#2
Project: Sandoval GC A #1A
Collection Date: 6/1/2020 12:10:00 PM
Lab ID: 2006046-002 **Matrix:** AQUEOUS **Received Date:** 6/2/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	570	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Toluene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Ethylbenzene	870	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2,4-Trimethylbenzene	1200	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,3,5-Trimethylbenzene	740	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Naphthalene	93	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1-Methylnaphthalene	ND	200		µg/L	50	6/3/2020 5:46:24 AM	W69341
2-Methylnaphthalene	ND	200		µg/L	50	6/3/2020 5:46:24 AM	W69341
Acetone	ND	500		µg/L	50	6/3/2020 5:46:24 AM	W69341
Bromobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Bromodichloromethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Bromoform	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Bromomethane	ND	150		µg/L	50	6/3/2020 5:46:24 AM	W69341
2-Butanone	ND	500		µg/L	50	6/3/2020 5:46:24 AM	W69341
Carbon disulfide	ND	500		µg/L	50	6/3/2020 5:46:24 AM	W69341
Carbon Tetrachloride	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Chlorobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Chloroethane	ND	100		µg/L	50	6/3/2020 5:46:24 AM	W69341
Chloroform	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Chloromethane	ND	150		µg/L	50	6/3/2020 5:46:24 AM	W69341
2-Chlorotoluene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
4-Chlorotoluene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
cis-1,2-DCE	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/3/2020 5:46:24 AM	W69341
Dibromochloromethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Dibromomethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2-Dichlorobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,3-Dichlorobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,4-Dichlorobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Dichlorodifluoromethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,1-Dichloroethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,1-Dichloroethene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2-Dichloropropane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,3-Dichloropropane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
2,2-Dichloropropane	ND	100		µg/L	50	6/3/2020 5:46:24 AM	W69341

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2006046**
Date Reported: **6/11/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW#2
Project: Sandoval GC A #1A
Collection Date: 6/1/2020 12:10:00 PM
Lab ID: 2006046-002 **Matrix:** AQUEOUS **Received Date:** 6/2/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,1-Dichloropropene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Hexachlorobutadiene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
2-Hexanone	ND	500		µg/L	50	6/3/2020 5:46:24 AM	W69341
Isopropylbenzene	83	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
4-Isopropyltoluene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
4-Methyl-2-pentanone	ND	500		µg/L	50	6/3/2020 5:46:24 AM	W69341
Methylene Chloride	ND	150		µg/L	50	6/3/2020 5:46:24 AM	W69341
n-Butylbenzene	ND	150		µg/L	50	6/3/2020 5:46:24 AM	W69341
n-Propylbenzene	85	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
sec-Butylbenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Styrene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
tert-Butylbenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/3/2020 5:46:24 AM	W69341
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
trans-1,2-DCE	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,1,1-Trichloroethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,1,2-Trichloroethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Trichloroethene (TCE)	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Trichlorofluoromethane	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
1,2,3-Trichloropropane	ND	100		µg/L	50	6/3/2020 5:46:24 AM	W69341
Vinyl chloride	ND	50		µg/L	50	6/3/2020 5:46:24 AM	W69341
Xylenes, Total	17000	750		µg/L	500	6/3/2020 5:17:53 AM	W69341
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	50	6/3/2020 5:46:24 AM	W69341
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	50	6/3/2020 5:46:24 AM	W69341
Surr: Dibromofluoromethane	101	70-130		%Rec	50	6/3/2020 5:46:24 AM	W69341
Surr: Toluene-d8	91.7	70-130		%Rec	50	6/3/2020 5:46:24 AM	W69341

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009A97**
Date Reported: **9/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: SIMCOE/Cottonwood Consulting
Client Sample ID: MW #2
Project: Sandoval GC A 1A
Collection Date: 9/14/2020 11:00:00 AM
Lab ID: 2009A97-001 **Matrix:** AQUEOUS **Received Date:** 9/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	620	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Toluene	150	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Ethylbenzene	790	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2,4-Trimethylbenzene	1200	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,3,5-Trimethylbenzene	730	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Naphthalene	ND	100		µg/L	50	9/24/2020 1:50:00 PM	B72085
1-Methylnaphthalene	ND	200		µg/L	50	9/24/2020 1:50:00 PM	B72085
2-Methylnaphthalene	ND	200		µg/L	50	9/24/2020 1:50:00 PM	B72085
Acetone	ND	500		µg/L	50	9/24/2020 1:50:00 PM	B72085
Bromobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Bromodichloromethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Bromoform	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Bromomethane	ND	150		µg/L	50	9/24/2020 1:50:00 PM	B72085
2-Butanone	ND	500		µg/L	50	9/24/2020 1:50:00 PM	B72085
Carbon disulfide	ND	500		µg/L	50	9/24/2020 1:50:00 PM	B72085
Carbon Tetrachloride	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Chlorobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Chloroethane	ND	100		µg/L	50	9/24/2020 1:50:00 PM	B72085
Chloroform	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Chloromethane	ND	150		µg/L	50	9/24/2020 1:50:00 PM	B72085
2-Chlorotoluene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
4-Chlorotoluene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
cis-1,2-DCE	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/24/2020 1:50:00 PM	B72085
Dibromochloromethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Dibromomethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2-Dichlorobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,3-Dichlorobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,4-Dichlorobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Dichlorodifluoromethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,1-Dichloroethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,1-Dichloroethene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2-Dichloropropane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,3-Dichloropropane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
2,2-Dichloropropane	ND	100		µg/L	50	9/24/2020 1:50:00 PM	B72085

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2009A97**
Date Reported: **9/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: SIMCOE/Cottonwood Consulting
Client Sample ID: MW #2
Project: Sandoval GC A 1A
Collection Date: 9/14/2020 11:00:00 AM
Lab ID: 2009A97-001 **Matrix:** AQUEOUS **Received Date:** 9/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Hexachlorobutadiene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
2-Hexanone	ND	500		µg/L	50	9/24/2020 1:50:00 PM	B72085
Isopropylbenzene	79	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
4-Isopropyltoluene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
4-Methyl-2-pentanone	ND	500		µg/L	50	9/24/2020 1:50:00 PM	B72085
Methylene Chloride	ND	150		µg/L	50	9/24/2020 1:50:00 PM	B72085
n-Butylbenzene	ND	150		µg/L	50	9/24/2020 1:50:00 PM	B72085
n-Propylbenzene	77	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
sec-Butylbenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Styrene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
tert-Butylbenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/24/2020 1:50:00 PM	B72085
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
trans-1,2-DCE	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,1,1-Trichloroethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,1,2-Trichloroethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Trichloroethene (TCE)	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Trichlorofluoromethane	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
1,2,3-Trichloropropane	ND	100		µg/L	50	9/24/2020 1:50:00 PM	B72085
Vinyl chloride	ND	50		µg/L	50	9/24/2020 1:50:00 PM	B72085
Xylenes, Total	15000	750		µg/L	500	9/24/2020 1:26:00 PM	B72085
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	50	9/24/2020 1:50:00 PM	B72085
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	50	9/24/2020 1:50:00 PM	B72085
Surr: Dibromofluoromethane	99.6	70-130		%Rec	50	9/24/2020 1:50:00 PM	B72085
Surr: Toluene-d8	102	70-130		%Rec	50	9/24/2020 1:50:00 PM	B72085

