Form 3160-5 (August 2007)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	OCD Hobbs

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

			. 5.	Lease Serial No.
wi.	বা	m M	1	Lease Serial No. NMNM121489

Vmu	1021	MNM121489
140.0		6. If Indian, Allottee or Tribe Name

Do not use th	NOTICES AND REPOI is form for proposals to II. Use form 3160-3 (API	drill or to re-enter an	NOV I O 2014 NMNM121488	e or Tribe Name				
SUBMIT IN TRI	PLICATE - Other instruc	tions on reverse side.	7. If Unit or CA/Ag	reement, Name and/or No.				
1. Type of Well  Soil Well Gas Well Otl	ner	·	8. Well Name and N HOGNOSE VIP					
2. Name of Operator	Name of Operator Contact: DAVID H COOK DEVON ENERGY PRODUCTION CO.ERMail: david.cook@dvn.com							
3a. Address 333 W. SHERIDAN AVENUE OKLAHOMA CITY, OK 73102	tode) 10. Field and Pool, of BELL LAKE;B	or Exploratory ONE SPRING, N						
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  Sec 23 T23S R33E SWSW 200FSL 850FWL  LEA COUNTY, NM								
12. CHECK APPR	ROPRIATE BOX(ES) TO	INDICATE NATURE (	OF NOTICE, REPORT, OR OTHI	ER DATA				
TYPE OF SUBMISSION		TYP	E OF ACTION					
Notice of Intent	☐ Acidize☐ Alter Casing	☐ Deepen ☐ Fracture Treat	☐ Production (Start/Resume) ☐ Reclamation	☐ Water Shut-Off ☐ Well Integrity				
☐ Subsequent Report ☐ Final Abandonment Notice	☐ Casing Repair☐ Change Plans	<ul><li>□ New Construction</li><li>□ Plug and Abandor</li></ul>		Other Change to Original A				
	Convert to Injection	Plug Back	☐ Water Disposal					
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi Devon Energy Production Con  - Change intermediate casing - Use multi-bowl wellhead asset	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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)  Devon Energy Production Company, L.P. respectfully requests to change the approved APD as follows:  - Change intermediate casing string to a "mixed" grade casing string.  - Use multi-bowl wellhead assembly.  Please see the attached revised Drill Plan and FMC Uni-head schematics.							
Original COH	15 Still Stan	d mare your s	ilot hole, subm	it a sundru				
14. I hereby certify that the foregoing is  Name(Printed/Typed) DAVID H C	true and correct. Electronic Submission #27 For DEVON ENERG Committed to AFMSS for	74710 verified by the BLM BY PRODUCTION CO.LP, of processing by JERRY BL	Well Information System sent to the Hobbs	<u></u>				
(vamo(11stacta 1)pea) BAVID II	,001K	71120	CENTOTT OF EGIALIOT					
Signature (Electronic S			9/2014 / / / / / / / / / / / / / / / / / / /	VED				
	THIS SPACE FOI	R FEDERAL OR STAT	E OFFICE USE / 11 110					
Approved By Conditions of approval, if any, are attached ertify that the applicant holds legal or equivities would entitle the applicant to conductive 18 U.S.C. Section 1001 and Title 43 U.S.C.	table title to those rights in the s t operations thereon.	ubject lease Office	RIVEAU OF LAND and willfully to make to any departing and	2014 Bay				
States any false, fictitious or fraudulent st				-ugoroy-or-mo-ormog				

## **DRILLING PROGRAM**

# Devon Energy Production Company, L.P. Hognose Viper 23 Fed 1H

- 1. Geologic Name of Surface Formation: Quaternary
- 2. Estimated Tops of Geological Markers & Depths of Anticipated FW, Oil, or Gas:

a.	Fresh Water	400′	
b.	Rustler	1290′	Barren
c.	Top of Salt	1770′	Barren
d.	Base of Salt	5090′	Barren
e.	Delaware	5190′	Oil / Gas
f.	Cherry Canyon	6060′	Oil / Gas
g.	Brushy Canyon	7640'	Oil / Gas
h.	Bone Spring Lime	9070′	Oil / Gas
i.	1st Bone Spring SS	10065′	Oil / Gas
j. į	2 <sup>nd</sup> Bone Spring SS	10800′	Oil / Gas
	Total Depth	11,150' TVD	15,892' MD

#### 3. Pressure Control Equipment:

Devon proposes using a multi-bowl wellhead assembly (FMC Uni-head). This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.

