State of New Mexico
Energy, Minerals and Natural Resources Department

PEMV0000003RP17

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley
Division Director
Oil Conservation Division

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.
    - Summary of remediation activity for the quarter.
    - SVE run time
    - SVE mass removal and product recovery.
    - 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	3RP-17
Facility ID	
Application ID	

NMOCD
NOV 05 2018
DISTRICT III

Release Notification

Responsible Party

Responsible Party: BP America Production Co.	OGRID: 778	Subsequent: **REMEDIATION PLAN**
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # *(assigned by OCD)*	
Contact mailing address: 1199 Main Ave, Suite 101, Durango CO, 81301		

Location of Release Source

Latitude: 36.702080° Longitude: -108.108771°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Gallegos Canyon Unit 153E	Site Type: Natural Gas Production Well Pad
Date Release Discovered: December 1994	API#: 30-045-24292

Unit Letter	Section	Township	Range	County
C	28	T29N	R12W	San 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	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): Unknown	Volume Recovered (bbls): 0 bbls
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight 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.

State of New Mexico
Oil Conservation Division

Incident ID	
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Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
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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?	15 (ft bgs)
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?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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: Date: November 1, 2018

email: steven.moskal@bpx.com Telephone: (505) 330-9179

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
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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

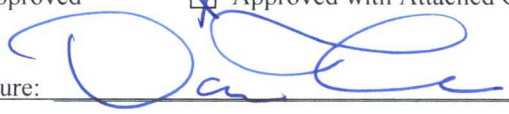
Signature:  Date: November 1, 2018

email: steven.moskal@bpx.com Telephone: (505) 330-9179

OCD Only

Received by: Vanessa Fields Date: 11/25/2018

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 11/29/18

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 items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

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.

SAMPLE DATE	WELL NAME / NUMBER	DEPTH TO WATER (ft)	WELL DEPTH (ft)	TDS (mg/L)	CONDUCT. (umhos)	pH	FREE PHASE PRODUCT (ft)	BTEX US EPA METHOD 8021B BENZENE (ppb)	TOLUENE (ppb)	ETHYL BENZENE (ppb)	TOTAL XYLENES (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		11.5	12.1	ND	54
05/05/93		10.34			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		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							0.01				
12/16/94		11.97					0.48				
06/28/95	WP #3B	11.73	15.00		6,500	7.40		1,947	1,735	434.3	3,150
09/11/95		12.14			8,400	7.80		752	102	427	1,386
12/08/95		12.15			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

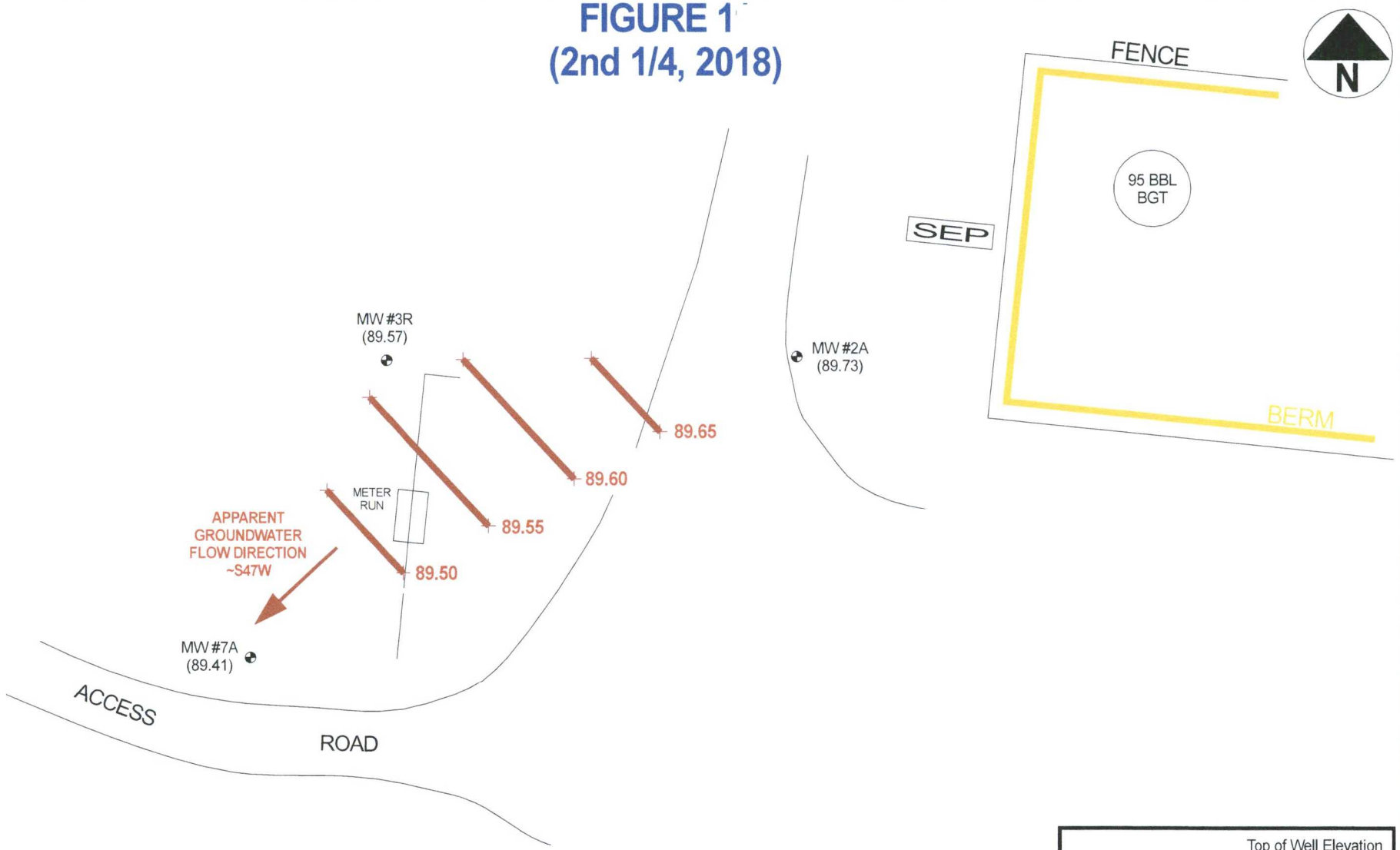
REVISED DATE: October 24 , 2018
Submitted by Blagg Engineering, Inc.

