•	OIL CONS. DIV DIST. 3									
District I Statt 1625 N. French Dr., Hobbs, NM 88240 Energy Mine District II Energy Mine 811 S. First St., Artesia, NM 88210 Oil Co District III Oil Co 1000 Rio Brazos Road, Aztec, NM 87410 1220 S 1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa	e of New Mexico rals and Natural Resources JUL nservation Division Su outh St. Francis Dr. ta Fe, NM 87505	0 6 2015 Form C-141 Revised August 8, 2011 bmit 1 Copy to appropriate District Office in accordance with 19,15,29 NMAC.								
Release Notifica	tion and Corrective Actio	n								
	OPERATOR	🛛 Initial Report 🖾 Final Report								
Address PO Box 640	Telephone No. (970) 623-8934									
Facility Name Chaco 225H	Facility Type Well Site									
Surface Owner State Mineral Ow	ner State	API No. 30-43-21149								
	TON OF DELEASE	7/11/10.00 15 21117								
Unit Letter Section Township Range Feet from the	North/South Line Feet from the East	/West Line County								
H 02 22N 6W 1666 1	North 278 East	Sandoval								
Latitude 36.10	9769 Longitude -107.429888									
NATU	RE OF RELEASE									
Type of Release Produced Water	Volume of Release 200 BBLS	Volume Recovered 200 BBLS								
source of Refease: A drain valve was left open on a tank after produced water tank was unloaded	6-21-15 unknown time	Date and Hour of Discovery 6-21-15 12:00								
Was Immediate Notice Given?	If YES, To Whom? Cory Smith, NMOCD									
By Whom? Kent Rider	Date and Hour 6-22-15 at 15:00									
Was a Watercourse Reached?	If YES, Volume Impacting the Wa N/A	tercourse.								
If a Watercourse was Impacted, Describe Fully.*										
Describe Cause of Problem and Remedial Action Taken.* A drain	valve was left open, allowing a 200 bbl pro	oduced water release into secondary								
containment. Containment liner tailure allowed 1-2 bbls to leak out Describe Area Affected and Cleanup Action Taken *	onto pad surface adjacent to secondary con	itainment.								
 198 bbls of produced water was pulled from the secondary 	containment using a vac truck									
 Integrity inspection of the containment liner was conducte Soil impacted by this spill outside of the liner was as 	d, and liner was repaired where water leake	ed through								
 The excavated area was sampled for BTEX, TPH, at 	d Chlorides									
Analytical report (attached) indicates that no further	remediation is necessary									
I hereby certify that the information given above is true and complet regulations all operators are required to report and/or file certain rele public health or the environment. The acceptance of a C-141 report should their operations have failed to adequately investigate and rem or the environment. In addition, NMOCD acceptance of a C-141 rep federal, state, or local laws and/or regulations.	e to the best of my knowledge and underst- ase notifications and perform corrective ac by the NMOCD marked as "Final Report" ediate contamination that pose a threat to a port does not relieve the operator of respon	and that pursuant to NMOCD rules and etions for releases which may endanger does not relieve the operator of liability ground water, surface water, human health sibility for compliance with any other								
Signature: Hold	OIL CONSER'	VATION DIVISION								
Printed Name: Kent Rider	Approved by Environmental Speciali	st: Comeda								
Title: Environmental Specialist	Approval Date: 8/12/15 Expiration Date:									
E-mail Address: Kent.Rider@wpxenergy.com	Conditions of Approval:	Attached								
Date: 7/2/2015 Phone: (970) 623-8934										
Allach Additional Sheets II Necessary #WCS,	517348622									



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

June 30, 2015

Deborah Watson Rule Engineering LLC 501 Airport Dr., Ste 205 Farmington, NM 87401 TEL: (505) 860-2712 FAX

RE: Chaco 2206 2H 225H

OrderNo.: 1506B20

Dear Deborah Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/24/2015 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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1506B20 Date Reported: 6/30/2015

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT: Rule Engineering LLC
 Client Sample ID: SC-1

