State of New Mexico Energy, Minerals and Natural Resources Department

Heather Riley

Division Director
Oil Conservation Division

Susana Martinez

Governor

Ken McQueen Cabinet Secretary

Matthias Sayer Deputy Cabinet Secretary

November 29, 2018

Mr. Steve Moskal 1199 Main Ave, Suite 101 Durango, CO 81303

Re: Gallegos Canyon Unit #153 (3RP-17) API# 30-045- 24292

Dear Mr. Moskal.

OCD has reviewed the subject work plan. OCD approves this work plan with the following conditions.

1.) BP will maintain a SVE runtime greater than or equal to 90% per quarter.

- 2.) BP will collect an initial gas sample for laboratory analysis shortly after the startup of SVE Operations and then a quarterly sample thereafter. The gas sample will be analyzed for EPA Method 8260 Full List and include Carbon dioxide and Oxygen.
 - The gas sample port needs to be installed prior to the inlet of the vacuum pump but, after the convergence of all sve wells.
- 3.) BP will submit to OCD District III a quarterly update report detailing remediation operations the report will include at a minimum.
 - o Summary of remediation activity for the quarter.
 - o SVE run time
 - o SVE mass removal and product recovery.
 - o Gas Sample Analysis

BP will submit to the OCD District III a closure sampling plan prior to initiating closure of the site.

Vanessa Fields

Environmental Specialist

505-334-6178 ext. 119

Cc: Jim Griswold, Brandon Powell, Cory Smith

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	300-17
Facility ID	
Application ID	

							NMOCD
	Release Notification		tion	NOV 0 5 2018			
Responsible Party			y	DISTRICT III			
Responsible	Party: BP A	merica Production	Co.		OGRID: 77	78	Subsequent: REMEDIATION PLAN
Contact Nam	e: Steve Mo	skal			Contact Te	lephone: (505)	330-9179
Contact emai	il: steven.mo	oskal@bpx.com			Incident #	(assigned by OCD))
Contact mail	ing address:	1199 Main Ave, S	Suite 101, Durang	o CO, 8	1301		
Location of Release Source							
Latitude: 36.	.702080°		(NAD 83 in a	decimal de	Longitude: grees to 5 deci	-108.108771°	
			(IVAD 65 III C	iecimai ae			
		nyon Unit 153E					roduction Well Pad
Date Releas	e Discovere	d: December 1994			API#: 30-	045-24292	
Unit Letter	Section	Township	Range		Count	ty	1
С	28	T29N	R12W	San Ji	an Juan		
Surface Owner: State Federal Tribal Private (Name:) Nature and Volume of Release Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)							
Crude Oil	l	Volume Release	d (bbls)			Volume Reco	overed (bbls)
Produced	Water	Volume Release	d (bbls):			Volume Reco	overed (bbls):
		Is the concentrat	ion of dissolved c >10,000 mg/l?	hloride	in the	Yes N	lo
Condensa	te		d (bbls): Unknow	vn		Volume Reco	overed (bbls): <u>0 bbls</u>
☐ Natural Gas Volume Released (Mcf)			Volume Reco	overed (Mcf)			
Other (describe) Volume/Weight Released (provide units)			Volume/Weig	ght Recovered (provide units)			
Cause of Release: Hydrocarbon impacts to soil and groundwater at the GCU 153E were first discovered at a dehydrator pit in December, 1994. Residual contaminants of concern remain elevated in an onsite groundwater monitoring well. BP plans to remediate using soil vapor extraction as detailed in the attached remediation plan.							

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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?		
☐ Yes ⊠ No			
If YES, was immediate no N/A	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?		
	Initial Response		
The responsible	e party must undertake the following actions immediately unless they could create a safety hazard that would result in injury		
☐ The source of the rele	ease has been stopped.		
☐ The impacted area ha	s been secured to protect human health and the environment.		
Released materials ha	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.		
All free liquids and re	ecoverable materials have been removed and managed appropriately.		
If all the actions described	d above have <u>not</u> been undertaken, explain why:		
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.			
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name:	Title:		
Signature:	Date:		
email:	Telephone:		
OCD Only			
Received by:	Date:		

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?			
Did this release impact groundwater or surface water?	⊠ Yes □ No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	⊠ Yes □ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?			
Are the lateral extents of the release within a 100-year floodplain?			
Did the release impact areas not on an exploration, development, production, or storage site?			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			
Characterization Report Checklist: Each of the following items must be included in the report.			
 Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information (Investigation performed prior to Spill Rule Update) Topographic/Aerial maps Laboratory data including chain of custody 			

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and			
regulations all operators are required to report and/or file certain	release notifications and perform corrective actions for releases which may endanger		
public health or the environment. The acceptance of a C-141 re	port by the OCD does not relieve the operator of liability should their operations have		
failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name:Steve Moskal Title:	Environmental Coordinator		
Signature: Annu Muu	Date: November 1, 2018		
email: <u>steven.moskal@bpx,com</u>	Telephone: (505) 330-9179		
OCD Only			
Received by:	Date:		

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Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.			
 Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 			
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.			
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.			
Extents of contamination must be fully delineated.			
Contamination does not cause an imminent risk to human health, the environment, or groundwater.			
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name: Steve Moskal Title: Environmental Coordinator			
Signature:			
email: <u>steven.moskal@bpx.com</u> Telephone: <u>(505) 330-9179</u>			
OCD Only Received by: Varessa TreldS Date: 1125 2018			
Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:			

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following is	tems must be included in the closure report.	
A scaled site and sampling diagram as described in 19.15.29.1	11 NMAC	
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office	
Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rer human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification to the O	nditions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.	
Printed Name:	Title:	
Signature:	Date:	
email:	Telephone:	
OCD Owler		
OCD Only		
Received by:	Date:	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Closure Approved by:	Date:	
Printed Name:	Title:	

BP America

Gallegos Canyon Unit 153E

(C) Sec 28 – T29N – R12W API: 30-045-24292

NMOCD Remediation File: 3RP-17

Remediation Plan

November 1, 2018

Introduction

Hydrocarbon impacts to soil and groundwater at the GCU 153E were first discovered at a dehydrator pit in December, 1994. Initial remediation and subsequent groundwater monitoring historical data has previously been submitted to the New Mexico Oil Conservation Division (NMOCD) and is contained in Remediation File 3RP-17.

Only one (1) monitor well (MW-3R) (Figure 1) has residual hydrocarbon impacts that exceed New Mexico Water Quality Control Commission (NMWQCC) groundwater standards. The most recent groundwater data (June 26, 2018) on this well reported benzene at 22 ug/L with all other full list US EPA Method 8260 constituents testing at below NMWQCC limits. The full historical laboratory analytical data for all site monitor wells is presented in Table 1. Presently the only remaining site monitor wells are MW-2A, MW-3R and MW-7A. Other prior site monitor wells have been abandoned.

Presented herein is updated monitoring laboratory analytical data and a proposed plan to augment groundwater remediation via installation of a soil vapor extraction (SVE) system.

Planned SVE System Operation

Four (4) soil vapor extraction points (SVE) will be installed in the vicinity of monitor well MW-3R (Figure 2). Groundwater at the site fluctuates between 10' - 12' below surface grade. The SVE points will be installed with a 5 foot screened section from 6' - 11' below grade. A hydrated bentonite grout mix will be placed above the screened section and extend to ground surface to limit vertical air flow in the immediate wellbore area.

The primary blower is anticipated to be a 1.5 horsepower Rotron EN454 regenerative blower with in-line flow meter and vacuum gages. The SVE points will be manifolded together with individual control valves to allow any one or group of points to be operated. Either a natural gas powered generator or an electric drop will be required to be installed by the electricity utility provider prior to startup of the SVE system. Presently the timing of receiving the power source is unknown.

After startup each of the SVE points will be individually field tested to determine off gas organic vapor meter (OVM) readings. Following this testing an initial effluent gas sample will be collected

from either a single SVE point or group of points, depending on initial field test results, for analysis by US EPA Method 8260 for volatile organic compounds (VOC). A re-sample of the effluent gas will be collected annually for VOC testing. Operating data will be collected to document a minimum 90% run time on the SVE unit. Groundwater monitor well sampling will be quarterly and will include testing by US EPA Method 8260 and API water (cation/anion balance). An annual report documenting site activities, groundwater quality, run time and mass removal (both gas and liquid) will be submitted to NMOCD.

Operation of the SVE unit will continue until groundwater quality reaches NMWQCC standards for four (4) consecutive quarters, at which time permanent site closure will be requested, following BP Groundwater Management Plan for pit closures.

BP AMERICA PRODUCTION COMPANY Table 1

GROUNDWATER FIELD DATA & LAB BTEX RESULTS

GCU # 153E - Dehy. Pit UNIT C, SEC. 28, T29N, R12W REVISED DATE: October 24, 2018 Submitted by Blagg Engineering, Inc.

								[BTEX US EPA N	METHOD 8021	LB
SAMPLE	WELL NAME	DEPTH TO	WELL	TDS	CONDUCT.	рН	FREE PHASE	BENZENE	TOLUENE	ETHYL	TOTAL
DATE	/ NUMBER	WATER	DEPTH				PRODUCT			BENZENE	XYLENES
		(ft)	(ft)	(mg/L)	(umhos)		(ft)	(ppb)	(ppb)	(ppb)	(ppb)
03/08/96	MW #1A	14.95	20.00	4,460	3,200	7.20		ND	0.73	ND	ND
01/12/93	MW #2A	11.50	15.83	4,460	5,700	6.60	T	11.5	12.1	ND	54
05/05/93	IVIVV HZA	10.34	15.65	7,400	3,400	6.60		14	6.9	10.9	20.1
09/01/93		11.54			2,800	7.10		700	10.4	244	82.9
12/01/93		11.42			4,800	7.00		118	1.6	76	44.7
03/08/94		11.01			4,600	7.20		24.1	8.5	24.5	29.3
06/27/94		11.14			4,000	6.90		350	13.2	126	ND
09/21/94		11.80			3,500	6.90		328.7	13.3	140.8	1.5
12/16/94		11.55			3,800	7.10		6.7	9.6	1.1	8.7
03/15/95		11.15			4,400	6.80		1.7	5	ND	3.8
06/16/95		10.82			4,000	6.90		36.5	5.4	17.6	7.2
09/11/95		11.39			3,100	7.20		239	17	168	35.6
12/08/95		11.44			3,800	6.80		50.2	9.99	10.3	5.84
03/08/96		11.08			2,700	6.70		1.08	ND	2.71	0.87
06/17/96		11.30			2,700	6.90		230	10.2	77.7	32.54
06/25/97		10.52			2,600	6.80		522	6.6	82.6	44.6
06/12/98		10.59			2,400	7.30		125	7.3	22.7	44.7
05/28/99		10.05			2,700	6.80		185	47.8	44.1	73.4
05/26/00		10.10			3,500	7.00		220	ND	96	15
07/28/01		10.87			3,700	7.26		66	ND	24	31
03/11/02		10.80			4,600	6.86		ND	ND	2.1	ND
06/21/02		11.18			4,700	7.63		63	ND	28	29.8
06/30/03		10.74			2,900	6.81		41	5.3	30	36
06/25/04		10.78			2,900	6.81		7.6	ND	3.5	5.5
12/22/04		11.03			N/A	N/A		ND	ND	ND	ND
03/29/05	<u></u>	9.85			3,100	6.73		ND	ND	ND	ND
01/12/93	MW #3A	11.40			6,800	7.00		706,000	6,438,000	3,684,000	13,999,000
05/05/93		10.38			4,900	7.00		8,200	2,210	1,070	4,340
09/01/93		11.44	16.00		5,400	7.10		8,300	800	660	2,750
12/01/93		11.33					0.02				
03/08/94	-	11.03					0.03				
06/27/94	-						0.02				
09/21/94 12/16/94		11.97					0.01				
	WP #3B	A CONTRACTOR OF THE PARTY OF TH	15.00		6 500	7.40	0.46	1 047	1 72E	121 2	2.150
06/28/95 09/11/95	VVF #3D	11.73 12.14	15.00		6,500 8,400	7.40		1,947 752	1,735 102	434.3 427	3,150 1,386
12/08/95		12.14			4,800	6.20		772	70	208	2,070
03/08/96		11.78			4,000	6.10		775	156	259	2,480
06/17/96		11.77			4,800	6.40		764	196	184	1,515
06/25/97		11.25			3,400	6.30		1,940	167	143	727
06/12/98		11.22			3,700	6.60		276	68	85.3	458
05/28/99		11.56			3,900	6.50		178	98	50.5	250
06/13/00	MW #3R	10.88			7,600	7.00		360	16	720	1,234
07/28/01		11.72			8,600	7.25		520	35	350	757
03/11/02		11.70			9,700	7.14		120	7	110	225
06/21/02		11.90			8,800	7.69		310	ND	300	551
06/30/03		11.39			5,200	7.11		300	ND	76	170
06/25/04		10.51			5,200	7.11		120	ND	44	63
06/27/05		10.78			6,200	7.00		160	12	54	84
06/29/06		11.51			7,800	6.93		470	39	170	180
06/25/07		10.70			6,000	6.94		180	ND	24	24

BP AMERICA PRODUCTION COMPANY

Table 1

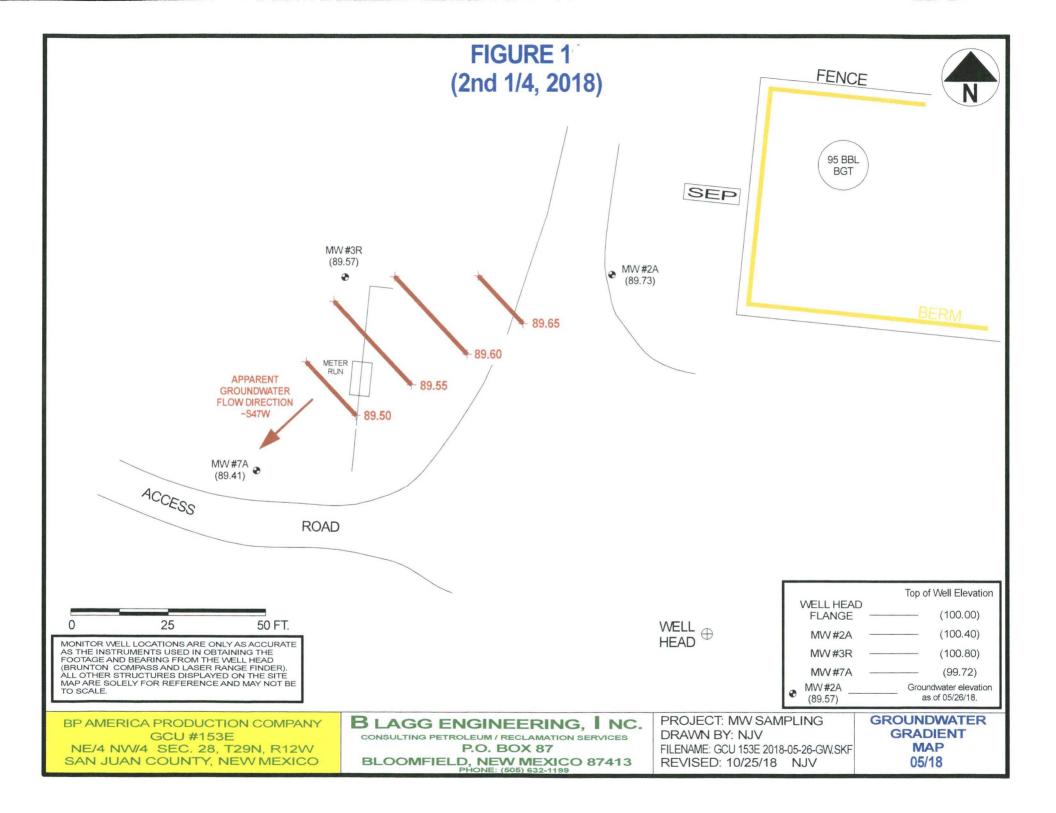
GROUNDWATER FIELD DATA & LAB BTEX RESULTS

GCU # 153E - Dehy. Pit UNIT C, SEC. 28, T29N, R12W REVISED DATE: October 24, 2018 Submitted by Blagg Engineering, Inc.

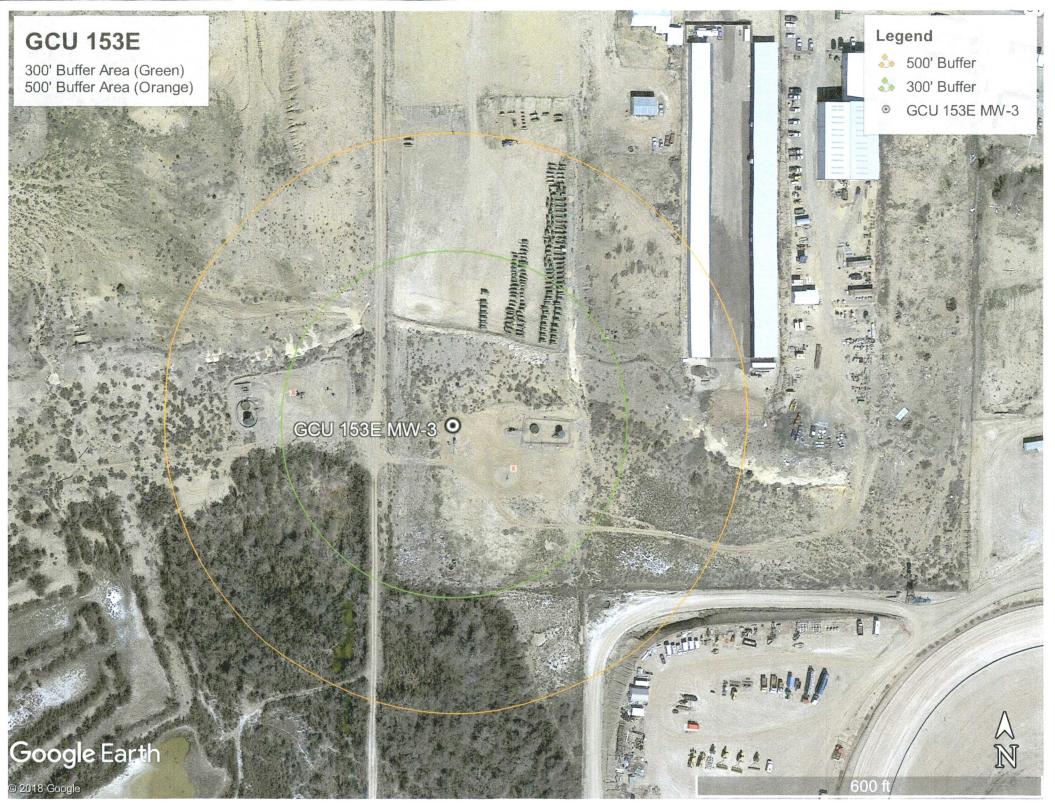
								[BTEX US EPA N	ИЕТНОD 8021	.B
SAMPLE	WELL NAME	DEPTH TO	WELL	TDS	CONDUCT.	рН	FREE PHASE	BENZENE	TOLUENE	ETHYL	TOTAL
DATE	/ NUMBER	WATER	DEPTH				PRODUCT			BENZENE	XYLENE
		(ft)	(ft)	(mg/L)	(umhos)		(ft)	(ppb)	(ppb)	(ppb)	(ppb)
06/09/08	MW #3R	10.66		I	3,300	7.24		72	6	9.1	14
08/27/08		11.47			6,000	7.37		58	ND	4.7	9
05/26/09		11.10			5,200	7.50		63	ND	ND	ND
12/28/09		11.70			5,600	7.52		8.3	ND	ND	ND
03/02/10		11.05			4,400	7.53		66	ND	ND	ND
05/10/10		10.57			4,700	7.49		47	ND	ND	ND
07/21/10		11.45			7,900	7.48		38	ND	2.3	6.3
10/21/10		12.18			6,400	7.15		11	ND	1.6	3.3
02/23/11		11.43			3,600	7.45		3.8	ND	ND	2.9
06/01/11		11.33			8,900	7.41		160	10	25	37
09/29/11		12.23			8,900	7.39		47	ND	6.6	12
12/21/11		11.73			6,400	7.78		20	4.3	5.4	6.2
02/10/12		11.56			6,200	7.21		9.7	1.6	2.7	4.8
06/29/12		11.88			6,500	7.31		79	18	19	30
09/27/12		11.80			3,100	7.34		17	2.4	6.2	7.7
11/26/12		11.75			3,200	7.71		8.9	1.5	2.6	4.3
02/27/13		11.35			5,100	7.05	1	63	13	14	23
05/31/13		11.16		6,010	4,300	7.30	1	93	14	14	31
08/28/13		12.10		0,020	2,900	7.80		51	6.5	5.3	ND
12/11/13		11.00			3,100	7.45		80	22	15	23
02/27/14		10.78			4,800	7.23		84	20	16	28
05/28/14		10.76			2,800	7.28		110	22	16	41
08/22/14		11.64			1,800	7.37		34	8.5	5.2	14
12/01/14		11.62			3,100	7.36		8.6	5.4	3.0	7.1
03/30/15		10.87			800	6.73		74	28	19	34
05/11/15		12.02			2,800	7.27		54	25	12	19
08/26/15		11.24			5,200	6.88		34	8.4	5.4	9.3
06/22/16		10.30			4,700	6.97		29	9.1	7.4	14
05/26/17		10.14			5,500	6.86		29	16	10	22
06/26/18		11.38			5,100	6.93		22	6.0	5.6	9.2
01/12/93	MW #7A	12.42			12,400	7.30		ND	0.5	ND	1.1
05/05/93		10.56			10,600	7.50		ND	ND	ND	0.5
09/01/93		11.90	16.60		10,700	7.50		0.2	ND	ND	0.8
03/08/94		11.10			16,800	7.30		ND	ND	ND	ND
06/27/94		11.23			13,700	7.30		ND	ND	ND	ND
09/21/94		12.30			13,100	7.30		0.8	1	ND	2.2
12/16/94		11.69			9,600	7.50		ND	ND	ND	ND
03/15/95		11.21			18,400	7.50		ND	ND	ND	ND
06/16/95		10.88			12,200	7.40		ND	ND	ND	ND
09/11/95		11.64			11,200	7.70		1.1	0.6	0.5	1
12/08/95		11.50			10,800	7.40		ND	ND	ND	ND
03/08/96		11.18			8,300	7.30		ND	ND	ND	ND
06/17/96		11.28			9,000	7.40		ND	ND	ND	ND
07/28/01		10.87			8,300	7.59		ND	ND	ND	ND
03/08/96	MW #11A	12.10	20.17		3,100	6.90		ND	ND	ND	ND
03/08/96	MW #12A										
03/08/96	IVIVV #12A	10.76	19.79		2,800	7.00		ND	ND	ND	ND

