

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

AUG 19 2016

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: Dawson GC 001	Facility Type: Natural gas well
Surface Owner: Federal	Mineral Owner: Federal
API No. 3004527336	

LOCATION OF RELEASE

Unit Letter K	Section 31	Township 31N	Range 08W	Feet from the 1,210	North/South Line South	Feet from the 660	East/West Line West	County: San Juan
------------------	---------------	-----------------	--------------	------------------------	---------------------------	----------------------	------------------------	------------------

Latitude 36.7012634° Longitude -108.1725922°

NATURE OF RELEASE



Type of Release: Produced water	Volume of Release: 10 bbl	Volume Recovered: none
Source of Release: Water transfer pipeline	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: August 11, 2016 @ 4:00 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" 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.* Tech found produced water that had surface near the edge of well location from underground piping. Fluids ran back across the well pad, remaining on site. Pipeline was shut in pending repairs and remedial investigation.

Describe Area Affected and Cleanup Action Taken.* Approximately 110' by 3-10' wide of visible water flow across the well pad surface. The pipeline was excavated to reveal a release point in the 3" polyline caused the release. The pipeline is under repair. Soil samples were collected at the surface during the initial response, at depth during the spill remediation and below the pipeline during excavation to repair the pipeline. Laboratory sample results for BTEX, TPH and chloride determine that the initial remediation of the spill suffices to meet the spill and release guidelines. Laboratory results and a field report are included. No further action is required.

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>10/5/2016</u>	Expiration Date:
E-mail Address: steven.moskal@bp.com		Conditions of Approval:	
Date: August 19, 2016 Phone: 505-326-9497		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

24

BP - Dawson GC 001

(K) Sec. 31, T31N, R8W

API #: 3004527336

Point of Release: 36.850337, -107.721354

Imagery date: 3/16/2016

FIGURE 1

Terminal end of Release (TOR)
gps coordinates:
36.850513, -107.721051

WH

Point of Release
(POR)

1,000 ft. radius from well head
gps coordinates:
36.850581, -107.721174

Google earth

© 2016 Google

900 ft

N

BP - Dawson GC 001

(K) Sec. 31, T31N, R8W

API #: 3004527336

Point of Release: 36.850337, -107.721354

Imagery date: 3/16/2016

FIGURE 2

5 point composite @ 1' - 2'
(beneath impact path)
(X - sample point designation)
Date: 08/16/2016; Time - 1100.

5 point composite @ ground surface (G.S.)
(Impacted soils)

(X - sample point designation)

Date: 08/12/2016; Time - 0950.

Grayish to dark yellowish orange sand, moist to saturated

Surface outline of Release

Terminal end of Release
(TOR)

110 lateral feet

Point of Release (POR)
Grab sample: POR @ 8'
Date: 8/15/2016; Time - 1335

Google earth

100 ft



Analytical Report

Lab Order 1608814

Date Reported: 8/18/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Project:** Dawson GC 1**Lab ID:** 1608814-001**Matrix:** SOIL**Client Sample ID:** 5PC-Impacted @ G.S.- (flowline**Collection Date:** 8/12/2016 9:50:00 AM**Received Date:** 8/13/2016 7:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	990	30		mg/Kg	20	8/15/2016 7:18:57 PM	26992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/16/2016 1:04:20 PM	26990
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/16/2016 1:04:20 PM	26990
Surr: DNOP	106	70-130		%Rec	1	8/16/2016 1:04:20 PM	26990
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/16/2016 10:30:28 AM	26977
Surr: BFB	79.6	68.3-144		%Rec	1	8/16/2016 10:30:28 AM	26977
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	8/16/2016 10:30:28 AM	26977
Toluene	ND	0.048		mg/Kg	1	8/16/2016 10:30:28 AM	26977
Ethylbenzene	ND	0.048		mg/Kg	1	8/16/2016 10:30:28 AM	26977
Xylenes, Total	ND	0.096		mg/Kg	1	8/16/2016 10:30:28 AM	26977
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	8/16/2016 10:30:28 AM	26977