SAMPLE DATE	WELL NAME / NUMBER	DEPTH TO WATER (ft)	WELL DEPTH (ft)	TDS (mg/L)	CONDUCT. (umhos)	pH	FREE PHASE PRODUCT (ft)	BTEX US EPA METHOD 8021B BENZENE (ppb)	TOLUENE (ppb)	ETHYL BENZENE (ppb)	TOTAL XYLENES (ppb)
06/09/08	MW #3R	10.66			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		63	13	14	23
05/31/13		11.16		6,010	4,300	7.30		93	14	14	31
08/28/13		12.10			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	10.76	19.79		2,800	7.00		ND	ND	ND	ND
							NMWQCC GROUNDWATER STANDARDS	10	750	750	620

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

Figures

FIGURE 1
(2nd 1/4, 2018)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

	Top of Well Elevation
WELL HEAD FLANGE	(100.00)
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.57)	Groundwater elevation as of 05/26/18.

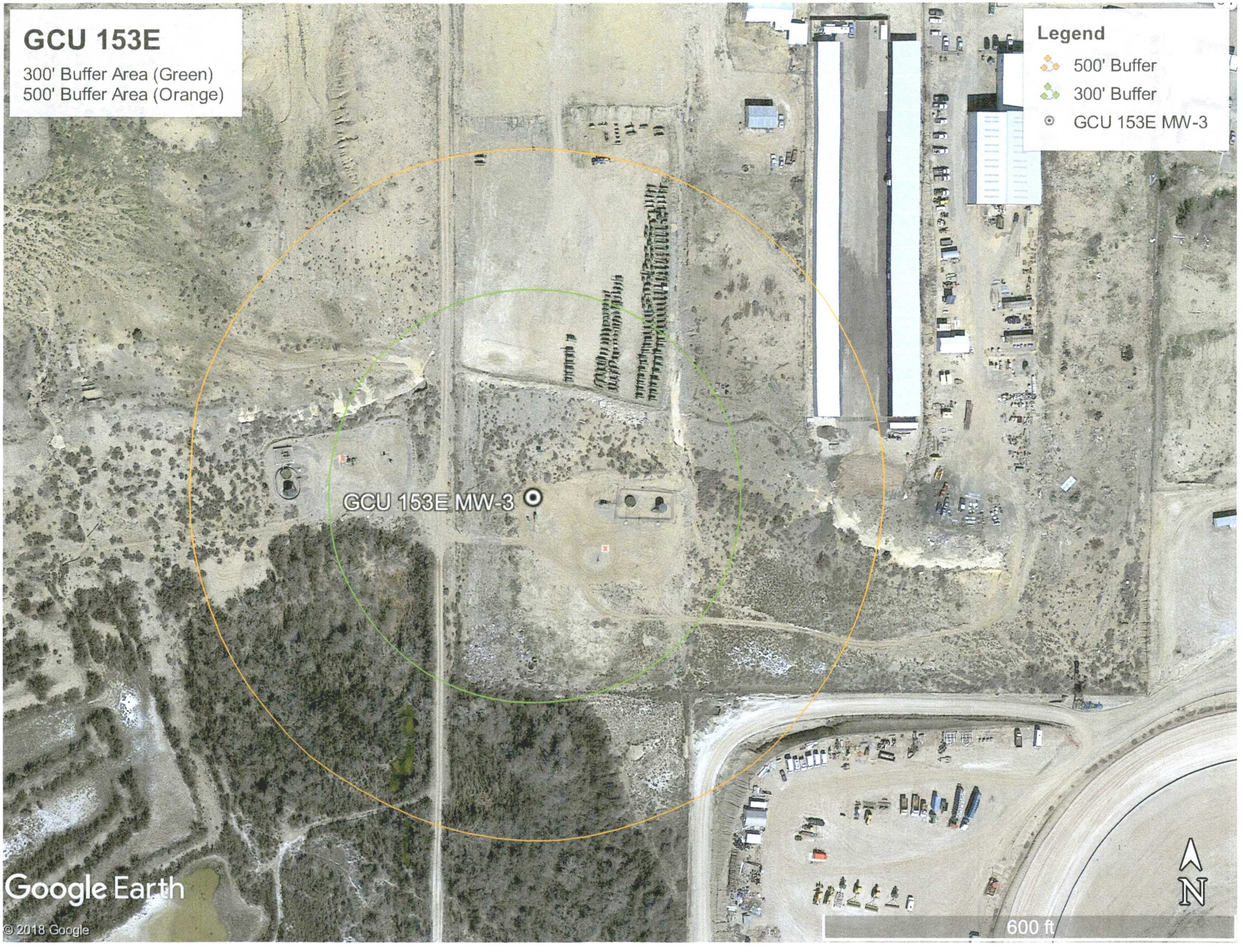
BP AMERICA PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

