

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: Steve Moskal	
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497	
Facility Name: Jones LS 001	Facility Type: Natural gas well	
Surface Owner: Federal	Mineral Owner: Federal	API No. 3004507719

**LOCATION OF RELEASE**

Unit Letter B	Section 35	Township 29N	Range 08W	Feet from the 990	North/South Line North	Feet from the 1,650	East/West Line East	County: San Juan
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Latitude 36.68702° Longitude -107.64312°

**NATURE OF RELEASE**

Type of Release: condensate and produced water	Volume of Release: Unknown	Volume Recovered: none
Source of Release: Confirmed corrosion of a 300 bbl production tank	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: June 23, 2016; 14:15
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* Soils impacted with hydrocarbons encountered during closure of 95 bbl BGT. Impacts found immediately below BGT, but there was no evidence of an integrity issue with the BGT or piping. Suspected source is an unlined earthen pit. Soil was excavated final extents. Soil samples were collected for laboratory analysis and a report is attached.		
Describe Area Affected and Cleanup Action Taken.* Site remediation by excavation of impacts with trackhoe. Final excavation 16' x 16' x 16' deep. Final soil disposal volume of 150 cubic yards. Confirmation soil samples all test TPH (US EPA Method 8015) at less than 5,000 mg/Kg, BTEX and chlorides site closure standards. Attached is a field report and laboratory results.		
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: 	OIL CONSERVATION DIVISION	
Printed Name: Steve Moskal	Approved by Environmental Specialist: 	
Title: Field Environmental Coordinator	Approval Date: <u>11/3/2016</u>	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: <u>NVF 1630849999</u>	Attached <input type="checkbox"/>
Date: August 24, 2016	Phone: 505-326-9497	

\* Attach Additional Sheets If Necessary

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**BP America**  
**Jones LS 1**  
**(B) Sec 35 – T29N – R8W**  
**San Juan County, New Mexico**  
**API: 30-045-07719**

Summary Record of Impact Remediation

June 23, 2016 Soils impacted with hydrocarbons encountered during closure of a 95 barrel below grade tank (BGT). Original source of impacts not evident, but appeared to be historical in nature with no integrity issues found with the BGT, flowlines or other equipment. Shallow sandstone encountered approximately 4 feet below grade, with the BGT base set in sandstone at about 3' below surface grade.

Site Closure Standard Determined at 5,000 ppm TPH based on:

Horizontal distance to blue line on USGS Topo > 1,000 feet (0 points)

Nearest water well based on search of State Engineer's data base > 1,000 feet (0 points)

Depth to groundwater based BGT permit data search >100 feet (0 points)

June 24, 2014 Receive rush lab results from BGT sample event:

Sample ID	Date/Time	Field OVM (ppm)	TPH Method 418.1 (mg/Kg)	TPH Method 8015B (GRO) (mg/Kg)	TPH Method 8015B (DRO) (mg/Kg)	Benzene (mg/Kg)	Total BTEX (mg/Kg)	Chloride (mg/Kg)
5-Point Comp @ Tank Base @ 5' depth	6/23/2016 @ 1415 pm	460	3,200	1,600	890	ND	59.3	ND
Grab @ 8' Depth	6/23/2016 @ 1425 pm	548	NA	1,200	790	0.62	53.3	NA
Closure Standard			5,000	DRO+GRO = 5,000		10	50	NA

July 20, 2016 Begin site remediation via excavation into sandstone with trackhoe. Remedial hole size approximately 16' x 16' x 16' deep.

July 21, 2016 Conduct closure sampling with NMOCD and BLM representatives on site. Concurrence with regulatory agencies on sampling composites from each sidewall and base and testing for BTEX only based on site closure standard and prior sample results.

