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 April 3, 2017

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

			Rele	ease Notifie	cation	and Co	orrective A	ction	1			
						OPERAT	FOR		🗌 Initia	al Report	■ F	Final Report
Name of Co	mpany BP	America Produc	tion Compar	ny		Contact Erin	Garifalos					
Facility Nan	ne GCU 155	t, Farmington, N	M 87401			Facility Typ	e: Natural Gas Wel	1				
Surface Our	nor Fadara			Minaral)umor. [Endoral			APINO	2004507260		
Surface Ow	ner: Federa	1		Mineral	Jwner: F	-ederal			AFINO	. 3004507269		
Unit Latter	Section	Tourship	Dongo	LOCA	ATION North/	N OF REI	EASE	East/	West Line	County		
N	23	28N	13W	990	Sou	ith	1,700	We	est	Sa	an	Juan
		1	Latitud	e 36.64344	Lo	ongitude1	08.19216	NAD	83			
				NAT	URE	OF RELI	EASE					
Type of Relea	ase: : none)				Volume of	Release: : unkno	own	Volume R	ecovered:: N	/A	
Source of Rel	ease: belo	w grade ta	nk - 95	bbl		Date and H	our of Occurrenc	e:	Date and n/a	Hour of Discov	very:	
Was Immedia	ate Notice (Given?	Yes 🗸	No 🗌 Not R	equired	If YES, To	Whom?					
By Whom?						Date and H	our					
Was a Watero	course Read	ched?	Ves V	No		If YES, Vo	lume Impacting t	the Wat	ercourse.			
If a Wataraau	rao was Im	nastad Dasar	he Fully *					0	IL CONS	. DIV DIST	3	
II a watercou	rse was Im	pacted, Descri	ibe rully."									
				\$ 7	Dal	Si	- BC=T	N.	DEC	2 2 2017		
Describe Cau	se of Proble	em and Reme	dial Action	n Taken.* Sampli	ng of the	beneath	the BGT was do	ne duri	ng removal.	Soil analysis r	esulte	d for BTEX
				and TP 5 feet t signific	H below below gro ant threa	BGT closure ound surface at to surface of	standards. Chlor with an estimated or groundwater. F	ride cor d depth ield rep	to groundw oorts and lab	were elevated ater of >100' th ooratory results	l but at ne leve s are at	t a depth of els pose no ttached.
Describe Area	a Affected	and Cleanup A	Action Tak	en.* No octio	n noo		inal laborat	0.00		lotorminor		
				remedia	l actio	n is requi	inal laborato	ory a	narysis c	letenninet		
				Torrioura	laotio	in lo roqu						
I hereby certi- regulations al public health should their o or the enviror federal, state,	fy that the i l operators or the envir perations h ment. In a or local law	information gi are required to ronment. The ave failed to a ddition, NMC ws and/or regu	ven above o report an acceptanc adequately OCD accep ilations.	is true and comp d/or file certain r e of a C-141 repo investigate and r tance of a C-141	lete to the elease no ort by the emediate report do	ne best of my otifications ar NMOCD ma contamination opes not relieve	knowledge and u ud perform correc arked as "Final Ro on that pose a thre e the operator of p	ndersta etive act eport" o eat to g respons	nd that purs tions for rele loes not reli round water ibility for co	uant to NMOC eases which ma eve the operato , surface water ompliance with	D rule ay enda or of lia , huma a any o	es and anger ability an health ther
L Signature:	rin g	orifalc	et-			Approved by	OIL CONS	SERV	ATION			
Printed Name	Erin G	Garifalos				ipproved by	Environmental P		2	25	\rightarrow	
Title: Field	l Enviro	onmenta	l Cool	rdinator		Approval Dat	12/26/1	2	Expiration I	Date:		
E-mail Addre	ss: erin.	garifalos	@bp.	com	(Conditions of	Approval:			Attached		
Date: Decem	iber 19, 20	017	Phone:	(832) 609-7048								

