Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECENED APR 11 2013

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

SUNDRY	NOTICES AND REPO s form for proposals to	RTS ON WELLS OCD	ARTESIA	 Lease Serial No. NMLC029426B 	į.
abandoned wel	6. If Indian, Allottee	or Tribe Name			
SUBMIT IN TRI	7. If Unit or CA/Agre	ement, Name and/or No.			
Type of Well Oil Well	8. Well Name and No. H E WEST B 22Y				
Name of Operator LINN OPERATING, INC.		TERRY B CALLAHAN		9. API Well No. 30-015-05950	
3a. Address 600 TRAVIS STREET SUITE HOUSTON, TX 77002	10. Field and Pool, or GRAYBURG JA				
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description	l)		11. County or Parish, and State	
Sec 9 T17S R31E Mer NMP S 32.843700 N Lat, 103.871980				EDDY COUNTY, NM	
12. CHECK APPR	OPRIATE BOX(ES) TO	O INDICATE NATURE OF	NOTICE, RE	EPORT, OR OTHE	R DATA
TYPE OF SUBMISSION		TYPE	OF ACTION		
Notice of Intent	☐ Acidize	☐ Deepen	☐ Producti	on (Start/Resume)	☐ Water Shut-Off
_	☐ Alter Casing	☐ Fracture Treat	☐ Reclama	ntion ,	■ Well Integrity
☐ Subsequent Report	☐ Casing Repair	■ New Construction	☐ Recomp	lete	□ Other
☐ Final Abandonment Notice	☐ Change Plans	Plug and Abandon	☐ Tempor	arily Abandon	
	☐ Convert to Injection	☐ Plug Back ☐ Water I		isposal	
1. MIRU PU. NDWH, NUBOR 2. RIH AND SET 5-1/2 CIBP (3. SPOT 25 SXS @ 1660-141 4. SPOT 25 SXS @ 60' TO SI 6. CUT OFF WELLHEAD ANI MOVE OFF.	WOC & TAG. WOC & TAG. URFACE. D WELD ON GROUND L	ATTACHED all annulus	COND COND	ITIONS OF F	OR APPROVAL LOCATION AND 1/13/2013
14. I hereby certify that the foregoing is	Electronic Submission # For LINN O Committed to AFMSS f	199723 verified by the BLM W PERATING, INC., sent to the for processing by KURT SIMM	Carlsbad IONS on 02/25/	2013 ()	
Name (Printed/Typed) TERRY B	CALLAHAN	Title REGU	ILATORY SPE	CIALIST III	
Signature (Electronic S		Date 02/22/			
	THIS SPACE FO	OR FEDERAL OR STATE	OFFICE US	SE	
Approved By James	Q. Omos_	Title	EPS		4-6-13 Date
Conditions of approval, if any, are attached certify that the applicant holds legal or equ which would extitle the applicant to condu	itable title to those rights in the		0		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s				ke to any department or	agency of the United
** OPERAT	OR-SUBMITTED ** O	PERATOR-SUBMITTED	** OPERAT	OR-SUBMITTED) **

Additional data for EC transaction #199723 that would not fit on the form

32. Additional remarks, continued

NOTE: PROPOSED AND CURRENT WELLBORE DIAGRAMS ATTACHED.

Wellbore Diagram

Leave & Well No. H.E. West "B" #21Y Field Name Grayburg Jackson 660' FSL & 1990' FEL SEC 9-T17S-R31E Lecation K.B. Elevation 3,879 D.E. Elevation Ground Level 3.871

Surface Casing								
Size (QD)	8.5/8*	Weight	24.0#	(2spth	674			
Grade	J-55 ST&C	Sx.Cml,	100 sx	TOC.@_	220			
		Intermediat	e Casing					
Size (QD)	n a	Wright		Ospili				
Grade		Sx. Cmt.		TOC.6				

Production Casing							
Size (QD)	5 1/2"	Weight	14.0#	Depth	3,731		
Grade	J-55 ST&C	Sx. Cmt.	100 sa	TOC @_	3.050		
	-	Sx. Cmt.	700 sx	TOC @	1,775*		
	r-	Sx Cmt.	700 **	TOC rii	Surf		

