	EPARTMENT OF THE SUREAU OF LAND MAN		NM OIL CON	ISERVAT	ONB N Expires: Ja 5. Lease Serial No.	O. 1004-0137 anuary 31, 2018
SUNDRY	NOTICES AND REP is form for proposals to	ORTS ON W	ARTESIA	DISTRICT	NMNM19848	
Do not use th abandoned we	is form for proposals to bli. Use form 3160-3 (Al	o drill or to re PD) for such	e-enter an proposakiAR 1	1 2019	6. If Indian, Allottee of	or Tribe Name
SUBMIT IN	TRIPLICATE - Other in	structions or	n page 2 RECI	EIVED	7. If Unit or CA/Agre 8910142720	ement, Name and/or No
1. Type of Well					8. Well Name and No. LAGUNA GRANDE UNIT FEDERAL 3	
Oil Well Gas Well Other Contact: AMITHY E CRAWFORD CIMAREX ENERGY COMPANY OF CO-Mail: acrawford@cimarex.com					9. API Well No. 30-015-23414-00-\$1	
3a. Address 600 N MARIENFELD STE 600 MIDLAND, TX 79701			3b. Phone No. (include area code) Ph: 432-620-1909		10. Field and Pool or Exploratory Area LAGUNA SALADO-ATOKA	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)					11. County or Parish,	State
Sec 29 T23S R29E NWSE 2310FSL 1980FEL					EDDY COUNT	Y, NM
		المري فرينا المدرو والمراجع			<u> </u>	
12. CHECK THE A	PPROPRIATE BOX(ES	5) TO INDIC			REPORT, OR OTI	HER DATA
TYPE OF SUBMISSION	ļ			ACTION		
Notice of Intent	Acidize	🗖 De	eepen	Product	tion (Start/Resume)	Water Shut-Off
_	Alter Casing	🗆 Ну	draulic Fracturing	🗖 Reclam	ation	Well Integrity
Subsequent Report	Casing Repair	🗖 Ne	w Construction	🗖 Recom	plete	Other
Final Abandonment Notice	Change Plans	🗖 Ph	ug and Abandon	🗖 Tempoi	rarily Abandon	
	Convert to Injection S Plug Back					
 Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involve testing has been completed. Final A determined that the site is ready for Cimarex Respectfully request 	peration: Clearly state all pertin lally or recomplete horizontally mk will be performed or provie d operations. If the operation bandonment Notices must be final inspection.	nent details, inclu y, give subsurfac de the Bond No. results in a multi filed only after al	uding estimated startin ee locations and measu on file with BLM/BIA ple completion or reco Il requirements, includ	red and true vo Required su mpletion in a ing reclamatio	ertical depths of all perti- becquent reports must be new interval, a Form 316 n, have been completed	nent markers and zones. e filed within 30 days 60-4 must be filed once and the operator has
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Rup. 3-22-19

Additional data for EC transaction #456349 that would not fit on the form

32. Additional remarks, continued

8. MIRU Wireline unit

MIRO Wireline Unit
 RIH with gauge ring to 11,950'; POOH with gauge ring
 RIH with 5-1/2" Cast Iron Bridge Plug to +/- 11,950' and set in joint
 Load hole and Pressure test the plug to 500 psi and hold for 30 minutes
 Spot 25 sacks of cement on top of CIBP; WOC
 MU RIH to 9,110' with perforating gun; perforate from 9,080' - 9,110' with 60 degree phasing, 6

SPF

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14. POOH with perf guns

POOH with perf guns
 RDMO Wireline
 MU TIH with 5-1/2" Retrievable Packer and 2-3/8" Tubing; set packer at 9,030'
 RIH with swab cups to 9,000' and swab a column of fluid; continue to swab until an oil cut is observed at surface and make note of % cut; if no oil cut is observed, contact Midland Office for decision on acidizing of zone; WAIT ON ORDERS
 Once decision from Midland is made, TOOH with 2-3/8" Tubing and 5-1/2" Packer
 ND BOP, NU WH
 Notify Production foreman when work is complete
 RDMO pulling unit
 Evaluate for potential P&A of well
 Clean up all trash from location

