bp



BP America Production Company 200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

June 23, 2017

Randolph Bayliss Hydrologist – Dist. III & IV New Mexico Oil Conservation Division Environmental Bureau 1220 St. Francis Drive Santa Fe, NM 87505

Re: Request for Permanent Closure Gallegos Canyon Unit 169E; 3RP-441-0 API No. 30-045-24176; Unit letter H, Section 35, T29N, R12W; GPS: 36.68519°, -108.06251°

Dear Mr. Bayliss :

BP America Production Company has retained Blagg Engineering, Inc. to conduct environmental monitoring of soil excavation and groundwater at the Gallegos Canyon Unit 169E currently operated by BP America Production Company. The site is located on private property.

Historical impacts were found at the location in May of 2011. The soil impacts were remediated via excavation and soils transported off site for landfarm treatment. Following the remedial excavation, groundwater monitoring wells were installed and sampled until each reached satisfactory water quality standards for 8 consecutive quarters.

The attached report requesting site closure demonstrates groundwater contaminants below the New Mexico Water Quality Control Commission's standards for all required constituents for four consecutive quarters per the BP and NMOCD agreed Groundwater Management Plan.

If you have any questions concerning this document, please contact myself (<u>steven.moskal@bp.com</u>) at the address or phone number listed above. Thank you for your cooperation and assistance.

Sincerely,

Steve Moskal Field Environmental Coordinator

cc: Mr. Cory Smith & Vanessa Fields, Environmental Specialists, NMOCD District III Office, 1000 Rio Brazos Road Aztec, NM

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

June 23, 2017

Mr. Steve Moskal BP America Production Company 200 Energy Ct Farmington, New Mexico 87401

Re: GCU 169E - (H) Sec 35 – T29N – R12W San Juan County, New Mexico Soil & Groundwater Remediation Closure NMOCD 3RP - 441

Dear Mr. Moskal:

At BP's request, Blagg Engineering, Inc. (BEI) conducted monitoring and sampling during soil and groundwater remedial activities at the BP operated GCU 169E gas well site, located in rural San Juan County, New Mexico in (H) Section 35, Township 29 North, Range 12 West. Historical soil impacts from an unknown source were discovered on May 24, 2011 during work at the site. Removal of these impacts began immediately, but due to active natural gas and produced water gathering lines within the impact area final excavation of impacted soil was not completed until January 11, 2013.

Groundwater at the site was present at a depth of approximately 8 feet below surface grade. Following remedial excavation, six (6) groundwater monitor wells were installed within and surrounding the excavation area in early April 2013. Initial sampling of the wells was conducted on April 23, 2013 and by May 14, 2015 each of the wells had achieved 8 consecutive quarters of analytical testing with parameters within New Mexico Oil Conservation Division (NMOCD) closure standards for all regulated constituents.

Attached is documentation of sampling and laboratory test reports confirming that both soil and groundwater at the site meets NMOCD standards for closure. BEI recommends site closure with no additional sampling or testing indicated.

Questions or comments with respect to this transmittal may be directed to myself at 632-1199. BEI appreciates the opportunity to provide services to BP.

Respectfully, *Blagg Engineering, Inc.*

Jeffrey C. Blagg, P.E. President

Attachment: Closure Documentation

BP America GCU 169E (H) Sec 35 – T29N – R12W San Juan County, New Mexico API: 30-045-24176 3RP - 441

Summary Record of Impact Remediation

<u>May 24, 2011</u> Soil impacts at a depth of approximately 3' below surface grade discovered near 300 bbl stock tank while trenching. Potential source, areal extent and age unknown.

<u>May 25 – 26, 2011</u> Begin investigation with backhoe. Determine impacts exceed available excavation equipment capabilities and transfer project to BP Remediation group.

February 24, 2012 Begin on-site remediation via excavation and transport of impacted soils to landfarm.

<u>April 3, 2012</u> While excavating, discover free product on water table on northwest corner of wellpad. BP files verbal report to NMOCD (Aztec and Santa Fe) and submits Form C-141.

<u>April 13, 2012</u> Complete on-pad soil excavation. Terminate remediation, waiting on removal of off-pad water and gas gathering lines north of wellpad before proceeding with site cleanup.

<u>December 14, 2012</u> Commence off-pad remediation north of wellpad in area of removed water and gas gathering lines.

January 11, 2013 Complete removal of off-pad impacts north of wellpad.

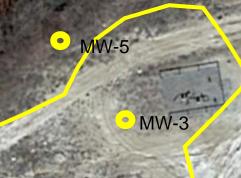
April 2 - 5, 2013 Install groundwater monitor wells MW-1 through MW-6.

<u>April 25, 2013 through May 14, 2015</u> Complete quarterly groundwater monitoring with 8 consecutive quarters of regulated parameters below closure standards.

GCU 169E

Groundwater Closure Documentation

SITE FIGURES SUMMARY BTEX TABLE MONITOR WELL BORING LOGS FIELD SAMPLING NOTES LABORATORY ANALYTICAL REPORTS Google Overhead Figure





• MW-6



Remedial Excavation

-CGCU 169E

oogle earth

9/2017 Google

FIGURE 1



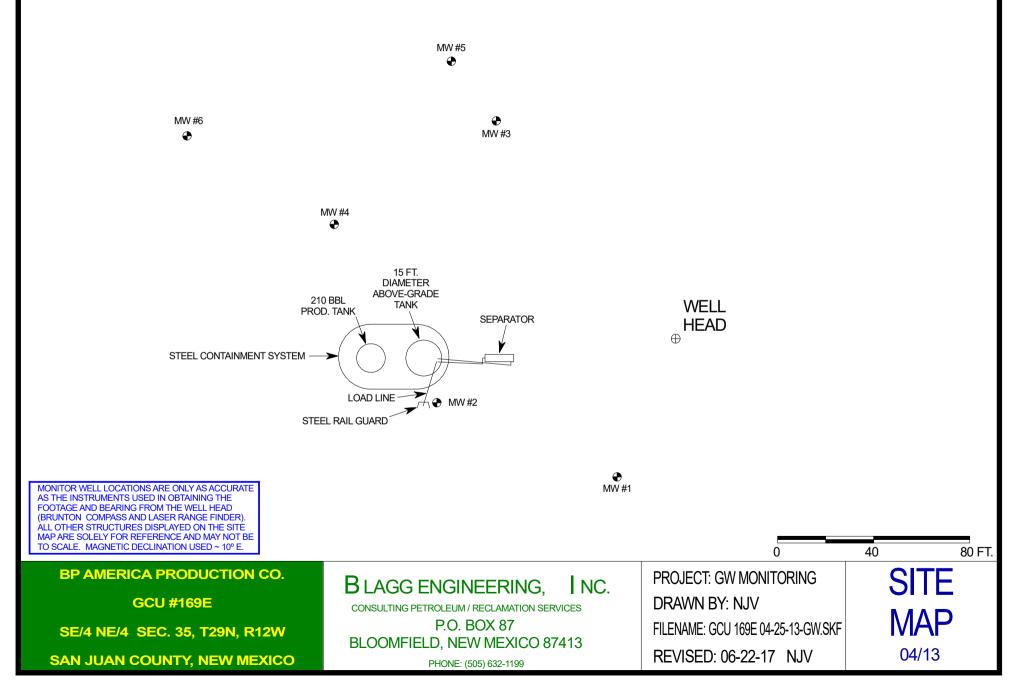
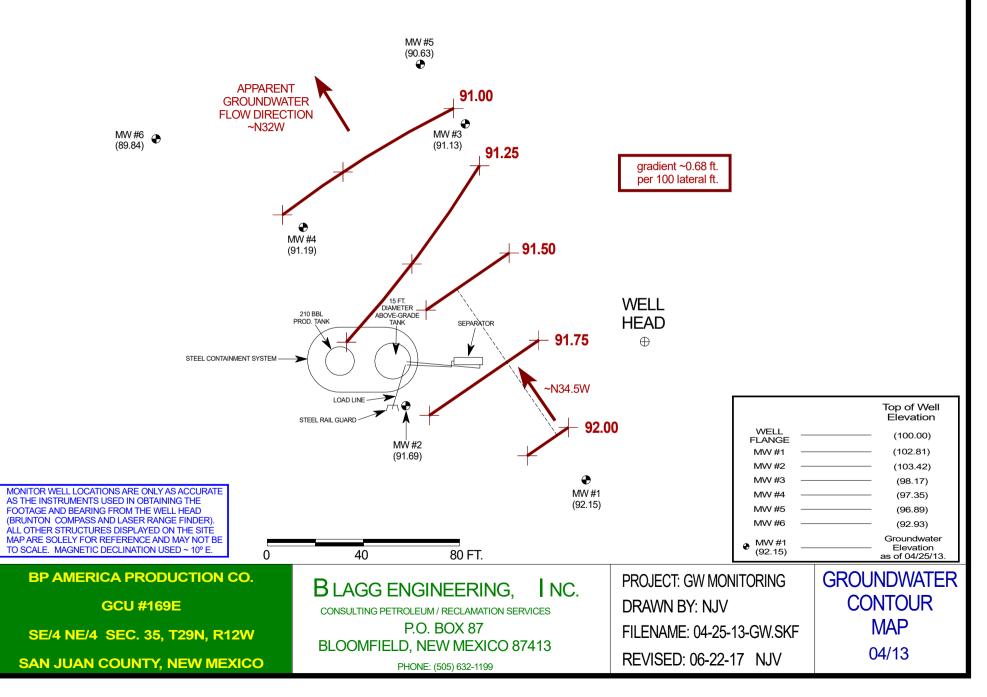
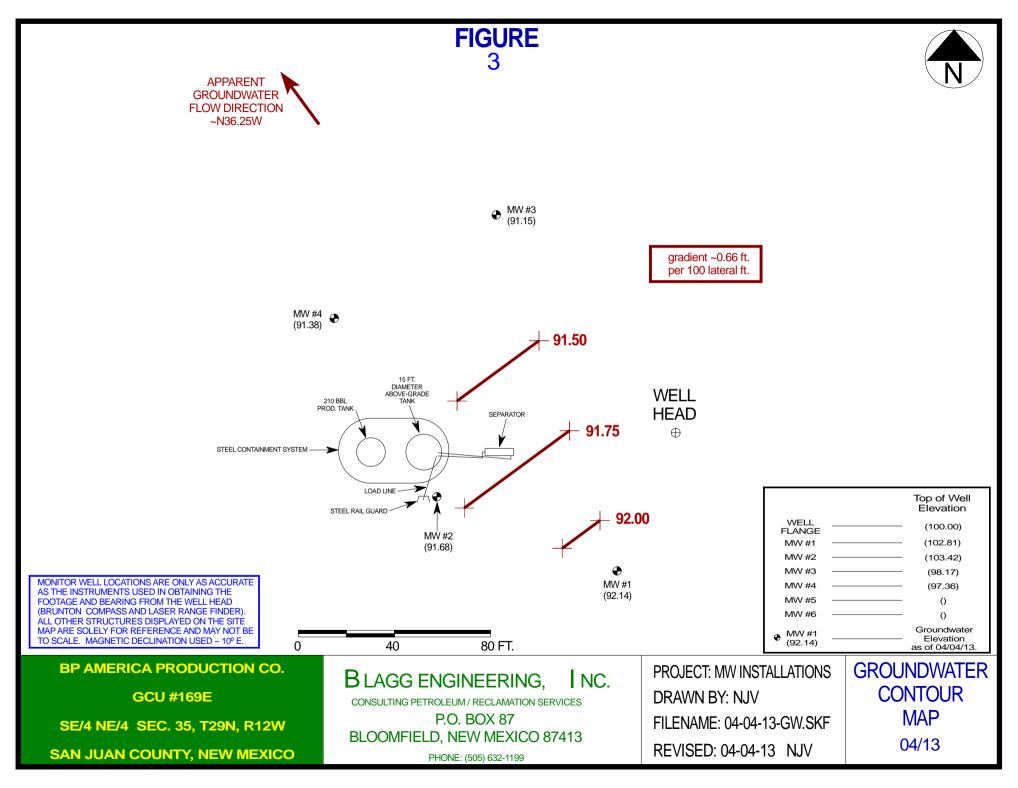


FIGURE 2 (2nd 1/4, 2013)



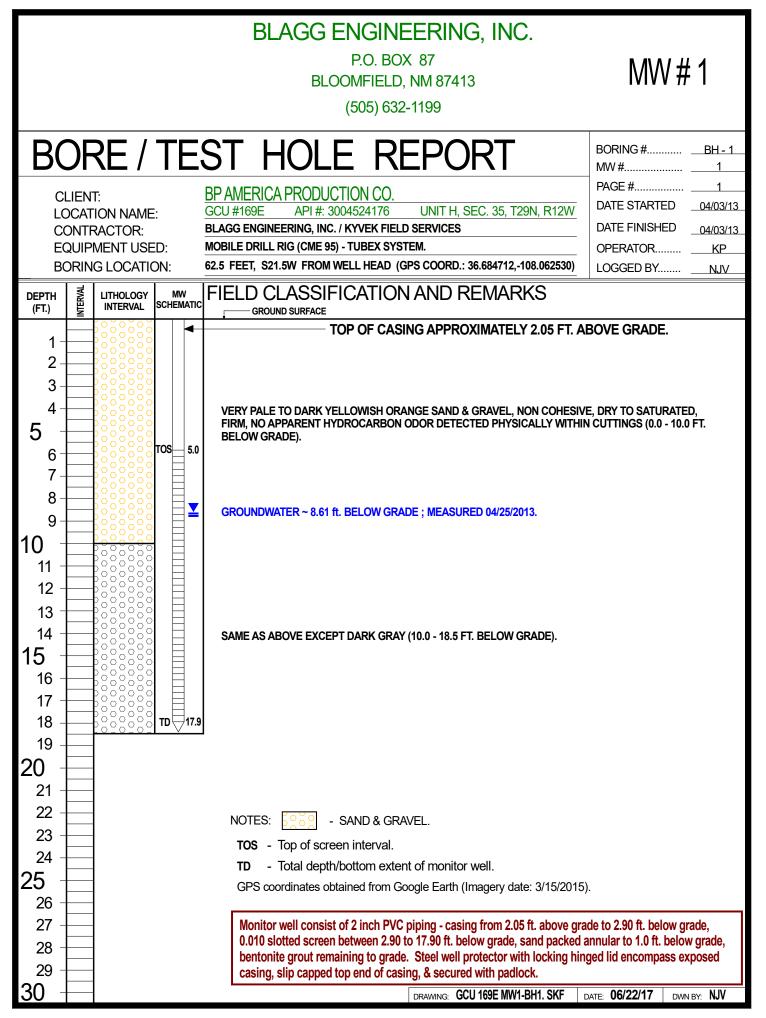


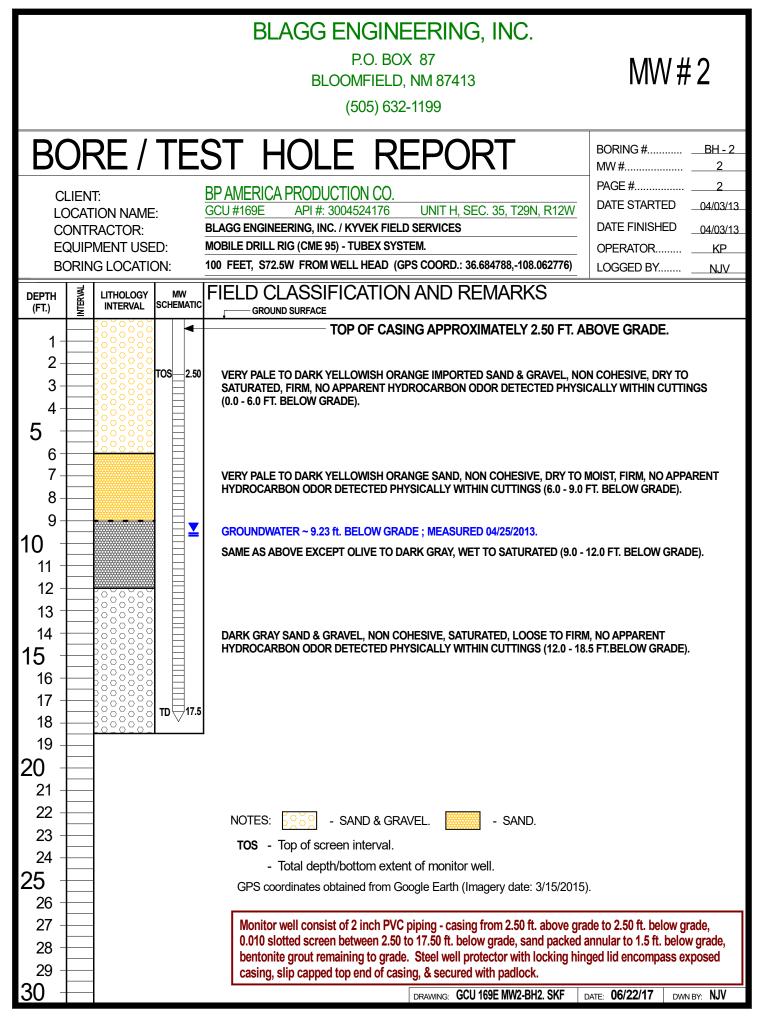


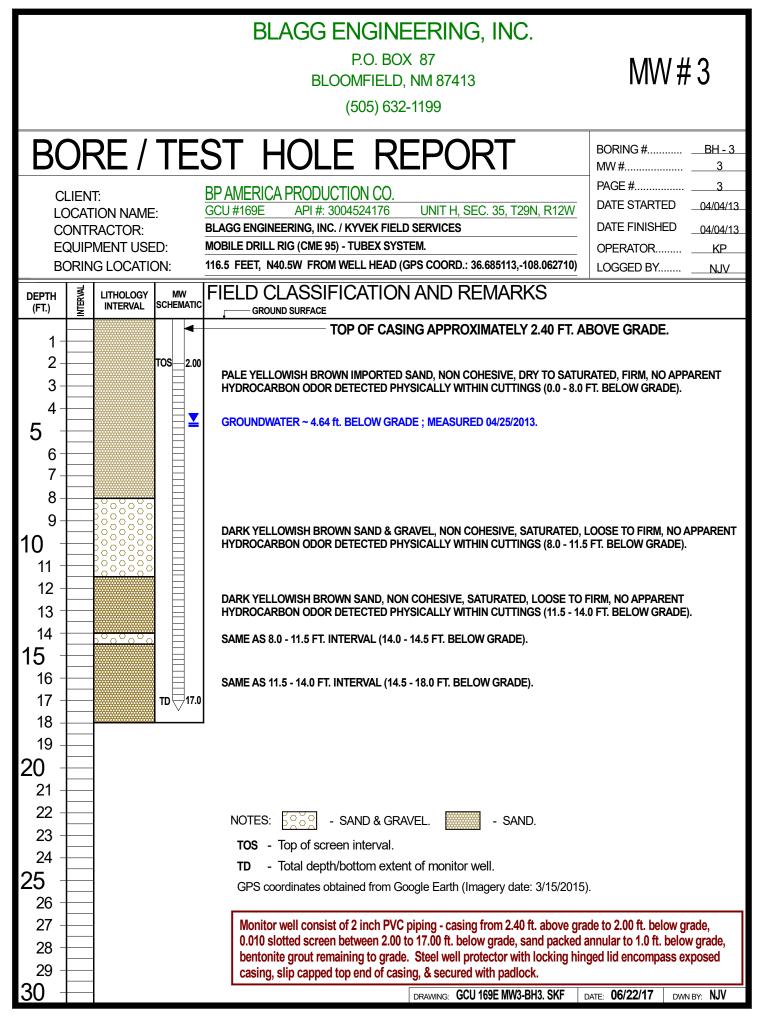
BP America - GCU 169E Monitor Well Summary Analytical Data

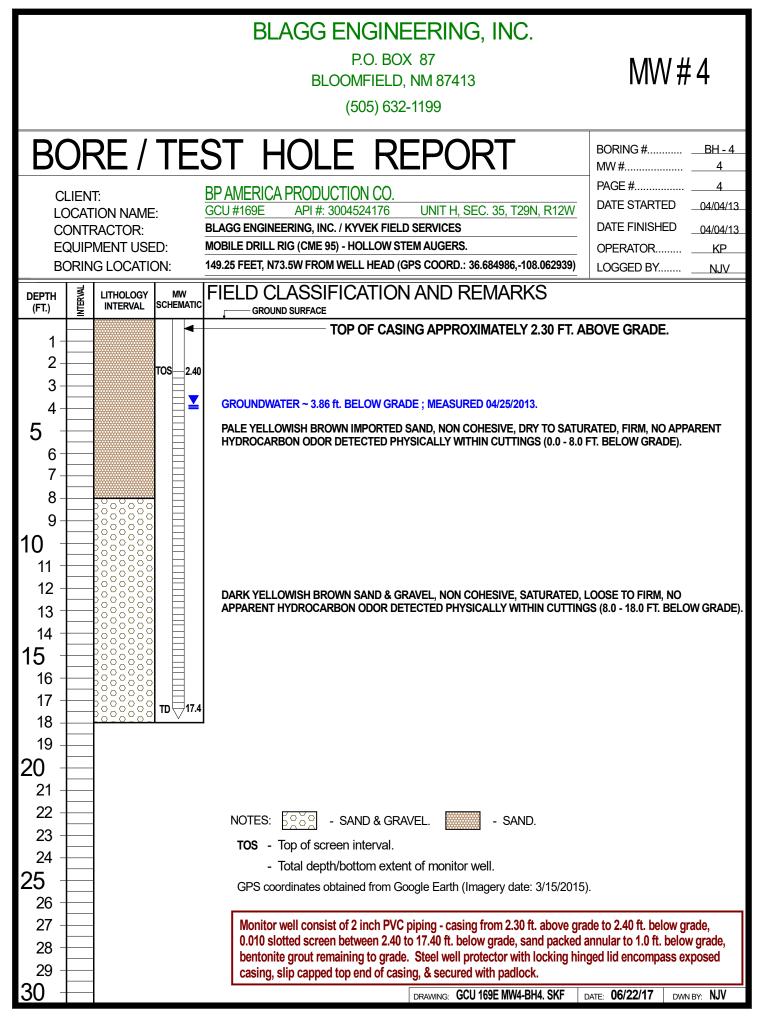
	Sampling	Benzene	Toluene	Ethyl-	Total
Well ID	Date	(ug/L)	(ug/L)	Benzene	Xylenes
				(ug/L)	(ug/L)
MW-1	04/25/2013		ND	ND	ND
Note: Upgra	adient monitor we	ell. Not resai	mpled after i I	nitial event.	
MW-2	04/25/2013	ND	ND	ND	ND
	08/28/2013	ND	ND	ND	ND
	12/16/2013	ND	ND	ND	ND
	03/04/2014	ND	ND	ND	ND
	05/16/2014	ND	ND	ND	ND
	08/25/2014	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND
	03/10/2015	ND	ND	ND	ND
	05/14/2015	ND	ND	ND	ND
MW-3	04/25/2013	57	ND	21	250
	08/28/2013	4.1	ND	1.4	ND
	12/16/2013	ND	ND	ND	ND
	03/04/2014	ND	ND	ND	ND
	05/16/2014	ND	ND	ND	ND
	08/25/2014	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND
	03/10/2015	ND	ND	ND	ND
	05/14/2015	ND	ND	ND	ND
MW-4	04/25/2013	6.3	ND	4.7	ND
	08/28/2013	ND	ND	ND	ND
	12/16/2013	ND	ND	ND	ND
	03/04/2014	ND	ND	ND	ND
	05/16/2014	ND	ND	ND	ND
	08/25/2014	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND
	03/10/2015	ND	ND	ND	ND
	05/14/2015	ND	ND	ND	ND
MW-5	04/25/2013	ND	ND	ND	ND
U1110-3	08/28/2013	ND	ND	ND	ND
	12/16/2013	ND	ND	ND ND	ND ND
	03/04/2014	ND	ND	ND	ND
	03/04/2014		ND	ND	ND
l	05/10/2014				NU

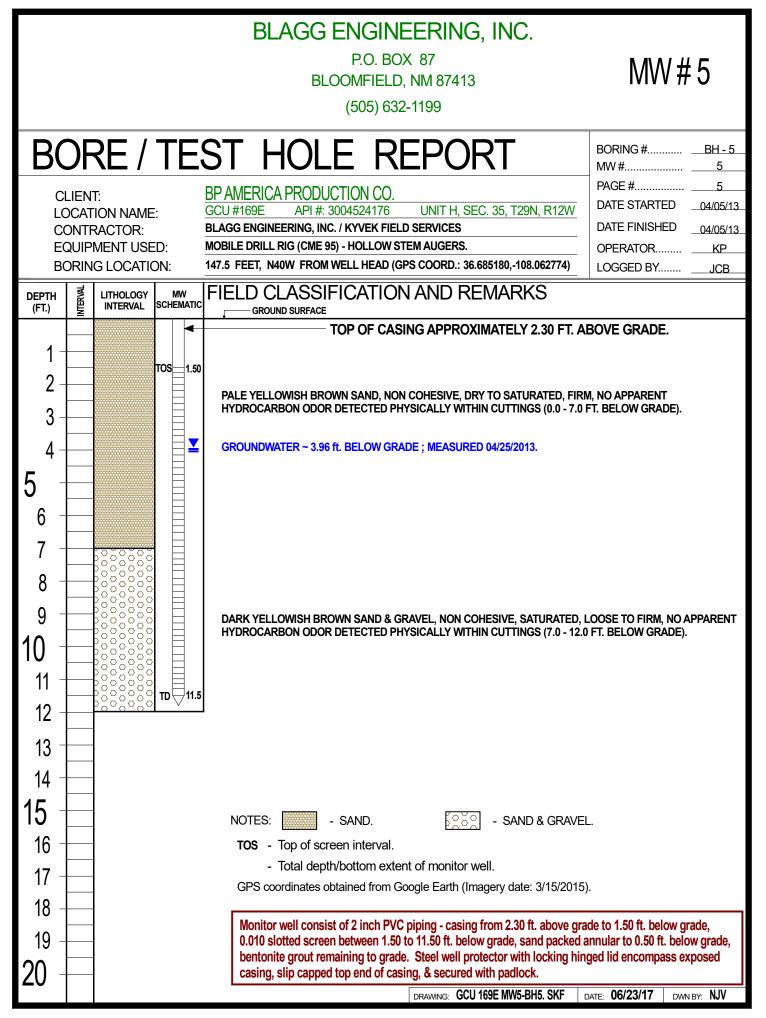
	08/25/2014	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND
	03/10/2015	ND	ND	ND	ND
	05/14/2015	ND	ND	ND	ND
MW-6	04/25/2013	ND	ND	ND	ND
	08/28/2013	ND	ND	ND	ND
	12/16/2013	ND	ND	ND	ND
	03/04/2014	ND	ND	ND	ND
	05/16/2014	ND	ND	ND	ND
	08/25/2014	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND
	03/10/2015	ND	ND	ND	2.2
	05/14/2015	ND	ND	ND	ND
NMWQCC Li	imits:	10	750	750	620

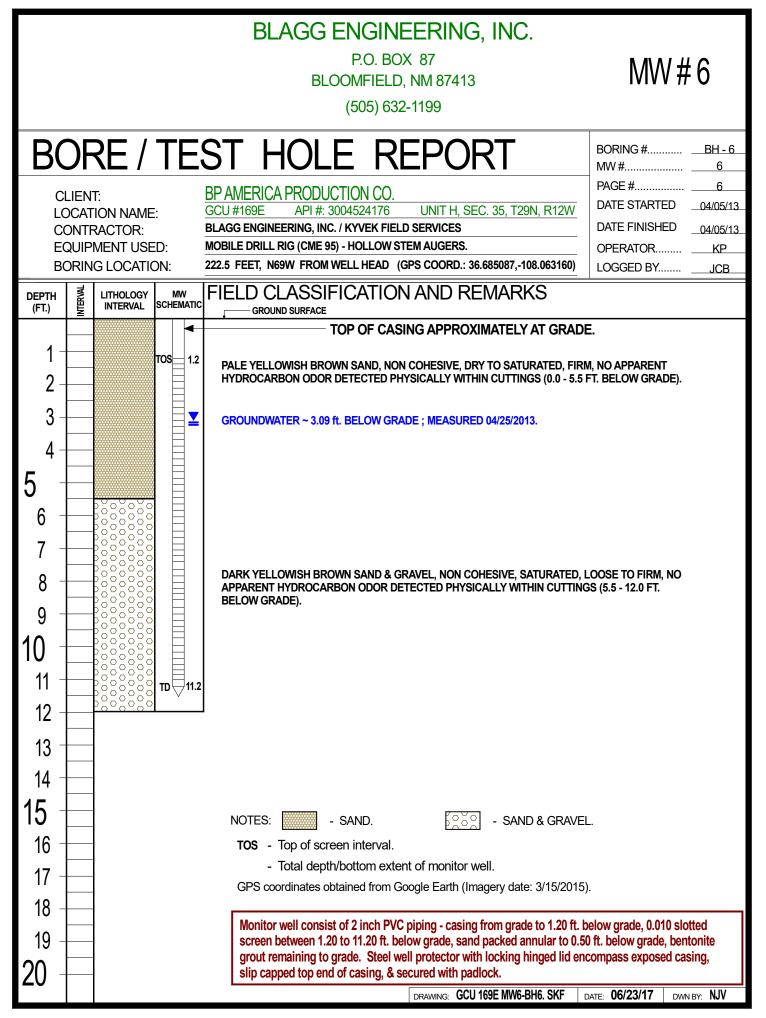












MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME		OD. CO.		CHAIN-OF-C	USTODY # :		N	/ A
GCU #169 UNIT H, SI	E EC. 35, T29N	, R12W			LABORATOR	RY (S) USED	:	HALL ENVIF	RONMENTAL
Date :	April 25, 2				C	EVELOPER	/ SAMPLER :	<u> </u>	JV
Filename :	GCU 169E r	mw log 04-2	5-13.xls			PROJECT	MANAGER :	<u> </u>	JV
WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	рН	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	102.81	92.15	10.66	19.94	0955	7.16	2,000	14.6	4.50
2	103.42	91.69	11.73	20.00	1210	7.19	2,100	14.7	4.00
3	98.17	91.13	7.04	19.40	1340	6.91	2,700	14.1	6.00
4	97.35	91.19	6.16	19.69	1255	6.88	2,300	14.3	6.75
5	96.89	90.63	6.26	13.78	1125	6.88	2,600	14.4	3.75
6	92.93	89.84	3.09	11.17	1040	7.17	2,400	14.8	4.00
			INSTRUMENT DATE & TIM	-	DNS =	4.01/7.00/10.00 04/25/13	2,800 0700		
NOTES :					ampling: V = r = (2/12) ft.		<u>X 7.48 gal./ft</u>	<u>3) X 3 (wellb</u>	ores).
	Ideally a mir	nimum of thr	ee (3) wellbo	re volumes:		2.00" well di	iameter =	0.49 gal./ft.	of water.
Comments	or note wel	l diameter	if not standa	ırd 2".					
Monitor well	top survey con	ducted on 4/4	4/13 & 4/15/13	. Installed M	IW #1 & #2 on 4	4/3/13, #3 & #	#4 on 4/4/13, #	#5 & #6 on	
4/5/13. All N	1W's initial dev	elopment con	pleted on 4/23	3/13 . Excell	ent recovery in	MW #1 thru ;	#4, fair to goo	d in #5 & #6.	

Used submersible pump and vinyl clear tubing for purging & sampling . Collected samples from all MW's for BTEX per US EPA Method 8021B & general chemistry parameters.

on-site	9:15 AM	temp	52 F
off-site	1:45 PM	temp	70 F
sky cond.		Mostly sunny	
wind speed	0 - 10	direct.	E, SE, NW

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.				CHAIN-OF-CUSTODY # :		N / A			
GCU # 169 UNIT H, S	E EC. 35, T29N	, R12W			LABORATOF	RY (S) USED	:	HALL ENVIF	RONMENTAL
Date : Filename :	August 28, GCU 169E r		8-13.xls		C		/ SAMPLER : MANAGER :		J V
WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	рН	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	102.81	91.84 91.36	10.97	19.94	- 1330	- 7.46	-	- 20.7	-
3	98.17 97.35	90.74 90.86	7.43	<u>19.40</u> 19.69	1620 1540	7.36	1,900 1,800	20.6	6.00 6.50
5 6	96.89 92.93	90.55 89.32	6.34 3.61	13.78 11.17	1410 1455	7.41 7.62	1,600 1,700	19.9 21.2	3.75 3.75
			INSTRUMENT DATE & TIMI		DNS =	4.01/7.00/10.00 08/26/13	2,800 0600		
NOTES :				-	ampling: V = r = (2/12) ft.	-	X 7.48 gal./ft	<u>3) X 3 (wellb</u>	ores).