NVF173603516

RP	BLAGG ENGINEERING, INC.		API#: 3004507269
CLIENT:	P.O. BOX 87, BLOOMFIELD, NM 874	13	
	(505) 632-1199		(if applicble):
FIELD REPORT:	(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:		PAGE #: of
SITE INFORMATION	I: SITE NAME: GCU # 155		DATE STARTED: 10/25/17
QUAD/UNIT: N SEC: 23 TWP:	28N RNG: 13W PM: NM CNTY: SJ ST:	NM	DATE FINISHED
1/4 -1/4/EQOTAGE: 990'S / 1.70	D'W SE/SW LEASE TYPE: FEDERAL & STATE / FEE / I	NDIAN	
LEASE #: SF077966	PROD. FORMATION: DK CONTRACTOR: BP - S. BEEBE		SPECIALIST(S): NJV
REFERENCE POINT	WELL HEAD (W.H.) GPS COORD.: 36.64321 X 10	8.19232	GL ELEV.: 6,093'
1) 95 BGT (SW/DB) - A	GPS COORD.: 36.64344 X 108.19216	DISTANCE/BEA	RING FROM W.H.: 96', N30.5E
2)	GPS COORD.:	DISTANCE/BEA	RING FROM W.H.:
3)	GPS COORD.:	DISTANCE/BEA	RING FROM W.H.:
4)	GPS COORD.:	DISTANCE/BEA	RING FROM W.H.:
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL		OVM READING
1) SAMPLE ID: 5PC - TB @ 5' (05) - A SAMPLE DATE: 10/25/17 SAMPLE TIME: 0840 LAB ANALYS	sis: 801	5B/8021B/300.0 (Cl) 0.0
2) SAMPLE ID: GRAB @ 5' (9	5) - A SAMPLE DATE: 10/25/17 SAMPLE TIME: 0842 LAB ANALYS	sis: 801	5B/8021B/300.0 (Cl) 0.0
3) SAMPLE ID:	SAMPLE DATE: SAMPLE TIME: LAB ANALYS	SIS:	
4) SAMPLE ID: 5) SAMPLE ID:	SAMPLE DATE:	SIS:	
			· · · · · · · · · · · · · · · · · · ·
	SOIL TYPE: SAND <u>SILTY SAND</u> SILT <u>SILTY CLAY</u> CLAY GRAVEL OTHE RATE BROWN PLASTICITY (CLAYS): NON PLASTIC / SLIGHTI (COHESIVE) COHESIVE (LIGHLY COHESIVE)		OHESIVE MEDIUM PLASTIC / HIGHLY PLASTIC
CONSISTENCY (NON COHESIVE SOILS): LC	DOSE FIRM DENSE / VERY DENSE HC ODOR DETECTED: YES NO EXPLANA	TION -	
MOISTURE: DRY SLIGHTLY MOIST MOIST W			
	ANY AREAS DISPLAYING WETNESS: YES	NO EXPLAN	VATION
SITE OBSERVED. TES			
APPARENT EVIDENCE OF A RELEASE OBSERVE			
EQUIPMENT SET OVER RECLAIMED AREA:	YES NO EXPLANATION -		
OTHER: TANK ID: A CONSTRUCTED OF	STEEL. GAS WELL PLUGGED & ABANDONED (P&A). NMOCD OR	BLM NOT P	RESENT TO WITNESS CONFIRM -
EXCAVATION DIMENSION ESTIMATION	NA ft. X NA ft. X NA ft. EXCA	VATION EST	TIMATION (Cubic Yards) : NA
DEPTH TO GROUNDWATER: >100' N	EAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: <1,00	0' NMOC	D TPH CLOSURE STD: 1,000 ppm
SITE SKETCH	BGT Located : off on site PLOT PLAN circle: atta	ached OVM	CALIB READ = 100.0 ppm pr 4 co
L			CALIB GAS = 100 ppm RF = 1.00
		N TIME	9:00 (am)pm DATE: 10/25/17
	BERM		MISCELL NOTES
	FENCE (95)-A		MISCELL, NOTES
	PBGTL T.B.~5'		0: 430085830/
	$(x \hat{x} x)$ B.G.	A	100040007670
			1. # 745277
		P	ermit date(s): 06/14/10
			CD Appr. date(s): 05/10/11
		Tan	k OVM = Organic Vapor Meter
	7 TO	A	BGT Sidewalls Visible: Y /(N)
	P&A Y _ C	PD	BGT Sidewalls Visible: Y / N
NOTES: BGT = BELOW-GRADE TANK: E.D. = EXCAVATIO	N DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE: ~= APPROX.: W.H. = WEL	L HEAD;	BGT Sidewalls Visible: Y / N
T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL APPLICABLE OR NOT AVAILABLE; SW - SINGLI	OW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA- WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.	NOT	lagnetic declination: 10 ° E
NOTES: GOOGLE EARTH IMAGE	ERY DATE: 3/15/2015. ONSITE: 10/25/17		

