

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: BP	Contact: Jeff Peace	
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9479	
Facility Name: Valencia Gas Com B 1M	Facility Type: Natural gas well	
Surface Owner: Private	Mineral Owner: Private	API No. 3004524952

LOCATION OF RELEASE

Unit Letter K	Section 18	Township 29N	Range 9W	Feet from the 1,670	North/South Line South	Feet from the 1,560	East/West Line West	County: San Juan
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Latitude 36.72322 Longitude 107.82159

NATURE OF RELEASE

Type of Release: condensate/oil	Volume of Release: unknown	Volume Recovered: none
Source of Release: unknown	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: May 21, 2013; 12:08 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell	
By Whom? Courtney Cochran	Date and Hour: May 22, 2013; 3:43 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

OIL CONS. DIV DIST. 3

MAY 30 2014

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* During operations to remove below grade tank (BGT) contaminated soil was discovered near the BGT. Initial investigation with test holes indicated limited impacts that were not from the BGT, but likely residual impacts from an earlier excavation of impacted soil. Excavation of impacted soil was done.

Describe Area Affected and Cleanup Action Taken.* Borehole drilling was done to collect soil samples and determine vertical and lateral extent of the contamination. Groundwater was found 3' to 4' below the surface. Excavation was done to remove impacted soil. Approximately 1,572 cubic yards of impacted soil was taken to the IEI landfarm for treatment. Excavation continued until remaining soil samples resulted in less than 100 ppm TPH. The excavated area was backfilled with clean soil. A monitor well was installed in the center of the excavated area and water sampling indicated no impacts to ground water impacts.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <u>Jeff Peace</u>	OIL CONSERVATION DIVISION
Printed Name: Jeff Peace	DENIED
Title: Area Environmental Advisor	BY: Cory Smith <u>Cory Smith</u> te:
E-mail Address: peace.jeffrey@bp.com	DATE: <u>6/12/14</u> (505) 334-6178 Ext. 115
Date: May 23, 2014 Phone: 505-326-9479	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

Elevated Levels of Surface and
Ground water. Please investigate and Resubmit.

412

Valencia GC B 1M
(K) Sec 18 – T29N – R9W
San Juan County, New Mexico

Summary Record of Impact Remediation

May 13, 2013 Soil impacts encountered during closure of 95 barrel BGT. Impacts were not apparently directly associated with BGT, but residual from a December, 1994 remediation. This prior remediation included removal of approximately 495 cubic yards of material, installation of groundwater monitor wells, sampling and reporting to NMOCD Santa Fe. Groundwater (ranging between 2' – 4' below grade, depending on season) tested below standards in all monitor wells and a closure request was submitted to NMOCD Santa Fe with correspondence dated February 9, 2006.

Delineation of soil impacts on May 13, 2013 determined that the areal extent was limited to on location only (investigation and lab reports attached) and were apparently residual from prior release remediated in 1994. No evidence of current or on-going release.

January 17 – January 30, 2014 Excavation of all soil impacts to below the water table completed. Excavation size approximately 113' x 64' x 7' below grade. 1,572 cubic yards of material hauled to BP Crouch Mesa Landfarm. Perimeter composite sampling of sidewalls completed, all samples tested below 100 ppm TPH, all BTEX and Chloride tested below closure standards (lab reports attached)

April 14, 2014 Monitor well MW-2A installed in center of excavation area. Well set at approximately 10 feet below grade with gravel pack around screened interval.

April 22, 2014 Monitor well MW-2A sampled. BTEX tested non-detect (lab reports attached).

Valencia GC B 1M

Preliminary Investigation of Impacts

Valencia GC B 1M

Valencia B 1M
Wellhead

North Wall 3-pt Composite

NE Corner Grab

West Wall
4-pt Composite

MW-2R

East Wall
4-pt Composite

Remediation Excavation Perimeter
(113' x 64' x 7' average depth)
(1,572 cubic yards material taken to Crouch Mesa LF)

