

Closure Report Cimarex Energy Company: Pintail 23 Federal Com #008H |30-015-38657|2RP-4006|

August 24, 2017

Prepared By:

TALON/LPE 408 W. Texas Avenue Artesia, New Mexico 88210

Prepared For:

Cimarex Energy Company 600 N Marienfeld Ste. Midland, Texas 79701 Ms. Christine Alderman **Cimarex Energy Company**600 N. Marienfeld Ste. 600

Midland, TX 79701

Subject:

Remedial Activities and Closure Report

Cimarex Energy Co.

Pintail 23 Fed Com #008H |30-015-38657|2RP-4006|

Dear Ms. Alderman,

Cimarex Energy Company (Cimarex) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The incident description, soil sampling results, remediation activities, and closure request are submitted herein.

Site Information

The Cimarex Pintail 23 Fed Com #8H is located approximately twenty-five (25) miles south of Carlsbad, New Mexico. The legal location for this facility is Unit Letter M, Section 23, Township 25S South and Range 26 East in Eddy County, New Mexico. More specifically the latitude and longitude are 32.1087494 North and -104.2693253 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of the Reagan-Gypsum land complex with 0 to 3 percent slopes. Drainage courses in this area are normally dry.

Ground Water and Site Ranking

According to the New Mexico Office of the State Engineer database, the ground water in this area is approximately 35-feet below ground surface (BGS). The referenced ground water data is presented in Appendix II. Therefore the ranking for this site is a **20** based on the following:

Depth to ground water <50'
Wellhead Protection Area >1000'
Distance to surface water body >1000'

Based upon the site ranking of **20**, NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 100 mg/kg for TPH and the recommended guideline for Total Chlorides is 1,000 mg/kg.

Incident Description and Initial Remedial Actions

On November 20, 2016 a 2-inch threaded fitting on a water line failed due to corrosion. This resulted in a release of approximately 50bbls of produced water. Approximately 2bbls of produced water were recovered. The fluid from this release impacted the pasture east of the location measuring approximately 280-feet by 120-feet (see site plan). On December 2, 2016, Talon mobilized personnel to the site to perform an initial site assessment and to collect soil samples within the impacted area. The soil samples were analyzed for TPH, BTEX, total chlorides, and detailed salinity. The analytical results from the soil analysis are summarized in the table below.

Laboratory Results

See Appendix V for complete report of laboratory results.

Sample ID	Depth ft	BTEX mg/kg	TPH mg/kg	Chloride mg/kg	рН	EC mmhos/cm	Sodium meq/L	Potassium meq/L	Calcium meq/L	Magnesium meq/L	SAR
S-1	0	<0.300	<10.0	11,627	7.2	100.5	928.49	16.33	167.26	17.86	96.51
S-1	1			10,635	7.2	73.6	13109.00	373.00	4224.00	165.00	53.86
S-1	2			3,899	7.2	39.3	64.01	0.57	34.05	23.50	11.94
S-1	3			1,063	7.5	7	16.51	0.30	47.13	4.76	3.24
S-1	4		us	2,410	7.4	18.3	50.34	0.41	131.15	11.09	5.97
S-1	5			1,489	7.6	12.47	44.45	0.36	74.68	5.72	7.14
S-1	6		13	921	7.7	4.67	8.55	0.30	39.94	3.34	1.84
S-1	7			128*	7.8	2.86	6.16	0.72	31.29	1.78	1.52
S-2	0	<0.300	<10.0	5,246	7	62.8	471.31	5.11	159.55	8.14	51.47
S-2	1			141	7.4	4.88	13.70	0.39	37.93	1.36	3.09
S-2	2			64*			-			r. t	
S-3	0	<0.300	<10.00	4,537	7.1	47.7	391.09	3.18	178.71	5.32	40.77
S-3	1			212	7.6	5.16	14.34	0.42	38.89	1.51	3.19
S-3	2			128*	7.6	4.4	13.46	0.36	33.46	1.13	3.24
S-4	0	<0.300	<10.00	8,720	7.2	86.7	734.56	13.13	205.89	10.49	70.62
S-4	1			5,246	7.3	33.1	166.12	1.54	190.31	6.58	16.74
S-4	2			141	7.9	3.39	7.61	0.34	30.56	1.25	1.91
S-4	3			144*	7.9	2.7	4.50	0.32	29.66	1.38	1.14
S-5	0	<0.300	<10.00	5,884	7.4	40.4	348.43	3.50	176.69	5.33	36.52
S-5	1			921	7.8	6.23	30.01	0.73	32.44	1.73	7.26
S-5	2			141	7.8	2.86	6.08	.08 0.37 30.0		0.86	1.55
S-5	3			80*	8	2.8	5.96	0.36	22.91	3.38	1.65

⁽⁻⁻⁾ Analyte Not Tested

^(*) Laboratory Chloride Confirmation

Remedial Actions

- Pursuant to the approved work plan the impacted area in the vicinity of sample location S-1 was excavated to a depth of 4-feet BGS. A 20-mil reinforced liner padded with felt was installed at the bottom of the excavation in order to encapsulate the remaining chloride impacts.
- The impacted areas in the vicinity of sample locations S-2, S-3, and S-5 were excavated to a depth of 1-foot BGS.
- The impacted area in the vicinity of sample location S-4 was excavated to a depth of 2-feet BGS.
- All of the excavated material was be hauled to an NMCOD approved solid waste disposal facility, Lea Land, LLC.
- The location was also downsized per BLM interim reclamation guidelines. The caliche generated during this process was used to backfill the bottom of the excavation.
- The remaining vertical extent of the excavation was backfilled with top soil and contoured to match the surrounding terrain.
- The excavated areas and the downsized area were seeded with BLM #1 seed mixture. A seed label is attached in Appendix IV.

Closure

On behalf of Cimarex Energy we respectfully request that no further actions be required and that closure with regard to this release be granted.

If we can provide additional information or be of further assistance, please contact our office at (575)-746-8768.

TALON/LPE

Sheldon L. Hitchcock

Project Manager

David J. Adkins
District Manager

Attachments

Appendix I Site Plan

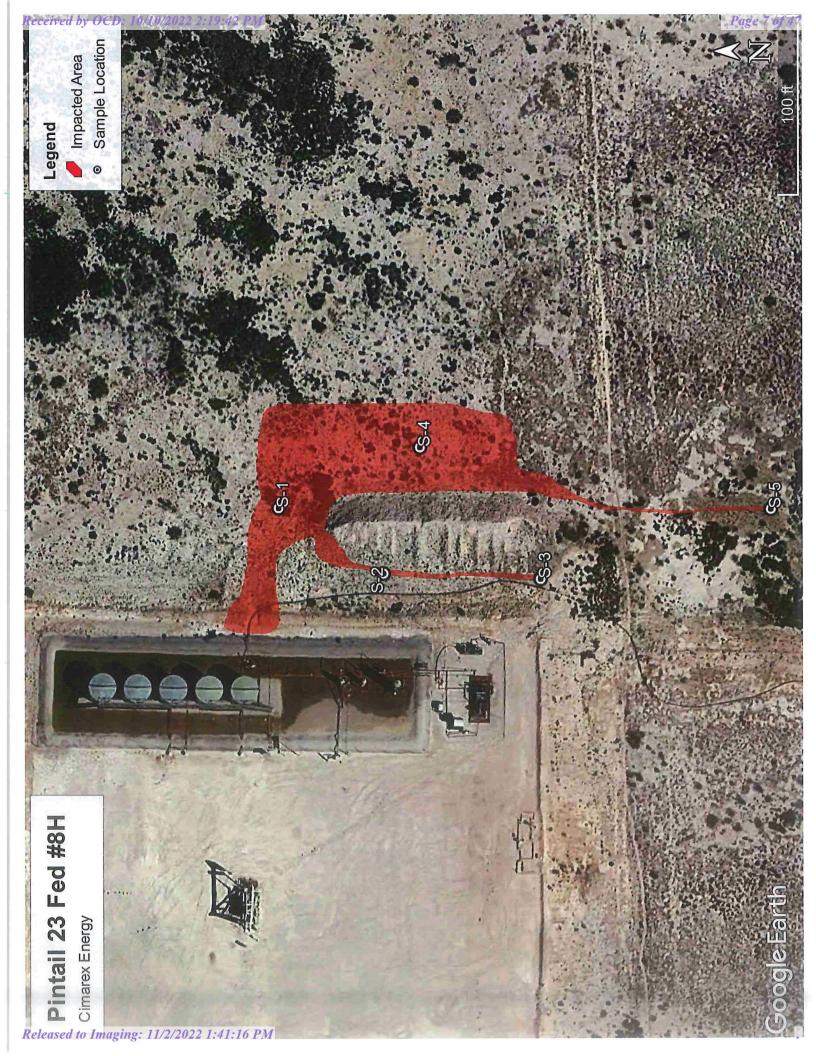
Appendix II Groundwater Data

Appendix III Initial C-141 & Final C-141

Appendix IV Seed Label

Appendix V Laboratory Results

APPENDIX I SITE PLAN



APPENDIX II GROUNDWATER DATA



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

,												
	POD											
	Sub-		Q	Q	2						Depth	Depth Water
POD Number	Code basin	County	64	16	4 Sec	Tws	Rng	X	Υ	Distance	Well	Water Column
C 03655 POD3	CUB	ED	1	4	4 22	25S	26E	568458	3553019 🌑	465		
C 02220	CUB	ED	3	1	2 26	25S	26E	569598	3552352*	862	35	

Average Depth to Water:

Minimum Depth: -

Maximum Depth: --

Record Count: 2

Basin/County Search:

County: Eddy

UTMNAD83 Radius Search (in meters):

Easting (X): 568890 Northing (Y): 3552845 Radius: 1000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