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2012772**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: SIMCOE/Cottonwood Consulting **Client Sample ID:** MW #2
Project: Sandoval GC A 1A **Collection Date:** 12/15/2020 1:00:00 PM
Lab ID: 2012772-001 **Matrix:** AQUEOUS **Received Date:** 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Benzene	1400	50		µg/L	50	12/24/2020 2:41:31 AM
Toluene	13	5.0		µg/L	5	12/24/2020 3:09:55 AM
Ethylbenzene	830	50		µg/L	50	12/24/2020 2:41:31 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2,4-Trimethylbenzene	1000	50		µg/L	50	12/24/2020 2:41:31 AM
1,3,5-Trimethylbenzene	610	50		µg/L	50	12/24/2020 2:41:31 AM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Naphthalene	94	10		µg/L	5	12/24/2020 3:09:55 AM
1-Methylnaphthalene	21	20		µg/L	5	12/24/2020 3:09:55 AM
2-Methylnaphthalene	52	20		µg/L	5	12/24/2020 3:09:55 AM
Acetone	170	50		µg/L	5	12/24/2020 3:09:55 AM
Bromobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Bromodichloromethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Bromoform	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Bromomethane	ND	15		µg/L	5	12/24/2020 3:09:55 AM
2-Butanone	ND	50		µg/L	5	12/24/2020 3:09:55 AM
Carbon disulfide	ND	50		µg/L	5	12/24/2020 3:09:55 AM
Carbon Tetrachloride	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Chlorobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Chloroethane	ND	10		µg/L	5	12/24/2020 3:09:55 AM
Chloroform	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Chloromethane	ND	15		µg/L	5	12/24/2020 3:09:55 AM
2-Chlorotoluene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
4-Chlorotoluene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
cis-1,2-DCE	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	12/24/2020 3:09:55 AM
Dibromochloromethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Dibromomethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Dichlorodifluoromethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,1-Dichloroethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,1-Dichloroethene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2-Dichloropropane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,3-Dichloropropane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
2,2-Dichloropropane	ND	10		µg/L	5	12/24/2020 3:09:55 AM

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012772**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: SIMCOE/Cottonwood Consulting **Client Sample ID:** MW #2
Project: Sandoval GC A 1A **Collection Date:** 12/15/2020 1:00:00 PM
Lab ID: 2012772-001 **Matrix:** AQUEOUS **Received Date:** 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
1,1-Dichloropropene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Hexachlorobutadiene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
2-Hexanone	ND	50		µg/L	5	12/24/2020 3:09:55 AM
Isopropylbenzene	90	5.0		µg/L	5	12/24/2020 3:09:55 AM
4-Isopropyltoluene	21	5.0		µg/L	5	12/24/2020 3:09:55 AM
4-Methyl-2-pentanone	ND	50		µg/L	5	12/24/2020 3:09:55 AM
Methylene Chloride	ND	15		µg/L	5	12/24/2020 3:09:55 AM
n-Butylbenzene	ND	15		µg/L	5	12/24/2020 3:09:55 AM
n-Propylbenzene	80	5.0		µg/L	5	12/24/2020 3:09:55 AM
sec-Butylbenzene	12	5.0		µg/L	5	12/24/2020 3:09:55 AM
Styrene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
tert-Butylbenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	12/24/2020 3:09:55 AM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
trans-1,2-DCE	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Trichloroethene (TCE)	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Trichlorofluoromethane	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
1,2,3-Trichloropropane	ND	10		µg/L	5	12/24/2020 3:09:55 AM
Vinyl chloride	ND	5.0		µg/L	5	12/24/2020 3:09:55 AM
Xylenes, Total	13000	150		µg/L	100	12/24/2020 1:14:03 PM
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	5	12/24/2020 3:09:55 AM
Surr: 4-Bromofluorobenzene	158	70-130	S	%Rec	5	12/24/2020 3:09:55 AM
Surr: Dibromofluoromethane	106	70-130		%Rec	5	12/24/2020 3:09:55 AM
Surr: Toluene-d8	96.2	70-130		%Rec	5	12/24/2020 3:09:55 AM

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

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

WATER/FLUID

CHAIN-OF-CUSTODY

RECORDS

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1108C18	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Cation / Anion Balance	8081 Pesticides / 8082 PCB's	8260B (VOA) BTEX only	8270 (Semi-VOA)	Air Bubbles (Y or N)
8/30/11	1135	WATER	MW #2	40 ml VOA - 2	HCl & Cool	-1										✓		

Analysis Request

Remarks: REPORT BTEX ONLY.

BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401

Work Order: (will forward in near future) Paykey: ZPEACJDENV

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/30/11	1420		Christine Walters	8/30/11	1420
8/30/11	1610	Christine Walters			

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1112525	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)				Air Bubbles (Y or N)
12/9/11	1430	WATER	MW #1	40 ml VOA - 2	HCl & Cool	1	✓															
12/9/11	1530	WATER	MW #2	40 ml VOA - 2	HCl & Cool	2	✓															

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/11/11	1200			12/11/11	1200
12/12/11	700			12/12/11	1435

Remarks:

BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401

Work Order: N1496948 Paykey: ZPEACJDENV

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	2/6/12 HEAL No. 1202366	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)
2/9/12	1300	WATER	MW #1	40 ml VOA - 2	HCl & Cool	-1	✓											
2/9/12	1345	WATER	MW #2	40 ml VOA - 2	HCl & Cool	-2	✓											

Date	Time	Relinquished by:	Received by:	Date	Time
2/9/12	1652			2/9/12	1652
2/9/12	1748	Christine Walters		2/10/12	1010

Remarks: **TPH (8015B) - GRO & DRO ONLY.**

BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401

Work Order: N1520114 Paykey: ZPEACJDENV

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: SANDOVAL GC A # 1A

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1206808	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	
6/21/12	1400	WATER	MW #1	40 ml VOA - 2	HCl & Cool	-001	✓													✓		
6/21/12	1505	WATER	MW #2	40 ml VOA - 2	HCl & Cool	-002	✓													✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/25/12	724			6/25/12	724
6/25/12	1621	Christine Walters		06/26/12	1010

Remarks:

Send invoice to :

Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87**
BLOOMFIELD, NM 87413

Phone #: **(505) 632-1199**

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ**

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1209609	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample
9/20/12	1220	WATER	MW # 1	40 ml VOA - 2	HCl & Cool	-001	✓													✓	
9/20/12	1320	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-002	✓													✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
09/20/12	0800			09/20/12	1000
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401
Find Purchase Order in email from BP.