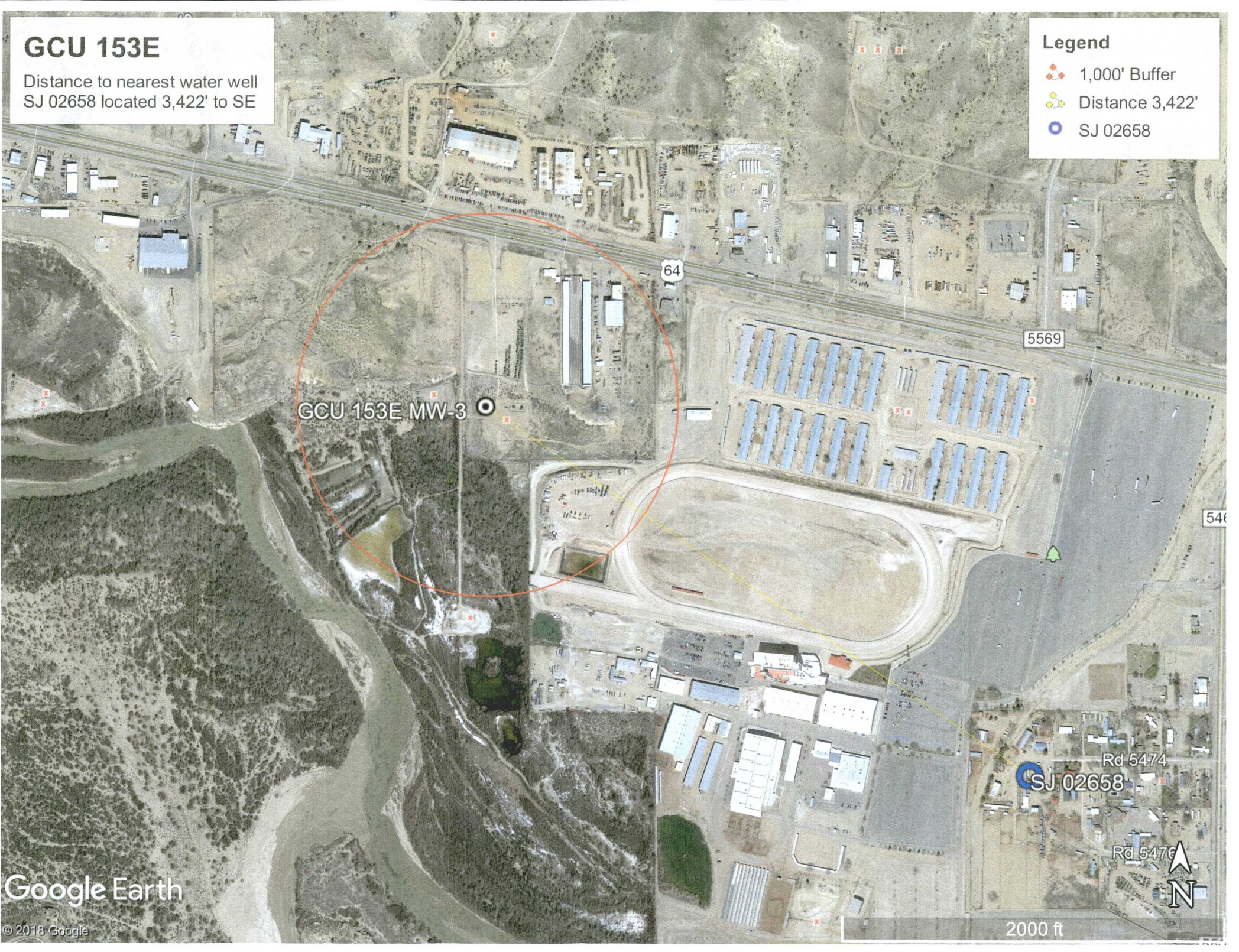
B LAGG ENGINEERING, I NC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: GCU 153E 2018-05-26-GW.SKF
REVISED: 10/25/18 NJV

GROUNDWATER GRADIENT MAP 05/18


BP - GCU 153E
API #: 3004524292
(C) Sec. 28, T29N, R12W
Imagery Date: 3/15/2015
Figure 2
Subsurface 2 inch PVC casing tie-in from air blower to SVE pts.
SVE Blower
Groundwater monitor well MW #2A
SVE Pt.
AVERAGE APPARENT GROUNDWATER FLOW DIRECTION ~S47W
Groundwater monitor well MW #3R 36.702080°, -108.108771°
Groundwater monitor well MW #7A
WH
N
60 ft
Google earth


GCU 153E
300' Buffer Area (Green)
500' Buffer Area (Orange)
Legend
500' Buffer
300' Buffer
GCU 153E MW-3
GCU 153E MW-3
Google Earth
© 2018 Google
600 ft
N


GCU 153E
Distance to nearest water well
SJ 02658 located 3,422' to SE
Legend
1,000' Buffer
Distance 3,422'
SJ 02658
64
5569
GCU 153E MW-3
SJ 02658
Rd 5474
Rd 5476
N
2000 ft
Google Earth
© 2018 Google

New Mexico Office of the State Engineer

Wells with Well Log Information

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

) Number	POD Sub-basin Code	County	Source	q 6416	q	q 4	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
)2658	SJM2	SJ	Shallow	1	2	4	28	29N	12W	223123	4065711*	1046	09/22/1995	09/29/1995	10/12/1995	42	24	SAVAGE, BOB	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
)0726	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
)0711	SJM2	SJ	Shallow	4	2	1	29	29N	12W	220963	4066391*	1317	07/05/1978	07/09/1978	07/12/1978	20	8		717
)0827	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
)1008	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
)3634	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
)0904	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
)3422	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
)0901	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

M location was derived from PLSS - see Help

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(NAD83 UTM in meters)

(in feet)

) Number	POD Code	Sub-basin	County	Source	q 6416	q 4	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
)1828		SJM2	SJ	Shallow	4	3	1	27	29N	12W	223737	4065905*	1518	05/03/1984	05/05/1984	05/11/1984	45	25	HOOD, TERRY	717
)2870		SJM2	SJ	Shallow	4	3	1	27	29N	12W	223737	4065905*	1518	11/07/1998	11/07/1998	11/12/1998	39	24	TERRY HOOD	717
)3384		SJM2	SJ	Shallow	4	3	1	27	29N	12W	223737	4065905*	1518	07/20/2003	07/21/2003	07/31/2003	41	30	TERRY HOOD	717
)0572		SJM2	SJ	Shallow		1	3	27	29N	12W	223627	4065598*	1533	03/01/1978	03/21/1978	04/10/1978	35	28	SELF	
)1700		SJM2	SJ	Shallow		1	3	27	29N	12W	223627	4065598*	1533	05/07/1983	05/09/1983	05/17/1983	87	48	MCCOY, LYLE LEROY	1036
)1728		SJM2	SJ	Shallow		1	3	27	29N	12W	223627	4065598*	1533	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	12W	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	12W	220763	4066591*	1538	04/17/2002	04/17/2002	03/25/2002	21	10		1479
)3168		SJM2	SJ	Shallow	1	2	1	29	29N	12W	220763	4066591*	1538	04/17/2002	04/17/2002	03/25/2002	21	10		1479
)3169		SJM2	SJ	Shallow	1	2	1	29	29N	12W	220763	4066591*	1538	04/17/2002	04/17/2002	03/25/2002	21	10		1479
)3170		SJM2	SJ	Shallow	1	2	1	29	29N	12W	220763	4066591*	1538	04/17/2002	04/17/2002	03/25/2002	21	10		1479
)3171		SJM2	SJ	Shallow	1	2	1	29	29N	12W	220763	4066591*	1538	04/18/2002	04/18/2002	03/25/2002	21	10		1479
)2973		SJM2	SJ	Shallow	2	1	2	33	29N	12W	222901	4064910*	1549	02/18/2000	02/19/2000	03/10/2000	130	50		1345
)0559		SJM2	SJ	Shallow							220726	4066296	1553			04/07/1978	15		SELF	
)2118		SJM2	SJ	Shallow			1	27	29N	12W	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	12W	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	12W	223604	4065351	1646	01/10/2008	01/12/2008	01/28/2008	21	10	HOOD, TERRY	717
)0786		SJM2	SJ	Shallow	4	1	1	29	29N	12W	220567	4066403*	1714	09/09/1978	09/11/1978	09/13/1978	21	8	W.L.HARGIS	799
)0799		SJM2	SJ	Shallow	4	1	1	29	29N	12W	220567	4066403*	1714	10/06/1978	10/09/1978	10/12/1978	20	8	BILL HARGIS	799
)0842		SJM2	SJ	Shallow	4	1	1	29	29N	12W	220567	4066403*	1714	12/17/1978	12/19/1978	12/29/1978	15	5	JOHNNIE'S LUCKY "7"	777