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

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

Lab Order 1608883

Date Reported: 8/18/2016

CLIENT: Blagg Engineering**Client Sample ID:** POR @ 8'**Project:** DAWSON GC #1**Collection Date:** 8/15/2016 1:35:00 PM**Lab ID:** 1608883-001**Matrix:** SOIL**Received Date:** 8/16/2016 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	190	30		mg/Kg	20	8/16/2016 11:54:57 AM	27014
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/16/2016 12:20:40 PM	26998
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/16/2016 12:20:40 PM	26998
Surr: DNOP	105	70-130		%Rec	1	8/16/2016 12:20:40 PM	26998
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	8/16/2016 12:08:46 PM	26977
Surr: BFB	81.4	68.3-144		%Rec	1	8/16/2016 12:08:46 PM	26977
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.016		mg/Kg	1	8/16/2016 12:08:46 PM	26977
Toluene	ND	0.033		mg/Kg	1	8/16/2016 12:08:46 PM	26977
Ethylbenzene	ND	0.033		mg/Kg	1	8/16/2016 12:08:46 PM	26977
Xylenes, Total	ND	0.066		mg/Kg	1	8/16/2016 12:08:46 PM	26977
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/16/2016 12:08:46 PM	26977

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 1608981

Date Reported: 8/18/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Blagg Engineering**Client Sample ID:** 5PC @ 1'-2'**Project:** Dawson GC #1**Collection Date:** 8/16/2016 11:00:00 AM**Lab ID:** 1608981-001**Matrix:** MEOH (SOIL)**Received Date:** 8/17/2016 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	8/17/2016 11:05:39 AM	27036
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/17/2016 10:30:10 AM	27028
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2016 10:30:10 AM	27028
Surr: DNOP	90.7	70-130		%Rec	1	8/17/2016 10:30:10 AM	27028
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	8/17/2016 10:36:15 AM	27006
Surr: BFB	84.6	68.3-144		%Rec	1	8/17/2016 10:36:15 AM	27006
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	8/17/2016 10:36:15 AM	27006
Toluene	ND	0.041		mg/Kg	1	8/17/2016 10:36:15 AM	27006
Ethylbenzene	ND	0.041		mg/Kg	1	8/17/2016 10:36:15 AM	27006
Xylenes, Total	ND	0.082		mg/Kg	1	8/17/2016 10:36:15 AM	27006
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	8/17/2016 10:36:15 AM	27006

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

Chain-of-Custody Record		Turn-Around Time: SAME DAY	
Client: BLAGG ENGR. / BP AMERICA		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Mailing Address: P.O. BOX 87		Project Name: DAWSON GC # 1	
BLOOMFIELD, NM 87413		Project #:	
Phone #: (505) 632-1199		Project Manager:	
Email or Fax#:		NELSON VELEZ	
QA/QC Package:			
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: NELSON VELEZ	
Accreditation:		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other		Sample Temperature: 10	
<input type="checkbox"/> EDD (Type)			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Rate:	Time:	Relinquished by:	Received by:	Date	Time
3/15/16	1543	<i>[Signature]</i>	<i>[Signature]</i>	8/5/16	1543
Rate:	Time:	Relinquished by:	Received by:	Date	Time
7/15/16	1904	<i>[Signature]</i>	<i>[Signature]</i>	08/16/16	1904

Remarks:	<u>BILL DIRECTLY TO BP USING THE CIRCLED CONTACT WITH CORRESPONDING VID & REFERENCE # WHEN APPLICABLE:</u>		
	Vance Hixon	Steve Moskal	John Ritchie
VID:	VHIXONEVB2	VMOS6HQQEC	VDRINKJWA1
Reference #			

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.