 Project:
 Chaco 2206 2H 225H
 Collection Date: 6/23/2015 1:15:00 PM

 Lab ID:
 1506B20-001
 Matrix: SOIL
 Received Date: 6/24/2015 7:20:00 AM

 Analyses
 Result
 RL Qual Units
 DF Date Analyzed

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	760	30	mg/Kg	20	6/29/2015 7:07:09 PM	19993
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst:	KJH
Diesel Range Organics (DRO)	49	9.6	mg/Kg	1	6/29/2015 1:04:34 PM	19961
Surr: DNOP	91.7	57.9-140	%REC	1	6/29/2015 1:04:34 PM	19961
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/26/2015 3:34:20 PM	19911
Surr: BFB	88.6	75.4-113	%REC	1	6/26/2015 3:34:20 PM	19911
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	6/26/2015 3:34:20 PM	19911
Toluene	ND	0.050	mg/Kg	1	6/26/2015 3:34:20 PM	19911
Ethylbenzene	ND	0.050	mg/Kg	1	6/26/2015 3:34:20 PM	19911
Xylenes, Total	ND	0.099	mg/Kg	1	6/26/2015 3:34:20 PM	19911
Surr: 4-Bromofluorobenzene	90.5	80-120	%REC	1	6/26/2015 3:34:20 PM	19911

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 Metho	od Blank
	E	Value above quantitation range	Η	Holding times for preparation or analysis	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 1 of 5
	0	RSD is greater than RSDlimit	Р	Sample pH Not In Range	1 450 1 01 5
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

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Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Rule I Chaco	Engineering Ll 2206 2H 225	LC H								
Sample ID	MB-19993	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 19	993							
Prep Date:	6/29/2015	Units: mg/K	g								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-19993	SampT	ype: LC	s	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 19	993	F	RunNo: 2	7184				
Prep Date:	6/29/2015	Analysis Da	ate: 6/	29/2015	S	13717	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.7	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits J
- RSD is greater than RSDlimit 0
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank В
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Sample pH Not In Range Р
- RL Reporting Detection Limit

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WO#: 1506B20 30-Jun-15

QC SUMMARY REPORT

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WO#:	15061	320

30-Jun-15

Hall Environmental Analysis Laboratory, Inc.

Client:	Rule E	Engineering L	LC											
Project:	Chaco	2206 2H 225	5H											
Sample ID	MB-19961	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics				
Client ID:	PBS	Batch	n ID: 19	961	F	RunNo: 27167								
Prep Date:	6/26/2015	Analysis D	ate: 6/	29/2015	5	SeqNo: 8	13096	Units: mg/k	(g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range (Organics (DRO)	ND	10											
Surr: DNOP		37		10.00		371	57.9	140			S			
Sample ID	LCS-19961	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics				
Client ID:	LCSS	Batch	n ID: 19	961	F	RunNo: 2	7167							
Prep Date:	6/26/2015	Analysis D	ate: 6/	29/2015	S	SeqNo: 8	13097	Units: mg/M	g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range C	Organics (DRO)	45	10	50.00	0	90.7	57.4	139						
Surr: DNOP		4.2		5.000		83.9	57.9	140						

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 3 of 5

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Rule Engineering LLC

Project:	Chaco 22	06 2H 22	5H								
Sample ID	MB-19911	SampT	Гуре: МІ	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batcl	h ID: 19	911	F	RunNo: 2	7129				
Prep Date:	6/24/2015	Analysis E	Date: 6	/26/2015	5	SeqNo: 8	11396	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	5.0								
Surr: BFB		850		1000		85.0	75.4	113			
Sample ID	LCS-19911	Sampl	Type: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS Batch ID: 19911				F	RunNo: 2	7129					
Prep Date:	6/24/2015	Analysis D	nalysis Date: 6/26/2015			SeqNo: 8	11397	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	26	5.0	25.00	0	104	64	130			
Surr: BFB		890		1000		89.4	75.4	113			
Sample ID	1506B20-001AMS	SampT	уре: М	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	SC-1	Batch	h ID: 19	911	F	RunNo: 2	7129				
Prep Date:	6/24/2015	Analysis D	Date: 6	26/2015	5	SeqNo: 8	11400	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	24	4.9	24.65	0	96.7	47.9	144			
Surr: BFB		960		986.2		97.3	75.4	113			
Sample ID	1506B20-001AMS	D Samp1	уре: М	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	SC-1	Batch	h ID: 19	911	RunNo: 27129						
Prep Date:	6/24/2015	Analysis D	Date: 6/	26/2015	5	SeqNo: 8	11401	Units: mg/K	g		