M location was derived from PLSS - see Help

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(in feet)

) Number	POD Sub-basin	County	Source	q 6416	q 4	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	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
)0833	SJM2	SJ	Shallow	2 3	1	29	29N	12W	220553	4066197*	1731	11/16/1978	11/16/1978	11/29/1978	17	9		
)0961	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
)1677	SJM2	SJ	Shallow		2	33	29N	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
)0966	SJM2	SJ	Shallow	3 3	1	29	29N	12W	220353	4065997*	1955	05/21/1979	05/23/1979	05/31/1979	18	3	JOHNNIE'S LUCKY "7" DRLG.	777
)0338	SJM2	SJ	Shallow	3 3	3	20	29N	12W	220381	4066809*	1958	05/28/1977	05/29/1977	06/08/1977	28	10	WRIGHT, JOHN R.	730
)0566	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	12W	224218	4065793*	2011	06/19/1986	06/21/1986	06/26/1986	60	25	HOOD, TERRY	717
)2169	SJM2	SJ	Shallow			27	29N	12W	224218	4065793*	2011	04/08/1988	04/11/1988	04/27/1988	36	19	THOMPSON, LEON	527
)1775	SJM2	SJ	Shallow	1	1	34	29N	12W	223604	4064782*	2037			10/04/1983	15		THOMPSON, LEON	527
)1776	SJM2	SJ	Shallow	1	1	34	29N	12W	223604	4064782*	2037			10/04/1983			THOMPSON, LEON	527
)2041	SJM2	SJ	Shallow	3	2	27	29N	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	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	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	12W	220078	4066510*	2208	06/22/1981	06/23/1981	06/26/1981	35	6	HOOD, TERRY	717

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1565	SJM2	SJ	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow		4	4	19	29N	12W	220092	4066915*	2264	05/19/1979	05/21/1979	05/31/1979	76	40		777
2183	SJM2	SJ	Shallow		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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow	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	Shallow		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	Shallow	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	Shallow		4	4	22	29N	12W	224867	4066767*	2624	01/14/1993	01/15/1993	01/25/1993	300	185	HOOD, TERRY	717

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)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
)3312	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
)0567	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

Monitor Well
Laboratory Analytical Data Reports

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

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 OrderNo.: 1806F96

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
4901 Hawkins NE
Albuquerque, NM 87109

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806F96**

05-Jul-18

Client: Blagg Engineering

Project: GCU 153E

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A52366**	RunNo: **52366**
Prep Date:	Analysis Date: **6/29/2018**	SeqNo: **1717363** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806F96**

05-Jul-18

Client: Blagg Engineering
Project: GCU 153E

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A52366**	RunNo: **52366**
Prep Date:	Analysis Date: **6/29/2018**	SeqNo: **1717363** 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 lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **A52366**	RunNo: **52366**
Prep Date:	Analysis Date: **6/29/2018**	SeqNo: **1717364** 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			
Chlorobenzene	20	1.0	20.00	0	98.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806F96**

05-Jul-18

Client: Blagg Engineering

Project: GCU 153E

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **A52366**	RunNo: **52366**
Prep Date:	Analysis Date: **6/29/2018**	SeqNo: **1717364** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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HALL VIRONMENTAL 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: 1806F96 | RcptNo: 1

Received By: Anne Thorne 6/27/2018 7:55:00 AM Anne Thorne

Completed By: Anne Thorne 6/27/2018 1:14:18 PM Anne Thorne

Reviewed By: IO 6/27/18 JAB 06/27/18

Labeled by: JAB 06/27/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

JAB 06/27/18

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

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

Chain-of-Custody Record

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

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

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

email or Fax#:

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

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

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
GCU # 153E

Project #:

Project Manager:
STEVE MOSKAL

Sampler: **NELSON VELEZ**

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.4

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1806F96	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	Cation / Anion Balance	Total Dissolved Solids		Grab sample	5 pt. composite sample
6/26/18	1100	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001										✓				✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/26/18	1548			6/26/18	1548
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/26/18	1820			06/27/18	0755

Remarks:

BILL DIRECTLY TO BP:
Contact: Steve Moskal
SIO #: **190040007685**
WBS ELEMENT: **L1-001CV-E:GCU153E**

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This

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

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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1705E94**
Date Reported: **6/2/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1705E94-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 5/26/2017 11:20:00 AM
Received Date: 5/31/2017 7:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	29	1.0		µg/L	1	6/1/2017 1:30:08 AM	SL43178
Toluene	16	1.0		µg/L	1	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	1	6/1/2017 1:30:08 AM	SL43178
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	6/1/2017 1:30:08 AM	SL43178
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	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	1	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.

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1705E94**

02-Jun-17

Client: Blagg Engineering

Project: GCU #153E

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL43178**	RunNo: **43178**
Prep Date:	Analysis Date: **5/31/2017**	SeqNo: **1359057** 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	130			
Surr: Dibromofluoromethane	9.8		10.00		97.7	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL43178**	RunNo: **43178**
Prep Date:	Analysis Date: **5/31/2017**	SeqNo: **1359058** 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	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.4	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1705E94 RcptNo: 1

Received By: **Anne Thorne** 5/31/2017 7:15:00 AM

Completed By: **Andy Jansson** 5/31/2017 8:25:33 AM

Reviewed By: SPC 05/31/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1705E94
5/26/17	1120	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001

Analysis Request

BTEX ~~+ MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
✓													✓		

Date	Time	Relinquished by	Received by	Date	Time
5/30/17	1200			05/31/17	0715

Remarks:

BILL DIRECTLY TO BP:
200 Energy Court, Farmington, NM 87401 Attn.: Steve Moskal

VID: VRITCJWFEC WBS ELEMENT: L1-00169-E:GCU153E

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

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 OrderNo.: 1606D62

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 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 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