Chain-of-Custody Record		Turn-Around Time
Client: BLAGG ENGR. / BP AMERICA	<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush 24 HR.
Mailing Address: P.O. BOX 87	Project Name: DAWSON GC # 1	
BLOOMFIELD, NM 87413	Project #: _____	
Phone #: (505) 632-1199	Project Manager: NELSON VELEZ	
Email or Fax#: _____	Sampler: NELSON VELEZ	
AVOC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input type="checkbox"/> NELAP <input type="checkbox"/> Other _____	Sample Temperature: 1.40C	
EDD (Type): _____		

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date:	Time:
8/16/16	1521	[Signature]	Christa Wark	8/16/16	1521
Date:	Time:	Relinquished by:	Received by:	Date:	Time:
8/16/16	1910	Christa Wark	Ann Ann	08/17/16	0820



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

✓	BTEX + MTBE + TMAH's (8021B)
	BTEX + MTBE + TPH (Gas only)
✓	TPH 8015B (GRO / DRO / MRO)
	TPH (Method 418.1)
	EDB (Method 504.1)
	PAH (8310 or 8270SIMS)
	RCRA 8 Metals
	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
	8081 Pesticides / 8082 PCB's
	8260B (VOA)
	8270 (Semi-VOA)
✓	Chloride (soil - 300.0 / water - 300.1)
	Grab sample
✓	5 pt. composite sample
	Air Bubbles (Y or N)

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

	Vance Hixon	Steve Moskal	John Ritchie
VID:	VHIXONEV82	VMOS6HQFEC	VDRINKJWA1
Reference #			

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 noted on the analytical report.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608814

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC 1

Sample ID	MB-26992		SampType:	mbk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	26992		RunNo:	36525				
Prep Date:	8/15/2016		Analysis Date:	8/15/2016		SeqNo:	1130975		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-26992		SampType:	lcs		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS		Batch ID:	26992		RunNo:	36525				
Prep Date:	8/15/2016		Analysis Date:	8/15/2016		SeqNo:	1130976		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	90.6	90	110				

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#: 1608814

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC 1

Sample ID	LCS-26949		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 26949		RunNo: 36499					
Prep Date:	8/12/2016		Analysis Date: 8/15/2016		SeqNo: 1130646		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.3	70	130			

Sample ID	MB-26949		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	26949		RunNo:	36499				
Prep Date:	8/12/2016		Analysis Date:	8/15/2016		SeqNo:	1130647		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	8.7		10.00		87.0	70	130				

Sample ID	LCS-26990		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 26990		RunNo: 36499					
Prep Date:	8/15/2016		Analysis Date: 8/16/2016		SeqNo: 1131339		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.3	62.6	124			
Surr: DNOP	4.6		5.000		91.9	70	130			

Sample ID	MB-26990	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	26990		RunNo:	36499				
Prep Date:	8/15/2016	Analysis Date:	8/16/2016		SeqNo:	1131341	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	70	130			

Sample ID	LCS-27019		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	27019		RunNo:	36556				
Prep Date:	8/16/2016		Analysis Date:	8/17/2016		SeqNo:	1132223		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	4.5		5.000		90.6	70	130				

Sample ID	MB-27019		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 27019		RunNo: 36556					
Prep Date:	8/16/2016		Analysis Date: 8/17/2016		SeqNo: 1132224		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608814

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC 1

Sample ID	MB-26977	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	26977	RunNo:	36534					
Prep Date:	8/15/2016	Analysis Date:	8/16/2016	SeqNo:	1131742	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	760		1000		76.2	68.3	144			

Sample ID	LCS-26977	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	26977	RunNo:	36534					
Prep Date:	8/15/2016	Analysis Date:	8/16/2016	SeqNo:	1131743	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	80.2	80	120			
Surr: BFB	920		1000		92.3	68.3	144			

Sample ID	MB-27006	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	27006	RunNo:	36570					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132895	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	850		1000		84.7	68.3	144			

Sample ID	LCS-27006	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	27006	RunNo:	36570					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132896	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.3	68.3	144			

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#: 1608814

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC 1

Sample ID	MB-26977		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 26977		RunNo: 36534					
Prep Date:	8/15/2016		Analysis Date: 8/16/2016		SeqNo: 1131777		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	0.98		1.000		98.5	80	120			