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 ".

Monitor well top survey conducted on 4/4/13 & 4/15/13. Installed MW #1 & #2 on 4/3/13, #3 & #4 on 4/4/13, #5 & #6 on
4/5/13. All MW's initial development completed on 4/23/13. Excellent recovery in MW #1 thru #4, fair to good in #5 & #6.
Collected samples for BTEX per US EPA Method 8021B from MW's #2 thru #6. 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.

on-site	12:45 PM	temp	80 F
off-site	3:45 PM	temp	84 F
sky cond.		Mostly cloudy	
wind speed	0 - 10	direct.	E - SSE

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.					CHAIN-OF-CUSTODY # :		N / A		
GCU #169 UNIT H, S	E EC. 35, T29N	l, R12W			LABORATOR	RY (S) USED	:	HALL ENVIF	RONMENTAL
Date :	December	16, 2013			Γ	EVELOPER	/ SAMPLER :	N	JV
Filename :	GCU 169E r	mw log 12-1	6-13.xls			PROJECT	MANAGER :	N	JV
WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	рН	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	102.81	92.33	10.48	19.94	-	-	-	-	-
2	103.42	91.87	11.55	20.00	1420	7.22	1,100	15.1	4.25
3	98.17	91.28	6.89	19.40	1615	7.44	1,500	14.7	6.25
4	97.35	91.43	5.92	19.69	1515	7.29	1,300	14.3	6.75
5	96.89	90.97	5.92	13.78	1320	7.10	1,300	15.4	3.75
6	92.93	89.96	2.97	11.17	1225	7.13	1,200	11.9	4.00
NOTEO			INSTRUMENT DATE & TIMI	E =		4.01/7.00/10.00 12/16/13	2,800 0600		
NOTES :	-				ampling: V = r = (2/12) ft.	-	<u>X 7.48 gal./ft</u>	<u>3) X 3 (wellb</u>	ores).

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 ".

Monitor well top survey conducted on 4/4/13 & 4/15/13. Installed MW #1 & #2 on 4/3/13, #3 & #4 on 4/4/13, #5 & #6 on
4/5/13. All MW's initial development completed on 4/23/13. Excellent recovery in MW #1 thru #4, fair to good in #5 & #6.
Collected samples for BTEX per US EPA Method 8021B from MW's #2 thru #6. 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.

on-site	11:30 AM	temp	33 F
off-site	4:30 PM	temp	39 F
sky cond.		Mostly sunny	
wind speed	0 - 10	direct.	ESE - WSW

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME	OD. CO.		CHAIN-OF-C	USTODY # :		N	/ A	
GCU #169E UNIT H, SEC. 35, T29N, R12W					LABORATOR	RY (S) USED	:	HALL ENVIF	RONMENTAL
Date :	March 4,	2014			C	DEVELOPER	/ SAMPLER :	N	JV
Filename :			4-14.xls			PROJECT	MANAGER :	N	JV
WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	рН	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	102.81	92.44	10.37	19.94	-	-	-	-	-
2	103.42	92.01	11.41	20.00	1140	7.30	1,900	12.0	4.25
3	98.17	91.39	6.78	19.40	1335	7.23	2,000	12.0	6.25
4	97.35	91.55	5.80	19.69	1235	7.33	1,800	12.4	6.75
5	96.89	91.05	5.84	13.78	1040	7.29	1,800	12.4	4.00
6	92.93	90.09	2.84	11.17	0935	7.34	1,900	9.7	4.00
			INSTRUMENT DATE & TIMI	-	DNS =	4.01/7.00/10.00 02/24/14	2,800 0600		
NOTES :	NOTES: <u>Volume of water purged from well prior to sampling: $V = pi X r^2 X h X 7.48 gal./ft3) X 3 (wellbores).(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)$</u>								ores).
	Ideally a mir	nimum of thr	ee (3) wellbo	re volumes:		2.00" well d	iameter =	0.49 gal./ft.	of water.
Comments	or note wel	I diameter	if not standa	rd 2".					

Excellent recovery in MW #1 thru #4, fair to good in #5 & #6. Collected samples for BTEX per US EPA Method 8021B from MW's #2 thru #6. 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.

on-site	8:45 AM	temp	38 F			
off-site	1:45 PM temp		52 F			
sky cond.	Cloudy					
wind speed	0 - 10	direct.	E - SE			

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME	RICA PR	OD. CO.		CHAIN-OF-C	USTODY # :	N / A		
GCU # 169 UNIT H, SI	E EC. 35, T29N	, R12W			LABORATOR	RY (S) USED	:	HALL ENVIRONMENTAL	
Date :	May 16, 2	2014			г		/ SAMPLER :	N.	JV
Filename :	GCU 169E I		6-14 xls		-		MANAGER :		JV
Thomaine .	000 10021	in log oo i	0 11.00			TROULOT	W/ W/ OEI (<u> </u>
WELL	WELL	WATER	DEPTH TO	TOTAL	SAMPLING	pН	CONDUCT	TEMP.	VOLUME
#	ELEV.	ELEV.	WATER	DEPTH	TIME		(umhos)	(celcius)	PURGED
	(ft)	(ft)	(ft)	(ft)			. ,	· · · /	(gal.)
	,						•		
1	102.81	92.19	10.62	19.94	-	-	-	-	-
2	103.42	91.77	11.65	20.00	1140	7.32	1,400	15.7	4.00
3	98.17	91.14	7.03	19.40	1305	7.19	1,600	16.0	6.00
4	97.35	91.31	6.04	19.69	1225	7.24	1,300	16.4	6.75
5	96.89	90.80	6.09	13.78	1055	7.29	1,400	15.8	3.75
6	92.93	89.80	3.13	11.17	1015	7.43	1,100	15.1	4.00
			INSTRUMENT	CALIBRATI	ONS =	4.01/7.00/10.00	2,800		
			DATE & TIM	E =		05/16/14	0600		
NOTES :					<u>ampling: V =</u> / r = (2/12) ft.		X 7.48 gal./ft	<u>3) X 3 (wellb</u>	oores).
	Ideally a mir	nimum of thr	ee (3) wellboi	re volumes	:	2.00" well d	iameter =	0.49 gal./ft.	of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in all monitor wells sampled. No apparent sheen observed in any wells purged, light to murky brown in appearance. Purged well using 2 inch submersible electric pump, new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing. Collected samples from all wells except MW #1 for BTEX per US EPA Method 8021B.

on-site	9:20 AM	temp	57 F
off-site	1:15 PM	temp	79 F
sky cond.		Sunny	
wind speed	5 - 20	direct.	ESE - WNW

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME	RICA PR	OD. CO.		CHAIN-OF-CUSTODY # :			N / A	
GCU # 169 UNIT H, SE	E EC. 35, T29N	, R12W			LABORATOR	RY (S) USED	:	HALL ENVIRONMENTAL	
Date :	August 25,	2014			0	DEVELOPER	/ SAMPLER :	N	JV
	GCU 169E r		5-14.xls			PROJECT	MANAGER :		JV
WELL	WELL	WATER	DEPTH TO	TOTAL	SAMPLING	pН	CONDUCT	TEMP.	VOLUME
#	ELEV.	ELEV.	WATER	DEPTH	TIME		(umhos)	(celcius)	PURGED
	(ft)	(ft)	(ft)	(ft)					(gal.)
1	102.81	91.83	10.98	19.94	-	-	-	-	-
2	103.42	91.12	12.30	20.00	1245	7.24	1,300	19.7	3.75
3	98.17	90.80	7.37	19.40	1405	7.10	1,300	20.5	6.00
4	97.35	90.94	6.41	19.69	1330	7.21	1,200	19.1	6.50
5	96.89	90.60	6.29	13.78	1155	7.10	1,200	19.5	3.75
6	92.93	89.48	3.45	11.17	1110	7.28	1,100	19.0	3.75
	•		INSTRUMENT	CALIBRATIO	ONS =	4.01/7.00/10.00	2,800		
			DATE & TIME	=		08/25/14	0600		
NOTES :					ampling: V = r = (2/12) ft.		X 7.48 gal./ft	3) X 3 (wellb	oores).

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 ".

Excellent recovery in all monitor wells sampled. No apparent sheen observed in any wells purged, light to murky brown in appearance. Purged well using 2 inch submersible electric pump, new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing. Collected samples from all wells except MW #1 for BTEX per US EPA Method 8021B.

on-site	10:30 AM	temp	76 F
off-site	2:30 PM	temp	84 F
sky cond.		Sunny	
wind speed	0 - 10	direct.	ESE - W

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME	RICA PR	OD. CO.		CHAIN-OF-CUSTODY # :			N / A		
GCU #169 UNIT H, SI	E EC. 35, T29N	, R12W			LABORATORY (S) USED :			HALL ENVIRONMENTAL		
Date :	November	25. 2014			Г	DEVELOPER	/ SAMPLER :	N	NJV	
Filename :	-	,	5-14.xls		_		MANAGER :		JV	
WELL	WELL	WATER	DEPTH TO	TOTAL	SAMPLING	pН	CONDUCT	TEMP.	VOLUME	
#	ELEV.	ELEV.	WATER	DEPTH	TIME		(umhos)	(celcius)	PURGED	
	(ft)	(ft)	(ft)	(ft)					(gal.)	
					•					
1	102.81	92.29	10.52	19.94	-	-	-	-	-	
2	103.42	91.86	11.56	20.00	1155	7.39	1,400	16.5	4.25	
3	98.17	91.30	6.87	19.40	1350	7.27	1,400	16.4	6.25	
4	97.35	91.43	5.92	19.69	1255	7.39	1,200	15.1	6.75	
5	96.89	91.05	5.84	13.78	1050	7.36	1,200	16.5	4.00	
6	92.93	90.02	2.91	11.17	0955	7.53	1,200	13.8	4.00	
			INSTRUMENT	CALIBRATIC	DNS =	4.01/7.00/10.00	2,800			
			DATE & TIMI	E =		11/24/14	0600			
NOTES :					ampling: V = r = (2/12) ft.		X 7.48 gal./ft	3 <u>) X 3 (wellb</u>	oores).	

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 ".

Excellent recovery in all monitor wells sampled. No apparent sheen observed in any wells purged, light to murky brown in appearance. Purged well using 2 inch submersible electric pump, new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing. Collected samples from all wells except MW #1 for BTEX per US EPA Method 8021B.

on-site	9:00 AM	temp	26 F
off-site	2:00 PM	temp	45 F
sky cond.		Sunny	
wind speed	0 - 25	direct.	SSW-WNW

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME		OD. CO.	CHAIN-OF-C	USTODY # :		N / A		
GCU # 169E UNIT H, SEC. 35, T29N, R12W					LABORATOF	RY (S) USED	:	HALL ENVIRONMENTAL	
Date :	March 10, 2	015			г		/ SAMPLER :	N.	JV
Filename :	GCU 169E r		-03-10 xls		-		MANAGER :	-	JV
Thomaine .	000 10021	1111 109 2010	00 10.//0			TROULOT	WAAA COLIN		<u> </u>
WELL	WELL	WATER	DEPTH TO	TOTAL	SAMPLING	pН	CONDUCT	TEMP.	VOLUME
#	ELEV.	ELEV.	WATER	DEPTH	TIME		(umhos)	(celcius)	PURGED
	(ft)	(ft)	(ft)	(ft)			· · · ·	· · · /	(gal.)
<u> </u>	• • •				•		•	•	
1	102.81	92.57	10.24	19.94	-	-	-	-	-
2	103.42	92.17	11.25	20.00	1225	6.73	2,300	13.8	2.50
3	98.17	91.59	6.58	19.40	1420	6.78	2,100	13.7	3.75
4	97.35	91.68	5.67	19.69	1325	7.08	1,700	13.9	4.50
5	96.89	93.25	3.64	13.78	1120	7.06	1,900	13.9	2.50
6	92.93	90.29	2.64	11.17	1025	7.05	2,000	10.4	3.00
			INSTRUMENT	CALIBRATI	ONS =	4.01/7.00/10.00	2,800		
			DATE & TIM	E =		03/10/15	0630		
NOTES :					<u>ampling: V =</u> / r = (2/12) ft.		X 7.48 gal./ft	<u>3) X 3 (wellb</u>	oores).
	Ideally a mir	nimum of thr	ee (3) wellboi	re volumes	:	2.00" well d	iameter =	0.49 gal./ft.	of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in all monitor wells sampled. No apparent sheen observed in any wells purged, light to murky brown in appearance. Purged well using 2 inch submersible electric pump, new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing. Collected samples from all wells except MW # 1 for BTEX per US EPA Method 8021B.

on-site	9:30 AM	temp	36 F
off-site	2:30 PM	temp	60 F
sky cond.		Sunny	
wind speed	0 - 10	direct.	E - SSW

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT :	BP AME		OD. CO.		CHAIN-OF-CUSTODY # :			N / A	
GCU #169E UNIT H, SEC. 35, T29N, R12W				LABORATORY (S) USED :				HALL ENVIRONMENTAL	
Date :	May 14, 201	5			E	DEVELOPER	/ SAMPLER :	NJV	
Filename :	GCU 169E r	mw log 2015	-05-14.xls			PROJECT	MANAGER :	Ν.	JV
WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	рН	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
					1				
1	102.81	92.21	10.60	19.94	-	-	-	-	-
2	103.42	91.82	11.60	20.00	1230	6.97	2,600	14.6	3.00
3	98.17	91.22	6.95	19.40	1430	7.01	2,100	15.5	4.50
4	97.35	91.35	6.00	19.69	1330	7.09	1,700	14.8	4.50
5	96.89	90.92	5.97	13.78	1130	7.05	1,900	15.1	2.75
6	92.93	89.93	3.00	11.17	1030	6.98	1,900	14.9	3.00
			INSTRUMENT DATE & TIMI	-	DNS =	4.01/7.00/10.00 05/11/15	2,800 0600		
NOTES : <u>Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores)</u> . (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.							of water.	
Comments	or note wel	l diameter i	f not standa	ırd 2".					

Excellent recovery in all monitor wells sampled. No apparent sheen observed in any wells purged, light to murky brown in appearance. Purged well using 2 inch submersible electric pump, new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing. Collected samples from all wells except MW #1 for BTEX per US EPA Method 8021B.

on-site	9:30 AM	temp	57 F
off-site	2:30 PM	temp	72 F
sky cond.		Cloudy	
wind speed	10 - 15	direct.	E - SSE



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

March 13, 2015

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU #169E

OrderNo.: 1503484

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/11/2015 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: Blagg Engineering	Client Sample ID: MW #2							
Project: GCU #169E			Collection I	Date: 3/1	0/2015 12:25:00 PM			
Lab ID: 1503484-001	Matrix:	AQUEOUS	Received I	Date: 3/1	1/2015 8:10:00 AM			
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analyst	: NSB		
Benzene	ND	1.0	µg/L	1	3/12/2015 4:52:41 PM	R24802		
Toluene	ND	1.0	µg/L	1	3/12/2015 4:52:41 PM	R24802		
Ethylbenzene	ND	1.0	µg/L	1	3/12/2015 4:52:41 PM	R24802		
Xylenes, Total	ND	2.0	µg/L	1	3/12/2015 4:52:41 PM	R24802		
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	3/12/2015 4:52:41 PM	R24802		

Hall Environmental Analysis Laboratory, Inc.

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

Analyte detected in the associated Method Blank Holding times for preparation or analysis exceeded

Page 1 of 6

Not Detected at the Reporting Limit

Sample pH Not In Range Reporting Detection Limit

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RL
	S	Spike Recovery outside accepted recovery limits	

CLIENT: Blagg Engineering	Client Sample ID: MW #3						
Project: GCU #169E	Collection Date: 3/10/2015 2:20:00 PM						
Lab ID: 1503484-002	Matrix: AQUEOUS Received Date: 3/11/2015 8:10:00 A				1/2015 8:10:00 AM		
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	1.0	µg/L	1	3/12/2015 5:21:51 PM	R24802	
Toluene	ND	1.0	µg/L	1	3/12/2015 5:21:51 PM	R24802	
Ethylbenzene	ND	1.0	µg/L	1	3/12/2015 5:21:51 PM	R24802	
Xylenes, Total	ND	2.0	µg/L	1	3/12/2015 5:21:51 PM	R24802	
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	3/12/2015 5:21:51 PM	R24802	

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RL

- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
 - Not Detected at the Reporting Limit Page 2 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit

CLIENT: Blagg Engineering	Client Sample ID: MW #4							
Project: GCU #169E	Collection Date: 3/10/2015 1:25:00 PM							
Lab ID: 1503484-003	Matrix: AQUEOUS Received Date: 3/11/2015 8:10:00 A							
Analyses	Result	RL Qua	d Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analyst	NSB		
Benzene	ND	1.0	µg/L	1	3/12/2015 7:47:39 PM	R24802		
Toluene	ND	1.0	µg/L	1	3/12/2015 7:47:39 PM	R24802		
Ethylbenzene	ND	1.0	µg/L	1	3/12/2015 7:47:39 PM	R24802		
Xylenes, Total	ND	2.0	µg/L	1	3/12/2015 7:47:39 PM	R24802		
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	3/12/2015 7:47:39 PM	R24802		

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	D	DDD outside accorted recovery limits	DI

- 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

Page 3 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

CLIENT: Blagg Engineering	Client Sample ID: MW #5							
Project: GCU #169E	Collection Date: 3/10/2015 11:20:00 AM							
Lab ID: 1503484-004	Matrix: AQUEOUS Received Date: 3/11/2015 8:10:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analyst	: NSB		
Benzene	ND	1.0	μg/L	1	3/12/2015 8:16:49 PM	R24802		
Toluene	ND	1.0	µg/L	1	3/12/2015 8:16:49 PM	R24802		
Ethylbenzene	ND	1.0	µg/L	1	3/12/2015 8:16:49 PM	R24802		
Xylenes, Total	ND	2.0	µg/L	1	3/12/2015 8:16:49 PM	R24802		
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	3/12/2015 8:16:49 PM	R24802		

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RL
	S	Spike Recovery outside accepted recovery limits	

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
 - D Not Detected at the Reporting Limit Page 4 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W #6		
Project: GCU #169E	Collection Date: 3/10/2015 10:25:00 AM						
Lab ID: 1503484-005	Matrix: AQUEOUS Received Date: 3/11/2015 8:10:00 AM						
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	1.0	µg/L	1	3/12/2015 8:45:58 PM	R24802	
Toluene	ND	1.0	µg/L	1	3/12/2015 8:45:58 PM	R24802	
Ethylbenzene	ND	1.0	µg/L	1	3/12/2015 8:45:58 PM	R24802	
Xylenes, Total	2.2	2.0	µg/L	1	3/12/2015 8:45:58 PM	R24802	
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	3/12/2015 8:45:58 PM	R24802	

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р

- 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

Page 5 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

in the final state of the state					15-Mar-13					
5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
PBW	Batch	n ID: R2	4802	R	anNo: 2	4802				
	Analysis D	Date: 3/	12/2015	S	SeqNo: 7	30484	Units: µg/L			
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ND	1.0								
	ND	1.0								
	ND	1.0								
	ND	2.0								
ofluorobenzene	22		20.00		112	80	120			
100NG BTEX LCS	SampT	ype: LC	s	TestCode: EPA Method 8021B: Volatiles						
LCSW	Batch	n ID: R2	4802	R	RunNo: 2	4802				
	Analysis D	Date: 3/	12/2015	S	SeqNo: 7	30485	Units: µg/L			
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	22	1.0	20.00	0	109	80	120			
	21	1.0	20.00	0	107	80	120			
	21	1.0	20.00	0	105	80	120			
	63	2.0	60.00	0	105	80	120			
ofluorobenzene	24		20.00		120	80	120			S
	Blagg En GCU #16 5ML RB PBW	Blagg Engineering GCU #169E 5ML RB SampT PBW Batch Analysis D ND ND ND ND ND ND ND ND ND ND ND ND ND	Blagg Engineering GCU #169E 5ML RB SampType: ME PBW Batch ID: R2 Analysis Date: 3/ Result PQL ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 2.0 offuorobenzene 22 100NG BTEX LCS SampType: LC LCSW Batch ID: R2 Analysis Date: 3/ Result PQL 22 1.0 21 1.0 21 1.0 63 2.0	Blagg Engineering GCU #169E SML RB SampType: MBLK PBW Batch ID: R24802 Analysis Date: 3/12/2015 Result PQL SPK value ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 2.0 20.00 Difluorobenzene 22 20.00 100NG BTEX LCS SampType: LCS LCSW Batch ID: R24802 Analysis Date: 3/12/2015 Result PQL SPK value 22 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21 1.0 20.00 21	Blagg Engineering GCU #169E SampType: MBLK Test 5ML RB SampType: MBLK Test PBW Batch ID: R24802 R Analysis Date: 3/12/2015 S Result PQL SPK value SPK Ref Val ND 1.0 ND 1.0 ND 1.0 ND 2.0 offluorobenzene 22 20.00 20 100NG BTEX LCS SampType: LCS Test LCSW Batch ID: R24802 R Analysis Date: 3/12/2015 S Result PQL SPK value SPK Ref Val 22 1.0 20.00 0 21 1.0 20.00 0 22 1.0 20.00 0 21 1.0 20.00 0 21 1.0 20.00 0 21 1.0 20.00 0 21 1.0 20.00 0 <td>Blagg Engineering GCU #169E SampType: MBLK TestCode: El 5ML RB SampType: MBLK TestCode: El PBW Batch ID: R24802 RunNo: 2 Analysis Date: 3/12/2015 SeqNo: 7 Result PQL SPK value SPK Ref Val %REC ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 2.0 112 100NG BTEX LCS SampType: LCS TestCode: El LCSW Batch ID: R24802 RunNo: 2 Analysis Date: 3/12/2015 SeqNo: 7 Result PQL SPK value SPK Ref Val % REC 22 1.0 20.00 0 109 21 1.0 20.00 0 105</td> <td>Blagg Engineering GCU #169E SampType: MBLK TestCode: EPA Method 5ML RB SampType: MBLK TestCode: EPA Method PBW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Result PQL SPK value SPK Ref Val %REC LowLimit ND 1.0 ND 2.0 112 80 folloorobenzene 22 20.00 112 80 80 100NG BTEX LCS SampType: LCS TestCode: EPA Method LCSW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730485 Result PQL SPK value SPK Ref Val %REC LowLimit 22 1.0 20.00 0 109</td> <td>Blagg Engineering GCU #169E SampType: MBLK TestCode: EPA Method 8021B: Volat 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volat PBW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 2.0 112 80 120 offuorobenzene 22 20.00 112 80 120 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volat LCSW Batch ID: R24802 RunNo: 24802 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 22 1.0 20.00 0</td> <td>Blagg Engineering GCU #169E SML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Batch ID: R24802 RunNo: 24802 RunNo: 24802 PBW Batch ID: R24802 RunNo: 24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD ND 1.0 X X</td> <td>Blagg Engineering GCU #169E SML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit ND 1.0 ND 1.0 ND 1.0 ND 2.0 112 80 120 100 100 ND 1.0 ND 1.0 ND 2.0 112 80 120 100 100 ND 1.0 ND 1.0</td>	Blagg Engineering GCU #169E SampType: MBLK TestCode: El 5ML RB SampType: MBLK TestCode: El PBW Batch ID: R24802 RunNo: 2 Analysis Date: 3/12/2015 SeqNo: 7 Result PQL SPK value SPK Ref Val %REC ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 2.0 112 100NG BTEX LCS SampType: LCS TestCode: El LCSW Batch ID: R24802 RunNo: 2 Analysis Date: 3/12/2015 SeqNo: 7 Result PQL SPK value SPK Ref Val % REC 22 1.0 20.00 0 109 21 1.0 20.00 0 105	Blagg Engineering GCU #169E SampType: MBLK TestCode: EPA Method 5ML RB SampType: MBLK TestCode: EPA Method PBW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Result PQL SPK value SPK Ref Val %REC LowLimit ND 1.0 ND 2.0 112 80 folloorobenzene 22 20.00 112 80 80 100NG BTEX LCS SampType: LCS TestCode: EPA Method LCSW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730485 Result PQL SPK value SPK Ref Val %REC LowLimit 22 1.0 20.00 0 109	Blagg Engineering GCU #169E SampType: MBLK TestCode: EPA Method 8021B: Volat 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volat PBW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 2.0 112 80 120 offuorobenzene 22 20.00 112 80 120 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volat LCSW Batch ID: R24802 RunNo: 24802 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 22 1.0 20.00 0	Blagg Engineering GCU #169E SML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Batch ID: R24802 RunNo: 24802 RunNo: 24802 PBW Batch ID: R24802 RunNo: 24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD ND 1.0 X X	Blagg Engineering GCU #169E SML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Batch ID: R24802 RunNo: 24802 Analysis Date: 3/12/2015 SeqNo: 730484 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit ND 1.0 ND 1.0 ND 1.0 ND 2.0 112 80 120 100 100 ND 1.0 ND 1.0 ND 2.0 112 80 120 100 100 ND 1.0 ND 1.0

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - Р Sample pH Not In Range
 - RL Reporting Detection Limit

1503484 13-Mar-15

WO#:

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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	: 1503484		RcptNo: 1
Received by/date:	03/11/15			
Logged By: Ashley Gallegos	3/11/2015 8:10:00 AM	<u>-</u> -	AR	
Completed By: Ashley Gallegos				
	3/11/2015 3:40:40 PM		Stof	
Reviewed By:	03 12 15		· · ·	
<u>Chain of Custody</u>				
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		
<u>Log In</u>				
4. Was an attempt made to cool the samp	les?	Yes 🗹	No 🗌	
5. Were all samples received at a tempera	ture 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 te	est(s)?	Yes 🗹	No 🗌	
8. Are samples (except VOA and ONG) pro	perly 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 b	roken?	Yes 🗌	No 🗹	# of preserved
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody))	Yes 🗹	No 🗆	bottles checked for pH: (<2 or >12 unless noted)
13 Are matrices correctly identified on Chair		Yes 🗹	No 🗆	Adjusted?
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 🗌	Checked by:
Special Handling (if applicable)				
16. Was client notified of all discrepancies w	ith this order?	Yes	No 🗔	

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	2.1	Good	Yes			

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

May 22, 2014

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 169E

OrderNo.: 1405841

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/20/2014 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1405841

Date Reported: 5/22/2014

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 2	
Project: GCU # 169E			Collection I	Date: 5 /1	16/2014 11:40:00 AM	
Lab ID: 1405841-001	Matrix:	AQUEOUS	Received I	Date: 5/2	20/2014 10:06:00 AM	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	µg/L	1	5/20/2014 6:15:09 PM	R18747
Toluene	ND	1.0	µg/L	1	5/20/2014 6:15:09 PM	R18747
Ethylbenzene	ND	1.0	µg/L	1	5/20/2014 6:15:09 PM	R18747
Xylenes, Total	ND	2.0	µg/L	1	5/20/2014 6:15:09 PM	R18747
		=	P9/⊏	•	0/20/2011 0110100 1111	1110747

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RL

- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
 - Not Detected at the Reporting Limit Page 1 of 6
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.	
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Date Reported: 5/22/2014

CLIENT: Blagg Engineering			Client Sampl	e ID: MW # 3	
Project: GCU # 169E			Collection I	Date: 5/16/2014 1:05:00 PM	
Lab ID: 1405841-002	Matrix:	AQUEOUS	Received I	Date: 5/20/2014 10:06:00 AM	
Analyses	Result	RL Qu	al Units	DF Date Analyzed B	atch
EPA METHOD 8021B: VOLATILES				Analyst: N	ISB
Benzene	ND	1.0	µg/L	1 5/20/2014 6:45:29 PM R	R18747
Toluene	ND	1.0	µg/L	1 5/20/2014 6:45:29 PM R	R18747
Ethylbenzene	ND	1.0	µg/L	1 5/20/2014 6:45:29 PM R	R18747
Xylenes, Total	ND	2.0	µg/L	1 5/20/2014 6:45:29 PM R	R18747
Surr: 4-Bromofluorobenzene	104	82.9-139	%REC	1 5/20/2014 6:45:29 PM R	R18747

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte o
	Е	Value above quantitation range	Н	Holding
	J	Analyte detected below quantitation limits	ND	Not Dete

- O RSD is greater than RSDlimit
- 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

Page 2 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental A	Analysis Laboratory.	Inc.
	maryono Laboratory,	IIIC.