South Wall
3-pt Composite

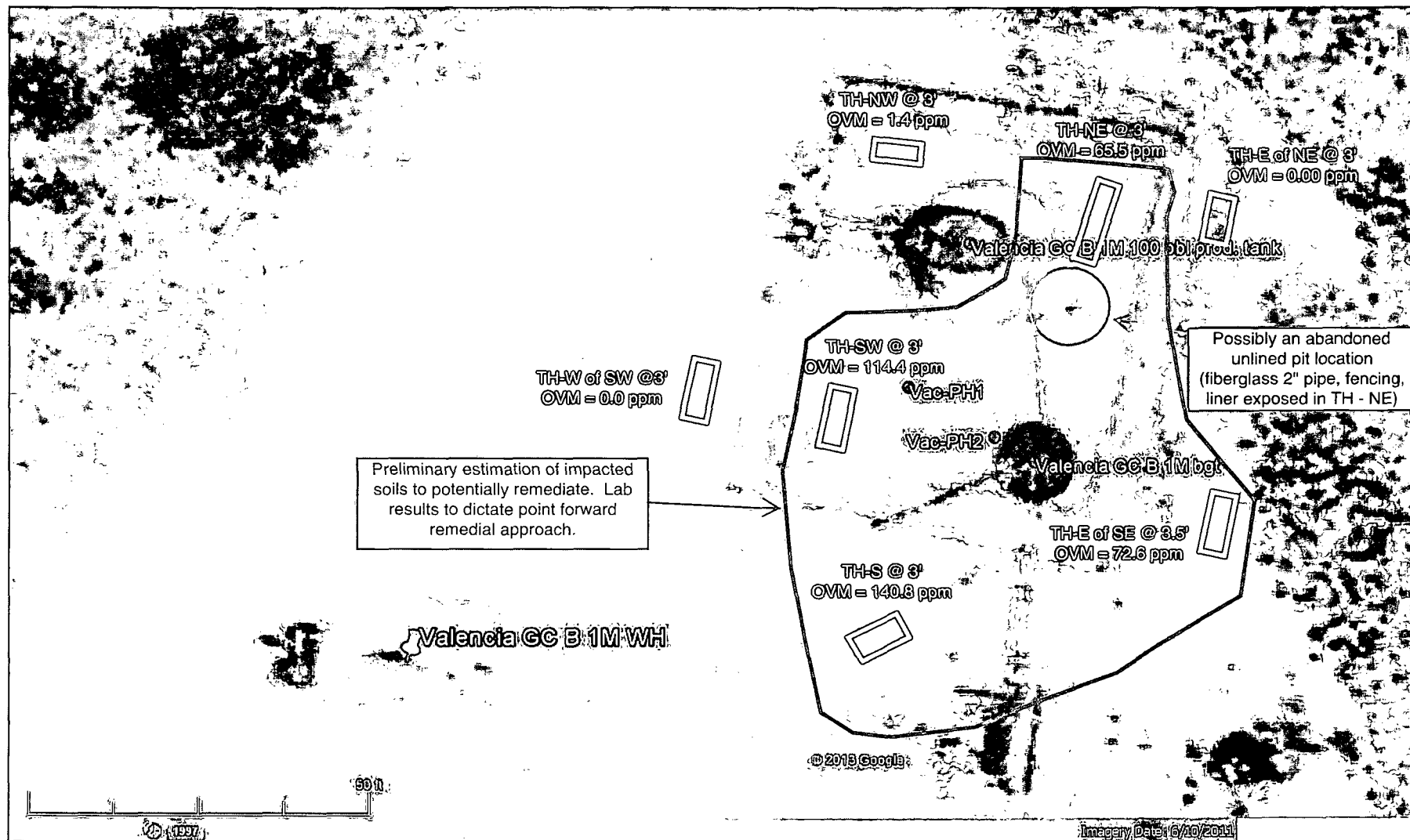
Legend

Composite Sample Point

Monitor Well



100 ft



BP - Valencia GC B # 1M
NE/4 SW/4, Section 18, T29N, R9W
36.723191°N / 107.821599°W

CLIENT:

BP

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

API #: 3004524952

TANK ID
(if applicable):**FIELD REPORT:**(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:

PAGE #: 1 of 1

SITE INFORMATION:

SITE NAME: VALENCIA GC B #1M

QUAD/UNIT: K SEC: 18 TWP: 29N RING: 9W PM: PM CNTY: SJ ST: NM

1/4 - 1/4 FOOTAGE: 1,670'S / 1,560'W NE/SW LEASE TYPE: FEDERAL / STATE (FEE) INDIAN

LEASE #:

PROD. FORMATION: MU/DK CONTRACTOR: GUSHORN MGR - B. SCHURMAN

DATE STARTED: 05/15/13

DATE FINISHED:

ENVIRONMENTAL
SPECIALIST(S): NJV**REFERENCE POINT:**

WELL HEAD (W.H.) GPS COORD: 36.723191 X 107.821599 GLELEV: 5,537'

1) 100 BBL PROD. TANK

GPS COORD: 36.723364 X 107.821316 DISTANCE/BEARING FROM WH: 104', N53E

2) 95 BGT (DW/DB)

GPS COORD: 36.723274 X 107.821284 DISTANCE/BEARING FROM WH: 97', N72E

3) VAC - PH1

GPS COORD: 36.723305 X 107.821348 DISTANCE/BEARING FROM WH: 84', N61E

4) VAC - PH2

GPS COORD: 36.723284 X 107.821305 DISTANCE/BEARING FROM WH: 92.5', N68.5E

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED:

HALL

1) SAMPLE ID: VAC - PH1 @ 2'

SAMPLE DATE: 05/15/13 SAMPLE TIME: 1437 LAB ANALYSIS: 8015B / 8021B

OVM
READING
(ppm)

50.2

2) SAMPLE ID: VAC - PH2 @ 2.5'

SAMPLE DATE: 05/15/13 SAMPLE TIME: 1444 LAB ANALYSIS: " "

114.4

3) SAMPLE ID:

SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:

4) SAMPLE ID:

SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:

SOIL DESCRIPTION:SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: DARK YELLOWISH ORANGE

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSEMOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDSAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. NA

DISCOLORATION/STAINING OBSERVED (YES/NO) EXPLANATION: DARK GRAY TO BLACK IN VAC - PH1 & VAC - PH2

APPROXIMATELY 2 - 2 1/2 FT. BELOW GRADE.

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION:

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED (YES/NO) EXPLANATION: APPEARS HISTORICAL BASED ON DISCOLOR.

ADDITIONAL COMMENTS: ON-SITE MONITOR WELL RECORDED. GROUNDWATER AT 3 FT. BELOW GRADE.
PLAN TO REMOVE BGT TOMORROW & CONTINUE INVESTIGATION.

SOIL IMPACT DIMENSION ESTIMATION:

ft. X ft. X ft. EXCAVATION ESTIMATION (Cubic Yards):

DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: > 1,000' NEAREST SURFACE WATER: < 1,000' NMOC DTPH CLOSURE STD: 100 ppm

SITE SKETCH

100 BBL PROD. TANK

822m

VAC - PH1

VAC - PH2

PLOT PLAN circle: attached

N

95 BBL BGT

● - S.P.D.

