OIL CONS. DIV DIST. 3

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

AUG 17 2016

Form C-141 Revised August 8, 2011

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

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

			Rele	ease Notifi	cation	and Co	orrective A	ction				
						OPERA'	ГOR		✓ Initi	al Report	\boxtimes	Final Repo
Name of C	ompany: B	P America P	roduction	n Company	- 0	Contact: St	eve Moskal					
Address: 2	00 Energy	Court, Farm	ington, N	VM 87401		Telephone 1	No.: 505-326-9	497				
Facility Na	me: Galle	gos Canyon	Unit 211			Facility Typ	e: Natural Gas	s Well				
Surface Ov	vner: Fee			Mineral	Owner: 1	Fee			API No	. 30-045-1	1651	
				LOC	ATION	OF RE	EASE					
Jnit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/W	est Line	County		
3	32	29N	12W	1,650	Notth		1,650	East		San Juan		
						OF REL						
	ease: Produ						Release 6.38			Recovered r		
ource of Re	elease: 2" p	oly pipeline				August 2, 2	lour of Occurrence 2016			Hour of Dis 2016 11:20		
Was Immedi	iate Notice (Yes [No Not R	equired	If YES, To			ragust 2	2010 11120		
y Whom?						Date and H	lour					
Vas a Water	course Read	ched? Y	es 🛛 N	lo		If YES, Vo	lume Impacting t	the Water	course.			
Describe Can have moved was shut in a Describe Are	use of Proble from the sound the area ea Affected	of impact was and Cleanup A	dial Action ease, down removed Action Tak	n the lease road. via vac-truck. ten* The produce	All fluid	released rem	ater stain on the a ained to the area oximately 186' to	of current	activities	and disturb	se point	The pipeline with an
ne area of in	npact detern	nined effective	e removal	of contaminants.	Laborat	ory analysis	ruck. Soil sample and site figure are knowledge and u	e included				
regulations a public health should their or the enviro	Il operators or the envir operations h nment. In a	are required to conment. The ave failed to a	acceptance acceptance adequately CD accep	nd/or file certain the of a C-141 reprinted investigate and	release no ort by the remediate	otifications ar NMOCD ma contaminati	and perform correct arked as "Final R on that pose a three the operator of	ctive actio deport" do reat to gro	ns for rele es not reli und water	eases which eve the oper , surface wa	may enerator of ter, hun	danger liability nan health
Signature:	Must	Mu					OIL CON	SERVA	ATION //	DIVISIO	<u>N</u>	-4
rinted Nam	e: Steve Mo	skal			1	Approved by	Environmental S	pecialist:	0	Z Ju	~	
itle: Field E	Environment	al Coordinato	r		1	Approval Dat	e: 8/22/16	E	cpiration 1	Date:		37
-mail Addr	ess: steven.r	moskal@bp.co	m		(Conditions of	Approval:			Attached		

Phone: (505) 326-9497 - + NCS 16235 42 776 * Attach Additional Sheets If Necessary

Date: August 15, 2016



Point 7 of 7 - 186 ft. from POR Point 6 of 7 - 156 ft. from POR Point 5 of 7 - 134 ft. from POR Point 4 of 7 - 106 ft, from POR Point 3 of 7 - 77 ft. from POR Point 2 of 7 - 48 ft. from POR Point 1 of 7 - 22 ft. from POR

BP - GCU 211/307 Pipeline Release

Point of Release: 36.685774, -108.121784

Imagery date: 3/15/2015

7 point composite sample @ 0.5 - 1.5 ft. below grade (beneath impacted soils)
Date: 08/02/2016; Time - 1615

Soil mostly dark yellowish orange to brown sand to silty sand, dry to slightly moist

Point of Release (POR)

FIGURE 1

N

00 ft

Google earth

Point 1 of 7 - 22 ft. from POR

BP - GCU 211/307 Pipeline Release

Point of Release: 36,685774, -108,121784

Imagery date: 3/15/2015

5 point composite sample @ ground surface (impacted soils) (X - sample point designation)

(X - sample point designation) Date: 08/02/2016; Time - 1525.