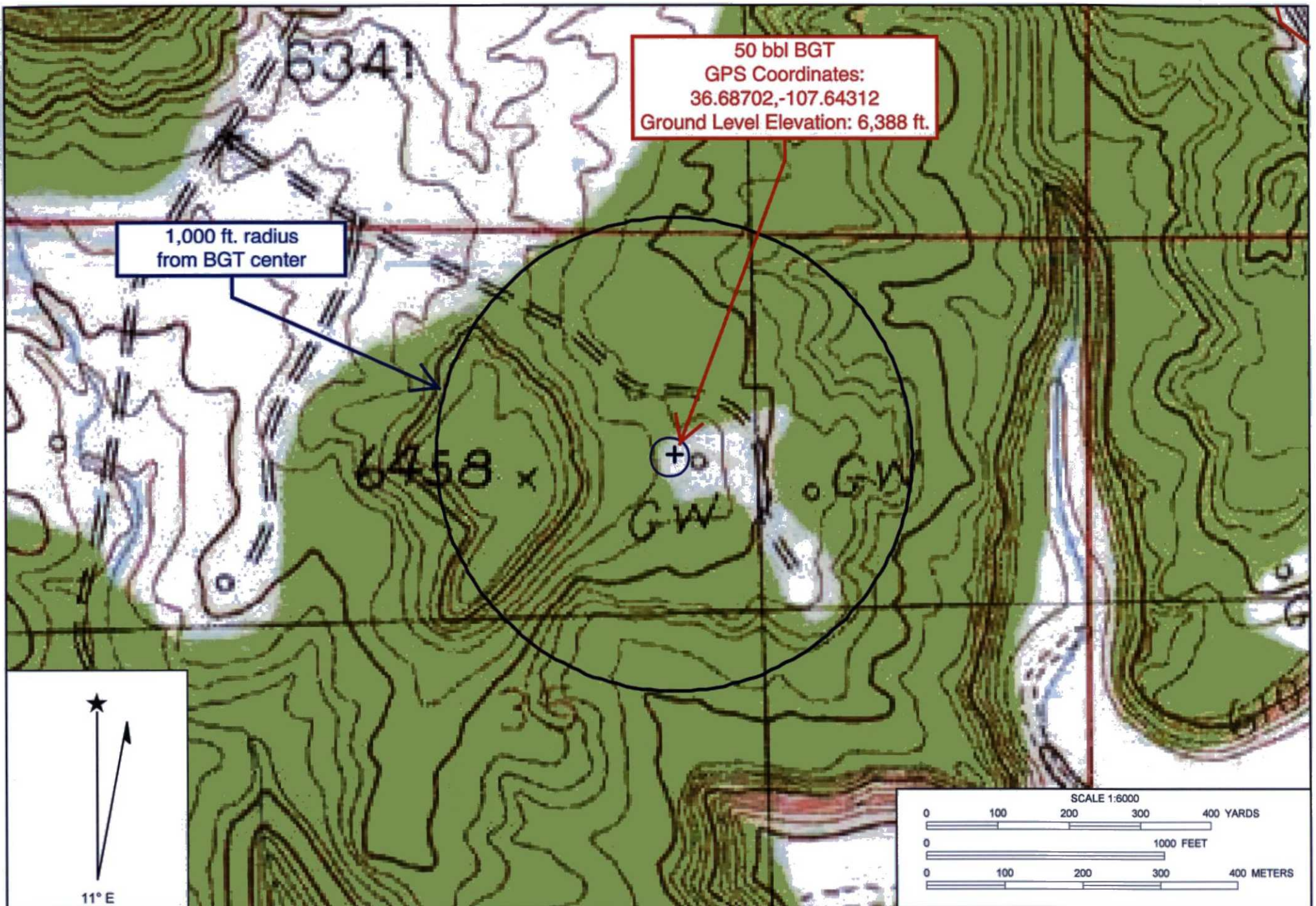


July 22, 2016 Receive rush lab results from excavation sample event:

Sample ID	Date/Time	Field OVM (ppm)	Benzene (mg/Kg)	Total BTEX (mg/Kg)
Base 5-point @ 16'	7/21/2016 @ 1227 pm	1,328	ND	1.0
East Wall 3-Pt (7'-14')	7/21/2016 @ 1231 pm	1,420	ND	3.33
North Wall 3-Pt (7'-14')	7/21/2016 @ 1234 pm	1,360	ND	10.32
West Wall 3-Pt (7'-14')	7/21/2016 @ 1238 pm	1,420	ND	5.67
South Wall 3-Pt (7'-14')	7/21/2016 @ 1242 pm	1,305	ND	2.95
Closure Standard			10	50

July 26, 2016 Receive regulatory approval to close site based on laboratory results.

July 27, 2016 Excavation crew completes backfilling operation. Total volume removed and transported to Envirotech landfarm approximately 150 cubic yards soil.