OVM CALIB: READ = 53.0 ppm RF = 0.52
 OVM CALIB: GAS = 100 ppm
 TIME: 2:45 am DATE: 05/15/13

MISCELL. NOTES

WO: N15182813

PO #:

PK: 2EUVH01 BGT2

PJ #: 22-00613-C

Permit date(s):

OCD Appr. date(s):

Tank ID OVM = Organic Vapor Meter
ppm = parts per million

BGT Sidewalls Visible: Y / N

BGT Sidewalls Visible: Y / N

BGT Sidewalls Visible: Y / N

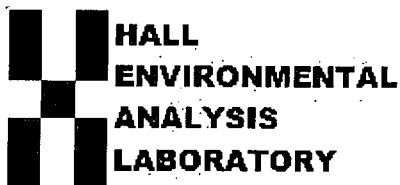
Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD;
 T.B. = TANK BOTTOM; PBGT = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA = NOT
 APPLICABLE OR NOT AVAILABLE; SW = SINGLE WALL; DW = DOUBLE WALL; SB = SINGLE BOTTOM; DB = DOUBLE BOTTOM.

TRAVEL NOTES:

CALLOUT:

ONSITE: 05/15/13, 05/16/13



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

May 21, 2013

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

RE: Valencia GC B #1M

OrderNo.: 1305710

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 9 sample(s) on 5/17/2013 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

CLIENT: Blagg Engineering

Client Sample ID: VAC-PH1 @ 2'

Project: Valencia GC B #1M

Collection Date: 5/15/2013 2:37:00 PM

Lab ID: 1305710-001

Matrix: MEOH (SOIL)

Received Date: 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: GSA
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/17/2013 12:35:31 PM	7492
Surr: DNOP	88.4	63-147		%REC	1	5/17/2013 12:35:31 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	56	25		mg/Kg	5	5/17/2013 11:16:46 AM	R10713
Surr: BFB	224	80-120	S	%REC	5	5/17/2013 11:16:46 AM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	5/17/2013 11:16:46 AM	R10713
Toluene	ND	0.25		mg/Kg	5	5/17/2013 11:16:46 AM	R10713
Ethylbenzene	ND	0.25		mg/Kg	5	5/17/2013 11:16:46 AM	R10713
Xylenes, Total	ND	0.50		mg/Kg	5	5/17/2013 11:16:46 AM	R10713
Surr: 4-Bromofluorobenzene	107	80-120		%REC	5	5/17/2013 11:16:46 AM	R10713

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
	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

Analytical ReportLab Order **1305710**

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** VAC-PH2 @ 2.5'**Project:** Valencia GC B #1M**Collection Date:** 5/15/2013 2:44:00 PM**Lab ID:** 1305710-002**Matrix:** MEOH (SOIL)**Received Date:** 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: GSA
Diesel Range Organics (DRO)	18	10		mg/Kg	1	5/17/2013 12:57:27 PM	7492
Surr: DNOP	107	63-147		%REC	1	5/17/2013 12:57:27 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	43	10		mg/Kg	2	5/17/2013 11:12:35 PM	R10713
Surr: BFB	119	80-120		%REC	2	5/17/2013 11:12:35 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.10		mg/Kg	2	5/17/2013 11:12:35 PM	R10713
Toluene	ND	0.10		mg/Kg	2	5/17/2013 11:12:35 PM	R10713
Ethylbenzene	ND	0.10		mg/Kg	2	5/17/2013 11:12:35 PM	R10713
Xylenes, Total	0.20	0.20		mg/Kg	2	5/17/2013 11:12:35 PM	R10713
Surr: 4-Bromofluorobenzene	108	80-120		%REC	2	5/17/2013 11:12:35 PM	R10713

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
	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

Analytical ReportLab Order **1305710**Date Reported: **5/21/2013****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** TH-NE @ 3'**Project:** Valencia GC B #1M**Collection Date:** 5/16/2013 10:30:00 AM**Lab ID:** 1305710-003**Matrix:** MEOH (SOIL)**Received Date:** 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: GSA
Diesel Range Organics (DRO)	46	10		mg/Kg	1	5/17/2013 1:19:31 PM	7492
Surr: DNOP	101	63-147		%REC	1	5/17/2013 1:19:31 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	38	10		mg/Kg	2	5/17/2013 11:41:06 PM	R10713
Surr: BFB	108	80-120		%REC	2	5/17/2013 11:41:06 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.10		mg/Kg	2	5/17/2013 11:41:06 PM	R10713
Toluene	ND	0.10		mg/Kg	2	5/17/2013 11:41:06 PM	R10713
Ethylbenzene	ND	0.10		mg/Kg	2	5/17/2013 11:41:06 PM	R10713
Xylenes, Total	ND	0.20		mg/Kg	2	5/17/2013 11:41:06 PM	R10713
Surr: 4-Bromofluorobenzene	106	80-120		%REC	2	5/17/2013 11:41:06 PM	R10713

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
	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

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH-NW @ 3'

Project: Valencia GC B #1M

Collection Date: 5/16/2013 10:45:00 AM

Lab ID: 1305710-004

Matrix: MEOH (SOIL)

Received Date: 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: GSA
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/17/2013 1:41:39 PM	7492
Surr: DNOP	92.1	63-147		%REC	1	5/17/2013 1:41:39 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/17/2013 12:42:34 PM	R10713
Surr: BFB	96.7	80-120		%REC	1	5/17/2013 12:42:34 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	5/17/2013 12:42:34 PM	R10713
Toluene	ND	0.050		mg/Kg	1	5/17/2013 12:42:34 PM	R10713
Ethylbenzene	ND	0.050		mg/Kg	1	5/17/2013 12:42:34 PM	R10713
Xylenes, Total	ND	0.10		mg/Kg	1	5/17/2013 12:42:34 PM	R10713
Surr: 4-Bromofluorobenzene	98.5	80-120		%REC	1	5/17/2013 12:42:34 PM	R10713