Date Reported: 5/22/2014

CLIENT: Blagg Engineering Project: GCU # 169E			00110011011	Date: 5 /1	6/2014 12:25:00 PM	
Lab ID: 1405841-003	Matrix:	AQUEOUS	Received 1	Date: 5/2	20/2014 10:06:00 AM	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	5/20/2014 7:15:41 PM	R18747
Toluene	ND	1.0	µg/L	1	5/20/2014 7:15:41 PM	R18747
Ethylbenzene	ND	1.0	µg/L	1	5/20/2014 7:15:41 PM	R18747
Xylenes, Total	ND	2.0	µg/L	1	5/20/2014 7:15:41 PM	R18747
Surr: 4-Bromofluorobenzene	93.0	82.9-139	%REC	1	5/20/2014 7:15:41 PM	R18747

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Ana
	Е	Value above quantitation range	Н	Hol
	J	Analyte detected below quantitation limits	ND	Not
	~			~

- O RSD is greater than RSDlimit
- 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

Page 3 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/22/2014

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 5	
Project: GCU # 169E			Collection I	Date: 5 /1	6/2014 10:55:00 AM	
Lab ID: 1405841-004	Matrix:	AQUEOUS	Received I	Date: 5 /2	20/2014 10:06:00 AM	
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	µg/L	1	5/20/2014 7:45:54 PM	R18747
Toluene	ND	1.0	µg/L	1	5/20/2014 7:45:54 PM	R18747
Ethylbenzene	ND	1.0	µg/L	1	5/20/2014 7:45:54 PM	R18747
Xylenes, Total	ND	2.0	µg/L	1	5/20/2014 7:45:54 PM	R18747
Surr: 4-Bromofluorobenzene						

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the a
	Е	Value above quantitation range	Н	Holding times for prepar

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- associated Method Blank
- aration or analysis exceeded
- ND Not Detected at the Reporting Limit Page 4 of 6
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.
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Date Reported: 5/22/2014

Page 5 of 6

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 6	
Project: GCU # 169E			Collection I	Date: 5 /1	6/2014 10:15:00 AM	
Lab ID: 1405841-005	Matrix:	AQUEOUS	Received l	Date: 5/2	20/2014 10:06:00 AM	
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	5/20/2014 8:16:03 PM	R18747
Toluene	ND	1.0	µg/L	1	5/20/2014 8:16:03 PM	R18747
l oluene Ethylbenzene	ND ND	1.0 1.0	μg/L μg/L	1 1	5/20/2014 8:16:03 PM 5/20/2014 8:16:03 PM	R18747 R18747
				1 1 1		

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 5
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 age 5
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	

Spike Recovery outside accepted recovery limits

S

Hall Environme	ntal Anal	ysis I	aborat	ory, Inc.						22-May-14
	g Engineering # 169E									
Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch	h ID: R1	8747	F	RunNo: 1	8747				
Prep Date:	Analysis D	Date: 5/	20/2014	S	SeqNo: 5	41435	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		93.6	82.9	139			
Sample ID 100NG BTEX	LCS SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	h ID: R1	8747	F	RunNo: 1	8747				
Prep Date:	Analysis D	Date: 5/	20/2014	S	SeqNo: 5	41437	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	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Ethylbenzene	20	1.0	20.00	0	99.1	80	120			
Xylenes, Total	61	2.0	60.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		97.7	82.9	139			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- RSD is greater than RSDlimit 0
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - Р Sample pH greater than 2.
 - RL Reporting Detection Limit

Page 6 of 6

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 Numbe	er: 1405841		RcptNo: 1	
Received by/dat	te: AC	05/20/14				•
Logged By:	Celina Sessa	5/20/2014 10:06:00 A	M	Celin S. Celin S.	vac-	
Completed By:	Celina Sessa	5/20/2014 11:01:38 A	M	alim S	ven	
Reviewed By:	N	ostidiu		-		
Chain of Cus	stody					
	als intact on sample bo	ottles?	Yes	No 🗌	Not Present 🗹	
	Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
<u>Log In</u>						
4. Was an atte	empt made to cool the	samples?	Yes 🗹	No 🗌	NA 🗆	
5. Were all sa	mples received at a te	mperature of >0° C to 6.0°C	Yes 🗹	No 🗌		
6. Sample(s)	in proper container(s)?		Yes 🗹	No		
7. Sufficient s	ample volume for indic	ated test(s)?	Yes 🗹	No 🗌		
8. Are sample	s (except VOA and ON	IG) properly preserved?	Yes 🗹	No 🗌		
9. Was preser	rvative added to bottles	\$?	Yes	No 🗹	NA 🗌	
10.VOA vials h	nave zero headspace?		Yes 🗹	No 🗌	No VOA Vials	
11. Were any s	sample containers rece	eived broken?	Yes	No 🗹 🏾	# of preserved	
	rwork match bottle lab epancies on chain of c		Yes 🗹	No 🗀	bottles checked for pH:	>12 unless noted)
•	eparticles on chain of c		Yes 🗹	No 🗌	Adjusted?	
	hat analyses were req		Yes 🗹	No 🗌		
15. Were all ho	olding times able to be y customer for authoriz	met?	Yes 🗹	No 🗌 🛛	Checked by:	
<u>Special Han</u>	dling (if applicab	(e)				
16. Was client	notified of all discrepa	ncies with this order?	Yes	No 🗌	NA 🗹	
Perso	on Notified:	Date				
By W	/hom:	Via:	eMail 🗌 I	Phone 🗌 Fax	In Person	
Rega	arding:			· · · · · · · · · · · · · · · · · · ·		
Clien	t Instructions:	and a second				
17. Additional	remarks:					

18. Cooler Information

· =		I CALICIT					• • • · · · · · · · · · · · ·
	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
	1	1.8	Good	Yes			

Market Address Description Description Market Address F. A. B. ANKERICA Standard Market Address Market Address Market Address F. O. BOXF Address F. A. BOWFELDI, MM 87433 Propert Name Wave Mailton Informentation Market Address F. O. BOXF CUT # LGS Standard Market Market Market Market Market Address F. O. BOXF CUT # LGS Standard Propert Managet Market Market Market Market Market Address F. O. BOXF ECO Market Market Market Market Market Market Market Market Market Address F. O. BOX Encode Address Foreit Managet Market Market Market Market Market Address Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market Market				T					3	ļ					
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Sr: P.O. BOX 87 GCU # 165E BLOOWRELD, NM 87413 Project #: ADD 1 Paveins A. 107 BLOOWRELD, NM 87413 Project #: ADD 1 Paveins A. 107 BLOOWRELD, NM 87413 Project Manager: ADD 1 Paveins A. 100 GS05 633-1199 Sampler: Project Manager: Isoconservice Million Sampler: ADD 1 Drainer NELSON VELEZ GS05 633-1199 Sampler: NELSON VELEZ Annus Sampler: NELSON VELEZ ADD Torialine: NELSON VELEZ Non-1001 ADD Torialine: NELSON VELEZ Non-1001 ADD Torialine: NELSON VELEZ Non-1001 ADD Torialine: Network Sampler: ADD Torialine: Network Network ADD Torialine: Network Non-1001 ADD Torialine: Non-1001 Non-1001 ADD Torialine: Non-1001 Non-1001 ADD Torialine: Non-1001 </td <td></td> <td></td> <td></td> <td>Project Name</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>7</u>7.</td> <td>Š</td> <td>N N N</td> <td></td> <td>XO</td>				Project Name							<u>7</u> 7.	Š	N N N		XO
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Dute Matrix Sample Request ID Container Preservative 7 Matrix Sample Request ID Type and # Type and # 7 Matrix Sample Request ID Type and # Type 0.0 WATER Mw#2 40 miVoA-2 HCl & Color 0.0 WATER Mw#3 40 miVOA-2 HCl & Color 0.0 WATER Mw#4 40 miVOA-2 HCl & Color 0.0 WATER Mw#4 40 miVOA-2 HCl & Color 0.0 WATER Mw#5 40 miVOA-2 HCl & Color 0.0 WATER Mw#5 40 miVOA-2 HCl & Color 1.1 Mw#6 40 miVOA-2 HCl & Color 100 Gr & Gr & SI 1.2 WATER Mw#6 40 miVOA-2 HCl & Color 100 Gr & Gr & SI 1.3 WATER Mw#6 40 miVOA-2	ation: AP	Diher D			NELSON V				(T'1	SWISO			N		əlamı
Time Matrix Sample Request ID Container Preservative Type HER.No 1140 WATER NW#2 40 mi VOA-2 HCI & Coli V N 1255 WATER NW#2 40 mi VOA-2 HCI & Coli V N N 1255 WATER NW#2 40 mi VOA-2 HCI & Coli O N N N 1255 WATER NW#3 40 mi VOA-2 HCI & Coli -002 V N N N 1255 WATER NW#3 40 mi VOA-2 HCI & Coli -002 V N N N 1255 WATER NW#5 40 mi VOA-2 HCI & Coli -002 V N N N 1205 WATER NW#5 40 mi VOA-2 HCI & Coli -002 V N N 1205 WATER NW#5 40 mi VOA-2 HCI & Coli -002 V N N 1005 WATER NW#5 40 mi VOA-2 HCI & Coli -002 V N N 1005 WATER NW#5 40 mi VOA-2 HCI & Coli -002 V N N 1005 WATER NW#5 40 mi	(Type)			Tem	<u>wy res</u> erature:	<u>U No</u>			705				trite		
1 140 WATER MW#2 40 ml VOA-2 HCl & Cool -001 V -1 -1 V 1 305 WATER MW#3 40 ml VOA-2 HCl & Cool -001 V -1 -1 V 1 305 WATER MW#3 40 ml VOA-2 HCl & Cool -002 V -1 -1 V 1 305 WATER MW#3 40 ml VOA-2 HCl & Cool -002 V -1 -1 V 1 305 WATER MW#5 40 ml VOA-2 HCl & Cool -005 V -1 -1 V 1 3015 WATER MW#6 40 ml VOA-2 HCl & Cool -005 V -1 -1 V 1 3015 WATER MW#6 40 ml VOA-2 HCl & Cool -005 V -1 V -1 V 1 3015 WATER MW#6 40 ml VOA-2 HCl & Cool -005 V V V V V V	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	<u> 1000 2007 2000</u>			DB (Method				itrate N / N		
I 305 WATER NW#3 40 ml VOA-2 HCl8 Cool -002 V N N I 1255 WATER MW#4 40 ml VOA-2 HCl8 Cool -003 V N		WATER	MW # 2		HCI & Cool	100-	+		Э				N		_
125 WATER NW#4 40m VOA-2 HCl & Cool -003 V N N 1 1015 WATER MW#5 40 m VOA-2 HCl & Cool -003 V N		WATER	MW # 3		HCI & Cool	- 062	>	<u> </u>			+		╀		
1055 WATER NW # 5 40 mi VOA - 2 HCl & Cool -0.04 V N N 1 1015 WATER MW # 6 40 mi VOA - 2 HCl & Cool -0.05 V N <		WATER	MW # 4		HCI & Cool	-003	>			-			+		
JOIS WATER MW # 6 40 ml VOA - 2 HCI & Cool -0.05 V I Image: Time: Multiple: Multiple: Multiple: Multiple: Multiple: Multiple: Image: Time: Relinquished by: Date Date Time Remarks: Image: Relinquished by: Referended by: Date Time Remarks: Image: Relinquished by: Remarks: Date Time Image: Relinquished by: Relinquished by: Date Time Image: Relinquished by: Relinquished by: Date Sale Image: Relinquished by: Relinquished by: Date Time Image: Relinquished by: Relinquished by: Date Sale Image: Time: Relinquished by: Date Sale	-	WATER	MW # 5	40 ml VOA - 2	HCI & Cool	troo-	>								5
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

March 12, 2014

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 169E

OrderNo.: 1403157

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/5/2014 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 3/12/2014

CLIENT: Blagg Engineering			Client Sampl			
Project: GCU # 169E			Collection I	Date: 3/4	4/2014 11:40:00 AM	
Lab ID: 1403157-001	Matrix:	AQUEOUS	Received I	Date: 3/5	5/2014 10:20:00 AM	
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: JMP
Benzene	ND	1.0	µg/L	1	3/10/2014 5:05:33 PM	R17212
Toluene	ND	1.0	µg/L	1	3/10/2014 5:05:33 PM	R17212
Ethylbenzene	ND	1.0	µg/L	1	3/10/2014 5:05:33 PM	R17212
Xylenes, Total	ND	2.0	µg/L	1	3/10/2014 5:05:33 PM	R17212
Surr: 4-Bromofluorobenzene	109	82.9-139	%REC	1	3/10/2014 5:05:33 PM	R17212

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte dete
	Е	Value above quantitation range	Н	Holding time
	J	Analyte detected below quantitation limits	ND	Not Detected

- O RSD is greater than RSDlimit
- 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

Page 1 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.	
Hun Divitoniun Analysis Dubbi ator y, me	

Date Reported: 3/12/2014

CLIENT: Blagg Engineering			Client Sample	e ID: MV	W # 3	
Project: GCU # 169E			Collection I	Date: 3/4	/2014 1:35:00 PM	
Lab ID: 1403157-002	Matrix:	AQUEOUS	Received I	Date: 3/5	/2014 10:20:00 AM	
Analyses	Result	RL Qua	d Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: JMP
Benzene	ND	1.0	µg/L	1	3/10/2014 5:35:51 PM	R17212
Toluene	ND	1.0	µg/L	1	3/10/2014 5:35:51 PM	R17212
Ethylbenzene	ND	1.0	µg/L	1	3/10/2014 5:35:51 PM	R17212
Xylenes, Total	ND	2.0	µg/L	1	3/10/2014 5:35:51 PM	R17212
Surr: 4-Bromofluorobenzene	103	82.9-139	%REC	1	3/10/2014 5:35:51 PM	R17212

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р

- 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

Page 2 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.	
Han Divitonital Milarysis Daboratory, me.	

Date Reported: 3/12/2014

CLIENT: Blagg EngineeringProject: GCU # 169ELab ID: 1403157-003	Client Sample ID: MW # 4 Collection Date: 3/4/2014 12:35:00 PM Matrix: AQUEOUS Received Date: 3/5/2014 10:20:00 AM					
Analyses	Result		al Units		Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	JMP
Benzene	ND	1.0	µg/L	1	3/10/2014 6:05:56 PM	R17212
Toluene	ND	1.0	µg/L	1	3/10/2014 6:05:56 PM	R17212
Ethylbenzene	ND	1.0	µg/L	1	3/10/2014 6:05:56 PM	R17212
Xylenes, Total	ND	2.0	µg/L	1	3/10/2014 6:05:56 PM	R17212
Surr: 4-Bromofluorobenzene	103	82.9-139	%REC	1	3/10/2014 6:05:56 PM	R17212

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in th
	Б		11	II-14' - the former

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- 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

Page 3 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Ind	С.

Date Reported: 3/12/2014

CLIENT: Blagg Engineering	Client Sample ID: MW # 5						
Project: GCU # 169E	Collection Date: 3/4/2014 10:40:00 AM						
Lab ID: 1403157-004	Matrix:	AQUEOUS	Received I	Date: 3/5	5/2014 10:20:00 AM		
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch	
EPA METHOD 8021B: VOLATILES					Analyst	: JMP	
Benzene	ND	1.0	µg/L	1	3/10/2014 6:36:07 PM	R17212	
Toluene	ND	1.0	µg/L	1	3/10/2014 6:36:07 PM	R17212	
Ethylbenzene	ND	1.0	µg/L	1	3/10/2014 6:36:07 PM	R17212	
Xylenes, Total	ND	2.0	µg/L	1	3/10/2014 6:36:07 PM	R17212	
Surr: 4-Bromofluorobenzene	102	82.9-139	%REC	1	3/10/2014 6:36:07 PM	R17212	

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Me

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 4 of 6
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Analytical Report Lab Order 1403157 Б n

Hall Environmental Analysis Laborato	ry, Inc. Date Reported: 3/12/2014
CLIENT: Blagg Engineering	Client Sample ID: MW # 6
Project: GCU # 169E	Collection Date: 3/4/2014 9:35:00 AM

Collection Date: 3/4/2014 9:35:00 AM Presived Date: 3/5/2014 10:20:00 AM

Lab ID: 1403157-005	Matrix:	AQUEOUS	Received l	Received Date: 3/5/2014 10:20:00 AM			
Analyses	Result	RL Qua	al Units	DF Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES				Analys	t: JMP		
Benzene	ND	1.0	µg/L	1 3/10/2014 9:06:54 PM	R17212		
Toluene	ND	1.0	µg/L	1 3/10/2014 9:06:54 PM	R17212		
Ethylbenzene	ND	1.0	µg/L	1 3/10/2014 9:06:54 PM	R17212		
Xylenes, Total	ND	2.0	µg/L	1 3/10/2014 9:06:54 PM	R17212		
Surr: 4-Bromofluorobenzene	104	82.9-139	%REC	1 3/10/2014 9:06:54 PM	R17212		

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associ
	_			

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- ciated Method Blank

Page 5 of 6

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmen	tal Anal	ysis I	Laborat	ory, Inc.						1405157 12-Mar-14
Client:Blagg HProject:GCU #	Engineering 169E									
Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBW	Batcl	h ID: R1	7212	F	RunNo: 1	7212				
Prep Date:	Analysis D	Date: 3/	10/2014	5	SeqNo: 4	95257	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	21		20.00		105	82.9	139			
Sample ID 100NG BTEX LO	CS SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSW	Batcl	h ID: R1	7212	F	RunNo: 1	7212				
Prep Date:	Analysis D	Date: 3/	10/2014	S	SeqNo: 4	95258	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.3	80	120			
Toluene	19	1.0	20.00	0	97.4	80	120			
Ethylbenzene	20	1.0	20.00	0	98.4	80	120			
Xylenes, Total	59	2.0	60.00	0	98.3	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		89.2	82.9	139			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - Р Sample pH greater than 2.
 - RL Reporting Detection Limit

Page 6 of 6

1403157

WO#:

	ENVIRONMENTAL
	ANALYSIS
	LABORATORY

4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG	Nork Order Number:	1403157		RcptNo:	1
Received by/date:	95/4				
Logged By: Lindsay Mangin 3/5	6/2014 10:20:00 AM		Andy Alland		
Completed By: Lindsay Mangin 3/5	/2014 2:12:07 PM		- Annelis Hologo		
Reviewed By:	03/05/14	4			
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?		<u>Courier</u>			
<u>Log in</u>					
4. Was an attempt made to cool the samples?		Yes 🗹	No 🗆		
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes 🗹	No 🗌		
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 p	reserved?	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 🗹	# of preserved	
		_	_	bottles checked	
12. Does paperwork match bottle labels?		Yes 🗹	No 🗌	for pH:	r >12 unless noted)
(Note discrepancies on chain of custody) 13. Are matrices correctly identified on Chain of Customer Custo	stody?	Yes 🗹	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?	stody	Yes 🗹		_	
15. Were all holding times able to be met?		Yes 🗹	No 🗌	Checked by:	
(If no, notify customer for authorization.)			l		
Special Handling (if applicable)					
16. Was client notified of all discrepancies with this	order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:				
By Whom:	'_	eMail 🗌	Phone 🗌 Fax	In Person	
Regarding:			·		
Client Instructions:					
17. Additional remarks:					
18. <u>Cooler Information</u>	1 1		1		

	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
ļ	1	1.0	Good	Yes			



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

December 23, 2013

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX: (505) 632-3903

RE: GCU #169E

OrderNo.: 1312978

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/18/2013 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 12/23/2013

CLIENT: Blagg Engineering	Client Sample ID: MW #2						
Project: GCU #169E			Collection 2	Date: 12/16/2013 2:20:00 PM			
Lab ID: 1312978-001	Matrix: AQUEOUS Received			Date: 12/18/2013 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 12/21/2013 5:38:58 AM R15650			
Toluene	ND	1.0	µg/L	1 12/21/2013 5:38:58 AM R15650			
Ethylbenzene	ND	1.0	µg/L	1 12/21/2013 5:38:58 AM R15650			
Xylenes, Total	ND	2.0	µg/L	1 12/21/2013 5:38:58 AM R15650			
Surr: 4-Bromofluorobenzene	94.9	85-136	%REC	1 12/21/2013 5:38:58 AM R15650			

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	F	Value above quantitation range

- Value above quantitation range E
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Page 1 of 6 Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Ana	lvsis Laboratory, Inc.
	iysis Laboratory, inc.

Date Reported: 12/23/2013

CLIENT: Blagg Engineering	Client Sample ID: MW #3							
Project: GCU #169E		Collection Date: 12/16/2013 4:15:00 PM						
Lab ID: 1312978-002	Matrix: AQUEOUS Received			Date: 12/18/2013 10:00:00 AM				
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analy	vst: NSB		
Benzene	ND	1.0	µg/L	1	12/21/2013 1:56:42 F	PM R15667		
Toluene	ND	1.0	µg/L	1	12/21/2013 1:56:42 F	PM R15667		
Ethylbenzene	ND	1.0	µg/L	1	12/21/2013 1:56:42 F	PM R15667		
Xylenes, Total	ND	2.0	µg/L	1	12/21/2013 1:56:42	PM R15667		
Surr: 4-Bromofluorobenzene	98.2	85-136	%REC	1	12/21/2013 1:56:42	PM R15667		

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	F	Value above quantitation range

- Value above quantitation range Е
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Page 2 of 6 Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analy	vsis Laboratory, Inc.
Han Environnental Anal	ysis Laboratory, 111C.

Date Reported: 12/23/2013

CLIENT: Blagg Engineering	Client Sample ID: MW #4						
Project: GCU #169E			Collection 1	Date: 12/16/2013 3:15:00 PM			
Lab ID: 1312978-003	Matrix: AQUEOUS Received			Date: 12/18/2013 10:00:00 AM			
Analyses	Result	RL Qua	d Units	DF Date Analyzed Batch			
EPA METHOD 8021B: VOLATILES				Analyst: NSB			
Benzene	ND	1.0	µg/L	1 12/21/2013 2:26:44 PM R15667			
Toluene	ND	1.0	µg/L	1 12/21/2013 2:26:44 PM R15667			
Ethylbenzene	ND	1.0	µg/L	1 12/21/2013 2:26:44 PM R15667			
Xylenes, Total	ND	2.0	µg/L	1 12/21/2013 2:26:44 PM R15667			
Surr: 4-Bromofluorobenzene	89.8	85-136	%REC	1 12/21/2013 2:26:44 PM R15667			

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Б	Value alterna annutitation annua

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Page 3 of 6 Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Labo	oratory. Inc.
Han Environnental Analysis Labo	<i><i>natory</i>, <i>mc</i>.</i>

Date Reported: 12/23/2013

CLIENT: Blagg Engineering		•	Client Sampl	e ID: MW #5	
Project: GCU #169E			Collection 1	Date: 12/16/2013 1:20:00 PM	
Lab ID: 1312978-004	Matrix: A	QUEOUS	Received	Date: 12/18/2013 10:00:00 AM	
Analyses	Result	RL Qual	l Units	DF Date Analyzed Ba	atch
EPA METHOD 8021B: VOLATILES				Analyst: N	SB
Benzene	ND	1.0	µg/L	1 12/21/2013 2:57:03 PM R	15667
Toluene	ND	1.0	µg/L	1 12/21/2013 2:57:03 PM R	15667
Ethylbenzene	ND	1.0	µg/L	1 12/21/2013 2:57:03 PM R	15667
Xylenes, Total	ND	2.0	µg/L	1 12/21/2013 2:57:03 PM R	15667
Surr: 4-Bromofluorobenzene	83.4	85-136 S	%REC	1 12/21/2013 2:57:03 PM R ⁻	15667

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	F	Value above quantitation range

- Value above quantitation range Е
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Page 4 of 6 Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Date Reported: 12/23/2013

CLIENT: Blagg Engineering			Client Samp	le ID: MW #6	
Project: GCU #169E			Collection 1	Date: 12/16/2013 12:25:00 PM	
Lab ID: 1312978-005	Matrix: A	AQUEOUS	Received	Date: 12/18/2013 10:00:00 AM	
Analyses	Result	RL Qua	l Units	DF Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	1.0	µg/L	1 12/21/2013 3:27:29 PM	R15667
Toluene	ND	1.0	µg/L	1 12/21/2013 3:27:29 PM	R15667
Ethylbenzene	ND	1.0	µg/L	1 12/21/2013 3:27:29 PM	R15667
Xylenes, Total	ND	2.0	µg/L	1 12/21/2013 3:27:29 PM	R15667
Surr: 4-Bromofluorobenzene	82.7	85-136 S	%REC	1 12/21/2013 3:27:29 PM	R15667

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	F	Value above quantitation range

- Value above quantitation range Е
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Page 5 of 6 Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Enviro	nmental Ana	lysis I	Laborat	ory, Inc.					W O#.	131291 23-Dec-1
Client: Project:	Blagg Engineering GCU #169E	;								
Sample ID: B25	Samp	Type: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBW	Bate	ch ID: R1	5650	F	RunNo: 1	5650				
Prep Date:	Analysis	Date: 12	2/20/2013	5	SeqNo: 4	51492	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Senzene	ND	1.0								
oluene	ND	1.0								
thylbenzene	ND	1.0								
ylenes, Total	ND	2.0								
Surr: 4-Bromofluorob	enzene 18		20.00		89.6	85	136			
Sample ID: 100NG	BTEX LCS Samp	Type: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSW	Bate	ch ID: R1	5650	F	RunNo: 1 :	5650				
Prep Date:	Analysis	Date: 12	2/20/2013	Ş	SeqNo: 4	51493	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene	22	1.0	20.00	0	108	80	120			
oluene	21	1.0	20.00	0	107	80	120			
thylbenzene	22	1.0	20.00	0	108	80	120			
ylenes, Total	66	2.0	60.00	0	110	80	120			
Surr: 4-Bromofluorob	enzene 19		20.00		92.6	85	136			
Sample ID: 5ML R	B Samp	Type: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBW	Bate	ch ID: R1	5667	F	RunNo: 1	5667				
Prep Date:	Analysis	Date: 12	2/21/2013	Ş	SeqNo: 4	51694	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene	ND	1.0								
oluene	ND	1.0								
thylbenzene	ND	1.0								
ylenes, Total	ND	2.0								
Surr: 4-Bromofluorob	enzene 20		20.00		100	85	136			
Sample ID: 100NG	BTEX LCS Samp	Type: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSW	Bate	ch ID: R1	5667	F	RunNo: 1	5667				
Prep Date:	Analysis	Date: 12	2/21/2013	S	SeqNo: 4	51695	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene	22	1.0	20.00	0	109	80	120			
oluene	22	1.0	20.00	0	109	80	120			
thylbenzene	21	1.0	20.00	0	106	80	120			
ylenes, Total	65	2.0	60.00	0	109	80	120			
	enzene 21		20.00		103	85	136			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- 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
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 6 of 6



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 Numbe	er: 1312978		RcptNo: 1	
Received by/dat	ie:MG-	12/18/13	······]
Logged By:	Anne Thorne	12/18/2013 10:00:00	AM	anne Arm	~	
Completed By:	Anne Thorne	12/20/2013		anne Am	-	
Reviewed By:	MA	12/20/13			-	
Chain of Cus	tody]
	als intact on sample bottle	es?	Yes	No 🗌	Not Present	
2. Is Chain of (Custody complete?		Yes 🖌	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
<u>Log In</u>						
4. Was an atte	empt made to cool the sa	mples?	Yes ⊻	No 🗌		
5. Were all sar	mples received at a temp	erature of >0° C to 6.0°C	Yes 🗹	No 🗌		
6. Sample(s) i	n proper container(s)?		Yes 🗹	No 🗌		
7. Sufficient sa	ample volume for indicate	d test(s)?	Yes 🗹	No 🗌		
8. Are samples	s (except VOA and ONG)	properly preserved?	Yes 🗸	No 🗌		
9. Was preser	vative added to bottles?		Yes 🗌	No 🗹	NA 🖾	
10.VOA vials h	ave zero headspace?		Yes 🗹	No 🗌	No VOA Vials	
11. Were any s	ample containers receive	d broken?	Yes 🗌	No 🗹 🏾	# of preserved	- -
	work match bottle labels? epancies on chain of cust		Yes 🗹	No 🗆	bottles checked for pH: (<2 or >12 unle	
	s correctly identified on C	•	Yes 🔽	No 🗆	Adjusted?	<u> </u>
14. Is it clear w	hat analyses were reques	ted?	Yes 🗹	No 🗆		
	lding times able to be me customer for authorization		Yes 🗹	No 🗌	Checked by:	
<u>Special Hanc</u>	lling (if applicable)					
16. Was client r	notified of all discrepancie	es with this order?	Yes 🗌	No 🗌	NA 🗹	

Person Notified:	Date
By Whom:	Via: 🗌 eMail 🗌 Phone 🗌 Fax 🗌 In Person
Regarding:	
Client Instructions:	

17. Additional remarks:

18. <u>Cooler Information</u>

-	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
	1	10.00	Good	Yes			

BLAGG ENGR. / BP AMERICA Istandard Rush Project Name. Project Na	1				- T					2								
Ing Address: P.O. BOX 87 Project Name: GCU # 169E 4901 Haw Info Faxif: BLOOWFIELD, NM 87413 Project Manager: CCU # 169E 4901 Haw Info Faxif: BLOOWFIELD, NM 87413 Project Manager: CCU # 169E 4901 Haw Standard BLOOWFIELD, NM 87413 Project Manager: Project Manager: 100 Faxif: 100 Faxi		LAGG EN	NGR.	/ BP AMERICA	Standard	□ Rush								9:			Į	
Ing Address P.O. BOX 87 GU # 168 400. Harden Montentation In Fait: BLOOMFIELD, NM 87113 Project 4: Automatine Ministrice Ministreverstreadula Ministreverse Ministreverset Ministrin Ministrice					Project Name					Ċ		n F	Ŋ	ζ.	Š		N N	≻
Indext BLOOMFIELD, MM 87413 Project H: Lie Scool 652-1139 Project H: Lie Scool 652-1139 Project H: Lie Scool 652-1139 Lie S	iling Addre:		D. BOX	87	- - -	GCU # 1(69E				WW,DW	allenvi	onme	ental.	com			
metric (362) 632.1139 metric Manager: Ma		BLO(DOMFI	IELD, NM 87413	Project #:			r ·	ידטבי עדורבי				nerqu	Je, N	N 20	601		
Click Franker Project Manager. Click Franker Level 4 (Ful Validation) Click Franker Different Click Franker Different Fill Mattix Sample Franker Different Sample Franker Different Project Manager Different Different Different Project Manager	one #:	(505)	15) 632	-1199	T				G. 19	0-242	-765- -	Fa.	-cuc >	345	4107			
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DO (Type) Simple feature: Container Preservative H.A. H.O. aff Time Matrix Sample Request ID Container Preservative H.A. H.O. aff.1 131 1315 WATER MW# 2 a0 mIVOA.2 HIC & H.O. HIC & H.O. aff.3 1315 WATER MW# 2 a0 mIVOA.2 HIC & Container Preservative H.A. H.O. aff.3 1315 WATER MW# 2 a0 mIVOA.2 HIC & Container Preservative aff.3 1315 WATER MW# 2 a0 mIVOA.2 HIC & Container Preservative aff.3 1315 WATER MW# 2 a0 mIVOA.2 HIC & Container Preservative aff.3 1325 WATER MW# 5 a0 mIVOA.2 HIC & Container Preservative aff.3 1325 WATER MW# 5 a0 mIVOA.2 HIC & Container Preservative aff.3 1325 WATER MW# 5 a0 mIVOA.2 HIC & Container Preservative aff.3 1325 WATER MW# 5 a0 mIVOA.2 HIC & Container Preservative aff.3 1325 WATER MW# 5 a0 mIVOA.2 HIC & Container V V <tr< td=""><td>reditation: VELAP</td><td>Ð</td><td>Other</td><td></td><td>Sampler:</td><td>NELSON V</td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td>ered)</td><td>N €</td><td></td><td>əlqme</td><td></td></tr<>	reditation: VELAP	Ð	Other		Sampler:	NELSON V		_						ered)	N €		əlqme	
Intermediation Time Matrix Sample Request ID Container Preservative HEAR NS 5/13 1420 WATER MW#2 40 m/VOA-2 HC & Cool Col V Preservative 5/13 1451 WATER MW#2 40 m/VOA-2 HC & Cool Col V Preservative 5/13 1451 WATER MW#2 40 m/VOA-2 HC & Cool Col V Preservative 5/13 1320 WATER MW#3 40 m/VOA-2 HC & Cool Col V Preservative 5/13 1320 WATER MW#4 40 m/VOA-2 HC & Cool Col V Preservative 5/13 1320 WATER MW#4 40 m/VOA-2 HC & Cool Col V V 5/13 1320 WATER MW#4 40 m/VOA-2 HC & Cool Col V V 6/13 1225 WATER MW#6 40 m/VOA-2 HC & Cool Col V V V 6/13 1225 WATER MW#6 40 m/VOA-2 HC & Cool Col V V V V 6/13 1225 WATER MW#6 40 m/VOA-2 HC & Cool <td>EDD (Type)</td> <td></td> <td></td> <td></td> <td>Temn</td> <td>erature: /</td> <td><u></u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4IJ)</td> <td>trite</td> <td></td> <td>s ə1</td> <td></td>	EDD (Type)				Temn	erature: /	<u></u>							4IJ)	trite		s ə1	
6/13 1420 WATER MW#2 40 mVOA-2 HCl & Cool $-COl$ V $-E$ $-E$ $-C$ $-V$ 6/13 1515 WATER MW#3 40 mVOA-2 HCl & Cool $-COl$ V $-C$ $-V$ $-V$ 6/13 1315 WATER MW#3 40 mVOA-2 HCl & Cool $-COl$ V $-C$ $-V$			Itrix	Sample Request ID	Container Type and #	Preservative Type	<u>}</u>							on, Ferrous	trate N / Ni			
6/13 1615 WATER MW # 3 40 ml VOA - 2 HCI & Cool 6/13 1515 WATER MW # 4 40 ml VOA - 2 HCI & Cool 6/13 1320 WATER MW # 5 40 ml VOA - 2 HCI & Cool 6/13 1320 WATER MW # 5 40 ml VOA - 2 HCI & Cool 6/13 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 6/13 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 6/13 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 6/13 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 6/14 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 6/13 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 6/14 1225 WATER MW # 6 40 ml VOA - 2 HCI & Cool 7 Time: Relinguished by: MW # 6 40 ml VOA - 2 HCI & Cool <tr< td=""><td></td><td>┝──╁</td><td>뛾</td><td>MW # 2</td><td>40 ml VOA - 2</td><td>HCI & Cool</td><td>10/2/10</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td><u>и</u></td><td>IN</td><td></td><td></td><td></td></tr<>		┝──╁	뛾	MW # 2	40 ml VOA - 2	HCI & Cool	10/2/10					_		<u>и</u>	IN			
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

December 02, 2014

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU #169E

OrderNo.: 1411B03

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/26/2014 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: Blagg Engineering Project: GCU #169E			Client Sampl Collection I		W #2 /25/2014 11:55:00 Al	М
Lab ID: 1411B03-001	Matrix:	AQUEOUS	Received I	Date: 11,	/26/2014 7:00:00 AM	[
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	1.0	µg/L	1	11/27/2014 3:15:58 A	M R22836
Toluene	ND	1.0	µg/L	1	11/27/2014 3:15:58 A	M R22836
Ethylbenzene	ND	1.0	µg/L	1	11/27/2014 3:15:58 A	M R22836
Xylenes, Total	ND	2.0	µg/L	1	11/27/2014 3:15:58 A	M R22836
Surr: 4-Bromofluorobenzene	105	66.6-167	%REC	1	11/27/2014 3:15:58 A	M R22836

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RL

- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
 - Not Detected at the Reporting Limit Page 1 of 6
- P Sample pH greater than 2.
- RL Reporting Detection Limit

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W #3	
Project: GCU #169E			Collection I	Date: 11	/25/2014 1:50:00 PM	[
Lab ID: 1411B03-002	Matrix:	AQUEOUS	Received I	Date: 11	/26/2014 7:00:00 AN	1
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	1.0	μg/L	1	11/27/2014 3:43:07 A	M R22836
Toluene	ND	1.0	µg/L	1	11/27/2014 3:43:07 A	M R22836
Ethylbenzene	ND	1.0	µg/L	1	11/27/2014 3:43:07 A	M R22836
Xylenes, Total	ND	2.0	µg/L	1	11/27/2014 3:43:07 A	M R22836
Surr: 4-Bromofluorobenzene	104	66.6-167	%REC	1	11/27/2014 3:43:07 A	M R22836

Hall Environmental Analysis Laboratory, Inc.