Soil mostly dark yellowish orange to brown sand to silty sand, moist to wet

Point of Release (POR)

Google earth

2016 Google

FIGURE 2

N

20 ft

		n-ous	stody Record	Turn-Around		48				HA	11	FI	NV	TE	20	NI	ME	NT	AI	
Client:	BLAG	G ENGR.	/ BP AMERICA	☐ Standard	Rush _	HR-												TO		,
				Project Name			-			wv	vw.ha	allen	viro	nme	ental	l.con	n			
Mailing Add	dress:	P.O. BO	X 87	1				490)1 Ha	wkins	NE -	Alb	uqu	erqu	ue, N	MIN 8	7109)		
		BLOOM	FIELD, NM 87413			1 #307		Te	1. 505	-345-	3975	F	ax !	505-	345-	-410	7			
Phone #:		(505) 63	32-1199	BIDERIN	e RELE	ASE					A	hnaly	sis	Rec	ques	st				
email or Fa	ax#:			Project Manag	ger:								(4)				300.1)			
QA/QC Pack Standar			Level 4 (Full Validation)	NE	7204 RE	してて	(80218)	s only)	/ MRO)		(S)		PO4,SC	PCB's			water - 30		a	
Accreditation	on:			Sampler: N	ELSON VE	-22	Se C	1 (Ga	DRO	न न	or 8270SIMS)		NO2,	808			~		sample	
□ NELAP		□ Other		On Ice:	Yes	□ No	1	TP	101	418	827	S	103	es/		OA)	300.0			N TO
□ EDD (Ty	ype)			Sample Temp	erature: //-		1	BE +	(GB	pou pou		etal	CI,N	icid	(A)	y-ir		0	osi	3
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX +-MF	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1) EDB (Method 504.1)	PAH (8310	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil	Grab cample	U #pt. composite	Air Bubbles (Y or N)
8/2/06	1525	501L	SURFACE (IMPROTE)	402-1	COOL	-001	V		V						_	-	V		5	
8/2/16/	1615	201L	790@0.5-1.5' BELOW) GRADE	4021	C002	-00Z	V		/								/		7	
			6-5 1 1 1 2					1												
-1-12	Time:	Relinquish	de J	Received by:	Walla	Date Time 8/2/16 1650		narks		ORRESP Vanc		IG VID	& RE	FERE		WHEN	APPL	And the Control of the Control		
Date: T	Time: 1834	Relinquish	ed by: atu Walt printed to Hall Environmental may be su	Received by:	08/03	Date Time	Charle	CKOA Great		VHIX	ONEV	B2	NV NV	10SE	FOR TOP	EC 743	VR 3	ITCJW	FEC	



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

OrderNo.: 1608127

August 04, 2016

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

RE: GCU #211/#307 Pipeline Release

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/3/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1608127

Date Reported: 8/4/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC@Ground Surface (Impacted

Project: GCU #211/#307 Pipeline Release

Collection Date: 8/2/2016 3:25:00 PM

Lab ID: 1608127-001

Received Date: 8/3/2016 7:20:00 AM Matrix: MEOH (SOIL)

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	9800	300	mg/Kg	200	8/3/2016 4:52:13 PM	26766
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst:	KJH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/3/2016 10:30:49 AM	26760
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/3/2016 10:30:49 AM	26760
Surr: DNOP	99.1	70-130	%Rec	1	8/3/2016 10:30:49 AM	26760
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	12	3.3	mg/Kg	1	8/3/2016 10:42:55 AM	26741
Surr: BFB	119	49.4-163	%Rec	1	8/3/2016 10:42:55 AM	26741
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.016	mg/Kg	1	8/3/2016 10:42:55 AM	26741
Toluene	0.034	0.033	mg/Kg	1	8/3/2016 10:42:55 AM	26741
Ethylbenzene	ND	0.033	mg/Kg	1	8/3/2016 10:42:55 AM	26741
Xylenes, Total	0.087	0.066	mg/Kg	1	8/3/2016 10:42:55 AM	26741
Surr: 4-Bromofluorobenzene	98.2	80-120	%Rec	1	8/3/2016 10:42:55 AM	26741