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
	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

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH-SW @ 3'

Project: Valencia GC B #1M

Collection Date: 5/16/2013 10:55:00 AM

Lab ID: 1305710-005

Matrix: MEOH (SOIL)

Received Date: 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	270	9.9		mg/Kg	1	5/17/2013 4:32:09 PM	7492
Surr: DNOP	111	63-147		%REC	1	5/17/2013 4:32:09 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	570	50		mg/Kg	10	5/17/2013 1:11:05 PM	R10713
Surr: BFB	791	80-120	S	%REC	10	5/17/2013 1:11:05 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.20		mg/Kg	10	5/17/2013 1:11:05 PM	R10713
Toluene	ND	0.50		mg/Kg	10	5/17/2013 1:11:05 PM	R10713
Ethylbenzene	ND	0.50		mg/Kg	10	5/17/2013 1:11:05 PM	R10713
Xylenes, Total	3.8	1.0		mg/Kg	10	5/17/2013 1:11:05 PM	R10713
Surr: 4-Bromofluorobenzene	127	80-120	S	%REC	10	5/17/2013 1:11:05 PM	R10713

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
	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

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH-W of SW @ 3'

Project: Valencia GC B #1M

Collection Date: 5/16/2013 11:00:00 AM

Lab ID: 1305710-006

Matrix: MEOH (SOIL)

Received Date: 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/17/2013 5:00:26 PM	7492
Surr: DNOP	110	63-147		%REC	1	5/17/2013 5:00:26 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/17/2013 1:39:51 PM	R10713
Surr: BFB	149	80-120	S	%REC	1	5/17/2013 1:39:51 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	5/17/2013 1:39:51 PM	R10713
Toluene	ND	0.050		mg/Kg	1	5/17/2013 1:39:51 PM	R10713
Ethylbenzene	ND	0.050		mg/Kg	1	5/17/2013 1:39:51 PM	R10713
Xylenes, Total	ND	0.10		mg/Kg	1	5/17/2013 1:39:51 PM	R10713
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	5/17/2013 1:39:51 PM	R10713

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
	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

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** TH-E of NE @ 4'**Project:** Valencia GC B #1M**Collection Date:** 5/16/2013 11:10:00 AM**Lab ID:** 1305710-007**Matrix:** MEOH (SOIL)**Received Date:** 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/17/2013 5:28:42 PM	7492
Surr: DNOP	108	63-147		%REC	1	5/17/2013 5:28:42 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/17/2013 2:08:36 PM	R10713
Surr: BFB	109	80-120		%REC	1	5/17/2013 2:08:36 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	5/17/2013 2:08:36 PM	R10713
Toluene	ND	0.050		mg/Kg	1	5/17/2013 2:08:36 PM	R10713
Ethylbenzene	ND	0.050		mg/Kg	1	5/17/2013 2:08:36 PM	R10713
Xylenes, Total	ND	0.10		mg/Kg	1	5/17/2013 2:08:36 PM	R10713
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	5/17/2013 2:08:36 PM	R10713

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
	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

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH-E of SE @ 3.5'

Project: Valencia GC B #1M

Collection Date: 5/16/2013 11:15:00 AM

Lab ID: 1305710-008

Matrix: MEOH (SOIL)

Received Date: 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	21	10		mg/Kg	1	5/17/2013 5:57:00 PM	7492
Surr: DNOP	109	63-147		%REC	1	5/17/2013 5:57:00 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	61	25		mg/Kg	5	5/17/2013 2:37:20 PM	R10713
Surr: BFB	261	80-120	S	%REC	5	5/17/2013 2:37:20 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	5/17/2013 2:37:20 PM	R10713
Toluene	ND	0.25		mg/Kg	5	5/17/2013 2:37:20 PM	R10713
Ethylbenzene	ND	0.25		mg/Kg	5	5/17/2013 2:37:20 PM	R10713
Xylenes, Total	ND	0.50		mg/Kg	5	5/17/2013 2:37:20 PM	R10713
Surr: 4-Bromofluorobenzene	106	80-120		%REC	5	5/17/2013 2:37:20 PM	R10713

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
	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

Analytical Report

Lab Order 1305710

Date Reported: 5/21/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** TH-S @ 3'**Project:** Valencia GC B #1M**Collection Date:** 5/16/2013 11:25:00 AM**Lab ID:** 1305710-009**Matrix:** MEOH (SOIL)**Received Date:** 5/17/2013 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	100	10		mg/Kg	1	5/17/2013 6:25:01 PM	7492
Surr: DNOP	112	63-147		%REC	1	5/17/2013 6:25:01 PM	7492
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	790	20		mg/Kg	4	5/17/2013 3:05:58 PM	R10713
Surr: BFB	1720	80-120	S	%REC	4	5/17/2013 3:05:58 PM	R10713
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.34	0.20		mg/Kg	4	5/17/2013 3:05:58 PM	R10713
Toluene	ND	0.20		mg/Kg	4	5/17/2013 3:05:58 PM	R10713
Ethylbenzene	ND	0.20		mg/Kg	4	5/17/2013 3:05:58 PM	R10713
Xylenes, Total	9.4	0.40		mg/Kg	4	5/17/2013 3:05:58 PM	R10713
Surr: 4-Bromofluorobenzene	172	80-120	S	%REC	4	5/17/2013 3:05:58 PM	R10713

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
	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#: 1305710

21-May-13

Client: Blagg Engineering
Project: Valencia GC B #1M

Sample ID	MB-7492	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	7492	RunNo:	10707					
Prep Date:	5/17/2013	Analysis Date:	5/17/2013	SeqNo:	302574	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.7		10.00		86.9	63	147			

