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	L	HOBB:	s oci		15-684
Form 3160-3 (February 2005) , UNITED STAT		FEB 22	2016	OMB No	APPROVED 5, 1004-0137 4arch 31, 2007
DEPARTMENT OF THI BUREAU OF LAND M APPLICATION FOR PERMIT T	E INTERIOR ANAGEMENT		NED	<ol> <li>Lease Serial No.</li> <li><u>NMNM</u></li> <li>If Indian, Allotee</li> </ol>	oaw394 or Tribe Name
	\ 	I NEEWIEN		7 If Unit or CA Agre	ement, Name and No.
Ia. Type of work: DRILL REEI	, I <u>.</u>		-	8. Lease Name and V	Vell No.
Ib. Type of Well:     Oil Well     Gas Well     Other     S       2. Name of Operator	SWD 🖌 Sii	ngle ZoneMultip	ple Zone	9. API Well No.	ca Draw Unit SWD #1
BTA Oil Producers, LLC 3a. Address 104 S. Pecos	3b. Phone No	. (include area code)		<b>30-025-23895</b> O. Field and Pool, or I	
Midland, TX 79701 4. Location of Well (Report location clearly and in accordance with		82-3753		SWD;DEVONIAN	
At surface At proposed prod. zone St FSL 562' FEL SESE Sec.	21 UL -P-			Sec. 21, T25S-	•
<ol> <li>Distance in miles and direction from schest town or post office*</li> <li>22 miles West from Jal, NM</li> </ol>				2. County or Parish Lea	13. State NM
<ul> <li>Distance from proposed*</li> <li>location to nearest</li> <li>property or lease line, fi.</li> <li>(Also to nearest drig. unit line, if any)</li> </ul>	16. No. of a 3 acres	cres in lease	17. Spacing U	Jnit dedicated to this v	vell
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> <li>1870'</li> </ol>	1 .	19. Proposed Depth         20. BLM/BIA Bond No. on file           17,909' MD 17,909' TVD         NM1195			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3359' GL	22 Approxi	nate date work will star 09/01/2015	rt* 2	3. Estimated duration 45 days	n
			_ <del></del>	SIL	11-1571
The following, completed in accordance with the requirements of On	shore Oil and Gas	Order No.1, must be a	ttached to this f	formi:	- 121 j
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syster SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	em Lands, the	Item 20 above). 5. Operator certific 6. Such other site	cation	ŗ	existing bond on file (see
25. Signature Musle Mr (mmp)		- BLM. Name (Printed:Typed) Kayla McConnell			Date 05/28/2015
Title Regulatory Analyst		Email: kmcconnell(	@btaoil.com		
Approved by (Six Steve Caffey	Name	(Printed Typed)		(	Date FEB - 2 20
Title FIELD MANAGER	Office		LSBAD FIE	LD OFFICE	
Application approval does not warrant or certify that the applicant h conduct operations thereon. Conditions of approval, if any, are attached.	olds legal or equit	able title to those righ			ntitle the applicant to FOR TWO YEA
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations	a crime for any pe as to any matter w	erson knowingly and v ithin its jurisdiction.	villfully to mak	e to any department o	or agency of the United
*(Instructions on page 2)		1/2	,		
sbad Controlled Water Basin		KZ 02/2	6/16	P	
		· · · · ·			
Approval Subject to & Special Stipu	General Requiations Attac	uirements ched		ATTACH DITIONS	ED FOR

MAR 0 3 2016



BTA Oil Producers, LLC 7811 JV-P Vaca Draw Unit SWD #1 658' FSL & 662' FEL Sec. 21, T25S, R33E Attachment to Form 3160-3 API:30-025-23895

#### APPLICATION FOR DRILLING

# BTA OIL PRODUCERS, LLC #1, Vaca Draw Unit SWD, 7811 JV-P 658' FSL & 662' FEL Sec. 21, T25S, R33E Surface Lea County, New Mexico

HOBBS OCD

FEB 2 2 2016

In conjunction with Form 3160-3, Application for Permit to Drill, RECEIPTED cers submits the following 10 items for pertinent information in accordance with BLM requirements:

1. Geologic surface formation is Quaternary.

2. Estimated top of geologic markers & depths of anticipated fresh water, oil or gas:

Anhydrite	1007'
Delaware	4955'
Bone Spring	9063'
Barnett	15575'
Miss. Lime	16940'
Devonian	17498'

This is a reentry application, the 20" casing was set at 902' and circulated to surface. No formations are expected to yield oil, gas, or fresh water in measurable volumes. The Delaware and Bone Spring intervals are protected, as the 10-3/4" casing was set at 13,004' and circulated to surface.