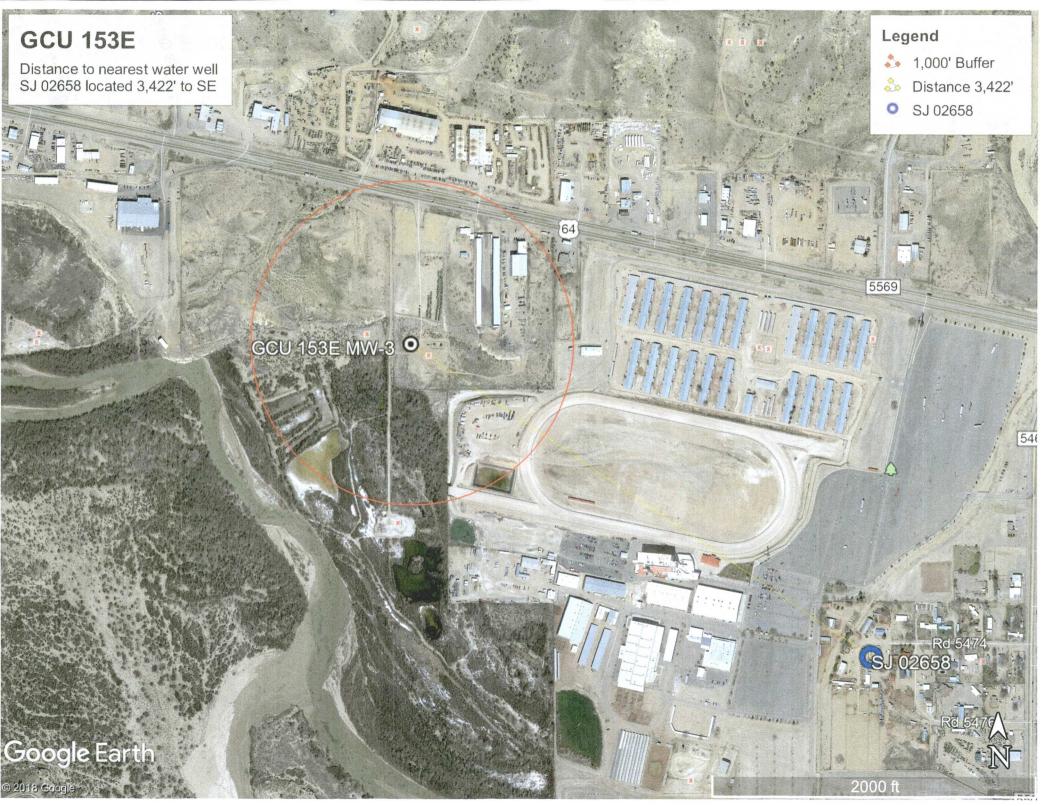
NOTES: 1) RESULTS IN BOLD RED TYPE INDICATE EXCEEDING NMWQCC STANDARDS.

Figures











New Mexico Office of the State Engineer

Wells with Well Log Information

CLW#### in the D suffix indicates POD has been aced & no longer es a water right

(R=POD has been replaced, O=orphaned,

POD

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE) C=the file is (quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

) Number	Sub- Code basin (,	Source Shallow		Sec		3	X 223123	Y 4065711*		Start Date 09/22/1995	Finish Date 09/29/1995	Log File Date 10/12/1995	Depth Well 42	Depth Water Driller 24 SAVAGE, BOB	License Number 847
)2047	SJM2	SJ	Shallow	2 4	28	29N	12W	223224	4065612*	1186	04/29/1986	04/30/1986	05/05/1986	40	25 HOOD, TERRY	717
)2061	SJM2	SJ	Shallow	2 4	28	29N	12W	223224	4065612*	1186	06/21/1986	06/23/1986	06/26/1986	39	23 HOOD, TERRY	717
00726	SJM2	SJ	Shallow	1 3 1	27	29N	12W	223537	4066105*	1277	07/22/1978	07/24/1978	07/26/1978	50	30 JOHNNIE'S LUCKY "7" DRLG.	777
)2654	SJM2	SJ	Shallow	1 3 1	27	29N	12W	223537	4066105*	1277	07/30/1995	08/12/1995	08/21/1996	62	32 DAVID L. MCDONALD	725
00711	SJM2	SJ	Shallow	4 2 1	29	29N	12W	220963	4066391*	1317	07/05/1978	07/09/1978	07/12/1978	20	8	717
00827	SJM2	SJ	Shallow	3 3 1	27	29N	12W	223537	4065905*	1327	10/29/1978	10/31/1978	11/09/1978	55	30 JOHNNIE'S LUCKY "7" DRLG.	777
11008	SJM2	SJ	Shallow	3 3 1	27	29N	12W	223537	4065905*	1327	07/05/1979	07/09/1979	07/20/1979	51	20 THOMPSON, LEON	527
)2370	SJM2	SJ	Shallow	2 2 1	29	29N	12W	220963	4066591*	1342	01/20/1993	01/20/1993	01/25/1993	16	5 HOOD, TERRY	717
03634	SJM2	SJ	Shallow	2 2 1	29	29N	12W	220963	4066591*	1342	02/01/2006	02/02/2006	02/08/2006	18	10 HOOD, TERRY	717
)1590	SJM2	SJ	Shallow	3 1	27	29N	12W	223638	4066006*	1396	06/20/1982	06/25/1982	07/13/1982	63	30 THOMPSON, LEON	527
00904	SJM2	SJ	Shallow	1 1 3	27	29N	12W	223526	4065697*	1397	04/01/1979	04/05/1979	04/09/1979	32	14	717
)1690	SJM2	SJ	Shallow	1 1 3	27	29N	12W	223526	4065697*	1397	04/02/1983	04/04/1983	04/06/1983	25	10 HOOD, TERRY	717
13422	SJM2	SJ	Shallow	2 3 1	27	29N	12W	223737	4066105*	1474	02/08/2004	02/08/2004	02/13/2004	41	31 HOOD, TERRY	717
00901	SJM2	SJ	Shallow	3 1 3	27	29N	12W	223526	4065497*	1499	03/18/1979	03/19/1979	03/29/1979	32	15 THOMPSON, LEON	527
)0666	SJM2	SJ	Shallow	4 3 1	27	29N	12W	223737	4065905*	1518	06/03/1978	06/05/1978	06/15/1978	35	17 LEON THOMPSON	527

CLW#### in the O suffix indicates POD has been aced & no longer res a water right

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

) Number	POD Sub- Code basin C	ounty SJ	Source Shallow			Tws Rng		Y 4065905*		Start Date 3 05/03/1984	Finish Date	Log File Date 05/11/1984	Depth Well	Depth Water Driller 25 HOOD, TERRY	License Number 717
)2870	SJM2	SJ	Shallow			29N 12V		4065905*		3 11/07/1998		11/12/1998	39	24 TERRY HOOD	717
)3384	SJM2	SJ	Shallow	4 3 1	27	29N 12V	223737	4065905*	1518	3 07/20/2003	07/21/2003	07/31/2003	41	30 TERRY HOOD	717
00572	SJM2	SJ	Shallow	1 3	27	29N 12V	223627	4065598*	1533	3 03/01/1978	03/21/1978	04/10/1978	35	28 SELF	
)1700	SJM2	SJ	Shallow	1 3	27	29N 12V	223627	4065598*	1533	3 05/07/1983	05/09/1983	05/17/1983	87	48 MCCOY, LYLE LEROY	1036
11728	SJM2	SJ	Shallow	1 3	27	29N 12V	223627	4065598*	1533	3 05/25/1983	05/27/1983	06/03/1983	25	11 TERRY G HOOD	717
)3711 POD1	SJM2	SJ	Shallow	1 4 1	29	29N 12V	220751	4066185*	1535	07/03/2006	07/03/2006	07/20/2006	20	8 GILES, DEE III	1479
)3167	SJM2	SJ	Shallow	1 2 1	29	29N 12V	220763	4066591*	1538	3 04/17/2002	04/17/2002	03/25/2002	21	10	1479
)3168	SJM2	SJ	Shallow	1 2 1	29	29N 12V	220763	4066591*	1538	3 04/17/2002	04/17/2002	03/25/2002	21	10	1479
)3169	SJM2	SJ	Shallow	1 2 1	29	29N 12V	220763	4066591*	1538	3 04/17/2002	04/17/2002	03/25/2002	21	10	1479
)3170	SJM2	SJ	Shallow	1 2 1	29	29N 12V	220763	4066591*	1538	3 04/17/2002	04/17/2002	03/25/2002	21	10	1479
)3171	SJM2	SJ	Shallow	1 2 1	29	29N 12V	220763	4066591*	1538	3 04/18/2002	04/18/2002	03/25/2002	21	10	1479
)2973	SJM2	SJ	Shallow	2 1 2	33	29N 12V	222901	4064910*	1549	02/18/2000	02/19/2000	03/10/2000	130	50	1345
00559	SJM2	SJ	Shallow				220726	4066296	1553	3		04/07/1978	15	SELF	
)2118	SJM2	SJ	Shallow	1	27	29N 12V	223839	4066207*	1564	06/17/1987	06/18/1987	06/22/1987	29	6 CHIVERS DRILLING CO.	809
)2228	SJM2	SJ	Shallow	1	29	29N 12V	220655	4066299*	1624	04/28/1989	04/28/1989	05/17/1990	19	8 TERRY HOOD	717
)3792 POD1	SJM2	SJ	Shallow	1 3 3	27	29N 12V	223604	4065351	1646	01/10/2008	01/12/2008	01/28/2008	21	10 HOOD, TERRY	717
00786	SJM2	SJ	Shallow	4 1 1	29	29N 12V	220567	4066403*	1714	1 09/09/1978	09/11/1978	09/13/1978	21	8 W.L.HARGIS	799
00799	SJM2	SJ	Shallow	4 1 1	29	29N 12V	220567	4066403*	1714	10/06/1978	10/09/1978	10/12/1978	20	8 BILL HARGIS	799
00842	SJM2	SJ	Shallow	4 1 1	29	29N 12V	220567	4066403*	1714	12/17/1978	12/19/1978	12/29/1978	15	5 JOHNNIE'S LUCKY "7"	777

CLW#### in the D suffix indicates POD has been aced & no longer res a water right

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

) Number	POD Sub- Code basin C	ounty	y Source	q q q 6416 4	Sec	Tws	Rng	x	Υ	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water Driller DRLG.	License Number
)1431	SJM2	SJ	Shallow	4 1 1	29	29N	12W	220567	4066403*	1714	05/30/1981	06/01/1981	06/08/1981	19	7 MATTICS, JOHN	777
00833	SJM2	SJ	Shallow	2 3 1	29	29N	12W	220553	4066197*	1731	11/16/1978	11/16/1978	11/29/1978	17	9	
00961	SJM2	SJ	Shallow	2 3 1	29	29N	12W	220553	4066197*	1731	07/11/1995	07/13/1995	08/21/1996			725
)2497	SJM2	SJ	Shallow	2 3 1	29	29N -	12W	220553	4066197*	1731	08/02/1993	08/04/1993	08/09/1993	17	8 THOMPSON, LEON	527
)2501	SJM2	SJ	Shallow	2 3 1	29	29N -	12W	220553	4066197*	1731	08/25/1993	08/25/1993	08/30/1993	17	17 ORUM, DON	527
)3105	SJM2	SJ	Shallow	2 3 3	27	29N -	12W	223714	4065289*	1772	02/25/2002	02/27/2002	03/06/2002	19	9	799
01677	SJM2	SJ	Shallow	2	33	29N 1	12W	222996	4064603*	1869	03/09/1983	03/19/1983	04/08/1983	51	35 MCDONALD, D.K.	725
)2299	SJM2	SJ	Shallow	3 1 1	29	29N	12W	220367	4066403*	1913	09/26/1991	09/29/1991	03/20/1992	27	7	809
00966	SJM2	SJ	Shallow	3 3 1	29	29N 1	12W	220353	4065997*	1955	05/21/1979	05/23/1979	05/31/1979	18	3 JOHNNIE'S LUCKY "7" DRLG.	777
00338	SJM2	SJ	Shallow	3 3 3	20	29N 1	12W	220381	4066809*	1958	05/28/1977	05/29/1977	06/08/1977	28	10 WRIGHT, JOHN R.	730
00566	SJM2		Shallow					220317	4065902	2008	04/05/1978	04/07/1978	04/13/1978	18	6 NORTH, JIMMY DON	744
)2058	SJM2	SJ	Shallow		27	29N 1	12W	224218	4065793*	2011	06/19/1986	06/21/1986	06/26/1986	60	25 HOOD, TERRY	717
)2169	SJM2	SJ	Shallow		27	29N 1	12W	224218	4065793*	2011	04/08/1988	04/11/1988	04/27/1988	36	19 THOMPSON, LEON	527
01775	SJM2	SJ	Shallow	1 1	34	29N 1	12W	223604	4064782*	2037			10/04/1983	15	THOMPSON, LEON	527
)1776	SJM2	SJ	Shallow	1 1	34	29N 1	12W	223604	4064782*	2037			10/04/1983		THOMPSON, LEON	527
)2041	SJM2	SJ	Shallow	3 2	27	29N 1	12W	224440	4065970*	2190	04/22/1986	04/25/1986	10/11/1988	37	8 CHIVERS,BRYCE	809
)2074	SJM2	SJ	Shallow	3 2	27	29N 1	12W	224440	4065970*	2190	08/01/1986	08/03/1986	10/11/1988	60	25 CHIVERS,BRYCE	809
)0872	SJM2	SJ	Shallow	2 2	30	29N 1	12W	220078	4066510*	2208	08/25/1980	09/10/1980	09/16/1980	25	8 BOB SAVAGE	847
)1442	SJM2	SJ	Shallow	2 2	30	29N 1	12W	220078	4066510*	2208	06/22/1981	06/23/1981	06/26/1981	35	6 HOOD, TERRY	717

CLW#### in the 0 suffix indicates POD has been aced & no longer res a water right

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closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

	POD					
	Sub-	qqq		Log File	Depth Depth	License
) Number	Code basin County So	urce 6416 4 Sec Tws Rng	X Y	Distance Start Date Finish Date Date	Well Water Driller	Number
1565	SJM2 SJ Sha	allow 2 2 30 29N 12W	220078 4066510*	2208 04/15/1983 04/18/1983 04/20/1983	27 4 HOOD, TERRY OR TERRY	717
1695	SJM2 SJ Sha	allow 2 2 30 29N 12W	220078 4066510*	2208 04/28/1983 04/28/1983 05/05/1983	13 4 HOOD, TERRY	717
2502	SJM2 SJ Sha	allow 3 1 4 27 29N 12W	224326 4065462*	2222 09/03/1993 09/13/1993 09/24/1993	40 ORUM, DON	527
2640	SJM2 SJ Sha	allow 3 1 4 27 29N 12W	224326 4065462*	2222 06/10/1995 06/10/1995 08/15/1996	31 18 HOOD, TERRY	717
3376	SJM2 SJ Sha	allow 3 1 4 27 29N 12W	224326 4065462*	2222 09/05/2003 09/07/2003 09/10/2003	27 13 TERRY G. HOOD	717
4024 POD1	SJM2 SJ Sha	allow 4 1 1 34 29N 12W	223714 4064589	2255 03/22/2013 03/22/2013 04/01/2013	27 10 BAILEY, MARK	1357
0952	SJM2 SJ Sha	allow 4 4 19 29N 12W	220092 4066915*	2264 05/19/1979 05/21/1979 05/31/1979	76 40	777
2183	SJM2 SJ Sha	allow 1 4 27 29N 12W	224427 4065563*	2280 05/05/1988 05/05/1988 05/11/1988	40 26 THOMPSON, LEON	527
1643	SJM2 SJ Sha	allow 4 3 2 27 29N 12W	224539 4065869*	2305 05/03/1986 05/09/1986 05/15/1986	65 30 CHIVERS,BRYCE	809
2274	SJM2 SJ Sha	allow 4 3 2 27 29N 12W	224539 4065869*	2305 05/29/1990 05/29/1990 06/08/1990	47 22 CHIVERS DRILLING COMPANY	809
3931 POD1	SJM2 SJ Sha	allow 3 1 4 27 29N 12W	224425 4065457	2316 07/20/2010 07/21/2010 07/27/2010	53 30 MARK BAILEY	1357
3372	SJM2 SJ Sha	allow 3 4 4 19 29N 12W	219991 4066814*	2339 05/19/2003 05/19/2003 05/22/2003	10 2 APPLICANT-MICHAEL WHITNEY	
2506	SJM2 SJ Sha	allow 2 1 4 27 29N 12W	224526 4065662*	2343 09/21/1993 09/25/1993 08/19/1996	44 20 THOMPSON, LEON	527
1133	SJM2 SJ Sha	allow 4 1 4 27 29N 12W	224526 4065462*	2408 03/08/1980 03/09/1980 03/03/1980	24 7 SAVAGE, BOB	847
3255	SJM2 SJ Sha	allow 4 3 4 19 29N 12W	219801 4066819*	2526 08/23/2002 08/23/2002 05/28/2003	17 5 LEON THOMPSON	527
4037 POD1	SJM2 SJ Sha	allow 1 2 4 27 29N 12W	224757 4065678	2561 03/18/2013 03/19/2013 04/01/2013	43 23 MARK BAILEY	1357
3270	SJM2 SJ Sha	allow 2 3 4 19 29N 12W	219801 4067019*	2572 04/09/2003 04/12/2003 04/16/2003	43 24 TERRY HOOD	717
1517	SJM2 SJ Sha	allow 1 2 30 29N 12W	219689 4066516*	2597 01/14/1982 01/15/1982 01/25/1982	20 8 LEON THOMPSON	527
0657	SJM2 SJ Sha	allow 4 1 4 19 29N 12W	219818 4067225*	2619 06/02/1978 06/06/1978 06/13/1978	85 38 W.J.HOOD	717
2363	SJM2 SJ Sha	allow 4 4 22 29N 12W	224867 4066767*	2624 01/14/1993 01/15/1993 01/25/1993	300 185 HOOD, TERRY	717
4						

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(NAD83 UTM in meters)

(in feet)

	POD														
	Sub-			q q q								Log File	Depth	Depth	License
) Number	Code basin C	ounty	Source	6416 4	Sec	Tws Rng	X	Υ	Distance	Start Date	Finish Date	Date	Well	Water Driller	Number
)3363	SJM2	SJ	Shallow	3 4	19	29N 12W	219702	4066920*	2644	09/02/2003	09/02/2003	09/10/2003	19	3 TERRY HOOD	717
)1991	SJM2	SJ	Shallow	2 4	27	29N 12W	224826	4065545*	2664	10/29/1985	10/31/1985	11/08/1985	50	13 CHIVERS,BRYCE	809
)3394	SJM2	SJ	Shallow	4 4 2	27	29N 12W	224938	4065851*	2701	07/07/2003	07/07/2003	07/11/2003	59	15 DEE GILES	1479
)1070	SJM2	SJ	Shallow	1 3 4	19	29N 12W	219601	4067019*	2765	10/10/1979	10/13/1979	10/17/1979	38	14 HOOD, TERRY	717
03312	SJM2	SJ	Shallow	4 1 2	34	29N 12W	224499	4064646*	2785	04/12/2003	04/12/2003	04/16/2003	13	2 TERRY HOOD	717
00567	SJM2	SJ	Shallow	4 4 3	19	29N 12W	219411	4066823*	2910	03/10/1978	03/17/1978	03/21/1978	28	28 JOHN HARGIS	724
)1954	SJM2	SJ	Shallow	1 3	26	29N 12W	225225	4065528*	3052	07/17/1985	07/18/1985	07/30/1985	55	20 CHIVERS,BRYCE	809
)1956	SJM2	SJ	Shallow	1 3	26	29N 12W	225225	4065528*	3052	07/30/1985	07/30/1985	08/09/1985	50	18 CHIVERS,BRYCE	809
)2496	SJM2	SJ	Shallow	4 1 1	26	29N 12W	225351	4066241*	3072	08/16/1993	08/20/1993	09/09/1993	35	20 THOMPSON, LEON	527
)3052	SJM2	SJ	Shallow	4 1 3	26	29N 12W	225324	4065427*	3175	11/15/2000	11/18/2000	01/17/2001	29	15 HOOD, TERRY	717

ord Count: 85

UTMNAD83 Radius Search (in meters):

Easting (X): 222279.51 Northing (Y): 4066329.8 Radius: 3200

M location was derived from PLSS - see Help

data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, ibility, usability, or suitability for any particular purpose of the data.