Sample ID	LCS-7492	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	7492	RunNo:	10707					
Prep Date:	5/17/2013	Analysis Date:	5/17/2013	SeqNo:	302643	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	77.1	128			
Surr: DNOP	4.8		5.000		96.4	63	147			

Sample ID	MB-7474	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	7474	RunNo:	10701					
Prep Date:	5/16/2013	Analysis Date:	5/17/2013	SeqNo:	303158	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	63	147			

Sample ID	LCS-7474	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	7474	RunNo:	10701					
Prep Date:	5/16/2013	Analysis Date:	5/17/2013	SeqNo:	303159	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		102	63	147			

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 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#: 1305710

21-May-13

Client: Blagg Engineering

Project: Valencia GC B #1M

Sample ID	MB-7477		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	PBS		Batch ID:	R10713		RunNo:	10713			
Prep Date:	5/16/2013		Analysis Date:	5/17/2013		SeqNo:	303069		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.3	80	120			

Sample ID	LCS-7477		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	LCSS		Batch ID:	R10713		RunNo:	10713			
Prep Date:	5/16/2013		Analysis Date:	5/17/2013		SeqNo:	303070		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	62.6	136			
Surr: BFB	1100		1000		112	80	120			

Sample ID	MB-7477		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	PBS		Batch ID:	7477		RunNo:	10713			
Prep Date:	5/16/2013		Analysis Date:	5/17/2013		SeqNo:	303086		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.3	80	120			

Sample ID	LCS-7477		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	LCSS		Batch ID:	7477		RunNo:	10713			
Prep Date:	5/16/2013		Analysis Date:	5/17/2013		SeqNo:	303087		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		112	80	120			

Sample ID	MB-7482		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	PBS		Batch ID:	7482		RunNo:	10713			
Prep Date:	5/16/2013		Analysis Date:	5/17/2013		SeqNo:	303115		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	950		1000		94.7	80	120			

Sample ID	LCS-7482		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	LCSS		Batch ID:	7482		RunNo:	10713			
Prep Date:	5/16/2013		Analysis Date:	5/17/2013		SeqNo:	303116		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	80	120			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1305710

21-May-13

Client: Blagg Engineering
Project: Valencia GC B #1M

Sample ID	MB-7482	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R10713	RunNo:	10713					
Prep Date:	5/16/2013	Analysis Date:	5/17/2013	SeqNo:	303122	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.7	80	120			

Sample ID	LCS-7482	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R10713	RunNo:	10713					
Prep Date:	5/16/2013	Analysis Date:	5/17/2013	SeqNo:	303123	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	62.6	136			
Surr: BFB	1000		1000		101	80	120			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1305710

21-May-13

Client: Blagg Engineering

Project: Valencia GC B #1M

Sample ID	MB-7477	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: R10713			RunNo: 10713					
Prep Date:	5/16/2013	Analysis Date: 5/17/2013			SeqNo: 303133		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	LCS-7477		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R10713		RunNo: 10713					
Prep Date:	5/16/2013		Analysis Date: 5/17/2013		SeqNo: 303134		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	111	80	120			
Toluene	1.1	0.050	1.000	0	110	80	120			
Ethylbenzene	1.1	0.050	1.000	0	111	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	MB-7477		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 7477		RunNo: 10713					
Prep Date:	5/16/2013		Analysis Date: 5/17/2013		SeqNo: 303146		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	LCS-7477		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 7477		RunNo: 10713					
Prep Date:	5/16/2013		Analysis Date: 5/17/2013		SeqNo: 303147		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

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

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

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: **COMPLETE BY 5/17/13**

☐ Standard ☒ Rush

Project Name: **VALENCIA GC B # 1M**

Project #:

Project Manager: **NELSON VELEZ**

Sampler: **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

Sample Temperature: **13.05**



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE	BTEX + MTBE	TPH 8015B (GC)	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	
5/15/13	1437	SOIL	VAC-PH1 @ 2'	4 oz. - 1	Cool	1305710 -001	✓		✓											✓	
5/15/13	1444	SOIL	VAC-PH2 @ 2.5'	4 oz. - 1	Cool	-002	✓		✓											✓	
5/16/13	1030	SOIL	TH - NE @ 3'	4 oz. - 1	Cool	-003	✓		✓											✓	
5/16/13	1045	SOIL	TH - NW @ 3'	4 oz. - 1	Cool	-004	✓		✓											✓	
5/16/13	1055	SOIL	TH - SW @ 3'	4 oz. - 1	Cool	-005	✓		✓											✓	
5/16/13	1100	SOIL	TH - W of SW @ 3'	4 oz. - 1	Cool	-006	✓		✓											✓	
5/16/13	1110	SOIL	TH - E of NE @ 4'	4 oz. - 1	Cool	-007	✓		✓											✓	
5/16/13	1115	SOIL	TH - E of SE @ 3.5'	4 oz. - 1	Cool	-008	✓		✓											✓	
5/16/13	1125	SOIL	TH - S @ 3'	4 oz. - 1	Cool	-009	✓		✓											✓	

Date: **5/16/13** Time: **1356** Relinquished by: *[Signature]*

Date: **5/16/13** Time: **1350** Received by: *[Signature]*

Date: **5/16/13** Time: **1750** Relinquished by: *[Signature]*

Date: **5/17/13** Time: **10:03** Received by: *[Signature]*

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

Work Order: **N15182813** Paykey: **ZEVH018GT2**

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This carries no action of this possibility. Any sub contracted data will be stated.