Perf & Sqz'd 6j.3040'-42' w'700 sxs. TOC from sqzqi.1,775'

County & State Eddy County, New Mexico API No. 30-015-05950 Brandi Williams - 8/10/2012 Created By

Proposed Completion Tubing Detail

Spot to assemt in 60° to 2-3 8°, 4 7n, 1-55 EUE 8rd

TOC (å 220' (calculated)

8-5:8" Csg set @ 694' w/100 sxs 0'-694' Spot 25 sxs cmt @ 750'-500' & Tag Circ cement down prod annulus to 928°

Spot 25 sas cmt @ 1660'-1413 & Tag

Detail of Perforations 3239', 40' M.Grayburg 3256', 78', 82', 85', 88', 89' Loco Hills 32991, 33051, 071, 131, 261, 311, 361, 381, 411 Metes 33\$0', 57', 66', 67', 80', 90', 95', 3455' L. Grayburg 3414', 16', 23', 31', 34' Premier 3483', 84', 89', 94', 98', 3502', 06' Vacuum 3518', 19', 34', 42', 45'₁ 49' Vacuum 3558', 61', 66', 70', 81', 92', 3603', 09' Lovington 3619', 29', 41', 48', 50', 62', 63', 74', 76' U. Jackson 3713', 18', 19', 20', 24' Jackson

Set 5-1/2" CIBP @ 3200 Spot 25 axs emt on top

Current Perforations:						
Top	Bot.	EL.	Shots			
3,239	3,434"	30*	29			
3,483	3,676	361	.30			
3,713	3,724	05'	5			

5-1/2" Csg set @ 3731' w/100 sxs. Original TOC @ 3,05ff (CBL) 4.3'4" Open Hole: 3731'-3856' (Middle & Lower Jackson Interval)

Plug Back Depth	
Total Depth	3.816

Wellbore Diagram

Lease & V	Vell No.		H.E. We	st "B" #22Y					
Field N				rg Jackson		-	County & State Eddy County, New Mexico		
Locat	ion _	660	FSL & 1990 F	EL SEC 9-T17	S-R31E			APINO	30-015-05950
K.B. Ele D.F. Ele		3,879						Created By	Brandi Williams - 8/10/2012
Ground		3,871'	•				Coment	Completion	Tubing Detail
Money		2,071	•				is in		2-3/8*, 4.7#, 1-55 EUE 8rd
						1			
		Surface C				ļ			MANA
Size (OD)	8 5/8"	Weight	24.0#	Depth .	694'	}			TOC @220' (calculated)
Grade	J-55 ST&C	Sr. Cmt.	100 sx	TOC @	220				
		Intermediat	e Casing			l			
Size (OD)	n/a	Weight		Depth					
Grade		Sx. Cmt.		TOC @					
		n_1	C-i-						8-5/8" Csg set @ 694' w/100 sxs 0'-694'
- 10 m		Production							
Size (OD)	5 1/2"	Weight	14.08	_ Depth _	3,731'	}	E.E		Circ cement down prod annulus to 928'
Grade	J-55 ST&C	Sx. Cmi.	100 sx 700 sx	TOC @	3,050°				
	<u></u>	Sx. Cmt.	200 sx		Surf	ł	1		Detail of Perforations
	L	Sx. Cmt.	20031	IOC@	3011	l	6878	329	3239', 40' M.Grayburg
									3256', 78', 82', 85', 88', 89' Loco Hills
							劉		3299', 3305', 07', 13', 26', 31', 36', 38', 41' Metes
									3350', 57', 66', 67', 80', 90', 95', 3405' L. Grayburg
									3414', 16', 23', 31', 34' Premier
									3483', 84', 89', 94', 98', 3502', 96' Vacuum
					*				3518', 19', 34', 42', 45', 49' Vacuum
									3558', 61', 66', 70', 81', 92', 3603', 09' Lovington
							[3]		3619', 29', 41', 48', 50', 62', 63', 74', 76' U. Jackson
									3713', 18', 19', 20', 24' Jackson
							<u> </u>	選	
			Perf & Squ	:d @3040'-42' w	/700 sxs. TOC fro	m sqz@1,775'	1/4/		
									Current Perforations;
					Guiberson E	R-6 Pkr @3178'			Top Bot. Ft. Shots
									3,239' 3,434' 30' 29
							Mil	前	3,483' 3,676' 30' 30
							3		3,713' 3,724' 05' 5
								书图	
							94	13	
							建		
							3	10	
							徽	Tall	
									5-1/2" Csg set @ 3731' w/100 sxs. Original TOC @3,050' (CBL)
								1	4 3/4" Open Hole: 3731'-3856' (Middle & Lower Jackson Interval)
							•	•	*

