Form 3160-5 (June 2015) DF	UNITED STATE EPARTMENT OF THE I	S NTERIOR	95		FORM OMB N	APPROVED O. 1004-0137
B <sup>I</sup> SUNDRY	UREAU OF LAND MANA NOTICES AND REPO	GEMENT		<b>b</b>	5. Lease Serial No. NMNM136226	andary 51, 2018
Do not use thi abandoned we	is form for proposals to II. Use form 3160-3 (AP	drill or to re D) for such a	enter/da roposal <b>6</b>	34	6. If Indian, Allottee of	or Tribe Name
SUBMIT IN	TRIPLICATE - Other ins	tructions on	page 20	<b>}</b> ──	7. If Unit or CA/Agre	ement, Name and/or No.
1. Type of Well					8. Well Name and No.	
2. Name of Operator	herContact:		GERALD		9. API Well No.	
MATADÓR PRODUCTION CO	OMPANYE-Mail: nicky.fitzge	erald@matador	resources.com		30-025-44484-0	00-X1
5400 LBJ FREEWAY SUITE " DALLAS, TX 75240	1500	Ph: 972-37	(1-5448 Ext: 544)	8	DOGIE DRAW-	
4. Location of Well (Footage, Sec., T	C., R., M., or Survey Description	V			11. County or Parish,	State
32.124249 N Lat, 103.413528	3 W Lon				LEA COUNTY,	NM
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE, I	REPORT, OR OTH	HER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION		
B Notice of Intent	Acidize	Dee	pen	Productio	on (Start/Resume)	U Water Shut-Off
	□ Alter Casing	🗖 Hyd	raulic Fracturing		tion	U Well Integrity
	Casing Repair		Construction	Recompl	ete	Other Change to Original A
Final Adandonment Notice	Convert to Injection		gand Abandon Rack	U Tempora	niy Abandon snosal	PD
Surety Bond No. RLB0015172 Matador Resources respectfu Biggers Federal #215H (30-02	2 illy requests to amend the 25-44484).	casing, ceme	enting and mud p	program on th	• HC	BBS OCO
Please find supporting docum questions.	entation attached and co	ntact JD Hark	rider at 972-629-	2177 for any		FEB 1 0 2020
					F	RECEIVED
14. I hereby certify that the foregoing is	s true and correct. Electronic Submission # For MATADOR P nmitted to AFMSS for proc	501575 verifie RODUCTION essing by PRI	d by the BLM Wel COMPANY, sent SCILLA PEREZ or	I Information to the Hobbs n 02/03/2020 (	System 20PP1182SE)	
Name (Printed/Typed) J.D. HARI	KRIDER				R	
Signature (Electronic S	Submission)		Date 01/30/20	020		
	THIS SPACE FO	DR FEDERA		OFFICE US	E	
······						
Conditions of approval, if any, are attache ertify that the applicant holds legal or equivicity that the applicant to condu-	ed. Approval of this notice does uitable title to those rights in the uct operations thereon.	not warrant or subject lease				
Conditions of approval, if any, are attache ertify that the applicant holds legal or equivich would entitle the applicant to condu 'itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	d. Approval of this notice does uitable title to those rights in the uct operations thereon. U.S.C. Section 1212, make it a statements or representations as	not warrant or subject lease crime for any pe to any matter w	rson knowingly and ithin its jurisdiction.	willfully to mal	te to any department or	agency of the United
Conditions of approval, if any, are attache ertify that the applicant holds legal or equivalent would entitle the applicant to condi- itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent a Instructions on page 2) ** BLM REV	ed. Approval of this notice does uitable title to those rights in the uct operations thereon. U.S.C. Section 1212, make it a statements or representations as	rine for any pe to any matter w	rson knowingly and ithin its jurisdiction.	willfully to make	te to any department or	agency of the United

#### Revisions to Operator-Submitted EC Data for Sundry Notice #501575

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM136226	NMNM136226
Agreement:		
Operator:	MATADOR PRODUCTION COMPANY 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240 Ph: 972-371-5448	MATADOR PRODUCTION COMPANY 5400 LBJ FREEWAY SUITE 1500 DALLAS, TX 75240 Ph: 972.371.5200
Admin Contact:	NICKY FITZGERALD REGULATORY ANALYST E-Mail: nicky.fitzgerald@matadorresources.com Ph: 972-371-5448	NICKY FITZGERALD REGULATORY ANALYST E-Mail: nicky.fitzgerald@matadorresources.com Cell: 972-371-5448 Ph: 972-371-5448 Ext: 5448
Tech Contact:	J.D. HARKRIDER DRILLING ENGINEER E-Mail: jharkrider@matadorresources.com	J.D. HARKRIDER DRILLING ENGINEER E-Mail: jharkrider@matadorresources.com
	Ph: 972-629-2177	Ph: 972-629-2177
Location: State: County:	NM LEA	NM LEA
Field/Pool:	DOGGIE DRAW; WOLFCAMP	DOGIE DRAW-DELAWARE
Well/Facility:	BIGGERS FEDERAL 215H Sec 18 T25S R35E 387FSL 498FWL 32.124247 N Lat, 103.413527 W Lon	BIGGERS FEDERAL 215H Sec 18 T25S R35E SWSW 353FSL 523FWL 32.124249 N Lat, 103.413528 W Lon