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

Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1305710

RcptNo: 1

Received by/date:

AG

05/17/13

Logged By:

Michelle Garcia

5/17/2013 10:03:00 AM

Michelle Garcia

Completed By:

Michelle Garcia

5/17/2013 10:06:15 AM

Michelle Garcia

Reviewed By:

[Signature]

05/17/13

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 $>0^{\circ}\text{C}$ 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

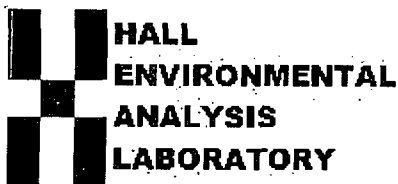
Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Not Present			



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

February 05, 2014

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-1183

FAX (505) 632-3903

Excavation Perimeter Closure Sampling Report

RE: Valencia GC B 1M

OrderNo.: 1401C25

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 1/31/2014 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 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: NE Corner
 Project: Valencia GC B 1M Collection Date: 1/30/2014 2:02:00 PM
 Lab ID: 1401C25-001 Matrix: SOIL Received Date: 1/31/2014 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2014 8:09:11 PM	11505
Surr: DNOP	109	66-131		%REC	1	1/31/2014 8:09:11 PM	11505
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	7.4	4.7		mg/Kg	1	2/1/2014 6:34:41 PM	11514
Surr: BFB	132	74.5-129	S	%REC	1	2/1/2014 6:34:41 PM	11514
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.047		mg/Kg	1	2/1/2014 6:34:41 PM	11514
Toluene	ND	0.047		mg/Kg	1	2/1/2014 6:34:41 PM	11514
Ethylbenzene	ND	0.047		mg/Kg	1	2/1/2014 6:34:41 PM	11514
Xylenes, Total	0.20	0.095		mg/Kg	1	2/1/2014 6:34:41 PM	11514
Surr: 4-Bromofluorobenzene	96.7	80-120		%REC	1	2/1/2014 6:34:41 PM	11514
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	2/3/2014 11:46:32 AM	11534

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering **Client Sample ID:** East Wall 4-pt Comp
Project: Valencia GC B 1M **Collection Date:** 1/30/2014 2:06:00 PM
Lab ID: 1401C25-002 **Matrix:** SOIL **Received Date:** 1/31/2014 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2014 8:39:18 PM	11505
Surr: DNOP	104	66-131		%REC	1	1/31/2014 8:39:18 PM	11505
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	9.5	4.7		mg/Kg	1	2/1/2014 8:00:17 PM	11514
Surr: BFB	133	74.5-129	S	%REC	1	2/1/2014 8:00:17 PM	11514
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.047		mg/Kg	1	2/1/2014 8:00:17 PM	11514
Toluene	ND	0.047		mg/Kg	1	2/1/2014 8:00:17 PM	11514
Ethylbenzene	ND	0.047		mg/Kg	1	2/1/2014 8:00:17 PM	11514
Xylenes, Total	0.10	0.093		mg/Kg	1	2/1/2014 8:00:17 PM	11514
Surr: 4-Bromofluorobenzene	95.9	80-120		%REC	1	2/1/2014 8:00:17 PM	11514
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	2/3/2014 12:23:47 PM	11534

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		

Analytical Report

Lab Order 1401C25

Date Reported: 2/5/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: South Wall 3-pt Comp

Project: Valencia GC B 1M

Collection Date: 1/30/2014 2:14:00 PM

Lab ID: 1401C25-003

Matrix: SOIL

Received Date: 1/31/2014 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2014 9:09:48 PM	11505
Surr: DNOP	107	66-131		%REC	1	1/31/2014 9:09:48 PM	11505
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/1/2014 8:28:56 PM	11514
Surr: BFB	88.2	74.5-129		%REC	1	2/1/2014 8:28:56 PM	11514
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	2/1/2014 8:28:56 PM	11514
Toluene	ND	0.050		mg/Kg	1	2/1/2014 8:28:56 PM	11514
Ethylbenzene	ND	0.050		mg/Kg	1	2/1/2014 8:28:56 PM	11514
Xylenes, Total	ND	0.099		mg/Kg	1	2/1/2014 8:28:56 PM	11514
Surr: 4-Bromofluorobenzene	93.2	80-120		%REC	1	2/1/2014 8:28:56 PM	11514
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	2/3/2014 12:36:12 PM	11534

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		

Analytical Report

Lab Order 1401C25

Date Reported: 2/5/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: West Wall 4-pt Comp

Project: Valencia GC B 1M

Collection Date: 1/30/2014 2:20:00 PM

Lab ID: 1401C25-004

Matrix: SOIL

Received Date: 1/31/2014 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2014 9:40:22 PM	11505
Surr: DNOP	105	66-131		%REC	1	1/31/2014 9:40:22 PM	11505
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/1/2014 8:57:31 PM	11514
Surr: BFB	85.3	74.5-129		%REC	1	2/1/2014 8:57:31 PM	11514
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.047		mg/Kg	1	2/1/2014 8:57:31 PM	11514
Toluene	ND	0.047		mg/Kg	1	2/1/2014 8:57:31 PM	11514
Ethylbenzene	ND	0.047		mg/Kg	1	2/1/2014 8:57:31 PM	11514
Xylenes, Total	ND	0.094		mg/Kg	1	2/1/2014 8:57:31 PM	11514
Surr: 4-Bromofluorobenzene	93.4	80-120		%REC	1	2/1/2014 8:57:31 PM	11514
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	2/3/2014 12:48:37 PM	11534

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		

Analytical Report

Lab Order 1401C25

Date Reported: 2/5/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: North Wall 3-pt Comp

