

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia
NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 16 2015

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. LC-065928-A
2. Name of Operator OGX Operating, LLC		6. If Indian, Allottee or Tribe Name
3a. Address P. O. Box 2064, Midland, Texas 79702	3b. Phone No. (include area code) (432) 685-1287	7. If Unit of CA/Agreement, Name and/or No. MNMNM127486
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec. 34, T26S, R29E 423' FSL & 2150' FWL		8. Well Name and No. Littlefield BO Federal #6
		9. API Well No. 30-015-35174
		10. Field and Pool or Exploratory Area Brushy Draw Delaware
		11. Country or Parish, State Eddy County, New Mexico

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input checked="" type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Change of casing design to increase annular space:

3 1/2", 9.2#, J-55, FJ, New API tubing/casing set at 6500'. Annular clearance 1.25" (required clearance 0.442"). Collapse ~~6577~~ ⁶⁹⁸⁰ psi ~~8F 4.425~~ ⁷⁴⁰⁰, Burst 6204 psi ~~8F 1.125~~ ^{90,000}, Tension ~~20,500#~~ ^{4.0}

Cementing will be with 120 sx Class C, Wt 14.8 ppg. Yield 1.34. This cement volume is 100% excess for annular volume 5100'-6500'.

Prior to deepening, will locate TOC, reported to be at 2200' by CBL. Then perforate 5 1/2" casing at TOC and pump enough Class "C" cement to circulate to surface between 5 1/2" x 8 5/8" casing.

Attached is a copy of CBL run on this well 12/1/06 by GP II Energy, Inc.

Will cement squeeze existing perms 4668'-4793', then drill CIRP at 4805'. Cement squeeze old Williamson Sand Delaware perms 4862'-4900', first produced 12/2/06, when well was initially completed.

Accepted for record
11/20/15
NMOC

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Steve Douglas

Signature *Steve Douglas*

Title Engineer

Date 10/26/2015

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

APPROVED
PETROLEUM ENGINEER
NOV - 9 2015
Kenneth Rennick
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Littlefield BO Federal 6
30-015-35174
OGX Operating, LLC
Conditions of Approval**

**NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 16 2015
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Notify BLM at (575) 361-2822 (Eddy County) a minimum of 24 hours prior to commencing work.

Work to be completed by February 10, 2016.

1. Surface disturbance beyond the existing pad must have prior approval.
2. Closed loop system required.
3. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
4. Operator to have H2S monitoring equipment on location.
5. A minimum of a 2000 (2M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
6. **Operator shall cement squeeze the existing perforations at 4668 feet though 4793 feet, and then is approved to drill out the CIBP at 4805 feet. Operator shall next cement squeeze the existing perforations at 4862 feet though 4900 feet.**
7. Steel tanks to be used.

- 8. Operator shall verified Top of Cement (TOC) for behind the 5 1/2 inch Casing. Once verified, Operator shall bring cement to surface behind the 5 1/2 inch Casing. This shall be done by perforating just above the TOC and establish rate up the annulus. Squeeze cement so there will be circulation to surface.**
9. Changes to the approved Sundry casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).
- 10. Operator is approved to deepen well to 6500 feet with a 4 3/4 inch bit, as well a setting 3 1/2 inch casing. Minimum required fill of cement behind the 3 1/2 inch casing shall tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.**
- 11. Test the 3 1/2 inch casing per Onshore Order 2.III.B.1.h. All casing string below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken. Document the pressure test on a one hour full rotation calibrated recorder chart registering within 25 to 85 per cent of its full range. Submit results to BLM with the Subsequent Sundry.**
- 12. Subsequent Sundry required detailing work done and completion report as well as recorder chart for the press test. Operator to include well bore schematic of current well condition when work is complete.**

KGR 11092015



Rennick, Kenneth <krennick@blm.gov>

Fwd: [Junk released by User action] 4" specs. For Littlefield BO Federal # 6 Sundry Notice to Deepen Well

3 messages

Steve Douglas <steve@ogxresources.com>
To: "krennick@blm.gov" <krennick@blm.gov>

Tue, Oct 20, 2015 at 1:39 PM

Mr. Rennick :: please find PDF from pipe supplier showing dimensions & strengths of 4" Flush Joint Tubing.
Thanks Steve Douglas OGX Engineer

Begin forwarded message:

From: Wes Smith <wsmith@smithbrospipe.com>
Date: October 7, 2015 at 10:15:56 AM CDT
To: Steve Douglas <steve@ogxresources.com>
Subject: [Junk released by User action] 4" specs.

 SKMBT_C28015100615000.pdf
1397K

Rennick, Kenneth <krennick@blm.gov>
To: Steve Douglas <steve@ogxresources.com>, Edward Fernandez <efernand@blm.gov>

Tue, Oct 20, 2015 at 5:17 PM

Hello Mr. Steve Douglas,

Thank you for the information!

However I noticed with a 4-inch OD on the Casing and a 4.75-inch Drilling Bit Size, the hole/ casing annulus clearance is 0.375-inch $(=(4.75-4)/2)$. A 0.442-inch clearance is required which is outlined in the Onshore Orders No. 2.III.B. My calculation came out that an OD that is less than 3.9-inch should work assuming that you want to keep the hole size to be 4.75-inch.