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- 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
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 1 of 6
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1608127

Date Reported: 8/4/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 7PC@0.5'-1.5' Below Grade

Project: GCU #211/#307 Pipeline Release

Collection Date: 8/2/2016 4:15:00 PM

Lab ID: 1608127-002

Matrix: MEOH (SOIL)

Received Date: 8/3/2016 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	250	30	mg/Kg	20	8/3/2016 11:29:34 AM	26766
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst:	KJH
Diesel Range Organics (DRO)	21	9.5	mg/Kg	1	8/3/2016 10:52:45 AM	26760
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/3/2016 10:52:45 AM	26760
Surr: DNOP	90.2	70-130	%Rec	1	8/3/2016 10:52:45 AM	26760
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	8/3/2016 11:06:28 AM	26741
Surr: BFB	97.5	49.4-163	%Rec	1	8/3/2016 11:06:28 AM	26741
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.017	mg/Kg	1	8/3/2016 11:06:28 AM	26741
Toluene	ND	0.035	mg/Kg	1	8/3/2016 11:06:28 AM	26741
Ethylbenzene	ND	0.035	mg/Kg	1	8/3/2016 11:06:28 AM	26741
Xylenes, Total	ND	0.070	mg/Kg	1	8/3/2016 11:06:28 AM	26741
Surr: 4-Bromofluorobenzene	92.3	80-120	%Rec	1	8/3/2016 11:06:28 AM	26741

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1608127 04-Aug-16

Client:

Blagg Engineering

Project:

GCU #211/#307 Pipeline Release

Sample ID MB-26766

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

Batch ID: 26766

RunNo: 36217

Prep Date: 8/3/2016

Analysis Date: 8/3/2016

SeqNo: 1121709

Units: mg/Kg HighLimit

%RPD **RPDLimit** Qual

Analyte Chloride

Result PQL ND

1.5

TestCode: EPA Method 300.0: Anions

Sample ID LCS-26766

Client ID: LCSS

SampType: Ics Batch ID: 26766

RunNo: 36217

Units: mg/Kg

Prep Date: 8/3/2016

Analysis Date: 8/3/2016

SeqNo: 1121710

HighLimit

%RPD

Qual

Analyte

PQL

15.00

SPK value SPK Ref Val %REC LowLimit

Chloride

14

110

0

SPK value SPK Ref Val %REC LowLimit

93.5

RPDLimit

Page 3 of 6

1.5

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits S % Recovery outside of range due to dilution or matrix B Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

P Sample pH Not In Range Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608127

04-Aug-16

Client:

Blagg Engineering

Project:

GCU #211/#307 Pipeline Release

Sample ID LCS-26760	SampT	ype: LC	S	Tes	Code: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	n ID: 26	760	F	tunNo: 3	6186				
Prep Date: 8/3/2016	Analysis D	ate: 8/	3/2016	S	eqNo: 1	120950	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.1	62.6	124			
Surr: DNOP	4.5		5.000		90.1	70	130			

Sample ID MB-26760	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	h ID: 26	760	F	RunNo: 3	6186				
Prep Date: 8/3/2016	Analysis D	Date: 8/	3/2016	5	SeqNo: 1	120951	Units: mg/F	(g		
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	8.5		10.00		85.0	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

Page 4 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608127

04-Aug-16

Client:

Blagg Engineering

Project:

GCU #211/#307 Pipeline Release

Sample ID MB-26741 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: Batch ID: 26741 RunNo: 36191 Prep Date: 8/2/2016 Analysis Date: 8/3/2016 SeqNo: 1121472 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 960 1000 96.4 49.4 163 Sample ID LCS-26741 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Batch	h ID: 26	741	F	RunNo: 3	6191				
Analysis E	Date: 8/	3/2016	8	SeqNo: 1	121473	Units: mg/k	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
26	5.0	25.00	0	102	80	120			
1100		1000		106	49.4	163			
	Analysis D Result 26	Analysis Date: 8/ Result PQL 26 5.0	26 5.0 25.00	Analysis Date: 8/3/2016 S Result PQL SPK value SPK Ref Val 26 5.0 25.00 0	Analysis Date: 8/3/2016 SeqNo: 1 Result PQL SPK value SPK Ref Val %REC 26 5.0 25.00 0 102	Analysis Date: 8/3/2016 SeqNo: 1121473 Result PQL SPK value SPK Ref Val %REC LowLimit 26 5.0 25.00 0 102 80	Analysis Date: 8/3/2016 SeqNo: 1121473 Units: mg/k Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 26 5.0 25.00 0 102 80 120	Analysis Date: 8/3/2016 SeqNo: 1121473 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 26 5.0 25.00 0 102 80 120	Analysis Date: 8/3/2016 SeqNo: 1121473 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 26 5.0 25.00 0 102 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

Page 5 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1608127

04-Aug-16

Client:

Blagg Engineering

Project:

GCU #211/#307 Pipeline Release

Sample ID MB-26741	Samp	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	n ID: 26	741	F	RunNo: 3	6191				
Prep Date: 8/2/2016	Analysis D	Date: 8/	3/2016	8	SeqNo: 1	121479	Units: mg/K	(g		
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	0.91		1.000		91.5	80	120			

Sample ID LCS-26741	Samp [*]	Type: LC	S	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 26	741	F	RunNo: 3	6191				
Prep Date: 8/2/2016	Analysis [Date: 8/	3/2016	5	SeqNo: 1	121480	Units: mg/l	⟨ g		
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			117
Toluene	0.98	0.050	1.000	0	97.6	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	100	83.9	122			
Surr: 4-Bromofluorobenzene	0.96		1.000		96.5	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

Page 6 of 6

P Sample pH Not In Range

RL Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NF. 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:	1608	127		RcptNo: 1	
Received by/date	e: Lindsay/Mangin	03/10 8/3/2016 7:20:00 AM			Sounday Albertage		
Completed By:	Lindsay Mangin	8/3/2016 7:53:54 AM			Jouly Hope		
Reviewed By:	IO	08/03/16			0 0		
Chain of Cus	tody						
1. Custody sea	ls intact on sample bottles?		Yes	1.	No	Not Present 🖈	
2. Is Chain of C	Custody complete?		Yes	*	No _ i	Not Present	
3. How was the	e sample delivered?		Cour	ier			
Log In							
	empt made to cool the sample	es?	Yes	•	No	NA . !	
5. Were all san	mples received at a temperal	ture of >0° C to 6.0°C	Yes	d	No	NA : 1	
6. Sample(s) in	n proper container(s)?		Yes	*	No		
7. Sufficient sa	mple volume for indicated te	st(s)?	Yes	4	No []		
	(except VOA and ONG) pro		Yes	*	No .		
9. Was preserv	vative added to bottles?		Yes	[]	No 🖃	NA i i	
10.VOA vials ha	ave zero headspace?		Yes		No !	No VOA Vials	
11. Were any sa	ample containers received b	roken?	Yes	i.	No 🌬	# of preserved	
12 Daga papan	work match bottle labels?		Yes	'A'	No	bottles checked for pH:	
The second secon	pancies on chain of custody		165	-	110	(<2 or >12 unless	noted)
13. Are matrices	s correctly identified on Chair	of Custody?	Yes	4	No :	Adjusted?	
14, Is it clear wh	nat analyses were requested	?	Yes	*	No		
	ding times able to be met? customer for authorization.)		Yes	*	No	Checked by:	
Special Hand	lling (if applicable)						
16. Was client n	notified of all discrepancies w	ith this order?	Yes	[No .	NA 🕪	
Person	n Notified:	Date:	-				
By Wh	nom:	Via:	. eMa	ail	Phone Fax	In Person	
Regard	ding:				· · · · · · · · · · · · · · · · · · ·	and the same of th	
Client	Instructions:	MATERIAL PROPERTY AND ADDRESS OF THE PARTY O			<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	And the state of t	
17. Additional re	emarks:						
18. Cooler Info	ormation	12			N.		
Cooler N	o Temp °C Condition	Seal Intact Seal No S	Seal D	ate	Signed By		
1,	1.7 3000	100					