Monitor Well Laboratory Analytical Data Reports



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 1806F96

July 05, 2018

Steve Moskal

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199

FAX (505) 632-3903

RE: GCU 153E

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/27/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1806F96

Hall Environmental Analysis Laboratory, Inc. Date Reported: 7/5/2018

CLIENT: Blagg Engineering Client Sample ID: MW #3R

 Project:
 GCU 153E
 Collection Date: 6/26/2018 11:00:00 AM

 Lab ID:
 1806F96-001
 Matrix: AQUEOUS
 Received Date: 6/27/2018 7:55:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: DJF
Benzene	22	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Toluene	6.0	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Ethylbenzene	5.6	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2,4-Trimethylbenzene	4.7	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Naphthalene	ND	2.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1-Methylnaphthalene	ND	4.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
2-Methylnaphthalene	ND	4.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Acetone	ND	10	μg/L	1	6/30/2018 7:50:29 AM	A52366
Bromobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Bromodichloromethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Bromoform	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Bromomethane	ND	3.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
2-Butanone	ND	10	μg/L	1	6/30/2018 7:50:29 AM	A52366
Carbon disulfide	ND	10	μg/L	1	6/30/2018 7:50:29 AM	A52366
Carbon Tetrachloride	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Chlorobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Chloroethane	ND	2.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Chloroform	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Chloromethane	ND	3.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
2-Chlorotoluene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
4-Chlorotoluene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
cis-1,2-DCE	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Dibromochloromethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Dibromomethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2-Dichlorobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,3-Dichlorobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,4-Dichlorobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Dichlorodifluoromethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,1-Dichloroethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,1-Dichloroethene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2-Dichloropropane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,3-Dichloropropane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
2,2-Dichloropropane	ND	2.0	μg/L	1	6/30/2018 7:50:29 AM	A52366

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1806F96 Date Reported: 7/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW #3R

Project: GCU 153E Collection Date: 6/26/2018 11:00:00 AM Lab ID: 1806F96-001 Matrix: AQUEOUS Received Date: 6/27/2018 7:55:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: DJF
1,1-Dichloropropene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Hexachlorobutadiene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
2-Hexanone	ND	10	μg/L	1	6/30/2018 7:50:29 AM	A52366
Isopropylbenzene	20	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
4-Isopropyltoluene	3.4	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
4-Methyl-2-pentanone	ND	10	μg/L	1	6/30/2018 7:50:29 AM	A52366
Methylene Chloride	ND	3.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
n-Butylbenzene	ND	3.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
n-Propylbenzene	2.7	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
sec-Butylbenzene	3.2	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Styrene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
tert-Butylbenzene	1.8	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
trans-1,2-DCE	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,1,1-Trichloroethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,1,2-Trichloroethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Trichloroethene (TCE)	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Trichlorofluoromethane	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
1,2,3-Trichloropropane	ND	2.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Vinyl chloride	ND	1.0	μg/L	1	6/30/2018 7:50:29 AM	A52366
Xylenes, Total	9.2	1.5	μg/L	1	6/30/2018 7:50:29 AM	A52366
Surr: 1,2-Dichloroethane-d4	105	70-130	%Red	1	6/30/2018 7:50:29 AM	A52366
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	6/30/2018 7:50:29 AM	A52366
Surr: Dibromofluoromethane	101	70-130	%Rec	1	6/30/2018 7:50:29 AM	A52366
Surr: Toluene-d8	102	70-130	%Red	1	6/30/2018 7:50:29 AM	A52366

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 5 J

- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1806F96

05-Jul-18

Client:

Blagg Engineering

Project:

GCU 153E

Sample ID rb	SampT	ype: MBL	.K	Tes	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: A52 3	366	R	tunNo: 5	2366				
Prep Date:	Analysis D	ate: 6/29	9/2018	S	eqNo: 1	717363	Units: µg/L			
Analyte	Result	PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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

Page 3 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1806F96

05-Jul-18

Client:

Blagg Engineering

Project:

GCU 153E

Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: A5	2366	F	RunNo: 5	2366				
Prep Date:	Analysis D	ate: 6/	29/2018	S	SeqNo: 1	717363	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.3	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			
Sample ID 100ng Ics	SampT	ype: LC	s	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	ID: A5	2366	F	RunNo: 5	2366				
Prep Date:	Analysis D	ate: 6/	/29/2018	5	SeqNo: 1	717364	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	101	70	130			

Qualifiers:

Chlorobenzene

* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

20

1.0

20.00

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

70

130

E Value above quantitation range

98.0

J Analyte detected below quantitation limits

Page 4 of 5

P Sample pH Not In Range

0

- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1806F96

05-Jul-18

Client:

Blagg Engineering

Project:

GCU 153E

Sample ID 100ng Ics	SampT	ype: LC	S	Tes	8260B: VOL	ATILES				
Client ID: LCSW	Batch	Batch ID: A52366 RunNo: 52366								
Prep Date:	Analysis D	ate: 6/	29/2018	S	SeqNo: 1	717364	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	f Val %REC LowLimit		HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	99.4	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	90.1	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.5	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 5 of 5



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: B	BLAGG	Work Order Number	1806F96		RcptNo	: 1
Received By:	Anne Thorne	6/27/2018 7:55:00 AM		anne An	_	
Completed By:	Anne Thorne	6/27/2018 1:14:18 PM		aone Ha		06/27/18
Reviewed By:	ledby! SAB	06/27/18			LL JAK	5 0 01
Chain of Custo					~	
1. Is Chain of Cust	tody complete?		Yes 🗸	No 🗔	Not Present	
2. How was the sa	ample delivered?		Courier			
Log In						
-	t made to cool the samples?	•	Yes 🗸	No 🗌	NA 🗆	
4. Were all sample	es received at a temperature	of >0° C to 6.0°C	Yes 🗸	No 🗆	na 🗆	
5. Sample(s) in pro	oper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample	e volume for indicated test(s	3)?	Yes 🗸	No 🗌		
7. Are samples (ex	cept VOA and ONG) proper	ly preserved?	Yes 🗸	No 🗌		
8. Was preservative	re added to bottles?		Yes	No 🗸	NA \square	
9. VOA vials have z	zero headspace?		Yes 🗸	No 🗌	No VOA Vials	
10. Were any samp	le containers received broke	en?	Yes	No 🗸	# of preserved	
	match bottle labels?		Yes 🗸	No 🗆	for pH: (<2 or	>12 unless noted
2. Are matrices cor	rectly identified on Chain of	Custody?	Yes 🗸	No 🗌	Adjusted?	(0)
3. Is it clear what a	nalyses were requested?		Yes 🗸	No 🗌	/	
	times able to be met? tomer for authorization.)		Yes 🗸	No 🗆	Checked by:	D
	g (if applicable)				/5) ()
	ied of all discrepancies with	this order?	Yes	No 🗌	NA 🗸	
Person No	otified:	Date	EDANTA DA BADE AZ LIZARZIL EDA DANA EDBORO EDBORO	CONTRACTOR OF THE PROPERTY OF]
By Whom:	•	Via:	eMail	Phone Fax	In Person	
Regarding						
Client Inst	tructions:	ON THE STATE OF TH	THE RESIDENCE OF THE PARTY OF T	ervenenskus och men men en e	methelis vales statis stander alexandra et en son tradit a vitalia de la element	
16. Additional rema	arks:					J
17. Cooler Informa						
Cooler No	Temp °C Condition S	eal Intact Seal No S	ieal Date	Signed By		

1.4

Good

Yes

С	Chain-of-Custody Record				Turn-Around Time:						AL		=	RIL	/TI	20	A BARI	6.4 E	BIT	· A I
Client:	BLAC	GG ENGR.	/ BP AMERICA			MA											NT			
				Project Name:				ANALYSIS LABORATORY www.hallenvironmental.com												
Mailing A	ddress:	P.O. BO	X 87			4901 Hawkins NE - Albuquerque, NM 87109														
		BLOOM	FIELD, NM 87413	Project #:				Tel. 505-345-3975 Fax 505-345-4107												
Phone #:		(505) 63	2-1199	1								0000	STEATE OF		Re		C. C. T.			
email or F	Fax#:			Project Manag	jer:										SHEET					
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)				STEVE MO	SKAL	+ TMB's (8021B)	+ TPH (Gas only)	MRO)			S)		04,504	PCB's						
Accredita				Sampler: NELSON VELEZ					RO/	1)	1)	8270SIMS)		02,6	082		Balance	Solids		mple
□ NELAF	>	□ Other	-	On Ice: ⊠"Yes □ No					/ DRO	418.1)	504.1)	3270		N,E	8/8		Bala	Sol		e Sal
□ EDD (Type)		Sample Temp	67	+ 4	(GRO	po 7	po		tals	N,I	cide	F	Anion	lvec		le osit				
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + MTBE	BTEX + MTBE	TPH 8015B	TPH (Method	EDB (Method	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Ar	Total Dissolved		Grab sample 5 pt. composite sample
6/26/18	1100	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	101										٧			1	V
																				+
-															<u> </u>					+
												-	_	-	-				+	+
	-	-					-			_		_	-		+		-	\vdash		+
							+-	-				-			-				-	+
	-	-		-			-						-	-	-	-			-	-
-							-					_	_	-	-				_	+
				-			-					_	_	_	_	_				+
												_		_	_					
															_					
Date: 6/26/18	Time:	Relinquished By:		Received by: Date Time L/ L/ L/ L/ L/ L/ L/ L/ L/ L			Remarks: BILL DIRECTLY TO BP: Contact: Steve Moskal													
Date:	Time:	Relinquishe	ed by:	Received by:	7	Date Time			1900											
4/26/14	1820	Mus	* Walk	1	n. A	- 0755							V-E:	GCU1	153E					
	If necessary camples submitted to Hall Environmental may be a			sichnantmatent to ather	die- d lab	- 101		** **												



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

June 02, 2017

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

RE: GCU #153E OrderNo.: 1705E94

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/31/2017 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1705E94

Received Date: 5/31/2017 7:15:00 AM

Date Reported: 6/2/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW #3R

Project: GCU #153E Collection Date: 5/26/2017 11:20:00 AM Matrix: AQUEOUS

Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: DJF 29 6/1/2017 1:30:08 AM SL43178 1.0 µg/L 1 Toluene 16 1.0 µg/L 6/1/2017 1:30:08 AM SL43178 Ethylbenzene 10 1.0 µg/L 1 6/1/2017 1:30:08 AM SL43178 Xylenes, Total 22 1.5 µg/L 6/1/2017 1:30:08 AM SL43178 Surr: 1,2-Dichloroethane-d4 95.0 70-130 %Rec 6/1/2017 1:30:08 AM SL43178 Surr: 4-Bromofluorobenzene 96.5 70-130 %Rec 6/1/2017 1:30:08 AM SL43178 Surr: Dibromofluoromethane 91.5 70-130 %Rec 1 6/1/2017 1:30:08 AM SL43178 Surr: Toluene-d8 99.0 70-130 %Rec 6/1/2017 1:30:08 AM SL43178

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

Oualifiers:

Lab ID:

1705E94-001

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 2J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1705E94

02-Jun-17

Client:

Blagg Engineering

Project:

GCU #153E

Project: GCU #	153E												
Sample ID rb	SampT	SampType: MBLK TestCode: EPA Method 8260: Volatiles Short List											
Client ID: PBW	Batch	Batch ID: SL43178 RunNo: 43178											
Prep Date:	Analysis D	Analysis Date: 5/31/2017 SeqNo: 1359057 U				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	1.5											
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.3	70	130						
Surr: 4-Bromofluorobenzene	10 10.00 99.6 70					70	130						
Surr: Dibromofluoromethane	9.8		10.00		97.7	70	130						
Surr: Toluene-d8	10		10.00		101	70	130						
Sample ID 100ng Ics	SampT	ype: LC	s	Tes	tCode: El	PA Method	8260: Volatil	es Short L	ist				
Client ID: LCSW	Batch	ID: SL	43178	F	RunNo: 4	3178							
Prep Date:	Analysis D	ate: 5/	31/2017	S	SeqNo: 1	359058	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	70	130						
Toluene	20	1.0	20.00	0	102	70	130						
Surr: 1,2-Dichloroethane-d4	9.4 10.00 93.7 7		70	130									
Surr: 4-Bromofluorobenzene	9.6		10.00		96.4	70	130						
Surr: Dibromofluoromethane	methane 9.5 10.00 95.1 70				70	130							
Surr: Toluene-d8	oluene-d8 9.9 10.00 99.3 70						130						

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 2 of 2



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	BLAGG	!	Work Order Number:	1705E	94		Rcp	tNo: 1
Received By:	Anne Thorn	e 5/3	31/2017 7:15:00 AM		(aone Am	_	
Completed By:	Andy Janss	on 5/3	31/2017 8:25:33 AM			1600		
Reviewed By:	5pe	05/31/1	7		0	wy species		
Chain of Cus	tody							
1 Custody sea		nole bottles?		Yes		No 🗌	Not Present	✓
2. Is Chain of C				Yes	~	No 🗌	Not Present	
3. How was the				Courie				
Log In								
4. Was an atte	empt made to c	ool the samples?		Yes	V	No 🗆	NA	
5. Were all san	nples received	at a temperature of	>0° C to 6.0°C	Yes	~	No 🗌	NA	
6. Sample(s) ir	n proper contai	ner(s)?		Yes	✓	No 🗆		
7. Sufficient sa	mple volume fo	or indicated test(s)?		Yes	✓	No 🗌		
8. Are samples	(except VOA a	and ONG) properly p	reserved?	Yes	V	No 🗌		
9. Was preserv	ative added to	bottles?		Yes		No 🗸	NA	
10. VOA vials ha	ave zero heads	pace?		Yes		No 🗌	No VOA Vials	✓
11. Were any sa	ample containe	rs received broken?		Yes		No 🗸	# of preserved	
							bottles checke	
12. Does paperv	vork match bot pancies on cha			Yes	✓	No 🗔	for pH:	(<2 or >12 unless noted)
		ified on Chain of Cu	stody?	Yes	✓	No 🗌	Adjusted	
14. Is it clear wh			•	Yes	~	No 🗆		
15. Were all hold				Yes	✓	No 🗌	Checked	by:
(If no, notify	customer for a	uthorization.)				1		
Special Hand								
16. Was client n	otified of all dis	crepancies with this	order?	Yes		No 🗀	NA	Y
Person	Notified:		Date		oyaanta varian ilian ilkuva viisaa ja kin	en e		
By Wh	a constant of the constant of		Via:	eMai	I Pho	ne 🗌 Fax	_ In Person	
Regard	2			A. S. X.A.X F., 18.				munich ⁴
Client	Instructions:							
17. Additional re	emarks:							
18. Cooler Info								
Cooler No		Condition Seal	ntact Seal No S	Seal Dat	te Sig	gned By		
1	1.3	Good Yes		W 102 12 78 18 80 18 18 18		and the control of the control of		

Chain-of-Custody Record			Turn-Around Time:				1 3	T T	-	1 A			NV	/TE	20	MI	ME	רוח	ra	i i		
Client:	BLAG	G ENGR.	/ BP AMERICA	✓ Standard	☐ Rush _		HALL ENVIRONMEN ANALYSIS LABORAT															
7	Bratin heavy great and the second	N. Photogrammarian in the Commission of the Comm		Project Name	THE RESERVE THE PARTY OF THE PA	www.hallenvironmental.com																
Mailing A	ddress:	P.O. BO	X 87	GCU # 153E				4901 Hawkins NE - Albuquerque, NM 87109														
	-	BLOOM	FIELD, NM 87413	Project #:			Tel. 505-345-3975 Fax 505-345-4107															
Phone #:		(505) 63	32-1199									7774	STORY.	ysis	-		Se let					
email or Fax#:			Project Manag	ger:							No. of the		4)			617 mag	1)					
QA/QC Package: ☑ Standard			NELSON VELEZ			(8021B)	s only)	/ MRO)			(S)		PO4,50,	PCB's			water - 300.1)			a)		
Accredita	tion:			Sampler: NELSON VELEZ				MTBE + TPH (Gas	DRO	1	1)	70SIMS)		102,	8082						ldmi	
□ NELAP □ Other			On ice: XYes INo			1	TPH	-	418	504	827	S	03,1	_		(AC	300.0			e sa	r N	
□ EDD (Type)			Sample Temp	erature: /		1	BE +	(GR	pot	pou	0	etal	CI,N	icide	(A)	i-V(1		ole	osit	(۸	
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. 1705E94	BTEX ← NAT	BTEX + MT	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
5/26/17	1120	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	٧													٧		
																					\top	
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-			***************************************						\neg	-	-							\vdash	+	\dashv	_	_
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											_							$\dashv$	$\dashv$	$\dashv$	$\dashv$	
Date:	Time:	Relinquishe	ed by:	Received by:	1	Date Time	Ren	nark										$\perp$				
5/30/17	1200	Mi	my]	Received by:    Date   Time   US/3/1/7   US/3/1/7   US/3/1/5     Received by: Date   Time   US/3/1/7   US/3/1/				Remarks: BILL DIRECTLY TO BP:														
Date:	Time:	Relinquishe	ed by: C					200 Energy Court, Farmington, NM 87401 Attn.: Steve Moskal  VID: VRITCJWFEC WBS ELEMENT: L1-00169-E:GCU153E														



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 1606D62

June 30, 2016

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199

FAX (505) 632-3903

RE: GCU #153E

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/24/2016 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Lab Order 1606D62

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2016

CLIENT: Blagg Engineering Client Sample ID: MW #3R

 Project:
 GCU #153E
 Collection Date: 6/22/2016 8:20:00 AM

 Lab ID:
 1606D62-001
 Matrix: AQUEOUS
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF D	ate Analyzed	Batch
EPA METHOD 8260: VOLATILES S	HORT LIST				Analys	t: <b>DJF</b>
Benzene	29	1.0	μg/L	1 6	/26/2016 11:35:59 PM	1 C35190
Toluene	9.1	1.0	µg/L	1 6	/26/2016 11:35:59 PM	1 C35190
Ethylbenzene	7.4	1.0	μg/L	1 6	/26/2016 11:35:59 PM	1 C35190
Xylenes, Total	14	1.5	μg/L	1 6	/26/2016 11:35:59 PM	1 C35190
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1 6	/26/2016 11:35:59 PM	1 C35190
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1 6	/26/2016 11:35:59 PM	1 C35190
Surr: Dibromofluoromethane	93.5	70-130	%Rec	1 6	/26/2016 11:35:59 PM	1 C35190
Surr: Toluene-d8	93.8	70-130	%Rec	1 6	/26/2016 11:35:59 PM	1 C35190

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 2
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1606D62

30-Jun-16

Client:

Blagg Engineering

Project:

GCU #153E

Project: GCU#	133E									
Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260: Volatile	es Short L	ist	
Client ID: PBW	Batch	ID: C3	5190	F	RunNo: 3	35190				
Prep Date:	Analysis D	ate: 6/	26/2016	S	SeqNo: 1	1088895	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	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	9.1		10.00		91.4	70	130			
Sample ID 100ng Ics	SampT	ype: LC	s	Tes	tCode: E	PA Method	8260: Volatile	es Short L	_ist	
Client ID: LCSW	Batch	ID: C3	5190	F	RunNo: 3	35190				
Prep Date:	Analysis D	ate: 6/	26/2016	8	SeqNo: 1	1089164	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	114	70	130			
Toluene	20	1.0	20.00	0	99.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.6	70	130			
Surr: Toluene-d8	9.3		10.00		93.3	70	130			

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

P Sample pH Not In Range

- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



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

BLAGG Work Order Number: 1606D62 RcotNo: 1 Client Name: 06/24/16 Received by/date: anne Ham Logged By: 6/24/2016 7:47:00 AM Anne Thorne anne Am Completed By: Anne Thorne 6/24/2016 06/24/16 Reviewed By: Chain of Custody Yes Not Present V No. 1. Custody seals intact on sample bottles? Yes 🗸 No 🗌 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗌 NA 4. Was an attempt made to cool the samples? Yes V 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 V 7. Sufficient sample volume for indicated test(s)? No Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? NA 🗌 No V 9. Was preservative added to bottles? Yes Yes 🗸 No 🗌 No VOA Vials 10. VOA vials have zero headspace? No V 11. Were any sample containers received broken? Yes # of preserved bottles checked for pH: 12. Does paperwork match bottle labels? Yes V No 🗌 (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No _ 13 Are matrices correctly identified on Chain of Custody? No 🗌 ~ 14. Is it clear what analyses were requested? Vac Yes 🗸 No 🗌 Checked by: 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes NA V No ... 16. Was client notified of all discrepancies with this order? 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 2.4 Good Yes