Analytical Report
Lab Order **1606D62**
Date Reported: **6/30/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1606D62-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 6/22/2016 8:20:00 AM
Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	29	1.0		µg/L	1	6/26/2016 11:35:59 PM	C35190
Toluene	9.1	1.0		µg/L	1	6/26/2016 11:35:59 PM	C35190
Ethylbenzene	7.4	1.0		µg/L	1	6/26/2016 11:35:59 PM	C35190
Xylenes, Total	14	1.5		µg/L	1	6/26/2016 11:35:59 PM	C35190
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	6/26/2016 11:35:59 PM	C35190
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/26/2016 11:35:59 PM	C35190
Surr: Dibromofluoromethane	93.5	70-130		%Rec	1	6/26/2016 11:35:59 PM	C35190
Surr: Toluene-d8	93.8	70-130		%Rec	1	6/26/2016 11:35:59 PM	C35190

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1606D62**

30-Jun-16

Client: Blagg Engineering
Project: GCU #153E

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **C35190**	RunNo: **35190**
Prep Date:	Analysis Date: **6/26/2016**	SeqNo: **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 lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **C35190**	RunNo: **35190**
Prep Date:	Analysis Date: **6/26/2016**	SeqNo: **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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1606D62 RcptNo: 1

Received by/date: AT 06/24/16

Logged By: **Anne Thorne** 6/24/2016 7:47:00 AM Anne Thorne

Completed By: **Anne Thorne** 6/24/2016 Anne Thorne

Reviewed By: TO 06/24/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good	Yes			

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other________
☐ EDD (Type) ________

Turn-Around Time:
☑ Standard ☐ Rush ________

Project Name: GCU # 153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1606D62	BTEX ~~+ MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
6/22/16	0820	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	√													√		

Date	Time	Relinquished by:	Received by:	Date	Time
6/23/16	1537	[signature]	[signature]	6/23/16	1537
6/23/16	1844	[signature]	[signature]	06/24/16	0747

Remarks:

BILL DIRECTLY TO BP:
200 Energy Court, Farmington, NM 87401 Attn.: John Ritchie
VID: VDRINKJWA1

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 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 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

Analytical Report
Lab Order **1508E36**
Date Reported: **9/4/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU # 153E
Lab ID: 1508E36-001
Matrix: AQUEOUS
Client Sample ID: MW # 3R
Collection Date: 8/26/2015 10:00:00 AM
Received Date: 8/28/2015 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	34	1.0		µg/L	1	9/2/2015 4:55:53 PM	A28626
Toluene	8.4	1.0		µg/L	1	9/2/2015 4:55:53 PM	A28626
Ethylbenzene	5.4	1.0		µg/L	1	9/2/2015 4:55:53 PM	A28626
Xylenes, Total	9.3	1.5		µg/L	1	9/2/2015 4:55:53 PM	A28626
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	9/2/2015 4:55:53 PM	A28626
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	9/2/2015 4:55:53 PM	A28626
Surr: Dibromofluoromethane	109	70-130		%REC	1	9/2/2015 4:55:53 PM	A28626
Surr: Toluene-d8	99.7	70-130		%REC	1	9/2/2015 4:55:53 PM	A28626

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1508E36**

04-Sep-15

Client: Blagg Engineering

Project: GCU # 153E

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **A28626**	RunNo: **28626**
Prep Date:	Analysis Date: **9/2/2015**	SeqNo: **866329** 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	9.6		10.00		95.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.8		10.00		98.1	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **A28626**	RunNo: **28626**
Prep Date:	Analysis Date: **9/2/2015**	SeqNo: **866330** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.9	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **BLAGG** Work Order Number: **1508E36** RcptNo: **1**

Received by/date: 08/28/15

Logged By: **Lindsay Mangin** **8/28/2015 8:25:00 AM**

Completed By: **Lindsay Mangin** **8/31/2015 6:23:34 AM**

Reviewed By: 08/31/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	# of preserved bottles checked for pH:
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	(<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: **GCU # 153E**

Project #:

Project Manager: **NELSON VELEZ**

Sampler: **NELSON VELEZ**

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.3+0.3CF=2.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1508136	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample
8/26/15	1000	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓	

Date: 8/27/15 Time: 1600 Relinquished by: [signature] Received by: Christine Walls Date: 8/27/15 Time: 1600

Date: 8/27/15 Time: 1910 Relinquished by: [signature] Received by: [signature] Date: 08/28/15 Time: 0825

Remarks:

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

Paykey: ZEVH01REME

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

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 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 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

Analytical Report
Lab Order **1505489**
Date Reported: **5/15/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1505489-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 5/11/2015 11:00:00 AM
Received Date: 5/12/2015 8:49:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

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**
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 LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R26168**	RunNo: **26168**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776510** 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

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/date: AM 05/12/15

Logged By: **Ashley Gallegos** 5/12/2015 8:49:00 AM AG

Completed By: **Ashley Gallegos** 5/12/2015 2:28:07 PM AG

Reviewed By: JA 05/12/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record

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

lailing Address: **P.O. BOX 87**

BLOOMFIELD, NM 87413

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

mail or Fax#:

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

ccreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ**

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1505489	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
5/11/15	1100	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/11/15	1545		Christin Waeters	5/11/15	1545
Date:	Time:	Relinquished by:	Received by:	Date	Time
5/11/15	1871			05/12/15	0700

Remarks:

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

Paykey: ZEVH01REME

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

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 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 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

Analytical Report
Lab Order **1503D65**
Date Reported: **4/1/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1503D65-001
Matrix: AQUEOUS
Client Sample ID: MW#3R
Collection Date: 3/30/2015 12:25:00 PM
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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503D65**

01-Apr-15

Client: Blagg Engineering

Project: GCU #153E

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**LCSW**	Batch ID:	**R25204**		RunNo:	**25204**				
Prep Date:		Analysis Date:	**3/31/2015**		SeqNo:	**744926**	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**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**PBW**	Batch ID:	**R25204**		RunNo:	**25204**				
Prep Date:		Analysis Date:	**3/31/2015**		SeqNo:	**744944**	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1503D65 | RcptNo: 1

Received by/date: AT 03/31/15

Logged By: Celina Sessa 3/31/2015 8:45:00 AM Celina Sessa

Completed By: Celina Sessa 3/31/2015 9:05:10 AM Celina Sessa

Reviewed By: 03/31/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

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

Person Notified: ____ Date: ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

17. Additional remarks

18. Cooler Information

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: GCU # 153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ NV

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503D65	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	Total Dissolved Solids	Iron, Ferrous (filtered)	Nitrate N / Nitrite N			Grab sample	5 pt. composite sample
3/30/15	~~1225~~ MV	WATER	MW # 3R	40ml - 2	HCl cool	-001	✓													✓	
	1225																				