Sample ID	LCS-26977		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 26977		RunNo: 36534					
Prep Date:	8/15/2016		Analysis Date: 8/16/2016		SeqNo: 1131778		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.2	75.3	123			
Toluene	0.84	0.050	1.000	0	83.7	80	124			
Ethylbenzene	0.81	0.050	1.000	0	81.5	82.8	121			S
Xylenes, Total	2.5	0.10	3.000	0	81.7	83.9	122			S
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

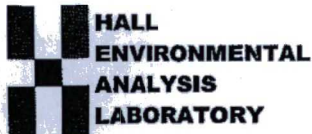
Sample ID	MB-27006		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS		Batch ID:	27006		RunNo:	36570				
Prep Date:	8/16/2016		Analysis Date:	8/17/2016		SeqNo:	1132930		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120				

Sample ID	LCS-27006		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 27006		RunNo: 36570					
Prep Date:	8/16/2016		Analysis Date: 8/17/2016		SeqNo: 1132931		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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



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: **1608814**

RcptNo: **1**

Received by/date:

LM

08/13/16

Logged By:

Ashley Gallegos

8/13/2016 7:15:00 AM

Completed By:

Ashley Gallegos

8/15/2016 7:51:08 AM

Reviewed By:

ag/as

08/15/16

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 $>0^{\circ}\text{C}$ 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 >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	1.2	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608883

18-Aug-16

Client: Blagg Engineering

Project: DAWSON GC #1

Sample ID	MB-27014	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	27014	RunNo:	36535					
Prep Date:	8/16/2016	Analysis Date:	8/16/2016	SeqNo:	1131490	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-27014	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	27014	RunNo:	36535					
Prep Date:	8/16/2016	Analysis Date:	8/16/2016	SeqNo:	1131491	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	90	110			

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#: 1608883

18-Aug-16

Client: Blagg Engineering

Project: DAWSON GC #1

Sample ID	LCS-26949		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 26949		RunNo: 36499					
Prep Date:	8/12/2016		Analysis Date: 8/15/2016		SeqNo: 1130646		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.3	70	130			

Sample ID	MB-26949		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 26949		RunNo: 36499					
Prep Date:	8/12/2016		Analysis Date: 8/15/2016		SeqNo: 1130647		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		87.0	70	130			

Sample ID	LCS-26990		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 26990		RunNo: 36499					
Prep Date:	8/15/2016		Analysis Date: 8/16/2016		SeqNo: 1131339		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.9	70	130			

Sample ID	LCS-26998		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 26998		RunNo: 36499					
Prep Date:	8/16/2016		Analysis Date: 8/16/2016		SeqNo: 1131340		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.6	62.6	124			
Surr: DNOP	4.6		5.000		92.4	70	130			

Sample ID	MB-26990		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	26990		RunNo:	36499				
Prep Date:	8/15/2016		Analysis Date:	8/16/2016		SeqNo:	1131341		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	11		10.00		108	70	130				

Sample ID	MB-26998	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	26998		RunNo:	36499				
Prep Date:	8/16/2016	Analysis Date:	8/16/2016		SeqNo:	1131342	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		89.2	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#: 1608883

18-Aug-16

Client: Blagg Engineering

Project: DAWSON GC #1

Sample ID	MB-26977	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	26977	RunNo:	36534					
Prep Date:	8/15/2016	Analysis Date:	8/16/2016	SeqNo:	1131742	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	760		1000		76.2	68.3	144			

Sample ID	LCS-26977	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	26977	RunNo:	36534					
Prep Date:	8/15/2016	Analysis Date:	8/16/2016	SeqNo:	1131743	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	80.2	80	120			
Surr: BFB	920		1000		92.3	68.3	144			

Sample ID	MB-27006	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	27006	RunNo:	36570					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132895	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	850		1000		84.7	68.3	144			

Sample ID	LCS-27006	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	27006	RunNo:	36570					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132896	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.3	68.3	144			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608883