OSE Well Locations

Wells visible at 1:18,000 with 1,000 features per view

+	Fsri World Geocoder	NM Water Rights Look Up
	(1 of 2)	
	C-02220	
	OBJECTID	123424
	POD Basin	C
1	POD Number	02220
	POD Suffix	
	County	ED
	Start Date	
	Finish Date	April 30, 9111
	Plug Date	
	Proof Completion of Well Date	
	Elevation	
	Depth of Well	35
100	Ground Water Source	
	Percent Shallow	
	Depth to Water	
	Well Log File Date	
-42	Schedule Date	
	Use of Well	
	Pump Type	
	Pump Serial	
	Discharge	
	Aquifer	
	System Date	July 20, 2010
	Sub-Division Name	
	Sub-Division Location	
NC. NO	Restrictions	
	Surface Code	
in the	Estimated Yield	7
1.0	POD Status	
N.	Casing Size	7.00
17	Ditch Name	
	Tract Number	
	Map Number	
	Zoom to	
\\ <u>\</u>	-104.256 32.108 Degrees	

All rights reserved

APPENDIX III INITIAL C-141

&

FINAL C-141

NM OIL CONSERVATION

District I 1625 N. French Dr., Hobbs, NM 88240 B11 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aziec, 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

ARTESTA DISTRICT

Form C-141 Revised August 8, 2011

NUV 2 1 2016

Submit 1 Copy to appropriate District Office in accordance with 19,15.29 NMAC. RECEIVED

Release Notification and Corrective Action															
DABI	328	41430				OPERATOR Initial Report Final Report									
Name of Co	inpany C	imarex Ener		12/183		Contact Christine Alderman									
Address 60 Facility Nar			0 Midlan	d TX		Telephone No. 432-853-7059 Facility Type production									
		23 #6F1													
Surface Ow	ner			Mineral C	wner			***************************************	API No	. 30-015-3	38657				
				LOCA		OFRE	LEASE								
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/V	Vest Line	County					
М	23	258	26E	250		S	800		w	Eddy					
Amenica de la constitución de la				Latitude 3	2.10874	Longitud	c -104.26932								
	Latitude_32.10874_Longitude -104.26932 NATURE OF RELEASE														
Type of Rele	ace Produc	ed water		IAN	UKE		Release 50 bbls		Volume F	Recovered 2	2 bbls				
Source of Re			· · · · · · · · · · · · · · · · · · ·			Date and F	four of Occurrence			Hour of Dis	covery	y			
Was Immedi	nto Mation (livang				11/20/2016 1f YES, To			11/20/201	16					
AA d2 111111GA	ate Monce		Yes [No Not R	equired		ker/Heather Patte	erson/Mi	ke Bratche	r					
By Whom?						Date and I				· · · · · · · · · · · · · · · · · · ·					
Was a Water	course Read		Yes 🗵	l No		If YES, Volume Impacting the Watercourse.									
7C - 171-4				9 110		NM OIL CONSERVATION ARTESIA DISTRICT									
If a Watercon	irsc was im	pacted, Descr	ine rully.												
										NUV	Zı	2016			
		em and Reme		n Taken.						ne	CET	VED			
A 2" thrende	d litting cor	roded and fail	led.							KE	CEL	VLD			
Describe Are	a Affected	and Cleanup	Action Tal	ken. oximately 2' wid	e hv 25'	long. We wi	II delinente and s	ubmit a	work plan	to remediate	đ.				
7110 01100100	urou vicus pro		· · · · · · · · · · · · · · · · · · ·		,				•						
I hereby cert	ify that the	Information o	iven abov	e is true and comp	lete to t	he hest of my	knowledge and	understa	nd that pur	suant to NM	IOCD	niles and			
regulations a	II operators	are required t	o report a	nd/or file certain i	elease n	otifications a	nd perform corre	ctive nct	ions for rel	cases which	i may o	endanger			
should their	onerations t	inve failed to	ndequately	ce of a C-141 rep y investigate and i	emediat	e contaminat	ion that pose a th	reat to g	round wate	r, surface w	ater, h	uman licalli			
or the enviro	nment. In a	iddition, NMC	OCD acce	plance of a C-141	report d	oes not reliev	c the operator of	respons	ibility for c	compliance	with a	ny other			
federal, state	, or local la	ws and/or reg	liations.		1		OIL CON	SERV	ATION	DIVISIO	MC	7			
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Signature: (10000	uu co	awu	nan_		Approved by	Environmental S	Specialis	. H			,			
Printed Nam	e: Christin	e Alderman				Approved try	Difficial		"112	100					
Title: ESH S	Supervisor					Approval Da	1e: 11 22	16	Expiration	Date: N	<u>A</u>				
E-mail Addr	ess: calderi	nan@cimarcz	com_			Conditions o	ſ∧pproval:	at.		Attache	ı 102				
Dela: 1161	hale	·Di 44	2 052 70	50				1		/ Macile	- UE				
Date: 11/21/ * Attach Addi		Phone: 43 ets If Neces		J7			· · · · · · · · · · · · · · · · · · ·	3			0	2 1mh			

<u>District I</u> 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

Form C-141 Revised April 3, 2017

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 Notific	ation	and Co	rrective A	ction						
						OPERAT	OR		Initia	ıl Report	\boxtimes	Final Report		
Name of Co	mpany Cir	marex Energ	У			Contact Christine Alderman								
		feld Ste. 60		d TX 79701		Telephone No. 432-853-7059								
Facility Nar	ne Pintail 2	23 Federal #	8h			Facility Type Production								
Surface Ow	ner BLM			Mineral C	wner F	ederal		A	API No	. 30-015-3	8657			
				LOCA	TION	ON OF RELEASE								
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West		County				
M	23	25S	26E	250		South	800	Wes	t	Eddy				
			Latitude	32.10874	Loi	ngitude10	4.26932	NAD83	3					
				_		OF REL								
Type of Rele	ase Produce	ed Water					Release 50bbls			Recovered 2				
Source of Re						Date and H 11/20/2016	our of Occurrence		ate and /20/201	Hour of Dis 16	covery			
Was Immedia	ate Notice (1.37		If YES, To								
		X	Yes _	No Not R	equired	Shelly Tuc Heather Pa	ker-BLM tterson/Mike Bra	tcher-NMO	CD					
By Whom? C	Christine Ale	derman				Date and I	lour							
Was a Water	course Read		Yes 🗵	7 No.		If YES, Vo	lume Impacting t	the Waterco	urse.					
		1000												
If a Watercou	ırse was İm	pacted, Descr	ibe Fully.	*										
				VroVn										
		em and Reme		n Taken.* on. The fitting wa	c renlaci	ed and the lin	e was nut hack in	ito service						
A 2 Intilig C	on the nown	ine faned due	to corrosi	on. The fitting wa	.s repiac	od and the mi	e was put back in	ito sei vice.						
Describe Are	a Affected	and Cleanup	Action Tal	ken.*			DAOCD and DLA	A audalina	a Faller	vvina dalina	ation a	nomodiation		
Work plan wa	mpacted the as drafted at	e pasture east ad subsequent	of the loca	ntion. The location ed by NMOCD ar	i was de id BLM.	The remedia	tion of this site w	vas carried o	s. rono out in ac	cordance w	ith the	approved		
work plan.														
I hereby cert	ify that the	information of	iven abov	e is true and comp	lete to t	ne hest of my	knowledge and i	inderstand t	hat purs	suant to NM	OCD r	ules and		
regulations a	Il operators	are required t	o report a	nd/or file certain i	elease n	otifications a	nd perform correct	ctive actions	s for rel	eases which	may er	ndanger		
public health	or the envi	ronment. The	acceptan	ce of a C-141 repo	ort by the	e NMOCD m	arked as "Final R	Report" does	not rel	ieve the ope	rator of	f liability		
				vinvestigate and interesting investigate and interesting the stance of a C-141										
		ws and/or reg			F									
							OIL CON	SERVA'	TION	DIVISIO	<u>NC</u>			
Signature:														
Printed Nam	Printed Name: Christine Alderman Approved by Environmental Specialist:													
Title: EHS S		and the street		1997 - 19		Approval Da	te:	Ext	oiration	Date:				
		nan@cimarex	.com			Conditions o					,			
				100 070 7070	Attached [
Date: 8/24/2	017		Pho	ne:432-853-7059										

Page 14 of 47

Incident ID nAB1632841630
District RP
Facility ID
Application ID

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following	items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.	.11 NMAC
Photographs of the remediated site prior to backfill or photomust be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate OD	OC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certa may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re- human health or the environment. In addition, OCD acceptance of	lations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in
Printed Name: Laci Luig	Title: ESH Specialist
Signature:	Date: 10/10/2022
email: laci.luig@coterra.com	Telephone: (432) 208-3035
OCD Only	
Received by:	Date:
	y of liability should their operations have failed to adequately investigate and e water, human health, or the environment nor does not relieve the responsible d/or regulations.
Closure Approved by: Lattan Hall	Date: 11/2/2022
Printed Name: Brittany Hall	Title: Environmental Specialist

APPENDIX IV SEED LABEL

Curtis and Curtis, Inc. 4500 North Prince Clovis, NM 88101 Phone: (575) 762-4759 www.curtisseed.com

Talon / LPE, LTD
2 Acre BLM #1, Drilled Rate
1 - 2 Acre Bag @ 2038 Bulk Pnunds
Cimarex-Pintal 23 Fed #8
Job #: 701162.088.01
API: 30-015-38657
USTR: M-23-T258-R26E

Lot#	M-14537-	1 .