CI	nain-d	of-Cus	tody Record	Turn-Around	Time:		HALL ENVIRONMENTAL															
lient:	BLAG	ig engr.	/ BP AMERICA	✓ Standard Project Name	Rush					A	N	AL	YS	519	S L	A	во	RA				
4 :1: A	1.1	*	the state of the s	-			-				WW	w.ha	allen	viro	nme	enta	l.cor	n				
/lailing A	ddress:	P.O. BO	X 87		GCU # 15	3E		49	01 F	lawk	ins	NE -	Alb	ouqu	ierq	ue, î	MV	37109	9			
		BLOOM	FIELD, NM 87413	Project #:				Te	el. 50	)5-34	15-3	975	F	ax :	505-	345	-410	7			0.65 B.00	name (UI
hone #:		(505) 63	2-1199									Α	nal	ysis	Red	ques	st					
mail or F	ax#:			Project Manag	ger:									(4)				300.1)				
≀A/QC Pa ☑ Stand			Level 4 (Full Validation)		NELSON V	ELEZ	(8021B)	s only)	/ MRO)			(SI)		PO₄,SC	2 PCB's			water - 30			e	
ccredita	tion:			Sampler:	NELSON V	ELEZ	35 SE	(Ga	DRO	1)	1)	8270SIMS)		VO ₂ ,	808						sample	
NELAF		□ Other		On Ice:	Yes	□No	1	ТРН	_	418	504.1)	827	S	03,1	/ Se		(A)	300.0			e Sa	N N
EDD (	Гуре)			Sample Temp	erature: ¿	24	1	BE +	(GR	pou	pou		etal	CI,N	cide	(A)	i-V	1 1		e e	osit	(ح
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX ← NATE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil		Grab sample	5 pt. composite	Air Bubbles (Y or N)
6/22/16	0820	WATER	MW # 3R	40 ml VOA - 2	HCI & Cool	201	٧										- 50			٧		
			, , , , , , , , , , , , , , , , , , ,																			
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Enterior security of the Alberta Selection				·															一		7	
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			4.4																十	_	$\dashv$	
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			The selection of the contract																$\dashv$	-	-	
ate; /	Time:	Relinquishe	d by:	Received by:		Date Time	Remarks:															
133/16	1537	Pla	e J	Christian	Waster"	e/23/16 1537	BILL DIRECTLY TO BP: 200 Energy Court, Farmington, NM 87401 Attn.: John Ritchie															
ate: 23/14	Time:	Relinquishe	ate lahela	Received by:	my I	Date Time 06/24/16		D: _			5	WA:	-	1, NN	/18/4	401	Atti	л.: Јо	nn F	KITCh	iie	
-	f necessary	samples subr	nifted to Hall Environmental may be sub	acontracted to other a	ccredited laboratorie	This convex as notice	7 Y / Office of this possibility. Any sub-contracted data will be clearly notated on the analytical report															



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

September 04, 2015

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU # 153E OrderNo.: 1508E36

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/28/2015 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Received Date: 8/28/2015 8:25:00 AM

1

Lab Order 1508E36 Date Reported: 9/4/2015

9/2/2015 4:55:53 PM

9/2/2015 4:55:53 PM

9/2/2015 4:55:53 PM

9/2/2015 4:55:53 PM

A28626

A28626

A28626

A28626

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW # 3R

101

98.9

109

99.7

**Project:** GCU # 153E Collection Date: 8/26/2015 10:00:00 AM Matrix: AQUEOUS

**Analyses** Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: DJF Benzene 9/2/2015 4:55:53 PM A28626 1.0 µg/L Toluene 8.4 1.0 1 9/2/2015 4:55:53 PM µg/L A28626 Ethylbenzene 5.4 1.0 µg/L 9/2/2015 4:55:53 PM A28626 Xylenes, Total 9.3 1.5 9/2/2015 4:55:53 PM A28626 µg/L 1

70-130

70-130

70-130

70-130

%REC

%REC

%REC

%REC

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

#### Qualifiers:

Lab ID:

1508E36-001

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 2 J
- P Sample pH Not In Range
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

11

9.7

10.00

10.00

WO#:

1508E36

04-Sep-15

Client:

Blagg Engineering

**Project:** 

GCU # 153E

SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short L	.ist	
Batch	ID: A2	8626	F	RunNo: 2	8626				
Analysis D	ate: 9/	2/2015	8	SeqNo: 8	66329	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	1.5								
9.6		10.00		95.7	70	130			
11		10.00		105	70	130			
11		10.00		108	70	130			
9.8		10.00		98.1	70	130			
SampT	ype: LC	s	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Batch	ID: A2	8626	F	RunNo: 2	8626				
Analysis D	ate: 9/	2/2015	S	SeqNo: 8	66330	Units: µg/L			
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
20	1.0	20.00	0	98.9	70	130			
19	1.0	20.00	0	97.2	70	130			
9.7		10.00		97.1	70	130			
11		10.00		105	70	130			
	Batch Analysis D Result ND ND ND 9.6 11 11 9.8  SampT Batch Analysis D Result 20 19 9.7	Batch ID: A2  Analysis Date: 9/  Result PQL  ND 1.0  ND 1.0  ND 1.5  9.6  11  11  9.8   SampType: LC  Batch ID: A2  Analysis Date: 9/  Result PQL  20 1.0  19 1.0  9.7	ND 1.0  ND 1.0  ND 1.0  ND 1.5  9.6 10.00  11 10.00  11 10.00  9.8 10.00  SampType: LCS  Batch ID: A28626  Analysis Date: 9/2/2015  Result PQL SPK value  20 1.0 20.00  19 1.0 20.00  9.7 10.00	Batch ID: A28626       FRAD Result       PQL       SPK value       SPK Ref Val         Result       PQL       SPK value       SPK Ref Val         ND       1.0       ND       1.0         ND       1.5       9.6       10.00         11       10.00       10.00         11       10.00       Test         Batch ID:       A28626       FR         Analysis Date:       9/2/2015       SPK Ref Val         20       1.0       20.00       0         19       1.0       20.00       0         9.7       10.00       0	Batch ID: A28626       RunNo: 2         Analysis Date:       9/2/2015       SeqNo: 8         Result       PQL       SPK value       SPK Ref Val       %REC         ND       1.0       ND       1.0       ND       1.0         ND       1.5       9.6       10.00       95.7         11       10.00       105         11       10.00       108         9.8       10.00       98.1         SampType: LCS       TestCode: El         Batch ID: A28626       RunNo: 2         Analysis Date:       9/2/2015       SeqNo: 8         Result       PQL       SPK value       SPK Ref Val       %REC         20       1.0       20.00       0       98.9         19       1.0       20.00       0       97.2         9.7       10.00       97.2	Batch ID: A28626       RunNo: 28626         Analysis Date:       9/2/2015       SeqNo: 866329         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit         ND       1.0       ND       1.0         ND       1.0       95.7       70         11       10.00       95.7       70         11       10.00       105       70         11       10.00       108       70         9.8       10.00       98.1       70         9.8       10.00       98.1       70         SampType: LCS       TestCode: EPA Method         Batch ID: A28626       RunNo: 28626         Analysis Date: 9/2015       SPK Ref Val       %REC       LowLimit         20       1.0       20.00       98.9       70         19       1.0       20.00       0       97.2       70         9.7       10.00       0       97.2       70         9.7       10.00       0       97.2       70	Batch ID: A28626         RunNo: 28626           Analysis Date:         9/2/2015         SeqNo: 866329         Units: μg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           ND         1.0         1.0         ND         1.0         1.0         1.0         ND         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0	Batch ID: A28626         RunNo: 28626           Analysis Date:         9/2/2015         SeqNo: 866329         Units: μg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           ND         1.0         1.0         ND         1.0         1.0         ND         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0	Batch ID: A2866         RunNo: 28626           Analysis Date:         9/2015         SeqNo: 866329         Units: μg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit           ND         1.0 </td

108

97.2

70

70

130

130

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: Dibromofluoromethane

Surr: Toluene-d8

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

# HALL VIROI NTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **BLAGG** Work Order Number: 1508E36 RcptNo: 1 Received by/date: 8/28/2015 8:25:00 AM Logged By: Lindsay Mangin Completed By: 8/31/2015 6:23:34 AM Lindsay Mangin Reviewed By: 0 8/31/15 Chain of Custody Not Present Yes 1. Custody seals intact on sample bottles? No 🗌 Yes 🖈 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA 🗌 4. Was an attempt made to cool the samples? No 🗌 NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C Sample(s) in proper container(s)? No 7. Sufficient sample volume for indicated test(s)? No 8. Are samples (except VOA and ONG) properly preserved? NA 🗌 No 9. Was preservative added to bottles? No VOA Vials No 🗌 10. VOA vials have zero headspace? 11. Were any sample containers received broken? No # of preserved bottles checked for pH: No 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 13. Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? Checked by: 15. Were all holding times able to be met? No Yes (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 NA 🛷 16. Was client notified of all discrepancies with this order? 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 2.6 Good Yes

C	hain-c	of-Cus	stody Record	Turn-Around T	ime:	parameter and the second secon	HALL ENVIRONMEN					NT	<b>-</b> Δ1								
Client:	BLAG	G ENGR.	/ BP AMERICA	✓ Standard	Rush													RA			
Bertretter und Australië bestel and de Australië	-		The state of the s	Project Name:													.com				
Mailing A	ddress:	P.O. BO	X 87		GCU # 153	3E		49	01 H									37109	)		
		BLOOM	FIELD, NM 87413	Project #:		· ·				05-3							-410				
Phone #:		(505) 63	2-1199									1	Anal	ysis	Red	ques	t	4		***	
email or F	ax#:			Project Manag	jer:									-				1)	T	T	
QA/QC Pa			Level 4 (Full Validation)		NELSON VI	ELEZ	FA48's (80218)	+ TPH (Gas only)	MRO)			(S)		05,50	PCB's			er - 300.1)			a
Accreditat	tion:	- Atomic - A		Sampler:	NELSON VI	ELEZ	8(8)	(Gas	DRO /	1)	1	SIN		102,	8082			/ wat			mpl
□ NELAF		□ Other		On Ice:	∀ Yes	□No	1	ТРН	_	118.	504.	3270		03,N	-		(A)	0.00			e sa
□ EDD (	Гуре)	,		Sample Tempe	erature: 2.3	40.3CF=26	1	+	(GRC	pol	pou	or 8	etals	N,	cide	(A)	i-VC	il - 3(		e l	osit
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX - NATES	BTEX + MTBE	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water		ap	5 pt. composite sample
8/26/19	1000	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	٧													٧	
-/					All Andreas and the second and the s															T	
																			$\top$	$\top$	
																			$\top$	$\top$	
																		$\neg$	$\dashv$	$\top$	
															-				+	$\forall$	
																			+	+	$\neg$
																-	$\vdash$	$\vdash$	+	+	
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	-						-		-								$\vdash\vdash$	$\vdash$	+	$\dashv$	-
****							-								_			-	+	+	
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Data	Time	Delinguish	ad har	Received by:		Date Time		Щ				<u></u>									
Date:	Time:	Relinquishe	In V	Mustu Received by:	ullarte	8/ 27/15 /600 Pate Time	BILL DIRECTLY TO BP:  Jeff Peace, 200 Energy Court, Farmington, NM 87401														
8/27/15	1910	1/ h/	liste Inhola	Jos. Au	08/	128/15 0825	825 Paykey: ZEVH01REME														



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

May 15, 2015

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1505489

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/12/2015 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

## Lab Order 1505489

Date Reported: 5/15/2015

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: MW #3R

**Project:** 

GCU #153E

**Collection Date:** 5/11/2015 11:00:00 AM

Lab ID: 1505489-001

Matrix: AQUEOUS

Received Date: 5/12/2015 8:49:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	54	5.0	μg/L	5	5/13/2015 8:54:38 PM	R26168
Toluene	25	5.0	μg/L	5	5/13/2015 8:54:38 PM	R26168
Ethylbenzene	12	5.0	μg/L	5	5/13/2015 8:54:38 PM	R26168
Xylenes, Total	19	10	μg/L	5	5/13/2015 8:54:38 PM	R26168
Surr: 4-Bromofluorobenzene	111	80-120	%REC	5	5/13/2015 8:54:38 PM	R26168

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

#### Qualifiers:

- 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

Page 1 of 2

- P Sample pH Not In Range
- RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1505489

15-May-15

Client: Blagg Engineering
Project: GCU #153E

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles
Client ID: PBW Batch ID: R26168 RunNo: 26168

Salari B. 1200

Prep Date: Analysis Date: 5/13/2015 SeqNo: 776509 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 18 20.00 90.6 80 120

Sample ID 100NG BTEX LC	S SampT	SampType: LCS TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSW	Batcl	h ID: R2	6168	F	RunNo: 2	6168							
Prep Date:	Analysis D	Date: 5/	13/2015	S	SeqNo: 7	76510	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	21	1.0	20.00	0	105	80	120						
Toluene	21	1.0	20.00	0	103	80	120						
Ethylbenzene	21	1.0	20.00	0	103	80	120						
Xylenes, Total	63	2.0	60.00	0	104	80	120						
Surr: 4-Bromofluorobenzene	20		20.00		98.3	80	120						

#### Qualifiers:

- 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



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name:	BLAGG	Work Order Number:	1505489		RcptNo:	1
Received by/dat	ie: IM	05/12/15				
Logged By:	Ashley Gallegos	5/12/2015 8:49:00 AM		A		
Completed By:	Ashley Gallegos	5/12/2015 2:28:07 PM		A		
Reviewed By:	Pa	05/12/15		V		
Chain of Cus	stody	O The state of				
1. Custody sea	als intact on sample bottles?		Yes 🗌	No 🗌	Not Present 🗹	
2. Is Chain of C	Custody complete?		Yes 🗸	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
Log In						
4. Was an atte	empt made to cool the sample	es?	Yes 🗹	No 🗆	NA 🗌	
5. Were all sar	mples received at a temperat	ure of >0° C to 6.0°C	Yes 🗸	No 🗆	NA 🗌	
6. Sample(s) i	n proper container(s)?		Yes 🗹	No 🗌		
7. Sufficient sa	ample volume for indicated te	st(s)?	Yes 🗸	No 🗌		
8. Are samples	s (except VOA and ONG) pro	perly preserved?	Yes 🗸	No		
9. Was presen	vative added to bottles?		Yes	No 🗸	NA 🗌	
10.VOA vials ha	ave zero headspace?		Yes 🗹	No 🗌	No VOA Vials	
11. Were any s	ample containers received br	oken?	Yes	No 🗸	# of preserved	
12 Dans			Yes 🗸	No 🗌	bottles checked for pH:	
	work match bottle labels? epancies on chain of custody)		res 💌	140		r >12 unless noted)
	s correctly identified on Chain	of Custody?	Yes 🗹	No 🗌	Adjusted?	
10.000	nat analyses were requested?	=	Yes 🗸	No 🗌	20.00	
	ding times able to be met? customer for authorization.)		Yes 🗸	No 🗀	Checked by:	
Special Hand	lling (if applicable)					
16. Was client n	notified of all discrepancies wi	th this order?	Yes	No 🗌	NA 🗹	
Person	n Notified:	Date				
By Wh	nom:	Via:	eMail	Phone Fax	_ In Person	
Regar	ding:					
Client	Instructions:					
17. Additional r	remarks:					
18. Cooler Info		Seal Intact   Seal No   5	Seal Date	Signed By		
1		Yes				

C	hain-d	of-Cus	stody Record	Turn-Around 1	Time:		HALL ENVIRONMEN			'ΑΙ												
ient:	BLAG	G ENGR.	/ BP AMERICA	✓ Standard	Rush														ATC			
				Project Name:							ww	w.h	aller	viro	nme	ental	.con	n				
lailing A	ddress:	P.O. BO	X 87		GCU # 15	3E		49	01 H								NM 8		19			
		BLOOM	FIELD, NM 87413	Project #:		TP.		Te	el. 50	)5-34	45-3	975		Fax	505	-345	5-410	)7				
hone #:		(505) 63	32-1199										Anal	ysis	Re	ques	st					
mail or F	ax#:			Project Manag	ger:							No. of the last of						1)				
A/QC Pa			Level 4 (Full Validation)		NELSON V	ELEZ	FMB's (8021B)	+ TPH (Gas only)	MRO)			S)		04,50	PCB's			er - 300.1)				
ccredita				Sampler:	NELSON V	ELEZ 975	18	Gas	DRO /	-	1	SIM		02,P	8082			wate			nple	
NELAF		□ Other		On Ice:	☑ Yes		1	H.	-	418.1)	04.	8270SIMS)		3,N	-		A	0.0			Sar	2
EDD (	Гуре)			Sample Tempe	erature: Zi	1	11	E + 1	GRO	od 4	od 5	or 8	tals	N.	cide	F	i-V0	1 - 3C		e	osite	\ \ \ \ \
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX NATE	BTEX + MTBE	TPH 8015B (GRO	TPH (Method	EDB (Method 504.1)	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water			5 pt. composite sample	Air Bubblas (Vor NI)
5/11/15	1100	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-m1	V													V		
													$\vdash$							$\top$	$\top$	-
																				+	+	-
													$\vdash$							+	+	-
							_	-				-	-			-				+	+	_
							-	-	_					-	-	-			-	+	-	_
								-					-		-		-	$\vdash$	$\vdash$	+	+	-
							-	-	_		-	_		-	-	-	-	-	$\vdash$	+	+	_
							-	-	-			-	-	-	-	-	-		$\vdash$	+	+	-
							-	-	-			-	-	-	-	-		-	-	$\dashv$	+	
							-	-	-		_	-	-	-	-	-	-	-	$\vdash$	+	+	
							+-	-	-			-	-	-	$\vdash$	-	-	_	-	$\dashv$	+	_
Date: ,	Time:	Relinquish	od hv	Received by:		Date Time	Time Remarks:							-								
Date:	1545 Time:	Relinquish	dn-VI	Mustlu Received by: A	Wasters	51,	BILL DIRECTLY TO BP:															
Shill	1871	Cha	tr 1.12.12.	V	A OF	5/12/15 0700	Paulou: 7EVHO1PEME															



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

April 01, 2015

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

TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1503D65

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/31/2015 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andyl

4901 Hawkins NE

#### Lab Order 1503D65

Date Reported: 4/1/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW#3R

**Project:** GCU #153E

**Collection Date:** 3/30/2015 12:25:00 PM

**Lab ID:** 1503D65-001

Matrix: AQUEOUS Received Date: 3/31/2015 8:45:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	74	5.0		µg/L	5	3/31/2015 3:49:48 PM	R25204
Toluene	28	5.0		μg/L	5	3/31/2015 3:49:48 PM	R25204
Ethylbenzene	19	5.0		µg/L	5	3/31/2015 3:49:48 PM	R25204
Xylenes, Total	34	10		µg/L	5	3/31/2015 3:49:48 PM	R25204
Surr: 4-Bromofluorobenzene	125	80-120	S	%REC	5	3/31/2015 3:49:48 PM	R25204

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

#### Qualifiers:

- 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

Page 1 of 2

- P Sample pH Not In Range
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1503D65

01-Apr-15

Client:

Blagg Engineering

**Project:** 

GCU #153E

Troject.	1552									
Sample ID 100NG BTEX LC	S SampT	ype: LC	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	ID: R2	5204	F	RunNo: 2	5204				
Prep Date:	Analysis D	ate: 3/	31/2015	5	SeqNo: 7	44926	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	113	80	120			
Toluene	22	1.0	20.00	0	110	80	120			
Ethylbenzene	21	1.0	20.00	0	106	80	120			
Xylenes, Total	64	2.0	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	23		20.00		114	80	120			
Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch	1D: <b>R2</b>	5204	F	RunNo: 2	5204				
Prep Date:	Analysis D	ate: 3/	31/2015	5	SeqNo: 7	44944	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	23		20.00		117	80	120			

### Qualifiers:

- * 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



Fiall Environmental Analysis Laboratory 4901 Hawkins NE Athiquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

# Sample Log-In Check List

		and the local division in the local division	THE RESERVE OF THE PERSON			
Client Name: BLAGG	Work Order Number:	15030	065		Rop	tNo. 1
Received by/date: AT	03/31/15					
Logged By: Celina Sessa	3/31/2015 8:45:00 AM			Celin	Some	
Completed By: Celina Sessa	3/31/2015 9:05:10 AM			Celia	Sun	
Reviewed By.	Ostenlin					
Chain of Custody						
1 Custody seals intact on sample	bottles?	Yes		No	Not Present	<b>✓</b>
2. Is Chain of Custody complete?		Yes	<b>~</b>	No	Not Present	
3. How was the sample delivered?		Cour	ier			
LogIn						
<u>Log In</u>		.,		No	NA.	
Was an attempt made to cool the state of	ne samples?	Yes	•	NO		
5. Were all samples received at a	temperature of >0° C to 6 0°C	Yes	<b>~</b>	No	NA	
Sample(s) in proper container(s	)?	Yes	<b>V</b>	No		
7. Sufficient sample volume for ind	icated test(s)?	Yes	~	No		
8. Are samples (except VOA and C	ONG) properly preserved?	Yes	~	No		
9. Was preservative added to bottl	es?	Yes		No 🗸	NA NA	
10.1/04 /	2	Yes		No	No VOA Vials	
<ol> <li>VOA vials have zero headspace</li> <li>Were any sample containers re-</li> </ol>		Yes		No V		
11, were any sample containers le	ocived bloken?	163		1110	# of preserved bottles checke	
12. Does paperwork match bottle la	bels?	Yes	<b>Y</b>	No	for pH:	
(Note discrepancies on chain of		14	.,	No	Adjusted	(<2 or >12 unless noted)
<ul><li>13. Are matrices correctly identified</li><li>14. Is it clear what analyses were re</li></ul>		Yes Yes		No		
15. Were all holding times able to be		Yes		No	Checked	by:
(if no, notify customer for author	ization.)					
0						
Special Handling (if applicat					3	G
16. Was client notified of all discrep	ancies with this order?	Yes		No	NA	<b>Y</b>
Person Notified:	Date					
By Whom:	Via:	eMa	oil	Phone F	ax In Person	oddiner*
Regarding: Client Instructions:	CHIED-NO AD DETENDANT COMMENCE AND	Parallel State of the State of			inga prawa na patalika kuwan yang iki salamata diskuna kakina diskuna diskuna diskuna diskuna diskuna diskuna	and delivery.
17. Additional remarks						
18. Cooler Information  Cooler No   Temp °C   Co	ndition   Seal Intact   Seal No	Seal Da	ate	Signed By		
1 10 Goo		2001 01		orginos dy		