Hall Environmental Analys	sis Labora	itory, Inc.			Date Reported: 10/31/2	017
CLIENT: Blagg Engineering Project: GCU 155	Matrice		Client Samp Collection	le ID: 5P Date: 10/	C-TB @ 5' (95)-A /25/2017 8:40:00 AM	
Lab ID: 1/10D/8-001	Matrix:	MEOR (SOIL)	Received	Date: 10/	20/2017 8.00.00 AM	
Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	MRA
Chloride	69	30	mg/Kg	20	10/26/2017 1:38:02 PM	34664
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	том
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	10/26/2017 11:21:16 A	M 34652
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/26/2017 11:21:16 A	M 34652
Surr: DNOP	105	70-130	%Rec	1	10/26/2017 11:21:16 A	M 34652
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	10/26/2017 11:06:06 A	M G46673
Surr: BFB	116	15-316	%Rec	1	10/26/2017 11:06:06 A	M G46673
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.019	mg/Kg	1	10/26/2017 11:06:06 A	M B46673
Toluene	ND	0.039	mg/Kg	1	10/26/2017 11:06:06 A	M B46673
Ethylbenzene	ND	0.039	mg/Kg	1	10/26/2017 11:06:06 A	M B46673
Xylenes, Total	ND	0.078	mg/Kg	1	10/26/2017 11:06:06 A	M B46673
Surr: 4-Bromofluorobenzene	116	80-120	%Rec	1	10/26/2017 11:06:06 A	M B46673

Analytical Report Lab Order 1710D76

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 6
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Anal	vtical	Re	port
FAIL61	yucar	1.0	DUIL

Lab Order 1710D77

Date Reported: 10/31/2017

Hall Environmental Analysis Laboratory, Inc.

· #

 CLIENT: Blagg Engineering
 Client Sample ID: Grab @ 5' (95)-A

 Project:
 GCU 155
 Collection Date: 10/25/2017 8:42:00 AM

 Lab ID:
 1710D77-001
 Matrix: MEOH (SOIL)
 Received Date: 10/26/2017 8:00:00 AM

1	Analyses	Result	PQL Qua	il Units	DF	Date Analyzed	Batch
	EPA METHOD 300.0: ANIONS					Analyst	MRA
	Chloride	450	30	mg/Kg	20	10/26/2017 2:27:42 PM	34664
	EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	6			Analyst	TOM
	Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/26/2017 11:03:39 AM	1 34652
	Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/26/2017 11:03:39 AM	1 34652
	Surr: DNOP	82.7	70-130	%Rec	1	10/26/2017 11:03:39 AM	1 34652
	EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
	Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/26/2017 11:53:28 AM	A G46673
	Surr: BFB	114	15-316	%Rec	1	10/26/2017 11:53:28 AM	I G46673
	EPA METHOD 8021B: VOLATILES					Analyst	NSB
	Benzene	ND	0.023	mg/Kg	1	10/26/2017 11:53:28 AM	1 B46673
	Toluene	ND	0.046	mg/Kg	1	10/26/2017 11:53:28 AM	1 B46673
	Ethylbenzene	ND	0.046	mg/Kg	1	10/26/2017 11:53:28 AM	1 B46673
	Xylenes, Total	ND	0.091	mg/Kg	1	10/26/2017 11:53:28 AM	1 B46673
	Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	10/26/2017 11:53:28 AM	1 B46673