Because of this, I request that you reevaluate the design so that the regulation is complied.

You are also welcome to discuss additional designs that may work with Mr. Ed Fernandez and I. Just please let us know what you decide.

Best Regards,

Kenneth Rennick

[Quoted text hidden]

--
Kenneth Rennick

Petroleum Engineer
Bureau of Land Management

Carlsbad Field Office
(575) 234-5964
krennick@blm.gov

Steve Douglas <steve@ogxresources.com>
To: "Rennick, Kenneth" <krennick@blm.gov>

Tue, Oct 20, 2015 at 5:52 PM

Kenneth ; I will evaluate a smaller casing size and submit that to you ..
Thanks Steve

Sent from my iPad
[Quoted text hidden]



Rennick, Kenneth <krennick@blm.gov>

Littlefield BO Federal Federal #6 - API 3001535174 - Casing Schematics

1 message

Rennick, Kenneth <krennick@blm.gov>
To: Steve Douglas <steve@ogxresources.com>
Cc: Edward Fernandez <efernand@blm.gov>

Mon, Nov 2, 2015 at 9:51 AM

Hello Again Mr. Steve Douglas!

I hope all is well!

I am working on the Sundry for the subject well. It seems like that the Casing Design that you submitted with the updated Sundry as of October 26th does not match the Casing Schematics that you submitted via email earlier.

Because of this if you may please submit the Manufacturer's Schematic for the proposed Casing that will be greatly appreciated.

Also another note, I noticed that you state that the Tension of the Casing Design is 70,500-lbs and that the SF is 1.8.

My calculations actually determined that the SF is 1.41 which is the following:

-- Assuming Mud is 9.3-ppg, OD is 3.5-in, TD is 6500-ft and Minimum Hole ID is 2.867-in; then Buoyancy Factor is
$$(((3.5^2 - 2.867^2)/4) * \pi) * 12 * 6500 / 231 * 9.3 = 9940$$

-- Assuming 9.2 #/ft Casing; then Weight is $9.2 * 6500 = 59,800$

-- With the Provided Tensile Strength; then $SF = 70,500 / (59,800 - 9940) = 1.41$

Since this SF is below the requirement of 1.8, it requested that you review the Schematics to make sure that is the correct Tension.

Again you are welcome to discuss your design with Mr. Ed Fernandez and myself.

Best Regards,

Kenneth Rennick

--
Kenneth Rennick

Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office
(575) 234-5964
krennick@blm.gov



Rennick, Kenneth <krennick@blm.gov>

Fwd: 3 1/2" Specs

1 message

Steve Douglas <steve@ogxresources.com>
To: "krennick@blm.gov" <krennick@blm.gov>

Mon, Nov 2, 2015 at 12:59 PM

Please find manufacture's Pipe Specifications on the 3.1/2" Liberty Flush joint ..
100 % joint strength is 90,000 # , not the 70,000 # I had previously reported ..
Thanks for your help
Steve Douglas

Sent from my iPhone

Begin forwarded message:

From: Wes Smith <wsmith@smithbrospipe.com>
Date: November 2, 2015 at 1:46:07 PM CST
To: Steve Douglas <steve@ogxresources.com>
Subject: 3 1/2" Specs

Steve,

Please see attachment for specs. per your email request.

Thanks,

Wes Smith

P. O Box 10019

Midland. TX 79702

Office: 432-683-3110

Cell: 432-425-1993

Fax: 432-682-6247

4 attachments



3.5" 9.2# (0.254") API J55

USS-LIBERTY FJM™

PIPE

CONNECTION

MECHANICAL PROPERTIES

Minimum Yield Strength	55,000		psi
Maximum Yield Strength	80,000		psi
Minimum Tensile Strength	75,000		psi

DIMENSIONS

Outside Diameter	3.500	3.500	in.
Wall Thickness	0.254		in.
Inside Diameter	2.992	2.906	in.
Drift - API	2.867	2.867	in.
Nominal Linear Weight, T&C	9.20		lbs/ft
Plain End Weight	8.81		lbs/ft

SECTION AREA

Cross Sectional Area Critical Area	2.590	1.634	sq. in.
Joint Efficiency		63.1	%

PERFORMANCE

Minimum Collapse Pressure	7,400	7,400	psi
Minimum Internal Yield Pressure	6,980	6,980	psi
Minimum Pipe Body Yield Strength	142,000		lbs
Joint Strength		90,000	lbs
Compression Rating		90,000	lbs
Maximum Uniaxial Bend Rating		45.7	deg/100 ft

MAKE-UP DATA

Minimum Make-Up Torque		1,050	ft-lbs
Maximum Make-Up Torque		1,950	ft-lbs
Make-Up Loss		2.93	in.

Notes:

- 1) Performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2) Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
- 3) Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- 4) USS-LIBERTY FJM™ connections are optimized for each combination of OD and wall thickness, and cannot be interchanged.
- 5) Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

Legal Notice: USS-LIBERTY FJM™ is a trademark of U. S. Steel Corporation. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability, and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application. USS Product Data Sheet Liberty FJM 2012 rev12 (Nov. 1)

OGX Operating, LLC

Littlefield 80 Federal #6 Sec 34 26S 29E

Spud by GP III Energy 11/1/06 using Capstar Rig