COC RECEIVED 09/20/12

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 notated on the analytical repor

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample
12/19/12	1345	WATER	MW # 1	40 ml VOA - 2	HCl & Cool	1212986-001	✓													✓	
12/19/12	1420	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-002	✓													✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/20/12	1454		Christine Walker	12/20/12	1454
12/20/12	1647	Christine Walker		12/21/12	0955

Remarks:
BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401
Find Purchase Order in email from BP.

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

Email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1303817	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
3/19/13	1025	WATER	MW # 1	40 ml VOA - 2	HCl & Cool	-001	✓													✓		

Date: 3/19/13 Time: 1628 Relinquished by: [signature] Received by: Christine Walker Date: 3/19/13 Time: 1628

Date: 3/19/13 Time: 1758 Relinquished by: Christine Walker Received by: [signature] Date: 03/20/13 Time: 0955

Remarks:
BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401
Find Purchase Order in email from BP.

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 notated on the analytical report.

Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87**
BLOOMFIELD, NM 87413

Phone #: **(505) 632-1199**

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ** NV

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.1

HEAL No. 1306874

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,~~NO3,NO2,PO4,SO4~~)	Total Dissolved Solids	Iron, Ferrous (**filtered**)	Nitrate N ~~+Nitrite N~~			Grab sample	5 pt. composite sample	
6/19/13	0900	WATER	MW # 1	40 ml VOA - 2	HCl & Cool	-001	√													√		
6/19/13	0900	WATER	MW # 1	500 ml - 1	Cool	-001								√	√					√		
6/19/13	0900	WATER	MW # 1	250 ml - 1	HNO_3 & Cool	-001										√				√		
6/19/13	0900	WATER	MW # 1	250 ml - 1	H_2SO_4	-001											√			√		

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/19/13	1217		Christine Walker	6/19/13	1217
6/19/13	1747	Christine Walker		06/20/13	1000

Remarks:

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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 notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0 @ 3 coolers

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1904020
3/28/19	1000	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-001

Analysis Request

BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
									√				√		

Date	Time	Relinquished by	Received by	Date	Time
3/29/19	1404			3/29/19	1404
3/29/19	1846			03/30/19	0922

Remarks:
BILL DIRECTLY TO BPX: Contact: Steve Moskal

Should receive/Should've received PO from BPX.

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
Sandoval GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

Sample Temperature: 0.9+0.5=1.4°c, 5.3+0.5=5.8°c

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1906D58	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
6/24/19	1350	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-001										√				√		

Analysis Request

Relinquished by:	Date	Time	Received by:	Date	Time
	6/24/19	1717	Christin Wade	6/24/19	1717
Christin Wade	6/24/19	1910	Courier	6/25/19	8:15

Remarks:
BILL DIRECTLY TO BPX: Contact: Steve Moskal

Should receive/Should've received PO from BPX.

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
Sandoval GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.3 -0.3=5.0
6.2-0.3=5.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
9/19/19		WATER	MW # 2	40 ml VOA - 2	HCl & Cool	1909B00 -001										√				√		

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/19/19	1343			9/19/19	1343
9/19/19	1806			9/20/19	8:15

Remarks:
BILL DIRECTLY TO BPX: Contact: Steve Moskal

Should receive/Should've received PO from BPX.

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Sandoval GC A # 1A

Project #:

Project Manager: STEVE MOSKAL

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: Ambient

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1912620	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
12/10/19	1210	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-001										✓				✓		

Date: ~~12/10/19~~ 12/11/19 Time: 720 Relinquished by:

Date: 12/11/19 Time: 1804 Relinquished by:

Received by: Date: 12/11/19 Time: 720

Received by: Date: 12/12/19 Time: 0845

Remarks:

BILL DIRECTLY TO BPX: Contact: Steve Moskal

Should receive/Should've received PO from BPX.

0.3-03=
0.5-03=

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 notated on the analytical report.

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Sandoval GC A # 1A

Project #:

Project Manager: STEVE MOSKAL

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.7-0= 1.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2004027	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
3/30/20	1130	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-001										√				√		

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/31/20	1434			3/31/20	1434
3/31/20	1742		courier	4/1/20	8:05

Remarks:
BILL DIRECTLY TO BPX:
Contact: Steve Moskal PO to be provided

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 notated on the analytical report.

Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87**
BLOOMFIELD, NM 87413

Phone #: **(505) 632-1199**

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: **NELSON VELEZ** NV

On Ice: ☑ Yes ☐ No

Sample Temperature: 6.7 - 0.1 = 6.6 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2006046	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Chloride (soil - 300.0 / water - 300.1)	Carbon Dioxide	Oxygen	Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
~~6/1/20~~	~~1155~~	~~AIR~~	~~SVE (MW2)~~	~~tedlar bag 2~~	~~n/a~~	001										✓		✓	✓	✓		
6/1/20	1210	WATER	MW #2	40ml - 2	HCl & cool	-002	NV									✓						

Date: 6/1/20 Time: 1520 Relinquished by: [signature] Received by: Christa Waller Date: 6/1/2020 Time: 1520

Date: 6/1/2020 Time: 1807 Relinquished by: Christa Waller Received by: EKM courier Date: 6/2/20 Time: 8:00

Remarks: **BILL DIRECTLY TO BPX USING INFORMATION BELOW.**

CONTACT: **Steve Moskal**

PO #: **Provided by BPX (SVE O&M 1H 2020)**

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 notated on the analytical report.

Chain-of-Custody Record

Client: SIMCOE LLC / COTTONWOOD CONSULTING

Mailing Address: 1100 MAIN ST.
DURANGO, COLO. 81301

Phone #: (505) 330-9179

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name:
SANDOVAL GC A # 1A

Project #:

Project Manager:
STEVE MOSKAL

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.5 ± 0-4.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2009A917	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
9/14/20	1100	WATER	MW #2	40 ml VOA - 2	HCl & Cool	001										√				√		

Date: 9/17/20 Time: 1910 Relinquished by: [signature] Received by: EM courier Date: 9/18/20 Time: 8:00

Date: Time: Relinquished by: Received by: Date: Time:

Remarks: BILL DIRECTLY TO SIMCOE LLC USING INFORMATION BELOW.