C	Chain-of-Custody Record ient: BLAGG ENGR. / BP AMERICA				Time:					ě	НА	LL	E	N۱	/IF	<b>RO</b>	NI	MEN	ITA	L
Client:	BLAG	G ENGR.	/ BP AMERICA		Rush															
				Project Name						-										
Mailing A	ddress:	P.O. BO	X 87	G	CN # 1	53E		49	01 H	lawl										
		BLOOM	FIELD, NM 87413	Project #:				Te	el. 50	05-3	45-3	975		Fax	505	-345	-410	)7		
Phone #:		(505) 63	2-1199									- 1	Anal	ysis	Rec	ques	st			
email or f	ax#:			Project Manag	ger: ,									-						
QA/QC Pa			Level 4 (Full Validation)	NE	LOON VE	UEZ.	(8021B)	(Aluo	MRO)			S)		05,50						
Accredita		- Virginian		Sampler:	NEUSON	VELEZ MU	1	Gas	-	1	1)	8270SIMS)		02,	ds	(pa	7		and the second s	sample
□ NELAF	>	□ Other		On Ice:	≥ Yes	□ No	1	) Hd	/ DRO	18.	504.1)	270		3,N	Sol	Ilte				
□ EDD (	Гуре)			Sample Temp	erature: /co	0-	I	+ 1	GRO	od 4	od 5	0	tals	N,	lved	JS (f	N E		le	osite
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503D65	BTEX + TUT	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method	PAH (8310	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	Total Dissolved Solids	Iron, Ferrous (filtered)	Vitrate N /	itrite N	Grab sample	5 pt. composite
3/30/15		WATER	MW # 3R	40ml - 2	Held cook		1/									_			1/	
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		17.																		
Date.	Time.	Relinquishe	d by	Received by:		Date Time	Rer	nark	S:				1		1	1				1
3/30/15	1445	190	luly	Mart. 1	1)0010	3/30/15 1444					то									
Date:	Time:	Relinquishe	ed by	Received by.	7	Date Time	1	Jeff F	eace	200	0 Ene	ergy	Cour	t, Fa	rmin	gton	, NM	87401		
3/30/15					103	31115 OB 45		Payk	ey: _	ZEV	VH0:	LREM	ME	-						



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

December 09, 2014

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 153E OrderNo.: 1412130

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/3/2014 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andy

4901 Hawkins NE

Lab Order **1412130** 

Date Reported: 12/9/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

**Project:** GCU # 153E

**Lab ID:** 1412130-001

Client Sample ID: MW # 3R

Collection Date: 12/1/2014 1:10:00 PM

Matrix: AQUEOUS Received Date: 12/3/2014 7:30:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	8.6	1.0		μg/L	1	12/4/2014 4:04:25 PM	R22938
Toluene	5.4	1.0		μg/L	1	12/4/2014 4:04:25 PM	R22938
Ethylbenzene	3.0	1.0		µg/L	1	12/4/2014 4:04:25 PM	R22938
Xylenes, Total	7.1	2.0		μg/L	1	12/4/2014 4:04:25 PM	R22938
Surr: 4-Bromofluorobenzene	170	66.6-167	S	%REC	1	12/4/2014 4:04:25 PM	R22938

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

#### Qualifiers:

- 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

Page 1 of 2

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

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1412130

09-Dec-14

Client: Blagg Engineering
Project: GCU # 153E

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBW** Batch ID: R22896 RunNo: 22896 Prep Date: Analysis Date: 12/3/2014 SeqNo: 676694 Units: %REC Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 4-Bromofluorobenzene 21 20.00 66.6 105 167

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSW Batch ID: R22896 RunNo: 22896 Prep Date: Analysis Date: 12/3/2014 SeqNo: 676695 Units: %REC Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 4-Bromofluorobenzene 20.00 109 66.6 167

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBW** Batch ID: R22938 RunNo: 22938 Prep Date: Analysis Date: 12/4/2014 SeqNo: 677407 Units: µg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 1.0 Toluene ND 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 20.00 21 103 66.6 167

Sample ID 100NG BTEX LCS TestCode: EPA Method 8021B: Volatiles SampType: LCS Client ID: LCSW Batch ID: R22938 RunNo: 22938 Prep Date: Analysis Date: 12/4/2014 SeqNo: 677408 Units: µg/L PQL SPK value SPK Ref Val %REC Analyte Result LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 20 1.0 20.00 0 80 98.6 120 20.00 Toluene 20 1.0 0 99.8 80 120 Ethylbenzene 20 1.0 20.00 0 99.8 80 120 Xylenes, Total 2.0 64 60.00 0 106 80 120 Surr: 4-Bromofluorobenzene 22 20.00 108 66.6 167

#### Qualifiers:

- 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 greater than 2.
- RL Reporting Detection Limit

#### HALL ENVIROI NTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com

RcptNo: 1 Client Name: **BLAGG** Work Order Number: 1412130 Received by/date: Logged By: Lindsay Mangin 12/3/2014 7:30:00 AM 12/3/2014 8:59:45 AM Completed By: Lindsay Mangin Reviewed By: Chain of Custody Not Present Yes 1 Custody seals intact on sample bottles? No 🗌 Not Present 2. Is Chain of Custody complete? Yes 3. How was the sample delivered? Courier Log In NA 🗌 No 4. Was an attempt made to cool the samples? NA [ No _ 5. Were all samples received at a temperature of >0° C to 6.0°C No [ 6. Sample(s) in proper container(s)? No 7. Sufficient sample volume for indicated test(s)? No 8. Are samples (except VOA and ONG) properly preserved? NA ... No 🖈 9. Was preservative added to bottles? Yes No VOA Vials No L 10.VOA vials have zero headspace? 11. Were any sample containers received broken? No 🐗 # of preserved bottles checked No for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13. Are matrices correctly identified on Chain of Custody? No L No 14. Is it clear what analyses were requested? No 🗌 Checked by: 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes [.] 16. Was client notified of all discrepancies with this order? No C NA 🛷 Person Notified: Date: By Whom: Phone Fax 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 1.6 Good Yes

Chain-of-Custody Record				Tulli-Albunu	HIIG.				<b>多</b>	1	A		E	NV	/IF	20	NI	ΜЕІ	VN	AL
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard	Rush													RA		
and the second second second second				Project Name:	Committee of the Commit										nme					
Mailing Ac	ldress:	P.O. BO	X 87		GCU # 153	BE		49	01 ⊢									7109		
			FIELD, NM 87413	Project #:						05-3				,	505-					
		(505) 63							1. 50		43-3	NAME OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER,		C C OF IS	Rec	STERRE S	A STORAGE AL			
Phone #: email or Fa	av#	(303) 03	2-1133	Project Manag	ier.				1.82			10.45								
QA/QC Pad Standa	kage:		Level 4 (Full Validation)		NELSON VI	ELEZ	(80218)	only)	MRO)			(S)		04,504	PCB's			er - 300.1)		e
Accreditati			anne de la companya del la companya de la compa	Sampler:	NELSON VI	ELEZ 7:10	(80	Gas	/ DRO /	1)	1)	SIN		02,	8082			/ water		sample
□ NELAP		□ Other		On Ice:	Yes	□ No	1	TPH (Gas		418.	504.	3270		O3, N	-		JA)	300.0		e sa
□ EDD (T	ype)			Sample Tempe	erature: 1.C		1	+	(GRC	pou	pou	or 8	etals	Z,	cide	(A)	i-VC	,	e e	osit
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MATE	BTEX + MTBE	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil	Grab sample	
12/1/14	1310	WATER	MW # 3R	40 ml VOA - 2	HCI & Cool	-001	٧												٧	1
												-								
		-						decement of the No. and				Professional and		-	-				-	++
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Data	T:	Delianuich	and have	Received by:		Date Time	Por	nark												
Date:	Time: 1537	Relinquish	in Vy	Received by:  Date Time Remarks:  BILL DIRECTLY TO BP:  Jeff Peace, 200 Energy Court, Farmington, NM 87401																
Date:	Time:	Relinquish	ed by:	Received by	Λ.	Date Time										ton,	NM 8	7401		
1/2/14	1747	Mrs	to Waster	1	120	314 MF30	Fi	nd Pi	urch	ase C	order	ine	mail	rron	I BP.	negativate needle (1999				



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

August 29, 2014

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU # 153E OrderNo.: 1408D06

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

Only

4901 Hawkins NE

### Lab Order **1408D06**

Date Reported: 8/29/2014

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

**Project:** GCU # 153E

Lab ID:

GCU # 153E 1408D06-001

Matrix: AQUEOUS

Client Sample ID: MW # 3R

**Collection Date:** 8/22/2014 12:55:00 PM **Received Date:** 8/26/2014 7:45:00 AM

Analyses	Result RL Qual Units DF Date Analyzed						
EPA METHOD 8021B: VOLATILES		STEEL ST				Analys	t: NSB
Benzene	34	1.0		μg/L	1	8/27/2014 1:11:19 PM	R20843
Toluene	8.5	1.0		μg/L	1	8/27/2014 1:11:19 PM	R20843
Ethylbenzene	5.2	1.0		μg/L	1	8/27/2014 1:11:19 PM	R20843
Xylenes, Total	14	2.0		µg/L	1	8/27/2014 1:11:19 PM	R20843
Surr: 4-Bromofluorobenzene	205	82.9-139	S	%REC	1	8/27/2014 1:11:19 PM	R20843

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

#### **Qualifiers:**

- * 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

Page 1 of 2

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

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1408D06

29-Aug-14

Client: Project:	Blagg Eng GCU # 15										
Sample ID	5ML RB	SampTyp	e: MI	BLK	Test	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBW	Batch II	D: <b>R2</b>	0809	R	RunNo: 2	20809				
Prep Date:		Analysis Date	e: 8/	26/2014	S	SeqNo: 6	605937	Units: %REC			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	nofluorobenzene	21		20.00	Or reverse	104	82.9	139	701112		
Sample ID	100NG BTEX LCS	SampTyp	e: LC	s	Test	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	LCSW	Batch II	D: <b>R2</b>	0809	R	RunNo: 2	20809				
Prep Date:		Analysis Date	e: 8/	26/2014	S	SeqNo: 6	605938	Units: %REC			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	23		20.00		117	82.9	139			
Sample ID	5ML RB	SampTyp	e: MI	BLK	Test	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBW	Batch II	D: <b>R2</b>	0843	R	RunNo: 2	20843				
Prep Date:		Analysis Date	e: 8/	27/2014	S	SeqNo: 6	606708	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-Bron	nofluorobenzene	22		20.00		109	82.9	139			
Sample ID	100NG BTEX LCS	SampTyp	e: LC	S	Test	Code: E	PA Method	8021B: Volati	iles		1
Sample ID Client ID:	100NG BTEX LCS LCSW	SampTyp Batch II				tCode: E		8021B: Volati	iles		
			D: <b>R2</b>	0843	R		20843	8021B: Volati Units: μg/L	iles		
Client ID:		Batch II	D: <b>R2</b>	27/2014	R	tunNo: 2	20843		iles %RPD	RPDLimit	Qual
Client ID: Prep Date:		Batch II	D: <b>R2</b> e: 8/	27/2014	R	RunNo: 2 SeqNo: 6	20843 606709	Units: µg/L		RPDLimit	Qual
Client ID: Prep Date: Analyte		Batch II Analysis Date Result	D: <b>R2</b> e: <b>8</b> / PQL	20843 27/2014 SPK value	R S SPK Ref Val	tunNo: 2 SeqNo: 6 %REC	20843 606709 LowLimit	Units: µg/L HighLimit		RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene		Batch II Analysis Date Result 20	D: <b>R2</b> e: <b>8</b> / PQL 1.0	20843 27/2014 SPK value 20.00	SPK Ref Val	RunNo: 2 SeqNo: 6 %REC 99.3	20843 606709 LowLimit 80	Units: µg/L HighLimit		RPDLimit	Qual

20.00

24

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range

Surr: 4-Bromofluorobenzene

- Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- 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

121

82.9

139

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

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com RcptNo: 1 Client Name: BLAGG Work Order Number: 1408D06 Received by/date: Logged By: Lindsay Mangin 8/26/2014 7:45:00 AM Lindsay Mangin 8/26/2014 8:41:41 AM Completed By: 08/24/14 Reviewed By: Chain of Custody Not Present ✓ 1. Custody seals intact on sample bottles? No Yes Not Present No 2. Is Chain of Custody complete? Yes V 3 How was the sample delivered? Courier Log In NA 4. Was an attempt made to cool the samples? No NA 5. Were all samples received at a temperature of >0° C to 6.0°C No No Sample(s) in proper container(s)? No 7. Sufficient sample volume for indicated test(s)? 8. Are samples (except VOA and ONG) properly preserved? No Yes NA 9. Was preservative added to bottles? No Yes No VOA Vials 10. VOA vials have zero headspace? Yes No 11. Were any sample containers received broken? No V Yes # of preserved bottles checked for pH: No 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13. Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? No Checked by No 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) 16 Was client notified of all discrepancies with this order? Yes No NA V Person Notified: Date: By Whom: Via eMail Phone In Person Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 2.6 Good Yes

Cl	Chain-of-Custody Record				ime:		١.		1 1	-	łΑ	L	E	NV	/TF	50	NI	MER	a/	AL	
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard Project Name:	Rush _					A	N		YS	SIS	S L	AI	30	RA			•
Mailing Ac	ldress:	P.O. BO	X 87		GCU # 153	BE		49	01 H									37109			
,		BLOOM	FIELD, NM 87413	Project #:				Te	l. 50	5-34	15-3	975	F	ax	505-	-345	-410	)7			
Phone #:		(505) 63	2-1199									Α	hnal	ysis	Rec	ques	t				
email or Fa	ax#:			Project Manag	er:									(4)				300.1)			
QA/QC Pad  Standa			Level 4 (Full Validation)		NELSON VI	ELEZ	(8021B)	s onty)	/ MRO)			VIS)		,PO4,SC	2 PCB's			water - 300		le e	
Accreditati	on:			Sampler:	NELSON VI			(Ga	ORO	(1)	1.1)	8270SIMS)		NO ₂	8082					sample	1.
□ NELAP		☐ Other		On Ice:	And the second s	□ No	1	TPH	0	418	504.1)		S	103,	es /		OA)	300.0		te s	
□ EDD (T	ype)	1		Sample Tempe	erature: 2	16	1	BE +	(GR	hod	hod	) or	eta	CI,N	icid	(AC	Ni-V		ple	posi	. 3
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1)	EDB (Method	PAH (8310	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides /	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil	Grab sample	5 pt. composite	
8/22/14	1255	WATER	MW # 3R	40 ml VOA - 2	HCI & Cool	-001	٧												V		
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Date: Time: Relinquished by				Received by:  Date Time  Remarks:  BILL DIRECTLY TO BP:  Jeff Peace, 200 Energy Court, Farmington, NM 87401																	
Date:	Time:	Relinquish	ed by:	Received by:	£ 08/2	Date Time	] Je	eff Pe nd Pi								ton, l	NM 8	7401			
163/11	If necess	ry, samples s	submitted to Hall Environmental may be s	subcontracted to other	accredited laboratorie	es. This serves as notice	of this p	ossibi	lity. A	ny sub	-contr	acted	data v	will be	clearl	y nota	ted on	the anal	/tical re	port.	



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

June 04, 2014

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 153E OrderNo.: 1405D14

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/30/2014 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Received Date: 5/30/2014 11:12:00 AM

## Lab Order 1405D14 Date Reported: 6/4/2014

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW # 3R

**Project:** GCU # 153E Collection Date: 5/28/2014 11:25:00 AM Matrix: AQUEOUS

**Analyses** Result RL Qual Units **DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB 110 5.0 6/3/2014 11:20:07 AM R19021 µg/L 5 Toluene P 22 5.0 µg/L 5 6/3/2014 11:20:07 AM R19021 Ethylbenzene 16 5.0 P 6/3/2014 11:20:07 AM R19021 µg/L 5 Xylenes, Total 41 10 P µg/L 6/3/2014 11:20:07 AM R19021 Surr: 4-Bromofluorobenzene 130 82.9-139 %REC 6/3/2014 11:20:07 AM R19021

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

#### **Qualifiers:**

Lab ID:

1405D14-001

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits J
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- 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
- P Sample pH greater than 2.
- Page 1 of 2
- Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1405D14

04-Jun-14

Client: Blagg Engineering
Project: GCU # 153E

Sample ID 5ML RB	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch	ID: <b>R1</b>	9021	R	RunNo: 1	9021				
Prep Date:	Analysis Date: 6/3/2014 SeqNo: 549631 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	22		20.00		110	82.9	139			

Sample ID 100NG BTEX LC	S SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	n ID: <b>R1</b>	9021	F	RunNo: 1	9021				
Prep Date:	Analysis D	oate: 6/	3/2014	S	SeqNo: 5	49632	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	64	2.0	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		105	82.9	139			

#### Qualifiers:

- * 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 greater than 2.
- RL Reporting Detection Limit



Hall Enviror ntal 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

Work Order Number: 1405D14 RcptNo: 1 BLAGG Client Name: Received by/date: Logged By: Michelle Garcia 5/30/2014 11:12:00 AM 5/30/2014 3:14:48 PM Completed By: Michelle Garcia Reviewed By: Chain of Custody No 🗌 Not Present V 1 Custody seals intact on sample bottles? Not Present No 🗌 Yes 🗸 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier Log In No 🗌 NA 🗌 Yes 🗸 4. Was an attempt made to cool the samples? NA 🗌 No 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 Sample(s) in proper container(s)? No ~ 7. Sufficient sample volume for indicated test(s)? No 8. Are samples (except VOA and ONG) properly preserved? Yes No V NA 🗌 Yes 9. Was preservative added to bottles? No No VOA Vials Yes 🗸 10.VOA vials have zero headspace? No V 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 13. Are matrices correctly identified on Chain of Custody? ~ No 14. Is it clear what analyses were requested? Checked by: **V** No 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) Yes No 🗌 NA V 16. Was client notified of all discrepancies with this order? Person Notified: Date: Via: Phone Fax In Person By Whom: eMail Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 2.1 Good Yes

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Client:	BLAG	G ENGR.	/ BP AMERICA	✓ Standard	☐ Rush _				7									RAT		
				Project Name:								w.ha							•	
Mailing A	ddress:	P.O. BO	X 87		GCU # 15	3E		490	01 H									7109		
	44-page-manuscript and a second	BLOOM	FIELD, NM 87413	Project #:						5-34							-410			
Phone #:		(505) 63	32-1199									А	naly	ysis	Rec	lues	t			
email or F	ax#:			Project Manag	jer:									4				1)		
QA/QC Pad	_		Level 4 (Full Validation)		NELSON VI	ELEZ	4B/s (8021B)	only)	/ MRO)			(S)		04,50	PCB's			er - 300.1)		a
Accreditat	ion:			Sampler:	NELSON VI	ELEZ BV	86	Gas	30/	=	1	SIM		02,	8082			water		sample
□ NELAP	•	□ Other		COLUMN SECRETA PARTICIPATE AND SECRETA	¥ Yes	Laboration of Control of State and Control of Control o	1	PH (	/ DRO	418.1)	504.1)	8270SIMS)		3,N	_		(A)	300.0		
□ EDD (1	Гуре)			Sample Tempe	erature: 🚄	10	1	E + 1	GRO	od 4	po	or 8	tals	N,	ide	(A	-\0	( )	<u>e</u>	osit
Date	Time	Matrix	Sample Request ID	Container Type and #	BTEX - MTB	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO	TPH (Method	EDB (Method	PAH (8310	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil	Grab sample	5 pt. composite		
5/28/14	1125	WATER	MW # 3R	40 ml VOA - 2 HCI & Cool — 06)						1									V	
										$\neg$		1								
										_	$\dashv$		$\dashv$						H	
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Date:	Time:	Relinquishe	ed by:	Received by: Date Time Jeff Peace, 200 Energy Court, Farmington, NM 87401																
5/29/14	1747	Uhn	ista Walla	aline	Sun a	15/30/14 /1:12	F:.	nd Pu			_		-		_	,				
1	If necessa	ry, samples si	ubmitted to Hall Environmental may be s	ubcontracted to other	accredited laboratorie	es. This serves as notice of	this p	ossibili	ty. An	y sub-	contra	acted o	lata w	rill be	clearly	notat	ed on t	the analytic	cal repo	ort.