Lot# M-14537-1	-			*	Total	Test	Total PLE
Item Sand Dropseed	Origin Colorado	Purity 10.01%	<u>Germ</u> 98.00%	Dormant 0.00%	Germination 98.00%(TZ)	Date 02/17	Pounds 2.00
Not Stated Sidepats Grama	Texas `	58.68%	79.00%	13.00%	92.00%	02/17	11.00
El Reno Plains Bristlegras Not Stated	s Oklahoma	20.24%	6.00%	91.00%	97.00%(TZ)	05/17	4,0∍
Other Crop: Weed Seed:	0.39% Thi	s Bag Wei	Bags For Thi ghs 20.38Bu For 2 Acres	ik Pounds	Total Bulk P	ounds:	20.38

APPENDIX V LABORATORY RESULTS



Outside TX County

Laboratory Number: 472168 Customer Sample ID: S-1 0 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016 Printed on: 12/21/2016

Area Represented: not provided

Crop Grown: IMPRO	VED	H UNA	ARKID RFI	KIVIUDA	GRAS	55, GR	AZINO	3				
Analysis Resu	ılts	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess,		
рН	7.8	(5.8)	-	Mod. Al	kaline			1,5				- 1
Conductivity 6,4	150	(-)	umho/cm	V. High				L.		, F	ertilizer Recommended	
Nitrate-N	0	(-)	ppm**							į	55 lbs N/acre	
Phosphorus	13	(50)	ppm			Erick Englished		İ			50 lbs P2O5/acre	
Potassium	396	(125)	ppm					ķimmun			0 lbs K20/acre	
Calcium 17,	308	(180)	ppm					MIIIIIIIII	ll.		0 lbs Ca/acre	1
	200	(50)	ppm	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		Brasile amounts		F. S. S. S.		•	0 lbs Mg/acre	
	110	(13)	ppm			I ve commercia	1 was not as 1 a	финиц			0 lbs S/acre	
Sodium 9,	748	(~)	ppm		į i i i i i i i i i i i i i i i i i i i			HIIIIIIII		Ē		
Iron	1704		1 1 WH 1 1 1 1 1 1	1		ansonia.		1			jug est	- 1
Zinc								I share I		Ì	a de la companya de l	45
Manganese						. Hansa c. a		I				
Copper								1		į		
Boron	-57 32	rister af dige.	erantral, dat i i jentra	a Baddhulos, et	Valenta iki erre	Services	Na orani	1	ļ.,]	ing garage of the entropy of the contract of t	i dad
Limestone Requirement		V S Charle			高級的	dieli v		474	200	11,34.4	0.00 tons 100ECCE/acre	-
		description of the Delivery of the Control	seveshweru Pro		erenia (etc.	251 2.5 1352.5	KIRSIMPITA		adile suff	9823666666	e and the contract of the contract of the con-	3534
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		er madres		ege a terrene a talant e talant e	odium	the section of the section of the	idaleksaksi			7 ppm	928.486 meq/L	
				FRICESCO STATES	otassii	San San San San San San San San San San			No. of Street, and Street	8 ppm	16.328 meg/L	
	amce.			err a sylvaniana filipa	alcium	n mineral comment and				2 ppm	167.258 meq/L	1000
					agnes	(um	對素質	和意思	W	7 ppm	17,861 meg/L	渥
					AR			202550000000000000000000000000000000000	96.5	ATTACABLE ACTIONS		AM.
		N ^{orth}		S.	SP		建筑	李精致越,	82.1	bis 经等		

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472169 Customer Sample ID: S-11 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016 Printed on: 12/21/2016

Area Represented: not provided

Crop Grow	n: IMPROVED	AND H	YBRID BE	RMUDA	GRAS	S, GR	AZINO	è			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHlgh	Exces	5.
рН	7.6	(5.8)		Mod. All	kaline	(1947) (1947)	3,924,83	grave se		1.5	
Conductivity	6,360	(-)	umho/cm	V. High			C	L*]	Fertilizer Recommended
Nitrate-N	0	(-)	ppm**	17.7.7							55 lbs N/acre
Phosphorus	14	(50)	ppm	1111111111		Ш		t I			50 lbs P2O5/acre
Potassium	300	(125)	ppm	1111111111		11111111111		\$11111f			0 lbs K20/acre
Calcium	17,185	(180)	ppm	100000		1111111111		įmmmi	(ii		0 lbs Ca/acre
Magnesium	190	(50)	ppm					ğiiii			0 lbs Mg/acre
Sulfur	1,648	(13)	ppm	111111111				human	ļummuni		0 lbs S/acre
Sodium	8,413	(-)	ppm		11111111111	LLLIILLIII		Human	(amanana)		
Iron			- 00				,	1			
Zinc	[11] MARTIN	y Asid						1			
Manganese								1			
Copper		ě s			* 10 Tayl						
Boron								1			
Limestone Requirem	ent				W. S.						0.00 tons 100ECCE/acre
			aller 7 4a	Detaile	ed Sall	nity Te	est (Sa	iturate	d Paste	Extr	act)
				pŀ	1	7.7			7.3	2	
				Co	onduct	ivity			73.60) mmt	ios/cm
Control of the Contro				Sc	odium				13109	ppm	570.431 meq/L
			100 july 100	Pc	otassiu	im=			373	3 ppm	9:552 meq/L
				Ca	alcium		* 108 Min - 1180 Min		4224	1 ppm	210.772 meq/L
		7 10 17	"	Ma	agnesi	um			Complete State Company	ppm	2010年8月2日 (1987年) 1747年(1988年8月2日) 1784年8月2日 (1981年) 1882年 1787年
		***************************************		The same of the same of	٩R	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	American Species	time and a second of the	53.86		- ram #1/2344 (\$1000 전 한 1014 O 전 2 233 전에도 그러 형 현대시고 아버지도 보냈다. 중요한 경안 경안 함께 됩니다.
		i (1965)	5,77 8 45		SP.				70.92	2	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472170 Customer Sample ID: S-1 2 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS, GRAZING

	WII. IMPROVED									
Analysis	Results	CL*	Units	ExLow	VLow Lo	v Mod	High	VHlgh	Excess.	
ρΗ	7.7	(5.8)		Mod. All	kaline		,			
Conductivity	4,710	(-)	umho/cm	V. High			CL*		Fer	ilizer Recommended
Vitrate-N	0	(-)	ppm**							55 lbs N/acre
Phosphorus	12	(50)	ppm	1111111111			1			50 lbs P2O5/acre
otassium	163	(125)	ppm			1111)1111111	ligii 🔌			0 lbs K20/acre
Calcium	21,931	(180)	ppm	1111111111		шфиши	nija mana	ŲÍ		0 lbs Ca/acre
Vlagnesium	325	(50)	ppm			inijanan	HİHIH			0 lbs Mg/acre
Sulfur	597	(13)	ppm	1111111111		1111)111111	ոփոսուս	инини		0 lbs S/acre
Sodium	1,068	(-)	ppm							
ron							i			
Zinc										
Vianganese				į			į			
Copper		9 7		in Paliti		1 179	1			
Boron	•						1			
Limestone Require	ment	TOANN							(0.00 tons 100ECCE/acre
				The second section is		otom enakom	ಪ್ರಾತಿಕ್ಷಣಗಳ ಪ್ರೇಷ್	Rasett Andrie	tare vesice asset	u na rapituri pilikusi pada katusi da salah salah salah salah salah salah salah salah salah salah salah salah s
				man carrantantant	ed Salinity	Test (Saturate			
			. Na desar de conscionario con conscionario de	pŀ		neur Seiler in tent	est discontente to or	7.		
				Co	onductivit	y		39.3	0 mmhos/	1 to the second control of the second control of the second
				Sc	odium			147	2 ppm	64.049 meq/L
				Po	otassium			2	2 ppm	0,569 meq/L
				Ca	alcium			68	2 ppm	34.053 meq/L
				≝ M	agneslum			- 28	6 ppm	23,496 meq/L
And the second of the second		Charles and Proper	AND COMPANY OF THE PARTY OF THE	THE STREET	٩R	Commercial Section 12		11.9	4	
				O,	717			11.0	*	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472171 Customer Sample ID: S-1 3 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grown:	IMPROVED	AND F	IYBRID BEI	RMUDA	GRAS	SS, GF	AZING	i			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
рН	7.9	(5.8)	ar ar <u>i</u> na	Mod. All	kaline						
Conductivity	2,010	(-)	umho/cm	High			Cl	•		Fe	ertilizer Recommended
Nitrate-N	0	(-)	ppm**								55 lbs N/acre
Phosphorus	5	(50)	ppm								60 lbs P2O5/acre
Potassium	129	(125)	ppm				HIHIT				0 lbs K20/acre
Calcium	36,367	(180)	ppm						ļļ .		0 lbs Ca/acre
Magnesium	225	(50)	ppm	2 17 17 11 1	Carried Guest Co.	4		-11			0 lbs Mg/acre
Sulfur	758	(13)	ppm	1 1 100 100 100		I amana and) (((((((((((((((((((HIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			0 lbs S/acre
Sodium	329	(-)	ppm			(IIIIIII					
Iron	an an Kesa		ar allea el la ce								
Zinc	er Halle o				44.4%						
Manganese		50.50	nos eres si en el		<i>e</i>						
					Ç. x	H.T.					
Boron	. en a na na este de la	E STATE COM	Waster and State		v. a. d.a	July 1 to 1		.8			ata na ara ara ara ara ara ara ara ara ara
Limestone Requirement	i a militari				64 TUS			454, -			0.00 tons 100ECCE/acre
			Sanzar al arranea e	ero-erokerek				Diamentika.	engentekaneri		
	tude 1	1011	16.00	Mary and and and and and and and		inity T	est (Sa	turate	1 1	e Extra	(1:
				p۱					7.		
				SET CO. ST. ST. ST. ST. ST. ST. ST. ST. ST. ST	onduc	tivity			10 3 5 - 1 5 3 4 1 5 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0 mmho	to make the same of the fight for the statement of the statement and the statement a
				The Secretar Supplemental	odium		1007000000	esovyku P		9 ppm	16.505 meq/L
		regression		Property Courties	otassii	min conference de la finalista de				2 ppm .	0,303 meg/L
				and in to make a second	alcium	-		errere	rairrat-cont-t-	5 ppm	47.134 meq/L
				A COLORAGO	agnes	lum		域的	10 10 20 20 20 20 20 20 20 20 20 20 20 20 20	8 ppm	4.763 meq/L
				man and the same of the beat	AR		Messore Gave	rasiastro	3.2		
				4 S	3P				24.0	Z.	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472172 Customer Sample ID: S-1 4