**BP - Jones LS 001**

API #: 3004507719

(B) Section 35, Township 29.0N, Range 8W, P.M. NM 23

Well head GPS coord.: 36.68709, -107.64275

**Proximity to Watercourses**



CLIENT: <b>BP</b>	<b>BLAGG ENGINEERING, INC.</b> <b>P.O. BOX 87, BLOOMFIELD, NM 87413</b> <b>(505) 632-1199</b>	API #: <b>3004507719</b> TANK ID (if applicable): <b>A</b>								
<b>FIELD REPORT:</b> (circle one): BGT CONFIRMATION / <u>RELEASE INVESTIGATION</u> / OTHER:		PAGE #: <b>1</b> of <b>1</b>								
<b>SITE INFORMATION:</b> SITE NAME: <b>JONES LS #1</b> QUAD/UNIT: <b>B</b> SEC: <b>35</b> TWP: <b>29N</b> RNG: <b>8W</b> PM: <b>NM</b> CNTY: <b>SJ</b> ST: <b>NM</b> 1/4 - 1/4 FOOTAGE: <b>990'N / 1,630'E</b> <b>NW/NE</b> LEASE TYPE: <u>FEDERAL</u> / STATE / FEE / INDIAN LEASE #: <b>SF079938</b> PROD. FORMATION: <b>MV</b> CONTRACTOR: <b>BP - J. GONZALES</b>		DATE STARTED: <b>06/23/16</b> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST(S): <b>NJV</b>								
<b>REFERENCE POINT:</b> WELL HEAD (W.H.) GPS COORD.: <b>36.68709 X 107.64275</b> GL ELEV.: <b>6,388'</b> 1) <b>50 BGT (SW/DB)</b> GPS COORD.: <b>36.68702 X 107.64312</b> DISTANCE/BEARING FROM WH: <b>121', S76W</b> 2) _____ GPS COORD.: _____ DISTANCE/BEARING FROM WH: _____ 3) _____ GPS COORD.: _____ DISTANCE/BEARING FROM WH: _____ 4) _____ GPS COORD.: _____ DISTANCE/BEARING FROM WH: _____										
<b>SAMPLING DATA:</b> CHAIN OF CUSTODY RECORD(S) # OR LAB USED: <b>HALL</b>		OVM READING (ppm)								
1) SAMPLE ID: <b>① @ 8' (95)</b> SAMPLE DATE: <b>06/23/16</b> SAMPLE TIME: <b>1425</b> LAB ANALYSIS: <b>8015B/8021B</b> 2) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____ 3) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____ 4) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____		<b>548</b>								
<b>SOIL DESCRIPTION:</b> SOIL TYPE: <u>SAND</u> / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / <u>OTHER</u> <b>BEDROCK (SANDSTONE)</b> SOIL COLOR: <b>MOSTLY DARK YELLOWISH ORANGE</b> COHESION (ALL OTHERS): <u>NON COHESIVE</u> / SLIGHTLY COHESIVE / COHESIVE / <u>HIGHLY COHESIVE</u> CONSISTENCY (NON COHESIVE SOILS): <u>LOOSE</u> / FIRM / DENSE / <u>VERY DENSE</u> MOISTURE: DRY / <u>SLIGHTLY MOIST</u> / MOIST / WET / SATURATED / SUPER SATURATED SAMPLE TYPE: <u>GRAB</u> COMPOSITE - # OF PTS. <b>NA</b> DISCOLORATION/STAINING OBSERVED: <u>YES</u> / NO EXPLANATION - <b>IN BEDROCK STARTING @ 5 FT. BELOW GRADE (GRAY TO BLACK).</b> PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD HC ODOR DETECTED: <u>YES</u> / NO EXPLANATION - <b>PHYSICALLY &amp; FIELD SCREENING FROM DISCOLORED SOILS &amp; BEDROCK.</b> ANY AREAS DISPLAYING WETNESS: YES / <u>NO</u> EXPLANATION - _____										