3. Existing and Proposed\* Casing and Cementing Program:

Hole Size	OD Casing	Setting from	Depth to	Weight	Grade	Joint
26"	20"	0	920'	94.0#		
17-1/2"	13-3/8"	0	4,986'	61# & 68#		
12-1/4"	10-3/4"	0	13,004'	51#, 55# & 60.7#		
	7-3/4" Liner	12,715'	17,055'			
	5" Liner	16,782'	17,609'			
	Open Hole*	17,609'*	17,909'*			

Minimum Casing Design Factors:

Collapse	1.125
Burst	1.0
Tensile	1.8



### **Drilling Plan**

### #1, Vaca Draw Unit SWD, 7811 JV-P

- 4. Cement Program (Existing):
- I. Surface Casing:
  - 1550 sx Class-C.
  - Cement circulated to surface.
- II. Intermediate Casing:
  - 3200 sx
  - Cement circulated to surface.
- III. Production Casing:
  - 3375 sx
  - Cement circulated to surface.
    - o 7-3/4" Drill Liner
    - o 1900 sx
    - o 5" Production Liner
    - o 100 sx
- 5. Pressure Control Equipment:



The blowout preventer equipment (BOP) shown in Exhibit A will consist of a (5M system) double ram type (5000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and  $4-\frac{1}{2}$ " drill pipe rams on bottom. The BOP's will be installed on the 20" surface casing and utilized continuously until TD is reached. All BOP's and associated equipment will be tested as per BLM drilling Operations Order No. 2.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 5000 psi WP rating.

# 6. Mud Program:

- Squeeze well with Cut Brine 8.6# 9.3#
- Deepening in Devonian Cut Brine 8.5# 9.0#
- 7. Auxiliary Equipment:
  - a) Upper Kelly cock valve with handle available.
  - b) Lower Kelly cock valve with handle available.
  - c) Safety valves and subs to fit all drill string connections in use.
  - d) Monitoring of mud system will be mechanical.

8. Testing Logging and Coring Program:

Drill Stem Tests will be based on geological sample shows.

Drilling Plan #1, Vaca Draw Unit SWD, 7811 JV-P

Open electrical logging program will be:

• No additional logs planned Ser

9. Potential Hazards:

Ho abnormal pressures or temperatures are anticipated. If <u>H2S is encountered</u>, the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP: 7915 psi. Estimated BHT: 190° F. No H<sub>2</sub>S is anticipated to be encountered.

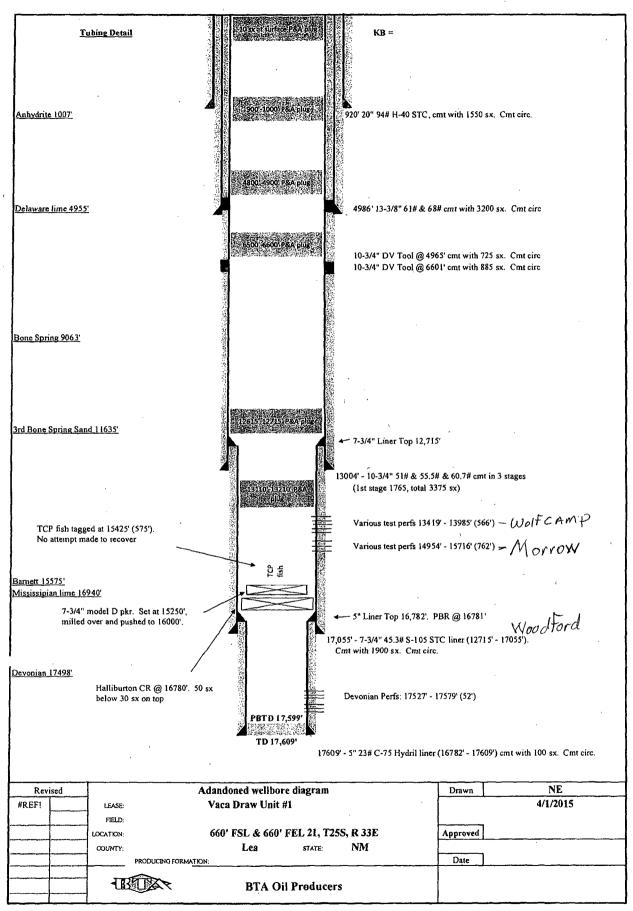
10. Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig is available. Move in operations and drilling is expected to take 25 days. An additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines to place the well on production.