Project: Valencia GC B 1M

Collection Date: 1/30/2014 2:26:00 PM

Lab ID: 1401C25-005

Matrix: SOIL

Received Date: 1/31/2014 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2014 10:10:56 PM	11505
Surr: DNOP	113	66-131		%REC	1	1/31/2014 10:10:56 PM	11505
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/1/2014 9:26:08 PM	11514
Surr: BFB	101	74.5-129		%REC	1	2/1/2014 9:26:08 PM	11514
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.047		mg/Kg	1	2/1/2014 9:26:08 PM	11514
Toluene	ND	0.047		mg/Kg	1	2/1/2014 9:26:08 PM	11514
Ethylbenzene	ND	0.047		mg/Kg	1	2/1/2014 9:26:08 PM	11514
Xylenes, Total	ND	0.093		mg/Kg	1	2/1/2014 9:26:08 PM	11514
Surr: 4-Bromofluorobenzene	92.9	80-120		%REC	1	2/1/2014 9:26:08 PM	11514
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	30		mg/Kg	20	2/3/2014 1:01:02 PM	11534

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#: 1401C25

05-Feb-14

Client: Blagg Engineering

Project: Valencia GC B IM

Sample ID	MB-11534	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	11534	RunNo:	16499					
Prep Date:	2/3/2014	Analysis Date:	2/3/2014	SeqNo:	475170	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-11534	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	11534	RunNo:	16499					
Prep Date:	2/3/2014	Analysis Date:	2/3/2014	SeqNo:	475171	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	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
- 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401C25

05-Feb-14

Client: Blagg Engineering

Project: Valencia GC B 1M

Sample ID	MB-11505		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	11505		RunNo:	16420				
Prep Date:	1/31/2014		Analysis Date:	1/31/2014		SeqNo:	474322		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	8.1		10.00		81.1	66	131				

Sample ID	LCS-11505		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 11505		RunNo: 16420					
Prep Date:	1/31/2014		Analysis Date: 1/31/2014		SeqNo: 474323		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.6	60.8	145			
Surr: DNOP	4.2		5.000		84.3	66	131			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401C25

05-Feb-14

Client: Blagg Engineering

Project: Valencia GC B IM

Sample ID	MB-11514	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	11514		RunNo:	16439				
Prep Date:	1/31/2014	Analysis Date:	2/1/2014		SeqNo:	474130	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	820		1000		82.5	74.5	129			

Sample ID	LCS-11514		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 11514		RunNo: 16439					
Prep Date:	1/31/2014		Analysis Date: 2/1/2014		SeqNo: 474131		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	74.5	126			
Surr: BFB	900		1000		89.8	74.5	129			

Sample ID	1401C25-001AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	NE Corner		Batch ID: 11514		RunNo: 16439					
Prep Date:	1/31/2014		Analysis Date: 2/1/2014		SeqNo: 474138		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.8	23.79	7.438	109	69.5	145			
Surr: BFB	1400		951.5		149	74.5	129			S

Sample ID	1401C25-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	NE Corner		Batch ID: 11514		RunNo: 16439					
Prep Date:	1/31/2014		Analysis Date: 2/1/2014		SeqNo: 474139		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	34	4.7	23.74	7.438	113	69.5	145	3.04	20	
Surr: BFB	1400		949.7		145	74.5	129	0	0	S

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401C25

05-Feb-14

Client: Blagg Engineering

Project: Valencia GC B 1M

Sample ID	MB-11514	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batch ID: 11514		RunNo: 16439						
Prep Date:	1/31/2014	Analysis Date: 2/1/2014		SeqNo: 474184		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.3	80	120			

Sample ID	LCS-11514		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 11514		RunNo: 16439					
Prep Date:	1/31/2014		Analysis Date: 2/1/2014		SeqNo: 474185		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	112	80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		96.1	80	120			

Sample ID	1401C25-002AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	East Wall 4-pt Com		Batch ID: 11514		RunNo: 16439					
Prep Date:	1/31/2014		Analysis Date: 2/1/2014		SeqNo: 474198		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.047	0.9337	0	103	67.4	135			
Toluene	0.95	0.047	0.9337	0.01694	100	72.6	135			
Ethylbenzene	0.99	0.047	0.9337	0.03028	102	69.4	143			
Xylenes, Total	3.0	0.093	2.801	0.1011	103	70.8	144			
Surr: 4-Bromofluorobenzene	0.91		0.9337		97.3	80	120			

Sample ID	1401C25-002AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	East Wall 4-pt Com		Batch ID: 11514		RunNo: 16439					
Prep Date:	1/31/2014		Analysis Date: 2/2/2014		SeqNo: 474199		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.047	0.9311	0	101	67.4	135	2.07	20	
Toluene	0.92	0.047	0.9311	0.01694	96.5	72.6	135	4.08	20	
Ethylbenzene	0.95	0.047	0.9311	0.03028	98.6	69.4	143	3.87	20	
Xylenes, Total	2.9	0.093	2.793	0.1011	98.7	70.8	144	3.96	20	
Surr: 4-Bromofluorobenzene	0.91		0.9311		97.3	80	120	0	0	

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

☐ Standard ☒ Rush

BP America

Project Name	Valencia GC B 1M
--------------	------------------

Mailing Address:

P.O. Box 87

Bloomfield, NM 87413

Project #:

Phone #:

(505)320-1183

email or Fax#:

Project Manager:

QA/QC Package:

Jeff Blagg

 Standard

☐ **Level 4 (Full Validation)**

☐ Other

☐ EDD (Type)

Sampler: Jeff Blagg

On Ice: ☒ Yes ☐ No

Sample Temperature: 105

[illegible]

Date:	v
31/14	06/0

Relinquished by:

Received by:

Date: 01/31/14 Time: 10:15

Remarks:	Bill Blagg Engineering
----------	------------------------

Date:	Time:
-------	-------

Relinquished by:

Received by:

Date _____ Time _____

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
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: **1401C25**