Ch	nain-c	of-Cus	stody Record	Turn-Around	Time	48				н	AL	L	EN	IV	IR	10	NI	1EI	NTA	L	
ient:	BLAG	G ENGR	/ BP AMERICA	Standard Project Name	Rush _	HR.				A	N/	AL	YS	IS	L	AE	30	RA	TO		
alling A	dalesses			A A			-					v.hal									
ailing A	uuress.	P.O. BO		2	scu #21	11#307	-											7109			
		100000000000000000000000000000000000000	FIELD, NM 87413	the silver of the same of the same				Te	1.50	5-34	5-39					345-		7			
none #:		(505) 63	32-1199		e rece	nse						Aı	naly:	sis	Red	lues	it		453	- 10	
nail or F				Project Mana					=					0	LS.			300.1)			
A/QC Pa			Level 4 (Full Validation)		1204 RE		(80218)	+ MTBE + TPH (Gas only)	/ MRO)			AS)		PO4, S	2 PCB					e	
ccredita	tion:			Sampler: N	ELSON VEU	EZ	38	l (Ga	/ DRO	1	F	OSIN		102	808			300.0 / water		dun	
NELAF	,	□ Other		On Ice:	☑ Yes	□ No	1	TPH	0/1	418	504	827	S	S	/ se	-	(AC	3000		te sa	or N
EDD (Type)			Sample Temp	erature: //-	+	1	BE +	(GR	por	DO.	00	etal	C	icid	(A)	ıi-V	100	o e	isoc	2 (3
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX +	BTEX + MT	TPH 8015B (GRO	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	8250B (VOA)	8270 (Semi-VOA)	Chloride (soil	Grab sample	() #pt. composite sample	Air Bubbles (Y or N)
12/16	1525	5014	SPC E GROUND	402-1	COOL	-001	V		V									V		5	
/z/ 16	1615	501L	790005-1.5'	4021	C002	-002	V		/									/		7	
		,											1						+		
tte: /2/16	Time:	Relinquish	any	Received by:	elilaeta "	Date Time 8/2/16 1650 Date Time		mark		Va	nce	Hixo	n C	Ste	FEREN	Mosl	when	Joh	n Ritc	hie	
2/14	1834	ann	atu Walt	Y	08 03	16 0770	7 1-250	OKO A	ee#	_		racted	1	12	115	HQF	74	3/_	TCJWF nalytical		



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

OrderNo.: 1608497

August 12, 2016

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

RE: GCU 211/307 Pipeline Release

Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/9/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1608497

Date Reported: 8/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 3pc @ Source 6'-7' Below Grab

Project: GCU 211/307 Pipeline Release

Collection Date: 8/8/2016 2:00:00 PM

Lab ID: 1608497-001

Matrix: MEOH (SOIL) Received Date: 8/9/2016 8:00:00 AM

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	770	30	mg/Kg	20	8/10/2016 3:48:03 AM	26873
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst:	TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	8/10/2016 12:36:03 PM	26867
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/10/2016 12:36:03 PM	26867
Surr: DNOP	86.1	70-130	%Rec	1	8/10/2016 12:36:03 PM	26867
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	8/10/2016 1:01:24 PM	26858
Surr: BFB	109	68.3-144	%Rec	1	8/10/2016 1:01:24 PM	26858
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.017	mg/Kg	1	8/10/2016 1:01:24 PM	26858
Toluene	ND	0.033	mg/Kg	1	8/10/2016 1:01:24 PM	26858
Ethylbenzene	ND	0.033	mg/Kg	1	8/10/2016 1:01:24 PM	26858
Xylenes, Total	ND	0.066	mg/Kg	1	8/10/2016 1:01:24 PM	26858
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/10/2016 1:01:24 PM	26858