Prep Date: RPDLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual Gasoline Range Organics (GRO) 29 5.0 0 116 47.9 29.9 25.00 144 19.3 Surr: BFB 980 1000 98.2 75.4 113 0 0

Qualifiers:

Client:

- * Value exceeds Maximum Contaminant Level.
- Value above quantitation range E
- Analyte detected below quantitation limits J
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- Р Sample pH Not In Range
- RL Reporting Detection Limit

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1506B20

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Rule Eng	gineering L	LC								
Project:	Chaco 22	206 2H 22:	5H								
Sample ID	MB-19911	SampT	Type: ME	3LK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batc	h ID: 19	911	F	RunNo: 2					
Prep Date:	6/24/2015	Analysis E	Date: 6/	26/2015	5	SeqNo: 8	11428	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	0.88		1.000		87.5	80	120			
Sample ID	LCS-19911	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batcl	h ID: 19	911	F	RunNo: 2	7129				
Prep Date:	6/24/2015	Analysis E	Date: 6/	26/2015	5	SeqNo: 8	11429	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.050	1.000	0	104	76.6	128			
Toluene		1.0	0.050	1.000	0	104	75	124			
Ethylbenzene		1.1	0.050	1.000	0	107	79.5	126			
Xylenes, Total		3.2	0.10	3.000	0	106	78.8	124			

90.3

80

120

Qualifiers:

Surr: 4-Bromofluorobenzene

0.90

1.000

- * Value exceeds Maximum Contaminant Level.
- Value above quantitation range Е
- Analyte detected below quantitation limits J
- RSD is greater than RSDlimit 0
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- Р Sample pH Not In Range
- RL Reporting Detection Limit

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30-Jun-15

1506B20

WO#:

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	HALL ENVIRONMENTAL ANALYSIS LABORATORY

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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: RULE ENGINEERING LL Work Order Number	er: 1506B20		RcptNo: 1
Received by/date:A506/24/15			
Logged By: Anne Thorne 6/24/2015 7:20:00 Al	N	anne Hum	-
Completed By: Anne Thorne 6/24/2015		Dan M.	_
Reviewed By:		and sim	-
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 $>0^{\circ}$ 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 🗹	# of preserved
12. Does paperwork match bottle labels?	Yes 🔽	No 🗆	for pH: (<2 or >12 unless noted
13 Are matrices correctly identified on Chain of Custody?	Yes 🔽	No 🗌	Adjusted?
14. Is it clear what analyses were requested?	Yes 🗹	No 🗌	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗌	Checked by:
Operated 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. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact Seal No	Seal Date	Signed By	
1 1.0 Good Yes			·

Page 1 of 1

Ch	Chain-of-Custody Record		Turn-Around	Time:									0.010	ACDI	TAI	r.						
Client:	Rule E	ngineer	ing, LLC	XStandard	C Rush	::				AN	ALY	SIS	5 LA	BO	RAT	'OR	Y					
				Project Name	B:					W	ww ha	llenv	ironn	nental	com							
Mailing Add	iress:	501 Air	nort Drive Suite 205	Chaco 220	6 2H 225H			10	<u>01 н</u>	aukin	e NE	- Alb	uqua	roue	NIM 97	100						
	Formir	oton M	ow Movice 97401	Project #:				Tel 505-345-3975 Eav 505-345-4107														
Dhono H.	Farmi	505 86	0.2712	-				Analysis Request														
ompil or En	~#·	505-60	0-2712	Project Mans	ner:																	
	A#7.			Deborah W	latson																	
X Standar	d		Level 4 (Full Validation)	Debolari	atson																	
Accreditatio	n.			Sampler	D. Watson			SO)														
	/	Other		On Ice:	Yes	D No		0/0									or N					
EDD (Ty	pe)			Sample Tem	perature: /	0		DR	ides								2					
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	8021 BTEX	TPH 8015 (300.0 Chlor								Air Bubbles					
6/23/2015	13:15	soil	SC-1	(2) 4-oz glass jars	cold	-201	x	x	x													
											-				+	_						
															+		_					
								_														
									_						+	-						
Date:	Time: 1720	Relinquish	ed by: wh Watu	Redeived by:	a Wall	Date Time	Ren	harks	s: Bill	to WF	×Χ	ii.										
Date: 1	Time: 1840	Relinquish	itotire hallon	Received by:	Jud.	24/15 1/129																