18-Aug-16

Client: Blagg Engineering

Project: DAWSON GC #1

Sample ID	MB-26977		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	26977		RunNo:	36534			
Prep Date:	8/15/2016		Analysis Date:	8/16/2016		SeqNo:	1131777		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	0.98		1.000		98.5	80	120			

Sample ID	LCS-26977		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	26977		RunNo:	36534			
Prep Date:	8/15/2016		Analysis Date:	8/16/2016		SeqNo:	1131778		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.2	75.3	123			
Toluene	0.84	0.050	1.000	0	83.7	80	124			
Ethylbenzene	0.81	0.050	1.000	0	81.5	82.8	121			S
Xylenes, Total	2.5	0.10	3.000	0	81.7	83.9	122			S
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID	MB-27006		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	27006		RunNo:	36570			
Prep Date:	8/16/2016		Analysis Date:	8/17/2016		SeqNo:	1132930		Units: %Rec	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			

Sample ID	LCS-27006		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	27006		RunNo:	36570			
Prep Date:	8/16/2016		Analysis Date:	8/17/2016		SeqNo:	1132931		Units: %Rec	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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: **1608883**

RcptNo: **1**

Received by/date: _____

Logged By: **Anne Thorne** **8/16/2016 7:00:00 AM**

Anne Thorne

Completed By: **Anne Thorne** **8/16/2016**

Anne Thorne

Reviewed By: **NBS 8/16/16**

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 $>0^{\circ}\text{C}$ 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 >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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	1.0	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608981

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC #1

Sample ID	LCS-27019	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	27019	RunNo:	36556					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132223	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.6	70	130			

Sample ID	MB-27019	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	27019	RunNo:	36556					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132224	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.4	70	130			

Sample ID	LCS-27028	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	27028	RunNo:	36557					
Prep Date:	8/17/2016	Analysis Date:	8/17/2016	SeqNo:	1132248	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	105	62.6	124			
Surr: DNOP	4.8		5.000		96.2	70	130			

Sample ID	MB-27028	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	27028	RunNo:	36557					
Prep Date:	8/17/2016	Analysis Date:	8/17/2016	SeqNo:	1132249	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.5	70	130			

Sample ID	1608981-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	5PC @ 1'-2'	Batch ID:	27028	RunNo:	36557					
Prep Date:	8/17/2016	Analysis Date:	8/17/2016	SeqNo:	1132494	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.92	6.986	96.5	33.9	141			
Surr: DNOP	5.0		5.092		97.6	70	130			

Sample ID	1608981-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	5PC @ 1'-2'	Batch ID:	27028	RunNo:	36557					
Prep Date:	8/17/2016	Analysis Date:	8/17/2016	SeqNo:	1132496	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.8	49.21	6.986	102	33.9	141	2.06	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608981

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC #1

Sample ID	1608981-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	5PC @ 1'-2'	Batch ID:	27028	RunNo:	36557					
Prep Date:	8/17/2016	Analysis Date:	8/17/2016	SeqNo:	1132496	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		4.921		98.6	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
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#: 1608981

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC #1

Sample ID	MB-27006	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	27006	RunNo:	36570					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132895	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	850		1000		84.7	68.3	144			

Sample ID	LCS-27006	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	27006	RunNo:	36570					
Prep Date:	8/16/2016	Analysis Date:	8/17/2016	SeqNo:	1132896	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	80	120			
Surr: BFB	900		1000		90.3	68.3	144			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608981

18-Aug-16

Client: Blagg Engineering

Project: Dawson GC #1

Sample ID	MB-27006		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	27006		RunNo:	36570			
Prep Date:	8/16/2016		Analysis Date:	8/17/2016		SeqNo:	1132930		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	0.99		1.000		99.4	80	120			

Sample ID	LCS-27006		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	27006		RunNo:	36570			
Prep Date:	8/16/2016		Analysis Date:	8/17/2016		SeqNo:	1132931		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	83.2	75.3	123			
Toluene	0.92	0.050	1.000	0	92.1	80	124			
Ethylbenzene	0.99	0.050	1.000	0	98.5	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	100	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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 |