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

March 05, 2014

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1402B45

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/28/2014 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andyl

4901 Hawkins NE

## Lab Order 1402B45

Date Reported: 3/5/2014

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: MW # 3R

Project: GCU #153E

Collection Date: 2/27/2014 10:05:00 AM

**Lab ID:** 1402B45-001

Matrix: AQUEOUS

Received Date: 2/28/2014 10:00:00 AM

Analyses	Result	RL (	Qual 1	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analys	t: <b>JMP</b>
Benzene	84	1.0		μg/L	1	3/3/2014 3:12:32 PM	R17069
Toluene	20	1.0		μg/L	1	3/3/2014 3:12:32 PM	R17069
Ethylbenzene	16	1.0		μg/L	1	3/3/2014 3:12:32 PM	R17069
Xylenes, Total	28	2.0		µg/L	1	3/3/2014 3:12:32 PM	R17069
Surr: 4-Bromofluorobenzene	184	85-136	S	%REC	1	3/3/2014 3:12:32 PM	R17069

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

#### Qualifiers:

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

Page 1 of 2

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

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1402B45

05-Mar-14

Client:

Blagg Engineering

Project:

GCU #153E

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch	1D: <b>R1</b>	7069	R	RunNo: 1	7069				
Prep Date:	Analysis D	ate: 3/	3/2014	S	SeqNo: 4	90953	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	85	136			
Sample ID 100NG BTEX LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	les		
Client ID: LCSW	Batch	1D: <b>R1</b>	7069	R	RunNo: 1	7069				

Sample ID 100NG BTEX LC	<b>S</b> SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	les		
Client ID: LCSW	Batch	1D: <b>R1</b>	7069	R	RunNo: 1	7069				
Prep Date:	Analysis D	ate: 3/	3/2014	S	SeqNo: 4	90954	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.7	80	120			
Toluene	19	1.0	20.00	0	97.2	80	120			
Ethylbenzene	20	1.0	20.00	0	98.9	80	120			
Xylenes, Total	59	2.0	60.00	0	98.9	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		111	85	136			

#### Qualifiers:

- * 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 greater than 2.
- RL Reporting Detection Limit

Page 2 of 2



Hall 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** Work Order Number: 1402B45 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 2/28/2014 10:00:00 AM Completed By: Lindsay Mangin 2/28/2014,2:17:17 PM Reviewed By: Chain of Custody Not Present V Yes No 1. Custody seals intact on sample bottles? Yes 🗸 Not Present No 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗌 NA 4. Was an attempt made to cool the samples? Yes 🗸 NA 🗍 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No No 🗌 6. Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? 8. Are samples (except VOA and ONG) properly preserved? Yes NA 🗌 9. Was preservative added to bottles? No Yes 10. VOA vials have zero headspace? V No 🔲 No VOA Vials Yes No V 11. Were any sample containers received broken? Yes # of preserved bottles checked No 🗌 for pH: 12. Does paperwork match bottle labels? ~ Yes (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 13. Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? No Yes 🗸 Checked by: 15. Were all holding times able to be met? No L (If no, notify customer for authorization.) Special Handling (if applicable) NA 🗌 16. Was client notified of all discrepancies with this order? Yes No V Person Notified: Date: By Whom: eMail Phone Fax Via: In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1.0 Good Yes

CI	hain-c	of-Cus	stody Record	I um-Albuna i	IIIIC.		HALL ENVIRON ENTAL															
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard Project Name:	Rush					A	\N		YS	SIS	S L	A	30	RA	ATC			
Mailing Ad	ddress:	P.O. BO	X 87	1	GCU # 153	BE		49	01 H									7109	9			
04 AA 7000 AA		BLOOM	FIELD, NM 87413	Project #:					l. 50							345						
Phone #:		(505) 63	2-1199									Α	nal	ysis	Rec	lues	t					
email or F	ax#:			Project Manag	er:									(4)				.1)				
QA/QC Pad	-		Level 4 (Full Validation)		NELSON VE	LEZ	(8021B)	(Aluo	/ MRO)			AS)		PO4,50	2 PCB's			water - 300.1)		PROGRAMMY OF THE PROGRAMMY AND A	e	
Accreditat		☐ Other		Sampler: On ice:	NELSON VE	LEZ 905 □ No	8) <del>e.aw.</del>	РН (Ga	/ DRO	418.1)	504.1)	8270SIMS)		D3, NO2,	s / 8082		(A)	300.0 / wa			e sample	N. I.
□ EDD (T	ype)			Sample Tempe	rature: [ v	D	1	E + 1	GRC	thod thod !!  If or Ello or Ericide  If (OA)  If (OA)								e ·	osit	1		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NOT	BTEX MATE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO	TPH (Method	EDB (Method	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil		rab	5 pt. composite	
2/27/14	1005	WATER	MW # 3R	40 ml VOA - 2	HCI & Cool	-001	٧												_	٧		_
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101117	If necessa	ary, samples s	ubmitted to Hall Environmental may be	ubcontracted to other	accredited laboratorie	s. This serves as notice of	this p	ossibil	ity. An	v sub	-contra	acted	data v	vill be	clearly	/ notat	ed on	the an	alvtical	report		_



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

December 18, 2013

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1312587

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/13/2013 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

#### Lab Order 1312587

Date Reported: 12/18/2013

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: MW #3R

Project: GCU #153E

Collection Date: 12/11/2013 12:45:00 PM

Lab ID: 1312587-001

Matrix: AQUEOUS

Received Date: 12/13/2013 10:40:00 AM

Analyses	Result	RL Q	Qual U	Jnits	DF Date Analyzed Batch
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	80	1.0		μg/L	1 12/17/2013 11:08:56 PM R15572
Toluene	22	1.0	1	μg/L	1 12/17/2013 11:08:56 PM R15572
Ethylbenzene	15	1.0	1	µg/L	1 12/17/2013 11:08:56 PM R15572
Xylenes, Total	23	2.0	1	µg/L	1 12/17/2013 11:08:56 PM R15572
Surr: 4-Bromofluorobenzene	168	85-136	S	%REC	1 12/17/2013 11:08:56 PM R15572

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

- 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 Page 1
  - Page 1 of 2
  - P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

21

21

63

20

1.0

1.0

2.0

20.00

20.00

60.00

20.00

WO#: 1312587

18-Dec-13

Client:

Blagg Engineering

**Project:** 

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

GCU #153E

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8021B: Volati	les		
Client ID: PBW	Batch	ID: <b>R1</b>	5572	F	RunNo: 1	5572				
Prep Date:	Analysis D	ate: 12	2/17/2013	S	SeqNo: 4	48255	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	20		20.00		97.8	85	136			
Sample ID 100NG BTEX LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: LCSW	Batch	ID: <b>R1</b>	5572	F	RunNo: 1	5572				
Prep Date:	Analysis D	ate: 12	2/17/2013	S	SeqNo: 4	48256	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	80	120			

0

0

0

105

103

105

102

80

80

80

85

120

120

120

136

#### Qualifiers:

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

Page 2 of 2

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name:	BLAGE	Work Order Nu	mber: 131	2587			RcptNo	p: 1
Received by/da	w KM	12/13/13	3		New York No. 18 and No. 18			
Logged By:	Ashley Gallegos	12/13/2013 10:4	0:00 AM		A			
Completed By:	Ashley Gallegos	12/13/2013 11:3	MA 00:0		A			
Reviewed By:	dam				V			i.
Chain of Cus	stody							
1. Custody sea	als intact on sample bottle	s?	Ye	s	No		Not Present ✔	
2. Is Chain of	Custody complete?		Ye	s 🗸	No	J	Not Present	
3. How was th	e sample delivered?		Co	urier				
Log In								
4. Was an att	empt made to cool the sar	nples?	Ye	s V	No		NA [	]
5. Were all sa	imples received at a temper	erature of >0° C to 6.0°C	Ye:	s <b>v</b>	No	i	NA .	
6. Sample(s)	in proper container(s)?		Ye	s 🗸	No			
7. Sufficient s	ample volume for indicated	d test(s)?	Ye	s 🗸	No			
8. Are sample	s (except VOA and ONG)	properly preserved?	Ye	s 🗸	No			
9. Was preser	rvative added to bottles?		Ye	s 🗌	No	<b>V</b>	NA [	
10.VOA vials h	nave zero headspace?		Ye	s 🗸	No		No VOA Vials	
11. Were any s	sample containers received	d broken?	Ye	s	No	<b>V</b>	# of preserved	
12 Does paper	rwork match bottle labels?		Ye	s V	No		bottles checked for pH:	
	epancies on chain of custo	dy)	,,				(<2	2 or >12 unless noted)
13. Are matrice	es correctly identified on CI	nain of Custody?	Ye	s	No		Adjusted?	
	hat analyses were request			s 🗸	No			
	olding times able to be met y customer for authorizatio		Ye	s <b>v</b>	No		Checked by	:
Special Hand	dling (if applicable)							
16. Was client	notified of all discrepancie	s with this order?	Ye	s	No		NA 🗸	
Perso	on Notified:	E	ate:		Cauth Le sechicipersers and Les although coloris colores	ONLINE TO SERVICE STREET		
By W	hom:	V	ia: el	Vail .	Phone	Fax	In Person	
1	rding:				488-19-19-19-19-19-19-19-19-19-19-19-19-19-	Links All Armstone		
Clien	t Instructions:	<u> </u>						
17. Additional	remarks:							
18. Cooler Inf	contract to be at their contract of the contract of the	8 . J. 1. 2. 3. 2. 3. 3. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	. 1 . 22		l-		,	
Cooler I	No Temp °C Conditio	n Seal Intact Seal N Yes	lo Seal	Date	Signed B	у		
Ľ.							ı	

CI	nain-c	of-Cus	stody Record	Tuni-Alounu i	nne.		HALL ENVIRON ENTA					AL								
Client:	BLAG	G ENGR.	/ BP AMERICA		Rush_			-												RY
				Project Name:					Section of the								.com			
Mailing Ad	ddress:	P.O. BO	X 87		GCU # 153	3E		49	01 H									7109		
		BLOOM	FIELD, NM 87413	Project #:	and the second s			Te	el. 50	05-34	45-3	975	1	Fax	505	-345	-410	7		
Phone #:		(505) 63	2-1199									I	Anal	ysis	Rec	ques	it			
email or F	ax#:			Project Manag	er:									4				1)		
QA/QC Pad  Standa			Level 4 (Full Validation)		NELSON VI	ELEZ	(80218)	(Aluo	/ MRO)			15)		PO4,50	2 PCB's			water - 300.1}		٥
Accreditat	ion:			Sampler:	<b>NELSON VI</b>	ELEZ EV	-8	трн (Gas	DRO,	1.	.1)	8270SIMS)		102,	8082			/ wa		dme
□ NELAP		□ Other		On Ice:	∠d Yes	□ No .	1	TPH	_	418	504	827	S	03,	-		(AC	0.00		te s
□ EDD (T	ype)	1		Sample Tempe	erature: / (		1	+	(GR(	po	pou	or	etal	Z	cide	(A)	i-V(	- <u>ii</u>	9	osil
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + NATE	BTEX + MTBE	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 /	Grab cample	
12/11/13	1245	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	٧												V	
	4																			
																				$\top$
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																		$\top$	1	+
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	Manuscon of the control of the contr																			
Date:	Time: 1453	Relinquishe	Mr J	Received by:	Lhelen '	Date Time 2/12/13 1453	ВІ		REC	TLY T										
Date: 2/12/13	Time:	Relinquishe	istu Waller	Received by:	Date Time Jeff Peace, 200 Find Purchase O						rder	in e	mail	from	BP.					



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

September 06, 2013

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489 FAX (505) 632-3903

RE: GCU # 153E OrderNo.: 1308D54

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

### **Analytical Report** Lab Order 1308D54

Date Reported: 9/6/2013

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: MW # 3R

**Project:** GCU # 153E Collection Date: 8/28/2013 12:20:00 PM

Lab ID: 1308D54-001 Received Date: 8/30/2013 10:00:00 AM Matrix: AQUEOUS

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SH	HORT LIST				Analys	t: cadg
Benzene	51	5.0	μg/L	5	9/3/2013 5:11:19 PM	R13040
Toluene	6.5	5.0	μg/L	5	9/3/2013 5:11:19 PM	R13040
Ethylbenzene	5.3	5.0	µg/L	5	9/3/2013 5:11:19 PM	R13040
Xylenes, Total	ND	10	µg/L	5	9/3/2013 5:11:19 PM	R13040
Surr: 1,2-Dichloroethane-d4	94.0	70-130	%REC	5	9/3/2013 5:11:19 PM	R13040
Surr: 4-Bromofluorobenzene	102	70-130	%REC	5	9/3/2013 5:11:19 PM	R13040
Surr: Dibromofluoromethane	108	70-130	%REC	5	9/3/2013 5:11:19 PM	R13040
Surr: Toluene-d8	93.6	70-130	%REC	5	9/3/2013 5:11:19 PM	R13040

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

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1308D54

06-Sep-13

Client: Blagg Engineering
Project: GCU # 153E

Sample ID 5mL rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short I	_ist	
Client ID: PBW	Batch	ID: <b>R1</b>	3040	F	RunNo: 1	3040				
Prep Date:	Analysis D	ate: 9/	3/2013	8	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: <b>LC</b>	S	Tes	tCode: El	PA Method	8260: Volatile	s Short L	.ist	
Client ID: LCSW	Batch	ID: <b>R1</b>	3040	F	RunNo: 1	3040				
Prep Date:	Analysis D	ate: 9/	3/2013	S	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			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.8		10.00		98.2	70	130			

#### Qualifiers:

- * 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 greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 2 of 2



#### 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Work Order Number: 1308D54 RcptNo: 1 Client Name: BLAGG Received by/date: 8/30/2013 10:00:00 AM Logged By: Lindsay Mangin Completed By: Lindsay Mangin 8/30/2013 1:11:51 PM Reviewed By: Chain of Custody No Not Present Yes 1. Custody seals intact on sample bottles? Not Present Yes V No 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA 🗌 No Yes 🗸 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No NA Yes 🗸 Sample(s) in proper container(s)? No 7. Sufficient sample volume for indicated test(s)? 8. Are samples (except VOA and ONG) properly preserved? No No V NA . 9. Was preservative added to bottles? No VOA Vials No 10.VOA vials have zero headspace? No V 11. Were any sample containers received broken? Yes # of preserved bottles checked No for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 13. Are matrices correctly identified on Chain of Custody? Yes No 🗌 14. Is it clear what analyses were requested? No 🗌 Checked by: V 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) Yes No _ NA V 16. Was client notified of all discrepancies with this order? 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 4.9 Good

	_		way incould	. a , tround	me.								general Contract of the Contra	<b>813</b>	#T 1	-					
Client:			/ BP AMERICA	Standard Project Name	Rush						N	AL	.Y	SI	SI	A	ВС	ME RA			
Mailing A	ddress:	P.O. BO	X 87		GCU # 153	3E		49	01 F	lawk					nme			n 37109	<b>a</b>		
		BLOOM	FIELD, NM 87413	Project #:						)5-3					505				,		
Phone #:		(505) 63	2-1199									17 515		1000	Red	BI-SVIE					
email or F	ax#:			Project Manag	jer:							1,500						=			artis of
QA/QC Pa	-		Level 4 (Full Validation)		NELSON VI	ELEZ	(8021B)	+ TPH (Gas only)	MRO)			(S)		04,504	PCB's			er - 300.1)			0.
Accreditat	tion:			Sampler:	NELSON VI	ELEZ TV	(80	(Gas	/ DRO /	1)	1)	8270SIMS)		102,F	8082			/ water			mple
□ NELAP	)	□ Other		On Ice:	Yes /	□-No	1	TPH	d/c	418.	504.1)	827(		03,8	18/8		(A)	300.0 /			e sa
□ EDD (7	ype)			Sample Tempe	erature: 4,6		1	, + 3	(GRC	pol	pou	9	etals	N,	cide	F	-N-I	1 1		e	osit
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX - NATE	BTEX + MTBE	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method	PAH (8310	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄ )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil		Grab sample	5 pt. composite sample
8/28/13	1220	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	٧													٧	T
																			1	7	7
																		$\Box$	1	1	$\top$
																		1	1	+	+
							-					-		-	-	-	-		+	$\dashv$	+
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2-1-	<b>T</b> ime =	Dellamilah		Descind hou				لبا													
Date: 29/13	Sa0	Relinquishe	nof	Received by:	Wales	Date Time 8/29/13 820	ВІ	nark: LL DI	RECT					_							
)ate:	Time:	Relinquishe		Received by:	/	Date Time		ff Pea nd Pu								on, i	8 Mi	7401			
129/13	1757	1 mi	othe laboters		08/2	0/13 IM	FII	uru	n Crid	SE U	iuei	in ei	ııdıı	11011	Dr.						

If necessary, camples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of the



Hall Environmental Analysis Laboratory
4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

June 17, 2013

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1306206

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/5/2013 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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.

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

#### Lab Order 1306206

Date Reported: 6/17/2013

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

gg Engineering Client Sample ID: MW #3R

 Project:
 GCU #153E
 Collection Date: 5/31/2013 9:00:00 AM

 Lab ID:
 1306206-001
 Matrix: AQUEOUS
 Received Date: 6/5/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	93	5.0	Р	μg/L	5	6/11/2013 9:34:03 PM	R11218
Toluene	14	5.0	P	μg/L	5	6/11/2013 9:34:03 PM	R11218
Ethylbenzene	14	5.0	P	μg/L	5	6/11/2013 9:34:03 PM	R11218
Xylenes, Total	31	10	Р	μg/L	5	6/11/2013 9:34:03 PM	R11218
Surr: 4-Bromofluorobenzene	102	69.4-129	Р	%REC	5	6/11/2013 9:34:03 PM	R11218
EPA METHOD 300.0: ANIONS						Analyst	: JRR
Fluoride	1.9	0.50		mg/L	5	6/7/2013 2:00:33 AM	R11162
Chloride	85	2.5		mg/L	5	6/7/2013 2:00:33 AM	R11162
Sulfate	2300	50		mg/L	100	6/12/2013 1:04:42 PM	R11289
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/12/2013 7:04:35 PM	R11289
EPA METHOD 6010B: DISSOLVED	METALS					Analyst	ELS
Iron	0.036	0.020		mg/L	1	6/12/2013 11:26:34 AM	R11267
SM2540C MOD: TOTAL DISSOLVE	D SOLIDS					Analyst	: KS
Total Dissolved Solids	6010	20.0	*	mg/L	1	6/9/2013 4:49:00 PM	7790

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

- 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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page
  - Not Detected at the Reporting Limit Page 1 of 6
  - P Sample pH greater than 2 for VOA and TOC only.
  - RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1306206** *17-Jun-13* 

Page 2 of 6

Client:

Blagg Engineering

**Project:** 

GCU #153E

Project:	GC	CU #153E	
Sample ID	МВ	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID:	PBW	Batch ID: <b>R11162</b>	RunNo: 11162
Prep Date:		Analysis Date: 6/6/2013	SeqNo: 315620 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	
Sample ID	LCS	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID:	LCSW	Batch ID: R11162	RunNo: 11162
Prep Date:		Analysis Date: 6/6/2013	SeqNo: 315621 Units: mg/L
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Fluoride		0.54 0.10 0.5000	0 108 90 110
Chloride		4.8 0.50 5.000	0 96.3 90 110
Sample ID	MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID:	PBW	Batch ID: R11162	RunNo: 11162
Prep Date:		Analysis Date: 6/6/2013	SeqNo: 315676 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	
Sample ID	LCS	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID:	LCSW	Batch ID: R11162	RunNo: 11162
Prep Date:		Analysis Date: 6/6/2013	SeqNo: 315677 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 99.9 90 110
Chloride		4.5 0.50 5.000	0 90.5 90 110
Sample ID	МВ	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID:	PBW	Batch ID: R11289	RunNo: 11289
Prep Date:		Analysis Date: 6/12/2013	SeqNo: 319042 Units: mg/L
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sulfate		ND 0.50	
Nitrate+Nitrite	as N	ND 0.20	
Sample ID	LCS	SampType: LCS	TestCode: EPA Method 300.0; Anions
Client ID:	LCSW	Batch ID: R11289	RunNo: 11289
Prep Date:		Analysis Date: 6/12/2013	SeqNo: 319043 Units: mg/L
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sulfate		9.3 0.50 10.00	0 92.5 90 110

- * 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

- 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

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1306206

17-Jun-13

Client:

Blagg Engineering

Project:

GCU #153E

Sample ID LCS

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSW

Batch ID: R11289

**PQL** 

0.20

RunNo: 11289

Units: mg/L

Prep Date: Analyte

Analysis Date: 6/12/2013

SeqNo: 319043

%RPD

**RPDLimit** 

Result

SPK value SPK Ref Val

%REC 94.8 LowLimit 90 HighLimit

Qual

Nitrate+Nitrite as N

3.3

3.500

0

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits J

0 RSD is greater than RSDlimit

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

P Sample pH greater than 2 for VOA and TOC only.

Reporting Detection Limit

Page 3 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1306206 17-Jun-13

Client:

Blagg Engineering

**Project:** 

GCU #153E

Sample ID 5ML RB

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

69.4

Client ID:

PBW

Batch ID: R11177

RunNo: 11177

Prep Date:

Analysis Date: 6/7/2013

SeqNo: 315996

Units: %REC

%RPD

%RPD

%RPD

Analyte

Result Surr: 4-Bromofluorobenzene 18 SPK value SPK Ref Val

20.00

%REC LowLimit 91.4

HighLimit 129 **RPDLimit** 

Qual

Sample ID 100NG BTEX LCS

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

Client ID: LCSW

Batch ID: R11177

RunNo: 11177

Analysis Date: 6/7/2013

SeqNo: 315997

Units: %REC

129

Analyte

Prep Date:

Result 19 SPK value SPK Ref Val

20.00

%REC 94 2

LowLimit 69.4

LowLimit

69.4

HighLimit %RPD **RPDLimit** 

Qual

Surr: 4-Bromofluorobenzene Sample ID 5ML RB

SampType: MBLK Batch ID: R11218

PQL

1.0

1.0

1.0

2.0

RunNo: 11218

TestCode: EPA Method 8021B: Volatiles

Client ID: **PBW** Prep Date:

Analysis Date: 6/11/2013

Result

ND

ND

ND

ND

SeqNo: 317557

Units: µg/L HighLimit

**RPDLimit** 

Qual

Analyte Benzene Toluene

Ethylbenzene Xylenes, Total

Surr: 4-Bromofluorobenzene

18

20.00

SPK value SPK Ref Val

SPK value SPK Ref Val %REC

88.4

129

Sample ID 100NG BTEX LCS

LCSW

SampType: LCS

Batch ID: R11218

PQL

1.0

1.0

TestCode: EPA Method 8021B: Volatiles

RunNo: 11218

Prep Date: Analyte

Client ID:

Analysis Date: 6/11/2013

Result

17

0

0

SeqNo: 317558 %REC

86.7

86.2

Units: µg/L HighLimit

120

120

120

120

129

**RPDLimit** 

Qual

Benzene Toluene Ethylbenzene

17 18 Xylenes, Total 52 Surr: 4-Bromofluorobenzene

2.0 18 20.00

1.0 20.00 60.00

20.00

20.00

0 87.6 0 87 0 87.6

80 80 69.4

80

80

LowLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

RPD outside accepted recovery limits

0 RSD is greater than RSDlimit В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

Sample pH greater than 2 for VOA and TOC only. P

RL Reporting Detection Limit Page 4 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1306206

17-Jun-13

Client:

Blagg Engineering

**Project:** 

GCU #153E

Sample ID MB

SampType: MBLK

TestCode: EPA Method 6010B: Dissolved Metals

Client ID:

**PBW** 

Batch ID: R11267

RunNo: 11267

Prep Date:

Analysis Date: 6/12/2013 **PQL** 

SeqNo: 318281

Units: mg/L

Analyte

Result

SPK value SPK Ref Val %REC

LowLimit

HighLimit

%RPD **RPDLimit**  Qual

Iron

ND 0.020

Sample ID LCS

LCSW

SampType: LCS

PQL

RunNo: 11267

Client ID:

Batch ID: R11267

LowLimit

120

Prep Date:

Analysis Date: 6/12/2013

SeqNo: 318282

Units: mg/L HighLimit

**RPDLimit** 

Analyte Iron

Result 0.49

0.020 0.5000 0 98.5

SPK value SPK Ref Val %REC

TestCode: EPA Method 6010B: Dissolved Metals

%RPD

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

P Sample pH greater than 2 for VOA and TOC only.