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grov	wn: IMPROVED	AND H	YBRID BE	RMUDA	GRAS	SS, GF	RAZINO	3			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
рН	7.9	(5.8)		Mod. Al	kallne		VVIII.	N. Y. Bar			
Conductivity	3,300	(-)	umho/cm	V. High			C	CL*		F	ertilizer Recommended
Nitrate-N	0	(-)	ppm**			301.5				ļ	55 lbs N/acre
Phosphorus	8	(50)	ppm	1111111111				1			55 lbs P2O5/acre
Potassium	65	(125)	ppm	1111111111		mm		1 5			55 lbs K20/acre
Calcium	31,150	(180)	ppm	1111111111	mann		ļumin	innimi	ķι		0 lbs Ca/acre
Magnesium	187	(50)	ppm					dilli			0 lbs Mg/acre
Sulfur	5,027	(13)	ppm	1111111111			ļiiiiiiiii	dannan	in minimi		0 lbs S/acre
Sodium	654	(-)	ppm	umum			i)IIII				
Iron								1			
Zinc					1 14 17	1366 V		1			
Manganese								į			
Copper			Marik Caran National		A STANFORD		21.5	i			
Boron					THE R 1990			I I			
Limestone Requirer	ment						Sandra II s	11344			0.00 tons 100ECCE/acre
					k / waik also ida	- Secretario e Si	e sesa dele-se la seco	SAN transformers	normal official to see	terr säveter	- Tro engliste g-mele mga sujety - a melaga sung di samma makania di saturan di sam
) 		Detail	ed Sali	inity T	est (S	aturate	d Paste		ct)
				pł	market to the section of	NA NACON BURNING	termina estatuenta	espera a resident foresta	7.4	The state of the state of the state of	erantzan es el elle ellevel de fruit i profise el fruit i profise el fatte de fre de la companie de frei
		1 - 1			onduct	livity			A C at County Ann Printer	0 mmhd	
					odium	product were the six of	errorgano er silvanda	rávanski sveten		7 ppm	50.335 meq/L
				Po	otassii	ım 🐇				6 ppm	
	•	2.		C	alcium				262	8 ppm	131.147 meq/L
		i e di		a M	agnesi	lum			13	5 ppm	11.087 meq/L
The state of the s					AR				5.9		all the control of th
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			∰ : S	SP.				26.0	8	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472173 Customer Sample ID: S-1 5 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grown	: IMPROVED	AND H	YBRID BEI	RMUDA	GRAS	SS, GF	AZING				
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHlgh	Excess.	
рН	8.1	(5.8)		Mod. All	kaline		, na vije Kon				TA TO THE TOTAL TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TH
Conductivity	2,230	(-)	umho/cm	High			CL	•		F	ertilizer Recommended
Nitrate-N	0	(-)	ppm**		ji i						55 lbs N/acre
Phosphorus	7	(50)	ppm	1111111111	1111						55 lbs P2O5/acre
Potassium	37	(125)	ppm		1111111		3 4 6				80 lbs K20/acre
Calcium	28,799	(180)	ppm				11111111111		ļI		0 lbs Ca/acre
Magnesium	135	(50)	ppm	The second second second	5 (2) 1 (1) (1) (1)	· · · · · · · · · · · · · · · · · · ·	i) III III II 1 1			0 lbs Mg/acre	
Sulfur	5,242	(13)	ppin	HIMMIN		(HIIIIIII))				0 lbs S/acre
Sodium	770	(-)	ppm)11111				
Iron											
Zinc								je e		İ	
Manganese											
Copper		- 1 h		a Transfer		M. A.					
Boron											
Limestone Requireme	ent	13. 集構								4	0.00 tons 100ECCE/acre
						-					
				Detall	ed Sal	inity T	est (Sa	iturate	d Paste	e Extra	ct)
				pl	4	_			7.	6	
				C	onduc	tivity			1,14,121,1381,1751,1751	7 mmh	
(1) proprieduce (1) * Sall de la compléte professione (1) en équation (2) \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$				S	odium				102	1 ppm	44.446 meq/L
				: P	otassii	ım				4 ppm	0.355 meq/L
				C	alcium	1			143	7 ppm	71.684 meg/L
	and the second second			, M	agnes	lum			. 7	0 ppm	5.716 meq/L
No. of the Control of	CONTRACTOR STATE OF THE STATE O	on, a series below the series of the			AR				7.1	4	
	La oraka 14.	de Vaja		≣ 'S	SP				36.3	7	

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



Outside TX County

Laboratory Number: 472174 Customer Sample ID: S-16

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences **2478 TAMU**

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

High

VHigh

Excess.

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016 Printed on: 12/21/2016 Area Represented: not provided

Crop Grown	: IMPROVED	AND H	YBRID BE	RMUDA	GRAS	S, GR	AZING
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod
рН	8.2	(5.8)	•	Mod. All	allne	0.5551025	
Conductivity	1,580	(-)	umho/cm	High			CL.
Nitrate-N	0	(-)	ppm**			. H. Alija	Paradical
Phoenhorus	6	(50)	maʻa		111		1

рН		8.2	(5.8)	1. W. Str. 1. St	Mod. Alkaline	. 4.
Conductivity		1,580	(-)	umho/cm	High cL*	Fertilizer Recommended
Nitrate-N		0	(-)	ppm**		55 lbs N/acre
Phosphorus		6	(50)	ppm		60 lbs P2O5/acre
Potassium		30	a para dina daline	ppm		90 lbs K20/acre
Calcium		30,974	(180)	ppm		0 lbs Ca/acre
Magnesium		128	(50)	ppm		0 lbs Mg/acre
Sulfur		5,234	(13)	ppm		IIIIIIIII 0 lbs S/acre
Sodium	J. E.	153	(-)	ppm		
Iron						
Zinc	,					
Manganese						
Copper		100				*
Boron				The service service		
Limestone Requ	uirement	No. 15 April 1995 September 1995		King sanith		0.00 tons 100ECCE/acre

Det	alled Salinity Test (Saturated	Paste Extract)	
	рH	7.7	
	Conductivity	4.67 mmhos/cm	
	Sodium	197 ppm	8.554 meq/L
	Potassium	12 ppm	0.298 meq/L
	Calcium	800 ppm	39.935 meq/L
	Magnesium	41 ppm	3.340 meq/L:
	SAR	1.84	
	SSP	16.41	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
		1 1 ++	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water. Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



Outside TX County

Laboratory Number: 472175 Customer Sample ID: S-1 7 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Grop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Gro	own: IMPROVE	DANDH	IYBRID BE	RMUDA	GRAS	SS, GR	AZING	5.			
Analysis	Results		Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
рН	8.	(5.8)		Mod. Al	kaline			S. P.			
Conductivity	1,430	(-)	umho/cm	Moderat			CL	•		Fe	ertilizer Recommended
Nitrate-N		(-)	ppm**			100,760	ta.				55 lbs N/acre
Phosphorus		(50)	ppm	1111111			1				60 lbs P2O5/acre
Potassium	4(2 1700 170 110	ppm			提到					75 lbs K20/acre
Calcium	32,45		ppm	111111111			manni	WIIIIIII	ļII		0 lbs Ca/acre
Magnesium	11:		ppm	111111111)))IIIIIII)	II			0 lbs Mg/acre
Sulfur	5,05	3 (13)	ppm	111111111		(111111111	шин	111111111			0 lbs S/acre
Sodium	8:		ppm	1111111111	IIIIIII						, et .
Iron							1				
Zinc					4.5	3.00	1				V 1
Manganese			•				i				
Copper			. BW 7 16				i				
Boron							1				
Limestone Require	ement		it and the							•	0.00 tons 100ECCE/acre
				•							
				Detail	ed Sal	inity T	est (Sa	turate	d Paste	Extra	ct)
				pl	4			2 2 10 2004	7.	3	
				g C	onduc	tivity			2.8	6 mmho	s/cm
Exercise Control of the Control of t				S	odium	85.7- /			14:	2 ppm	6.164 meq/L
	17 to 10 to			P	otassii	mi			1	1 ppm	0.272 meq/L
				C	alcium					7 ppm	31.292 meq/L
				M	agnes	lum -			mention and the filtrestern	2 ppm	1.783 meg/L
		and age produced stays	CAN SECURITION OF PRINCIPLE SECURITION OF PERINCIPLE SECURITION OF PERI	with a second second second second	AR	- magnification and resemble		A CASE OF SHIPPING	1.5		THE PERSON NAMED IN COLUMN TO THE PERSON OF
				S	SP				15.6	0.000	

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=riig/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water. Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