CONTACT: Steve Moskal / Erin Dunman

PO #: Already or to be provided.

Seal intact EM 9/18/20

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 notated on the analytical report.

Chain-of-Custody Record

Client: SIMCOE LLC / COTTONWOOD CONSULTING LLC

Mailing Address: 1100 MAIN ST., SUITE 101 DURANGO, COLO. 81301

Phone #: (505) 330-9179

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: SANDOVAL GC A #1A

Project #:

Project Manager: STEVE MOSKAL

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 0.4 - 0.0 = 0.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2012772	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
12/15/20	1300	WATER	MW # 2	40ml VOA (2)	HCl + COOL	001										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/15/2020	1637			12/15/2020	1637
Date:	Time:	Relinquished by:	Received by:	Date	Time
12/15/2020	1806		Courier	12/16/20	8:00

Remarks: BILL TO IKAV ENERGY INC.
CONTACT: STEVE MOSKAL / ERIN OUNMAN

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 notated on the analytical report.

LABORATORY

QUALITY CONTROL /

QUALITY ASSURANCE

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Sandoval GC A #1A
Work Order: 1108C18

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260: Volatiles Short List											
Sample ID: 5ml rb		*MBLK*				Batch ID:	**R47544**	Analysis Date:		9/1/2011 9:12:02 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R47544**	Analysis Date:		9/1/2011 10:10:09 AM	
Benzene	23.03	µg/L	1.0	20	0	115	81.1	130			
Toluene	22.38	µg/L	1.0	20	0	112	82.3	122			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG Date Received: 8/31/2011

Work Order Number 1108C18 Received by: LNM

Checklist completed by: Signature 8/31/11 Date Sample ID labels checked by: MG/IO Initials

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐		
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑		
Chain of custody present?	Yes ☑	No ☐			
Chain of custody signed when relinquished and received?	Yes ☑	No ☐			
Chain of custody agrees with sample labels?	Yes ☑	No ☐			
Samples in proper container/bottle?	Yes ☑	No ☐			
Sample containers intact?	Yes ☑	No ☐			
Sufficient sample volume for indicated test?	Yes ☑	No ☐			
All samples received within holding time?	Yes ☑	No ☐			
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐		
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑		
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑		
Container/Temp Blank temperature?	4.6°	<6° C Acceptable If given sufficient time to cool.			

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Sandoval GC A #1A
Work Order: 1112525

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML-RB		*MBLK*				Batch ID:	**R49592**	Analysis Date:	12/13/2011 11:47:40 AM		
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 5ML-RB		*MBLK*				Batch ID:	**R49600**	Analysis Date:	12/14/2011 10:17:54 AM		
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R49592**	Analysis Date:	12/13/2011 11:18:48 AM		
Benzene	23.09	µg/L	1.0	20	0.4276	113	80	120			
Toluene	23.34	µg/L	1.0	20	0.483	114	80	120			
Ethylbenzene	23.14	µg/L	1.0	20	0.5194	113	80	120			
Xylenes, Total	69.75	µg/L	2.0	60	0	116	78.6	121			
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R49600**	Analysis Date:	12/14/2011 9:49:02 AM		
Benzene	22.91	µg/L	1.0	20	0.43	112	80	120			
Toluene	23.20	µg/L	1.0	20	0.4418	114	80	120			
Ethylbenzene	23.21	µg/L	1.0	20	0.465	114	80	120			
Xylenes, Total	69.13	µg/L	2.0	60	0	115	78.6	121			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG Date Received: 12/12/2011

Work Order Number 1112525 Received by: LNM

Checklist completed by: Signature 12/12/11 Date Sample ID labels checked by: Initials

Matrix: Carrier name: Courier

Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐	
Custody seals intact on shipping container/cooler?	Yes	☑	No	☐	Not Present	☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes	☐	No	☐	N/A	☑	
Chain of custody present?	Yes	☑	No	☐			
Chain of custody signed when relinquished and received?	Yes	☑	No	☐			
Chain of custody agrees with sample labels?	Yes	☑	No	☐			
Samples in proper container/bottle?	Yes	☑	No	☐			
Sample containers intact?	Yes	☑	No	☐			
Sufficient sample volume for indicated test?	Yes	☑	No	☐			
All samples received within holding time?	Yes	☑	No	☐			
Water - VOA vials have zero headspace?	No VOA vials submitted	☐	Yes	☑	No	☐	
Water - Preservation labels on bottle and cap match?	Yes	☐	No	☐	N/A	☑	
Water - pH acceptable upon receipt?	Yes	☐	No	☐	N/A	☑	

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

Container/Temp Blank temperature? **4.6°** *<6° C Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1202366**

14-Feb-12

Client: Blagg Engineering

Project: SANDOVAL GC A #A

Sample ID	**5ML-RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R905**	RunNo:	**905**					
Prep Date:		Analysis Date:	**2/10/2012**	SeqNo:	**25961**	Units:	**µg/L**			
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		94.2	76.5	115			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R905**	RunNo:	**905**					
Prep Date:		Analysis Date:	**2/10/2012**	SeqNo:	**25965**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.4	80	120			
Toluene	19	1.0	20.00	0	94.2	80	120			
Ethylbenzene	19	1.0	20.00	0	93.7	80	120			
Xylenes, Total	57	2.0	60.00	0	94.3	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		94.9	76.5	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE
Albuquerque, NM 8710
TEL: 505-345-3975 FAX: 505-345-410
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1202366

Received by/date: 02/10/12 AT

Logged By: Anne Thorne 2/10/2012 10:10:00 AM

Completed By: Anne Thorne 2/10/2012

Reviewed By: 2/10/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1206B08**
30-Jun-12

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R3739** RunNo: **3739**
Prep Date: Analysis Date: **6/27/2012** SeqNo: **105696** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		94.8	55	140			

Sample ID: **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R3739** RunNo: **3739**
Prep Date: Analysis Date: **6/27/2012** SeqNo: **105697** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	22	1.0	20.00	0	111	80	120			
Xylenes, Total	66	2.0	60.00	0	109	80	120			
Surr: 4-Bromofluorobenzene	23		20.00		114	55	140			