Reporting Detection Limit

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1306206

17-Jun-13

Client:

Blagg Engineering

Project:

Client ID:

GCU #153E

Sample ID MB-7790

SampType: MBLK

TestCode: SM2540C MOD: Total Dissolved Solids

**PBW** 

Batch ID: 7790

RunNo: 11171

Prep Date: 6/6/2013

Sample ID LCS-7790

Analysis Date: 6/9/2013

PQL

SeqNo: 315792

Units: mg/L

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Qual

Total Dissolved Solids

ND

20.0

Client ID:

LCSW

SampType: LCS Batch ID: 7790

**PQL** 

RunNo: 11171

LowLimit

TestCode: SM2540C MOD: Total Dissolved Solids

Analyte

Prep Date: 6/6/2013 Analysis Date: 6/9/2013

SeqNo: 315793

Units: mg/L HighLimit

**RPDLimit** 

Qual

**Total Dissolved Solids** 

Result

SPK value SPK Ref Val %REC

%RPD

**RPDLimit** 

1040 20.0 1000 0 104

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

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

Sample pH greater than 2 for VOA and TOC only.

- Not Detected at the Reporting Limit
- Reporting Detection Limit

P

Page 6 of 6



Hall 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

RcptNo: 1 Client Name: BLAGG Work Order Number: 1306206 0/1/05/13 Received by/date: anne Am Logged By: Anne Thorne 6/5/2013 10:00:00 AM 6/5/2013 Completed By: Anne Thorne Reviewed By: Chain of Custody No 🗌 Not Present 🗹 1. Custody seals intact on sample bottles? Not Present No 2. Is Chain of Custody complete? Yes 3 How was the sample delivered? Courier Log In No 🗌 NA 🗌 Yes V 4. Was an attempt made to cool the samples? NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No . Yes 🗸 No 🗌 6. Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? Yes No 8. Are samples (except VOA and ONG) properly preserved? Yes Yes 🗌 No V NA 🗌 9. Was preservative added to bottles? No VOA Vials Yes 🗸 No | 10.VOA vials have zero headspace? No V Yes 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: 12. Does paperwork match bottle labels? Yes 🗸 >12 unless noted) (Note discrepancies on chain of custody) No 🗌 13. Are matrices correctly identified on Chain of Custody? Yes No 🗌 14. Is it clear what analyses were requested? No 🗌 Checked by 15. Were all holding times able to be met? Yes 🗸 (If no, notify customer for authorization.) Special Handling (if applicable) Yes No NA V 16. Was client notified of all discrepancies with this order? Person Notified: Date By Whom: Via: eMail Phone Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Temp °C | Condition | Cooler No Seal Intact | Seal No Seal Date Signed By 1.0 Good Yes

C	hain-d	of-Cus	stody Record	Turn-Around I	ппс.		١.	1	1	-	44		F	NV	/TE	3O	NI	ME	N	ГΔ	
Client:	BLAG	G ENGR.	/ BP AMERICA	☑ Standard	Rush_			·										RA			
				Project Name:					:								.con				
Mailing A	ddress:	P.O. BO	X 87		GCU # 153	BE		49	01 H									37109	9		
		BLOOM	FIELD, NM 87413	Project #:		1.110	1	Te	el. 50	)5-34	45-3	975	1	Fax	505	-345	-410	)7			
Phone #:		(505) 63	2-1199									ļ	Anal	ysis	Red	ques	st				
email or F	ax#:			Project Manag	jer:		<u>@</u>							.504)							
QA/QC Pa	-		Level 4 (Full Validation)		NELSON VE	ELEZ	(8021B)	(yluo	/ MRO)			AS)		PO4,SC			・ れい	_			le
Accredita	tion:			Sampler:	NELSON VI	ELEZ AN	1	трн (Gas	/ DRO	.1)	.1)	OSIN	nv	Q.	olids	ered	Ł				amp
□ NELAF	D	□ Other		On Ice:	☑ Yes	□ No	1	TPH	1/0	418	504	827	S	ĝ	d Sc	(filt	/ Withte N				te s
□ EDD (	Гуре)			Sample Tempe	erature: / ˌ/		#	3E +	(GR	pou	pou	or or	etal	C, A	olve	Snc	E			ple	oosi
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX +	BTEX + MTBE	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO3,	Total Dissolved Solids	Iron, Ferrous (filtered)	Nitrate N			Grab sample	5 pt. composite sample
5/31/13	0900	WATER	MW # 3R	40 ml VOA - 2	HCI & Cool	-001	٧						-							٧	
5/31/13	0900	WATER	MW # 3R	500 ml - 1	Cool	-OO								٧	٧					٧	
5/31/13	0900	WATER	MW # 3R	250 ml - 1	HNO ₃ & Cool	-04						2				٧				٧	
5/31/13	0900	WATER	MW # 3R	250 ml - 1	H ₂ SO ₄	-00											٧			٧	
Date:	Time:	Relinquish	ed by:	Received by:		Date Time	Rer	nark	s:												
4/13	924	10	m Uf	Charten to	Woole	4/4/13 924		ILL D													
Date:	Time:	Relinquish	ed by:	Received by:		Date Time	1										NM 8	37401			
6/4/13	1730	Thrus	to Wallen	Merhel	to Ole/	05/13 10:00		nd Pi													
	If necess	ary, samples s	ubmitted to Hall Environmental may be s	subcontracted to other	accredited laboratorie	es. This serves as notice of	f this p	ossibi	ity. A	ny sub	-contr	acted	data v	vill be	clearly	y notat	ted on	the an	alytica	I repor	rt.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

March 07, 2013

Nelson Velez

Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 320-3489

FAX: (505) 632-3903

RE: GCU #153E OrderNo.: 1303140

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/5/2013 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

#### Lab Order 1303140

Date Reported: 3/7/2013

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

GCU #153E

**Project:** 

Lab ID:

1303140-001

Client Sample ID: MW #3R

**Collection Date:** 2/27/2013 3:05:00 PM

Matrix: AQUEOUS Received Date: 3/5/2013 9:55:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	63	1.0	μg/L	1	3/6/2013 1:33:26 AM
Toluene	13	1.0	μg/L	1	3/6/2013 1:33:26 AM
Ethylbenzene	14	1.0	μg/L	1	3/6/2013 1:33:26 AM
Xylenes, Total	23	2.0	μg/L	1	3/6/2013 1:33:26 AM
Surr: 4-Bromofluorobenzene	101	69.7-152	%REC	1	3/6/2013 1:33:26 AM

- 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 Page 1 of 2

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1303140

07-Mar-13

Client:

Blagg Engineering

**Project:** 

GCU #153E

					-					
Sample ID: 5ML RB	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8021B: Volati	les		
Client ID: PBW	Batch	ID: R8	983	R	RunNo: 8	983				
Prep Date:	Analysis D	ate: 3/	5/2013	S	SeqNo: 2	56581	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		93.8	69.7	152			

Sample ID: 100NG BTEX LCS	SampT	ype: LC	LCS TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batch	ID: R8	983	R	RunNo: 8	983					
Prep Date:	Analysis D	ate: 3/	5/2013	S	eqNo: 2	56582	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	21	1.0	20.00	0	105	80	120				
Toluene	21	1.0	20.00	0	107	80	120				
Ethylbenzene	21	1.0	20.00	0	107	80	120				
Xylenes, Total	66	2.0	60.00	0	109	80	120				
Surr: 4-Bromofluorobenzene	21		20.00		104	69.7	152				

#### Qualifiers:

P Sample pH greater than 2

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

^{*} Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

# Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com

Clie	nt Name:	BLAGG	_		Work Or	der Nu	ımber:	13031	40	
Rec	eived by/date	:	16-03	105/13						
Log	ged By:	Anne Thorn	ne	3/5/2013 9:55:00 /	MA		a	ne A.	-	
Con	npleted By:	Anne Thorr	ne	3/5/2013_			a	ne A.	_	
Rev	iewed By:	na		)5/05/13						
Cha	in of Cust	ody)		,						
1.	Were seals i	ntact?			Yes		No 🗌	No	t Present 🗸	
2.	Is Chain of C	Custody comp	olete?		Yes	V	No 🗌	No	t Present	
3.	How was the	sample deliv	vered?		Cou	rier				
Log	<u>In</u>									v
4.	Coolers are	present? (see	e 19. for cooler	specific information)	Yes	<b>V</b>	No 🗌		NA 🗌	
5.	Was an atte	mpt made to	cool the samp	les?	Yes	<b>v</b>	No 🗌		NA 🗌	
6.	Were all san	nples receive	d at a tempera	ture of >0° C to 6.0°C	Yes	<b>V</b> 1	No 🗆		NA 🗆	
7.	Sample(s) in	proper conta	ainer(s)?		Yes	<b>V</b>	No 🗌			
8.	Sufficient sa	mple volume	for indicated to	est(s)?	Yes	<b>V</b>	No 🗌			
9.	Are samples	(except VOA	and ONG) pr	operly preserved?	Yes	<b>V</b>	No 🗌			
10.	Was preserv	ative added t	to bottles?		Yes		No 🗸		NA 🗆	
11.	VOA vials ha	ave zero head	dspace?		Yes	<b>V</b>	No 🗆	No V	OA Vials	
12.	Were any sa	mple contain	ers received b	roken?	Yes		No 🗸			
13.	Does paperv (Note discrep		ottle labels? nain of custody	<b>'</b> )	Yes	<b>V</b>	No 🗌		# of preserved bottles checked for pH:	
14.	Are matrices	correctly ide	ntified on Chai	in of Custody?	Yes	<b>V</b>	No 🗌			2 unless noted)
15.	Is it clear wh	at analyses v	vere requested	1?			No 🗆		Adjusted?	
16.			le to be met?		Yes	V 1	No L			
_			authorization.)						Checked by:	
	cial Handl						. $\Box$			
17.	vvas client n	otified of all d	liscrepancies v	vith this order?	Yes	n	No 🗌		NA 🗸	7
	Person	Notified:		Da	te					
	By Who			Via	: eMa	il 🗍	Phone	F	ax In Person	
	Regard							w		
	Client	nstructions:								
18.	Additional re	marks:								
									w)	
19.	Cooler Infor	1	Condition Good	Seal Intact   Seal No	Seal Da	te	Sigr	ned By		

C	hain-d	of-Cus	stody Record	Turn-Around 1	rime:		],	i	T 1		dι		F	N	/TF	3O	NI	MF	N7	ΓΔΙ		
Client:	BLAG	G ENGR.	/ BP AMERICA	✓ Standard	Rush														ATO			ř.
Mary Bulleting at the second			AND AND ADDRESS OF THE PARTY OF	Project Name:						-					nme							
Mailing A	ddress:	P.O. BO	X 87	1	GCU # 153	3E		49	01 F	lawl					ıerqı				9			
	-	BLOOM	FIELD, NM 87413	Project #:			1			05-3					505							
Phone #:		(505) 63		1								Charles III	18		Rec		7			7.75		
email or F	ax#:			Project Manag	jer:			I Olympia						A STATE OF				7		25/45		
QA/QC Pa	-		Level 4 (Full Validation)		NELSON VI	ELEZ	218)	only)	Diesel)					04, 504)	PCB's							
Accreditat				Sampler:	NELSON VI	ELEZ 91V	(8021B)	Gas	Gas/					02, 1	32 PC						nple	1
□ NELAF		□ Other		On Ice:	X Yes	□ No	1	) Hd.	15B (	8.1)	504.1)	PAH)		3, N	/ 8082						e sar	1
□ EDD (1	Гуре)			Sample Tempe	erature: 🕍		I	E + 1	1 80.	d 41	d 50	or PA	als	N.	des,		VOA	(0.0)		e	osit	> >
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO:	BTEX +-NITB	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method	8310 (PNA c	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4,	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Dubble
2/27/13	1505	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	٧													V		
																				十	$\forall$	_
							T													$\top$	$\neg$	_
ment of the second seco							+	-											_	$\dashv$	$\forall$	
																			$\dashv$	$\dashv$	+	_
							+												$\dashv$	+	$\dashv$	
							+												+	+	$\dashv$	
							+	-		_	-								$\dashv$	+	$\dashv$	_
							+	┼			_	-					_		$\dashv$	+	$\dashv$	
		,					-	-										-	$\dashv$	-	$\dashv$	_
		-	Allande	-			-	-	_										-	+	$\dashv$	
							-	-	_										-	-	_	_
Deter	Timo	Dolinguish	and hur	Passined by		Data Time		<u></u>														
Date: 3/4/13	Time: 9//	Relinquish	and Dy:	Received by:	Was to	Date Time 3/4/13 9/1		nark I <b>LL DI</b>		ΓLY T	О ВР	e:										
Date: 3/4/13	Time: 1730	Relinquishe	t Walle	Received by:	63/05/1	Date Time		ff Pe nd Pu							_	on, N	1M 8	7401				



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

December 06, 2012

Nelson Velez

Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1211A60

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/29/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

Client Sample ID: MW #3R

### Lab Order 1211A60

Date Reported: 12/6/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

**Project:** GCU #153E **Collection Date:** 11/26/2012 10:30:00 AM

Lab ID: 1211A60-001 Matrix: AQUEOUS Received Date: 11/29/2012 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	8.9	1.0	μg/L	1	11/30/2012 4:08:42 PM
Toluene	1.5	1.0	µg/L	1	11/30/2012 4:08:42 PM
Ethylbenzene	2.6	1.0	µg/L	1	11/30/2012 4:08:42 PM
Xylenes, Total	4.3	2.0	µg/L	1	11/30/2012 4:08:42 PM
Surr: 4-Bromofluorobenzene	104	69.7-152	%REC	1	11/30/2012 4:08:42 PM

- 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 Page 1 of 2

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1211A60

06-Dec-12

Client: Blagg Engineering

**Project:** GCU #153E

Sample ID 5ML RB	SampT	fampType: MBLK TestCode: EPA Method 8021B: Volatiles								
Client ID: PBW	Batch	ID: R7	230	F	RunNo: 7	230				
Prep Date:	Analysis D	ate: 1	1/30/2012	S	SeqNo: 2	09612	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	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	69.7	152			

Sample ID 100NG BTEX LC	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: LCSW	Batch	ID: R7	230	F	RunNo: 7	230				
Prep Date:	Analysis D	ate: 11	1/30/2012	S	SeqNo: 2	09613	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	80	120			
Toluene	22	1.0	20.00	0	108	80	120			
Ethylbenzene	22	1.0	20.00	0	108	80	120			
Xylenes, Total	67	2.0	60.00	0	112	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		109	69.7	152			

- * 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 ENVIRONMENTAL ANALYSIS LABORATORY

Hall 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

		A STATE OF THE PARTY OF THE PAR	STREET,	A 800T		
Clien	t Name: BLAGG Wo	rk Ord	der N	√umb	er: 1	211A60
Rece	ived by/date: 11/20/12					
Logg	ed By: Ashley Gallegos 11/29/2012 10:00:00 AM				A	7
	pleted By: Ashley Gallegos 11/29/2012 5:35:34 PM				A	3
	ewed By: $MA = \frac{1}{30}$					a
	11/30/18					
	n of Custody	Yes		No		Not Present ✓
	Were seals intact?	Yes			:	Not Present
	Is Chain of Custody complete?  How was the sample delivered?	Cour		110		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		-				
Log	<u>In</u>					
4.	Coolers are present? (see 19. for cooler specific information)	Yes	<b>V</b>	No		NA I
_	Mas as attempt made to enable ?	Yes	_	No		NA
5.	Was an attempt made to cool the samples?	res	•	140		
6	Were all samples received at a temperature of >0° C to 6.0°C	Yes	<b>V</b>	No		NA
٠.					,	
7.	Sample(s) in proper container(s)?	Yes	<b>V</b>	No		
8.	Sufficient sample volume for indicated test(s)?	Yes	<b>V</b>	No	1	
9.	Are samples (except VOA and ONG) properly preserved?	Yes	<b>V</b>	No		
10.	Was preservative added to bottles?	Yes		No	<b>V</b>	NA :
11	VOA vials have zero headspace?	Yes	<b>V</b>	No		No VOA Vials
	Were any sample containers received broken?	Yes	- !		<b>V</b>	
	Does paperwork match bottle labels?	Yes	<b>V</b>	No	1	# of preserved bottles checked
	(Note discrepancies on chain of custody)					for pH:
14.	Are matrices correctly identified on Chain of Custody?	Yes	<b>V</b>	No	i	(<2 or >12 unless noted)
	Is it clear what analyses were requested?	Yes	<b>V</b>	No		Adjusted?
	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes	~	No		Checked by:
	cial Handling (if applicable)					Checked by.
	Was client notified of all discrepancies with this order?	Yes	- 1	No	1 1	NA 🗸
,,,	gradient forman agent and constitution and the state of t	LIANA IARA AND AND AND AND AND AND AND AND AND AN	h-Cl-Dat			
	Person Notified: Date:   Date:   Via:	eMa	il	D	hone	Fax In Person
	Regarding:	Civia	HI :	- I - I	HOHE	Tax : III Gravit
	Client Instructions:					
10	Additional remarks:					
10.	namonal fortains.					
19.	Cooler Information					
	Cooler No Temp °C Condition Seal Intact Seal No Seal N	eal Da	te		Sign	ed By
	A CONTRACT OF THE PROPERTY OF					

Client: BLAGG ENGR. / BP AMERICA  Project Name:  Mailing Address: P.O. BOX 87  BLOOMFIELD, NM 87413  Project #:  Client: BLAGG ENGR. / BP AMERICA  Project Name:  GCU # 153E  BLOOMFIELD, NM 87413  Project #:  Project #:  Client: BLAGG ENGR. / BP AMERICA  Project Name:  Www.hallenvironmental.com  4901 Hawkins NE - Albuquerque, NM 87109  Tel. 505-345-3975  Fax 505-345-4107  Analysis Request  Analysis Request  Project Manager:  GA/QC Package:  GA		L.E.	HALL ENVIRONMENTAL					١.		ime:	Turn-Around T	stody Record	of-Cus	nain-c	CI							
Mailing Address:   P.O. BOX 87   GCU # 153E   4901 Hawkins NE - Albuquerque, NM 87109	r		ANALYSIS LABORATORY											/ BP AMERICA	G ENGR.	BLAG	Client:					
Project #: Tel. 505-345-3975   Fax 505-345-4107				109									01 H	490		3E	GCU # 153	1	X 87	P.O. BOX	ldress:	Mailing Ad
email or Fax#:  QA/QC Package: Standard  Accreditation: Sampler  Date  Time  Matrix  Matrix  Sample Request ID  Container Type and #  Type  Type																		Project #:	FIELD, NM 87413	BLOOM		
OA/OC Package:    Standard					t	ues	Req	sis	naly	A								1	2-1199	(505) 63	1700	Phone #:
Date Time Matrix Sample Request ID    Container Aujous (F, Cl, NO3, NO2, PO4, 18.1)   Sample								04)									er:	Project Manag			ax#:	email or F
		<u>e</u>					CB's						s/Diesel	onfy)	0218)	ELEZ	NELSON VE		Level 4 (Full Validation)		50	
		amp					382 F	NO2,					(Gas	(Gaş	F	ELEZ GOV	NELSON VE	Sampler:			on:	Accreditat
					8		)8/	03,		AH)	04.1	18.1	)15B	TPH	1		The second secon	THE RECORD AND ADDRESS OF THE PROPERTY OF THE		□ Other_		
	1.	osi	alc	0.00	-00	7	ides	2	tals	or P	od 5	4 bc	98 p	3E +	1		erature: [,	Sample Tempo		г	ype)	□ EDD (T
	1	5 pt. comp	Grab sam	Chloride (3	8270 (Semi	8260B (VO/	8081 Pestic	Anions (F, C	RCRA 8 Me	8310 (PNA	EDB (Metho	TPH (Metho	TPH Metho	BTEX + MTE	BTEX +- NATH	HEAL No.			Sample Request ID	Matrix	Time	Date
	T		V														HCl & Cool	40 ml VOA - 2	MW # 3R	WATER	1030	11/26/12
	T																					
	Γ																					
	T		T	$\top$																		
	T		$\top$	$\top$																		
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Date: Time: Relinquished by: Received by: Date Time Remarks:													RECT	LL DI	ВІ	VIII	Wester	China ta	mV/	//		
Date: Time: Relinquished by: Date Time Jeff Peace, 200 Energy Court, Farmington, NM 87401				401	1M 87	on, N	-				-					Date Time	1	Received by:	ed by: U	Relinquishe	Time:	Date:
1/28/12 1800 Christia Waller And 1/20/12 10/00 Find Purchase Order in email from BP.  If necessary, samples submitted to Hall Environmental may be subcontracted to other carbonatories. This serves as action of this association of the associatio							BP.	rom	nail f	in er	rder	se O				1/12 10'00	11/20	1	atu Walles	Chru		1/28/12



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

October 05, 2012

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU # 153E

OrderNo.: 1210008

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/29/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

#### Lab Order 1210008

Date Reported: 10/5/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

GCU # 153E

Lab ID: 1210008-001

**Project:** 

Client Sample ID: MW # 3R

**Collection Date:** 9/27/2012 2:50:00 PM

Matrix: AQUEOUS Received Date: 9/29/2012 10:00:00 AM

Analyses	Result	RL (	RL Qual Units			Date Analyzed		
EPA METHOD 8021B: VOLATILES						Analyst: NSB		
Benzene	17	1.0	р	μg/L	1	10/2/2012 10:50:58 PM		
Toluene	2.4	1.0	р	μg/L	1	10/2/2012 10:50:58 PM		
Ethylbenzene	6.2	1.0	р	μg/L	1	10/2/2012 10:50:58 PM		
Xylenes, Total	7.7	2.0	р	μg/L	1	10/2/2012 10:50:58 PM		
Surr: 4-Bromofluorobenzene	84.2	69.7-152	р	%REC	1	10/2/2012 10:50:58 PM		

- 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 Page 1 of 3

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1210008** 

05-Oct-12

Client: Blagg Engineering
Project: GCU # 153E

Surr: BFB

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015B: Gasoline Range

Client ID: PBW Batch ID: R5928 RunNo: 5928

Prep Date: Analysis Date: 10/2/2012 SeqNo: 170834 Units: %REC

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 19 20.00 95.0 69.8 119

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015B: Gasoline Range

Client ID: LCSW Batch ID: R5928 RunNo: 5928

21

Prep Date: Analysis Date: 10/2/2012 SeqNo: 170835 Units: %REC

20.00

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

104

69.8

- 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 Environmental Analysis Laboratory, Inc.

