с ^с г.	Form 3160-5 (August 2007)	UNITED STATES UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMEN RY NOTICES AND REPORTS-ON	ation Division, Foist sigk dvED ench Drive OMB No. 1004-0137 Expires: July 31, 2010 NMNM-32409 6. If Indian, Allottee or Tribe Name						
	Do not use	this form proposals to drill or to vell. Use Form 3160-3 (APD) for s	o re-enter an 🔔						
	S	UBMIT IN TRIPLICATE - Other instructions on page	2. SEP 04 2012	7. If Unit of CA/Agr	eement, Name and/or No.				
	I. Type of Well	Gas Well Other	SEP	8. Well Name and No Sam Federal #4	<u>.</u>				
	2. Name of Operator Mac	k Energy Corporation	RECEIVED	9. API Well No. 30-005-29105					
	3a. Address P.O. Box 960 Artesia 4. Location of Well <i>(Footage, J</i>	a, NM 88210-0960 / (575) 74 Sec., T.R.M. or Survey Description)	10. Field and Pool or Exploratory Area Wildcat; San Andres 11. Country or Parish, State						
2 3 4 5 (2285 FNL & 380 FWL Se	ec. 28 T15S R30E	Chaves, NM						
	12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA								
2. 3. 4. 5. 6.	TYPE OF SUBMISSION	1	TYPE OF A	CTION					
	Notice of Intent	Alter Casing	cture Treat	oduction (Start/Resume) clamation	Water Shut-Off Well Integrity				
2 3 4 5 6	Subsequent Report			complete mporarily Abandon	Other				
	Final Abandonment Notice			Water Disposal					
2 3 4 5 6	 POH w/pump and tubing. Set CIBP @ 3650' w/35'. Set 25sx plug @ 3000'(Sat. Set 25sx plug @ 1550'(BC5). Set 25sx plug @ 675'(TO5). RIH to 60' and circulate control of the set. Install Dry Hole Marker. 	DS). WOC and tag. S and surface casing shoe). WOC and tag	-						
			APPR		MONTH PERIOD				
2. 3. 4. 5. 6.	14. I hereby certify that the foreg	bing is true and correct. Name (Printed/Typed)							
	Jerry W. Sherrell		Title Production Cler						
	Signature Jerry	W. Shenell	Date 8/7/12						
1. 2. 3. 4. 5. 6.	THIS SPACE FOR FEDERAL OR STATE OFFICE USE								
	Approved by /S/DA Conditions of approval, if any, are	VID R. GLASS			AVG 2 9 2012				
	that the applicant holds legal or equentitle the applicant to conduct ope	attached. Approval of this notice does not warrant or uitable tille to those rights in the subject lease which rations thereoty		VELL FIELD OFFI	CE				
		Fitle 43 U.S.C. Section 1212, make it a crime for my or representations as to any matter within its jurisdicti		to make to any department	it or agency of the United States any false,				
		IONS OF APPROVAL	<u> </u>	r	APR 18 20 3				

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MACK ENERGY CORPORATION Sam Fed. #4 SEC 28, T15S, R30E SHL: 2285' FNL & 380' FWL, BHL: 2285' FNL & 330' FEL

Well Information

Existing Casing: all depths are with 17.5' KB.

Hole	MD (ft)	Casing	Weight	Grade	Coupling	Comments		
14 3/4"	0-588'	9 5/8"	36#	J-55	ST & C	Circ 175sx		
8 3/4"	0-8418'	5 1/2"	17#	P-110	LT & C	Bottom of 5 1/2" @ 8008"		
6 1/8"	8418-	4 1/2"	11.6#	HCP-	Buttress	Circ. 350sx		
	13091			110		FO Cementer at 8008'		

Production Casing: OD-5.5" ID-4.892" Drift-4.767" Burst-10,640psi, OD-4.5" ID-4.00" Drift-3.875" Burst-10,690psi

PBTD-12,991'

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Directional Plan

See Pathfinder Survey for more details.