Sample ID: **1206977-019AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC** Batch ID: **R3739** RunNo: **3739**
Prep Date: Analysis Date: **6/27/2012** SeqNo: **105710** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.2100	105	70.1	118			
Ethylbenzene	22	1.0	20.00	0.1660	110	73.5	117			
Xylenes, Total	68	2.0	60.00	0.4680	112	73.1	119			
Surr: 4-Bromofluorobenzene	23		20.00		113	55	140			

Sample ID: **1206977-019AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC** Batch ID: **R3739** RunNo: **3739**
Prep Date: Analysis Date: **6/27/2012** SeqNo: **105716** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.2100	101	70.1	118	4.22	16.4	
Ethylbenzene	21	1.0	20.00	0.1660	104	73.5	117	5.32	13.5	
Xylenes, Total	65	2.0	60.00	0.4680	107	73.1	119	5.00	12.9	
Surr: 4-Bromofluorobenzene	20		20.00		98.9	55	140	0	0	

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R3770** RunNo: **3770**
Prep Date: Analysis Date: **6/28/2012** SeqNo: **106779** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206B08**

30-Jun-12

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID: **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R3770**	RunNo: **3770**
Prep Date:	Analysis Date: **6/28/2012**	SeqNo: **106779** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	16		20.00		78.9	55	140			

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R3770**	RunNo: **3770**
Prep Date:	Analysis Date: **6/28/2012**	SeqNo: **106780** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	80	120			
Toluene	22	1.0	20.00	0	108	80	120			
Ethylbenzene	21	1.0	20.00	0	107	80	120			
Xylenes, Total	64	2.0	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		99.5	55	140			

Sample ID: **1206B09-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R3770**	RunNo: **3770**
Prep Date:	Analysis Date: **6/28/2012**	SeqNo: **106785** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	490	10	200.0	252.8	118	70.1	118			S
Toluene	310	10	200.0	93.78	111	72.3	117			
Ethylbenzene	950	10	200.0	682.1	134	73.5	117			S
Surr: 4-Bromofluorobenzene	200		200.0		101	55	140			

Sample ID: **1206B09-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R3770**	RunNo: **3770**
Prep Date:	Analysis Date: **6/28/2012**	SeqNo: **106786** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	480	10	200.0	252.8	116	70.1	118	1.17	16.4	
Toluene	320	10	200.0	93.78	111	72.3	117	0.551	13.9	
Ethylbenzene	950	10	200.0	682.1	135	73.5	117	0.133	13.5	S
Surr: 4-Bromofluorobenzene	190		200.0		94.5	55	140	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 1206B08

Received by/date: AT 06/26/12

Logged By: **Anne Thorne** 6/26/2012 10:10:00 AM Anne Thorne

Completed By: **Anne Thorne** 6/26/2012 Anne Thorne

Reviewed By: 06/26/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209D07**

05-Oct-12

Client: Blagg Engineering

Project: SANDOVAL GC A #1A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Gasoline Range**					
Client ID:	**PBW**	Batch ID:	**R5899**	RunNo:	**5899**					
Prep Date:		Analysis Date:	**10/1/2012**	SeqNo:	**169940**	Units:	**%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	17		20.00		84.0	69.8	119			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Gasoline Range**					
Client ID:	**LCSW**	Batch ID:	**R5899**	RunNo:	**5899**					
Prep Date:		Analysis Date:	**10/1/2012**	SeqNo:	**169941**	Units:	**%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	20		20.00		98.8	69.8	119			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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 greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1209D07**
05-Oct-12

Client: Blagg Engineering
Project: SANDOVAL GC A #1A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R5899**	RunNo:	**5899**					
Prep Date:		Analysis Date:	**10/1/2012**	SeqNo:	**169948**	Units:	**µg/L**			

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	16		20.00		80.2	69.7	152			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R5899**	RunNo:	**5899**					
Prep Date:		Analysis Date:	**10/1/2012**	SeqNo:	**169949**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	80	120			
Toluene	21	1.0	20.00	0	105	80	120			
Ethylbenzene	22	1.0	20.00	0	108	80	120			
Xylenes, Total	65	2.0	60.00	0	109	80	120			
Surr: 4-Bromofluorobenzene	17		20.00		82.8	69.7	152			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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 greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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: BLAGG Work Order Number: 1209D07

Received by/date: CM 09/25/12

Logged By: Anne Thorne 9/25/2012 10:00:00 AM Anne Thorne

Completed By: Anne Thorne 9/28/2012 Anne Thorne

Reviewed By: 09/28/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1212986**

28-Dec-12

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R7720**	RunNo:	**7720**					
Prep Date:		Analysis Date:	**12/26/2012**	SeqNo:	**224422**	Units:	**µg/L**			
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	25		20.00		123	69.7	152			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R7720**	RunNo:	**7720**					
Prep Date:		Analysis Date:	**12/26/2012**	SeqNo:	**224423**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	80	120			
Toluene	22	1.0	20.00	0	108	80	120			
Ethylbenzene	22	1.0	20.00	0	109	80	120			
Xylenes, Total	66	2.0	60.00	0	110	80	120			
Surr: 4-Bromofluorobenzene	26		20.00		131	69.7	152			

Sample ID	**1212986-002AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW#2**	Batch ID:	**R7720**	RunNo:	**7720**					
Prep Date:		Analysis Date:	**12/26/2012**	SeqNo:	**224426**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7200	200	4000	2850	110	74.1	124			
Toluene	12000	200	4000	7576	112	75.2	124			
Ethylbenzene	5100	200	4000	635.6	113	69	125			
Xylenes, Total	32000	400	12000	18430	113	73.1	126			
Surr: 4-Bromofluorobenzene	5400		4000		135	69.7	152			

Sample ID	**1212986-002AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW#2**	Batch ID:	**R7720**	RunNo:	**7720**					
Prep Date:		Analysis Date:	**12/26/2012**	SeqNo:	**224427**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	6600	200	4000	2850	94.7	74.1	124	8.74	11.2	
Toluene	11000	200	4000	7576	89.1	75.2	124	7.79	11.9	
Ethylbenzene	4700	200	4000	635.6	102	69	125	8.51	13.5	
Xylenes, Total	29000	400	12000	18430	90.6	73.1	126	8.62	13	
Surr: 4-Bromofluorobenzene	5400		4000		136	69.7	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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 greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG

Work Order Number: 1212986

Received by/date: 12/21/12

Logged By: Ashley Gallegos 12/21/2012 9:55:00 AM

Completed By: Ashley Gallegos 12/21/2012 12:05:36 PM

Reviewed By: 12/21/12

Chain of Custody

		Yes	No	Not Present
1.	Were seals intact?			✔
2.	Is Chain of Custody complete?	✔		
3.	How was the sample delivered?	Courier		