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1608497

12-Aug-16

Client:

Blagg Engineering

Project:

GCU 211/307 Pipeline Release

Sample ID MB-26873

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

Batch ID: 26873

RunNo: 36358

Prep Date:

8/9/2016

Analysis Date: 8/10/2016

SeqNo: 1126271

Units: mg/Kg HighLimit

RPDLimit %RPD

Qual

Analyte Chloride

Result ND PQL 1.5

TestCode: EPA Method 300.0: Anions

%RPD

Sample ID LCS-26873

8/9/2016

SampType: LCS

Batch ID: 26873

Analysis Date: 8/10/2016

RunNo: 36358

SeqNo: 1126272

Units: mg/Kg

HighLimit

RPDLimit Qual

Analyte

Client ID:

Prep Date:

14

90

Chloride

PQL 1.5

15.00

SPK value SPK Ref Val

SPK value SPK Ref Val %REC LowLimit

%REC 93.2

LowLimit

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits R S % Recovery outside of range due to dilution or matrix В

J Analyte detected below quantitation limits

P

Sample pH Not In Range RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

E Value above quantitation range

Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1608497

12-Aug-16

Client:

Blagg Engineering

Project:

Surr: DNOP

GCU 211/307 Pipeline Release

9.6

Sample ID LCS-26867	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics												
Client ID: LCSS	Batch	n ID: 26	867	F	tunNo: 3	6347										
Prep Date: 8/9/2016	Analysis D)ate: 8/	10/2016	S	eqNo: 1	126001	Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Diesel Range Organics (DRO)	43	10	50.00	0	86.2	62.6	124									
Surr: DNOP	4.7		5.000		93.9	70	130									
Sample ID MB-26867	SampT	ype: ME	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics												
Client ID: PBS	Batcl	n ID: 26	867	RunNo: 36347												
	Analysis Date: 8/10/2016				eaNo: 1	126002	Units: mg/K	(g								
Prep Date: 8/9/2016	Analysis D	ate: 8/	10/2016		oqi to.		-									
Prep Date: 8/9/2016 Analyte	Analysis D Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
					Andrews and		HighLimit	%RPD	RPDLimit	Qual						

10.00

95.6

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

Page 3 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1608497

12-Aug-16

Client:

Blagg Engineering

Project:

GCU 211/307 Pipeline Release

Sample ID MB-26858 SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range											
Client ID: PBS	Batc	h ID: 26	858	F	RunNo: 3	6367									
Prep Date: 8/9/2016	Analysis [Date: 8/10/2016 SeqNo: 1126685					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	1100		1000		110	68.3	144								
Sample ID LCS-26858	Samp ¹	Гуре: LC	s	TestCode: EPA Method 8015D: Gasoline Range											
Client ID: LCSS	Batc	h ID: 26	858	RunNo: 36367											
Prep Date: 8/9/2016	Analysis [Date: 8/	10/2016	5	SeqNo: 1	126686	Units: mg/F								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	80	120								
Surr: BFB	1200		1000		122	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

Page 4 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1608497

12-Aug-16

Client:

Blagg Engineering

Project:

GCU 211/307 Pipeline Release

Sample ID MB-26858	Tes									
Client ID: PBS	Batc	h ID: 26	858	F	RunNo: 3	6367				
Prep Date: 8/9/2016	Analysis Date: 8/10/2016			8	SeqNo: 1	126698	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025			150					
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	-ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID LCS-26858	Samp	Type: LC	S	Tes						
Client ID: LCSS	Batc	h ID: 26	858	F	RunNo: 3					
Prep Date: 8/9/2016	Analysis Date: 8/10/2016				SeqNo: 1	126699	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.3	75.3	123			
Toluene	1.0	0.050	1.000	0	103	80	124			
Ethylbenzene	1.1	0.050	1.000	0	114	82.8	121			
Xylenes, Total	3.3	0.10	3.000	0	110	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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