Description	MD	TVD	Vertical Section	Inclination (degrees)	Max DLS	Comments
Kick-off point	8114'	8113'	-6.16'	0.70°		
End of curve	9145'	8787	650'	86.98°	13.02	Max DLS in curve 13.02°/100' at 8254' MD Avg DLS-8.33°
TD	13091'	9042'	4587'	85.97°	4.16	Max DLS in VS 4.16°/100' at 10452' MD

Azimuth-90° (East)

Packers ECP Top @ 8051', Bottom @ 8067'

Packer		· · ·	Port			
<u>#</u>	<u>MD</u>	TVD	<u>Depth</u>	<u>Ball Size</u>	<u>Flush</u>	Seat Size
	12621',		POP at			
1	12570'	9004'	12891'		262bbls	
2	12106'	8973'	12340'	2.75"	254bbls	2.625"
3	11600'	8930'	11839'	2.875"	246bbls	2.75"
4	11101'	8888'	11335'	3"	238bbls	2.875"
5	10637'	8867'	10872'	3.125"	231bbls	3"
6	10100'	8842'	10371'	3.250"	223bbls	3.125"
7	9606'	8808'	9839'	3.375"	215bbls	3.25"
8	9142'	8787'	9376'	3.5"	208bbls	3.375"

Existing Perfs

Perf #	Perfs	Phasing	# settings	# of shots
San Andres	3675'-3725'	180	17settings 2SPF	34holes

MACK ENERGY CORPORATION Sam Fed. #4 SEC 28, T15S, R30E SHL: 2285' FNL & 380' FWL, BHL: 2285' FNL & 330' FEL

Procedure

- 1. MIRU PU
- 2. POH w/ pump
- 3. NU BOP
- 4. POH w/ tbg
- 5. RU Schlumberger set CIBP w/ 35' cmt cap a 3650'
- 6. RIH w/ tbg.
- 7. Set 25sx plug @ 3000'. Covering top of San Andres
- 8. Set 25sx plug @ 1550'. Covering base of salt. Tag Plug
- 9. Set 25sx plug @ 675'. Covering top of salt and surface shoe. Tag Plug
- 10. RIH to 60'. Circulate cmt to surface

To Be Mixed W/Fresh Water(636al Back) Note: Circulate Hole W/Fresh water get. All cmt plugs are figured w/ 14.8ppg w/ 1.34 yield class C cmt. 25 SacKs (50# Each) Of Gel Per 100 Barrels Of Brine Water Minimum 9# Per Gallon Mud.

BUREAU OF LAND MANAGEMENT Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201 (575) 627-0272

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 ninety (90) 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 the BLM Roswell Field Office (RFO), prior to the 90th day, with the reason for not meeting the deadline and a date when the BLM Roswell Field Office can expect the well to be plugged. Failure to do so will result in enforcement action. Unless the well has been properly plugged, the rig shall not be removed from over the hole without prior approval.

2. <u>Notification:</u> Contact the BLM Roswell Field Office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, during office hours or after office hours call (575) 627-0205. Engineer on call during office hours phone (575) 627-0275 or phone (after hours) call (575) 626-5749.

3. <u>Blowout Preventers:</u> A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9090 feet; a 3M system for a well not deeper than 13636 feet; and a 5M system for a well not deeper than 22727 feet.

4. <u>Mud Requirement</u>: Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at a rate of 25 sacks (50 pounds each) of gel per 100 barrels of 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 not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 50 feet of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either class "C" for up to 7500 feet of depth, mixed at 14.8 lbs./gal with 6.3 gallons of fresh water per sack or class "H" for deeper than 7500 feet plugs, mixed at 16.4 lbs./gal with 4.3 gallons of fresh water per sack.

6. <u>Monument:</u> Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

7. <u>Timing Limitation Lease Stipulation / Condition of Approval For Lesser Prairie-Chicken</u>: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D seismic operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

8. <u>Subsequent Plugging Reporting</u>: Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to the BLM Roswell Field Office. 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. <u>Show date well was plugged</u>.

Following the submittal and approval of the Subsequent Report of Abandonment, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.