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

Analyte detected in the associated Method Blank Holding times for preparation or analysis exceeded

Page 2 of 6

Not Detected at the Reporting Limit

Sample pH greater than 2. Reporting Detection Limit

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RL

Spike Recovery outside accepted recovery limits

S

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W #4	
Project: GCU #169E			Collection l	Date: 11.	/25/2014 12:55:00 P	М
Lab ID: 1411B03-003	Matrix:	AQUEOUS	Received I	Date: 11	/26/2014 7:00:00 AN	1
Analyses	Result	RL Qua	d Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	1.0	µg/L	1	11/27/2014 4:10:19 A	M R22836
Toluene	ND	1.0	µg/L	1	11/27/2014 4:10:19 A	M R22836
Ethylbenzene	ND	1.0	µg/L	1	11/27/2014 4:10:19 A	M R22836
Xylenes, Total	ND	2.0	µg/L	1	11/27/2014 4:10:19 A	M R22836
Surr: 4-Bromofluorobenzene	101	66.6-167	%REC	1	11/27/2014 4:10:19 A	M R22836

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	-		

- 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

Page 3 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

CLIENT: Blagg EngineeringProject: GCU #169ELab ID: 1411B03-004	Matrix:	AQUEOUS		Date: 11,	W #5 /25/2014 10:50:00 A /26/2014 7:00:00 AM	
Analyses	Result	RL Qua			Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	1.0	µg/L	1	11/27/2014 4:37:28 A	M R22836
Toluene	ND	1.0	µg/L	1	11/27/2014 4:37:28 A	M R22836
Ethylbenzene	ND	1.0	µg/L	1	11/27/2014 4:37:28 A	M R22836
Xylenes, Total	ND	2.0	µg/L	1	11/27/2014 4:37:28 A	M R22836
Surr: 4-Bromofluorobenzene	98.8	66.6-167	%REC	1	11/27/2014 4:37:28 A	M R22836

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	_		

- 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
 - D Not Detected at the Reporting Limit Page 4 of 6
- P Sample pH greater than 2.
- RL Reporting Detection Limit

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W #6	
Project: GCU #169E			Collection I	Date: 11	/25/2014 9:55:00 AN	1
Lab ID: 1411B03-005	Matrix:	AQUEOUS	Received I	Date: 11	/26/2014 7:00:00 AN	1
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	1.0	µg/L	1	11/27/2014 5:05:36 A	M R22836
Toluene	ND	1.0	µg/L	1	11/27/2014 5:05:36 A	M R22836
Ethylbenzene	ND	1.0	µg/L	1	11/27/2014 5:05:36 A	M R22836
Xylenes, Total	ND	2.0	µg/L	1	11/27/2014 5:05:36 A	M R22836
Surr: 4-Bromofluorobenzene	101	66.6-167	%REC	1	11/27/2014 5:05:36 A	M R22836

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р

- 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

Page 5 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environme	ental Anal	ysis I	Laborat	ory, Inc.					W O#.	02-Dec-14
	g Engineering #169E									
Sample ID 5ML RB	SampT	Type: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBW	Batcl	h ID: R2	2836	F	RunNo: 2	2836				
Prep Date:	Analysis D	Date: 1	1/26/2014	S	SeqNo: 6	73944	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		95.6	66.6	167			
Sample ID 100NG BTEX LCS SampType: LCS			s	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batcl	h ID: R2	2836	F	RunNo: 2	2836				
Prep Date:	Analysis D	Date: 1	1/26/2014	S	SeqNo: 6	73945	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	80	120			
Toluene	20	1.0	20.00	0	101	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Xylenes, Total	64	2.0	60.00	0	107	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		107	66.6	167			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - Р Sample pH greater than 2.
 - RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY		Hawkins NE 1e, NM 87105 505-345-4107	Sam	ple Log-In Che	eck List
Client Name: BLAGG	Nork Order Number: 1411	B03	_	RcptNo: 1	
Received by/date:	1/20/14				
Logged By: Ashley Gallegos 11/	/26/2014 7:00:00 AM	A	P		
Completed By: Ashley Gallegos 11/	/26/2014 10:13:11 AM	A	FF		
Reviewed By:	11/26/14		V		
Chain of Custody					
1. Custody seals intact on sample bottles?	Yes		No 🗌	Not Present 🗹	
2. Is Chain of Custody complete?	Yes	\checkmark	No 🗌	Not Present	
3. How was the sample delivered?	Cour	rier			
<u>Log In</u>		_			
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 🗌		
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 p	vreserved? Yes	\checkmark	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 🗹	# of preserved	
			No. 🕞	bottles checked for pH:	
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes		No 🗔		12 unless noted)
13. Are matrices correctly identified on Chain of Cu	stody? Yes		No 🗌	Adjusted?	
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 🗌	Checked by:	
Special Handling (if applicable)	and and the second s			NA 🗹	
16. Was client notified of all discrepancies with this			No [_]		
Person Notified:	Date:	ail 🗖 Dharr	. .	In Person	
By Whom:	Via: 🗌 eM	ail 🔄 Phone	e 🔄 Fax		
Regarding: Client Instructions:					
• · · · · · · · · · · · · · · · · · · ·				I	
· · · · · · · · · · · · · · · · · · ·	Intact Seal No Seal D	ate Sig	ned By		
1 1.3 Good Yes				I	
Page 1 of 1	<u></u>				

כ	ain-	Sno-10	Unain-or-Lustouy Record						Ξ	AL	Ш	2	IR	NO	HALL ENVIRONMENTAL	ATA	-
Client:	BLAG	G ENGR.	BLAGG ENGR. / BP AMERICA	 Standard 	□ Rush					A	Ľ	SIS	5	B	ANALYSIS LABORATORY	TO	2
				Project Name:					-	www.hallenvironmental.com	nallen	viron	ment	al.co	E		
Mailing Address:	dress:	P.O. BOX 87	X 87		GCU # 169E	ЭE	4	901	ławki	4901 Hawkins NE -		anbri	uque,	ΣN	Albuquerque, NM 87109		
		BLOOMF	BLOOMFIELD, NM 87413	Project #:				Tel. 5	05-34	Tel. 505-345-3975		Fax 505-345-4107	05-34	5-41	07		
Phone #:		(505) 632-1199	2-1199								Anal	Analysis Request	seque	est			
email or Fax#:	:#XE			Project Manager:	er:		(1	_		-		(*)	-	-			
QA/QC Package:	kage:		Level 4 (Full Validation)		NELSON VELEZ	ELEZ				(5	4	OS"*O					
Accreditation:	on:]		Sampler:	NELSON VELEZ	ELEZ ZY			(τ	-				100			əlqm
D NELAP		□ Other		部分	X Yes	0			'8T					-			es a
EDD (Type)	ype)			Sample Temperature:	erature:	~	10.7.02		po					0.000		əl	osito
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + MT B BTEX + MTB) 85108 HdT	трн (Меth	A19M) 803 PAH (8310	у 9М 8 АЯЗЯ	D, , H) anoinA	Total Disso	Vitrate N /		griab samp	5 pt. comp
11/25/14	1155	WATER	MW # 2	40 ml VOA - 2	HCI & Cool	100-	>						-	_		>	
11/25/14	1350	WATER	MW # 3	40 ml VOA - 2	HCI & Cool	200-	>									>	
11/25/14	1255	WATER	MW #4	40 ml VOA - 2	HCI & Cool	-003	>						\vdash			>	
11/25/14	1050	WATER	MW #5	40 ml VOA - 2	HCI & Cool	h00-	>			-			-			>	
11/25/14	0955	WATER	9 # MW	40 ml VOA - 2	HCI & Cool	-002	>									>	
													+				
								_		-			+	_		_	
								++		++			+	++		++	
													+	-			
Date:	Time: 1532	Relinquished by	her V	Received by:	1 Julle	Date Time	Remarks: BILL DIR	ks: DIREC	emarks: BILL DIRECTLY TO BP:	8P:							
Date:	Time:	Relinquished by:	0-	Received by:	A		Jeff P Find	eace, Purcha	200 E ase Or	Jeff Peace, 200 Energy Court, Farmington, NM 87401 Find Purchase Order in email from BP.	Court, email	Farmi from E	ngton 3P.	MN	87401		
Ma	-	ary samples su	If necessary samples submitted to Hall Environmental may be subcontracted to other	ubcontracted to other	appredited laboratorie	ドー・リーアルリーム じつー apcredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	this possi	bility. A	-qns /u	contracte	d data v	fill be cl	early no	tated or	n the anal	vtical repo	r.



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

August 28, 2014

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 169E

OrderNo.: 1408D04

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/26/2014 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1408D04 Date Reported: 8/28/2014

CLIENT: Blagg Engineering Project: GCU # 169E			Client Sampl Collection I		W # 2 25/2014 12:45:00 PM	
Lab ID: 1408D04-001	Matrix:	AQUEOUS	Received I	Date: 8/2	26/2014 7:45:00 AM	
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	1.0	μg/L	1	8/26/2014 5:02:10 PM	R20809
Toluene	ND	1.0	µg/L	1	8/26/2014 5:02:10 PM	R20809
Ethylbenzene	ND	1.0	µg/L	1	8/26/2014 5:02:10 PM	R20809
Xylenes, Total	ND	2.0	µg/L	1	8/26/2014 5:02:10 PM	R20809

Hall Environmental Analysis Laboratory, Inc.

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

Refer to the	QC Summa	y report and	i sample io	gill ellecklist	tor maggeu	preservation	i intormati

*	Value exceeds	s Maximum	Contaminant	Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit

Qualifiers:

- 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
 - Not Detected at the Reporting Limit Page 1 of 6
- P Sample pH greater than 2.

ND

RL Reporting Detection Limit

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 3						
Project: GCU # 169E	Collection Date: 8/25/2014 2:05:00 PM										
Lab ID: 1408D04-002 Matrix: AQUEOUS Received Date: 8/26/2014 7:45:00											
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch					
EPA METHOD 8021B: VOLATILES					Analyst	: NSB					
Benzene	ND	1.0	µg/L	1	8/26/2014 5:32:26 PM	R20809					
Toluene	ND	1.0	µg/L	1	8/26/2014 5:32:26 PM	R20809					
Ethylbenzene	ND	1.0	µg/L	1	8/26/2014 5:32:26 PM	R20809					
Xylenes, Total	ND	2.0	µg/L	1	8/26/2014 5:32:26 PM	R20809					
Surr: 4-Bromofluorobenzene	106	82.9-139	%REC	1	8/26/2014 5:32:26 PM	R20809					

Hall Environmental Analysis Laboratory, Inc.

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information. * Value exceeds Maximum Contaminant Level.

ND

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit

- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
 - Not Detected at the Reporting Limit Page 2 of 6
- Р Sample pH greater than 2.
- RL Reporting Detection Limit

CLIENT: Blagg EngineeringProject: GCU # 169ELab ID: 1408D04-003	Matrix:	AQUEOUS	Collection 1	e ID: MW # 4 Date: 8/25/2014 Date: 8/26/2014		
Analyses	Result	RL Qu	al Units	DF Date	Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	1.0	µg/L	1 8/26/2	2014 10:03:53 P	M R20809
Toluene	ND	1.0	µg/L	1 8/26/2	2014 10:03:53 P	M R20809
Ethylbenzene	ND	1.0	µg/L	1 8/26/2	2014 10:03:53 P	M R20809
Xylenes, Total	ND	2.0	µg/L	1 8/26/2	2014 10:03:53 P	M R20809
Surr: 4-Bromofluorobenzene	96.5	82.9-139	%REC	1 8/26/2	2014 10:03:53 P	M R20809

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Ana
	Е	Value above quantitation range	Н	Hol
	J	Analyte detected below quantitation limits	ND	Not
	0	RSD is greater than RSDlimit	Р	San
	R	RPD outside accepted recovery limits	RL	Rep

- RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- alyte detected in the associated Method Blank
- olding times for preparation or analysis exceeded
 - ot Detected at the Reporting Limit Page 3 of 6
- ample pH greater than 2.
- RL Reporting Detection Limit

8/26/2014 10:34:03 PM R20809

8/26/2014 10:34:03 PM R20809

CLIENT: Blagg Engineering	Client Sample ID: MW # 5										
Project: GCU # 169E			Collection	Date: 8/25/2014 11:55:00 AM							
Lab ID: 1408D04-004 Matrix: AQUEOUS Received Date: 8/26/2014 7:45:00 AM											
Analyses	Result	RL Qua	l Units	DF Date Analyzed Bat							
EPA METHOD 8021B: VOLATILES				Analyst: NSI							
Benzene	ND	1.0	µg/L	1 8/26/2014 10:34:03 PM R20							
Toluene	ND	1.0	µg/L	1 8/26/2014 10:34:03 PM R20							
Ethylbenzene	ND	1.0	µg/L	1 8/26/2014 10:34:03 PM R20							

2.0

82.9-139

µg/L

%REC

1

1

ND

104

Hall Environmental Analysis Laboratory, Inc.

Xylenes, Total

Surr: 4-Bromofluorobenzene

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	ND
	0	RSD is greater than RSDlimit	Р
	р		BI

- 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

Page 4 of 6

- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

8/26/2014 11:04:08 PM R20809

8/26/2014 11:04:08 PM R20809

CLIENT: Blagg Engineering	Client Sample ID: MW # 6										
Project: GCU # 169E	Collection Date: 8/25/2014 11:10:00 AM										
Lab ID: 1408D04-005	Matrix: AQUEOUS Received Date: 8/26/2014 7:45:00 AM										
Analyses	Result	RL Qua	d Units	DF Date Analyzed Bat	tch						
EPA METHOD 8021B: VOLATILES				Analyst: NS	зв						
Benzene	ND	1.0	µg/L	1 8/26/2014 11:04:08 PM R20	20809						
Toluene	ND	1.0	µg/L	1 8/26/2014 11:04:08 PM R20	20809						
Ethylbenzene	ND	1.0	µg/L	1 8/26/2014 11:04:08 PM R20	20809						

2.0

82.9-139

µg/L

%REC

1

1

ND

106

Hall Environmental Analysis Laboratory, Inc.

Xylenes, Total

Surr: 4-Bromofluorobenzene

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	Е	Value above quantitation range	Н
	J	Analyte detected below quantitation limits	NI
	0	RSD is greater than RSDlimit	Р
	R	RPD outside accepted recovery limits	RI
	S	Spike Recovery outside accepted recovery limits	

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ID Not Detected at the Reporting Limit Page 5 of 6
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmen	tal Anal	ysis I	Laborat	ory, Inc.						28-Aug-14
Client:Blagg HProject:GCU #	Engineering 169E									
Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batcl	h ID: R2	0809	F	RunNo: 2	0809				
Prep Date:	Analysis D	Date: 8/	26/2014	S	SeqNo: 6	05937	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	21		20.00		104	82.9	139			
Sample ID 100NG BTEX LO	CS SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batcl	h ID: R2	0809	F	RunNo: 2	0809				
Prep Date:	Analysis D	Date: 8/	26/2014	S	SeqNo: 6	05938	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	80	120			
Toluene	20	1.0	20.00	0	98.9	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	64	2.0	60.00	0	107	80	120			
Surr: 4-Bromofluorobenzene	23		20.00		117	82.9	139			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - Р Sample pH greater than 2.
 - RL Reporting Detection Limit

1408D04 28.Aug.14

WO#:

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental A Albuc TEL: 505-345-3975 I Website: www.hal	4901 I querque FAX: 50	Hanrkin . NM 8 15-345-	ns NE 7109 Sa 1 4107	mple	e Log-In Check Li	st
Client Name: BLAGG	Work Order Number:	1408D	04			RcptNo: 1	
Received by/date:	08/26/14 8/26/2014 7:45:00 AM			, fi nakaj Hen	, GD		
Completed By: Lindsay Mangin	8/26/2014 8:34:17 AM			Anabul Hor	, ng		
Reviewed By:	08/24/14			050			
	Upalli						
Chain of Custody		¥		No		Not Present V	
1. Custody seals intact on sample bottles?		Yes		No		Not Present	
2. Is Chain of Custody complete?		Yes		NO		Not Frederic	
3. How was the sample delivered?		<u>Couri</u>	<u>er</u>				
Log In							
4. Was an attempt made to cool the sampl	es?	Yes	✓.	No	:	NA	
5. Were all samples received at a temperat	ture of >0° C to 6.0°C	Yes	V	No	÷	NA	
		N		No			
6. Sample(s) in proper container(s)?		Yes	v	NO			
7. Sufficient sample volume for indicated te	est(s)?	Yes	v	No			
8. Are samples (except VOA and ONG) pro	operly preserved?	Yes	✓	No			
9. Was preservative added to bottles?		Yes		No	/	NA	
10.VOA vials have zero headspace?		Yes	V	No		No VOA Vials	
11. Were any sample containers received b	roken?	Yes		No *		# of preserved	
		Yes	J.	No		bottles checked for pH:	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	165	• 1	110		(<2 or >12 unless	s noted)
13 Are matrices correctly identified on Chai	n of Custody?	Yes	✓	No		Adjusted?	
14. Is it clear what analyses were requested		Yes	✓:	No			
15. Were all holding times able to be met?		Yes		No		Checked by:	
(If no, notify customer for authorization.)							
<u>Special Handling (if applicable)</u>							

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16.\	Vas client not	ified of all di	screpancies v	vith this order?	,	Yes	N	C	NA 🗸
	Person N	Notified:			Date:	ſ		<u></u>	
	By Whor	n: [Via:	eMail	Phone	Fax	In Person
	Regardir	ıg:	***************************************	ana ang ang ang ang ang ang ang ang ang					
	Client In:	structions:							
17.	Additional ren	narks:							
18.	Cooler Inforr	nation							
	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed	d By	
	1	2.6	Good	Yes			: 		
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Page 1 of 1

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HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request	(*(DS ^{(†} C				D,H) snoinA												Jeff Peace, 200 Energy Court, Farmington, NM 87401 Find Purchase Order in email from BP.	il be ci
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A H	Z	Ŵ	kins	Tel. 505-345-3975							EDB (Meth											emarks: BILL DIRECTLY TO BP:	Ener, Order	b-conti
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			901	[el. 5							BTEX + MTBI) 82108 H9T							 			 	rks: DIREC	Purch	ibility.
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Ģ	BLAGG ENGR. / BP AMERICA		<u>ہ</u> ا		5							· · ·									 			If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.
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Chain-of-Custody Record			Mailing Address:		#	email or Fax#:	QA/QC Package:	 Standard 	Accreditation:						4	4					 	14 1 14	14 1 ⁷	
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

September 06, 2013

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 169E

OrderNo.: 1308D55

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/30/2013 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/6/2013

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 2				
Project: GCU # 169E	Collection Date: 8/28/2013 1:30:00 PM								
Lab ID: 1308D55-001	Matrix:	AQUEOUS	Received 1	Date: 8/3	30/2013 10:00:00 AM				
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch			
EPA METHOD 8260: VOLATILES S	HORT LIST				Analys	t: cadg			
Benzene	ND	1.0	µg/L	1	9/3/2013 6:09:17 PM	R13040			
Toluene	ND	1.0	µg/L	1	9/3/2013 6:09:17 PM	R13040			
Ethylbenzene	ND	1.0	µg/L	1	9/3/2013 6:09:17 PM	R13040			
Xylenes, Total	ND	2.0	µg/L	1	9/3/2013 6:09:17 PM	R13040			
Surr: 1,2-Dichloroethane-d4	94.0	70-130	%REC	1	9/3/2013 6:09:17 PM	R13040			
Surr: 4-Bromofluorobenzene	98.7	70-130	%REC	1	9/3/2013 6:09:17 PM	R13040			
Surr: Dibromofluoromethane	108	70-130	%REC	1	9/3/2013 6:09:17 PM	R13040			
Surr: Toluene-d8	95.5	70-130	%REC	1	9/3/2013 6:09:17 PM	R13040			

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Page 1 of 6 Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/6/2013

CLIENT:Blagg EngineeringProject:GCU # 169ELab ID:1308D55-002	Matrix: A	AQUEOUS		Date: 8/2	W # 3 28/2013 4:20:00 PM 30/2013 10:00:00 AM	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES S	HORT LIST				Analys	t: cadg
Benzene	4.1	1.0	µg/L	1	9/3/2013 6:38:14 PM	R13040
Toluene	ND	1.0	µg/L	1	9/3/2013 6:38:14 PM	R13040
Ethylbenzene	1.4	1.0	µg/L	1	9/3/2013 6:38:14 PM	R13040
Xylenes, Total	ND	2.0	µg/L	1	9/3/2013 6:38:14 PM	R13040
Surr: 1,2-Dichloroethane-d4	94.1	70-130	%REC	1	9/3/2013 6:38:14 PM	R13040
Surr: 4-Bromofluorobenzene	97.1	70-130	%REC	1	9/3/2013 6:38:14 PM	R13040
Surr: Dibromofluoromethane	106	70-130	%REC	1	9/3/2013 6:38:14 PM	R13040
Surr: Toluene-d8	94.4	70-130	%REC	1	9/3/2013 6:38:14 PM	R13040

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Not Detected at the Reporting Limit Page 2 of 6 Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/6/2013

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 4			
Project: GCU # 169E	Collection Date: 8/28/2013 3:40:00 PM							
Lab ID: 1308D55-003	Matrix:	AQUEOUS	Received	Date: 8/3	30/2013 10:00:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8260: VOLATILES S	HORT LIST				Analys	t: cadg		
Benzene	ND	1.0	µg/L	1	9/3/2013 7:36:00 PM	R13040		
Toluene	ND	1.0	µg/L	1	9/3/2013 7:36:00 PM	R13040		
Ethylbenzene	ND	1.0	µg/L	1	9/3/2013 7:36:00 PM	R13040		
Xylenes, Total	ND	2.0	µg/L	1	9/3/2013 7:36:00 PM	R13040		
Surr: 1,2-Dichloroethane-d4	101	70-130	%REC	1	9/3/2013 7:36:00 PM	R13040		
Surr: 4-Bromofluorobenzene	102	70-130	%REC	1	9/3/2013 7:36:00 PM	R13040		
Surr: Dibromofluoromethane	112	70-130	%REC	1	9/3/2013 7:36:00 PM	R13040		
Surr: Toluene-d8	95.6	70-130	%REC	1	9/3/2013 7:36:00 PM	R13040		

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- Not Detected at the Reporting Limit Page 3 of 6 Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/6/2013

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 5			
Project: GCU # 169E	Collection Date: 8/28/2013 2:10:00 PM							
Lab ID: 1308D55-004	Matrix:	AQUEOUS	Received I	Date: 8/3	30/2013 10:00:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8260: VOLATILES S	HORT LIST				Analys	t: cadg		
Benzene	ND	1.0	µg/L	1	9/3/2013 8:04:47 PM	R13040		
Toluene	ND	1.0	µg/L	1	9/3/2013 8:04:47 PM	R13040		
Ethylbenzene	ND	1.0	µg/L	1	9/3/2013 8:04:47 PM	R13040		
Xylenes, Total	ND	2.0	µg/L	1	9/3/2013 8:04:47 PM	R13040		
Surr: 1,2-Dichloroethane-d4	98.2	70-130	%REC	1	9/3/2013 8:04:47 PM	R13040		
Surr: 4-Bromofluorobenzene	98.4	70-130	%REC	1	9/3/2013 8:04:47 PM	R13040		
Surr: Dibromofluoromethane	110	70-130	%REC	1	9/3/2013 8:04:47 PM	R13040		
Surr: Toluene-d8	99.5	70-130	%REC	1	9/3/2013 8:04:47 PM	R13040		

Qualifiers:	*	Value exceeds Maximum Contaminant Level.					
	Е	Value above quantitation range					

- Analyte detected below quantitation limits J
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Not Detected at the Reporting Limit Page 4 of 6 Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/6/2013

CLIENT: Blagg Engineering			Client Sampl	e ID: M	W # 6	
Project: GCU # 169E			Collection 1	Date: 8/2	28/2013 2:55:00 PM	
Lab ID: 1308D55-005	Matrix:	AQUEOUS	Received	Date: 8/3	30/2013 10:00:00 AM	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES S	HORT LIST				Analys	t: cadg
Benzene	ND	1.0	µg/L	1	9/3/2013 8:33:31 PM	R13040
Toluene	ND	1.0	µg/L	1	9/3/2013 8:33:31 PM	R13040
Ethylbenzene	ND	1.0	µg/L	1	9/3/2013 8:33:31 PM	R13040
Xylenes, Total	ND	2.0	µg/L	1	9/3/2013 8:33:31 PM	R13040
Surr: 1,2-Dichloroethane-d4	95.8	70-130	%REC	1	9/3/2013 8:33:31 PM	R13040
Surr: 4-Bromofluorobenzene	102	70-130	%REC	1	9/3/2013 8:33:31 PM	R13040
Surr: Dibromofluoromethane	111	70-130	%REC	1	9/3/2013 8:33:31 PM	R13040
Surr: Toluene-d8	95.8	70-130	%REC	1	9/3/2013 8:33:31 PM	R13040

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Not Detected at the Reporting Limit Page 5 of 6 Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

Hall Environmen	tal Analy	ysis I	Laborat	ory, Inc.					W 0#.	06-Sep-13
Client:Blagg HProject:GCU #	Engineering 169E									
Sample ID 5mL rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatil	es Short L	_ist	
Client ID: PBW	Batch	n ID: R1	3040	F	RunNo: 1	3040				
Prep Date:	Analysis D	ate: 9/	3/2013	S	SeqNo: 3	72717	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: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			
Sample ID 100ng lcs2	SampT	ype: LC	s	Tes	tCode: El	PA Method	8260: Volatil	es Short L	_ist	
Client ID: LCSW	Batch	1D: R1	3040	F	RunNo: 1 :	3040				
Prep Date:	Analysis D	ate: 9/	3/2013	5	SeqNo: 3	72718	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.8	70	130			
Toluene	18	1.0	20.00	0	90.8	82.2	124			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.4	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

Е Value above quantitation range

Surr: Dibromofluoromethane

Surr: Toluene-d8

11

9.8

10.00

10.00

- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

107

98.2

70

70

130

130

- Р Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit RL

Page 6 of 6



4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG	Work Order Number:	1308D55		RcptNo: 1
Received by/date:	0830 13			
Logged By: Lindsay Mangin	8/30/2013 10:00:00 AN	1	Junki Hlago	
Completed By: Lindsay Mangin	8/30/2013;1:19:38 PM		Junky Happ	
	08/20/13			
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		
<u>Log In</u>				
4. Was an attempt made to cool the sampl	es?	Yes 🗹	No 🗌	NA 🗌
5. Were all samples received at a temperat	ure of >0° C to 6.0°C	Yes 🗹	No 🗌	
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗌	
7. Sufficient sample volume for indicated te	st(s)?	Yes 🗹	No 🗌	
8. Are samples (except VOA and ONG) pro	perly 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 be	roken?	Yes 🗆	No 🗹 🛛	# of preserved
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody))	Yes 🔽	No 🗆	bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chair		Yes 🗹	No 🗔	Adjusted?
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 🗖	Checked by:

Special Handling (if applicable)

16. Was client notified of all	discrepancies with this order?	Yes 🗌	Νο	NA 🗹
Person Notified:		Date:		· · · • • • • • • • • • • • • • • • • •
By Whom:		Via: 🗌 eMail 🗌	Phone 🗌 Fax 🛛 In	Person
Regarding:				· · · · · · · · · ·
Client Instructions			<u> </u>	<u> </u>

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Yes			

Name: H:: Manager: Mana	ain-of-Cus BIAGG FNGR	- 	ord	n-Around	Time:				A H			IR		VEN C	Ē	2 2 2 1
Manager. Www.hallenvironmental.com GCU # 169E Abuquerque, NM 87109 Finander Abuquerque, NM 87109 Tel. SOS 345-3975 Fax SOS-345-34107 Tel. SOS 345-3975 Fax SOS-345-34107 Tel. SOD VELEZ Analysis Request Manager. Manager. Manager. Manager. Manager. Manager. Tel. SOS 345-3975 Fax SOS-345-34107 Tel. SOS 345-3975 Fax SOS-345-3975 Fail RE Merchod 418.1) Manager. Manager. Manager. Manager. Manager. Manager. Manager. NELSON VELEZ Manager. NELSON VELEZ Manager. Netaler Manager.	BLAGG ENGR. / BP AIVIERICA	K. / DF AIVIERICA		Standard					Z	ALY	SIS	3		KA	Ō	
GCU # 169E 4901 Hawkins NE - Albuquerque, NM 87109 #ininger: Manager: Manager: Manager: N ELSON VELEZ Analysis Request Manager: N ELSON VELEZ Analysis Request Manager: N Nitrite N N Nitrite N N ELSON VELEZ Manager: Manager: Manager: N Nitrite N N Nitrite N N ELSON VELEZ Manager: Manager: Manager: N Nitrite N N Nitrite N N Dissolved Solids N Nitrite N V V N Dissolved Solids N Nitrite N OA-1 Hd & Rooi MRO OA-2 Hd & Rooi MRO OA-2 Hd & Rooi N Nitrite N OA-2 Hd & Rooi OA-2 OA-2 Hd & Rooi OA-2 Hd & Rooi OA-2 Hd & Cooi OA-2 Hd & C				Project Name:			and a second second		WM	w.halle	inviron	ment	al.con	~		
Tel. 505-345-4107 Tel. 505-345-4107 Manager: Manager: Manager: Manager: Manager: Manager: NELSON VELEZ Manager: Manager: NELSON VELEZ Anatysis Request Manager: Inter Preservative Inter Recool OA: 2 Inter Recool OA: 2 Inter Recool OA: 2 Inter Recool	Mailing Address: P.O. BOX 87	OX 87			GCU # 169)E	4	901 Ha	wkins	NE - A	anbnqr	erque,	NM 8	1109		
Manager. Manager. Manager. Nelson VELEZ Manager. Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ No Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ No Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ Nelson VELEZ No Nelson VERZ V V V V	BLOOMFIELD, NM 87413		2	Project #:			Т	el. 505	-345-3	975	Fax 5	505-34	t5-410	17		
Manager. Manager. Manager. Manager. Manager. Manager. NELSON VELEZ NELSON VELEZ NELSON VELEZ NELSON VELEZ NELSON VELEZ NELSON VELEZ NELSON VELEZ Nelson Nelson Nelson Manager. Nelson Manager. Nelson Manager. Nelson Manager. Nelson Manager. Nelson Manager. Nelson Nelson Manager. Nelson Nelson Manager. Nelson Nelson Nelson Manager. Nelson Nelson Nelson Nelson Manager. Nelson Nelson Nelson Nelson Nelson Manager. Nelson Nelson Nelson Nelson Nelson Nelson Manager. Nelson Nelson Nelson Nelson Nelson Nelson Manager. Nelson Nelson Nelson Nel	(505) 632-1199	632-1199								An	lysis	Reque	est			
NELSON VELEZ Nelson Nelson OA.2 HCI & Cool Date In Date In Date In Date In Date In In In In In	email or Fax#: Proj	Pro	ΡΩ	iect Manag€			(१		<u> </u>		(*(
Image: Second Contract of the second of t	 △A/QC Package: Standard Level 4 (Full Validation) 	Level 4 (Full Validation)			NELSON VE	IEZ				(SI)S(_p Oq			<u></u>		
Initial Sector Initial Sector Initial Sector Initial fractor Initial fractor Initial fractor	Accreditation: Sampler:	Samp	Samp	oler:				090 (VISO	^z ON					uuu
Preservative Type Hcl & Cool Type Type Type Hcl & Cool Type Hcl & Cool Type Hcl & Cool Hcl & Cool - 001 Hcl & Cool - 002 Hcl & Cool - 003 <	Don Ices		On le	e: 1	gYes	🖂 No		3/0						• •		
er Preservative HEALNO HEALNO HEALNO 1.2 HCl & Cool -001 V BTEX + MTB 1.2 HCl & Cool -001 V BTEX + MTB 1.2 HCl & Cool -001 V BTEX + MTB 1.2 HCl & Cool -001 V BTEX + MTB 1.2 HCl & Cool -002 V BTEX + MTB 1.2 HCl & Cool -002 V BTEX + MTB 1.2 HCl & Cool -002 V BTEX + MTB 1.2 HCl & Cool -002 V BTEX + MTB 1.2 HCl & Cool -002 V BTEX + MTB 1.2 HCl & Cool -002 V BTEX + MTB 1.2 HCl & Cool -002 V Croal Disso 1.2 HCl & Cool -002 V V V 1.2 HCl & Cool -002 V V V V 1.2 HCl & Cool -002 V V V V V 1.2 HCl & Cool	EDD (Type) Sam	wes	Sam	Sample Tempe	hture:419			้อยด							le	
1.2 HCI & Cool $-OO$ V V	Time Matrix Sample Request ID Co	Sample Request ID	Typ Co	Container Type and #	Preservative Type	HEAL NO.) 82108 НАТ							Grab samp	
1-2 HCI & Cool $-\Omega 2$ V I I I I 1-2 HCI & Cool $-\Omega 2$ V V I I I I 1-2 HCI & Cool $-\Omega 2$ V V I I I I I 1-2 HCI & Cool $-\Omega 2$ V V I I I I I 1-2 HCI & Cool $-\Omega 2$ V I <td>1330 WATER MW # 2 40 n</td> <td>MW # 2</td> <td>40 n</td> <td>40 ml VOA - 2</td> <td>HCI & Cool</td> <td>0-0-</td> <td>٧</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>></td> <td></td>	1330 WATER MW # 2 40 n	MW # 2	40 n	40 ml VOA - 2	HCI & Cool	0-0-	٧								>	
1-2 HCI & Cool $-OO3$ V V I I I 1-2 HCI & Cool $OO4$ V V I I I I 1-2 HCI & Cool $OO4$ V V I I I I I 1-2 HCI & Cool $OO4$ V I	1620 WATER MW # 3 40 m	MW #3	40 m		HCI & Cool	-002	٧								V	
1-2 HCI & Cool \mathcal{O} V V	1540 WATER MW # 4 40 ml	MW #4	40 m		HCI & Cool	-003	٧								V	
N-2 HCI & Cool -005 V N	1410 WATER MW # 5 40 m ¹	MW #5	40 ml '		HCI & Cool	toot	٧								V	
Time R. Date Time R. Date Time R. Date Time	1455 WATER MW # 6 40 m ¹	9 # MW	40 m		HCI & Cool	-005	ر ک								V	
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The Date Time R. Date Time R. Date Time																
The May Ley Rag/13 828																
R. Wayley Plage Time R. Hu Wayley Plage Time														_		
John Waster 8/29/13 820 Differ 108/20/12 1000	Time: Relinquished by: Received by	، بر م بر	Receive	ed by:		Date Time	Remar	:s:								
DIV TIME Date Time	() Jun 1	tor t	$\overline{\mathbf{C}}$	h Katta	4	Plag13 P22	BILLD	IRECTL	V TO BF	••						
The first pool is in the Purchase Order in email from BP.	Relinquished by: V	<i>(</i> ,)	, Recei			pate Time	Jeff Pe	eace, 20	0 Ener	y Cour	., Farmi	ington,	NM 8	7401		
	Mit. Lant.		2	ł	- melan	I'r MM	Find P	urchase	e Order	in ema	l from l	BP.				