Plug Back Depth	
Total Depth	3,856'

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

- 2. <u>Notification</u>: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.
- 3. <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; and a 5M system for a well not deeper than 22,727 feet.
- 4. <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.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified 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. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Before pumping or bailing cement on top of CIBP, 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.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

- 7. <u>Subsequent Plugging Reporting</u>: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging 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. **Show date well was plugged**.
- 8. <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.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation procedure.

J. Amos 3/6/11

Requirements for ground level dry hole markers <u>Well Identification Markers</u> Conditions of Approval (COA)

The BLM Carlsbad Field Office (CFO) Conditions of Approval (COA) Requires that ground level dry hole markers be placed on well within the Lesser Prairie Chicken habitat area. The dry hole markers will be to the following specifications. The operator will construct the markers as follows:

- 1. An 8 inch X 8 inch steel plate 1/8 to 3/16 of an inch thick is to be placed on the old dry hole marker stand pipe 2 inches from ground level, in the Lesser Prairie Chicken habitat area.
- 2. Steel plate may be welded or bolted approximately 2 inches from ground level on the stand pipes. If plates are bolted to the stand pipe, the person installing the plate will be required to weld a pipe collar on the plate and place a minimum of two set screws/bolt on each collar. Aluminum data plates may be bolted with minimum ½ inch bolt and locking nuts or self tapping fine threaded screws. A minimum of one in each corner is to be installed on each plate.
- 3. An 8 inch x 8 inch aluminum plate, which is 12 gauge or .080 sign material (1/8 inch aluminum plate may be used in place of the .080 plate) with the required information for that well stamped or engraved in a minimum 3/8 inch tall letter or number.
- 4. The following information will be stamped or engraved on the 8 inch X 8 inch aluminum plate in the following order.
 - a. First row: Operators name
 - b. Second row: Well name and number
 - c. Third row: Legal location to include ¼ ¼, Section, Township, and range. If the legal location cannot be placed on one row it can be split into two rows with the ¼ ¼ (example: 1980 FNL 1980 FWL) being on the top row.
 - d. Fourth row: Lease Number and API number.
 - i. Example marker plate: (attached)

NMOCD Order No. R-12965 also required the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a ground level dry hole marker was installed as required in the COA's from the BLM.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its predisturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, redistribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

- The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of
 Operations must include adequate measures for stabilization and reclamation of disturbed lands.
 Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD
 process as per Onshore Oil and Gas Order No. 1.
- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation

equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

- 5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Inspection & Enforcement

Jim Amos Supervisory Environmental Protection Specialist 575-234-5909, 575-361-2648 (Cell)

Mike Burton Environmental Protection Specialist 575-234-2226

Jeffery Robertson Natural Resource Specialist 575-234-2230

Jennifer Van Curen Environmental Protection Specialist 575-234-5905

Doug Hoag Civil Engineering Technician 575-234-5979

Linda Denniston Environmental Protection Specialist 575-234-5974

Realty, Compliance

Randy Pair Environmental Protection Specialist 575-234-6240

Permitting

Cody Layton Natural Resource Specialist 575-234-5959

Trishia Bad Bear Natural Resource Specialist 575-393-3612

Todd Suter Surface Protection Specialist 575-234-5987

Tanner Nygren Natural Resource Specialist 575-234-5975

Amanda Lynch Natural Resource Specialist 575-234-5922

Leg1on Brumley Environmental Protection Specialist 575-234-5957