Date	Time	Relinquished by	Received by	Date	Time
3/30/15	1445			3/30/15	1445
3/30/15	1855			03/31/15	0845

Remarks:

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

Paykey: ZEVH01REME

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

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 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 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

Analytical Report
Lab Order **1412130**
Date Reported: **12/9/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU # 153E
Lab ID: 1412130-001
Matrix: AQUEOUS
Client Sample ID: MW # 3R
Collection Date: 12/1/2014 1:10:00 PM
Received Date: 12/3/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

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		105	66.6	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	22		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	21		20.00		103	66.6	167			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R22938**	RunNo: **22938**
Prep Date:	Analysis Date: **12/4/2014**	SeqNo: **677408** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.6	80	120			
Toluene	20	1.0	20.00	0	99.8	80	120			
Ethylbenzene	20	1.0	20.00	0	99.8	80	120			
Xylenes, Total	64	2.0	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 ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **BLAGG** Work Order Number: **1412130** RcptNo: **1**

Received by/date: 12/03/14

Logged By: **Lindsay Mangin** 12/3/2014 7:30:00 AM

Completed By: **Lindsay Mangin** 12/3/2014 8:59:45 AM

Reviewed By: 12/03/14

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: GCU # 153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412130	BTEX ~~+ MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample
12/1/14	1310	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	√													√	

Date	Time	Relinquished by:	Received by:	Date	Time
12/2/14	1537			12/2/14	1537
12/2/14	1747			12/03/14	0730

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

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

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 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 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

Analytical Report
Lab Order **1408D06**
Date Reported: **8/29/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU # 153E
Lab ID: 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	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408D06**

29-Aug-14

Client: Blagg Engineering

Project: GCU # 153E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R20809**	RunNo: **20809**
Prep Date:	Analysis Date: **8/26/2014**	SeqNo: **605937** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	21		20.00		104	82.9	139			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R20809**	RunNo: **20809**
Prep Date:	Analysis Date: **8/26/2014**	SeqNo: **605938** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	23		20.00		117	82.9	139			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R20843**	RunNo: **20843**
Prep Date:	Analysis Date: **8/27/2014**	SeqNo: **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-Bromofluorobenzene	22		20.00		109	82.9	139			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R20843**	RunNo: **20843**
Prep Date:	Analysis Date: **8/27/2014**	SeqNo: **606709** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.3	80	120			
Toluene	20	1.0	20.00	0	99.6	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	63	2.0	60.00	0	104	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		121	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 ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: **1408D06** RcptNo: 1

Received by/date: 08/26/14

Logged By: **Lindsay Mangin** 8/26/2014 7:45:00 AM

Completed By: **Lindsay Mangin** 8/26/2014 8:41:41 AM

Reviewed By: mg 08/26/14

Chain of Custody

1. Custody seals intact on sample bottles?	Yes	No	Not Present ✔
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ✔	No	NA
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
6. Sample(s) in proper container(s)?	Yes ✔	No	
7. Sufficient sample volume for indicated test(s)?	Yes ✔	No	
8. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
9. Was preservative added to bottles?	Yes	No ✔	NA
10. VOA vials have zero headspace?	Yes ✔	No	No VOA Vials
11. Were any sample containers received broken?	Yes	No ✔	# of preserved bottles checked for pH:
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	(<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	Adjusted?
14. Is it clear what analyses were requested?	Yes ✔	No	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: eMail Phone Fax In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. H08D06	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	
8/22/14	1255	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/25/14	1540			8/25/14	1540
8/25/14	1715			08/26/14	0745

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

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

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

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 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 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

Analytical Report
Lab Order **1405D14**
Date Reported: **6/4/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU # 153E
Lab ID: 1405D14-001
Matrix: AQUEOUS
Client Sample ID: MW # 3R
Collection Date: 5/28/2014 11:25:00 AM
Received Date: 5/30/2014 11:12:00 AM

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

*	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405D14**

04-Jun-14

Client: Blagg Engineering

Project: GCU # 153E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R19021**	RunNo: **19021**
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 LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R19021**	RunNo: **19021**
Prep Date:	Analysis Date: **6/3/2014**	SeqNo: **549632** 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 ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1405D14 RcptNo: 1

Received by/date: CS 05/30/14

Logged By: **Michelle Garcia** 5/30/2014 11:12:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 5/30/2014 3:14:48 PM Michelle Garcia

Reviewed By: 05/30/14

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: BLAGG ENGR. / BP AMERICA	☑ Standard ☐ Rush
	Project Name: GCU # 153E
Mailing Address: P.O. BOX 87	
BLOOMFIELD, NM 87413	Project #:
Phone #: (505) 632-1199	
email or Fax#:	Project Manager: NELSON VELEZ
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)	Sampler: NELSON VELEZ
Accreditation: ☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 2.1°

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405D14	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample
5/28/14	1125	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-061	✓													✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/29/14	244pm		Christine Walters	5/29	14 244pm
Date:	Time:	Relinquished by:	Received by:	Date	Time
5/29/14	1747	Christine Walters	Celina Sena	05/30/14	11:12

Remarks:

BILL DIRECTLY TO BP:

Jeff Peace, 200 Energy Court, Farmington, NM 87401

Find Purchase Order in email from BP.

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

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

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 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 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

Analytical Report
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	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JMP**	
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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1402B45**

05-Mar-14

Client: Blagg Engineering

Project: GCU #153E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R17069**	RunNo: **17069**
Prep Date:	Analysis Date: **3/3/2014**	SeqNo: **490953** 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**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R17069**	RunNo: **17069**
Prep Date:	Analysis Date: **3/3/2014**	SeqNo: **490954** 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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1402B45 RcptNo: 1

Received by/date: AG 02/28/14

Logged By: **Lindsay Mangin** 2/28/2014 10:00:00 AM

Completed By: **Lindsay Mangin** 2/28/2014 2:17:17 PM

Reviewed By: 02/28/14

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

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

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ**

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1402835
2/27/14	1005	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001

Analysis Request

BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample	
✓													✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/27/14	1600			2/27/14	1600
2/27/14	1723			02/28/14	1000

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

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

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

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 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 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

Analytical Report
Lab Order **1312587**
Date Reported: **12/18/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1312587-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 12/11/2013 12:45:00 PM
Received Date: 12/13/2013 10:40:00 AM

Analyses	Result	RL	Qual	Units	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		µg/L	1	12/17/2013 11:08:56 PM	R15572
Ethylbenzene	15	1.0		µg/L	1	12/17/2013 11:08:56 PM	R15572
Xylenes, Total	23	2.0		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.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1312587**