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 5
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client:	BLAG	G ENGR.	/ BP AMERICA	Standard Project Name	Rush_	DAY				AI	ALL NAI	- E -Y	SI:	5 L	Al	BO		TO	IL RY	í
Mailing An	ddress:	P.O. 80	(87		GCU #15	5		49	01 Ha	awkin	NE	- Al	buqu	ierqi	ue, M		\$7109	-		
		BLOOM	FIELD, NM 87413	Project #:	Contraction of the second		-	Те	1. 50	5-345	3975		Fax	505	-345	-410	37			
Phone #:	2	(505) 63	2-1199									Ana	lysis	Ree	ques	st				
email or F	ax#:			Project Manag	ger.		1	-	15				-			1.1	1)		1	Ŷ.
AVQC Pad	ckage: ard		Level 4 (Full Validation)		NELSON VE	LEZ	0218)	(kjuo	(ONRO)		(5)		04,50	PCB's			er - 300.		a	
Accreditat	tion:			Sampler:	NELSON VE	LEZ 97 Y	5 (8)	Gas	02		NIS!		02,F	3082			/ wat		hpf	
	2	D Other		On Ice:	X Yes	D No		HAL	0/0	418.	3270	1	N ⁴⁶ O	2/5		(A)	0.00		e 53	1
EDD (7	Type)			Sample Temp	erature: 312 7	0-9=3-4	II	+ 3	GRC	poi	or	stals	CI,N	cide	(A)	DV-1	11-3(e	osit	202
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX +MH	BTEX + MTB	TPH 80158	TPH (Meth	PAH (8310	RCRA 8 M	Anions (F,0	8081 Pest	8260B (VO	8270 (Sem	Chloride (so	Grab samp	5 pt. comp	Air Bubblac
10/2/17	0840	SOIL	5PC-TB@ 5 '(95)-A	4 02 1	Cool	- 001	۷		۷			2					٧		۷	
1/2/17	-0=0	SOIL	EDE TO - 1/051 0	100.2	Cool	-002	¥	1	*								+	-	+	
							-													
		2		1	· · · · · · ·					-							r market a			
-															1					
and the second se			•		1													-	-	
Date: 0/25/17 Date: 0/2-1-	Time:	Relinquish	g by:	Received by	Ja – n	Date Time /0/25/07/1807 Date Time	Rem	arks	1	LEASE	INFORI	MATIC	DN SH	DULD	BEFO	DRWA	RDED	ROM BF	IFING	л.

-

Inunter

Client:	BLAG	g Engr.	/ BP AMERICA	Standard Project Name	Rush_	DAY					IAL	Y:	SIS	5 L	AI	BO	RA	TO	RY
Mailing A	ddress:	P.O. 80	X 87		GCU #15	5		490)1 Ha	wkins	NE -	All	uqu	erq	ue, N	IM 8	7109		
		BLOOM	FIELD, NM 87413	Project #:				Te	. 505	-345-	3975	5	Fax	505	-345	-410	17		
Phone #:	1	(505) 63	2-1199								ļ	Anal	ysis	Rec	ques	:t			
email or F	Fax#:		and the second	Project Manag	jer:								-	1			1		
AVQC Pa	ckage: ard		Level 4 (Full Validation)		NELSON VE	ELEZ	1218)	(Nuo	MRO)		5)		04,50	PCB's			er 300.		
Accreditat	tion:	-		Sampler:	NELSON VE	ELEZ NUT	-8	Gas	10%		SIM		02,6	3082			wat		mple
	>	D Other		On lice:	XYes	D No		Hau	0/0	504.	3270		Oa,N	5/5	- 1	(M)	0.00		e sa
	Type)	1		Sample Temp	erature: 32	+0.2=5.4		+ =	GRC	pol	lo	etals	CI'NI	cide	(M)	1-VC	11-30	le	osit
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + THE	STEX + MITE	PH 80158	EDB (Meth	PAH (8310	RCRA 8 M	Anions (F,	3081 Pesti	3260B (VO	3270 (Sem	Chloride (so	Srab samp	# pt. comp
10/25/17	0842	5014	GRAB @ 5 (95)-A	402 1	COOL	-001	1		1		1	-	1	~	~	w	V	V	
					1			-	1	1				1					1
							1			-	-					-			-
		-			1					1						-			
					1			-	4	-									
					1	· ·		. 9	-	_	_							_	
		-							-	-		-		_				_	-
-		-							_				-	_	-			_	-
						1	-	_	-	-			-		-		-	-	-
					1	1	-		-	-		-		-		-		-	-
		e					- 11			-	-		1		1		-		-
Date:	Time:	Relinquishe	ed by:	Received by:	U	Date Time	Rem	arks	ß	LUNGI	NFORM	MATIC	IN SH	OULD	BEFO	RWA	RDED F	OM BP	IF M
10/25/17	1807	90	la f	Mh4	Jon 14	125/ 1807			P	EASE	ONTAG	CT SAI	RE	REB	E		all a second	- 91	-
12510	1952	Ahh	t 1 Mala	Received by	1013	Date Time								97	1				