<b>SITE OBSERVATIONS:</b> LOST INTEGRITY OF EQUIPMENT: YES / <u>NO</u> EXPLANATION - _____ APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: <u>YES</u> / NO EXPLANATION: <b>VISUAL DISCOLORATION &amp; PHYSICAL ODOR.</b> EQUIPMENT SET OVER RECLAIMED AREA: YES / <u>NO</u> EXPLANATION - _____ OTHER: <b>BEDROCK ENCOUNTERED BELOW BGT BOTTOM WITH ROAD BASE GRAVEL. APPEARS TEST HOLE (see site sketch below) IS IMPACTED THROUGHOUT ENTIRE INTERVAL (3 FT.). NMOCD REPS. PRESENT DURING SAMPLE COLLECTION.</b> SOIL IMPACT DIMENSION ESTIMATION: _____ ft. X _____ ft. X _____ ft. EXCAVATION ESTIMATION (Cubic Yards): _____ DEPTH TO GROUNDWATER: <b>&gt;100'</b> NEAREST WATER SOURCE: <b>&gt;1,000'</b> NEAREST SURFACE WATER: <b>&gt;1,000'</b> NMOCD TPH CLOSURE STD: <b>5,000</b> ppm										
<b>SITE SKETCH</b> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>BGT Located : off / <u>on</u> site</p> </div> <div style="width: 45%;"> <p>PLOT PLAN circle: attached</p> <p>W.H. ↑</p> <p style="text-align: center; font-size: 2em;">N</p> </div> </div>										
OVM CALIB. READ. = <b>52.7</b> ppm RF=0.52 OVM CALIB. GAS = <b>100</b> ppm TIME: <b>2:35</b> (am/pm) DATE: <b>06/23/16</b>		<b>MISCELL. NOTES</b> WO: _____ REF #: <b>P - 585</b> VID: <b>VHIXONEVB2</b> PJ #: _____ Permit date(s): <b>05/27/16</b> OCD Appr. date(s): <b>06/22/16</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">Tank ID</td> <td>OVM = Organic Vapor Meter ppm = parts per million</td> </tr> <tr> <td><b>A</b></td> <td>BGT Sidewalls Visible: Y / <u>(N)</u></td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / N</td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / N</td> </tr> </table> Magnetic declination: <b>10° E</b>	Tank ID	OVM = Organic Vapor Meter ppm = parts per million	<b>A</b>	BGT Sidewalls Visible: Y / <u>(N)</u>		BGT Sidewalls Visible: Y / N		BGT Sidewalls Visible: Y / N
Tank ID	OVM = Organic Vapor Meter ppm = parts per million									
<b>A</b>	BGT Sidewalls Visible: Y / <u>(N)</u>									
	BGT Sidewalls Visible: Y / N									
	BGT Sidewalls Visible: Y / N									
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; PBGTL = 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. NOTES: <b>GOOGLE EARTH IMAGERY DATE: 3/16/2016.</b> ONSITE: <b>06/23/16</b>										