18-Dec-13

Client: Blagg Engineering
Project: GCU #153E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R15572**	RunNo: **15572**
Prep Date:	Analysis Date: **12/17/2013**	SeqNo: **448255** 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**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R15572**	RunNo: **15572**
Prep Date:	Analysis Date: **12/17/2013**	SeqNo: **448256** 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	105	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		102	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 for VOA and TOC only.
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1312587 RcptNo: 1

Received by/date: LM 12/13/13

Logged By: Ashley Gallegos 12/13/2013 10:40:00 AM AG

Completed By: Ashley Gallegos 12/13/2013 11:30:00 AM AG

Reviewed By: dhm

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	Adjusted?
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: GCU # 153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRON ENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1312587	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample
12/11/13	1245	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/12/13	1453		Christine Walker	12/12/13	1453
12/12/13	1747	Christine Walker		12/13/13	1040

Remarks:

BILL DIRECTLY TO BP:

Jeff Peace, 200 Energy Court, Farmington, NM 87401

Find Purchase Order in email from BP.

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

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 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 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

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
Matrix: AQUEOUS
Received Date: 8/30/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **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.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1308D54**

06-Sep-13

Client: Blagg Engineering
Project: GCU # 153E

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R13040**	RunNo: **13040**
Prep Date:	Analysis Date: **9/3/2013**	SeqNo: **372717** 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**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R13040**	RunNo: **13040**
Prep Date:	Analysis Date: **9/3/2013**	SeqNo: **372718** 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

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: 1308D54 RcptNo: 1

Received by/date: 08/30/13

Logged By: **Lindsay Mangin** 8/30/2013 10:00:00 AM

Completed By: **Lindsay Mangin** 8/30/2013 1:11:51 PM

Reviewed By: MG 08/30/13

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

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

Chain of Custody Record

Client:	BLAGG ENGR. / BP AMERICA
Mailing Address:	P.O. BOX 87
	BLOOMFIELD, NM 87413
Phone #:	(505) 632-1199
email or Fax#:	
QA/QC Package:	☑ Standard ☐ Level 4 (Full Validation)
Accreditation:	☐ NELAP ☐ Other ☐ EDD (Type)
Turn Around Time:	☑ Standard ☐ Rush
Project Name:	GCU # 153E
Project #:	
Project Manager:	NELSON VELEZ
Sampler:	NELSON VELEZ
On Ice:	☑ Yes ☐ No
Sample Temperature:	4.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1308054	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)		Grab sample	5 pt. composite sample
8/28/13	1220	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/29/13	820		Christine Walters	8/29/13	820
8/29/13	1757	Christine Walters		08/30/13	1000

Remarks:

BILL DIRECTLY TO BP:

Jeff Peace, 200 Energy Court, Farmington, NM 87401

Find Purchase Order in email from BP.

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

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

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 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 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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1306206**
Date Reported: **6/17/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1306206-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 5/31/2013 9:00:00 AM
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	P	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	P	µg/L	5	6/11/2013 9:34:03 PM	R11218
Surr: 4-Bromofluorobenzene	102	69.4-129	P	%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 DISSOLVED 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.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306206**

17-Jun-13

Client: Blagg Engineering
Project: GCU #153E

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: **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 **MB**	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			

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
- 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

QC SUMMARY REPORT

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**	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
Nitrate+Nitrite as N	3.3	0.20	3.500	0	94.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306206**

17-Jun-13

Client: Blagg Engineering

Project: GCU #153E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R11177**	RunNo: **11177**
Prep Date:	Analysis Date: **6/7/2013**	SeqNo: **315996** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	18		20.00		91.4	69.4	129			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R11177**	RunNo: **11177**
Prep Date:	Analysis Date: **6/7/2013**	SeqNo: **315997** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	19		20.00		94.2	69.4	129			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R11218**	RunNo: **11218**
Prep Date:	Analysis Date: **6/11/2013**	SeqNo: **317557** 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		88.4	69.4	129			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R11218**	RunNo: **11218**
Prep Date:	Analysis Date: **6/11/2013**	SeqNo: **317558** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	86.7	80	120			
Toluene	17	1.0	20.00	0	86.2	80	120			
Ethylbenzene	18	1.0	20.00	0	87.6	80	120			
Xylenes, Total	52	2.0	60.00	0	87.0	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		87.6	69.4	129			

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
- 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

QC SUMMARY REPORT

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**	SeqNo: **318281** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R11267**	RunNo: **11267**
Prep Date:	Analysis Date: **6/12/2013**	SeqNo: **318282** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.5	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
- 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306206**

17-Jun-13

Client: Blagg Engineering
Project: GCU #153E

Sample ID **MB-7790**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **7790**	RunNo: **11171**
Prep Date: **6/6/2013**	Analysis Date: **6/9/2013**	SeqNo: **315792** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-7790**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **7790**	RunNo: **11171**
Prep Date: **6/6/2013**	Analysis Date: **6/9/2013**	SeqNo: **315793** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1040	20.0	1000	0	104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1306206 | RcptNo: 1

Received by/date: MG 06/05/13

Logged By: **Anne Thorne** 6/5/2013 10:00:00 AM Anne Thorne

Completed By: **Anne Thorne** 6/5/2013 Anne Thorne

Reviewed By: 06/06/2013

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? NO

Checked by:

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

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

Chain-of-Custody Record

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

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

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

email or Fax#:

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

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

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ** NV

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1306206	BTEX ~~+ MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals NV	Anions (F,Cl,~~NO3,NO2,PO4,SO4~~)	Total Dissolved Solids	Iron, Ferrous (filtered)	Nitrate N / ~~Nitrite N~~ NV			Grab sample	5 pt. composite sample
5/31/13	0900	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓	
5/31/13	0900	WATER	MW # 3R	500 ml - 1	Cool	-002								✓	✓					✓	
5/31/13	0900	WATER	MW # 3R	250 ml - 1	HNO_3 & Cool	-003										✓				✓	
5/31/13	0900	WATER	MW # 3R	250 ml - 1	H_2SO_4	-004											✓			✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/4/13	924			6/4/13	924
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/4/13	1730			06/05/13	10:00

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

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

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 www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. 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 **1303140**
Date Reported: **3/7/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1303140-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 2/27/2013 3:05:00 PM
Received Date: 3/5/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1303140**

07-Mar-13

Client: Blagg Engineering

Project: GCU #153E

Sample ID: **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R8983**	RunNo: **8983**
Prep Date:	Analysis Date: **3/5/2013**	SeqNo: **256581** 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**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R8983**	RunNo: **8983**
Prep Date:	Analysis Date: **3/5/2013**	SeqNo: **256582** 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:

- * 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 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1303140

Received by/date: AG 03/05/13

Logged By: **Anne Thorne** 3/5/2013 9:55:00 AM Anne Thorne

Completed By: **Anne Thorne** 3/5/2013 Anne Thorne

Reviewed By: MG 03/05/13

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: GCU # 153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1303140	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
2/27/13	1505	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓		

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/4/13	911		Christine Walker	3/4/13	911
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/4/13	1730	Christine Walker		03/05/13	0955

Remarks:

BILL DIRECTLY TO BP:

Jeff Peace, 200 Energy Court, Farmington, NM 87401

Find Purchase Order in email from BP.