Log In

		Yes	No	NA
4.	Coolers are present? (see 19. for cooler specific information)	✔		
5.	Was an attempt made to cool the samples?	✔		
6.	Were all samples received at a temperature of >0° C to 6.0°C	✔		
7.	Sample(s) in proper container(s)?	✔		
8.	Sufficient sample volume for indicated test(s)?	✔		
9.	Are samples (except VOA and ONG) properly preserved?	✔		
10.	Was preservative added to bottles?		✔	
11.	VOA vials have zero headspace?	✔		No VOA Vials
12.	Were any sample containers received broken?		✔	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	✔		# of preserved bottles checked for pH:
14.	Are matrices correctly identified on Chain of Custody?	✔		(<2 or >12 unless noted)
15.	Is it clear what analyses were requested?	✔		Adjusted?
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	✔		Checked by:

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1303817**

25-Mar-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID: **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R9380**	RunNo: **9380**
Prep Date:	Analysis Date: **3/22/2013**	SeqNo: **267691** Units: **µg/L**

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		93.8	69.4	129			

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R9380**	RunNo: **9380**
Prep Date:	Analysis Date: **3/22/2013**	SeqNo: **267692** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	80	120			
Toluene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	21	1.0	20.00	0	106	80	120			
Xylenes, Total	64	2.0	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		98.7	69.4	129			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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 greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 1303817 RcptNo: 1

Received by/date: AG 03/20/13

Logged By: **Lindsay Mangin** 3/20/2013 9:55:00 AM

Completed By: **Lindsay Mangin** 3/21/2013 9:30:11 AM

Reviewed By: JO 03/21/2013

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306874**

02-Jul-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 200.7: Dissolved Metals**					
Client ID:	**PBW**	Batch ID:	**R11609**	RunNo:	**11609**					
Prep Date:		Analysis Date:	**6/27/2013**	SeqNo:	**329179**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Dissolved Metals**					
Client ID:	**LCSW**	Batch ID:	**R11609**	RunNo:	**11609**					
Prep Date:		Analysis Date:	**6/27/2013**	SeqNo:	**329180**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.51	0.020	0.5000	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306874**

02-Jul-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R11471**	RunNo: **11471**
Prep Date:	Analysis Date: **6/20/2013**	SeqNo: **324450** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R11471**	RunNo: **11471**
Prep Date:	Analysis Date: **6/20/2013**	SeqNo: **324451** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	94.1	90	110			
Chloride	4.7	0.50	5.000	0	93.1	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	98.2	90	110			

Sample ID **1306848-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R11471**	RunNo: **11471**
Prep Date:	Analysis Date: **6/20/2013**	SeqNo: **324465** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6280	98.1	76.9	114			
Nitrogen, Nitrate (As N)	4.2	0.10	2.500	1.524	105	93	113			

Sample ID **1306848-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R11471**	RunNo: **11471**
Prep Date:	Analysis Date: **6/20/2013**	SeqNo: **324466** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6280	98.5	76.9	114	0.152	20	
Nitrogen, Nitrate (As N)	4.1	0.10	2.500	1.524	105	93	113	0.210	20	

Sample ID **1306812-005AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R11471**	RunNo: **11471**
Prep Date:	Analysis Date: **6/20/2013**	SeqNo: **324474** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6247	101	76.9	114			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0.1119	101	93	113			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306874**

02-Jul-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID	**1306812-005AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R11471**	RunNo:	**11471**					
Prep Date:		Analysis Date:	**6/20/2013**	SeqNo:	**324475**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6247	99.2	76.9	114	0.587	20	
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0.1119	99.4	93	113	1.05	20	

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBW**	Batch ID:	**R11471**	RunNo:	**11471**					
Prep Date:		Analysis Date:	**6/20/2013**	SeqNo:	**324504**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**R11471**	RunNo:	**11471**					
Prep Date:		Analysis Date:	**6/20/2013**	SeqNo:	**324505**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	95.6	90	110			
Chloride	4.5	0.50	5.000	0	90.3	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	94.6	90	110			

Sample ID	**1306904-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R11471**	RunNo:	**11471**					
Prep Date:		Analysis Date:	**6/21/2013**	SeqNo:	**324535**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.73	0.10	0.5000	0.2454	97.0	76.9	114			

Sample ID	**1306904-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R11471**	RunNo:	**11471**					
Prep Date:		Analysis Date:	**6/21/2013**	SeqNo:	**324536**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.74	0.10	0.5000	0.2454	98.3	76.9	114	0.900	20	

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBW**	Batch ID:	**R11597**	RunNo:	**11597**					
Prep Date:		Analysis Date:	**6/26/2013**	SeqNo:	**328643**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306874**

02-Jul-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSW**	Batch ID:	**R11597**		RunNo:	**11597**				
Prep Date:		Analysis Date:	**6/26/2013**		SeqNo:	**328644**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.6	0.50	10.00	0	96.0	90	110			

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBW**	Batch ID:	**R11597**		RunNo:	**11597**				
Prep Date:		Analysis Date:	**6/27/2013**		SeqNo:	**328715**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID	**1306B11-001AMS**	SampType:	**MS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**R11597**		RunNo:	**11597**				
Prep Date:		Analysis Date:	**6/27/2013**		SeqNo:	**328718**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	40	0.50	10.00	30.03	102	90.1	116			

Sample ID	**1306B11-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**R11597**		RunNo:	**11597**				
Prep Date:		Analysis Date:	**6/27/2013**		SeqNo:	**328719**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	41	0.50	10.00	30.03	106	90.1	116	0.884	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306874**

02-Jul-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R11503**	RunNo:	**11503**					
Prep Date:		Analysis Date:	**6/21/2013**	SeqNo:	**325375**	Units:	**µg/L**			

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	20		20.00		102	69.4	129			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R11503**	RunNo:	**11503**					
Prep Date:		Analysis Date:	**6/21/2013**	SeqNo:	**325376**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	80	120			
Toluene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	21	1.0	20.00	0	107	80	120			
Xylenes, Total	65	2.0	60.00	0	109	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		111	69.4	129			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306874**

02-Jul-13

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID	**MB-8063**	SampType:	**MBLK**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**PBW**	Batch ID:	**8063**	RunNo:	**11518**					
Prep Date:	**6/23/2013**	Analysis Date:	**6/24/2013**	SeqNo:	**325941**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	**LCS-8063**	SampType:	**LCS**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**LCSW**	Batch ID:	**8063**	RunNo:	**11518**					
Prep Date:	**6/23/2013**	Analysis Date:	**6/24/2013**	SeqNo:	**325942**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Sample ID	**1306880-003AMS**	SampType:	**MS**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**BatchQC**	Batch ID:	**8063**	RunNo:	**11518**					
Prep Date:	**6/23/2013**	Analysis Date:	**6/24/2013**	SeqNo:	**325957**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	4710	20.0	1000	3699	101	80	120			