-

Client: Blagg Engineering Project: GCU 155

Sample ID MB-34664	SampType: mblk	Те	stCode: EPA Method	300.0: Anions		
Client ID: PBS	Batch ID: 34664		RunNo: 46677			
Prep Date: 10/26/2017	Analysis Date: 10/26	/2017	SeqNo: 1488010	Units: mg/Kg		
Analyte	Result PQL SF	PK value SPK Ref Va	I %REC LowLimit	HighLimit %	6RPD RPDLi	mit Qual
Chloride	ND 1.5					
Sample ID LCS-34664	SampType: Ics	Те	stCode: EPA Method	300.0: Anions		
Sample ID LCS-34664 Client ID: LCSS	SampType: Ics Batch ID: 34664	Te	stCode: EPA Method RunNo: 46677	300.0: Anions		
Sample ID LCS-34664 Client ID: LCSS Prep Date: 10/26/2017	SampType: Ics Batch ID: 34664 Analysis Date: 10/26/	Te	stCode: EPA Method RunNo: 46677 SeqNo: 1488011	300.0: Anions Units: mg/Kg		
Sample ID LCS-34664 Client ID: LCSS Prep Date: 10/26/2017 Analyte	SampType: Ics Batch ID: 34664 Analysis Date: 10/26 Result PQL SP	Te // 2017 PK value SPK Ref Va	stCode: EPA Method RunNo: 46677 SeqNo: 1488011 I %REC LowLimit	300.0: Anions Units: mg/Kg HighLimit 9	6RPD RPDLii	mit Qual

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
- PQL Practical Quanitative Limit
- 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

WO#: 1710D76 31-Oct-17

Page

- Page 3 of 6

Client: Blagg Engineering Project: GCU 155

Sample ID LCS-34652	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch	1D: 34	652	F	RunNo: 4	6661				
Prep Date: 10/26/2017	Analysis D	ate: 10	0/26/2017	S	SeqNo: 1	486701	Units: mg/h	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.7	73.2	114			
Surr: DNOP	3.8		5.000		76.8	70	130			
Sample ID MB-34652	SamnT	VDe ME	RI K	Tes	Code: El	PA Method	8015M/D · Di	esel Rang	e Organics	
Sample ID MB-34652	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID MB-34652 Client ID: PBS	SampT Batch	ype: ME	3LK 652	Tes F	tCode: El RunNo: 4	PA Method 6661	8015M/D: Di	esel Rang	e Organics	
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017	SampT Batch Analysis D	ype: ME 1D: 340 ate: 10	3LK 652 0/26/2017	Tes F S	tCode: El RunNo: 4 SeqNo: 1	PA Method 6661 486702	8015M/D: Di Units: mg/H	esel Rang (g	e Organics	
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017 Analyte	SampT Batch Analysis D Result	ype: ME 1 ID: 340 ate: 10 PQL	BLK 652 0/26/2017 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 4 SeqNo: 1 %REC	PA Method 6661 486702 LowLimit	8015M/D: Di Units: mg/H HighLimit	esel Rang (g %RPD	e Organics RPDLimit	Qual
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017 Analyte Diesel Range Organics (DRO)	SampT Batch Analysis D Result ND	ype: ME 1D: 34 pate: 10 PQL 10	3LK 652 0/26/2017 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 4 SeqNo: 1 %REC	PA Method 6661 486702 LowLimit	8015M/D: Di Units: mg/F HighLimit	esel Rang (g %RPD	e Organics RPDLimit	Qual
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	SampT Batch Analysis D Result ND ND	ype: ME 1D: 340 Pate: 10 PQL 10 50	3LK 652 0/26/2017 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 4 SeqNo: 1 %REC	PA Method 6661 486702 LowLimit	8015M/D: Di Units: mg/F HighLimit	esel Rang (g %RPD	e Organics RPDLimit	Qual

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
- PQL Practical Quanitative Limit
- 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

Page 4 of 6

WO#: 1710D76 31-Oct-17

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 155

Sample ID RB	Samp	Type: MI	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: PBS	Batc	h ID: G4	46673	F	RunNo: 4	6673				
Prep Date:	Analysis I	Date: 1	0/26/2017	S	SeqNo: 1	487403	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1200		1000		116	15	316			
Sample ID 2.5UG GRO LCS	Samp	Type: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batc	h ID: G4	46673	F	RunNo: 4	6673				
Prep Date:	Analysis [Date: 10	0/26/2017	S	SeqNo: 1	487405	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	75.0	131			
Odsonne Range Organios (ORO)	20	5.0	20.00	0	105	10.9	131			

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
- PQL Practical Quanitative Limit
- 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

WO#: 1710D76 31-Oct-17

Page 5 of 6

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 155

Sample ID RB	Samp	Type: ME	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B46673			RunNo: 46673						
Prep Date:	Analysis Date: 10/26/2017			SeqNo: 1487457 Units: mg/Kg				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	1.1		1.000		110	80	120			
Sample ID 100NG BTEX LCS	Samp	Type: LC	S	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: B4	6673	RunNo: 46673						
Prep Date:	Analysis [Date: 10	0/26/2017	S	SeqNo: 1	487459	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.4	77.3	128			
Toluene	0.97	0.050	1.000	0	96.7	79.2	125			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	100	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	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
- PQL Practical Quanitative Limit
- 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