May 13, 2013

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX: (505) 632-3903

RE: GCU # 169E

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

OrderNo.: 1304A90

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/26/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1304A90 Date Reported: 5/13/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW # 1 **Project:** GCU # 169E Collection Date: 4/25/2013 9:55:00 AM Lab ID: 1304A90-001 Matrix: AQUEOUS Received Date: 4/26/2013 10:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND Benzene 1.0 µg/L 1 5/1/2013 3:41:12 PM ND Toluene 1.0 µg/L 1 5/1/2013 3:41:12 PM Ethylbenzene ND µg/L 1 5/1/2013 3:41:12 PM 1.0 Xylenes, Total ND 2.0 µg/L 1 5/1/2013 3:41:12 PM %REC Surr: 4-Bromofluorobenzene 99.5 69.4-129 1 5/1/2013 3:41:12 PM **EPA METHOD 300.0: ANIONS** Analyst: JRR Fluoride 0.50 4/26/2013 10:06:43 PM 0.53 mg/L 5 Chloride 20 2.5 mg/L 5 4/26/2013 10:06:43 PM Nitrogen, Nitrite (As N) ND 0.50 mg/L 5 4/26/2013 10:06:43 PM 4/26/2013 10:06:43 PM Nitrogen, Nitrate (As N) ND 0.50 mg/L 5 Sulfate 970 10 mg/L 20 4/26/2013 10:19:08 PM EPA METHOD 200.7: DISSOLVED METALS Analyst: JLF 0.045 0.020 4/29/2013 1:12:59 PM Iron mg/L 1 SM2540C MOD: TOTAL DISSOLVED SOLIDS Analyst: KS **Total Dissolved Solids** 5/2/2013 5:35:00 PM 1600 mg/L 1 100

Qualifiers: * \

- * Value exceeds Maximum Contaminant Level.E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 5/13/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW # 2 **Project:** GCU # 169E Collection Date: 4/25/2013 12:10:00 PM Lab ID: 1304A90-002 Matrix: AQUEOUS Received Date: 4/26/2013 10:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8021B: VOLATILES** Analyst: NSB 5/1/2013 4:09:46 PM ND Benzene 1.0 µg/L 1 Toluene ND 5/1/2013 4:09:46 PM 1.0 µg/L 1 Ethylbenzene ND µg/L 1 5/1/2013 4:09:46 PM 1.0 Xylenes, Total ND 2.0 µg/L 1 5/1/2013 4:09:46 PM 102 %REC Surr: 4-Bromofluorobenzene 69.4-129 1 5/1/2013 4:09:46 PM **EPA METHOD 300.0: ANIONS** Analyst: JRR Fluoride 0.50 4/26/2013 10:31:33 PM 0.51 mg/L 5 Chloride 26 2.5 mg/L 5 4/26/2013 10:31:33 PM Nitrogen, Nitrite (As N) ND 0.50 mg/L 5 4/26/2013 10:31:33 PM Nitrogen, Nitrate (As N) ND 0.50 mg/L 5 4/26/2013 10:31:33 PM Sulfate 990 25 mg/L 50 5/3/2013 1:27:37 AM EPA METHOD 200.7: DISSOLVED METALS Analyst: JLF 0.43 0.020 4/29/2013 1:18:21 PM Iron mg/L 1 SM2540C MOD: TOTAL DISSOLVED SOLIDS Analyst: KS **Total Dissolved Solids** 5/2/2013 5:35:00 PM 1910 40.0 mg/L 1

Qualifiers:	*	Va
	-	* 7

- alue exceeds Maximum Contaminant Level. Value above quantitation range Е
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU # 169E

Date Reported: 5/13/2013 Client Sample ID: MW # 3 Collection Date: 4/25/2013 1:40:00 PM

Lab ID: 1304A90-003	Matrix:	AQUEOUS	Received I	Date: 4/26/2	013 10:00:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	57	2.0	µg/L	2	5/1/2013 8:56:07 PM
Toluene	ND	2.0	µg/L	2	5/1/2013 8:56:07 PM
Ethylbenzene	21	2.0	µg/L	2	5/1/2013 8:56:07 PM
Xylenes, Total	250	4.0	µg/L	2	5/1/2013 8:56:07 PM
Surr: 4-Bromofluorobenzene	112	69.4-129	%REC	2	5/1/2013 8:56:07 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Fluoride	0.53	0.50	mg/L	5	4/26/2013 8:52:14 PM
Chloride	25	2.5	mg/L	5	4/26/2013 8:52:14 PM
Nitrogen, Nitrite (As N)	ND	0.50	mg/L	5	4/26/2013 8:52:14 PM
Nitrogen, Nitrate (As N)	ND	0.50	mg/L	5	4/26/2013 8:52:14 PM
Sulfate	960	25	* mg/L	50	5/3/2013 1:40:02 AM
EPA METHOD 200.7: DISSOLVED MET	ALS				Analyst: JLF
Iron	3.6	0.10	* mg/L	5	4/29/2013 1:25:45 PM
SM2540C MOD: TOTAL DISSOLVED S	OLIDS				Analyst: KS
Total Dissolved Solids	1820	200	* mg/L	1	5/2/2013 5:35:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected
	Е	Value above quantitation range	Н	Holding times fo
	J	Analyte detected below quantitation limits	ND	Not Detected at
	_		_	

- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method BlankH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Date Reported: 5/13/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW # 4 **Project:** GCU # 169E Collection Date: 4/25/2013 12:55:00 PM Lab ID: 1304A90-004 Matrix: AQUEOUS Received Date: 4/26/2013 10:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 6.3 2.0 µg/L 2 5/1/2013 9:24:38 PM ND 2 Toluene 2.0 µg/L 5/1/2013 9:24:38 PM Ethylbenzene ND 2.0 µg/L 2 5/1/2013 9:24:38 PM Xylenes, Total 4.7 4.0 µg/L 2 5/1/2013 9:24:38 PM %REC 2 Surr: 4-Bromofluorobenzene 104 69.4-129 5/1/2013 9:24:38 PM **EPA METHOD 300.0: ANIONS** Analyst: JRR Fluoride 0.50 4/26/2013 11:21:12 PM 0.58 mg/L 5 Chloride 20 2.5 mg/L 5 4/26/2013 11:21:12 PM Nitrogen, Nitrite (As N) ND 0.50 mg/L 5 4/26/2013 11:21:12 PM Nitrogen, Nitrate (As N) ND 0.50 mg/L 5 4/26/2013 11:21:12 PM Sulfate 920 10 mg/L 20 4/26/2013 11:33:37 PM **EPA METHOD 200.7: DISSOLVED METALS** Analyst: JLF 3.7 5 4/29/2013 1:30:27 PM Iron 0.10 mg/L SM2540C MOD: TOTAL DISSOLVED SOLIDS Analyst: KS **Total Dissolved Solids** 5/2/2013 5:35:00 PM 1630 200 mg/L 1

Qualifiers: * Va

- * Value exceeds Maximum Contaminant Level.E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- 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.

Date Reported: 5/13/2013

CLIENT: Blagg Engineering			Client Sa	mple ID: MW #	5
Project: GCU # 169E			Collect	ion Date: 4/25/2	013 11:25:00 AM
Lab ID: 1304A90-005	Matrix:	AQUEOUS	Receiv	ved Date: 4/26/2	013 10:00:00 AM
Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	2.0	µg/L	2	5/1/2013 9:53:13 PM
Toluene	ND	2.0	µg/L	2	5/1/2013 9:53:13 PM
Ethylbenzene	ND	2.0	µg/L	2	5/1/2013 9:53:13 PM
Xylenes, Total	ND	4.0	µg/L	2	5/1/2013 9:53:13 PM
Surr: 4-Bromofluorobenzene	103	69.4-129	%REC	2	5/1/2013 9:53:13 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Fluoride	0.51	0.50	mg/L	5	4/27/2013 12:10:52 AM
Chloride	20	2.5	mg/L	5	4/27/2013 12:10:52 AM
Nitrogen, Nitrite (As N)	ND	0.50	mg/L	5	4/27/2013 12:10:52 AM
Nitrogen, Nitrate (As N)	ND	0.50	mg/L	5	4/27/2013 12:10:52 AM
Sulfate	890	25	* mg/L	50	5/3/2013 1:52:27 AM
EPA METHOD 200.7: DISSOLVED MET	ALS				Analyst: JLF
Iron	0.84	0.020	* mg/L	1	4/29/2013 1:44:02 PM
SM2540C MOD: TOTAL DISSOLVED S	OLIDS				Analyst: KS
Total Dissolved Solids	1740	200	* mg/L	1	5/2/2013 5:35:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

J Analyte detected below quantitation limits

Р Sample pH greater than 2

RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S

Date Reported: 5/13/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW # 6 **Project:** GCU # 169E Collection Date: 4/25/2013 10:40:00 AM Lab ID: 1304A90-006 Matrix: AQUEOUS Received Date: 4/26/2013 10:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND Benzene 2.0 µg/L 2 5/1/2013 10:21:53 PM ND 2 Toluene 2.0 µg/L 5/1/2013 10:21:53 PM Ethylbenzene ND µg/L 2 5/1/2013 10:21:53 PM 2.0 Xylenes, Total ND 4.0 µg/L 2 5/1/2013 10:21:53 PM %REC 2 Surr: 4-Bromofluorobenzene 99.2 69.4-129 5/1/2013 10:21:53 PM **EPA METHOD 300.0: ANIONS** Analyst: JRR Fluoride 0.50 4/27/2013 12:35:42 AM 0.71 mg/L 5 Chloride 25 2.5 mg/L 5 4/27/2013 12:35:42 AM Nitrogen, Nitrite (As N) ND 0.50 mg/L 5 4/27/2013 12:35:42 AM Nitrogen, Nitrate (As N) ND 0.50 mg/L 5 4/27/2013 12:35:42 AM Sulfate 1400 25 mg/L 50 5/3/2013 2:04:51 AM **EPA METHOD 200.7: DISSOLVED METALS** Analyst: JLF 0.49 0.020 4/29/2013 1:49:03 PM Iron mg/L 1 SM2540C MOD: TOTAL DISSOLVED SOLIDS Analyst: KS 5/2/2013 5:35:00 PM **Total Dissolved Solids** 2430 mg/L 1 200

- Value exceeds Maximum Contaminant Level. Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1304A90
	13-May-13

Client: Project:	Blagg Engineering GCU # 169E									
Sample ID: MB	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	200.7: Dissol	ved Metal	S	
Client ID: PBW	Batch	n ID: R1	0183	F	lunNo: 10	0183				
Prep Date:	Analysis D	Date: 4/	29/2013	S	eqNo: 2	89964	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Sample ID: LCS	SampT	ype: LC	S	Tes	tCode: EF	PA Method	200.7: Dissol	ved Metal	s	
Client ID: LCSW	Batch	n ID: R1	0183	F	lunNo: 1	0183				
Prep Date:	Analysis D	Date: 4/	29/2013	S	eqNo: 2	89965	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.52	0.020	0.5000	0	105	85	115			

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

			a b <i>c</i> 4	T					WO#:	1304A9
Hall Enviro	nmental Analy	/SIS L		ory, Inc.						13-May-1
Client: Project:	Blagg Engineering GCU # 169E									
Sample ID: MB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	300.0: Anions	6		
Client ID: PBW	Batch	ID: R1	0191	F	RunNo: 1	0191				
Prep Date:	Analysis D	ate: 4/	26/2013	S	SeqNo: 2	90383	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								
litrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								
Sample ID: LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	300.0: Anions	5		
Client ID: LCSW	Batch	ID: R1	0191	F	RunNo: 1	0191				
Prep Date:	Analysis D	ate: 4/	26/2013	S	SeqNo: 2	90384	Units: mg/L			
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
luoride	0.47	0.10	0.5000	0	94.2	90	110			
Chloride	4.7	0.50	5.000	0	93.4	90	110			
Nitrogen, Nitrite (As N)	0.92	0.10	1.000	0	91.8	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.9	90	110			
Sulfate	9.5	0.50	10.00	0	95.2	90	110			
Sample ID: MB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	300.0: Anions	5		
Client ID: PBW	Batch	ID: R1	0191	F	RunNo: 1	0191				
Prep Date:	Analysis D	ate: 4/	26/2013	S	SeqNo: 2	90438	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
luoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								
Sample ID: LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	300.0: Anions	6		
Client ID: LCSW	Batch	ID: R1	0191	F	RunNo: 1	0191				
Prep Date:	Analysis D	ate: 4/	26/2013	S	SeqNo: 2	90439	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	99.2	90	110			
Chloride	4.8	0.50	5.000	0	96.3	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	95.5	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			
Sulfate	9.8	0.50	10.00	0	97.7	90	110			

Qualifiers:

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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WO#: 1304A90

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1304A90
	13-May-13

Client: Project:	Blagg Engineering GCU # 169E								
Sample ID: MB	SampType:	MBLK	Tes	tCode: EP/	A Method	300.0: Anions	5		
Client ID: PBW	Batch ID:	R10287	F	RunNo: 102	287				
Prep Date:	Analysis Date:	5/2/2013	S	SeqNo: 293	3290	Units: mg/L			
Analyte	Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND 0.	.50							
Sample ID: LCS	SampType:	LCS	Tes	tCode: EP/	A Method	300.0: Anions	5		
Client ID: LCSW	Batch ID:	R10287	F	RunNo: 102	287				
Prep Date:	Analysis Date:	5/2/2013	S	SeqNo: 293	3291	Units: mg/L			
Analyte	Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.5 0.	.50 10.00	0	95.4	90	110			

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

Hall Environmen	tal Anal	ysis L	aborat	ory, Inc.						13-May-13
Client:BlaggProject:GCU #	Engineering 169E									
Sample ID: 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch	n ID: R1	0256	F	RunNo: 1	0256				
Prep Date:	Analysis D	Date: 5/	1/2013	5	SeqNo: 2	92424	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	21		20.00		103	69.4	129			
Sample ID: 100NG BTEX L	CS SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch ID: R10256			RunNo: 10256						
Prep Date:	Analysis D	0ate: 5/	1/2013	S	SeqNo: 2	92426	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	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	60	2.0	60.00	0	101	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		108	69.4	129			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

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WO#: 1304A90 13-May-13

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1304A90
	13-Mav-13

Client: Project:	Blagg Engineering GCU # 169E									
Sample ID: MB-7	237 Samp	Type: ME	BLK	Tes	tCode: SM	2540C MC	D: Total Diss	olved So	lids	
Client ID: PBW	Batc	h ID: 72	37	F	RunNo: 10 2	278				
Prep Date: 5/1/	2013 Analysis I	Date: 5/	2/2013	S	SeqNo: 29	3040	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-	7237 Samp	Type: LC	s	Tes	tCode: SM	2540C MC	D: Total Diss	olved So	lids	
Client ID: LCS	V Bato	h ID: 72	37	F	RunNo: 10 2	278				
Prep Date: 5/1/	2013 Analysis I	Date: 5/	2/2013	5	SeqNo: 29	3041	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			

- Value exceeds Maximum Contaminant Level. *
- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2
- Reporting Detection Limit RL

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.con

Sample Log-In Check List

Client Name: BLAGG	Work Order Number: 1304A90		RcptNo: 1
Received by/date:	office B		
Logged By: Lindsay Mangin	4/26/2013 10:00:00 AM	Juniy Hogo	
Completed By: Lindsay Mangin	4/26/2013 12:43:35 PM	Junky Hofeso	
	04/26/13	000	
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?	<u>Courier</u>		
Log In			
4. Was an attempt made to cool the sam	ples? Yes 🗹	No 🗆	
5. Were all samples received at a temper	ature of >0°C to 6.0°C Yes ☑	No 🗔	
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) p	roperly 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 🗹	# of preserved
12.Does paperwork match bottle labels? (Note discrepancies on chain of custod	y)	No 🗔	for pH:
13. Are matrices correctly identified on Cha	_	No 🗌	Adjusted 10.
14. Is it clear what analyses were requested	d? Yes 🗹	No 🗌	
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes 🔽	No 🗌	Checked by:

Special Handling (if applicable)

16. Was client notified of all di	screpancies with this order?	Yes 🗌	No 🗌	NA 🔽
Person Notified:	· · · · · · · · · · · · · · · · · · ·	Date:	· · · · · · ·	
By Whom:	· · · · · · · · · · · · · · · · · · ·	Via: 🗌 eMail [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			

Ü	hain-c	of-Cus	Chain-of-Custody Record	I urn-Around I	l ime:				-		Ű.		- A	Z				
Client:	BLAG	G ENGR.	BLAGG ENGR. / BP AMERICA	Standard	🗌 Rush _					ANALYSIS	Ľ			B	2	LABORATORY		
				Project Name:						www.	haller	viron	www.hallenvironmental.com	al.co	ε			
Mailing Address:	ddress:	P.O. BOX 87	X 87		GCU # 169E)E	7	4901 Hawkins NE	Hawki	ns NE		ndne	Albuquerque, NM 87109	Σ	8710	•		
	-	BLOOMI	BLOOMFIELD, NM 87413	Project #:				Tel. 505-345-3975	05-34	5-397		Fax 5	Fax 505-345-4107	5-41	07			
Phone #:		(505) 632-1199	:2-1199					-			Anal	ysis I	Analysis Request	sst				
email or Fax#:	ax#:			Project Manager:	er.		(1					(*						
QA/QC Package:	ckage: ard		Level 4 (Full Validation)		NELSON VELEZ	ELEZ				(5)		OS" "Od					Ð	
Accreditation:	tion:	□ Other		Sampler: On Ice:		ELEZ ஆழா பல	,8141				Å	² 0N'E	-				dwes a	
🗆 EDD (Type)	(ype)			Temp	rature: //	O), WC						
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO 1302 AGO	BTEX + MF	BTEX + MTBI BTEX + MTBI	TPH (Metho	PAH (8310 PAH (8310	RCRA 8 Me	D, I)	Total Disso	Nitrate N /			Grab sample 5 pt. compo	אַג צייאַאויפ זי <u>ס</u>
4/25/13	0955	WATER	MW # 1	40 ml VOA - 2	HCI & Cool	-001	٧									-		
4/25/13	09.55	WATER	MW # 1	500 ml - 1	Cool							V	۷			>		
4/25/13	260	WATER	MW # 1	250 ml - 1 $^{\mathcal{K}^{\mathrm{V}}}$	Her & Cool								>			~		
4/25/13	0955	WATER	MW # 1	250 ml - 1	H₂SO₄									V		N		
4/25/13	1210	WATER	MW # 2	40 ml VOA - 2	HCI & Cool	-602	٧									~		
4/25/13	0121	WATER	MW # 2	500 ml - 1	Cool							٧	٧			<u>۸</u>		
4/25/13	1210	WATER	MW # 2	250 ml - 1 প									>			V		
4/25/13	1210	WATER	MW # 2	250 ml - 1	H₂SO₄				-					N		V		
4/25/13	1340	WATER	MW # 3	40 ml VOA - 2	HCI & Cool	-003	٧									~		
4/25/13	0751	WATER	MW # 3	500 ml - 1	Cool							٧	٧			V		
4/25/13	1340	WATER	MW # 3	250 ml - 1	₩ HACE A								~			<u>ر</u>		
4/25/13	1340	WATER	MW # 3	250 ml - 1	H ₂ SO ₄									>		>		
Date:	Time:	Relinquished by	ed by:	Received by:		Date Time	Remarks:	rks:										
[1]57]	1604	Z	Mer Uf	Mutur	Weler	Yesh cilsel	Senc	Send invoice to	ce to :	Blage	Blagg Engineering. Inc.	eering	s. Inc.					
Date:		Relinquished by:	ed by: U	Received by:	-	/ Date Time				P.O.	P.O. Box 87							
21/22	Tarly	1. mater 1	and when		04/210	12 1000)				Bloor	Bloomfield, NM 87413	8 WN	7413					
	1 32	A Samples SI	Hall Frvironm	hommacted to other a	coredited laboratories	his serves as notice	of this nossibility	1	Any sub-contracted		, clata h	lo od lli	ion via	ated on the	the and	shifting re	te	

บี	ain-c	of-Cus	Chain-of-Custody Record		Э́Ш				I		li	5					/ _
Client:	BLAG	G ENGR.	BLAGG ENGR. / BP AMERICA	 ✓ Standard 	🗌 Rush				. <	I N	Ĭ	SI		ANALYSIS LABORATORY	۲.		, ≿
				Project Name:					i 5	www.hallenvironmental.com	allen	/ironn	nenta	com			1
Mailing Address:	dress:	P.O. BOX 87	X 87		GCU # 169E)E		4901	4901 Hawkins NE	is NE	- Alb	nquer	due, l	Albuquerque, NM 87109	109		
		BLOOM	BLOOMFIELD, NM 87413	Project #:			1	Tel. 5	505-345-3975	-3975		Fax 50	5-345	505-345-4107			
Phone #:		(505) 632-1199	12-1199				-				Analy	sis R	Analysis Request	st			
email or Fax#	:#X			Project Manager:	er:		(·				(*					
QA/QC Package:	kage: rd		Level 4 (Full Validation)		NELSON VELEZ	ELEZ	81208)			(SI	Ĭ	OS" ZOJ	(<u>.</u>			ə
Accreditation:	:uc	□ Other		Sampler: On Ice:	NELSON VELEZ	ELEZ ÂU	- '81/1		(T.81		Ли			V əf			Idmes
🗆 EDD (Type)	(be)			Sample Temper	rature:	<u>) • O · (</u>	- 3C		₽ pc		slet			Nitri		ə	ətiso
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. 1304 APSI C	BTEX ⊷MTI) 8710 + MTBI 92108 H91	трн (Меth	PAH (8310 EDB (Metho	вска 8 Me	D, H) snoinA	Total Dissol	Vitrate V /		Grab sampl	5 pt. compo
4/25/13	1255	WATER	MW # 4	40 ml VOA - 2	HCI & Cool	-004	V									٧	
4/25/13	1255	WATER	MW #4	500 ml - 1	Cool							>	>			>	
4/25/13	12.55	WATER	MW # 4	250 ml - 1	AND & Cool								>			>	
4/25/13	1255	WATER	MW #4	250 ml - 1	H ₂ SO ₄									>		٧	
4/25/13	1125	WATER	MW #5	40 ml VOA - 2	HCI & Cool	Ş	>									٧	
4/25/13	1125	WATER	MW # 5	500 ml - 1	Cool							<u> </u>	>			٧	
4/25/13	1125	WATER	MW # 5	250 ml - 1	Hiller & Cool								>			>	
4/25/13	1125	WATER	MW # 5	250 ml - 1	H ₂ SO ₄									V		λ	
4/25/13	040	WATER	9 # MW	40 ml VOA - 2	HCI & Cool	-000-	٧									>	
4/25/13	10 Y O	WATER	MW # 6	500 ml - 1	Cool			-				<u> </u>	۷			V	
4/25/13	1040	WATER	MW # 6	250 ml - 1									V			>	
5/13	1040		9 # MW	1	H ₂ SO ₄									٨		٧	
Date: / / / 2 イ/ 3	Time: <i> と</i> のイ	Relinquished by	R	Received by: $\int_{V} h_{A}$. L_{F}	1010	Date Time	Remarks: Send inv	emarks: Send invoice to	ce to :								
	Time:	Relinquished by:	l	Received by:	JUL ARV				_	Blagg Engineering, Inc.	ingine	ering,	lnc.				
4/25/12	TIS D	M	750 Mundle Delle	, A	04/20	1/2 1001				r.u. bux s/ Bloomfield, NM 87413	ield, l	VM 87	413				
	If necessa	IN Samples SI	ubmitted to Hall Environmental may be su	bcontracted to other a	ocredited laboratories	s. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	of this pos	sibility. A	ny sub-oc	Intracted	data wi	l be clea	arly notat	ed on the	e analvtic	al report	



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

May 18, 2015

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 169E

OrderNo.: 1505687

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/15/2015 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order: 1505687

Date Reported: 5/18/2015

CLIENT: Project:	Blagg Engineering GCU # 169E				Lab O	rder: 150	5687	
Lab ID:	1505687-001			Collection I	Date: 5 /1	4/2015 12:30:0	0 PM	
Client Sample	e ID: MW # 2			Ma	trix: AQ	UEOUS		
Analyses		Result	RL Q	ual Units	DF	Date Analyzed	l Ba	atch ID
EPA METHO	D 8021B: VOLATILES					ŀ	nalyst	: NSB
Benzene		ND	1.0	µg/L	1	5/15/2015 9:05:	15 PM	R26234
Toluene		ND	1.0	μg/L	1	5/15/2015 9:05:	15 PM	R26234
Ethylbenzene	9	ND	1.0	µg/L	1	5/15/2015 9:05:	15 PM	R26234
Xylenes, Tota		ND	2.0	μg/L	1	5/15/2015 9:05:	15 PM	R26234
Surr: 4-Bro	omofluorobenzene	97.8	80-120	%REC	1	5/15/2015 9:05:	15 PM	R26234
Lab ID:	1505687-002			Collection I	Date: 5 /1	4/2015 2:30:00	PM	
Client Sample	e ID: MW # 3			Ma	trix: AQ	UEOUS		
Analyses		Result	RL Q	ual Units	DF	Date Analyzed	l Ba	atch ID
EPA METHO	D 8021B: VOLATILES					ŀ	Analyst	: NSB
Benzene		ND	1.0	µg/L	1	5/15/2015 9:34:	01 PM	R26234
Toluene		ND	1.0	µg/L	1	5/15/2015 9:34:	01 PM	R26234
Ethylbenzene	9	ND	1.0	µg/L	1	5/15/2015 9:34:	01 PM	R26234
Xylenes, Tota	al	ND	2.0	µg/L	1	5/15/2015 9:34:	01 PM	R26234
Surr: 4-Brc	omofluorobenzene	99.6	80-120	%REC	1	5/15/2015 9:34:	01 PM	R26234
Lab ID:	1505687-003			Collection I	Date: 5 /1	4/2015 1:30:00	РМ	
Client Sample	e ID: MW # 4			Ma	trix: AQ	UEOUS		
Analyses		Result	RL Q	ual Units	DF	Date Analyzed	l Ba	atch ID
EPA METHO	D 8021B: VOLATILES					ļ	nalyst	: NSB
Benzene		ND	1.0	µg/L	1	5/15/2015 10:02	:45 PM	R26234
Toluene		ND	1.0	μg/L	1	5/15/2015 10:02	:45 PM	R26234
Ethylbenzene)	ND	1.0	μg/L	1	5/15/2015 10:02		
Xylenes, Tota	al	ND	2.0	μg/L	1	5/15/2015 10:02	:45 PM	R26234
	omofluorobenzene	102	80-120	%REC				R26234

Hall Environmental Analysis Laboratory, Inc.

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

- * Value exceeds Maximum Contaminant Level. Value above quantitation range
- E
- J Analyte detected below quantitation limits
- RSD is greater than RSDlimit 0
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н ND
- Not Detected at the Reporting Limit
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Page 1 of 3

Analytical Report

Lab Order: 1505687

Date Reported: 5/18/2015

	v		• •		Date	1	12010	
CLIENT: Project:	Blagg Engineering GCU # 169E				Lab Orde	r: 1505	587	
Lab ID:	1505687-004			Collection D	ate: 5/14/20	015 11:30:00	AM	
Client Sample	ID: MW # 5			Mat	trix: AQUE	OUS		
Analyses		Result	RL Qua	l Units	DF Dat	te Analyzed	Batch	ID
EPA METHOD	0 8021B: VOLATILES					An	alyst: NS	в
Benzene		ND	1.0	µg/L	1 5/1	5/2015 10:31:2	5 PM R2	6234
Toluene		ND	1.0	µg/L	1 5/1	5/2015 10:31:2	5 PM R2	6234
Ethylbenzene		ND	1.0	µg/L	1 5/1	5/2015 10:31:2	5 PM R2	6234
Xylenes, Total	I	ND	2.0	µg/L	1 5/1	5/2015 10:31:2	5 PM R2	6234
Surr: 4-Bror	mofluorobenzene	98.0	80-120	%REC	1 5/1	5/2015 10:31:2	5 PM R2	6234
Lab ID:	1505687-005			Collection D	ate: 5/14/20	015 10:30:00	AM	
Client Sample	ID: MW # 6			Mat	trix: AQUE	OUS		
Analyses		Result	RL Qua	l Units	DF Dat	te Analyzed	Batch	ID
EPA METHOD	0 8021B: VOLATILES					An	alyst: NS	BB
Benzene		ND	1.0	µg/L	1 5/1	5/2015 11:00:0	7 PM R2	6234
Toluene		ND	1.0	μg/L	1 5/1	5/2015 11:00:0	7 PM R2	6234
Ethylbenzene		ND	1.0	μg/L	1 5/1	5/2015 11:00:0	7 PM R2	6234
Xylenes, Total	l	ND	2.0	μg/L	1 5/1	5/2015 11:00:0	7 PM R2	6234
	mofluorobenzene	100	80-120	%REC	1 5/1	5/2015 11:00:0		000

Hall Environmental Analysis Laboratory, Inc.