Sample ID	**1306880-003AMSD**	SampType:	**MSD**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**BatchQC**	Batch ID:	**8063**	RunNo:	**11518**					
Prep Date:	**6/23/2013**	Analysis Date:	**6/24/2013**	SeqNo:	**325958**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	4710	20.0	1000	3699	101	80	120	0.106	5	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1306874 | RcptNo: 1

Received by/date: LM 06/20/13

Logged By: **Michelle Garcia** 6/20/2013 10:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 6/20/2013 1:38:39 PM Michelle Garcia

Reviewed By: JO 06/20/13

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? No

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1904020**
09-Apr-19

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **rb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **C58957**	RunNo: **58957**
Prep Date:	Analysis Date: **4/5/2019**	SeqNo: **1983120** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

E	Value above quantitation range
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1904020**
09-Apr-19

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **C58957** RunNo: **58957**
Prep Date: Analysis Date: **4/5/2019** SeqNo: **1983120** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.5	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	9.9		10.00		99.5	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **C58957** RunNo: **58957**
Prep Date: Analysis Date: **4/5/2019** SeqNo: **1983121** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.4	70	130			
Toluene	19	1.0	20.00	0	95.3	70	130			
Chlorobenzene	19	1.0	20.00	0	97.1	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.5	70	130			

Qualifiers:

E	Value above quantitation range
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904020**

09-Apr-19

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID: **100ng lcs2**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **C58957**	RunNo: **58957**
Prep Date:	Analysis Date: **4/5/2019**	SeqNo: **1983121** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	19	1.0	20.00	0	92.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		87.5	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A58989**	RunNo: **58989**
Prep Date:	Analysis Date: **4/8/2019**	SeqNo: **1984814** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		89.0	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.6		10.00		96.0	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **A58989**	RunNo: **58989**
Prep Date:	Analysis Date: **4/8/2019**	SeqNo: **1984818** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.2	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		88.8	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.8		10.00		98.3	70	130			

Sample ID: **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **D58989**	RunNo: **58989**
Prep Date:	Analysis Date: **4/8/2019**	SeqNo: **1984876** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		88.1	70	130			
Surr: Dibromofluoromethane	12		10.00		124	70	130			
Surr: Toluene-d8	9.8		10.00		98.4	70	130			

Qualifiers:

E	Value above quantitation range
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904020**

09-Apr-19

Client: Blagg Engineering

Project: Sandoval GC A #1A

Sample ID: **100ng lcs2**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **D58989**	RunNo: **58989**
Prep Date:	Analysis Date: **4/8/2019**	SeqNo: **1984877** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		90.8	70	130			
Surr: Dibromofluoromethane	12		10.00		122	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

E	Value above quantitation range
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **BLAGG** Work Order Number: **1904020** RcptNo: **1**

Received By: **Anne Thorne** **3/30/2019 9:20:00 AM** Anne Thorne

Completed By: **Yazmine Garduno** **4/1/2019 11:10:08 AM** Yazmine Garduno

Reviewed By: ENM 4/1/19

LB: ID 04/01/19

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 ☐	
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 4/01/19

(<2 or >12 unless noted)

Adjusted?

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: ☐ eMail ☐ Phone ☐ Fax ☐ 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	1.0	Good	Yes			
2	1.0	Good	Yes			
3	1.0	Good	Yes			

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906D58**
03-Jul-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R61035** RunNo: **61035**
Prep Date: Analysis Date: **6/28/2019** SeqNo: **2068428** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.0	70	130			
Toluene	20	1.0	20.00	0	99.9	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	89.4	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	90.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.3	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.2	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.6	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Sample ID: **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R61035** RunNo: **61035**
Prep Date: Analysis Date: **6/28/2019** SeqNo: **2068429** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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 Quanitative 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#: **1906D58**
03-Jul-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **rb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R61035**	RunNo: **61035**
Prep Date:	Analysis Date: **6/28/2019**	SeqNo: **2068429** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quanitative 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#: **1906D58**
03-Jul-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R61035** RunNo: **61035**
Prep Date: Analysis Date: **6/28/2019** SeqNo: **2068429** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.3	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

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 Quanitative 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

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: **BLAGG** Work Order Number: **1906D58** RcptNo: **1**

Received By: **Desiree Dominguez** **6/25/2019 8:15:00 AM**

Completed By: **Yazmine Garduno** **6/25/2019 2:20:00 PM**

Reviewed By: 6/26/19

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 ☐	
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: IO 6/26/19

Special Handling (if applicable)

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

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	1.4	Good	Yes			
2	5.8	Good	Yes			

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1909B00**
26-Sep-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R63131** RunNo: **63131**
Prep Date: Analysis Date: **9/23/2019** SeqNo: **2153819** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.0	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.5	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R63131** RunNo: **63131**
Prep Date: Analysis Date: **9/23/2019** SeqNo: **2153841** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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 Quanitative 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#: **1909B00**
26-Sep-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R63131** RunNo: **63131**
Prep Date: Analysis Date: **9/23/2019** SeqNo: **2153841** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1909B00**
26-Sep-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R63131**	RunNo: **63131**
Prep Date:	Analysis Date: **9/23/2019**	SeqNo: **2153841** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.3	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 1909B00 RcptNo: 1

Received By: **Yazmine Garduno** 9/20/2019 8:15:00 AM Yazmine Garduno

Completed By: **Michelle Garcia** 9/20/2019 10:22:12 AM Michelle Garcia

Reviewed By: YG 9/23/19

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 ☐
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: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	5.0	Good	Yes			
2	5.9	Good	Yes			

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1912620**
18-Dec-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R65220** RunNo: **65220**
Prep Date: Analysis Date: **12/16/2019** SeqNo: **2239084** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	20	1.0	20.00	0	98.6	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.1	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R65220** RunNo: **65220**
Prep Date: Analysis Date: **12/16/2019** SeqNo: **2239113** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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 Quanitative 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#: **1912620**
18-Dec-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R65220** RunNo: **65220**
Prep Date: Analysis Date: **12/16/2019** SeqNo: **2239113** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1912620**
18-Dec-19

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R65220** RunNo: **65220**
Prep Date: Analysis Date: **12/16/2019** SeqNo: **2239113** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		116	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

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 Quanitative 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

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: **BLAGG** Work Order Number: **1912620** RcptNo: **1**