# BP - Jones LS 001

(B) Sec. 35, T29N, R8W  
API #: 3004507719

Imagery date: 3/16/2016

North Wall 3-Pt (7'-14')  
OVM = 1,360 ppm  
Benzene = ND  
BTEX = 10.32 ppm

East Wall 3-Pt (7'-14')  
OVM = 1,420 ppm  
Benzene = ND  
BTEX = 3.33 ppm

West Wall 3-Pt (7'-14')  
OVM = 1,420 ppm  
Benzene = ND  
BTEX = 5.67 ppm

South Wall 3-Pt (7'-14')  
OVM = 1,305 ppm  
Benzene = ND  
BTEX = 2.95 ppm

July 22, 2016  
95 BGT  
Remedial Excavation  
Approx. 16'x16'x16' Deep



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1606D35

Date Reported: 6/28/2016

CLIENT: Blagg Engineering

Client Sample ID: 1 @ 8' (95)

Project: Jones LS 1

Collection Date: 6/23/2016 2:25:00 PM

Lab ID: 1606D35-001

Matrix: MEOH (SOIL)

Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	790	100		mg/Kg	10	6/24/2016 11:10:08 AM	26050
Surr: DNOP	0	70-130	S	%Rec	10	6/24/2016 11:10:08 AM	26050
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	1200	41		mg/Kg	10	6/24/2016 1:14:10 PM	R35158
Surr: BFB	530	80-120	S	%Rec	10	6/24/2016 1:14:10 PM	R35158
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	0.62	0.21		mg/Kg	10	6/24/2016 1:14:10 PM	A35158
Toluene	5.3	0.41		mg/Kg	10	6/24/2016 1:14:10 PM	A35158
Ethylbenzene	3.4	0.41		mg/Kg	10	6/24/2016 1:14:10 PM	A35158
Xylenes, Total	44	0.83		mg/Kg	10	6/24/2016 1:14:10 PM	A35158
Surr: 4-Bromofluorobenzene	132	80-120	S	%Rec	10	6/24/2016 1:14:10 PM	A35158

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

**Analytical Report**

Lab Order 1607B34

Date Reported: 7/25/2016

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** Base 5-pt @ 16'**Project:** Jones LS 1**Collection Date:** 7/21/2016 12:27:00 PM**Lab ID:** 1607B34-001**Matrix:** MEOH (SOIL)**Received Date:** 7/22/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.096		mg/Kg	5	7/22/2016 10:15:47 AM	26539
Toluene	ND	0.19		mg/Kg	5	7/22/2016 10:15:47 AM	26539
Ethylbenzene	ND	0.19		mg/Kg	5	7/22/2016 10:15:47 AM	26539
Xylenes, Total	1.0	0.38		mg/Kg	5	7/22/2016 10:15:47 AM	26539
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	5	7/22/2016 10:15:47 AM	26539

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

<b>Qualifiers:</b>	*	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



**Analytical Report**

Lab Order 1607B34

Date Reported: 7/25/2016

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** East Wall 3-pt (7'-14')**Project:** Jones LS 1**Collection Date:** 7/21/2016 12:31:00 PM**Lab ID:** 1607B34-002**Matrix:** MEOH (SOIL)**Received Date:** 7/22/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.10		mg/Kg	5	7/22/2016 10:39:16 AM	26539
Toluene	ND	0.20		mg/Kg	5	7/22/2016 10:39:16 AM	26539
Ethylbenzene	0.23	0.20		mg/Kg	5	7/22/2016 10:39:16 AM	26539
Xylenes, Total	3.1	0.40		mg/Kg	5	7/22/2016 10:39:16 AM	26539
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	5	7/22/2016 10:39:16 AM	26539

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

<b>Qualifiers:</b>	*	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

## Analytical Report

Lab Order 1607B34

Date Reported: 7/25/2016

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Blagg Engineering

Client Sample ID: North Wall 3-pt (7'-14')

Project: Jones LS 1

Collection Date: 7/21/2016 12:34:00 PM

Lab ID: 1607B34-003

Matrix: MEOH (SOIL)

Received Date: 7/22/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.098		mg/Kg	5	7/22/2016 11:02:46 AM	26539
Toluene	1.1	0.20		mg/Kg	5	7/22/2016 11:02:46 AM	26539
Ethylbenzene	0.62	0.20		mg/Kg	5	7/22/2016 11:02:46 AM	26539
Xylenes, Total	8.6	0.39		mg/Kg	5	7/22/2016 11:02:46 AM	26539
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	5	7/22/2016 11:02:46 AM	26539

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

<b>Qualifiers:</b>	* 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



**Analytical Report**Lab Order **1607B34**

Date Reported: 7/25/2016

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** West Wall 3-pt (7'-14')**Project:** Jones LS 1**Collection Date:** 7/21/2016 12:38:00 PM**Lab ID:** 1607B34-004**Matrix:** MEOH (SOIL)**Received Date:** 7/22/2016 7:20:00 AM

<b>Analyses</b>	<b>Result</b>	<b>PQL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Batch</b>
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.096		mg/Kg	5	7/22/2016 11:26:22 AM	26539
Toluene	0.68	0.19		mg/Kg	5	7/22/2016 11:26:22 AM	26539
Ethylbenzene	0.39	0.19		mg/Kg	5	7/22/2016 11:26:22 AM	26539
Xylenes, Total	4.6	0.39		mg/Kg	5	7/22/2016 11:26:22 AM	26539
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	5	7/22/2016 11:26:22 AM	26539

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 6
	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	