Page 5 of 5

P Sample pH Not In Range

RL Reporting Detection Limit



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

Sample Log-In Check List

Website: www.hallenvironmental.com BLAGG Work Order Number: 1608497 RcptNo: 1 Client Name: Received by/date: Logged By: Ashley Gallegos 8/9/2016 8:00:00 AM 8/9/2016 9:41:33 AM Completed By: Ashley Gallegos Reviewed By: Chain of Custody Yes 🗌 No | Not Present 1 Custody seals intact on sample bottles? No 🗌 Yes 🖈 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA 🗌 No 🗌 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 🗌 6. Sample(s) in proper container(s)? Yes No T 7. Sufficient sample volume for indicated test(s)? No 🗌 8. Are samples (except VOA and ONG) properly preserved? Yes NA 🗌 No 🛷 Yes 9. Was preservative added to bottles? No 🗌 No VOA Vials 10. VOA vials have zero headspace? Yes Yes No 🐠 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗌 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🗌 14. Is it clear what analyses were requested? Checked by: No 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) NA 🖈 16. Was client notified of all discrepancies with this order? Yes No 🗌 Person Notified: Date By Whom: eMail Phone Fax In Person Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact | Seal No Seal Date Signed By 1.8 Good

Ch	nain-c	of-Cus	tody Record	Turn-Around	Time:	48 HR.		1 1	-1	HALL ENVIRONMENTAL										
ient:	BLAG	G ENGR.	/ BP AMERICA	Standard Rush ANALYSIS LA																
				Project Name			38			١	www.	halle	nviro	nme	enta	l.cor	n			
lailing A	ddress:	P.O. BO	X 87	1			4901 Hawkins NE - Albuquerque, NM 87109													
		BLOOM	FIELD, NM 87413	Project #:	W #211	#307		Te	1. 50	5-34	5-397	5	Fax	505	-345	-410	7			
hone #:		(505) 63	2-1199	PIPELI	WE REU	ense		-17				Ana	lysis	Re	ques	st	T			
mail or F	ax#:			Project Manag	ger:							T	7				300.1)			
A/QC Pa			Level 4 (Full Validation)		SON VE		(8021B)	s only)	/ MRO)		100	(c)	PO4,SO	2 PCB's			water - 30	α.	e	
ccredita	tion:			Sampler: N	ELZÓZ VE	こうこ	₩ 86	(Ga	ORO	÷.	17		102	808			/ W.		sample	
NELAF		□ Other			⊠/Yes	CARLO CONTRACTOR CONTRACTOR AND AND ADDRESS.	#	TP	0	418	504	200	000	es/		OA)	300.0 /		te sa	or N
EDD (ype)		A7	Sample Temp	erature: \.4	loc .	1	BE +	(GR	hod	hod	8 Metals	CL	icid	(A)	- <u>i</u> -	1 1	o e	posi	2 3
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX 1	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1)	EDB (Method 504.1)	RCRA 8 M	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil	Grab sample	pt. composite	Air Bubbles (Y or N)
18/16	1400	5011	3fc & Source	4021	Cool	-001	/		~			1	1				/		7	
											1	\pm								
							-			+	+	-	-							
			ALLAN ALLAN									1								口
											1	+								
							-				-	-	-							
											1	1								
18/16	Time: 1550	Relinquish	le J	Received by:	Walter	8/8/16/1550	Ren	narks		CORRE		ING V	ID & R	EFERE		WHE	N APP	TWITH LICABLE; hn Ritc	nie	ļ
ate: 8/14	Time: 1828	Relinquish	ed by:	Received by:	mm/ 08	Date Time 0800	WO!	eren	VID:	VH	IXON		VI	MOS	6HQF	FEC	VI	RITCJWI		