WO#: 1710D76 31-Oct-17

Page 6 of 6

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albi TEL: 505-345-3975 Website: www.ha	Analysis Laboratory 4901 Hawkins NE Iquerque, NM 87109 FAX: 505-345-4107 Ilenvironmental.com	Sam	ple Log-In Check List
Client Name: BLAGG	Work Order Number:	1710D76		RcptNo: 1
Received By: Richie Eriacho	10/26/2017 8:00:00 AM	A (2-2	
Completed By: Ashley Gallegos Reviewed By:	10/26/2017 9:02:39 AM 10/26/17	1 7	€J	
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 temperatur	e of >0° C to 6.0°C	Yes 🗹	No 🗌	
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) prope	rly 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 brok	en?	Yes	No 🗹	# of preserved
12. Does paperwork match bottle labels?		Yes 🗹	No 🗌	bottles checked for pH:
(Note discrepancies on chain of custody)	f Custodu?	Voc V	No 🗌	Adjusted?
14 Is it clear what analyses were requested?	Custody	Yes 🔽		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗌	Checked by:
Special Handling (if applicable)				
16. Was client notified of all discrepancies with	this order?	Yes	No 🗌	NA 🗹
Person Notified:	Date		E.M. & A.M. M. MANY	
By Whom:	Via: [eMail Phone	e 🗌 Fax	In Person
Regarding:	Second Street and the strength lightly the street. All the street	and have a local second se	an a the stand of the	NA CALIFORNIA SUB-LANCES AND A LANCES AND AN AND A LANCES AND AN AND A LANCES AND A LANCES AND A LANCES AND A L
Client Instructions:	998-999-98-6799-1007-2009-449-699-697-698-698-698-6999-			CRI A - A - A - A - A - A - A - A - A - A
17. Additional remarks:				
18. <u>Cooler Information</u> <u>Cooler No</u> Temp °C Condition S 1 3.4 Good Ye	eal Intact Seal No 3 s	Seal Date Sig	ned By	
Page 1 of 1				te (* 1971), strantak itteratura interation (* 1971), strantak

WO#: 1710D77

Hall Environmenta	l Analysis	Labora	tory,	Inc
-------------------	------------	--------	-------	-----

Client: Blagg Engineering Project: GCU 155

Sample ID MB-34664	SampType: mblk	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 34664	RunNo: 46677		
Prep Date: 10/26/2017	Analysis Date: 10/26/2017	SeqNo: 1488010	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-34664	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-34664 Client ID: LCSS	SampType: Ics Batch ID: 34664	TestCode: EPA Method RunNo: 46677	300.0: Anions	
Sample ID LCS-34664 Client ID: LCSS Prep Date: 10/26/2017	SampType: Ics Batch ID: 34664 Analysis Date: 10/26/2017	TestCode: EPA Method RunNo: 46677 SeqNo: 1488011	300.0: Anions Units: mg/Kg	
Sample ID LCS-34664 Client ID: LCSS Prep Date: 10/26/2017 Analyte	SampType: Ics Batch ID: 34664 Analysis Date: 10/26/2017 Result PQL SPK value	TestCode: EPA Method RunNo: 46677 SeqNo: 1488011 SPK Ref Val %REC LowLimit	300.0: Anions Units: mg/Kg HighLimit %RPD	RPDLimit Qual

Qualifiers:

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

Page 2 of 5

31-Oct-17

Client: Blagg Engineering Project: GCU 155

Sample ID LCS-34652	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 34652			RunNo: 46661						
Prep Date: 10/26/2017	Analysis D	ate: 10)/26/2017	S	SeqNo: 1	486701	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.7	73.2	114			
Surr: DNOP	3.8		5.000		76.8	70	130			
Sample ID MB-34652	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID MB-34652 Client ID: PBS	SampT Batch	ype: ME	3LK 652	Tes	tCode: E RunNo: 4	PA Method 6661	8015M/D: Di	esel Rang	e Organics	
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017	SampTy Batch Analysis D	ype: ME ID: 340 ate: 10	3LK 652 0/26/2017	Tesi R S	tCode: E RunNo: 4 SeqNo: 1	PA Method 6661 486702	8015M/D: Di Units: mg/H	ese <mark>l R</mark> ange (g	e Organics	
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017 Analyte	SampTy Batch Analysis Da Result	ype: ME ID: 340 ate: 10 PQL	BLK 652 0/26/2017 SPK value	Tes R S SPK Ref Val	tCode: E RunNo: 4 SeqNo: 1 %REC	PA Method 6661 486702 LowLimit	8015M/D: Di Units: mg/H HighLimit	esel Rang (g %RPD	e Organics RPDLimit	Qual
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017 Analyte Diesel Range Organics (DRO)	SampT Batch Analysis D Result ND	ype: ME 1D: 340 ate: 10 PQL 10	BLK 652 0/26/2017 SPK value	Tes R S SPK Ref Val	tCode: E RunNo: 4 SeqNo: 1 %REC	PA Method 6661 486702 LowLimit	8015M/D: Di Units: mg/F HighLimit	esel Rango (g %RPD	e Organics RPDLimit	Qual
Sample ID MB-34652 Client ID: PBS Prep Date: 10/26/2017 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	SampT Batch Analysis D Result ND ND	ype: ME 1D: 340 ate: 10 PQL 10 50	BLK 652 0/26/2017 SPK value	Tes R S SPK Ref Val	tCode: E RunNo: 4 SeqNo: 1 %REC	PA Method 6661 486702 LowLimit	8015M/D: Di Units: mg/F HighLimit	esel Rang (g %RPD	e Organics RPDLimit	Qual

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
- PQL Practical Quanitative Limit
- 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

WO#: 1710D77 31-Oct-17

Page 3 of 5

WO#: 1710D77

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 155

Sample ID RB	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					e	
Client ID: PBS	Batch ID: G46673			RunNo: 46673						
Prep Date:	Analysis [Date: 10)/26/2017	S	SeqNo: 1	487403	Units: mg/M	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1200		1000		116	15	316			
	1200		1000		110		0.0			
Sample ID 2.5UG GRO LCS	Samp	Type: LC	s	Tes	tCode: El	PA Method	8015D: Gase	line Rang	9	
Sample ID 2.5UG GRO LCS Client ID: LCSS	Samp [*] Batc	Type: LC h ID: G4	S 6673	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	9	
Sample ID 2.5UG GRO LCS Client ID: LCSS Prep Date:	Samp Batc Analysis [Type: LC h ID: G4 Date: 10	S 66673	Tes F S	tCode: El RunNo: 4 SeqNo: 1	PA Method 6673 487405	8015D: Gaso Units: mg/K	oline Rang	9	
Sample ID 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte	Samp ⁻ Batc Analysis [Result	Type: LC h ID: G4 Date: 10 PQL	500 56673 50/26/2017 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 4 SeqNo: 1 %REC	PA Method 6673 487405 LowLimit	8015D: Gasc Units: mg/K HighLimit	oline Rang Sg %RPD	e RPDLimit	Qual
Sample ID 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO)	Samp Batc Analysis I Result 26	Type: LC h ID: G4 Date: 10 PQL 5.0	500 55 56673 57 57 57 57 57 57 57 57 57 57 57 57 57	Tes F S SPK Ref Val 0	tCode: El RunNo: 4 SeqNo: 1 %REC 105	PA Method 6673 487405 LowLimit 75.9	8015D: Gaso Units: mg/k HighLimit 131	oline Rang Sg %RPD	e RPDLimit	Qual

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
- PQL Practical Quanitative Limit
- 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