**Analytical Report**

Lab Order 1607B34

Date Reported: 7/25/2016

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Blagg Engineering**Client Sample ID:** South Wall 3-pt (7'-14')**Project:** Jones LS 1**Collection Date:** 7/21/2016 12:42:00 PM**Lab ID:** 1607B34-005**Matrix:** MEOH (SOIL)**Received Date:** 7/22/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.098		mg/Kg	5	7/22/2016 11:49:55 AM	26539
Toluene	ND	0.20		mg/Kg	5	7/22/2016 11:49:55 AM	26539
Ethylbenzene	0.25	0.20		mg/Kg	5	7/22/2016 11:49:55 AM	26539
Xylenes, Total	2.7	0.39		mg/Kg	5	7/22/2016 11:49:55 AM	26539
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	5	7/22/2016 11:49:55 AM	26539

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 6
	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	



**SAME  
DAY**

☐ Standard ☒ Rush

**JONES LS # 1**

Project #:

Project Manager:

NELSON VELEZ

☒ Standard ☐ Level 4 (Full Validation)

**Sampler:** **NELSON VELEZ**

On Ice: ☒ Yes ☐ No

#### EDD (Type)

Sample Temperature: 24

[illegible]

**BILL DIRECTLY TO BP USING THE CIRCLED CONTACT WITH**  
**CORRESPONDING VID & REFERENCE # WHEN APPLICABLE:**

Vance Hixon  
VHIXONEVB2

Steve Moskal  
VMOS6HQFEC

John Ritchie  
VRITCJWFEC

Reference #

**P - 585**

If necessary, samples submitted to Half 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.



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.



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D35

28-Jun-16

Client: Blagg Engineering

Project: Jones LS 1

Sample ID	LCS-26050		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 26050		RunNo: 35139					
Prep Date:	6/24/2016		Analysis Date: 6/24/2016		SeqNo: 1087276		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	77.9	62.6	124			
Surr: DNOP	4.2		5.000		83.2	70	130			

Sample ID	MB-26050		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	26050		RunNo:	35139				
Prep Date:	6/24/2016		Analysis Date:	6/24/2016		SeqNo:	1087277		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	8.9		10.00		89.0	70	130				

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D35

28-Jun-16

Client: Blagg Engineering

Project: Jones LS 1

Sample ID	5ML-RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R35158	RunNo:	35158					
Prep Date:		Analysis Date:	6/24/2016	SeqNo:	1087655	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	970		1000		97.3	80	120			

Sample ID	2.5NG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R35158	RunNo:	35158					
Prep Date:		Analysis Date:	6/24/2016	SeqNo:	1088007	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.4	80	120			
Surr: BFB	1100		1000		113	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D35

28-Jun-16

Client: Blagg Engineering

Project: Jones LS 1

Sample ID	5ML-RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	A35158	RunNo:	35158					
Prep Date:		Analysis Date:	6/24/2016	SeqNo:	1087658	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	A35158	RunNo:	35158					
Prep Date:		Analysis Date:	6/24/2016	SeqNo:	1088011	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.4	75.3	123			
Toluene	0.85	0.050	1.000	0	85.5	80	124			
Ethylbenzene	0.85	0.050	1.000	0	85.5	82.8	121			
Xylenes, Total	2.5	0.10	3.000	0	84.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

## 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  
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: **1606D35**

RcptNo: **1**

Received by/date:

*ART*

*06/24/16*  
6/24/2016 7:47:00 AM

Logged By: **Lindsay Mangin**

Completed By: **Lindsay Mangin**

6/24/2016 7:57:36 AM

Reviewed By:

*[Signature]*

*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			



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1607B34

25-Jul-16

Client: Blagg Engineering

Project: Jones LS 1

Sample ID	MB-26539	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	26539		RunNo:	35917				
Prep Date:	7/21/2016	Analysis Date:	7/22/2016		SeqNo:	1112184	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.3	80	120			

Sample ID	LCS-26539	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 26539			RunNo: 35917					
Prep Date:	7/21/2016	Analysis Date: 7/22/2016			SeqNo: 1112185		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	75.3	123			
Toluene	0.95	0.050	1.000	0	94.8	80	124			
Ethylbenzene	0.98	0.050	1.000	0	97.7	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	96.1	83.9	122			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



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## Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1607B34**

RcptNo: **1**

Received by/date:

Logged By: **Lindsay Mangin**

7/22/2016 7:20:00 AM

Completed By: **Lindsay Mangin**

7/22/2016 7:51:01 AM

Reviewed By:

### 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  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			