Revised PROCEDURE

- 1. Check guy line anchors 3 days prior to rig up
- 2. Check tubing and casing pressures; bleed off backside to sales
- 3. Pump 2% KCl water as needed to kill well
- 4. MIRU pulling unit
- 5. ND WH, NU BOP, function test BOP
- 6. Attempt to unset packer
- 7. Cut tubing at 11885 ft.
- 8. TOOH with 2-3/8" tubing
- 9. MIRU Wireline unit
- 10. RIH with gauge ring to 11,900'; POOH with gauge ring
- 11. MU RIH with 5-1/2" Cast Iron Bridge Plug to 11,885' and set in joint
- 12. Load hole and Pressure test the plug to 500 psi and hold for 30 minutes
- 13. Spot 25 sacks of cement on top of CIBP; WOC
- 14. MU RIH to 9,110' with perforating gun; perforate from 9,080' 9,110' with 60 degree phasing, 6 SPF
- 15. POOH with perf guns
- 16. RDMO Wireline
- 17. MU TIH with 5-1/2" Retrievable Packer and 2-3/8" Tubing; set packer at 9,030'

18. RIH with swab cups to 9,000' and swab a column of fluid; continue to swab until an oil cut is observed at surface and make note of % cut; if no oil cut is observed, contact Midland Office for decision on acidizing of zone; WAIT ON ORDERS

19. Once decision from Midland is made, TOOH with 2-3/8" Tubing and 5-1/2" Packer

- 20. ND BOP, NU WH
- 21. Notify Production foreman when work is complete
- 22. RDMO pulling unit
- 23. Evaluate for potential P&A of well
- 23. Clean up all trash from location

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Conditions of Approval for Permanent Abandonment of a Production Zone

- 1. <u>Notification</u>: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612
- <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet, a 3M system for a well not deeper than 13,636 feet, or a 5M system for a well not deeper than 22,727 feet (all depths are for measured well depth).
- 3. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.
- 4. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the approved depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours. In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. Before pumping cement on top of CIBP, a tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary. Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.
- 5. <u>Subsequent Plug back Reporting</u>: Within 30 days after plug back work is completed, file a Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. <u>Show date work was completed</u>. If plugging back to a new zone submit a Completion Report, form 3160-4 with the Subsequent Report.
- 6. <u>Trash</u>: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.
- If well location is within the Timing Limitation Stipulation Area for Lesser Prairie-Chicken: From March 1st through June 15th annually, abandonment activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted



PROCEDURE SHEET – CARLSBAD REGION

(PLEASE COMMENCE WITH WORK PER PROCEDURE)

AFE #: 36619031WE

Lease/Well No.: Laguna Grande Unit 3

API #: 30-015-23414

Location: Sec. 26 Township 24S Range 26E

County: Eddy, NM

Well Type: Flowing

Status: Active

Proposed Work: Swab test the Harkey formations prior to P&A

Scope: Pull current 2-3/8" tubing, set cast iron bridge plug over existing Atoka zone; test the Harkey formation (9,080' - 9,110')

Cimarex Contacts:

Paul Stock – Well Work Superintendent – 432-614-7508

Kim Barton - Production Superintendent - 432-853-4472

Brendan McCalpin - Production Engineer - 406-498-6647

Josh Leatherwood – Carlsbad Manager – 432-741-0179

Bill Callendar - Production Foreman - 575-200-0579

Vendor Contacts:

Peak Packers - Justin Reeves - 575-942-4155

Cimarex Energy Co.