RcptNo: **1**

Received by/date:

Logged By:

Ashley Gallegos

1/31/2014 10:15:00 AM

Completed By:

Ashley Gallegos

1/31/2014 11:47:39 AM

Reviewed By:

IO

01/31/2014

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 $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☐ No ☒ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐ Not required
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

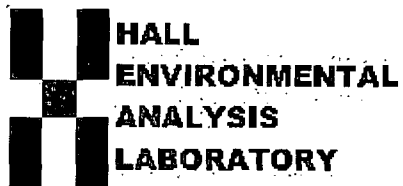
Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	6.5	Good	Yes			



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

May 02, 2014

Nelson Velez

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX (505) 632-3903

MW-2A Lab Report

RE: VALENCIA GC B # 1M

OrderNo.: 1404993

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/23/2014 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 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1404993

Date Reported: 5/2/2014

CLIENT: Blagg Engineering**Client Sample ID:** MW # 2A**Project:** VALENCIA GC B # 1M**Collection Date:** 4/22/2014 1:15:00 PM**Lab ID:** 1404993-001**Matrix:** AQUEOUS**Received Date:** 4/23/2014 10:02:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0	P	µg/L	1	4/25/2014 3:02:28 AM	R18204
Toluene	ND	1.0	P	µg/L	1	4/25/2014 3:02:28 AM	R18204
Ethylbenzene	ND	1.0	P	µg/L	1	4/25/2014 3:02:28 AM	R18204
Xylenes, Total	ND	2.0	P	µg/L	1	4/25/2014 3:02:28 AM	R18204
Surr: 4-Bromofluorobenzene	98.4	82.9-139	P	%REC	1	4/25/2014 3:02:28 AM	R18204
EPA METHOD 300.0: ANIONS							Analyst: JRR
Fluoride	0.63	0.50		mg/L	5	4/24/2014 2:37:41 PM	R18205
Chloride	11	2.5		mg/L	5	4/24/2014 2:37:41 PM	R18205
Sulfate	670	10		mg/L	20	4/24/2014 2:50:05 PM	R18205
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/30/2014 11:14:31 PM	R18329
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Iron	0.39	0.020	*	mg/L	1	4/24/2014 3:31:58 PM	R18197
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1340	100	*	mg/L	1	4/29/2014 4:29:00 PM	12902

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#: 1404993

02-May-14

Client: Blagg Engineering
Project: VALENCIA GC B # 1M

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R18197	RunNo:	18197					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525096	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R18197	RunNo:	18197					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525097	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	98.8	85	115			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| 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#: 1404993

02-May-14

Client: Blagg Engineering
Project: VALENCIA GC B # 1M

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R18205	RunNo:	18205					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525436	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								
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R18205	RunNo:	18205					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525437	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.6	90	110			
Chloride	4.6	0.50	5.000	0	92.4	90	110			
Sulfate	9.3	0.50	10.00	0	93.1	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R18329	RunNo:	18329					
Prep Date:		Analysis Date:	4/30/2014	SeqNo:	529476	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R18329	RunNo:	18329					
Prep Date:		Analysis Date:	4/30/2014	SeqNo:	529477	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.4	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
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#: 1404993

02-May-14

Client: Blagg Engineering
Project: VALENCIA GC B # 1M

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R18204	RunNo:	18204					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525419	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		96.8	82.9	139			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R18204	RunNo:	18204					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525420	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	21	1.0	20.00	0	105	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	64	2.0	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		99.0	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404993

02-May-14

Client: Blagg Engineering
Project: VALENCIA GC B # 1M

Sample ID	MB-12902	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	12902	RunNo:	18294					
Prep Date:	4/28/2014	Analysis Date:	4/29/2014	SeqNo:	528264	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-12902	SampType: LCS			TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW	Batch ID: 12902			RunNo: 18294					
Prep Date:	4/28/2014	Analysis Date: 4/29/2014			SeqNo: 528265		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	100	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 greater than 2.
RL Reporting Detection Limit

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) _____

Project Name:

VALENCIA GC B # 1M

Project #:

Project Manager:

Sampler: **NELSON VELEZ**

On Ice ☒ Yes ☐ No

Sample Temperature 32.0

Container Type and #	Preservative Type	HEAL No.
-------------------------	----------------------	----------

40 ml VOA - 2	HCl & Cool	-201
---------------	------------	------

500 ml - 1	Cool	- 001
------------	------	-------

125 ml - 1	HNO ₃ & Cool	- 001
------------	-------------------------	-------

125 ml - 1	H ₂ SO ₄ & Cool	-001
------------	---------------------------------------	------

Received by:	Date	Time
--------------	------	------

Chlorophyll

Received by:	Date	Time
--------------	------	------

Case C 01/63/111 12:05



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Date: /	Time:	Relinquished by: 	Received by:	Date	Time
---------	-------	--	--------------	------	------

11/22/1959	Mr. Vt	Ch. 111	4
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Date:	Time:	Relinquished by:	Received by:	Date	Time
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[illegible]

Remarks:

Send invoice to :

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

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

Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1404993**

RcptNo: **1**

Received by/date: **CS**

04/23/14

Logged By: **Celina Sessa**

4/23/2014 10:02:00 AM

Completed By: **Celina Sessa**

4/24/2014 8:36:25 AM

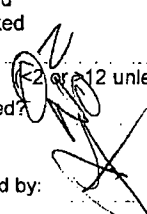
Reviewed By: 

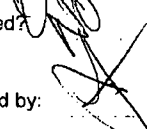
04/24/14

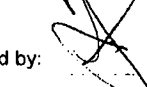
Chain of Custody

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 $>0^{\circ}\text{C}$ 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 2 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	3.2	Good	Yes			