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# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	Matador Production Company
LEASE NO.:	NMNM136226
WELL NAME & NO.:	Biggers Federal 215H
SURFACE HOLE FOOTAGE:	387'/S & 498'/W
<b>BOTTOM HOLE FOOTAGE</b>	240'/N & 988'/W
LOCATION:	Section 18, T.25 S., R.35 E., NMPM
COUNTY:	Lea County. New Mexico

# COA

H2S	C Yes	🖸 No	
Potash	C None	C Secretary	<b>C</b> R-111-P
Cave/Karst Potential	C Low	🖸 Medium	C High
Cave/Karst Potential	Critical		
Variance	C None	E Flex Hose	C Other
Wellhead	Conventional	C Multibowl	🖸 Both
Other	☐ 4 String Area	Capitan Reef	<b>└</b> WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	✓ Water Disposal	ГСОМ	🔽 Unit

#### All Previous COAs Still Apply

## A. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 1020 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that

string.

2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

### **Option 1 (Single Stage):**

• Cement to surface. If cement does not circulate see B.1.a, c-d above.

#### Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

## **B. PRESSURE CONTROL**

- a. 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.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.

## **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - Eddy County Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
  - Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

## A. CASING

- 1. Changes to the approved APD 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.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### 1. Casing & Cement

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 985	0 - 985	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1 Top	9.875	0 - 9500	0 - 9440	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Intermediate 1 Bottom	8.75	9500 - 12000	9440 - 11940	7.625	29.7	P-110	VAM HTF- NR	1.125	1.125	1.8
Production	6.75	0 - 17570	0 - 12586	5.5	20	P-110	Hunting TLWSC	1.125	1.125	1.8

All casing will be API and new. See attached casing assumption worksheet.

- All casing strings will be tested in accordance with Onshore Order #2 - III.B.1.h

- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed

- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

- 9-7/8" hole depth may fluctuate, but 7-5/8" BUTT will only be run inside of 9-7/8" OH and Flush joint will be run in 8-3/4" OH. Cement volumes will be adjusted proportionally.

- A variance is requested to wave the centralizer requirement for the 7-5/8" flush casing in the 8-3/4" hole and 5-1/2" SF/Flush casing in the 6-3/4" hole

- Matador requests a variance to run 7-5/8" BTC casing inside 9-5/8" BTC casing which will be less than the 0.422" stand off regulation. Matador has met with Christopher Walls and Mustafa Haque as well as other BLM representatives and determined that this would be acceptable as long as the 7-5/8" flush casing was run throughout the entire 300' cement tie back section between 9-5/8" and 7-5/8" casing.

String	Туре	Sacks	Yield	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Surface	Lead	321	2.21	12.4	50%	0	с	Class C Cement + 1% Calcium Chloride + LCM
Sunace	Tail	266	1.32	14.8	50%	685	с	Class C Cement + LCM
	Lead	324	5.57	10.2	30%	0	A/C	Stage 2: Tuned Light Blend
Intermediate 1 DV ~5,500'	Lead	236	5.57	10.2	30%	5500	A/C	Stage 1: Tuned Light Blend
	Tail	114	1.367	13.5	30%	11000	A/C	Stage 1: Class A/C + LCM
	Lead	559	5.57	10.2	30%	0	A/C	Tuned Light Blend
Alternate	Tail	114	1.367	13.5	30%	11000	A/C	Class A/C + LCM
Congri	Tail	1000	1.468	14.2	30%	0	с	Bradenhead Contingency: Class C Cement + LCM
Production	Tail	395	1.37	13.5	10%	200' Tie-Back	н	Fluid Loss + Dispersant + Retarder + LCM

- If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

#### 2. Mud Program

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An electronic Pason mud monitoring system complying with Onshore Order 2 will be used. All necessary mud products

Hole Section	Mud Type	Depth From	Depth To	Density (lb/gal)	Viscosity	Fluid Loss
Surface	Spud Mud	0	Surf Shoe	8.4 - 8.8	28-30	NC
	Brine Diesel					
Intermediate 1	Emulsion	Surf Casing Shoe	7-5/8" Shoe	8.4 - 9.4	28-30	NC
Production	OBM	7-5/8' Shoe	Lateral TD	11.0 - 12.5	30-35	<20

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# **TEC-LOCK WEDGE** 5.500" 20 LB/FT (.361"Wall) with 5.875" SPECIAL CLEARANCE OD

BEN P110 CY

## **Pipe Body Data**

Nominal OD:	5.500	in
Nominal Wall:	.361	in
Nominal Weight:	20.00	lb/ft
Plain End Weight:	19.83	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BEN	
Yield Strength:	125,000	psi
Tensile Strength:	135,000	psi
Nominal ID:	4.778	in
API Drift Diameter:	4.653	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	729,000	lbf
Burst:	14,360	psi
Collapse:	13.010	psi

## **Connection Data**

Standard OD:	5.875	in
Pin Bored ID:	4.778	ín
Critical Section Area:	5.656	in²
Tensile Efficiency:	97 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	707,000	lbf
Compressive Limit:	729,000	lbf
Internal Pressure Rating:	14,360	psi
External Pressure Rating:	13,010	psi
Maximum Bend:	101.2	°/100ft

## **Operational Data**

15,000	ft*lbf
18,700	ft*ibf
41,200	ft*ibf
45,800	ft*ibf
5.97	in
	15,000 18,700 41,200 45,800 5.97

Notes Operational Torque is equivalent to the Maximum Make-Up Torque