Outside TX County

Laboratory Number: 472176 Customer Sample ID: S-2 0 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grown: IMF	PROVED		YBRID BEF	RMUDA	GRAS	SS, GR	AZING	à						
Analysis I	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHlgh	Excess,				
Hc	7.5	(5.8)	•	Slightly	Alkaline	TANGERS	TV:							
Conductivity	6,190	(-)	umho/cm	V. High			С	L*		Fei	rtilizer l	Recomn	nende	d
Nitrate-N	0	(-)	ppm**		4.25		er i				55 lbs	N/acre		1 13
Phosphorus	16	(50)	ppm					1			45 lbs	P205/a	cre	
Potassium	288	(125)	ppm	HIIIIIIII							0 lbs	K20/acr	е	7
Calcium	18,367	(180)	ppm	11111111111		•		1	(II		0 lbs	Ca/acre		4.
Vlagneslum	139	(50)	ppm				1000	Tarriage 1			0 lbs	Mg/acre)	, ji
Sulfur	6,112	(13)	ppm						ļumminu		0 lbs	S/acre		
Sodium	6,440	(-)	ppm	11111111111					(mmm					- 10
ron			e engales a registrative se se				1 1,49. P.E.							***
Zinc	Section View of the							l I						
Manganese			1		este d			i I						25
Copper	,						1.0	ĺ						
Boron			ayeery arguments.	١. ١				I.				V 3	2.1. 20	yer way.
Limestone Requirement			Augustus e	144	1 (19)	(1, 13, 14)	a Selve	9			0.00 to	ns 100EC	CE/acr	е
				a companya a dalah salah		eduareaTecasTe #1.1		808011275 = 10741	swesie ostanik	855 Y N. T. VINGER	CERTAL PARTITION OF THE	soretiezena	iwaniana	
			inte			inity To	est (Sa	aturate		Extrac	()			
	**************************************			ph Totales		cual peri	neres serva	erakon era	7.0	and the complete company	lange terreng	andükutetel	erana	
				The state of the s	onduct	livity			SENSON STATE OF SERVICE AND ADDRESS.) mmhos	/cm			
			evantanting,	euchtungsgeren	dium	ieus caustesi	ieries		1083	market from the filter	recockersk		314 m	
				In play company	tassit	のださらないです。) ppm			110 m	
	egar Selasay		in the case in the	BALLS TANKED OF STREET	alcium	ಮ್ ಕನ್ ಬಗುವ ಸರ		1000 B 000 インストルスを見るからのようにもない	7 ppm	HOW WILLIAM	Control and the Control	552 m		
	i is a second			Section Service State State Section 1	agnesi	ıum			. rainera accent	9 ppm		8.	141 m	eq/L
		y transfer ny ara-	van de la companya de la companya de la companya de la companya de la companya de la companya de la companya d		\R			10 E 10 E 10 E	51.47		ikus kutus	ari pigyaya	a. Osobes	
				SS	2				73.1	ARTHURS.				

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472177 Customer Sample ID: S-2 1

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

er Sample ID: S-2 1
Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS, GRAZING

Analysis	Results	CL*	Units	ExLow	VLow	Low		High	VHlgh	Exces	9.		······································
рН	7.9	(5.8)		Mod. Alk	kaline	VALUE.	Salistera:				76.	England Comme	
Conductivity	2,050	(-)	umho/cm	High			C	CL*			Fertilizer R	ecommend	ded
Nitrate-N	2	(-)	ppm**	1							55 lbs	V/acre	
Phosphorus	11	(50)	ppm			1		1			50 lbs	205/acre	
Potassium	228	(125)	ppm								0 lbs	<20/acre	
Calcium	16,092	(180)	ppm	1111111111					ļΠ		0 lbs	Ca/acre	
Magnesium	125	(50)	ppm					фII			0 lbs	Mg/acre	
Sulfur	2,026	(13)	ppm					‡ IIIIIIII	ķiiiiiiiiiii	Ę	0 lbs	S/acre	
Sodium	375	(-)	ppm						İ			8	
Iron								I I					
Zinc								1					
Manganese			***					į .					
Copper	, Alty was a							Ì.				(A) 5	
Boron								1					
Limestone Requirement								•			0.00 tons	100ECCE/a	acre
					out take minde	e filozofia kontrakt te filozofiano	and Marie Co.	nordation to	ene orkopa alkalante	eurocontros.	to observation detections	 ************************************	AND THE PROPERTY OF THE
		1,2 7 35, 32 - 1,0				inity T	est (S	aturate	d Past		ract)		
				рН		us t od siste s	tvala kortón fa	Newsonal St	7.		anidirana News	erter telefikke	
				THE STATE OF THE PARTY OF	onduct	tivity			and the second was		hos/cm		
	_			Sc	odium	engels alternative and	abbeds miles	endades dictions (i.e.		5 ppm		13.697	THE PARTY NAMED IN
				李寶素 是 化二二分子 经一次的 化二	otassit	Source Service And American			Section 1 strains and a	5 ppn	drawn and a second	A	meq/L
				Martine at the same of the same of the	alcium		entangresitura	camin aus a	- 2- a - 32 (5:43)	0 ppm	さきものさいしょう クロボル かいこうかぎ	37.934	DOWNST / FILE OF THE
				M	agnesi	ium 🕖			and a life source man	7 ppn		1.362	meq/L
And the second s					٩R	en e meene	or at a settle sitted	nina kina alau indira	3.0			wysekszy esteleténe	
	i de la deservación de la constantia de	Later and		SS - S	SP 💮				25.6	6			

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472178 Customer Sample ID: S-3 0

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS, GRAZING

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.			
рН	7.9	(5.8)	· Production	Mod. Alk	aline	VERNEY	21121112						
Conductivity	5,270	(-)	umho/cm	V. High			CL	•		Fer	tillzer Red	commende	ed
Nitrate-N	1	(-)	ppm**								55 lbs N/	асге	.57
Phosphorus	22	(50)	ppm								35 lbs P2	O5/acre	
Potassium	230	(125)	ppm	ammi			HIIIIII	IIII °			0 lbs K2	20/acre	4
Calcium	18,063	(180)	ppm						H .		0 lbs Ca	alacre	
Magnesium	134	(50)	ppm				immini	II			0 lbs M	g/acre	
Sulfur	6,000	(13)	ppm				шшшф				0 lbs S/	acre	
Sodium	4,211	(-)	ppm		HIIIIIIII				Ш				45
Iron							. 1						
Zinc							1						, T. B
Manganese							i						
Copper	a stran							d			•	1.0	
Boron							I						
Limestone Requirement	4 1 1 1 1 1 1							4.		(0.00 tons 1	00ECCE/ac	re
				The state on atoms.	Control (T	a difference data subsets of	e de estado contra	5-7-8-1-5	and a freeze contra	e ground a commission with		na e a na e a e a e a e a e a e a e a e	Construction and
					A SALE SALES	inity Te	est (Sa	turate	******* * * * * * * * * * * * * * * *	Extract			
				рН		AND THE SECTION AND THE	Erforktorett	ecentegrato	7.1	er convenient to your a sit	a.va.setasatasa	15c (7.751205241)(57061	arte occasi
				The sensitivity of the 5th	nduci	tivity			and a market and the) mmhos/d	om i i i		
				The same of the same of the same	dium	Telescope and the colo	iersenration	to the second		ppm ppm	neantainneachtaire	391.094 n	マクロス・マストのことで
				Carried Control of the Control of th	tassiu	Particular services				ppm		3.183 n	and the second of the second
		awasa ta		washington that me steeme	lcium	16 mm = 2 15-1-15	ctaning to the	wied cars, se ch	作为"他"等于2000年12日的"1000"和	ppm	otentrace_istrace	178.707 n	
				Marie Co. Bornovic Charles	ignesi	lum 🦩			with the same of the same	ppm .		5. 316 n	neq/L
				SA		iana ne anti-			40.77	See at 100 at 10	i du din konstinara	n en orden man spielande fin	2-10-3-158-1365-74
		400	建筑影景 》。	SS	iP.				67.63				

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472179
Customer Sample ID: S-3 1
Crop Grown: IMPROVED AND HYBRID BERMLIDA GRASS, GRAZING

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Grop Grown:	IMPROVED	ANDH	ARKIN RE	KIMODA	GRAS	55, GF	CAZING	1			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHlgh	Excess	
рН	7.8	(5.8)		Mod. Al	kaline		11.14				
Conductivity	2,140	(-)	umho/cm	High			C	.*		F	ertilizer Recommended
Nitrate-N	2	(-)	ppm**				sant a				55 lbs N/acre
Phosphorus	12	(50)	ppm	1111111111		İ		l I			50 lbs P2O5/acre
Potassium	246	(125)	ppm	1111111111			11111111111	IIIII °			0 lbs K20/acre
Calcium .	15,240	(180)	· ppm	1111111111			minim		II .		0 lbs Ca/acre
Magnesium	148	(50)	ppm					111			0 lbs Mg/acre
Sulfur	2,336	(13)	ppm	1111111111)11111111111				0 lbs S/acre
Sodium	422	(-)	ppm	100000							
Iron								l I			
Zinc		ar differ		A Marka							
Manganese											
Copper		. 4.15				- 83(7A					
Boron											
Limestone Requiremen	nt			And Mark				1			0.00 tons 100ECCE/acre
				manda , Natio Mines	artis a travers	Ano anothern is	- for an experience	emerenski tet	do anad Truthing 1	- North Arthritis	187 107 10 10 10 10 10 10 10 10 10 10 10 10 10
				Detail	ed Sali	inity T	est (Sa	turate	d Paste		ct)
		32-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		pl	OF THE STREET, ST. ST. ST.			maka mengan	7.0	TAKE MARKET AND ADDRESS OF THE PARKET AND AD	
				Control of the second section of the second	onduc	tivity			Line Line to Andrew de	3 mmh	
				are march barrer	odium	enteller sternasie		ale ditabu	COLUMN PROPERTY	ppm 9	14.335 meq/L
			19 5 5 18 11	STED - FACTOR OF LANDS	otassit	and he such the			Tail of collection of the coll	3 ppm	0.418 meq/L =
		section to the		action of the second	alcium	COMMUNICATION AND AND AND AND AND AND AND AND AND AN		amvertten		9 ppm	38.890 meq/L
				Man I want hand "month from	agnesi	um			E effertable & edintrida To a	3 ppm	1.512 meq/L
					AR		entomoteur.	Mariana n	3.19		
是是特色。但是自己的自己				₽ S	SP,				25,99		是以生命的。

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water. Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472180 Customer Sample ID: S-3 2 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