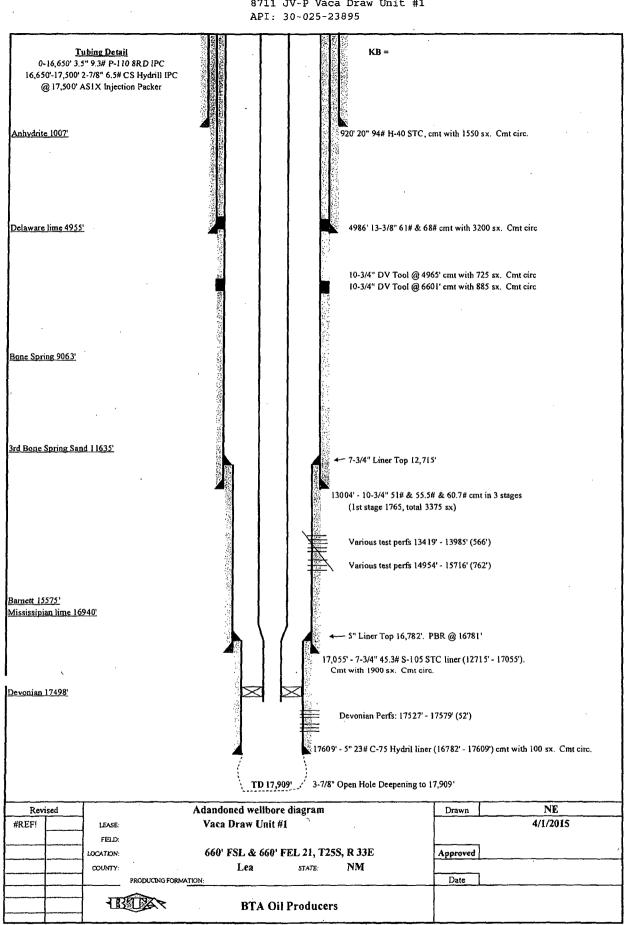
Note: BLM onsite will be conducted June 4<sup>th</sup>, 2015 by Trisha Bad Bear. An agreement has been entered into with CEHMM to prepare the EA.

Current 8711 JV-P Vaca Draw Unit #1 API: 30-025-23895

EXTRA COPY



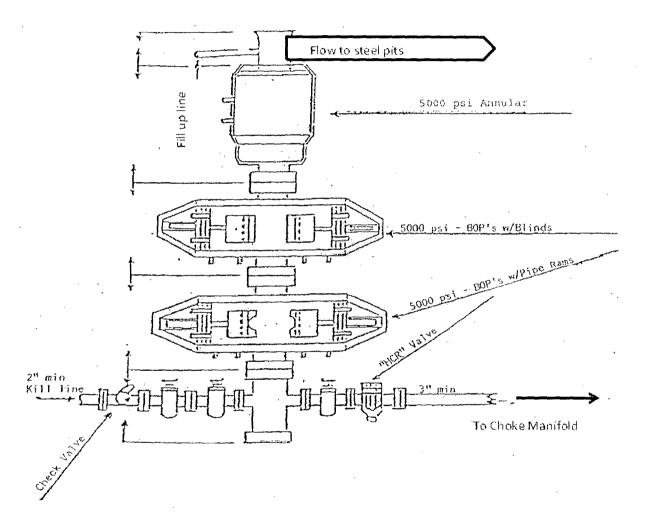
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Proposed 8711 JV-P Vaca Draw Unit #1