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

- * Value exceeds Maximum Contaminant Level. Value above quantitation range
- E
- J Analyte detected below quantitation limits
- RSD is greater than RSDlimit 0
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н ND Not Detected at the Reporting Limit
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Page 2 of 3

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

WO#: **1505687** *18-May-15*

Client:	Blagg Engineering
Project:	GCU # 169E

Sample ID 100NG BTEX LC	Sama		·e	Toe		PA Mothod	9021 B. Volat	iloe		
•	•	1 31			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSW	Batcl	Batch ID: R26234			RunNo: 26234					
Prep Date:	Analysis D	Date: 5/	15/2015	S	SeqNo: 7	79458	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	80	120			
Toluene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	21	1.0	20.00	0	106	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		94.3	80	120			
	15		20.00		34.5	00	120			
Sample ID 5ML RB		Type: ME		Tes			8021B: Volat	iles		
	SampT	Гуре: МЕ h ID: R2	BLK			PA Method		iles		
Sample ID 5ML RB	SampT	h ID: R2	3LK 6234	R	tCode: El	PA Method 6234		iles		
Sample ID 5ML RB Client ID: PBW	Samp1 Batcl	h ID: R2	3LK 6234 15/2015	R	tCode: El RunNo: 20	PA Method 6234	8021B: Volat	iles %RPD	RPDLimit	Qual
Sample ID 5ML RB Client ID: PBW Prep Date:	Samp1 Batcl Analysis [h ID: R2 Date: 5/	3LK 6234 15/2015	R S	tCode: El RunNo: 2 GeqNo: 7	PA Method 6234 79481	8021B: Volat Units: μg/L		RPDLimit	Qual
Sample ID 5ML RB Client ID: PBW Prep Date: Analyte	Samp1 Batcl Analysis D Result	h ID: R2 Date: 5/ PQL	3LK 6234 15/2015	R S	tCode: El RunNo: 2 GeqNo: 7	PA Method 6234 79481	8021B: Volat Units: μg/L		RPDLimit	Qual
Sample ID 5ML RB Client ID: PBW Prep Date: Analyte Benzene	SampT Batcl Analysis D Result ND	h ID: R2 Date: 5/ PQL 1.0	3LK 6234 15/2015	R S	tCode: El RunNo: 2 GeqNo: 7	PA Method 6234 79481	8021B: Volat Units: μg/L		RPDLimit	Qual
Sample ID 5ML RB Client ID: PBW Prep Date: Analyte Benzene Toluene	SampT Batcl Analysis E Result ND ND	h ID: R2 Date: 5/ PQL 1.0 1.0	3LK 6234 15/2015	R S	tCode: El RunNo: 2 GeqNo: 7	PA Method 6234 79481	8021B: Volat Units: μg/L		RPDLimit	Qual

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- 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
 - P Sample pH Not In Range
 - RL Reporting Detection Limit

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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

Contraction of the second s

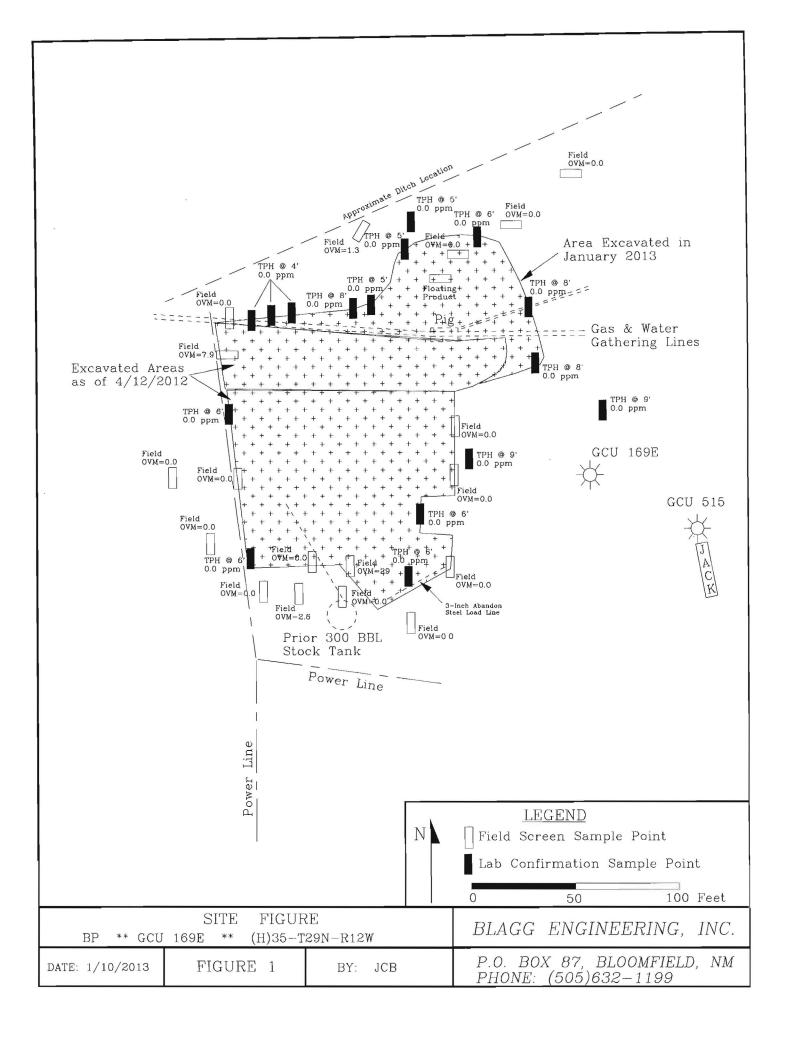
est and so a set

		4506097		RcptNo: 1	
Client Name: BLAGG	Work Order Number:	1909001		Nopulo. I	
Received by/date: AT	05 15/15				
Logged By: Lindsay Mangin	5/15/2015 7:26:00 AM		January Mongo		
Completed By: Lindsay Mangin	5/15/2015 8:14:17 AM		Junuby Hologo		
Reviewed By: DT 5-15-	15				
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?		<u>Courier</u>			
Log In		Yes 🖌	No 🗆		
4. Was an attempt made to cool the sample	95?				
5. Were all samples received at a temperation	ure of >0° C to 6.0°C	Yes 🛃	Νο	NA 🗔	
6. Sample(s) in proper container(s)?		Yes 🖈	No 🗌		
Sufficient sample volume for indicated term		Yes 🗹	No 🗆 No 🗔		
8. Are samples (except VOA and ONG) pro	perly preserved?	Yes 🛃	No 🗖	NA 🗌	
9. Was preservative added to bottles?		Yes 🗌			
10.VOA vials have zero headspace?		Yes 🛃	No 🗌	No VOA Vials 🗌	
11. Were any sample containers received be	roken?	Yes 🗆	No 🛃	# of preserved	
				bottles checked	
12. Does paperwork match bottle labels?		Yes 🛃	No	for pH: (<2 or	>12 unless noted)
(Note discrepancies on chain of custody		Yes 🛃	No 🗆	Adjusted?	
13. Are matrices correctly identified on Chair 14, Is it clear what analyses were requested		Yes 🖻	No 🗔		
15. Were all holding times able to be met?	•	Yes 🛃	No 🗌	Checked by:	. <u></u>
(If no, notify customer for authorization.)				···· · ·	
<u>Special Handling (if applicable)</u>					
16. Was client notified of all discrepancies v	vith this order?	Yes 🗋	No 🛄	NA 🖻	
Person Notified:	Date:				
By Whom:	Via:	🗌 eMail 📋] Phone 🔲 Fax	In Person	
Regarding:					
Client Instructions:					J
17. Additional remarks:					
18. Cooler Information				,	
Cooler No Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By	4	
1 1.2 Good	Yes	ana ah ya kakali kata ana ang ang ang batang ang ang ang baha			

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Σ	2	۶	8710	01												_	+		-	+		-				IM 87	
Z	BO	al.cor	ž	5-41	st	•		_			Iron, Ferr Nitrate N		-							+	-+					ton, N	
RC	Z	lenta	que,	5-34	edne				-		Total Diss					╉	╉	+	-+	-+	-+					ming) !
· 2	S	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request	(*0					a) snoinA								-			-				BILL DIRECTLY TO BP: Ieff Peace. 200 Energy Court, Farmington, NM 87401	
	Ž N	llenvi	Albu	E	naly: I						VI 8 A929															Cour	ME
	F	w.hal	- 97	975	< -		(SM			<u> </u>	158) HA9					_	_		$ \downarrow$) BP: nergy	ZEVHO1REME
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			Hawl	05-3							tem) HqT					+	╉	+	_							RECT are. J	. 2
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GCU 169E

Remedial Excavation Documentation



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COVER LETTER

Wednesday, December 21, 2011

Nelson Velez Blagg Engineering P. O. Box 87 Bloomfield, NM 87413

TEL: (505) 632-1199 FAX (505) 632-3903

RE: GCU #169E

Dear Nelson Velez:

Order No.: 1112533

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 12/12/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901 AZ license # AZ0682

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00	5			413			Level 4 (Full Validation)				Sample Request ID	GW-TB @ 5.5' (95 BGT)	GW-TB @ 5.5' (95 BGT)	4PC-SW @ 2' (95 BGT))	1		onmen
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0Ę.	BLAGG ENGR. / BP AMERICA		Р.(BL	(21				D						-	 	 			<u> </u>	-			If necessary, samples submitted to Hall Environmental may be subcontracted to other a
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Chain-of-Custody Record			Addr		<u>.</u> .	Fax	acka dard	ation	Ч	٩ E				 		 	 				Ę۲.	-@\~ ~		Ĩ
U	Client:		Mailing Address:		Phone #:	email or Fax#	QA/QC Package:	Accreditation:		🗆 EDD (Type)	Date	12/8/11	12/8/11	12/8/11							111	ti li	te: ר ו ר ו	+
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CLIENT:	Blagg Engineering			Clier	t Sample D	D: GW-TB (@ 5.5' (95 BGT)
Lab Order:	1112533			Co	llection Dat	e: 12/8/201	1 2:50:00 PM
Project:	GCU #169E			D	ate Receive	d: 12/12/20	11
Lab ID:	1112533-01				Matri	x: AQUEOU	JS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8021B: VOLATILES						Analyst: RAA
Benzene		ND	1.0		µg/L	1	12/13/2011 7:31:27 PN
Toluene		ND	1.0		µg/L	1	12/13/2011 7:31:27 PN
Ethylbenzene		ND	1.0		µg/L	1	12/13/2011 7:31:27 PN
Xylenes, Total	ι.	2.1	2.0		µg/L	1	12/13/2011 7:31:27 PN
Surr: 4-Brom	ofluorobenzene	102	76.5-115		%REC	1	12/13/2011 7:31:27 PN
EPA METHOD	300.0: ANIONS						Analyst: BR

10

mg/L

20

220

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:

Chloride

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Date: 21-Dec-11 Analytical Report

12/13/2011 4:11:21 AM

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Dec-11 Analytical Report

CLIENT:	Blagg Engineering			Client Sample II	D: 4PC-SW	@ 2' (95 BGT)
Lab Order:	1112533			Collection Dat	e: 12/8/201	1 3:00:00 PM
Project:	GCU #169E			Date Receive	d: 12/12/20	11
Lab ID:	1112533-02			Matri	x: SOIL	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8	015B: DIESEL RANGE	ORGANICS				Analyst: JB
Diesel Range Or	ganics (DRO)	ND	9.7	mg/Kg	1	12/18/2011 9:12:11 AM
Surr: DNOP		99.3	77.4-131	%REC	1	12/18/2011 9:12:11 AM
EPA METHOD 8	015B: GASOLINE RANG	GE				Analyst: RAA
Gasoline Range	Organics (GRO)	ND	4.8	mg/Kg	1	12/16/2011 5:22:54 PM
Surr: BFB		93.2	69.7-121	%REC	1	12/16/2011 5:22:54 PM
EPA METHOD 8	021B: VOLATILES					Analyst: RAA
Benzene		ND	0.048	mg/Kg	1	12/16/2011 5:22:54 PM
Toluene		ND	0.048	mg/Kg	1	12/16/2011 5:22:54 PM
Ethylbenzene		ND	0.048	mg/Kg	1	12/16/2011 5:22:54 PM
Xylenes, Total		ND	0.097	mg/Kg	1	12/16/2011 5:22:54 PM
Surr: 4-Bromo	fluorobenzene	98.3	80-120	%REC	1	12/16/2011 5:22:54 PM
EPA METHOD 3	00.0: ANIONS					Analyst: BRM
Chloride		30	1.5	mg/Kg	1	12/19/2011 9:27:05 PM
EPA METHOD 4	18.1: TPH					Analyst: JB
Petroleum Hydro	carbons, TR	ND	20	mg/Kg	1	12/15/2011

Qualifiers:

* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client:Blagg EngineProject:GCU #1691	-								Work	Order:	1112533
Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec L	owLimit Hi	ghLimit	%RPD	RPDLimit	Quai
Method: EPA Method 300.0: A	nions							_	_		
Sample ID: MB-29780		MBLK				Batch ID:	29780	Analysi	is Date:	12/19/2011	7:07:48 PM
Chloride Sample ID: LCS-29780	ND	mg/Kg LCS	1.5			Batch ID:	29780	Analysi	is Date:	12/10/2011	7:25:13 PM
Chloride	14.23	mg/Kg	1.5	15	0	94,9	90	110	S Date.	12/19/2011	7.20.13 FIV
											<u> </u>
Method: EPA Method 300.0: A Sample ID: MB	nions	MBLK				Batch ID:	R49564	Analysi	is Date:	12/12/2011	1:54:31 PM
Chloride	ND	mg/L	0.50					, analye			
Sample ID: MB		MBLK	0.00			Batch ID:	R49564	Analysi	is Date:	12/12/2011	9:21:43 PM
Chloride	ND	mg/L	0.50								
Sample ID: LCS		LCS				Batch ID:	R49564	Analysi	is Date:	12/12/2011	2:06:56 PM
Chloride	4.755	mg/L	0.50	5	0	95.1	90	110			
Sample ID: LCS		LCS				Batch ID:	R49564	Analysi	is Date:	12/12/2011	9:34:07 PM
Chloride	4.704	mg/L	0.50	5	0	94.1	90	1 10			
Method: EPA Method 418.1: T	РН										
Sample ID: MB-29751		MBLK				Batch ID:	29751	Analysi	is Date:		12/15/2011
Petroleum Hydrocarbons, TR	ND	mg/Kg	20								
Sample ID: LCS-29751		LCS				Batch ID:	29751	Analysi	is Date:		12/15/2011
Petroleum Hydrocarbons, TR	98.96	mg/Kg	20	100	0	99.0	87.8	115			
Sample ID: LCSD-29751		LCSD			_	Batch ID:	29751	-	is Date:		12/15/2011
Petroleum Hydrocarbons, TR	101.4	mg/Kg	20	100	0	101	87.8	115	2.44	8.04	
Method: EPA Method 8015B:	Diesel Range	-									
Sample ID: MB-29749		MBLK				Batch ID:	29749	Analysi	is Date:	12/15/2011	6:06:49 AM
Diesel Range Organics (DRO)	ND	mg/Kg	10						. D.r.	10/15/00/14	
Sample ID: LCS-29749		LCS				Batch ID:	29749	•	is Date:	12/15/2011	6:40:42 AM
Diesel Range Organics (DRO)	59.39	mg/Kg	10	50	0	119	62.7	139		_	
Method: EPA Method 8015B:	Gasoline Ra	-				=	_		_		
Sample ID: MB-29737		MBLK				Batch ID:	29737	Analysi	is Date:	12/16/2011 1	12:20:27 PM
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0				00-0-	8	a Datas	10/10/0011	4.40.50 415
Sample ID: LCS-29737		LCS		~-	0.00	Batch ID:	29737	•	is Date:	12/16/2011	11:19:58 AM
Gasoline Range Organics (GRO)	28.64	mg/Kg	5.0	25	2.06	106	86.4	132			

Qualifiers:

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded

NC Non-Chlorinated

R RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Project:	Blagg Engineering GCU #169E							,	Worl	k Order:	1112533
Analyte	Result	Units	PQL	SPK Va	a SPK ref	%Rec L	owLimit Hi	ghLimit %	6RPD) RPDLin	nit Qual
Method: EPA N	lethod 8021B: Volatiles										
Sample ID: MB-2	29737	MBLK				Batch ID:	29737	Analysis I	Date:	12/16/2011	12:20:27 PM
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: LCS	-29737	LCS				Batch ID:	29737	Analysis I	Date:	12/16/2011	11:50:10 AM
Benzene	1. 048	mg/Kg	0.050	1	0.0038	104	80	120			
Toluene	1.009	mg/Kg	0.050	1	0.0059	100	80	120			
Ethylbenzene	1.070	mg/Kg	0.050	1	0.0085	106	80	120			
Xylenes, Total	3.322	mg/Kg	0.10	3	0	111	80	120			
Method: EPA N	lethod 8021B: Volatiles										
Sample ID: 5ML-	RB	MBLK				Batch ID:	R49592	Analysis I	Date:	12/13/2011	I 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: 100N	IG BTEX LCS	LCS				Batch ID:	R49592	Analysis I	Date:	12/13/2011	I 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			

Qualifiers:

Е Estimated value

J Analyte detected below quantitation limits

Not Detected at the Reporting Limit $\mathbf{N}\mathbf{D}$

- Н Holding times for preparation or analysis exceeded
- NC Non-Chlorinated
- R RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

·····	Sample	Receip	ot Cheo	:klist			
Client Name BLAGG				Date Received	l:		12/12/2011
Work Order Number 1112533				Received by:	LNM		
Checklist completed by:		2/15) Date	Sample ID la	bels checked		Initials
Matrix:	Oanijer name:	<u>Courier</u>	[
Shipping container/cooler in good condition?		Yes 🔽		No 🗌	Not Present		
Custody seals intact on shipping container/cool	er?	Yes 🔽		Νο	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 🔽		Νο			
Sufficient sample volume for indicated test?		Yes 🔽		No 🗀			
All samples received within holding time?		Yes 🔽		Νο			Number of preserved
Water - VOA vials have zero headspace?	No VOA vials subi	mitted]	Yes 🗹	No 🗌		bottles checked for pH:
Water - Preservation labels on bottle and cap m	natch?	Yes		Νο	N/A 🗹		
Water - pH acceptable upon receipt?		Yes 🗌		No 🗌	N/A 🗹		<2 >12 unless noted
Container/Temp Blank temperature?		4.6°	· <	6° C Acceptabl	e		below.
COMMENTS:			lf	given sufficient	time to cool.		
	======						=======
Client contacted	Date contacted:			Pers	on contacted		
Contacted by:	Regarding:		· · · · · · · · · · · · · · · · · · ·				
Comments:							
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<u></u>							
Corrective Action							. <u> </u>
		,				_	



April 18, 2012

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: GCU #169E

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

OrderNo.: 1204536

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/13/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

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	Rush		GCU # 169E				JEFF BLAGG		<u> </u>	Preservative Type	-												3	Č	Ź
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S				3			Level 4 (Full Validation)	ŀ		Sample Request ID	GS @ 6' (NW corner) -	183', N80.5W											٦		معدووا
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Cu	NG		P.O. BOX 87	BLOOMFIELD, NM 87413	(505) 632-1199		نے ،			Matrix	SOIL											Relinquished by:		Relinquished by: 	men /
Chain-of-Custody Record	BLAGG ENGR. / BP AMERICA		ď	BL	(<u>2</u>																		- 1	<u>8</u> <	
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С О	ij		Mailing Address:		Phone #:	email or Fax#:	QA/QC Package:	Accreditation:	EDD (Type)	Date	4/11/12												12		7
	Client:		Mail		Phoi	ema	ĕ⊡	Accreditatic		ă	4/1											Date	21/2	Date: נו/	2, 1

Analytical Report Lab Order 1204536 Date Reported: 4/18/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Project: GCU #169E

1204536-001

Lab ID:

Client Sample ID: GS @ 6' (NW Corner)- 183', N8 Collection Date: 4/11/2012 9:50:00 AM Received Date: 4/13/2012 9:45:00 AM

		~			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGI	E ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/16/2012 8:27:22 AM
Surr: DNOP	96.2	77.4-131	%REC	1	4/16/2012 8:27:22 AM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/16/2012 5:54:15 PM
Surr: BFB	100	69.7-121	%REC	1	4/16/2012 5:54:15 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.049	mg/Kg	1	4/16/2012 5:54:15 PM
Toluene	ND	0.049	mg/Kg	1	4/16/2012 5:54:15 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/16/2012 5:54:15 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/16/2012 5:54:15 PM
Surr: 4-Bromofluorobenzene	94.3	80-120	%REC	1	4/16/2012 5:54:15 PM

Matrix: SOIL

Qualifiers:	*/X	Va
Quanners.	/ 21	• • •

*/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

					or y, me.						18-Apr-12
Client: Project:	Blagg Eng GCU #16										
Sample ID	MB-1530	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	PBS	Batch	n ID: 15	30	F	RunNo: 2	143				
Prep Date:	4/13/2012	Analysis D	ate: 4/	16/2012	S	SeqNo: 5	9548	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	ND	10								
Surr: DNOP		9.9		10.00		99.2	77.4	131			
Sample ID	LCS-1530	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	LCSS	Batch	n ID: 15	30	F	RunNo: 2	143				
Prep Date:	4/13/2012	Analysis D	ate: 4/	16/2012	S	SeqNo: 5	9549	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	36	10	50.00	0	72.8	62.7	139			
Surr: DNOP		4.4		5.000		87.5	77.4	131			
Sample ID	1204532-001AMSE) SampT	ype: M	SD	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	BatchQC	Batch	n ID: 15	30	F	RunNo: 2	143				
Prep Date:	4/13/2012	Analysis D	ate: 4/	17/2012	S	SeqNo: 5	9829	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	51	10	50.15	0	102	57.2	146	0.0391	26.7	
Surr: DNOP		5.3		5.015		105	77.4	131	0	0	
Sample ID	1204532-001AMS	SampT	ype: MS	6	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	BatchQC	Batch	n ID: 15	30	F	RunNo: 2	155				
Prep Date:	4/13/2012	Analysis D	ate: 4/	17/2012	S	SeqNo: 6	0424	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	organics (DRO)	51	10	50.15	0	102	57.2	146			
Surr: DNOP		4.5		5.015		90.3	77.4	131			

*/X Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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

Hall Environmental Analysis Laboratory, Inc.

WO#:

Hall Er	vironment	al Anal	ysis I	Laborat	ory, Inc.					w0#.	1204550 18-Apr-12
Client: Project:	Blagg Er GCU #1	ngineering 69E									
Sample ID	MB-1523	SampT	Гуре: М	BLK	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	е	
Client ID:	PBS	Batch	h ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4	/16/2012	S	SeqNo: 5	9997	Units: mg/ł	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 1,000	5.0	1,000		101	69.7	121			
Sample ID	LCS-1523	SampT	Type: LC	s	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	е	
Client ID:	LCSS	Batch	h ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4/	/16/2012	S	SeqNo: 5	9998	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
•	e Organics (GRO)	29	5.0	25.00	0	116	98.5	133			
Surr: BFB		1,100		1,000		108	69.7	121			
Sample ID	1204532-001AMS	SampT	Гуре: М	5	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	е	
Client ID:	BatchQC	Batch	h ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4/	/16/2012	5	SeqNo: 6	0036	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	27	4.8	23.99	0	111	85.4	147			
Surr: BFB		1,000		959.7		108	69.7	121			
Sample ID 1204532-001AMSD SampType: MSD TestCode: EPA Method 8015B: Gasoline Range											
Client ID:	BatchQC	Batch	h ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4	/16/2012	S	SeqNo: 6	0043	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	28	4.8	24.13	0	115	85.4	147	3.51	19.2	
Surr: BFB		1,100		965.3		109	69.7	121	0	0	

*/X Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#: 1204536 18-Apr-12

			0		ory, Inc.						18-Apr-
Client: Project:	Blagg En GCU #16	ngineering 59E									
Sample ID	MB-1523	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batch	n ID: 15	23	F	aunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4/	16/2012	S	eqNo: 6	0070	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050								
oluene		ND	0.050								
thylbenzene		ND	0.050								
(ylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	0.96		1.000		96.2	80	120			
Sample ID	LCS-1523	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	n ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4/	16/2012	5	SeqNo: 6	0071	Units: mg/Kg			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene		0.92	0.050	1.000	0	92.0	83.3	107			
oluene		0.94	0.050	1.000	0	94.4	74.3	115			
thylbenzene		0.94	0.050	1.000	0	93.8	80.9	122			
(ylenes, Total		2.8	0.10	3.000	0	94.8	85.2	123			
Surr: 4-Brom	ofluorobenzene	0.99		1.000		98.9	80	120			
Sample ID	1204534-001AMS	SampT	туре: М	3	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch	n ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4/	16/2012	S	SeqNo: 60088 Unit					
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene		0.87	0.047	0.9443	0	92.1	67.2	113			
oluene		0.91	0.047	0.9443	0	96.4	62.1	116			
thylbenzene		0.89	0.047	0.9443	0	94.8	67.9	127			
ylenes, Total		2.7	0.094	2.833	0	96.4	60.6	134			
Surr: 4-Brom	ofluorobenzene	0.93		0.9443		98.0	80	120			
Sample ID	1204534-001AMS	D SampT	туре: М	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch	n ID: 15	23	F	RunNo: 2	146				
Prep Date:	4/13/2012	Analysis D	Date: 4/	16/2012	S	SeqNo: 6	0089	Units: mg/k	(g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene		0.89	0.048	0.9597	0	92.8	67.2	113	2.45	14.3	
oluene		0.92	0.048	0.9597	0	95.5	62.1	116	0.718	15.9	
thylbenzene		0.91	0.048	0.9597	0	94.9	67.9	127	1.75	14.4	
(ylenes, Total		2.7	0.096	2.879	0	95.3	60.6	134	0.378	12.6	
	ofluorobenzene	0.93		0.9597		97.0	80	120	0	0	

*/X Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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

WO#: 1204536



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 Nan	ne:	BLAGG			Wa	ork Ord	er N	łumb	er: 12	204536			
Received		-	7	Hilph	~								
			X	W411511	<i>Ъ</i>				A	ŕ			
Logged By		Ashley Gal	-	4/13/2012 9:45					A.)			
Completed	-	Ashley Gal		4/13/2012 10:0	7:05 AM				A	ŕ			
Reviewed	By: 🞵	EO 04/1	3/10										
<u>Chain of</u>			1										
1. Were	seals i	intact?				Yes		No		Not Pre	sent 🗸		
2. Is Ch	ain of C	Custody com	plete?			Yes	✓	No		Not Pre	sent		
3. How	was the	e sample deli	vered?			<u>Couri</u>	er						
<u>Log In</u>													
	ers are	present? (se	e 19. for cooler si	pecific information	n)	Yes	~	No			NA		
4. 000%	510 010				·,								
5. Was	an atte	mpt made to	cool the samples	\$?		Yes	✓	No			NA		
6. Were	all san	nples receive	ed at a temperatu	re of >0° C to 6.0	°C	Yes	✓	No			NA		
7 Came			ainar(a)2			Vee		No					
•••		n proper cont		۱ (۵\۵		Yes Yes		No					
			e for indicated tes A and ONG) prop			Yes		No			•		
		vative added		eny preserveu?		Yes	•	No	v		NA		
10. 1045	preserv	valive audeu	to bottles:			103		110					
1 1 . VOA	vials h	ave zero hea	dspace?			Yes		No	1	No VOA V	Vials 🗸		
12. Were	e any sa	ample contai	ners received bro	ken?		Yes		No	✓	ľ	(
		work match b				Yes	~	No			of preserved ttles checked		
			hain of custody)	of Custody?		Voc	~	No		for	°pH: (<2	or >12 unle	ss noted)
			entified on Chain were requested?	or custody?		Yes Yes	ÿ	No			Adjusted?		sa notea)
			ble to be met?			Yes	V						
			r authorization.)								Checked by:		
<u>Special</u>	Hand	ling (if ap	plicable)										
17. Was	client r	notified of all	discrepancies wit	h this order?		Yes		No			NA 🗸		
	Persor	Notified:			Date			*****	u and s as he doed	tela partetti jägään			•
	By Wh			ningin werden anwendenis betreit in der Kalenstein im der	Via:	eMa	il	PI	none	Fax	In Person		
	Regard		2	annan an an San San San San San San San	araa kangaratara ka Jini	1	A	- 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 2			rarafrasaadira aana dhadhada aa dhaana	2013-112 2	
	Client I	Instructions:		an a	aneroza di da cara da c	0123842803812802/198	STRACING AND	8. ME FOR MENN	10-06-8456644113	nentangana na analan	an an ann an	CRUMPY	
18. Addit	tional re	emarks:									i.		
10		•											
19. <u>Cool</u>	er Info	rmation											

 Cooler No
 Temp °C
 Condition
 Seal Intact
 Seal No
 Seal Date
 Signed By

 1
 1.3
 Good
 Yes
 Yes



March 02, 2012

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX

RE: GCU 169E

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

OrderNo.: 1202931

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/29/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1202931 Date Reported: 3/2/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: TH-8 @ 6' Collection Date: 2/24/2012 9:13:00 AM

Lab ID: 1202931-001	Matrix:	SOIL	Received D	ate: 2/29/2	012 9:30:00 AM
Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	3/1/2012 9:17:45 AM
Surr: DNOP	85.9	77.4-131	%REC	1	3/1/2012 9:17:45 AM
EPA METHOD 8015B: GASOLINE RA	ANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	3/1/2012 12:47:14 PM
Surr: BFB	130	69.7-121	S %REC	1	3/1/2012 12:47:14 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.049	mg/Kg	1	3/1/2012 12:47:14 PM
Toluene	ND	0.049	mg/Kg	1	3/1/2012 12:47:14 PM
Ethylbenzene	ND	0.049	mg/Kg	1	3/1/2012 12:47:14 PM
Xylenes, Total	ND	0.098	mg/Kg	1	3/1/2012 12:47:14 PM
Surr: 4-Bromofluorobenzene	117	85.3-139	%REC	1	3/1/2012 12:47:14 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 1202931 Date Reported: 3/2/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: TH-11 @ 6' Collection Date: 2/24/2012 9:57:00 AM Received Date: 2/29/2012 9:30:00 AM

Lab ID: 1202931-002	Matrix:	SOIL	Received D	ate: 2/29/2	012 9:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	3/1/2012 11:55:03 AM
Surr: DNOP	88.9	77.4-131	%REC	1	3/1/2012 11:55:03 AM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/1/2012 1:17:30 PM
Surr: BFB	114	69.7-121	%REC	1	3/1/2012 1:17:30 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.050	mg/Kg	1	3/1/2012 1:17:30 PM
Toluene	ND	0.050	mg/Kg	1	3/1/2012 1:17:30 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/1/2012 1:17:30 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/1/2012 1:17:30 PM
Surr: 4-Bromofluorobenzene	112	85.3-139	%REC	1	3/1/2012 1:17:30 PM

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Ana
	Е	Value above quantitation range	Н	Hold
	J	Analyte detected below quantitation limits	ND	Not

- 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 1202931 Date Reported: 3/2/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: TH-14 @ 4' Collection Date: 2/24/2012 11:11:00 AM Received Date: 2/29/2012 9:30:00 AM

Lab ID: 1202931-003	Matrix:	SOIL	Received I	Date: 2/29/20	012 9:30:00 AM
Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	1,500	99	mg/Kg	10	3/1/2012 5:38:38 PM
Surr: DNOP	0	77.4-131	S %REC	10	3/1/2012 5:38:38 PM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: RAA
Gasoline Range Organics (GRO)	8,500	970	mg/Kg	200	3/1/2012 3:49:06 PM
Surr: BFB	107	69.7-121	%REC	200	3/1/2012 3:49:06 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	67	9.7	mg/Kg	200	3/1/2012 3:49:06 PM
Toluene	610	9.7	mg/Kg	200	3/1/2012 3:49:06 PM
Ethylbenzene	31	9.7	mg/Kg	200	3/1/2012 3:49:06 PM
Xylenes, Total	480	19	mg/Kg	200	3/1/2012 3:49:06 PM
Surr: 4-Bromofluorobenzene	97.3	85.3-139	%REC	200	3/1/2012 3:49:06 PM

Note: These soils were excavated and transported to the BP Crouch Mesa Landfarm (jcblagg-1/11/2013)

Oualifiers:	*/X	Va
Quanners:	"/A	_ V 8

*/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

C	QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.											
Client: Project:	Blagg GCU	Engineering 169E										
Sample ID N	IB-891	SampType: MBLK	TestCode: EPA Method 8015B: Diesel Range Org	ganics								
Client ID: P	BS	Batch ID: 891	RunNo: 1195									
Prep Date:	2/29/2012	Analysis Date: 3/1/2012	SeqNo: 34033 Units: mg/Kg									