Received By: **Yazmine Garduno** **12/12/2019 8:45:00 AM**

Completed By: **Leah Baca** **12/12/2019 9:56:51 AM**

Reviewed By: DAD 12/12/19

Chain of Custody

1. Is Chain of Custody sufficiently 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. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
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 12/12/19

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	0.2	Good				
2	0.0	Good				

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2004027**

09-Apr-20

Client: Blagg Engineering

Project: Sandoval GC A 1A

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R67944** RunNo: **67944**

Prep Date: Analysis Date: **4/6/2020** SeqNo: **2347890** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	22	1.0	20.00	0	110	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.2	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **B67944** RunNo: **67944**

Prep Date: Analysis Date: **4/6/2020** SeqNo: **2347916** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **B67944** RunNo: **67944**

Prep Date: Analysis Date: **4/6/2020** SeqNo: **2347917** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R67944** RunNo: **67944**

Prep Date: Analysis Date: **4/6/2020** SeqNo: **2347926** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								

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 Quanitative 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#: **2004027**
09-Apr-20

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R67944**	RunNo: **67944**
Prep Date:	Analysis Date: **4/6/2020**	SeqNo: **2347926** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004027**
09-Apr-20

Client: Blagg Engineering
Project: Sandoval GC A 1A

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R67944** RunNo: **67944**
Prep Date: Analysis Date: **4/6/2020** SeqNo: **2347926** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.7	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 2004027 RcptNo: 1

Received By: **Juan Rojas** 4/1/2020 8:05:00 AM

Completed By: **John Caldwell** 4/1/2020 12:58:47 PM

Reviewed By: JR 4/1/20

Chain of Custody

1. Is Chain of Custody sufficiently 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. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
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: LB 4/1/20

Special Handling (if applicable)

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

Person Notified: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	1.7	Good				

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006046**
11-Jun-20

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **W69341**	RunNo: **69341**
Prep Date:	Analysis Date: **6/3/2020**	SeqNo: **2405013** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006046**
11-Jun-20

Client: Blagg Engineering
Project: Sandoval GC A #1A

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W69341** RunNo: **69341**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2405013** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.1	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		88.4	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID: **100NG LCS** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W69341** RunNo: **69341**
Prep Date: Analysis Date: **6/2/2020** SeqNo: **2405014** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	20	1.0	20.00	0	97.6	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			

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 Quanitative 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

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: **BLAGG** Work Order Number: **2006046** RcptNo: **1**

Received By: **Emily Mocho** **6/2/2020 8:00:00 AM**

Completed By: **Isaiah Ortiz** **6/2/2020 8:29:08 AM** I-OL

Reviewed By: JR 6/4/20 2 JR 6/2/20

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. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
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: EM 6/2/20

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	6.6	Good	Not Present			

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009A97**
29-Sep-20

Client: SIMCOE/Cottonwood Consulting
Project: Sandoval GC A 1A

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **B72085** RunNo: **72085**
Prep Date: Analysis Date: **9/24/2020** SeqNo: **2527480** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	116	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **B72085** RunNo: **72085**
Prep Date: Analysis Date: **9/24/2020** SeqNo: **2527481** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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 Quanitative 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#: **2009A97**
29-Sep-20

Client: SIMCOE/Cottonwood Consulting
Project: Sandoval GC A 1A

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **B72085** RunNo: **72085**
Prep Date: Analysis Date: **9/24/2020** SeqNo: **2527481** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quanitative 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#: **2009A97**
29-Sep-20

Client: SIMCOE/Cottonwood Consulting
Project: Sandoval GC A 1A

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **B72085** RunNo: **72085**
Prep Date: Analysis Date: **9/24/2020** SeqNo: **2527481** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.5	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.2		10.00		92.1	70	130			

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 Quanitative 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

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

Sample Log-In Check List

Client Name: **SIMCOE/Cottonwood Consulting** Work Order Number: **2009A97** RcptNo: **1**

Received By: **Emily Mocho** **9/18/2020 8:00:00 AM**

Completed By: **Emily Mocho** **9/18/2020 9:04:09 AM**

Reviewed By: EM 9/18/20

Chain of Custody

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

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. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
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)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by: SPA 9.18.20

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	4.5	Good	Yes			

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012772**
30-Dec-20

Client: SIMCOE/Cottonwood Consulting
Project: Sandoval GC A 1A

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A74228** RunNo: **74228**
Prep Date: Analysis Date: **12/23/2020** SeqNo: **2620156** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.6	70	130			

Sample ID: **VSB Fridge** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A74228** RunNo: **74228**
Prep Date: Analysis Date: **12/23/2020** SeqNo: **2620157** Units: **µg/L**

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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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 Quanitative 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#: **2012772**
30-Dec-20

Client: SIMCOE/Cottonwood Consulting
Project: Sandoval GC A 1A

Sample ID: **VSB Fridge** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A74228** RunNo: **74228**
Prep Date: Analysis Date: **12/23/2020** SeqNo: **2620157** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quanitative 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#: **2012772**

30-Dec-20

Client: SIMCOE/Cottonwood Consulting

Project: Sandoval GC A 1A

Sample ID: **VSB Fridge** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **A74228** RunNo: **74228**

Prep Date: Analysis Date: **12/23/2020** SeqNo: **2620157** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.7		10.00		97.1	70	130			

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **A74244** RunNo: **74244**

Prep Date: Analysis Date: **12/24/2020** SeqNo: **2620789** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **A74244** RunNo: **74244**

Prep Date: Analysis Date: **12/24/2020** SeqNo: **2620790** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.8	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130			
Surr: Toluene-d8	9.6		10.00		95.5	70	130			

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 Quanitative 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

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

Sample Log-In Check List

Client Name: SIMCOE/Cottonwood Consulting

Work Order Number: 2012772

RcptNo: 1

Received By: Desiree Dominguez 12/16/2020 8:00:00 AM

Completed By: Emily Mocho 12/16/2020 9:26:00 AM

Reviewed By: SGL 12/16/20

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. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
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)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by: JR 12/16/20

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	8.00	Good				

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 16474

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 16474
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2020 Remediation Report for Sandoval Gas Com A 001A: Content Satisfactory 1. Continue operating and conducting O&M as prescribed for the SVE system on site. 2. When appropriate, advance soil borings in soil to confirm closure requirements have been met for TPH, BTEX and chlorides in soil. 3. Options for re-drilling or replacement will need to be considered for MW#1 and MW3# as both have not produced a viable sample due to insufficient volume since 2013. 4. Continue to submit annual reports and documentation as necessary by April 1 of every calendar year.	1/17/2024