WO#:

1210008

05-Oct-12

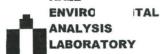
Client: Blagg Engineering
Project: GCU # 153E

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBW Batch ID: R5928 RunNo: 5928 Prep Date: Analysis Date: 10/2/2012 SeqNo: 170852 Units: µg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 1.0 ND Toluene 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 20.00 18 91.0 69.7 152

Sample ID 100NG BTEX LC	SampT	ype: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batch	n ID: <b>R5</b>	928	RunNo: 5928						
Prep Date:	Analysis D	ate: 10	0/2/2012	S	SeqNo: 1	70854	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	<b>RPDLimit</b>	Qual
Benzene	20	1.0	20.00	0	98.0	80	120			
Toluene	21	1.0	20.00	0	103	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	17		20.00		84 4	69.7	152			

- * 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



4901 Hawkins NE

Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

## Sample Log-In Check List

Work Order Number: 1210008 Client Name: BLAGG Received by/date: 9/29/2012 10:00:00 AM Logged By: **Lindsay Mangin** Completed By: Lindsay Mangin 10/1/2012 5:14:09 AM Reviewed By: Chain of Custody Yes No Not Present ✓ 1 Were seals intact? Yes V No Not Present 2 Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA Yes V No 4 Coolers are present? (see 19, for cooler specific information) NA 🗌 Yes V No 5. Was an attempt made to cool the samples? Yes V No NA 🗌 6. Were all samples received at a temperature of >0° C to 6.0°C Yes V No 7 Sample(s) in proper container(s)? Yes V No 8. Sufficient sample volume for indicated test(s)? Yes V No 9 Are samples (except VOA and ONG) properly preserved? Yes No V NA 🗌 10. Was preservative added to bottles? Yes V No No VOA Vials 11 VOA vials have zero headspace? □ No ✓ 12 Were any sample containers received broken? # of preserved Yes V No 13. Does paperwork match bottle labels? bottles checked (Note discrepancies on chain of custody) for pH: Yes V No (<2 or >12 unless noted) 14. Are matrices correctly identified on Chain of Custody? Adjusted? ✓ No 15. Is it clear what analyses were requested? Yes V No 16. Were all holding times able to be met? (If no, notify customer for authorization.) Checked by Special Handling (if applicable) Yes No NA V 17. Was client notified of all discrepancies with this order? Person Notified: Date: By Whom: eMail Phone Fax In Person Regarding: Client Instructions: 18. Additional remarks: 19 Cooler Information

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

Good

C	hain-c	of-Cus	stody Record	Turn-Around Time:						L	AL			NIV.	/TE	20	BI P	ME	NT	AI	
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard	Rush _														ATC		
				Project Name:													.com			<b>71%</b>	•
Mailing A	ddress:	P.O. BO	X 87	1	GCU # 153	3E		40	01 L									' 3710	α		
			FIELD, NM 87413	Project #:								975					-410		,		
Phone #:		(505) 63						16	1. 30	73-3	43-3	The same		ysis	Name and Address of the Owner, where				1		
email or F	ax#:	(303) 03		Project Manager:			4 191	50000													
QA/QC Pad	_		Level 4 (Full Validation)	NELSON VELEZ			80218)	only}	8015B (Gas/Diesel)					PO4, 504)	PCB's						a1
Accreditat				Sampler: NELSON VELEZ 91V					Gas/					Cl, NO3, NO2, PO4,	32 PC						sample
□ NELAF	·	□ Other		On Ice: Se Yes □ No				TPH (Gas	15B	18.1)	(1.1)	Ŧ		33, N	/ 8082		-				e sa
□ EDD (1	Гуре)	T.		Sample Temperature: 28'						od 41	)d 50	or PA	als	J, NC	ides	7	-V0A	0.00		le le	100SIL
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + MT	BTEX + MTBE	TPH Method	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, C	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		de t	5 pt. composite
9/27/12	1450	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	٧													V	T
Date: 9/28/12	Time:	Relinquishe	ed by:	Received by: Date Time				nark													
Date:	0745 Time:	Relinquishe		Received by:	Wester	7/28/12 805 Date Time 9/19/12 10:00	Jeff Peace, 200 Energy Court, Farmington, NM 8740					7401									



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

OrderNo.: 1207171

July 12, 2012

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: GCU # 153E

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/6/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

### Lab Order 1207171

Date Reported: 7/12/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Project: GCU # 153E

Client Sample ID: MW # 3R

Collection Date: 6/29/2012 1:30:00 PM

**Lab ID:** 1207171-001 **Matrix:** AQUEOUS **Received Date:** 7/6/2012 9:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES S	HORT LIST				Analyst: RAA
Benzene	79	1.0	μg/L	1	7/6/2012 4:38:29 PM
Toluene	18	1.0	μg/L	1	7/6/2012 4:38:29 PM
Ethylbenzene	19	1.0	μg/L	1	7/6/2012 4:38:29 PM
Xylenes, Total	30	2.0	μg/L	1	7/6/2012 4:38:29 PM
Surr: 1,2-Dichloroethane-d4	98.8	70-130	%REC	1	7/6/2012 4:38:29 PM
Surr: 4-Bromofluorobenzene	95.1	70-130	%REC	1	7/6/2012 4:38:29 PM
Surr: Dibromofluoromethane	103	69.8-130	%REC	1	7/6/2012 4:38:29 PM
Surr: Toluene-d8	89.5	70-130	%REC	1	7/6/2012 4:38:29 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
- U Samples with CalcVal < MDL

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1207171

12-Jul-12

Client:

Blagg Engineering

Project:

GCU # 153E

rroject: GCU#	133E									
Sample ID 5ml-rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short L	ist	
Client ID: PBW	Batch	ID: R3	963	F	RunNo: 3	963				
Prep Date:	Analysis D	ate: 7/	6/2012	S	SeqNo: 1	13355	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	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.3		10.00		93.5	70	130			
Sample ID 100ng Ics	SampT	ype: LC	s	Tes	tCode: El	PA Method	8260: Volatile	es Short L	ist	
Client ID: LCSW	Batch	ID: R3	963	F	RunNo: 3	963				
Prep Date:	Analysis D	ate: 7/	6/2012	S	SeqNo: 1	13356	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.8	84.1	126			
Toluene	18	1.0	20.00	0	91.8	80	120			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.0	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	11		10.00		106	69.8	130			
Surr: Toluene-d8	9.1		10.00		90.9	70	130			

#### Qualifiers:

*/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 2 of 2



Hall Enviror tal 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

					attenvii Onmen		
Client	t Name:	BLAGG	1	/ / /	Nork Order N	lumber: 1	1207171
Rece	ived by/date	:	16	07/06/12			
Logge	ed By:	Lindsa	y Mangin	7/6/2012 9:45:00 AM		0	hy Alburgio
Comp	pleted By:	Linds	y Mangin	7/6/2012 10:29:07 AM		of the same	by Hauge
Revie	ewed By: <	A		07/06/12			
Chair	n of Cust	tody	, 🚫	1			
	Nere seals i				Yes	No 🗌	Not Present ✓
			ommists?		_	No 🗆	Not Present
	s Chain of C					140	Not Flesent
3. F	low was the	sample	delivered?		Courier		
Log I	<u>In</u>						
4. 0	Coolers are	present?	(see 19. for cooler sp	ecific information)	Yes 🗸	No 🗌	NA 🗔
5. V	Nas an atte	mpt made	e to cool the samples	?	Yes 🗸	No 🗌	NA 🗆
6. V	Nere all san	nples rec	eived at a temperatur	e of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆
7. 5	Sample(s) in	proper o	container(s)?		Yes 🗸	No 🗌	8
			ume for indicated test	(s)?	Yes 🗸	No 🗌	
			VOA and ONG) prope		Yes 🗹		000
			led to bottles?	ony preserved:		No 🗸	NA 🗆 C
10. V	vas preserv	alive au	led to bottles!		Tes III	NO 🖭	
11. V	/OA vials ha	ave zero l	headspace?		Yes	No 🗌	No VOA Viale
12. V	Vere any sa	mple con	ntainers received brok	en?	Yes	No 🗸	
13. D	oes paperv	vork mate	ch bottle labels?		Yes 🗸	No 🗌	# of preserved bottles checked
1)	Note discrep	pancies o	on chain of custody)				for pH:
14. A	Are matrices	correctly	identified on Chain o	of Custody?	Yes 🗸	No 🗌	(<2 or >12 unless noted)
15. Is	s it clear wh	at analys	es were requested?		Yes 🗸	No 🗌	Adjusted?
16. V	Vere all hold	ding times	s able to be met?		Yes 🗸	No 🗌	
(I	If no, notify	customer	for authorization.)				Checked by:
Spec	ial Handl	ing (if a	applicable)				
17. V	Vas client n	otified of	all discrepancies with	this order?	Yes	No 🗹	NA 🗆
	Person	Notified:		Date:			and the second s
	By Who	om:		Via:	eMail	Phone	Fax In Person
	Regard	ing:		TO THE WAY IN COME AND A PROPERTY AND A PROPERTY OF THE PROPERTY			
		nstruction	ns:				
18 A	Additional re	marks:					·
10.							
19. <u>⊆</u>	Cooler Infor	mation	TEMP°C (	204101110H SEA (2000 Y	LINITACT	- 1 ,	. /
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					_ =	1	0110010

Page 1 of 1

CI	hain-d	of-Cus	stody Record	Turn-Around 1			t t	1	44		F	NV	/TE	20	NI	ME	N7	ra!				
Client:	BLAG	G ENGR.	/ BP AMERICA		Rush														ATO			
Barbart Glory and through you may be a party				Project Name:			-				ww	w.ha	allen	viro	nme	ntal	.con	n				
Mailing Ad	ddress:	P.O. BO	X 87		GCU # 153	BE		49	01 F	ławk	ins	NE -	Alb	ouqu	ıerqı	ue, N	1M 8	3710	9			
		BLOOM	FIELD, NM 87413	Project #:						05-34				Fax								
hone #:		(505) 63	32-1199									ALCOHOL:	TO SHOW	ysis	SELL TO	100	THE RES					
email or F	ax#:			Project Manag	jer:									504								
⊋A/QC Pad ☑ Standa	_		Level 4 (Full Validation)		NELSON VI	ELEZ	(80218)	(Gas only)	8015B (Gas/Diesel)					PO4, SC	PCB's						ь	
Accreditat	ion:			Sampler:	NELSON VI	ELEZ TOV	18	(Gas	(Gas					NO2,	82 P(						mp	
□ NELAP	)	□ Other		On Ice:	X Yes	□ No		TPH	158	18.1)	)4.1)	Œ		)3, N	/ 8082						e sa	2 Z
□ EDD (T	ype)			Sample Temp	erature: /,	0	1	+		od 43	)d 5(	or P/	als	CI, NO3,	ides	2	-V0A	0.00		e e	osit	(7 0
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX MATE	BTEX + MTBE	TPH Method	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, C	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
6/29/12	1330	WATER	MW#3R	40 ml VOA - 2	HCI & Cool	-001	٧													٧		
***************************************		-																				
×																						
England the Arthurst Copy (Spring)																				$\neg$		
ACTION 144-144-144-144-144-144-144-144-144-144																				1		
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1/5/17	1430	1	lin 1/1	Pho t.	1 1 . 1.	7/-1 1/20	1			LY T	О ВР	);										
)ate:	Time:	Relinquishe	ed by:	Received by:	Welte	73//2 /930 Date Time	1			200 E			urt,	Farm	ningt	on, N	1M 8	7401	,			
15/12	1727	Mr	stu Walter	Mdihl	Stories !	07/06/12/0949				se O												



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

February 20, 2012

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3487 FAX (505) 632-3903

RE: GCU #153E OrderNo.: 1202471

#### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/14/2012 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative. Analytical results designated with a "J" qualifier are estimated and represent a detection above the Method Detection Limit (MDL) and less than the Reporting Limit (PQL). These analytes are not reviewed nor narrated as to whether they are laboratory artifacts.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Andy Freeman

Laboratory Manager

may

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

Lab Order 1202471

Date Reported: 2/20/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: MW #3R

Project: GCU #153E

Collection Date: 2/10/2012 12:15:00 PM

Lab ID: 1202471-001

Matrix: AQUEOUS Received Date: 2/14/2012 12:45:00 PM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	9.7	1.0	μg/L	1	2/15/2012 2:07:50 PM
Toluene	1.6	1.0	μg/L	1	2/15/2012 2:07:50 PM
Ethylbenzene	2.7	1.0	μg/L	1	2/15/2012 2:07:50 PM
Xylenes, Total	4.8	2.0	μg/L	1	2/15/2012 2:07:50 PM
Surr: 4-Bromofluorobenzene	86.3	76.5-115	%REC	1	2/15/2012 2:07:50 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

## **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

1.0

1.0

1.0

2.0

20.00

20.00

20.00

60.00

20.00

19

19

19

60

22

WO#: **1202471** 

20-Feb-12

Client:

Blagg Engineering

**Project:** 

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

GCU #153E

Sample ID 5ML -RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles											
Client ID: PBW	Batch ID	R972	R	unNo: 9	72						
Prep Date:	Analysis Date	2/15/2012	S	eqNo: 2	8373	Units: µg/L					
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	nzene ND 1.0										
Xylenes, Total	ND	2.0									
Surr: 4-Bromofluorobenzene	19	20.00		95.5	76.5	115					
Sample ID 100NG BTEX LCS	SampType	e: LCS	Test	Code: EF	PA Method	8021B: Volat	iles				
Client ID: LCSW	72										
Prep Date:	Analysis Date	2/15/2012	S	eqNo: 28	8377	Units: µg/L					
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		

0

0

0

97.1

93.9

96.0

99.9

109

80

80

80

80

76.5

120

120

120

120

115

#### Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

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 2 of 2

# HALL //RONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **BLAGG** Work Order Number: 1202471 m6/04/12 Received by/date: 2/14/2012 12:45:00 PM Logged By: Anne Thorne anne Home 2/14/2012 Completed By: Anne Thorne Reviewed By: Ma 2/14/12 Chain of Custody Yes No Not Present ✓ 1 Were seals intact? Yes V No Not Present 2 Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In Yes 🗸 No 🗌 4. Coolers are present? (see 19. for cooler specific information) Yes V No 5. Was an attempt made to cool the samples? Yes V No NA | 6 Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 7. Sample(s) in proper container(s)? Yes 🗸 No 8 Sufficient sample volume for indicated test(s)? Yes V No 9 Are samples (except VOA and ONG) properly preserved? Yes No 🗸 NA 10. Was preservative added to bottles? Yes No No VOA Vials AT 2/14/12
Yes No No VOA Vials 11. VOA vials have zero headspace? Yes 🗌 No 🗸 12 Were any sample containers received broken? # of preserved Yes ✔ No 🗌 13. Does paperwork match bottle labels? bottles checked (Note discrepancies on chain of custody) for pH: 14. Are matrices correctly identified on Chain of Custody? Yes V No (<2 or >12 unless noted) Adjusted? Yes V No 15 is it clear what analyses were requested? Yes V No 16. Were all holding times able to be met? (If no, notify customer for authorization.) Checked by: Special Handling (if applicable) 17. Was client notified of all discrepancies with this order? Yes No NA V Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 18 Additional remarks: 19 Cooler Information Cooler No Temp °C Condition Seal Intact | Seal No Seal Date Signed By Good Yes

Client: BLAGG ENGR. / BP AMERICA  Project Name:  Project Name:  Mailing Address: P.O. BOX 87  BLOOMFIELD, NM 87413  Project #:  Project #:  Project #:  Project #:  Project #:  Project #:  Project Manager:  OACC Package:  Standard  CACC Package:  NELSON VELEZ  On Ice:  NELSON VELEZ  On Ice:  NELSON VELEZ  On Ice:  Sample: Time Matrix  Sample Request ID  Date Time Matrix  Sample Request ID  Container Type and #  Type and Type and #  Type and Typ	CI	hain-d	of-Cus	tody Record	Turn-Around Time:						-	1.0		F	NV	TE	20	NIE	V E	NT	-Δ1	
Mailing Address: P.O. BOX 87   GCU # 153E   A901 Hawkins NE - Albuquerque, NM 87109	Client:	BLAG	G ENGR.	/ BP AMERICA																		
Standard		***************************************			Project Name;							ww	w.ha	illen	viro	nme	ntal	.com	1			
Phone #: (505) 632-1199   Project Manager:   Pro	Mailing Ad	ddress:	P.O. BO	X 87		GCU # 153	3E		49	01 H	lawk	ins l	NE -	Alb	uqu	erqu	ıe, N	1M 8	710	9		
email or Fax#:  QA/QC Package: Standard  Level 4 (Full Validation)  Accreditation: NELSON VELEZ  On Ice: NELSON VELEZ  Time  NELSON VELEZ  Time  NELSON VELEZ  NO  Sampler: NELSON VELEZ  NO  Sampler: NELSON VELEZ  NO  Sampler: NELSON VELEZ  NO  Sampler: NELSON VELEZ  NO  NELSON			BLOOM	FIELD, NM 87413	Project #:				Te	el. 50	)5-34	15-3	975	F	ax	505-	345	-410	7			
Oxide   Container   Container   Type   Add   W   W   W   W   W   W   W   W   W	Phone #:		(505) 63	2-1199									A	nal	ysis	Rec	lues	t				
Standard	email or F	ax#:			Project Manager:										(4)							$\top$
2/10/12 1215 WATER MW #3R 40 ml VOA - 2 HCl & Cool - V		-		Level 4 (Full Validation)	NELSON VELEZ			0218)	onfy)	/Diesel)					PO4, SC	CB's						
2/10/12 1215 WATER MW #3R 40 ml VOA - 2 HCl & Cool - V	Accreditat	ion:			Sampler: NELSON VELEZ				(Gas	(Gas,					102,	82 Pt						
2/10/12 1215 WATER MW #3R 40 ml VOA - 2 HCl & Cool - V	□ NELAF	>	☐ Other					TIME	IPH	158	(8.1)	04.1)	Œ		33, N	-		-				1
2/10/12 1215 WATER MW #3R 40 ml VOA - 2 HCl & Cool — V	□ EDD (1	Type)	T		Sample Tempe	erature: 2	.9	1	1 + 1	d 80	od 41	)d 5(	or P/	als	I, NC	ides	2	V0V	0.00			2
2/10/12 1215 WATER MW #3R 40 ml VOA - 2 HCl & Cool - / V	Date	Time	Matrix	Sample Request ID				BTEX + WITE	BTEX + MTE	TPH Metho	TPH (Metho	EDB (Metho	8310 (PNA	RCRA 8 Met	Anions (F, C	8081 Pestic	8260B (VOA	8270 (Semi-	Chloride (30			
Date: / Time: Relinquished by: Received by: Date Time Remarks:	2/10/12	1215	WATER	MW #3R	40 ml VOA - 2	HCI & Cool	i	٧														
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/ Whating in Cellers 1/2 Joff Board 200 From Court Farmington NIM 97401	1/3/12	12 1135 glun Vf						BILL DIRECTLY TO BP:  Jeff Peace, 200 Energy Court, Farmington, NM 87401														
Date: Time: Relinquished by: Received by: Date Time Work Order: N1520125 Paykey: ZPEACJDENV					Received by:	Charin 2	Date Time									_						- nathropiu