IMPROVED	AND H	YBRID BEI	RNUDA	GRAS	S, GF	AZING				
Results	CL*	Units	ExLow			Mod	High	VHigh	Excess.	
8.1	(5.8)		Mod. Al	kaline			7.			
1,520	(-)	umho/cm	Modera	te		Cl			Fe	ertilizer Recommended
0	(-)	ppm**		Maria					ĺ	55 lbs N/acre
7	(50)	ppm	HIIIIIIII	11111					ĺ	55 lbs P2O5/acre
45	(125)	ppm	\$ 5 mg/ \$150 km/(\$600)	and the second second			. 9			75 lbs K20/acre
20,117	(180)	ppm						II.		0 lbs Cà/acre
58	(50)	ppm								0 lbs Mg/acre
6,142	(13)	ppm	1111111111)!!!!!!!!!!!!				0 lbs S/acre
171	(-)	ppm	minim		(111)					
A Partie					F.15					
				l	.					
					1 44.4	İ		-		
					l					0 959
t : 50 - 50	d Hall	Wenge		hand is	N WW				10	0.00 tons 100ECCE/acre
					are property to the con-	en la company de la company	0001100000	Paran Pipinggangangan		erate en succession de la companya de la companya de la companya de la companya de la companya de la companya
			Detail	ed Sal	inity T	est (Sa	iturate			ct)
			р	Н	a concentration when	a trace was are	No. No. of Control of Control			. g. ant - 11 - 11 - 11 - 11 - 11 - 12 - 12 - 1
	1, 14.		e C	onduc	tivity			Commercial Committee and the Committee of the Committee o	120-24 July - 170	
			S	odium		i i i marana a a a a a a a a a a a a a a a a a	Carrier Carrier Constitution			13.459 meq/L
			P	otassii	ım			Appendiculation of the	De a colo a Con i do To	0.362 meq/L
The second secon	104111		С	alcium			an and the second second			33.459 meq/L
			. M	agnes	lum			1	4 ppm	1.129 meg/L
of the last of the	- Carrier and				1 to out the - 1		Commence (A)	**. 1 5 * *** . 5**	erenesta a e	nome and amount were in the other functions of contract of the
L_{i} , L_{i} L_{i}	300		S	SP				27.8	0	
	IMPROVED Results 8.1 1,520 0 7 45 20,117 58 6,142 171	IMPROVED AND H Results CL* 8.1 (5.8) 1,520 (-) 0 (-) 7 (50) 45 (125) 20,117 (180) 58 (50) 6,142 (13) 171 (-)	IMPROVED AND HYBRID BE Results CL* Units 8.1 (5.8) 1,520 (-) umho/cm 0 (-) ppm** 7 (50) ppm 45 (125) ppm 20,117 (180) ppm 58 (50) ppm 6,142 (13) ppm 171 (-) ppm	MPROVED AND HYBRID BERMUDA Results CL* Units ExLow 8.1 (5.8) Mod. Al 1,520 (-) umho/cm Modera 0 (-) ppm** 7 (50) ppm Illillillillillillillillillillillillilli	MPROVED AND HYBRID BERMUDA GRASS Results CL* Units ExLow VLow R.1 (5.8) Mod. Alkaline Alkaline Moderate O (-) ppm** T (50) ppm HIIIIIIII HIIIII HIIIIIII HIIIIIII HIIIIIIII	MPROVED AND HYBRID BERMUDA GRASS, GR Results CL* Units ExLow VLow Low R.1 (5.8) Mod. Alkaline Alkal	MPROVED AND HYBRID BERMUDA GRASS, GRAZING Results CL* Units ExLow VLow Low Mod	Moderate	Moderate	Moderate

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water. Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



Outside TX County

Laboratory Number: 472181 Customer Sample ID: S-4 0 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop Grown:		AND H	BRID BEI	ŔМUDA	GRAS	S, GR	AZING						
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess,			
рН	7.7	(5.8)		Mod. All	aline				,				
Conductivity	6,250	(-)	umho/cm	V. High			CL	•		Fer	tilizer Reco	mmende	d
Nitrate-N	0	(-)	ppm**					Ì			55 lbs N/ac	re	
Phosphorus	29	(50)	ppm		manni	mmmi					25 lbs P2O	5/acre	
Potassium	453	(125)	ppm					milli	l		0 lbs K20/	асге	
Calcium	10,009	(180)	ppm					3	ll .		0 lbs Ca/a	cre	
Magnesium	195	(50)	ppm				ummi)	1111			0 lbs Mg/a	icre	
Sulfur	893	(13)	ppm		mmmmi(mmm)	mmni			0 lbs S/ac	re	
Sodium	8,505	(-)	ppm		mmmi)		(Allanni)	mmini	uiumin				
Iron							1	į					
Zinc							1		i.				
Manganesé					ĺ		į						
Copper													
Boron					l		1						
Limestone Requiremen	nt 💮 💮										0.00 tons 100	ECCE/acr	е 💛
				Detaile	d Sali	nity Te	est (Sa	turated	d Paste	Extract			
				p⊦					7.2	2			
	A 10 160			Co	nduct	ivity			86.70) mmhos/	cm - E		
				So	dium				16880) ppm	7	34.556 m	eq/L
				Po	tassiu	m			513	B ppm		13.131 m	eq/L
				Ca	lcium				4126	ppm	2	05.893 m	eq/L
			regarden are	Ma	ignesi	um 📄			128	ppm		10.485 m	eq/L
				SA					70.62	?			
				SS	P.				76.19				

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472182 Customer Sample ID: S-4 1

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016 Printed on: 12/21/2016

Area Represented: not provided

Crop Grown: II	MLKOAFD	ANDH	ARKID RFI	KINIODA	GRAS	55, GK	AZINC	7					
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.			
рН	7.8	(5.8)		Mod. Al	kaline	antitici in	og i digiri, i				•	1000	
Conductivity	4,600	(-)	umho/cm	V. High			C	L*		Ferti	izer Reco	mmende	d
Nitrate-N	0	(-)	ppm**			13.70					55 lbs N/ac	re	
Phosphorus	13	(50)	ppm			ļI		 			50 lbs P2O	5/acre	
Potassium	239	(125)	ppm				MIIIIIII	ķiili '			0 lbs K20/	асге	
Calcium	16,225	(180)	ppm		ŧ .	1	:		W _.		0 lbs Ca/a	cre	
Magnesium	169	(50)	ppm					ģII			0 lbs Mg/a	cre	
Sulfur	472	(13)	ppm)111111111	ļumun			0 lbs S/ac	e	
Sodium	2,809	(-)	ppm					ļimimi					
Iron								l I					
Zinc								I I				•	
Manganese								1					
Copper								į					
Boron					l., ,,	ļ		ı L					1
Limestone Requirement				Name of				<u></u>		0.	00 tons 100	ECCE/acr	е
						MER BUTTE DES	ret milieviske en f	ir mātu akrauta st	on to a substituti	awis markataning		respuestament	niconido e e e
					4764	inity T	est (S	aturate		Extract)			
				pl		Francisco (march)		ಪ್ರದೇಶ ಕೃತ್ಯಗಳ ಪ್ರದೇಶ ಕೃತ್ಯಗಳ	7.3				
		1. 1. 1			onduc				5. 4. 8.3 C v 10.5 mes 2) mmhos/cr	Contraction of the contraction of the Contraction o	dia ilia	
				and the second s	odium	- Anna Carlotta - Charles		n-vonciental	A S (- AP - P) - T P C - P	7 ppm	1) Andrewski state of the state of the state of the state of the state of the state of the state of the state of t	3 6.117 m	STORE FROM COUNTY
	11.6			THE RESERVE AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON	otassii	Den Grideren Grind Start			and the second section of the second) ppm		1.541 m	41.12.0.20.00.00.00.00.00.00.00.00.00.00.00.
				and the second response	alcium	an acceptance of the	eladāstrenikus	telerenako:	といったくなないないできます。	4 ppm	1! Antonierikoari	9 0.312 m	STORE CHESTON
				in the second second	agnes	lum) ppm		6.576 m	eq/L_
					AR	ner in	e Manazasas		16.74	· · · · · · · · · · · · · · · · · · ·	arenda arrak	Protore de la composición della composición dell	
				S S	SP				45.57				是結構

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water. Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472183 Customer Sample ID: S-4 2

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Crop	Grown: IMPROVED	AND H	YBRID BE	RMUDA	GRAS	S, GR	AZINO	કે			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHlgh	Excess.	
рН	8.1	(5.8)	-	Mod. Al	kaline		Branch.	7 "			1
Conductivity	1,560	(-)	umho/cm	High	-		c	L*		Fe	rtilizer Recommended
Nitrate-N	0	(-)	ppm**				4,447				55 lbs N/acre
Phosphorus	5	(50)	ppm	HIMIM				!			60 lbs P2O5/acre
Potassium	51	(125)	ppm					1 °			70 lbs K20/acre
Calcium	27,898	(180)	ppm	1		1			ll .		0 lbs Ca/acre
Magnesium	86	(50)	ppm								0 lbs Mg/acre
Sulfur	5,899	(13)	ppm	2				†mmm		Ė	0 lbs S/acre
Sodium	181	(-)	ppm	HIIIIIIII		III		-			
Iron					-			i			20
Zinc								1			enad.
Manganese				Ī				1			
Copper	e milita afilitati ili dilatari	1 4 4 4 4			V	LAVELA T		1			1877
Boron	an ala senadente i al lei euro i	er in skrevenske	Augrest, fiere exister			- ANTEROES		l l		1	
Limestone Requ	uirement			Administration	: M. M. N. J. M.			Sale (SW)	1	4. *	0.00 tons 100ECCE/acre
				grato valgorila	Grandologia (f		Magazan de St	washina tat	7077 NASS	ia orozná spaci	
		M. A.	1010-0170	SH NOT AND ADDRESS	LOTA SPECIAL SPECIAL SECTION	nity T	est (S	aturate		e Extrac	t)
		-		pl				STATESTAL Z.A	7.	AND THE RESERVE TO BE	
		7, 6		THE A THE PARTY OF THE PARTY.	onduct	ivity			4 - T. Sept. A. D Sept T. Sept.	9 mmhos	The Confidence of the part of the second of
Victor and the second		Carlos Barispin		and the same	odium	alapia espi	ensinerala.	STERVINE EN		5 ppm	7.612 meq/L
				Section Section 1	otassiu	A STATE OF THE PARTY OF THE PARTY.				3 ppm	0.341 meg/L
rate poi successiva de la compansión de				The state of the state of	alcium	A STATE OF THE REST.	rasanieria	Sofortali 4	けいからないできます。	2 ppm	30.560 meq/L
					agnesi	um.				5 ppm	1.245 meq/L
		e e e e e e e e e e e e e e e e e e e		manager of the second of the second	AR	Maria de	Tiridiya:	eranceance	1.9	entrance of the service of	
				g S	SP				19.1	District	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472184 Customer Sample ID: S-4 3 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016
Printed on: 12/21/2016
Area Represented: not provided