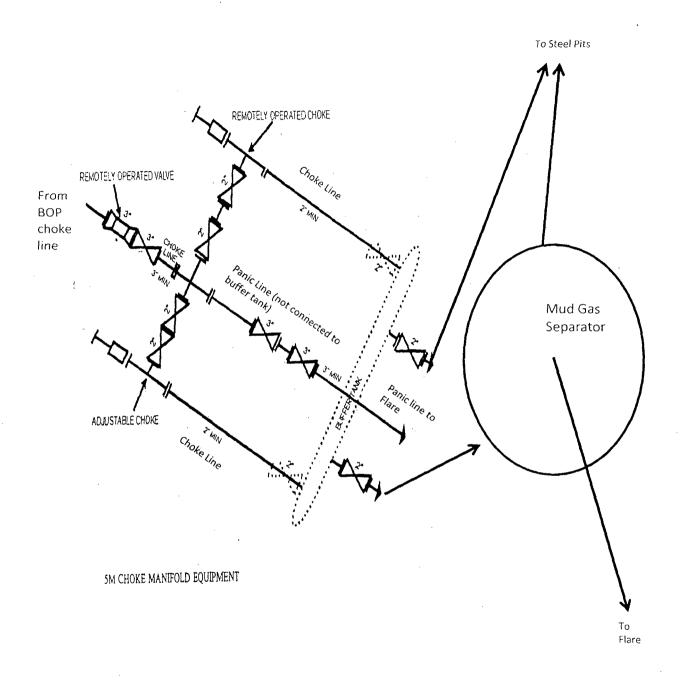
BTA Oil Producers, LLC 7811 JV-P Vaca Draw Unit SWD #1 658' FSL & 662' FEL Sec. 21, T25S, R33E Attachment to Form 3160-3 API:30-025-23895

# 13-5/8" 5,000 PSI BOP

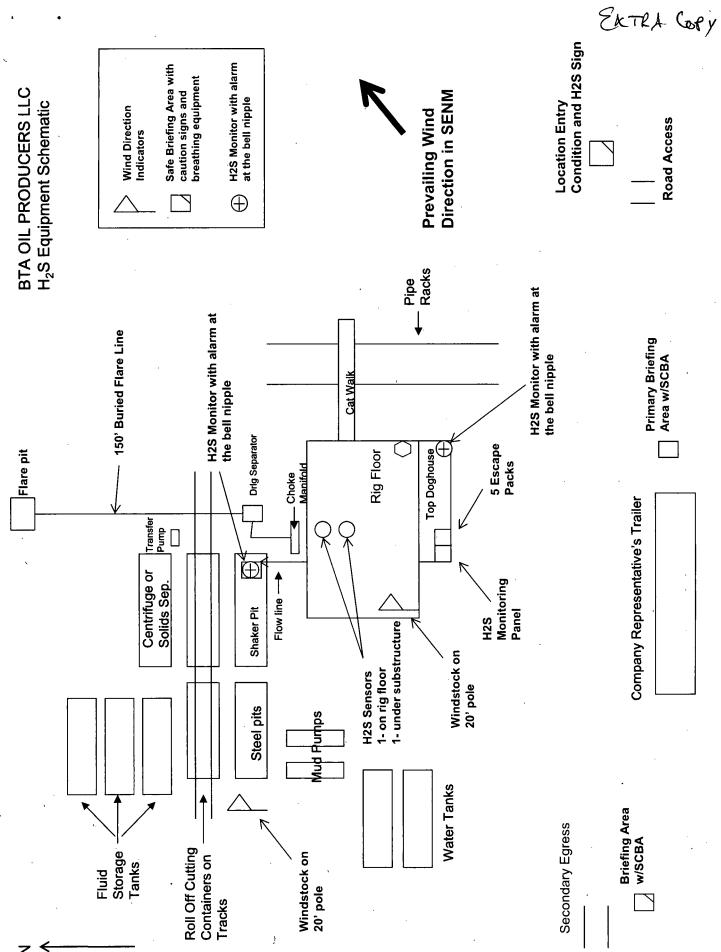


BTA OIL PRODUCERS, LLC 7811 JV-P Vaca Draw Unit SWD #1 658' FSL & 662' FEL Sec. 21, T25S, R33E Lea County, New Mexico





BTA OIL PRODUCERS, LLC 7811 JV-P Vaca Draw Unit SWD #1 658' FSL & 662' FEL Sec. 21, T25S, R33E Lea County, New Mexico



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