35

4.3

9.9

49.41

4.941

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Surr: DNOP	ND 8.6	10	10.00		86.2	77.4	131			
Sample ID LCS-891	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID: LCSS	Batch	n ID: 89	1	F	RunNo: 1	195				
Prep Date: 2/29/2012	Analysis D	ate: 3/	1/2012	S	SeqNo: 3	4034	Units: mg/ł	۲g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.7	62.7	139			
Surr: DNOP	4.5		5.000		89.5	77.4	131			
Sample ID 1202931-001AMS	SampT	ype: MS	6	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID: TH-8 @ 6'	Batch	n ID: 89	1	F	RunNo: 1	195				
Prep Date: 2/29/2012	Analysis D	ate: 3/	1/2012	S	SeqNo: 3	4197	Units: mg/ł	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.7	48.50	0	87.1	57.2	146			
Surr: DNOP	4.4		4.850		90.7	77.4	131			
Sample ID 1202931-001AMS	D SampT	уре: М	SD	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID: TH-8 @ 6'	Batch	n ID: 89	1	F	RunNo: 1	195				
Prep Date: 2/29/2012	Analysis D	ate: 3/	1/2012	S	SeqNo: 3	4207	Units: mg/k	۲g		
					•		-	•		

0

70.6

87.8

Qualifiers:

Diesel Range Organics (DRO)

Surr: DNOP

Value exceeds Maximum Contaminant Level. */X

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

57.2

77.4

146

131

19.1

0

26.7

0

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Er	vironmenta	al Anal	ysis I	Laborat	ory, Inc.					W O#.	02-Mar-12
Client: Project:	Blagg Er GCU 169	ngineering 9E									
Sample ID	MB-889	Samp	Гуре: МІ	BLK	Tes	tCode: El	PA Method	8015B: Gase	oline Rang	e	
Client ID:	PBS	Batc	h ID: 88	9	F	RunNo: 1	220				
Prep Date:	2/29/2012	Analysis E	Date: 3/	/1/2012	S	SeqNo: 3	4762	Units: mg/ł	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 880	5.0	1,000		88.4	69.7	121			
Sample ID	LCS-889	Samp	Гуре: LC	s	Tes	tCode: El	PA Method	8015B: Gase	oline Rang	e	
Client ID:	LCSS	Batc	h ID: 88	9	F	RunNo: 1	220				
Prep Date:	Date: 2/29/2012 Analysis Date: 3/1/2012 SeqNo: 34766 Units: mg/Kg										
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
•	e Organics (GRO)	29	5.0	25.00	0	118	98.5	133			
Surr: BFB		970		1,000		96.8	69.7	121			
Sample ID	1202931-001AMS	Samp	Гуре: М	S	Tes	tCode: El	PA Method	8015B: Gase	oline Rang	e	
Client ID:	TH-8 @ 6'	Batc	h ID: 88	9	F	RunNo: 1	220				
Prep Date:	2/29/2012	Analysis E	Date: 3/	/1/2012	S	SeqNo: 3	4767	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	35	4.7	23.56	2.312	138	85.4	147			
Surr: BFB		1,200		942.5		131	69.7	121			S
Sample ID	1202931-001AMS	D Samp1	Гуре: М	SD	Tes	tCode: El	PA Method	8015B: Gase	oline Rang	e	
Client ID:	TH-8 @ 6'	Batc	h ID: 88	9	F	RunNo: 1	220				
Prep Date:	2/29/2012	Analysis E	Date: 3	/1/2012	S	SeqNo: 3	4768	Units: mg/ł	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	38	4.7	23.43	2.312	153	85.4	147	9.22	19.2	S
Surr: BFB		1,000		937.2		106	69.7	121	0	0	

*/X Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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

WO#:

1202931

Hall En	nvironmenta	al Anal	ysis I	Laborat	ory, Inc.						02-Mar-1	
Client: Project:	Blagg En GCU 169	igineering 9E										
Sample ID	MB-889	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	PBS	Batcl	h ID: 88	9	R	RunNo: 1	220					
Prep Date:	2/29/2012	Analysis E	Date: 3/	1/2012	S	SeqNo: 3	4834	Units: mg/k	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene		ND	0.050									
oluene		ND	0.050									
Ethylbenzene		ND	0.050									
(ylenes, Total		ND	0.10									
Surr: 4-Brom	nofluorobenzene	0.93		1.000		92.6	85.3	139				
Sample ID	LCS-889	SampT	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID: LCSS Batch ID: 889 RunNo: 1220												
Prep Date:	2/29/2012	Analysis E	Date: 3/	1/2012	S	SeqNo: 3	4873	Units: mg/k	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene		1.0	0.050	1.000	0	101	83.3	107				
oluene		1.0	0.050	1.000	0	100	74.3	115				
Ethylbenzene		1.1	0.050	1.000	0	106	80.9	122				
(ylenes, Total		3.3	0.10	3.000	0	109	85.2	123				
Surr: 4-Brom	nofluorobenzene	1.3		1.000		127	85.3	139				
Sample ID	1202932-001AMS	SampT	Гуре: М	5	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	BatchQC	Batcl	h ID: 88	9	RunNo: 1220							
Prep Date:	2/29/2012	Analysis E	Date: 3/	1/2012	S	SeqNo: 3	4874	Units: mg/k	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene		0.92	0.047	0.9407	0	97.9	67.2	113				
oluene		0.93	0.047	0.9407	0.006881	97.9	62.1	116				
thylbenzene		0.99	0.047	0.9407	0	105	67.9	127				
(ylenes, Total	a	3.1	0.094	2.822	0	108	60.6	134				
Surr: 4-Brom	nofluorobenzene	0.95		0.9407		101	85.3	139				
Sample ID	1202932-001AMS	D SampT	Гуре: МS	5D	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	BatchQC	Batcl	h ID: 88	9	R	RunNo: 1	220					
Prep Date:	2/29/2012	Analysis D	Date: 3/	1/2012	S	SeqNo: 3	4875	Units: mg/k	٢g			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene		0.99	0.048	0.9569	0	103	67.2	113	6.87	14.3		
oluene		1.0	0.048	0.9569	0.006881	105	62.1	116	8.99	15.9		
thylbenzene		1.1	0.048	0.9569	0	113	67.9	127	8.55	14.4		
(ylenes, Total		3.3	0.096	2.871	0	114	60.6	134	6.78	12.6		
Surr: 4-Brom	nofluorobenzene	1.0		0.9569		106	85.3	139	0	0		

*/X Value exceeds Maximum Contaminant Level.

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#: 1202931

QC SUMMARY REPORT

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY
-

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.con

Sample Log-In Check List

	Vork Order Number: 1202932
Received by/date: AT 02/29/12 AC	02/29/12
Logged By: Michelle Garcia 2/29/2012 9:30:00 AM	Minule Conus
Completed By: Michelle Garcia 2/29/2012 10:11:51 AM	Murule Concins Murule Concins
Reviewed By: 2/29/12	
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 $>0^{\circ}$ 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?	
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 V No H # of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes ☑ No □ (<2 or >12 unless noted)
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 🗌 Checked by:
Special Handling (if applicable)	
17. Was client notified of all discrepancies with this order?	Yes 🗌 No 🗌 🛛 NA 🗹
Person Notified: Date: D	eMail Phone Fax In Person
18. Additional remarks:	

19.	Cooler Inform	ation					
	Cooler No	Temp ℃	Condition	Seal Intact	Seal No	Seal Date	Signed By
	1	2.4	Good	Yes			

	ANALYSTS LABORATORY		www.rialierivironmental.com ins NE - Albuquerque, NM 87109	505-345-4107	quest			(\	۰۸۵٬ ۱۹	VOV) 80588 eime <i>S</i>) 0728									<i>CO</i> >		
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				1		(1208) \$		╘─⊒ध	BTEX I MI	X	X	X						2 2	<u>נ ארז</u> ד	$\frac{1}{2}$
	X Rush $3 2 12$		169E					Č. Move – Move –	Ú	HEALING 1202931	 	-2	e-		 			Data Timo	۰ ، ۱	Date Time	
Time:		ľ	\mathbf{i}			ager:	Bater	T. BLACK	perature: C	Preservative Type	600	ч	۲, I						L lalt		<u>ר</u>
Turn-Around Time:	□ Standard	Project Name:	GCI	Project #:		Project Manager	ĥ	Sampler:	Sample Temperature	Container Type and #	403×1	t;	II					Racaivad hv.	Munh.	Received by:	
Chain-of-Custody Record	Client: BINL FULLIVEFOND INC		Mailing Address: P.O. Rox 97	SIMA BTHIZ	12		Level 4 (Full Validation)	Jr.		Sample Request ID	TH-BC 6	TH-11 CC	714-14 e4'					od hur	July Begg	ed by:	Here I Jook
of-C	L ENL	A LE O	S: P.O. B	EIEL N		1		□ Other		Matrix	2017	ù	11					Balinguish	14	Refinduished by:	V 160 - +
hain	BLA	202	Address	ROMMERL	} } \/}	r Fax#:	QA/QC Package: X Standard	itation AP	□ EDD (Type)	Time	0913	0957	111			 		Time.	1249	Time:	
0	Client:		Mailing	 	Phone #:	email or Fax#:	QA/QC Packs	Accreditation		Date	21/42/2	n	11					Dafa.	2/28/2	Date: ZI	28/2010



April 25, 2012

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: GCU 169E

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

OrderNo.: 1204708

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1204708 Date Reported: 4/25/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: 31' N10E@9' Collection Date: 4/13/2012 9:20:00 AM Received Date: 4/18/2012 10:00:00 AM

Lab ID: 1204708-001	Matrix:	SOIL	Received D	Received Date: 4/18/2012 10:00:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015B: DIESEL RANGE	E ORGANICS				Analyst: JMP				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/19/2012 10:13:15 AM				
Surr: DNOP	90.4	77.4-131	%REC	1	4/19/2012 10:13:15 AM				
EPA METHOD 8015B: GASOLINE RAI	NGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/20/2012 6:04:39 PM				
Surr: BFB	99.8	69.7-121	%REC	1	4/20/2012 6:04:39 PM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.047	mg/Kg	1	4/20/2012 6:04:39 PM				
Toluene	ND	0.047	mg/Kg	1	4/20/2012 6:04:39 PM				
Ethylbenzene	ND	0.047	mg/Kg	1	4/20/2012 6:04:39 PM				
Xylenes, Total	ND	0.093	mg/Kg	1	4/20/2012 6:04:39 PM				
Surr: 4-Bromofluorobenzene	93.7	80-120	%REC	1	4/20/2012 6:04:39 PM				

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte dete
	Е	Value above quantitation range	Н	Holding time
	J	Analyte detected below quantitation limits	ND	Not Detected

- 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 1204708 Date Reported: 4/25/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: 150' N36W@5' Collection Date: 4/13/2012 9:46:00 AM Received Date: 4/18/2012 10:00:00 AM

Lab ID: 1204708-002	Matrix:	SOIL	Received D	Received Date: 4/18/2012 10:00:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS				Analyst: JMP				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/19/2012 10:40:22 AM				
Surr: DNOP	90.2	77.4-131	%REC	1	4/19/2012 10:40:22 AM				
EPA METHOD 8015B: GASOLINE RA	ANGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/20/2012 6:33:29 PM				
Surr: BFB	100	69.7-121	%REC	1	4/20/2012 6:33:29 PM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.049	mg/Kg	1	4/20/2012 6:33:29 PM				
Toluene	ND	0.049	mg/Kg	1	4/20/2012 6:33:29 PM				
Ethylbenzene	ND	0.049	mg/Kg	1	4/20/2012 6:33:29 PM				
Xylenes, Total	ND	0.098	mg/Kg	1	4/20/2012 6:33:29 PM				
Surr: 4-Bromofluorobenzene	93.0	80-120	%REC	1	4/20/2012 6:33:29 PM				

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte
	Е	Value above quantitation range	Н	Holding
	J	Analyte detected below quantitation limits	ND	Not De

- 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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#:	1204708
	25-Anr-12

e	g Engineering J 169E									
Sample ID MB-1592	Tes	tCode: El	PA Method	8015B: Dies	el Range G	Organics				
Client ID: PBS Batch ID: 1592			F	anNo: 2	225					
Prep Date: 4/18/2012 Analysis Date: 4/19/2012			S	SeqNo: 6	1672	Units: mg/#	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.8		10.00		97.8	77.4	131			
Sample ID LCS-1592	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015B: Dies	el Range G	Organics	
Client ID: LCSS	Batch	h ID: 15	92	F	anNo: 2	225				
Prep Date: 4/18/2012	Analysis D	Date: 4/	19/2012	S	eqNo: 6	1764	Units: mg/k	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	62.7	139			
Surr: DNOP	4.4		5.000		87.6	77.4	131			

*/X Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

WO#:	1204708
	25-Apr-12

Client:Blagg HProject:GCU 1	Engineering 59E													
Sample ID MB-1584	SampTy	/pe: ME	BLK	TestCode: EPA Method 8015B: Gasoline Range										
Client ID: PBS	Batch	ID: 15	84	R	unNo: 22	242								
Prep Date: 4/18/2012	Analysis Da	ate: 4/	19/2012	S	eqNo: 62	2626	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Gasoline Range Organics (GRO) Surr: BFB	ND 980	5.0	1,000		98.3	69.7	121							
Sample ID LCS-1584	SampTy	/pe: LC	S	Test	e									
Client ID: LCSS	Batch	ID: 15	84	R										
Prep Date: 4/18/2012	Analysis Da	ate: 4/	19/2012	S	eqNo: 62	2627	Units: mg/K	g						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	98.5	133							
Surr: BFB	1,100		1,000		105	69.7	121							

*/X Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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

	tal Allalysis	Lavula	ory, me.						25-Apr-12
Client: Blagg I Project: GCU 1	Engineering 69E								
Sample ID MB-1584	SampType:	MBLK	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batch ID:	1584	F	RunNo: 22	242				
Prep Date: 4/18/2012	Analysis Date:	4/19/2012	S	SeqNo: 62	2645	Units: mg/H			
Analyte	Result PQ	_ SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND 0.05	0							
Toluene	ND 0.05	0							
Ethylbenzene	ND 0.05	0							
Xylenes, Total	ND 0.1	0							
Surr: 4-Bromofluorobenzene	0.92	1.000		91.7	80	120			
Sample ID LCS-1584	SampType:	LCS	Tes	tCode: EF					
Client ID: LCSS	Batch ID:	1584	F	RunNo: 22					
Prep Date: 4/18/2012	Analysis Date:	4/19/2012	S	SeqNo: 62	2646	Units: mg/k	٢g		
Analyte	Result PQ	_ SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95 0.05	0 1.000	0	95.1	83.3	107			
Toluene	0.98 0.05	1.000	0	98.3	74.3	115			
Ethylbenzene	0.96 0.05	0 1.000	0	95.9	80.9	122			
Xylenes, Total	2.9 0.1	0 3.000	0	96.1	85.2	123			
Surr: 4-Bromofluorobenzene	0.95	1.000		94.7	80	120			

*/X Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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

- Page 5 of 5

WO#: **1204708**

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.



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	: BLAGO	3		Ŵ	ork Or	der I	Numł	oer: 1	1204708		·····
Received by	/date:	14	04/18/12	2							
Logged By:	Michel	le Garcia	4/18/2012 10:					mi	helle Garria		
Completed I	By: Michel	le Garcia	4/18/2012 10:	20:31 AM				mi	hills Garria		
Reviewed B	10 0	4/18/12							1 -		
Chain of C	custody	1916									
1. Were se	eals intact?				Yes		No		Not Presen	t 🗸	
2. Is Chair	of Custody of	complete?			Yes	✓	No		Not Presen	t	
3. How wa	s the sample	delivered?			Grey	hou	nd				
<u>Log In</u>											
	are present?	(see 19. for cooler sp	ecific informatio	n)	Yes	~	No		NZ	4	
·				,	100	•				•	
5. Was an	attempt mad	e to cool the samples	?		Yes	✓	No		N	A	
6. Were a	l samples rec	eived at a temperatur	re of >0°C to 6.	0°C	Yes	~	No		NA	Ą	
7. Sample	(s) in proper o	container(s)?			Yes	~	No				
		ume for indicated test	(s)?		Yes	_	No				
		VOA and ONG) prop			Yes		No				
		ded to bottles?			Yes		No	~	NA		
	Is have zero		_		Yes		No		No VOA Vial	3 🗸	
		ntainers received brok	(en?	-	Yes		No	♥.	# of pr	eserved	
		ch bottle labels? on chain of custody)			Yes	~	No			checked	ł
14. Are mat	rices correctly	y identified on Chain o	of Custody?		Yes	~	No		ioi pri		<2 or >12 unless noted)
15. Is it clea	ur what analys	ses were requested?			Yes	✓	No			Adjusted	?
16. Were a	l holding time	s able to be met?			Yes	~	No				
(lf no, n	otify custome	r for authorization.)							C	hecked t	by:
Special Ha	ndling (if	applicable)									
17. Was cli	ent notified of	all discrepancies with	this order?		Yes		No		N	Α 🗸	
Pe	rson Notified:			Date	ar ar an	NKA NYAN	feliel a contrar coat c				
Ву	Whom:		and the second	Via:	eMa	il	Pł	none	Fax	n Persor	1
Re	garding:					rangesiya	1999 - A. S.	Tires and the second	ganta a arta e construir da gana agana	AY A 3960 A MOLE GA AFTERE A 3	
Cli	ent Instruction	ns:			ikin karanana	6.05.0099070099			****		5-30942930X

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
[1	1.0	Good	Yes			



December 31, 2012

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX: (505) 632-3903

RE: GCU 169E

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

OrderNo.: 1212923

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

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Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

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		halle	1	75	An					AN9) 0168				 					- ∠ Dro	RIAGO	5	لا د :
	Ż	www	ns N	4901 Hawkins NE Tel. 505-345-397			(1.40	g po	EDB (Weth									۲ ۲	, IX) /	いちょうう	
			AMERUCA www.hall $P.0$, BJx , $E7$ CU LQE 4901 Hawkins NE - $FIELD$ NM 87413 Project #: Tel. 505-345-3975 $5-632-1199$ $AMERUCA$ $AMERUCA$ $AMERUCA$			(1.81	₽ bc	TPH (Metho										5 2	t t	いく		
								офәМ НЧТ	\times									-	2			
		(とALE ENGWERRUNE INC, XStandard I Rush ANALYSIS L ると ENGWERRUNE A MERULA A MALYSIS L ANALYSIS R ANALYSIS L						BTEX + MT		_					_		Remarks:	•	(0		
		· .,	<u> </u>		1	()	208) s		. उध 	BTEX + MT	\times			 		-						
		ľ	イバ	·				イセレ Seie∎No>	(care construction)	HEAL-NO	100-	-				1			Date Time	12/4/2 1/20	$\int Date Time (c/2d/r, rc_7, c)$	シャッテー ヽ
Time:			,			iger:	Buter	J. R.A	perature:	Preservative Type	1000									th		
Turn-Around Time:	XStandard	Project Name	5	Project #:		Project Manager	J. Bu	Sampler: à On Ice	Sample Temperature	Container Type and #	40fx1								Received by:	Minut U	Received by:	1 / m
of-Custody Record		X	NN B741	- 2		Level 4 (Full Validation)			Sample Request ID	180'N66W@-4'								d bv:	1 Begs	d by:	3	
		THED	0-50			□ Other		Matrix	501L								Relinguished by:		Relinquished by			
hain	hain-of Brace BP AI Address:	Bear	# S	r Fax#:	QA/QC Package:	litation AP	🗆 EDD (Type)	Time	1148				-				Time:	120	Time:			
U	Client:			Phone	email or Fax#:	QA/QC Packa	Accreditation		Date	2/4/21								Date:	19/2	Date:	C11611	

Analytical Report Lab Order 1212923 Date Reported: 12/31/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering **Project:** GCU 169E

1212923-001

Lab ID:

Client Sample ID: 180' N66W@-4' Collection Date: 12/14/2012 11:48:00 AM **Received Date:** 12/20/2012 10:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	12/26/2012 2:31:04 PM
Surr: DNOP	91.4	72.4-120	%REC	1	12/26/2012 2:31:04 PM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	12/21/2012 2:18:28 PM
Surr: BFB	93.7	84-116	%REC	1	12/21/2012 2:18:28 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.046	mg/Kg	1	12/21/2012 2:18:28 PM
Toluene	ND	0.046	mg/Kg	1	12/21/2012 2:18:28 PM
Ethylbenzene	ND	0.046	mg/Kg	1	12/21/2012 2:18:28 PM
Xylenes, Total	ND	0.093	mg/Kg	1	12/21/2012 2:18:28 PM
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	12/21/2012 2:18:28 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	5.7	1.5	mg/Kg	1	12/27/2012 2:53:29 PM

Matrix: SOIL

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

					-									
Client: Project:	Blagg Eng GCU 169													
Sample ID:	MB-5456	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	s					
Client ID:	PBS	Batch	n ID: 54	56	F	RunNo: 7	748							
Prep Date:	12/27/2012	Analysis D	Date: 12	2/27/2012	S	SeqNo: 2	25121	Units: mg/k	(g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Chloride		ND	1.5											
Sample ID:	LCS-5456	SampT	ype: LC	S	Tes	tCode: El	PA Method	300.0: Anion	S					
Client ID:	ID: LCSS Batch ID: 5456 RunNo: 7748													
Prep Date:	12/27/2012	Analysis Date: 12/27/2012			S	SeqNo: 2	25122	Units: mg/Kg						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Chloride		14	1.5	15.00	0	93.9	90	110						
Sample ID:	1212752-001BMS	SampT	уре: М	3	Tes	tCode: El	PA Method	300.0: Anion	s					
Client ID:	BatchQC	Batch	n ID: 54	56	F	RunNo: 7	748							
Prep Date:	12/27/2012	Analysis D	Date: 12	2/27/2012	S	SeqNo: 2	25125	Units: mg/k	ſg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Chloride		52	7.5	15.00	39.15	83.7	64.4	117						
Sample ID:	1212752-001BMS) SampT	ype: M S	SD	Tes	tCode: El	PA Method	300.0: Anion	s					
Client ID:	BatchQC	Batch	n ID: 54	56	F	RunNo: 7	748							
Prep Date:	12/27/2012	Analysis D	Date: 12	2/27/2012	S	SeqNo: 2	25126	Units: mg/k	ſg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Chloride		51	7.5	15.00	39.15	77.8	64.4	117	1.73	20				

* Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Page 2 of 5

WO#: 1212923 31-Dec-12

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#:	1212923
	31-Dec-12

Client: Project:	Blagg En GCU 169	ngineering DE												
Sample ID:	MB-5421	SampT	ype: ME	BLK	Test	Code: EF	PA Method	8015B: Diese	l Range C	Organics				
Client ID:	PBS	Batch	n ID: 542	21	RunNo: 7701									
Prep Date:	12/26/2012	Analysis D	ate: 12	2/26/2012	S	eqNo: 22	23834	Units: %REC	c					
Analyte Surr: DNOP		Result 9.0	PQL	SPK value 10.00	SPK Ref Val	%REC 90.4	LowLimit 72.4	HighLimit 120	%RPD	RPDLimit	Qual			
								-						
Sample ID:		•	ype: LC					8015B: Diese	l Range C	Organics				
Client ID:	LCSS	Batch	n ID: 542	21	R	unNo: 77	701							
Prep Date:	12/26/2012	Analysis D	ate: 12	2/26/2012	S	eqNo: 22	23839	Units: %REC	2					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: DNOP		4.0		5.000		80.1	72.4	120						
Sample ID:	1212832-001AMS	SampType: MS TestCode: EPA Method 8015B: Diesel Range Organics								Organics				
Client ID:	BatchQC	Batch	D: 53		RunNo: 7701									
		Dato		78	п	unino: 77								
Prep Date:	12/20/2012	Analysis D				anno: 77	•	Units: mg/K	g					
Prep Date: Analyte	12/20/2012			2/26/2012		eqNo: 22	•	Units: mg/K HighLimit	g %RPD	RPDLimit	Qual			
Analyte Diesel Range (Organics (DRO)	Analysis D Result 40	ate: 12	2/26/2012 SPK value 49.75	S	eqNo: 22 %REC 80.4	24116 LowLimit 12.6	HighLimit 148	•	RPDLimit	Qual			
Analyte	Organics (DRO)	Analysis D Result	ate: 12 PQL	2/26/2012 SPK value	S SPK Ref Val	eqNo: 22 %REC	24116 LowLimit	HighLimit	•	RPDLimit	Qual			
Analyte Diesel Range (Surr: DNOP	Organics (DRO)	Analysis D Result 40 4.0	ate: 12 PQL	2/26/2012 SPK value 49.75 4.975	SPK Ref Val 0	eqNo: 22 %REC 80.4 81.1	24116 LowLimit 12.6 72.4	HighLimit 148	%RPD		Qual			
Analyte Diesel Range (Surr: DNOP	Organics (DRO) 1212832-001AMSI	Analysis D Result 40 4.0 D SampT	Pate: 12 PQL 10	2/26/2012 SPK value 49.75 4.975	SPK Ref Val 0 Test	eqNo: 22 %REC 80.4 81.1	24116 LowLimit 12.6 72.4 PA Method	HighLimit 148 120	%RPD		Qual			
Analyte Diesel Range (Surr: DNOP Sample ID:	Organics (DRO) 1212832-001AMSI BatchQC	Analysis D Result 40 4.0 D SampT	PQL 10 ype: MS	2/26/2012 SPK value 49.75 4.975 SD 78	SPK Ref Val 0 Test	eqNo: 22 %REC 80.4 81.1 Code: EF	24116 LowLimit 12.6 72.4 PA Method 701	HighLimit 148 120	%RPD		Qual			
Analyte Diesel Range (Surr: DNOP Sample ID: Client ID:	Organics (DRO) 1212832-001AMSI BatchQC	Analysis D Result 40 4.0 D SampT Batch	PQL 10 ype: MS	2/26/2012 SPK value 49.75 4.975 SD 78 2/26/2012	SPK Ref Val 0 Test	eqNo: 22 %REC 80.4 81.1 Code: EF cunNo: 77 SeqNo: 22	24116 LowLimit 12.6 72.4 PA Method 701	HighLimit 148 120 8015B: Diese	%RPD		Qual			
Analyte Diesel Range (Surr: DNOP Sample ID: Client ID: Prep Date: Analyte	Organics (DRO) 1212832-001AMSI BatchQC 12/20/2012 Organics (DRO)	Analysis D Result 40 4.0 D SampT Batch Analysis D	PQL 10 ype: MS 1D: 53 ate: 12	2/26/2012 SPK value 49.75 4.975 SD 78 2/26/2012	SPK Ref Val 0 Test R S	eqNo: 22 %REC 80.4 81.1 Code: EF cunNo: 77 SeqNo: 22	24116 LowLimit 12.6 72.4 PA Method 701 24117	HighLimit 148 120 8015B: Diese Units: mg/K	%RPD I Range C	Organics				

Qualifiers:

* Value exceeds Maximum Contaminant Level.

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than $2 \,$

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Client: Project:	ject: GCU 169E													
Sample ID:	MB-5389	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015B: Gaso	line Rang	е				
Client ID:	PBS	Batch	n ID: 53	39	F	RunNo: 7673								
Prep Date:	12/20/2012	Analysis D	ate: 12	2/21/2012	S	SeqNo: 22	23541	Units: mg/K	g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Rang	je Organics (GRO)	ND	5.0											
Surr: BFB		930		1000		93.4	84	116						
Sample ID: LCS-5389 SampType: LCS TestCode: EPA Method 8015B: Gasoline Range														
Client ID: LCSS Batch ID: 5389 RunNo: 7673														
Prep Date:	12/20/2012	Analysis D	ate: 12	2/21/2012	S	eqNo: 22	23547	Units: mg/K	g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Rang	je Organics (GRO)	23	5.0	25.00	0	93.7	74	117						
Surr: BFB		980		1000		98.4	84	116						
Sample ID:	1212832-001AMS	SampT	ype: MS	;	Tes	tCode: EF	PA Method	8015B: Gaso	line Rang	e				
Client ID:	BatchQC	Batch	n ID: 53	39	F	unNo: 76	673							
Prep Date:	12/20/2012	Analysis D	ate: 12	2/21/2012	S	eqNo: 22	23569	Units: mg/K	g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Rang	je Organics (GRO)	25	5.0	24.78	0	100	70	130						
Surr: BFB		980		991.1		98.6	84	116						
Sample ID:	1212832-001AMSE	SampT	ype: MS	SD .	Tes	tCode: EF	PA Method	8015B: Gaso	line Rang	e				
Client ID:	BatchQC	Batch	n ID: 53	39	F	lunNo: 76	673							
Prep Date:	12/20/2012	Analysis D	ate: 12	2/21/2012	S	eqNo: 22	23570	Units: mg/K	g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Rang	je Organics (GRO)	24	4.9	24.73	0	95.9	70	130	4.48	22.1				
Surr: BFB		990		989.1		99.7	84	116	0	0				

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

WO#: 1212923 31-Dec-12

Client:		gineering									
Project:	GCU 169	θE									
Sample ID:	MB-5389	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	n ID: 53	3 9	F						
Prep Date:	12/20/2012	Analysis D	Date: 12	2/21/2012	012 SeqNo: 223610			Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050								
Foluene		ND	0.050								
Ethylbenzene		ND	0.050								
Kylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	1.1		1.000		107	80	120			
Sample ID:	LCS-5389	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batch	n ID: 53	39	F	RunNo: 7	673				
Prep Date:	12/20/2012	Analysis D	Date: 12/21/2012		S	23611	Units: mg/K	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.050	1.000	0	103	80	120			
Foluene		1.0	0.050	1.000	0	104	80	120			
Ethylbenzene		1.1	0.050	1.000	0	105	80	120			
Kylenes, Total		3.1	0.10	3.000	0	104	80	120			
Surr: 4-Brom	ofluorobenzene	1.1		1.000		108	80	120			
Sample ID:	1212922-001AMS	SampT	ype: MS	;	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	BatchQC	Batch	n ID: 53	39	F	RunNo: 7	673				
Prep Date:	12/20/2012	Analysis D	Date: 12	2/21/2012	S	SeqNo: 2	23615	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.048	0.9690	0	110	67.2	113			
Foluene		1.1	0.048	0.9690	0	111	62.1	116			
Ethylbenzene		1.1	0.048	0.9690	0	113	67.9	127			
Kylenes, Total		3.3	0.097	2.907	0	113	60.6	134			
Surr: 4-Brom	ofluorobenzene	1.1		0.9690		109	80	120			
Sample ID:	1212922-001AMS	D SampT	уре: МS	D	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	BatchQC	Batch	n ID: 53	39	F	RunNo: 7	673				
Prep Date:	12/20/2012	Analysis D	Date: 12	2/21/2012	S	SeqNo: 2	23616	Units: mg/K	(g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.048	0.9699	0	106	67.2	113	4.24	14.3	
Foluene		1.0	0.048	0.9699	0	107	62.1	116	2.75	15.9	
		1.1	0.048	0.9699	0	110	67.9	127	2.08	14.4	
Ethylbenzene											
Ethylbenzene Kylenes, Total		3.2	0.040	2.910	0	109	60.6	134	2.99	12.6	

* Value exceeds Maximum Contaminant Level.