Customer Sample Crop Gro	own: IMPROVED	AND H	YBRID BEI	RIMUDA	GRAS	SS. GR.	AZING				
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHIgh	Excess.	
рН	8.1	(5.8)		Mod, Al	caline	ra vijeg ty					
Conductivity	1,550	(-)	umho/cm	High			CL*			Fertiliz	er Recommended
Nitrate-N	0	(-)	ppm**	1 11 3			l			56	lbs N/acre
Phosphorus	6	(50)	ppm	1111111111	I		i	-		60	lbs P2O5/acre
Potassium	44	(125)	ppm	1111111111	IIIIIII		1	. 0		75	lbs K20/acre
Calcium	28,274	(180)	ppm	111111111111111111111111111111111111111		(111111111)	minini		II	(lbs Calacre
Magnesium	93	(50)	ppm		111111111	(minim)	umumb)	la l		(lbs Mg/acre
Sulfur	5,819	(13)	ppm	1111111111	HIIIIIII	(111111111)	mmmþ			(lbs S/acre
Sodium	50	(-)	ppm	1111111111	WALL B			,			
Iron							1				
Zinc							į				
Manganese							i				
Copper		in the St			TARREST TAR		1	21		-2	
Boron ·							1				
Limestone Require	ement	i Xia Viji								0.00	tons 100ECCE/acre
				Detail	ed Sali	nity Te	est (Sat	urate	d Paste	Extract)	
			·	þΗ	1				7.9		
				Co	onduct	livity			2.70	mmhos/cm	
				Sc	dium				103	ppm	4.499 meg/L
				Po	tassiu	ım			12	ppm	0.319 meq/L
				Ca	llcium		0.75		594	ppm	29.657 meq/L
				, Ma	ignesi	um .			17	ppm	1.376 meg/L
				S	R				1.14		

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



Outside TX County

Laboratory Number: 472185 Customer Sample ID: S-5 0 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016

Printed on: 12/21/2016
Area Represented: not provided

Crop Grown:	IMPROVED	AND H	YBRID BE	RMUDA	GRAS	SS, GF	AZING	i			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess,	7 7 7
рН	7.9	(5.8)	<u> </u>	Mod. Al	kaline						
Conductivity	4,530	(-)	umho/cm	V. High			CL			Fe	rtilizer Recommended
Nitrate-N	1	(-)	ppm**								55 lbs N/acre
Phosphorus	27	(50)	ppm								30 lbs P2O5/acre
Potassium	295	(125)	ppm	1111111111) III III III K	IIIII°			0 lbs K20/acre
Calcium	7,534	(180)	ppm		*********	1	, manana		ļl		0 lbs Ca/acre
Magnesium	130	(50)	ppm					Ш		İ	0 lbs Mg/acre
Sulfur	1,234	(13)	ppm				111111111111111111111111111111111111111	unning		É	0 lbs S/acre
Sodium	3,897	(-)	ppm						m		
Iron											
Zinc											·
Manganese							l i				•
Copper											
Boron							1				
Limestone Requiremen	t									•	0.00 tons 100ECCE/acre
					erente frances s	Towns his own man	******************				
	its, it is a	5 2 1		Detaile	ed Sall	nity T	est (Sa	turate	d Paste	e Extrac	t)
				рН		Test (Turner) in June			7.	getter, or a super transmit	
				22 - 1 - 1 - 1 - 1 - 1 - 1 - 1	onduct	livity =			" " - Ending" - et posto.	0 mmhos	가지 수가 없는 사이 아이가 하는 사람 되었다. [전 기계 등 경험 경험 프랑스 경험을 하다는 수] 경우스 글을 가려면 그렇는 것 같다.
					dium	unitatio e Tra ns	struster war -		800.	7 ppm	348,427 meq/L
			7 7 7	And the second second	otasslı	Short State Control of Control				7 ppm -	3.502 meq/L
***				teles un management	alcium	MALE STREET		a di Turba (chi a Trado	354	1 ppm	176.694 meq/L
		ing. Salitana	1302.000		agnesi	um 🦟			6	5 ppm 🖠	5.327 meq/L
					\R	e engangan sangan en	and the same of th	* 1 /2 I a. 200 / 200	36.5	and the second	
				SS	3P				65.2	5	

**CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472186 Customer Sample ID: S-5 1 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone) 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016 Printed on: 12/21/2016

Area Represented: not provided

Crop Grown: IMPF	ROVED	AND H	YBRID BEI	RMUDA	GRAS	S, GR	AZING	ì			
Analysis R	esults	CL*	Units	ExLow	VLow	Low	Mod	High	VH(gh	Excess.	
рН	8.3	(5.8)		Mod. Al	kaline						
Conductivity	1,780	(-)	umho/cm	High			С	L•		Fe	ertilizer Recommended
Nitrate-N	1	(-)	ppm**			44	r jaran		1		55 lbs N/acre
Phosphorus	9	(50)	ppm	minim	mini			1 1			55 lbs P2O5/acre
Potassium	59	(125)	ppm					6			60 lbs K20/acre
Calcium 3	32,480	(180)	ppm						ļu —		0 lbs Ca/acre
Magnesium	134	(50)	ppm				100 200 200 200 200			Ė	0 lbs Mg/acre
Sulfur	5,519	(13)	ppm			Accessors and		humun	(Mariana)		0 lbs S/acre
Sodium	524	(-)	ppm	ummu			III				
Iron								l L			
Zinc								1			i i i i i i i i i i i i i i i i i i i
Manganese		100						1			
Copper						A-1	177				
Boron		S e o evodke si	iski Siberata ya Inte		one and						* 10
Limestone Requirement	10. (3)			P Havyds	Mar 1973	Miles of the	M.			÷	0.00 tons 100ECCE/acre
				a de la companione de l	on who are or white dis-	reducentario construire.	en danimiero co	pulsare and a	a.Zemperiori, ki ser	era/erumman/era	e de la companya del companya del companya de la companya del la companya de la c
						nity Te	est (Sa	turate	1	Extrac	ot)
				þł		ing property and the	ng-kanganasan	agus en nombre e	7.8	- of the bosons and the con-	පැවතිවරයා මෙයට වියේ ආද්රා වේ කිරීමයට පැවැදි දින පළමු වේදම් කළේට පැවැදිර සාය. එම්මුණ
		17.	Marian Company	The state of the s	onduct	ivity			- and a first of the first of t	3 mmhos	これに、シャップでし、ちゃとり、シャン・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
				TO SHOW WHEN THE SAME	odium	farneburiler		TATELET SANSON) ppm	30.005 meq/L
	(k_1)	Ver (1)	1-11, 514	at A table to move the same to	otassiu	m -				3-ppm	0.726 meq/L
				area area area area	alcium	stoficoch	Rever Michiga	au austan) ppm	32.438 meq/L
				Property of the confidence of	agnesi	um				l ppm	1.730 meq/L
					٩R	enialegan ota	esternit met	erentinen er	7.26		Collination of the state of the
				l S	SP.				46.23	3 16.7 16	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductívity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.



Outside TX County

Laboratory Number: 472187 Customer Sample ID: S-5 2 Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-4816 (phone 979-845-5958 (FAX)

Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016 Printed on: 12/21/2016 Area Represented: not provided

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS, GRAZING

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess			
рН	8.2	(5,8)		Mod. All	caline	CENTER!	YEAR THE	171.75 (4)					
Conductivity	1,420	(-)	umho/cm	Moderat	e			CL*		F	ertilizer l	Recommen	ded
Nitrate-N	1	(-)	ppm**			1 0 10	3 1 2	Ì	į		55 lbs	N/acre	4.50
Phosphorus	4	(50)	ppm	1111111				ī			60 lbs	P2O5/acre	
Potassium	10	(125)	ppm				基层的	1			105 lbs	K20/acre	
Calcium	18,208	(180)	ppm	11111111111							0 lbs	Ca/acre	
Magnesium	68	(50)	ppm								0 lbs	Mg/acre	
Sulfur	7,037	(13)	ppm	11111111111			ļumm	ı ç ımım	i (nommu)	É	0 lbs	S/acre	
Sodium	61	(-)	ppm		III	1 0.							
Iron								1					
Zinc					NV-11	77.		1					
Manganese								į					
Copper								I		-		High	Fs.)
Boron								1.					
Limestone Requirement					taris s		£ , 7				0.00 tor	s 100ECCE/	acre
					ed triaditions had a dis-	a karrena kururan da	v :: 10000 To : 174	San James Bay at the contract of	-74				Brown _ a glass 15,875 (a Frida)
		da Dav		Detaile	d Sali	nity T	est (S	aturate	ed Paste	e Extra	ict)		
property appropriate and the longer property and the continues of the cont				p⊦		of Name and Address	enterna en retar	tarional control open	7.8		mining multiple day	- Lotoforno Immeraliamento el	too there is a street, less than the
			4 25 3	The Court of the C	nduct	ivity			- S. of rear Section of Toursell	6 mmh	os/cm		
					dium	erana an an an	eriodus autoritas da			0 ppm			meq/L
		v. (,),		日本 こうしゃ かいかいかい かん	tassiu	m ,				4 ppm		A Division to the second property of the second	meg/L
				The same of the sa	lcium	STATE OF THE PARTY	uteres stron	ensonano esta		3 ppm	starnorthnia	30.090	
				Fill of the section of the	ignesi	um			The second secon	0 ppm		0,856	meq/L
				SA			erentations.	culanis Albasidas	1.5		toks edulu Skredin us z kelin	inatente di postanti	enformation
				SS	P.				16.2	7			