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

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 www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. 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 **1211A60**
Date Reported: **12/6/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1211A60-001
Matrix: AQUEOUS
Client Sample ID: MW #3R
Collection Date: 11/26/2012 10:30:00 AM
Received Date: 11/29/2012 10:00:00 AM

Analyses	Result	RL	Qual	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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211A60**

06-Dec-12

Client: Blagg Engineering

Project: GCU #153E

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R7230**	RunNo: **7230**
Prep Date:	Analysis Date: **11/30/2012**	SeqNo: **209612** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	21		20.00		105	69.7	152			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R7230**	RunNo: **7230**
Prep Date:	Analysis Date: **11/30/2012**	SeqNo: **209613** 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			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1211A60

Received by/date: 11/29/12

Logged By: Ashley Gallegos 11/29/2012 10:00:00 AM

Completed By: Ashley Gallegos 11/29/2012 5:35:34 PM

Reviewed By: MG 11/30/12

Chain of Custody

1. Were seals intact?	Yes	No	Not Present ✔
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	Courier		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ✔	No	NA
5. Was an attempt made to cool the samples?	Yes ✔	No	NA
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
7. Sample(s) in proper container(s)?	Yes ✔	No	
8. Sufficient sample volume for indicated test(s)?	Yes ✔	No	
9. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
10. Was preservative added to bottles?	Yes	No ✔	NA
11. VOA vials have zero headspace?	Yes ✔	No	No VOA Vials
12. Were any sample containers received broken?	Yes	No ✔	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	(<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes ✔	No	Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: GCU # 153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1211460	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample
11/26/12	1030	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓	

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/28/12	1500			11/28/12	1500
11/28/12	1800			11/29/12	10:00

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

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-

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

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 www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Client Sample ID: MW # 3R
Project: GCU # 153E
Collection Date: 9/27/2012 2:50:00 PM
Lab ID: 1210008-001
Matrix: AQUEOUS
Received Date: 9/29/2012 10:00:00 AM

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

Qualifiers:

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

QC SUMMARY REPORT

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 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**					
Prep Date:		Analysis Date:	**10/2/2012**	SeqNo:	**170835**	Units:	**%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	21		20.00		104	69.8	119			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

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								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		91.0	69.7	152			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R5928**	RunNo: **5928**
Prep Date:	Analysis Date: **10/2/2012**	SeqNo: **170854** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.0	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			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1210008

Received by/date: AF 09/29/12

Logged By: **Lindsay Mangin** 9/29/2012 10:00:00 AM

Completed By: **Lindsay Mangin** 10/1/2012 5:14:09 AM

Reviewed By: 10/01/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ** NV

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.8°c

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210005	Analysis Request: BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample
9/27/12	1450	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/28/12	0745				
9/28/12	1700			9/29/12	10:00

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

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

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 OrderNo.: 1207171

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 www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. 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
Client Sample ID: MW # 3R
Project: GCU # 153E
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	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT 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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207171**

12-Jul-12

Client: Blagg Engineering
Project: GCU # 153E

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R3963**	RunNo: **3963**
Prep Date:	Analysis Date: **7/6/2012**	SeqNo: **113355** 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 lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R3963**	RunNo: **3963**
Prep Date:	Analysis Date: **7/6/2012**	SeqNo: **113356** 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.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Enviro ntal Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 8710
TEL: 505-345-3975 FAX: 505-345-410
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1207171

Received by/date: MS 07/06/12

Logged By: **Lindsay Mangin** 7/6/2012 9:45:00 AM

Completed By: **Lindsay Mangin** 7/6/2012 10:29:07 AM

Reviewed By: 07/06/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ ~~No VOA Vials~~ ☑ 07/06/12
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	
1	1.0°	Good	Yes	07/06/12

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 120171	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
6/29/12	1330	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-001	✓													✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/5/12	1430			7/5/12	1430
Date:	Time:	Relinquished by:	Received by:	Date	Time
7/5/12	1727			07/06/12	0945

Remarks:

BILL DIRECTLY TO BP:

Jeff Peace, 200 Energy Court, Farmington, NM 87401

Find Purchase Order in email from BP.

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

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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1202471**
Date Reported: **2/20/2012**

CLIENT: Blagg Engineering
Project: GCU #153E
Lab ID: 1202471-001

Client Sample ID: MW #3R
Collection Date: 2/10/2012 12:15:00 PM
Matrix: AQUEOUS
Received Date: 2/14/2012 12:45:00 PM

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1202471**

20-Feb-12

Client: Blagg Engineering

Project: GCU #153E

Sample ID **5ML -RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R972**	RunNo: **972**
Prep Date:	Analysis Date: **2/15/2012**	SeqNo: **28373** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		95.5	76.5	115			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R972**	RunNo: **972**
Prep Date:	Analysis Date: **2/15/2012**	SeqNo: **28377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.1	80	120			
Toluene	19	1.0	20.00	0	93.9	80	120			
Ethylbenzene	19	1.0	20.00	0	96.0	80	120			
Xylenes, Total	60	2.0	60.00	0	99.9	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		109	76.5	115			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1202471

Received by/date: MG 02/14/12

Logged By: **Anne Thorne** 2/14/2012 12:45:00 PM Anne Thorne

Completed By: **Anne Thorne** 2/14/2012 Anne Thorne

Reviewed By: MG 2/14/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☒ AT 2/14/12
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

Chain-of-Custody Record

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

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

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

email or Fax#:

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.9°

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1202471	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)
2/10/12	1215	WATER	MW #3R	40 ml VOA - 2	HCl & Cool	-1	✓											

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/13/12	1135		Christine Walters	2/13/12	1135
2/13/12	1610	Christine Walters	Michelle Garcia	2/14/12	12:45

Remarks:

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

Work Order: N1520125 Paykey: ZPEACJDENV