Page 4 of 5

31-Oct-17

Client: Blagg Engineering Project: GCU 155

Sample ID RB	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B46673			F	RunNo: 46673					
Prep Date:	Analysis [Date: 10	0/26/2017	S	SeqNo: 1	487457	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	1.1		1.000		110	80	120			
Sample ID 100NG BTEX LC	S Samp	Type: LC	S	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Sample ID 100NG BTEX LC3 Client ID: LCSS	S Samp Batc	Type: LC	S 6673	Tes	tCode: El RunNo: 4	PA Method 6673	8021B: Vola	tiles		
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date:	S Samp Batc Analysis [Type: LC h ID: B4 Date: 1(S 6673 0/26/2017	Tes F S	tCode: E RunNo: 4 SeqNo: 1	PA Method 6673 487459	8021B: Volat	tiles		
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date: Analyte	S Samp Batc Analysis [Result	Type: LC h ID: B4 Date: 10 PQL	S 6673 0/26/2017 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 4 SeqNo: 1 %REC	PA Method 6673 487459 LowLimit	8021B: Volat Units: mg/K HighLimit	tiles Kg %RPD	RPDLimit	Qual
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date: Analyte Benzene	S Samp Batc Analysis I Result 0.97	Type: LC h ID: B4 Date: 10 PQL 0.025	S 6673 0/26/2017 SPK value 1.000	Tes F S SPK Ref Val 0	tCode: El RunNo: 4 SeqNo: 1 %REC 97.4	PA Method 6673 487459 LowLimit 77.3	8021B: Volat Units: mg/K HighLimit 128	tiles (g %RPD	RPDLimit	Qual
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date: Analyte Benzene Toluene	S Samp Batc Analysis [Result 0.97 0.97	Type: LC h ID: B4 Date: 10 PQL 0.025 0.050	S 6673 0/26/2017 SPK value 1.000 1.000	Tes F S SPK Ref Val 0 0	tCode: E RunNo: 4 SeqNo: 1 %REC 97.4 96.7	PA Method 6673 487459 LowLimit 77.3 79.2	8021B: Volat Units: mg/K HighLimit 128 125	tiles (g %RPD	RPDLimit	Qual
Sample ID 100NG BTEX LC3 Client ID: LCSS Prep Date: Analyte Benzene Toluene Ethylbenzene	S Samp Batc Analysis I Result 0.97 0.97 0.97	Type: LC h ID: B4 Date: 10 PQL 0.025 0.050 0.050	S 6673 0/26/2017 SPK value 1.000 1.000 1.000	Tes F S SPK Ref Val 0 0 0	tCode: El RunNo: 4 GeqNo: 1 %REC 97.4 96.7 96.9	PA Method 6673 487459 LowLimit 77.3 79.2 80.7	8021B: Volat Units: mg/K HighLimit 128 125 127	tiles Sg %RPD	RPDLimit	Qual
Sample ID 100NG BTEX LC3 Client ID: LCSS Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	S Samp ⁻ Batc Analysis [<u>Result</u> 0.97 0.97 0.97 3.0	Type: LC h ID: B4 Date: 10 PQL 0.025 0.050 0.050 0.10	S 6673 0/26/2017 SPK value 1.000 1.000 1.000 3.000	Tes F SPK Ref Val 0 0 0 0 0	tCode: El RunNo: 4 SeqNo: 1 %REC 97.4 96.7 96.9 100	PA Method 6673 487459 LowLimit 77.3 79.2 80.7 81.6	8021B: Volat Units: mg/K HighLimit 128 125 127 129	tiles (g %RPD	RPDLimit	Qual

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
- PQL Practical Quanitative Limit
- 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

WO#: 1710D77 31-Oct-17

Page 5 of 5

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Holl Environmental Analysis Laboratory 3901 Nawkins NE Albuquerque, NM 57109 7EU: 505-345-3973 FAX- 305-345-4107 Wabate www.hallenvironmental.com			Sample Log-In Check List			
Client Name: BLAGG	Work Order Number:	1710D77		ReptNe: 1			
Received By Richie Erlacho	10/26/2017 8:00:00 AM		and i				
Completed By: Ashley Gallegos Reviewed By:	10/26/2017 9:07:09 AM [0[26]] 7		AJ				
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 altempt 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 🗌			
 Sample(s) in proper container(s)? 		Yes	No 🗔				
7 Sufficient sample volume for indicated test(s)	2	Yes 🗹	No 🗌				
8 Are samples (except VOA and DNG) propert	y preserved?	Yes 🗹	No 🗌				
9. Was preservetive added to bottles?		Yes	No 🗹	NA 🗌			
10.VCA vials have zero headspace?		Yes	No 🗌	No VOA Vials 🗹			
1, Were any sample containers received troke	n?	Yes 🗍	No 🗹	# of preserved	- mangada bahanda		
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗆	(<2 or >	12 unless noted		
3. Are matrices correctly identified on Chain of	Custody?	Yes M	No 🗌	Adjusted?			
14, is it clear what analyses were requested*		Yes 🗹	No [
 Were all holding times able to be met? (If no, notify customer for authorization.) 		Yes 🗹	No	Checked by			
Special Handling (if applicable)							
16. Was client notified of all discrepancies with the	his order?	Yes	No 🗍	NA M			
Person Notified:	Date						
By Whom:	Via:	eMail 🔲 Ph	one 🔲 Fa>	In Person			
Regarding:							
Client Instructions:							
17. Additional remarks:							
18. Cooler Information Cooler No Temp C Condition Se 1 3.4 Good Yes	al Intect Seal No S	eal Dale S	agried By				
and the second sec							