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



Outside TX County

Laboratory Number: 472188 Customer Sample ID: S-5 3

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU

College Station, TX 77843-2478 979-845-4816 (phone)

979-845-5958 (FAX)
Visit our website: http://soiltesting.tamu.edu

Sample received on: 12/13/2016

Printed on: 12/21/2016
Area Represented: not provided

Crop Grow	n: IMPROVED	AND H	YBRID BEF	RMUDA	GRAS	SS, GR	AZING	i			
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHIgh	Excess.	
рН	8.3	(5.8)	17.547.143	Mod. Al	kaline						
Conductivity	1,510	(-)	umho/cm	Moderat	te		Cl	•		Fertilizer Recommended	
Nitrate-N	1	(-)	ppm**				455			55 lbs N/acre	
Phosphorus	4	(50)	ppm	[[]]]]]						60 lbs P2O5/acre	
Potassium	15	(125)	ppm							105 lbs K20/acre	
Calcium	16,303	(180)	ppm	1111111111	IIIIIIIIII	(mmm)	11111111111	ummuj	11	0 lbs Ca/acre	
Magnesium	324	(50)	ppm	1111111111						0 lbs Mg/acre	
Sulfur	6,730	(13)	ppm	1111111111	1111111111	(mmun	инини	mmmi		0 lbs S/acre	
Sodium	44	(-)	ppm	11111111	4. **		1,7500				
Iron				İ]				
Zinc											
Manganese								-			
Copper					11						
Boron											
Limestone Requirem	ent	10						i i		0.00 tons 100ECCE/acre	
					- ಉಪತ್ರಣೆ ಕ್ಷಾಕ್ರಾಂ	markfrour :	: CERTRIGE feet	mayou acassiss	to you part to the country of	and the state of t	e's may
					THE PERSON NAMED IN	inity T	est (Sa	turate	to the or publication	e Extract)	
		en de la lace		pł		Serve Verovsk	walania	Siferior and an	8.	The statement received and appear and a second specific to the	talues
					onduc				118 2003 1 2 1 2 1 2 1	0 mmhos/cm	
		aires Communica	No. 2004 (No. 2004)	ELECTRIC PROPERTY.	odium	495. 71177. 711. 5	A made military and a	eradotterresió de		7 ppm 5.964 med	A CONTRACTOR
				E/F TE TO VOAS	otassiu	and the late of the second	Series.			4 ppm 0.361 med	
Santa a Coloria de Casa de Casa de Casa de Casa de Casa de Casa de Casa de Casa de Casa de Casa de Casa de Cas	An Color	V. S. Film (V. S. S. S. S. S. S. S. S. S. S. S. S. S.		to the second had been been	alcium	na Tarina kanana a	ugasēkass ka	SEALO (FA-14-		9 ppm 22.906 med	and the same of the
					agnes	ium.				1 ppm 3.378 med	1/L
					۱R	nasoja salamovi	रहा देशीय अध्यक्ष स्टब्स	ioraeat i	1.6		
	to be the second	4.80		· S	SP				18.2	9	

^{*}CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

Nitrogen: Apply an additional 70 lbs/A of nitrogen for each subsequent heavy graze down.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.



December 15, 2016

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: PINTAIL 23 FED #8

Enclosed are the results of analyses for samples received by the laboratory on 12/08/16 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:

12/08/2016

Reported:

12/15/2016

Project Name:

PINTAIL 23 FED #8

Project Number: Project Location: 701162.078.01 M-23-25S-26E Sampling Date:

12/02/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-1 0' (H602747-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	119 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2016	ND	190	95.0	200	1.17	
DRO >C10-C28	<10.0	10.0	12/09/2016	ND	204	102	200	0.506	
Surrogate: 1-Chlorooctane	75.6	% 35-147							
Surrogate: 1-Chlorooctadecane	65.8	% 28-171							

Sample ID: S-1 7' (H602747-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	12/13/2016	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:

12/08/2016

Reported:

12/15/2016

Project Name: Project Number: PINTAIL 23 FED #8 701162.078.01

Project Location:

M-23-25S-26E

Sampling Date:

12/02/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: S-2 0' (H602747-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS		Constitution of the Consti	10000000000000000000000000000000000000		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5,99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	119 9	6 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS	- Automore				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2016	ND	190	95.0	200	1.17	
DRO >C10-C28	<10.0	10.0	12/09/2016	ND	204	102	200	0.506	
Surrogate: 1-Chlorooctane	67.3	% 35-147							
Surrogate: 1-Chlorooctadecane	63.5	% 28-171							

Sample ID: S-2 2' (H602747-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/13/2016	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived urless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

TALON LPE SHELDON HITCHCOCK 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received:

12/08/2016

Reported:

12/15/2016

Project Name:

PINTAIL 23 FED #8

Project Number: Project Location:

701162.078.01

M-23-25S-26E

Sampling Date:

12/02/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-3 0' (H602747-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5,99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	118 %	6 73.6-140)						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2016	ND	190	95.0	200	1.17	
DRO >C10-C28	<10.0	10.0	12/09/2016	ND	204	102	200	0.506	
Surrogate: 1-Chlorooctane	73.0 9	% 35-147							
Surrogate: 1-Chlorooctadecane	73.1 9	% 28-171							

Sample ID: S-3 2' (H602747-06)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	12/13/2016	ND	400	100	400	3.92	

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Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

TALON LPE SHELDON HITCHCOCK 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received:

12/08/2016

Reported:

12/15/2016

Project Name: Project Number: PINTAIL 23 FED #8 701162.078.01

Project Location:

M-23-25S-26E

Sampling Date:

12/02/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-4 0' (H602747-07)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	1199	% 73.6-140)						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2016	ND	190	95.0	200	1.17	
DRO >C10-C28	<10.0	10.0	12/09/2016	ND	204	102	200	0.506	
Surrogate: 1-Chlorooctane	68.8	% 35-147							
Surrogate: 1-Chlorooctadecane	68.8	% 28-171							

Sample ID: S-4 3' (H602747-08)

Chloride, SM4500Cl-B mg/kg		Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	12/13/2016	ND	400	100	400	3.92	

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Celeg D. Keena

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 8



Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:

12/08/2016

Reported:

12/15/2016

Project Name: Project Number: PINTAIL 23 FED #8 701162.078.01

Project Location:

M-23-25S-26E

Sampling Date:

12/02/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-5 0' (H602747-09)

BTEX 8021B	mg/	'kg	Analyze	d By: MS			W-5000000000000000000000000000000000000		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	118 9	% 73.6-14	0	,					
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2016	ND	190	95.0	200	1.17	
DRO >C10-C28	<10.0	10.0	12/09/2016	ND	204	102	200	0.506	
Surrogate: 1-Chlorooctane	69.8	% 35-147	,	, ,					
Surrogate: 1-Chlorooctadecane	65.4	% 28-171							

Sample ID: S-5 3' (H602747-10)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	12/13/2016	ND	400	100	400	3.92	

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Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature,
z.	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg & Keene

Celey D. Keene, Lab Director/Quality Manager

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101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: 2 ON/LPE	23 T	2 2 2 2 2		THE CONTRACTOR OF THE CONTRACT	A	ANALYSIS REQUEST	
Project Manager: Sheldon Hitchcock	neldon Hitchcock		P.O. #:	any number of the state of the			
Address: 408 W.	Texas Ave.		Company: Cimarex				
chy: Artesia	State: NM	Zip: 88210	Attn: Christine Alderman	an an an an an an an an an an an an an a			
Phone #: 575-746-8768	Fax #:	575-746-8905	Address:				
Project #: 701162.078.01	78.01 Project Owner: Cimarex		City:				
Project Name: Pintail 23 Fed #8			State: Zip:				
Project Location: M-23-25S-26E	23-25S-26E		Phone #:				·
Sampler Name: Sheldon Hitchcock	don Hitchcock		Fax#:				
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	ক	·5		
		RS TER					
8	Sample I.D.		/BASE: COOL	PH	TEX		
1602747		# CON GROU WAST SOIL OIL SLUDI					
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2 5-1	7	6-1	1/6/21/1/21	25,50			
2-5-8	20'	다 - -	1 2/2/16	31.00 /			
n	-2-2	6-1	1/12/2/16	3/05	\		
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65-	3 2	5	1 12/2/16	3,35			
254	-40'	6-	1 2/2/16	/ 80.1 h			
5-	43	い	1 12/2/60	4.2	\		
S	50,	1.5	12/2/6	1 28:4			
1015-	-53	6-1-	1 12/7/16	3:30			
PLEASE NOTE: Liability and Darnay analyses. All claims including those service. In no event shall Cardinal b	d clent's exclusive n ther cause whatsoov onsequental damage	ny claim arising whether based in contract or feemed waked unless made in writing and n without limitation, business interruptions, lot	ntract or tort, shall be limited to the amount paid by the client for the ng and received by Cardinal within 30 days after completion of the a torn, loss of use, or loss of profits incurred by client, its subsidiaries	by the client for the completion of the applicable and, its subsidiaries,	,		
Relinquished By:	ned By: 9,550/Q/II	Reper	red By: // Phone Res	듥		\dd' Phone #:	
or more	00:th	Appen A	228/		□ No	Add' Fax #:	
Relinquished By:	Date:	Received By:					
esta esta esta esta esta esta esta esta	Time:						
Delivered By: (Circle One)	rcle One)	Sample Conditio	п снискърву:				
Sampler - UPS - Bu	Bus - Other: 45	Cool Intact					

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 149945

CONDITIONS

Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO	162683
600 N. Marienfeld Street	Action Number:
Midland, TX 79701	149945
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Create By		Condition Date
bhal	I None	11/2/2022