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Pertinent Information:

Datum: 3013' K.B.: 27' Effective Depths: T.D.: 13,690' PBTD: 12,600' Packer Depth: N/A

Producing Zone: Atoka (12,104' - 12,189')

	Casing		
Size	Weight	Grade	Depth
5-1/2"	20#	P-110	12,725'
	Tubulars		
Size	Weight	Grade	Depth
2-3/8"	4.7#	N-80	11,900'

Tubing Detail

Laguna Grande Unit #3

KB Correction

27

Quantity	Description	Length	Setting Depth
386 jts	2-3/8" 4.7# N-80 EUE 8rd tbg		
1	Packer		11900'



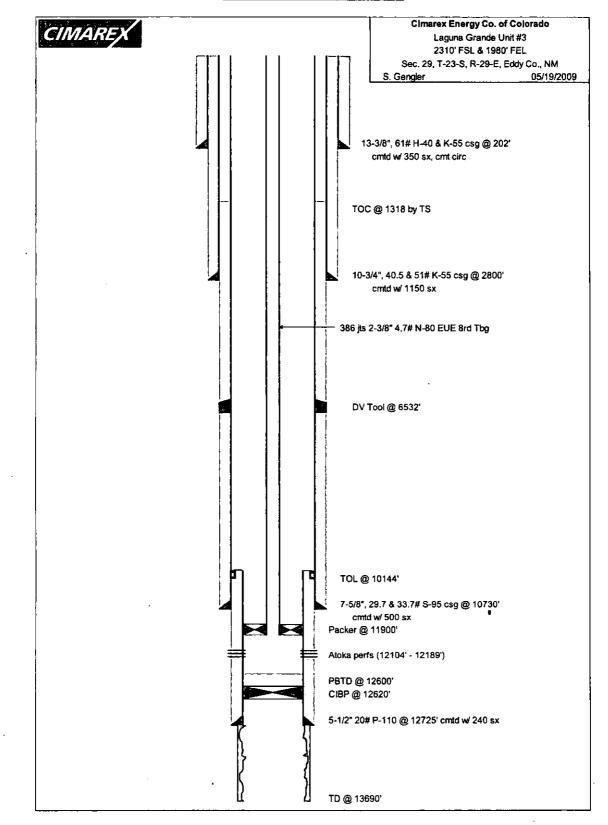
Primary PROCEDURE

- 1. Check guy line anchors 3 days prior to rig up
- 2. Check tubing and casing pressures; bleed off backside to sales
- 3. Pump 2% KCl water as needed to kill well
- 4. MIRU pulling unit
- 5. ND WH, NU BOP, function test BOP
- 6. Attempt to unset packer Cut filong at 11855ft 7. TOOH with 2-3/8" tubing
- 7. 10011 with 2-5/8 tubing
- 8. MIRU Wireline unit
- 9. RIH with gauge ring to 11,950'; POOH with gauge ring
- 10. MU RIH with 5-1/2" Cast Iron Bridge Plug to +/- 11,950' and set in joint
- 11. Load hole and Pressure test the plug to 500 psi and hold for 30 minutes
- 12. Spot 25 sacks of cement on top of CIBP; WOC
- 13. MU RIH to 9,110' with perforating gun; perforate from 9,080' 9,110' with 60° phasing, 6 SPF
- 14. POOH with perf guns
- 15. RDMO Wireline
- 16. MU TIH with 5-1/2" Retrievable Packer and 2-3/8" Tubing; set packer at 9,030'
- 17. RIH with swab cups to 9,000' and swab a column of fluid; continue to swab until an oil cut is observed at surface and make note of % cut; if no oil cut is observed, contact Midland Office for decision on acidizing of zone; WAIT ON ORDERS
- 18. Once decision from Midland is made, TOOH with 2-3/8" Tubing and 5-1/2" Packer
- 19. ND BOP, NU WH
- 20. Notify Production foreman when work is complete
- 21. RDMO pulling unit
- 22. Evaluate for potential P&A of well
- 23. Clean up all trash from location



Current Wellbore Diagram

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Proposed Wellbore Diagram