QC SUMMARY REPORT

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

WO#:

1212923

	HALL
	ENVIRONMENTAL
▃▀▃	ANALYSIS
	LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG	Work Order Number: 1212923
Received by/date: JB 12/2	0/12
Logged By: Michelle Garcia 12/20	1/2012 10:20:00 AM Minue Conuis 1/2012 1:51:03 PM Minue Conuis
Completed By: Michelle Garcia 12/20	2012 1:51:03 PM Minue Genue
Reviewed By: 12	2017
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	nformation) 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 pre	served? Yes 🗹 No 🗌
10. Was preservative added to bottles?	Yes No M NA
11, VOA vials have zero headspace?	Yes 🗌 No 💭 No VOA Vials 🗹
12. Were any sample containers received broken?	Yes 🗌 No 🗹
 Does paperwork match bottle labels? (Note discrepancies on chain of custody) 	Yes V No H for preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Cust	
15. Is it clear what analyses were requested?	Yes 🗹 No 🗌 Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹 No 🗌 Checked by:
Special Handling (if applicable)	
17. Was client notified of all discrepancies with this o	rder? Yes 🗌 No 🗌 NA 🗹
Person Notified:	Date:
By Whom:	Via: eMail Phone Fax In Person
Regarding:	
Client Instructions:	

18. Additional remarks:

19. Cooler Information

l	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
[1	1.4	Good	Yes			



January 09, 2013

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: GCU 169E

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

OrderNo.: 1301125

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/5/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

		~ II	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque NM 87109		Analvsis	(اد (ا	Ino ssi Seei(]\s 202,4(58 (Ga 8082 P H) H) H)	+ ∃ 501 418 504 133 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 1 4 103 3 14 10 3 14 10 3 14 10 3 14 10 3 14 10 3 14 10 3 14 10 3 14 10 3 14 10 10 3 14 10 10 3 14 10 10 10 10 10 10 10 10 10 10 10 10 10	5 Со 2 ТЕХ + МТВ 3 ТЕХ + МТВ 7 ТЕХ + МТВ 7 ТЕХ + МТВ 8 Меthod 7 10 (РИА ог 2	Т X 1 X 1 X 1 X 8 8 8 8 8 8 8 8 8 8 8 8 8							Remarks: 33 R	Τ-	" BP CONTACT : JEFF FRACE
Turn-Around Time:	Br IVES	A rush 1 / 1/ 1/		and lete	Project #:		Project Manager:	J. BUALL	Burle	Sample Tentheratile 3.12 c	AE billoning AE billoning AE ontainer Preservative Type and # Type Mean L K Preservative	403×1 606 000 -001		"\ " -00					Muctive Last the Value 113	I A IKIN	10114 (11/1 12.20 -
Chain-of-Custody Record	Client: BLAGG ENEINERENNE TUR			x 87	IN BT413	Phone #: 505-632-1199	email or Fax#:	QA/QC Package:	n 🗆 Other	EDD (Type)	Time Matrix Sample Request ID	1013 SOIL 162 N62WE -4	171/ 1/171/	" 0443 " 135 N 56WE-8'					3 1133 July Sherf	Time: Relfinquished by:	If necessary, san

Analytical Report Lab Order 1301125 Date Reported: 1/9/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: 162' N62W@-4' Collection Date: 1/3/2013 10:13:00 AM Received Date: 1/5/2013 12:00:00 PM

Lab ID: 1301125-001	Matrix:	SOIL	Re	eceived Date: 1	/5/20	13 12:00:00 PM
Analyses	Result	RL	Qual Un	its	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS					Analyst: MMD
Diesel Range Organics (DRO)	ND	9.7	, má	g/Kg	1	1/8/2013 12:43:41 PM
Surr: DNOP	82.5	72.4-120	%	REC	1	1/8/2013 12:43:41 PM
EPA METHOD 8015B: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	m m	g/Kg	1	1/7/2013 4:34:45 PM
Surr: BFB	121	84-116	S %	REC	1	1/7/2013 4:34:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050) mạ	g/Kg	1	1/7/2013 4:34:45 PM
Toluene	ND	0.050) mạ	g/Kg	1	1/7/2013 4:34:45 PM
Ethylbenzene	ND	0.050) mạ	g/Kg	1	1/7/2013 4:34:45 PM
Xylenes, Total	ND	0.10) mạ	g/Kg	1	1/7/2013 4:34:45 PM
Surr: 4-Bromofluorobenzene	113	80-120	%	REC	1	1/7/2013 4:34:45 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Chloride	ND	15	i mg	g/Kg	10	1/7/2013 12:02:20 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	Sample pH greater than 2	R	RPD outside accepted recovery limits

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

RL Reporting Detection Limit

Analytical Report Lab Order 1301125 Date Reported: 1/9/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: 171' N65W@-4' Collection Date: 1/4/2013 9:35:00 AM Received Date: 1/5/2013 12:00:00 PM

Lab ID: 1301125-002	Matrix:	SOIL	Received D	ate: 1/5/20	13 12:00:00 PM
Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	BE ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/8/2013 1:05:24 PM
Surr: DNOP	88.4	72.4-120	%REC	1	1/8/2013 1:05:24 PM
EPA METHOD 8015B: GASOLINE RA	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/7/2013 5:03:29 PM
Surr: BFB	109	84-116	%REC	1	1/7/2013 5:03:29 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	1/7/2013 5:03:29 PM
Toluene	ND	0.050	mg/Kg	1	1/7/2013 5:03:29 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/7/2013 5:03:29 PM
Xylenes, Total	ND	0.10	mg/Kg	1	1/7/2013 5:03:29 PM
Surr: 4-Bromofluorobenzene	113	80-120	%REC	1	1/7/2013 5:03:29 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	15	mg/Kg	10	1/7/2013 12:14:44 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	Sample pH greater than 2	R	RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

RL Reporting Detection Limit

Analytical Report Lab Order 1301125 Date Reported: 1/9/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU 169E

Client Sample ID: 135' N56W@-8' Collection Date: 1/4/2013 9:43:00 AM Dessived Dates 1/5/2012 12:00:00 DM

Lab ID: 1301125-003	Matrix:	SOIL	Received D	ate: 1/5/20	13 12:00:00 PM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/8/2013 1:27:14 PM
Surr: DNOP	84.2	72.4-120	%REC	1	1/8/2013 1:27:14 PM
EPA METHOD 8015B: GASOLINE RA	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/7/2013 5:32:24 PM
Surr: BFB	115	84-116	%REC	1	1/7/2013 5:32:24 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	0.14	0.050	mg/Kg	1	1/7/2013 5:32:24 PM
Toluene	ND	0.050	mg/Kg	1	1/7/2013 5:32:24 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/7/2013 5:32:24 PM
Xylenes, Total	ND	0.10	mg/Kg	1	1/7/2013 5:32:24 PM
Surr: 4-Bromofluorobenzene	112	80-120	%REC	1	1/7/2013 5:32:24 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	7.5	mg/Kg	5	1/7/2013 12:27:08 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Fr	nvironment	ol Anolycic	Inharat	ory Inc					W 0#.	1301125
	Ivii onnient	al Allalysis		ory, me.						09-Jan-13
Client: Project:	Blagg Er GCU 16	ngineering 9E								
Sample ID	MB-5549	SampType:	MBLK	Tes	tCode: EP	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch ID:	5549	F	RunNo: 78	397				
Prep Date:	1/7/2013	Analysis Date:	1/7/2013	5	SeqNo: 22	28861	Units: mg/K	g		
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1	.5							
Sample ID	LCS-5549	SampType:	LCS	Tes	tCode: EP	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch ID:	5549	F	RunNo: 78	397				
Prep Date:	1/7/2013	Analysis Date:	1/7/2013	S	SeqNo: 22	28862	Units: mg/K	g		
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1	.5 15.00	0	93.4	90	110			
Sample ID	1301122-001BMS	SampType:	MS	Tes	tCode: EP	A Method	300.0: Anion	s		
Client ID:	BatchQC	Batch ID:	5549	F	RunNo: 78	397				
Prep Date:	1/7/2013	Analysis Date:	1/7/2013	S	SeqNo: 22	28864	Units: mg/K	g		
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	30 15.00	13.10	73.9	64.4	117			
Sample ID	1301122-001BMS	D SampType:	MSD	Tes	tCode: EP	PA Method	300.0: Anion	s		
Client ID:	BatchQC	Batch ID:	5549	F	RunNo: 78	897				
Prep Date:	1/7/2013	Analysis Date:	1/7/2013	S	SeqNo: 22	28865	Units: mg/K	g		
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	30 15.00	13.10	66.8	64.4	117	0	20	

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

WO#: 1301125 09-Jan-13

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#:	1301125
	09. Jan. 13

Client:		gineering									
Project:	GCU 169	ЭЕ									
Sample ID	MB-5547	SampT	ype: ME	BLK	Test	tCode: EF	PA Method	8015B: Diese	el Range C	Organics	
Client ID:	PBS	Batch	ID: 55	47	R	unNo: 78	377				
Prep Date:	1/7/2013	Analysis D	ate: 1/	7/2013	S	SeqNo: 22	28563	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Surr: DNOP		9.9		10.00		98.8	72.4	120			
Sample ID	LCS-5547	SampT	ype: LC	s	Test	tCode: EF	PA Method	8015B: Diese	el Range C	Organics	
Client ID:	LCSS	Batch	ID: 55	47	R	RunNo: 78	377				
Prep Date:	1/7/2013	Analysis D	ate: 1/	7/2013	S	SeqNo: 22	28575	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	44	10	50.00	0	88.1	47.4	122			
Surr: DNOP		4.2		5.000		83.5	72.4	120			
Sample ID	1301113-001AMS	SampT	ype: MS	6	Test	tCode: EF	PA Method	8015B: Diese	el Range C	Organics	
Client ID:	BatchQC	Batch	ID: 55	47	R	lunNo: 7 9	903				
Client ID: Prep Date:		Batch Analysis D				8unNo: 7 9 SeqNo: 2 2		Units: mg/k	ζg		
				8/2013		SeqNo: 22		Units: mg/k HighLimit	′g %RPD	RPDLimit	Qual
Prep Date: Analyte		Analysis D	ate: 1/	8/2013	S	SeqNo: 22	29358	•	•	RPDLimit	Qual
Prep Date: Analyte	1/7/2013 Organics (DRO)	Analysis D Result	ate: 1/ PQL	8/2013 SPK value	S SPK Ref Val	eqNo: 22 %REC	29358 LowLimit	HighLimit	•	RPDLimit	Qual
Prep Date: Analyte Diesel Range Surr: DNOP	1/7/2013 Organics (DRO)	Analysis D Result 41 3.9	ate: 1/ PQL 10	8/2013 SPK value 49.75 4.975	SPK Ref Val 0	SeqNo: 22 %REC 81.7 79.2	29358 LowLimit 12.6 72.4	HighLimit 148	%RPD		Qual
Prep Date: Analyte Diesel Range Surr: DNOP	1/7/2013 Organics (DRO)	Analysis D Result 41 3.9 D SampT	ate: 1/ PQL 10	8/2013 SPK value 49.75 4.975	SPK Ref Val 0 Test	SeqNo: 22 %REC 81.7 79.2	29358 LowLimit 12.6 72.4 PA Method	HighLimit 148 120	%RPD		Qual
Prep Date: Analyte Diesel Range Surr: DNOP Sample ID	1/7/2013 Organics (DRO) 1301113-001AMSI BatchQC	Analysis D Result 41 3.9 D SampT	ate: 1/ PQL 10 ype: MS	8/2013 SPK value 49.75 4.975 SD 47	SPK Ref Val 0 Test R	SeqNo: 22 %REC 81.7 79.2 tCode: EF	29358 LowLimit 12.6 72.4 PA Method 903	HighLimit 148 120	%RPD		Qual
Prep Date: Analyte Diesel Range Surr: DNOP Sample ID Client ID:	1/7/2013 Organics (DRO) 1301113-001AMSI BatchQC	Analysis D Result 41 3.9 D SampT Batch	ate: 1/ PQL 10 ype: MS	8/2013 SPK value 49.75 4.975 SD 47 8/2013	SPK Ref Val 0 Test R	SeqNo: 2 %REC 81.7 79.2 tCode: EF	29358 LowLimit 12.6 72.4 PA Method 903	HighLimit 148 120 8015B: Diese	%RPD		Qual
Prep Date: Analyte Diesel Range Surr: DNOP Sample ID Client ID: Prep Date: Analyte	1/7/2013 Organics (DRO) 1301113-001AMSI BatchQC 1/7/2013 Organics (DRO)	Analysis D Result 41 3.9 D SampT Batch Analysis D	ate: 1/ PQL 10 ype: MS ID: 55 ate: 1/	8/2013 SPK value 49.75 4.975 SD 47 8/2013	SPK Ref Val 0 Tesi R S	SeqNo: 22 %REC 81.7 79.2 79.2 tCode: EF RunNo: 79 SeqNo: 22	29358 LowLimit 12.6 72.4 PA Method 903 29359	HighLimit 148 120 8015B: Diese Units: mg/K	%RPD	Organics	

* Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

	VII UIIIICIIta		y 515 L		51 y, me.						09-Jan-
Client: Project:	Blagg En GCU 169										
Sample ID	100NG BTEX LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	n ID: R7	882	F	RunNo: 78	882				
Prep Date:		Analysis D	ate: 1/	7/2013	S	SeqNo: 22	28839	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.050	1.000	0	102	80	120			
Toluene		1.0	0.050	1.000	0	102	80	120			
Ethylbenzene		1.0	0.050	1.000	0	103	80	120			
Xylenes, Total		3.1	0.10	3.000	0	102	80	120			
Surr: 4-Brom	ofluorobenzene	1.1		1.000		111	80	120			
Sample ID	1301122-001AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch	n ID: R7	882	R	RunNo: 78	882				
Prep Date:		Analysis D	ate: 1/	7/2013	S	SeqNo: 22	28841	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.62	0.050	0.6129	0	101	67.2	113			
Toluene		0.62	0.050	0.6129	0	102	62.1	116			
Ethylbenzene		0.63	0.050	0.6129	0	104	67.9	127			
Xylenes, Total		1.9	0.10	1.839	0	103	60.6	134			
Surr: 4-Brom	ofluorobenzene	0.66		0.6129		108	80	120			
Sample ID	1301122-001AMS	D SampT	ype: MS		Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch	n ID: R7	882	F	RunNo: 7 8	882				
Prep Date:		Analysis D	ate: 1/	7/2013	S	SeqNo: 22	28842	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.62	0.050	0.6129	0	101	67.2	113	0.769	14.3	
oluene		0.62	0.050	0.6129	0	102	62.1	116	0.0364	15.9	
Ethylbenzene		0.64	0.050	0.6129	0	104	67.9	127	0.458	14.4	
(ylenes, Total		1.9	0.10	1.839	0	103	60.6	134	0.403	12.6	
o	ofluorobenzene	0.68		0.6129		111	80	120	0	0	

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

- Value above quantitation range Е
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

WO#: 1301125 09-Jan-13



1000 Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG		Work Order Number: 13	301125
Received by/date:	F 01/05/13		
Logged By: Anne Thor	ne 1/5/2013 12:00:00 Pl	M Anne	H-
Completed By: Anne Thor	ne 1/7/2013	Δ	I- I-
Reviewed By: MG	01/17/12	Cline _	Am
Chain of Custody			
1. Were seals intact?		Yes 🗹 No 🗌	Not Present
2. Is Chain of Custody comp	plete?	Yes 🗹 No 🗌	Not Present
3. How was the sample delive	vered?	<u>Courier</u>	
<u>Log In</u>			
4, Coolers are present? (see	e 19. for cooler specific information)	Yes 🗹 No 🗌	NA 🗍
5. Was an attempt made to	cool the samples?	Yes 🗹 No 🗌	NA 🗌
6. Were all samples receive	d at a temperature of >0° C to 6.0°C	Yes 🗹 No 🗌	NA 🗀
7. Sample(s) in proper conta	ainer(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 t	o bottles?	Yes 🗌 No 🗹	NA 🗌
11. VOA vials have zero head	Ispace?	Yes 🗌 No 🗍 N	lo VOA Vials 🖌
12. Were any sample contain	ers received broken?	Yes 🗌 No 🗹	
13. Does paperwork match be (Note discrepancies on ch		Yes 🗹 No 🗌	# of preserved bottles checked for pH:
14. Are matrices correctly iden	ntified on Chain of Custody?	Yes 🔽 No 🗔	(<2 or >12 unless noted)
15. Is it clear what analyses w	vere requested?	Yes 🗹 No 🗌	Adjusted?
16. Were all holding times abl (If no, notify customer for a		Yes 🗹 No 🗌	Checked by:
<u>Special Handling (if app</u>	<u>licable)</u>		
17. Was client notified of all di	screpancies with this order?	Yes 🗌 No 🔲	NA 🗹
Person Notified:	Date		
By Whom:	Via:	eMail Phone	Fax 🗍 In Person
Regarding:			
Client Instructions:			<u></u>
18. Additional remarks:		 	

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			



January 15, 2013

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: GCU 169E

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

OrderNo.: 1301371

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/11/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1301371 Date Reported: 1/15/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Project: GCU 169E

1301371-001

Lab ID:

Client Sample ID: 129'N26W@-6' Collection Date: 1/10/2013 10:45:00 AM Matrix: MEOH (SOIL) Received Date: 1/11/2013 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/12/2013 2:49:44 PM
Surr: DNOP	101	72.4-120	%REC	1	1/12/2013 2:49:44 PM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/11/2013 4:03:27 PM
Surr: BFB	109	84-116	%REC	1	1/11/2013 4:03:27 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	1/11/2013 4:03:27 PM
Toluene	ND	0.050	mg/Kg	1	1/11/2013 4:03:27 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/11/2013 4:03:27 PM
Xylenes, Total	ND	0.10	mg/Kg	1	1/11/2013 4:03:27 PM
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	1/11/2013 4:03:27 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	8.8	1.5	mg/Kg	1	1/11/2013 1:46:53 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	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 1301371 Date Reported: 1/15/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Project: GCU 169E

1301371-002

Lab ID:

Client Sample ID: 90'N20W@-8' Collection Date: 1/10/2013 1:04:00 PM Matrix: MEOH (SOIL) Received Date: 1/11/2013 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/12/2013 3:16:42 PM
Surr: DNOP	102	72.4-120	%REC	1	1/12/2013 3:16:42 PM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/11/2013 4:32:16 PM
Surr: BFB	105	84-116	%REC	1	1/11/2013 4:32:16 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	1/11/2013 4:32:16 PM
Toluene	ND	0.050	mg/Kg	1	1/11/2013 4:32:16 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/11/2013 4:32:16 PM
Xylenes, Total	ND	0.10	mg/Kg	1	1/11/2013 4:32:16 PM
Surr: 4-Bromofluorobenzene	109	80-120	%REC	1	1/11/2013 4:32:16 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	13	1.5	mg/Kg	1	1/11/2013 2:11:44 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	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 1301371 Date Reported: 1/15/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering GCU 169E

1301371-003

Project:

Lab ID:

Client Sample ID: 60'N20W@-8' Collection Date: 1/10/2013 2:21:00 PM Matrix: MEOH (SOIL) Received Date: 1/11/2013 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/12/2013 3:43:39 PM
Surr: DNOP	103	72.4-120	%REC	1	1/12/2013 3:43:39 PM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/11/2013 5:00:59 PM
Surr: BFB	99.7	84-116	%REC	1	1/11/2013 5:00:59 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	1/11/2013 5:00:59 PM
Toluene	ND	0.050	mg/Kg	1	1/11/2013 5:00:59 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/11/2013 5:00:59 PM
Xylenes, Total	ND	0.10	mg/Kg	1	1/11/2013 5:00:59 PM
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	1/11/2013 5:00:59 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	5.8	1.5	mg/Kg	1	1/11/2013 2:36:33 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	Р	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

	•				-					WO#:	1301371
Hall Ei	nvironment	al Anal	ysis I	Laborat	ory, Inc.						15-Jan-13
Client: Project:	Blagg Er GCU 16	ngineering 9E									
Sample ID	MB-5641	SampT	ype: M	BLK	Tes	tCode: El	PA Method	300.0: Anion	IS		
Client ID:	PBS	Batch	n ID: 56	41	F	RunNo: 8	017				
Prep Date:	1/11/2013	Analysis D	ate: 1/	/11/2013	5	SeqNo: 2	31933	Units: mg/k	٢g		
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID	LCS-5641		ype: LC	s	Tes	tCode: El	PA Method	300.0: Anion	IS		
Client ID:	LCSS	Batch	n ID: 56	41	F	RunNo: 8	017				
Prep Date:	1/11/2013	Analysis D	ate: 1/	11/2013	S	SeqNo: 2	31934	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.8	90	110			
Sample ID	1301334-002AMS	SampT	уре: М	6	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	BatchQC	Batch	n ID: 56	41	F	RunNo: 8	017				
Prep Date:	1/11/2013	Analysis D	ate: 1/	/11/2013	5	SeqNo: 2	31939	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	7.5	15.00	3.624	84.3	64.4	117			
Sample ID	1301334-002AMS	D SampT	уре: М	SD	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	BatchQC	Batch	n ID: 56	41	F	RunNo: 8	017				
Prep Date:	1/11/2013	Analysis D	ate: 1/	11/2013	S	SeqNo: 2	31940	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	7.5	15.00	3.624	84.2	64.4	117	0.111	20	

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

- Value above quantitation range Е
- Analyte detected below quantitation limits J
- Sample pH greater than 2 Р

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

WO#: 1301371 15-Jan-13

Hall En	vironment	al Anal	ysis I	Laborat	ory, Inc.					WO#.	1501371 15-Jan-13
Client: Project:	Blagg Er GCU 16	ngineering 9E									
Sample ID	MB-5643	SampT	Гуре: М	BLK	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	PBS	Batcl	h ID: 56	43	F	RunNo: 7	992				
Prep Date:	1/11/2013	Analysis D	Date: 1/	11/2013	S	SeqNo: 2	31421	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C Surr: DNOP	Organics (DRO)	ND 9.6	10	10.00		96.1	72.4	120			
Sample ID	LCS-5643	SampT	Type: LC	s	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	LCSS	Batcl	h ID: 56	43	F	RunNo: 7	992				
Prep Date:	1/11/2013	Analysis D	Date: 1/	11/2013	S	SeqNo: 2	31480	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	42	10	50.00	0	84.3	47.4	122			
Surr: DNOP		4.5		5.000		89.9	72.4	120			
Sample ID	1301334-001AMS	Samp1	Гуре: М	6	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	BatchQC	Batcl	h ID: 56	43	F	RunNo: 7	975				
Prep Date:	1/11/2013	Analysis D	Date: 1/	12/2013	S	SeqNo: 2 :	32315	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	38	9.9	49.26	0	78.0	12.6	148			
Surr: DNOP		5.0		4.926		101	72.4	120			
Sample ID	1301334-001AMS	D Samp1	Гуре: М	SD	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID:	BatchQC	Batcl	h ID: 56	43	F	RunNo: 7	975				
Prep Date:	1/11/2013	Analysis D	Date: 1/	12/2013	S	SeqNo: 2	32316	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	42	9.8	48.92	0	86.6	12.6	148	9.73	22.5	
Surr: DNOP		5.0		4.892		103	72.4	120	0	0	

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Page 5 of 7

Client: Project:	Blagg En GCU 169	gineering)E									
Sample ID	5ML RB	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID:	PBS	Batch	n ID: R8	003	F	RunNo: 8	003		Ū		
Prep Date:		Analysis D)ate: 1 /	11/2013	S	SeqNo: 2	31959	Units: mg/k	۲q		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
,	ge Organics (GRO)	ND	5.0	SFIX value	SFR Kei Vai	/0RLC	LOWLIIIII	TiigiiLiitiit	/0ICF D	KF DLIIIII	Quai
Surr: BFB	,	960		1000		96.3	84	116			
Sample ID	2.5UG GRO LCS	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID:	LCSS	Batch	n ID: R8	003	F	RunNo: 8	003				
Prep Date:		Analysis D	ate: 1/	11/2013	5	SeqNo: 2	31968	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	27	5.0	25.00	0	108	74	117			
Surr: BFB		1000		1000		103	84	116			
Sample ID	1301369-001AMS	SampT	ype: M	6	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	e	
Client ID:	BatchQC	Batch	n ID: R8	003	F	RunNo: 8	003				
Prep Date:		Analysis D	ate: 1/	11/2013	S	SeqNo: 2	31971	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	je Organics (GRO)	22	5.0	19.07	2.059	105	70	130			
Surr: BFB		850		762.6		112	84	116			
Sample ID	1301369-001AMS	D SampT	ype: M	SD	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	e	
Client ID:	BatchQC	Batch	n ID: R8	003	F	RunNo: 8	003				
Prep Date:		Analysis D	ate: 1/	11/2013	S	SeqNo: 2	31972	Units: mg/ł	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	22	5.0	19.07	2.059	105	70	130	0.622	22.1	
Surr: BFB		860		762.6		113	84	116	0	0	

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: **1301371** *15-Jan-13*

Qualifiers:

* Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - R RPD outside accepted recovery limits

~ Hall Er	vironmenta	l Anal	ysis I	aborat	ory, Inc.					WO#:	13013 15-Jan-1
Client: Project:	Blagg Eng GCU 169	gineering	-		• ·						
Sample ID	5ML RB	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: R8	003	R	RunNo: 8	003				
Prep Date:		Analysis E	Date: 1/	11/2013	S	SeqNo: 2	32037	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050					-			
oluene		ND	0.050								
thylbenzene		ND	0.050								
ylenes, Total		ND	0.10								
-	nofluorobenzene	1.1		1.000		109	80	120			
Sample ID	100NG BTEX LCS	SampT	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: R8	003	R	RunNo: 8	003				
Prep Date:		Analysis E	Date: 1/	11/2013	S	SeqNo: 2	32040	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene		1.0	0.050	1.000	0	101	80	120			
oluene		1.0	0.050	1.000	0	101	80	120			
thylbenzene		1.0	0.050	1.000	0	102	80	120			
ylenes, Total		3.1	0.10	3.000	0	102	80	120			
Surr: 4-Brom	nofluorobenzene	1.1		1.000		111	80	120			
Sample ID	1301370-001AMS	Samp	Гуре: МS	;	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batc	h ID: R8	003	R	RunNo: 8	003				
Prep Date:		Analysis E	Date: 1/	11/2013	S	SeqNo: 2	32045	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene		0.74	0.050	0.7074	0	105	67.2	113			
oluene		0.74	0.050	0.7074	0	105	62.1	116			
thylbenzene		0.75	0.050	0.7074	0	106	67.9	127			
ylenes, Total		2.2	0.10	2.122	0	105	60.6	134			
Surry A Brom							00	120			
Juli. 4-Dioli	nofluorobenzene	0.79		0.7074		112	80	120			
	1301370-001AMSE		Гуре: М\$		Tes			8021B: Vola	tiles		
Sample ID) Samp1	Гуре: М \$ h ID: R8	SD.			PA Method		tiles		
Sample ID Client ID:	1301370-001AMSE) Samp1	h ID: R8	SD 003	R	tCode: El	PA Method				
Sample ID Client ID: Prep Date:	1301370-001AMSE	D Samp Batc	h ID: R8	SD 003 11/2013	R	tCode: El RunNo: 8	PA Method	8021B: Vola		RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte	1301370-001AMSE	D Samp Batcl Analysis I	h ID: R8 Date: 1/	SD 003 11/2013	ਸ S	tCode: El RunNo: 8 SeqNo: 2	PA Method 003 32046	8021B: Vola Units: mg/ł	٢g	RPDLimit 14.3	Qual
Sample ID Client ID: Prep Date: Analyte Jenzene	1301370-001AMSE	D SampT Batc Analysis I Result	h ID: R8 Date: 1/ PQL	5D 003 11/2013 SPK value	R S SPK Ref Val	tCode: El RunNo: 8 SeqNo: 2 %REC	PA Method 003 32046 LowLimit	8021B: Vola Units: mg/k HighLimit	(g %RPD		Qual
Sample ID Client ID: Prep Date: Analyte ienzene joluene	1301370-001AMSE	D Samp Batc Analysis I Result 0.72	h ID: R8 Date: 1/ PQL 0.050	5D 003 11/2013 SPK value 0.7074	R S SPK Ref Val 0	tCode: El RunNo: 8 SeqNo: 2 %REC 102	PA Method 003 32046 LowLimit 67.2	8021B: Vola Units: mg/k HighLimit 113	(g <u>%RPD</u> 2.47	14.3	Qual
	1301370-001AMSE	D Samp Batcl Analysis E Result 0.72 0.72	h ID: R8 Date: 1/ <u>PQL</u> 0.050 0.050	5D 003 11/2013 SPK value 0.7074 0.7074	R S SPK Ref Val 0 0	tCode: El RunNo: 8 SeqNo: 2 %REC 102 102	PA Method 003 32046 LowLimit 67.2 62.1	8021B: Vola Units: mg/F HighLimit 113 116	(g %RPD 2.47 2.64	14.3 15.9	Qual

Value exceeds Maximum Contaminant Level. *

QC SUMMARY REPORT

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Sample pH greater than 2 Р

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

- Page 7 of 7

WO#: 1301371

	HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albi TEL: 505-345-3975 Website: พากพ.ha	4901 uquerque FAX: 50	Hawk , NM 15-34.	:ins A 8710 5-410	/E 05 07	Sample Log-In C	heck List
Clier	nt Name: BLAGG		Nork Ord	ler N	lumb	er: 1	301371	
Rece	eived by/date:	01/11/17						
Logo	jed By: Astriky Gallegos	1/11/2013 11:00:00 AM	м			A	Ŧ	
	pleted By: Ashley Gallegos	1/11/2013 11:22:24 AM	M			A	*	
	iewed By: MA	()/11/13				· · .	0	
	in of Custody	0/11/						
1.	Were seals intact?		Yes	·	No		Not Present 🗸	
2.	Is Chain of Custody complete?		Yes		No		Not Present	
3.	How was the sample delivered?		<u>Cour</u>	ier				
<u>Log</u>	In							
	Coolers are present? (see 19. for coole	er specific information)	Yes	<	No		NA	
5.	Was an attempt made to cool the sam	ples?	Yes	<	No		NA	
6.	Were all samples received at a temper	ature of >0° C to 6.0°C	Yes	V	No		NA	
7.	Sample(s) in proper container(s)?		Yes	V	No	i		
8.	Sufficient sample volume for indicated	test(s)?	Yes	\checkmark	No	. :		
9.	Are samples (except VOA and ONG) p	properly preserved?	Yes					
10.	Was preservative added to bottles?		Yes		No	~	NA	
1 1	VOA vials have zero headspace?		Yes		No		No VOA Vials 🗸	
	Were any sample containers received	broken?	Yes					
	Does paperwork match bottle labels? (Note discrepancies on chain of custo		Yes	~	No	: 1	# of preserved bottles checked for pH:	
14.	Are matrices correctly identified on Ch	ain of Custody?	Yes	✓.	No		•	>12 unless noted)
15	Is it clear what analyses were request	ed?	Yes				Adjusted?	
16	Were all holding times able to be met? (If no, notify customer for authorization		Yes	~	No		Checked by:	
Spe	ecial Handling (if applicable)							
	Was client notified of all discrepancies	with this order?	Yes		No	: ;	NA	
	Person Notified:	Date:			/xen			
	By Whom:	Via:	i eMa	uil I	P	hone	Fax In Person	-
	Regarding:				-			-
	Client Instructions:	n maaran waaran ha waarda waxaa ku analaan ay yaaraa ku						:
40	<u>a</u>							
18	, Additional remarks:							

19. Cooler Information

 Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes			

		ee		Turn-Around Time:	Time:	By Mawbar 1/14/2013				A		- Ž	L'AL	ō,		E Z	A	
5 CNG.	5	DLAGE ENGLARDAN JUC.	ų	Droiect Name:	Rush					Ž		ANALYSIS	2	ă	LABORATOR		N. N	
AMERICA	Ŷ	A				ľ			8	www	halle.	nviron	www.hallenvironmental.com	l.con	~			
Mailing Address: $P.o. Box$		Sox 87		5	2	しった		4901	Haw	4901 Hawkins NE	,	nbnqı	erque,	MN	Albuquerque, NM 87109			
BLWMFIELD.	•	NM BAIS		Project #				Tel.	505-3	Tel. 505-345-3975	75	Fax	Fax 505-345-4107	45-4	107			
~	~	632-1199									Ana	alysis	Analysis Request	est				
				Project Manager:	ger:		((ias			([*] C						
		□ Level 4 (Full Validation)	ation)	14	BLAGE	Ś	1208)					00 [*] '20	PCB's					
□ Other	1 2			Sampler:	T. Bu	<u>مارید</u> 106 میں	S, SIMITI				(НА	^{3°} NO ^s	/ 8082					ir N)
	1			Sample Temperature:	berature:	10												<u>م (</u>
Matrix		Sample Request ID	st ID	Container Type and #	Preservative Type	LCSUST1	BTEX + STE	BTEX + MT	odieM) H9T	EDB (Metho	AN9) 0158	9M 8 АЯЭЯ Э,Я) snoinA	sitse9 1808	40V) 80828	-ime2) 0728			Air Bubbles
10/2013 1045 5012		129 NZ6W @ -6		4 of x1	Cert	100-	X	\times	\sim						$\boldsymbol{\times}$			
Ч		90'NZOW @	-8′	١٢	- 11	-Dn2	$\boldsymbol{\times}$	\times	\sim						$\left \boldsymbol{\lambda} \right $			
1		60'N ZOW @	-8,	11	ł	-003	λ	X	\sim						X	-		
									<u> </u>									
																	-	
														-				
				-														
				:		· ·												
Relinquished by:	ወ 🖣	d by:		Received by:	-	Date Time	Rem	Remarks:	V	SŁO	7	0 A		20	Buis	2		
3		1 Deg		/ Minthe	Walk	7/10/13 1540		Bit		BLACK	L							
		igheatury:		Received by:	N.	Date Time	A A		500	ant 4c7		王を	n U	CLL CLL	RACE			
	2	ک ¦] . <u>.</u>							j I.	·	,	-	<u>.</u>				1