- Wellhead will be installed by FMC's representatives.
- If the welding is performed by a third party, the FMC's representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- FMC representative will install the test plug for the initial BOP test.
- FMC will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 5M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time.
- If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted.
- Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating.
- Devon will test the casing to 70% of burst or 1500 psi, whichever is greater, as per Onshore Order #2.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 5M will be installed on the FMC Uni-head wellhead system and will undergo a 250 psi low pressure test followed by a 5,000 psi high pressure test. The 5,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.

After running the 9-5/8' intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 5M will already be installed on the FMC Uni-head.

The pipe rams will be operated and checked as per Onshore Order 2. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at **5,000 psi WP**.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

#### **Auxiliary Well Control and Monitoring Equipment:**

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

### 4. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0-1440'	13-3/8"	0 - 1440′	48	STC	H-40	1.25	2.81	8.57
12-1/4"	1440 – 5190′	9.625	0 – 4300′	40	втс	J-55	1.15	3.43	4.69
12-1/4"		9.625	4300 – 5190′	40	втс	HCK-55	1.57	4.63	6.07
8-3/4"	5190-15892'	5-1/2"	0-15892'	17	втс	P-110	1.54	1.91	3.00

## **Casing Notes:**

All casing is new and API approved

Maximum Lateral TVD: 11,150'

### 5. Proposed mud Circulations System:

Depth	Mud Weight	Viscosity	Fluid Loss	Type System
0-1440′	8.4-9.0	30-34	N/C	FW
1440-5190′	9.8-10.0	28-32	N/C	Brine
5190-16069′	8.6-9.6	28-32	N/C	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

## 6. Cementing Table:

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
13-3/8"	660	13.5	9.07	1.72	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.8% Fresh Water
Surface	560	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
9-5/8"	1120	12.9	9.81	1.85	Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
mermediate	430	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
	596	11.9	12.89	2.26	Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water
5-1/2" Production	330	12.5	10.86	1.96	Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly- E-Flake + 74.1 % Fresh Water
Casing	1300	14.5	5.38	1.22	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water

### **Estimated TOC for all Strings:**

Surface	@	0'
Intermediate	@	0'
Production	@	4990'

#### **Notes:**

- Cement volumes Surface 100%, Intermediate 75%, Pilot Hole Plug Back 10% and Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and caliper log data

#### 7. Logging, Coring, and Testing Program:

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated, a procedure, equipment to be used, and safety measures will be provided via sundry notice to the BLM.
- c. Resistivity and porosity logs are planned below the intermediate casing point. State logs run will be named in the Completion Report and submitted to the BLM.
- d. No coring program is planned
- e. Additional Testing will be initiated subsequent to setting the 5-1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows, and drill stem tests.

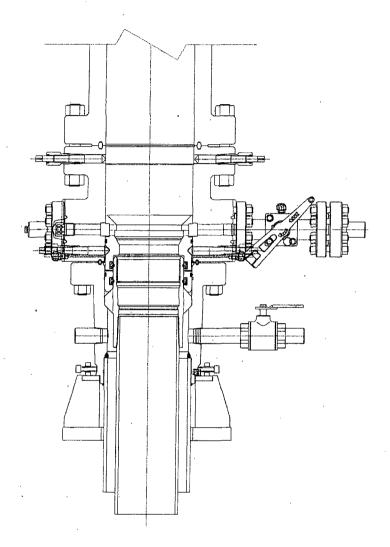
#### 8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area, and none is anticipated to be encountered. If H2S is encountered 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 being used to drill this well. Estimated BHP: 5000 psi, and estimated BHT: 165 degrees.
- b. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13-3/8" casing shoe until the 5-1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13-3/8" shoe until total depth is reached.

#### 9. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 20 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

# FMG Technologies



PRIMARY MODE

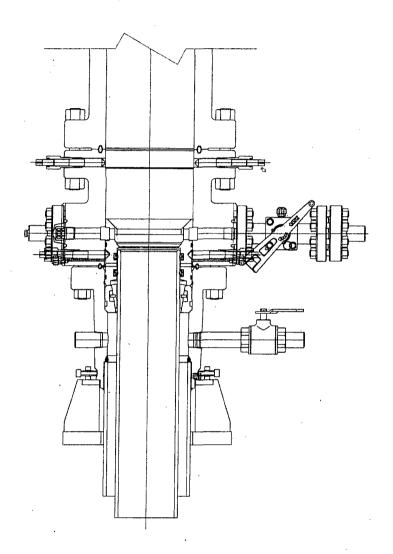
## DEVON ENERGY

ARTESIA S.E.N.M 13 3/8 X 9 5/8

QUOTE LAYOUT F18648 REF: DMIO0161737 DMIO0151315

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CONTINGENCY MODE

## DEVON ENERGY ARTESIA S.E.N.M

S.E.N.M 13 3/8 X 9 5/8

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