	PARTMENT OF THE I	S NTERIOR			FORM OMB N Expires: 12	APPROVED O. 1004-0137 anuary 31, 2018
BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELCS IS DOCI FIED Do not use this form for proposals to drill or to re-enter an						indity 51, 2010
abandoned wel	ll. Use form 3160-3 (API	D) for such pr	oposal s	D II.	6. If Indian, Allottee c	r Tribe Name
SUBMIT IN 1	TRIPLICATE - Other inst	tructions on p	age 2	<u>en dinar</u>	7. If Unit or CA/Agree	ement, Name and/or No.
. Type of Well	· · · · · · · · · · · · · · · · · · ·	· ·· · · · · · · · · · · · · · · · · ·			8. Well Name and No. CHARLES LING I	FED COM 212H
Name of Operator MATADOR PRODUCTION CO	Contact: Contact: CMPANYE-Mail: tlink@mata	TAMMY R LIN adorresources.cc	IK om		9. API Well No. 30-025-45081	
a. Address 5400 LBJ FREEWAY, SUITE	1500	3b. Phone No. Ph: 575-623	(include area code) -6601		10. Field and Pool or WOLFCAMP	Exploratory Area
DALLAS, TX 75240	R M or Survey Description		IOBBS (DCD_	11 County or Parish	State
Sec 11 T24S R33E Mer NMP	NENW 360FNL 1845FW	ŰL	DEC 1 2 2	018	LEA COUNTY,	NM
12. CHECK THE AF	PROPRIATE BOX(ES)	TO INDICAT	ENA PURE O	FIDTICE,	REPORT, OR OTH	IER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION	·	
Notice of Intent	Acidize	🗖 Deep	en	Product	ion (Start/Resume)	Water Shut-Off
	Alter Casing	🗖 Hydra	aulic Fracturing	🗖 Reclam	ation	Well Integrity
Subsequent Report	Casing Repair	New	Construction	🗖 Recomp	olete	Other
Final Abandonment Notice	Change Plans	🗖 Plug :	and Abandon	Tempor	arily Abandon	
. Describe Proposed or Completed Ope	eration: Clearly state all pertine	nt details, includir	g estimated startin	g date of any p	roposed work and appro-	ximate duration thereof.
and the second s		ed only after all re	dan on one of the tag	ing reclamatio	n have been completed a	and the operator has
determined that the site is ready for fi BLM Bond No.NMB0001079 Surety Bond No:RLB0015172 Please see attached table for d	change in 2nd intermedia	ed only after all re	ntermediate 2 b	ing reclamatio	n, have been completed a	and the operator has
determined that the site is ready for fi BLM Bond No.NMB0001079 Surety Bond No:RLB0015172 Please see attached table for 29# P-110 BTC to 7 5/8" 29.7# 3/4". Change in Production cas to 5 1/2" 20# P-110 Eagle SFH	change in 2nd intermedia # P-110 VAM HTF-NR. C sing for production botton H. Spec sheet attached fo	ate casing for in hange in Produ n from 4 1/2" 1 or 5 1/2" 20# Ea	ntermediate 2 buuction hole size 3.5# P-110 BT0 agle SFH.	ing reclamatio ottom from 1 from 6 1/8" C/VAM DWG	n, have been completed a to 6 COSEDTATTAC	THED FOR
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Additional data for EC transaction #445407 that would not fit on the form

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32. Additional remarks, continued

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Hole Size	Casing Size	Wt/Grade	Thread Collar	Setting Depth
17-1/2"	13-3/8" (new)	54.5# J-55	BTC	1340
12-1/4"	9-5/8" (new)	40# J-55	BTC	5220
8-3/4"	7-5/8" (new)	29.7# P-110	BTC	4920
8-3/4"	7-5/8" (new)	29.7# P-110	VAM HTF-NR	11800
8-3/4"	7″ (new)	29# P-110	BTC	12707
6-1/8"	5-1/2" (new)	20# P-110	VAM DWC/C-IS MS	11700
6-1/8"	4-1/2" (new)	13.5# P-110	VAM DWC/C-IS HT	17226
	Hole Size 17-1/2" 12-1/4" 8-3/4" 8-3/4" 8-3/4" 6-1/8" 6-1/8"	Hole Size Casing Size 17-1/2" 13-3/8" (new) 12-1/4" 9-5/8" (new) 8-3/4" 7-5/8" (new) 8-3/4" 7-5/8" (new) 8-3/4" 7'' (new) 6-1/8" 5-1/2" (new) 6-1/8" 4-1/2" (new)	Hole SizeCasing SizeWt/Grade17-1/2"13-3/8" (new)54.5# J-5512-1/4"9-5/8" (new)40# J-558-3/4"7-5/8" (new)29.7# P-1108-3/4"7-5/8" (new)29.7# P-1108-3/4"7" (new)29# P-1106-1/8"5-1/2" (new)20# P-1106-1/8"4-1/2" (new)13.5# P-110	Hole SizeCasing SizeWt/GradeThread Collar17-1/2"13-3/8" (new)54.5# J-55BTC12-1/4"9-5/8" (new)40# J-55BTC8-3/4"7-5/8" (new)29.7# P-110BTC8-3/4"7-5/8" (new)29.7# P-110VAM HTF-NR8-3/4"7" (new)29# P-110BTC6-1/8"5-1/2" (new)20# P-110VAM DWC/C-IS MS6-1/8"4-1/2" (new)13.5# P-110VAM DWC/C-IS HT

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Name	Hole Size	Casing Size	Wt/Grade	Thread Collar	Setting Depth
Surface	17-1/2"	13-3/8" (new)	54.5# J-55	BTC	1340
Intermediate	12-1/4"	9-5/8" (new)	40# J-55	BTC	5220
Intermediate 2 Top	8-3/4"	7-5/8" (new)	29.7# P-110	BTC	4920
Intermediate 2 Bottom	8-3/4"	7-5/8" (new)	29.7# P-110	VAM HTF-NR	12707
Production Top	6-3/4"	5-1/2" (new)	20# P-110	VAM DWC/C-IS MS	12350
Production Bottom	6-3/4"	5-1/2" (new)	20# P-110	Eagle SFH	17226

Name	Hole Size	Mud Weight	Visc	Fluid Loss	Type Mud
Surface	17-1/2"	8.30	28	NC	FW Spud Mud
Intermediate 1	12-1/4"	10.00	30-32	NC	Brine Water
Intermediate 2	8-3/4"	9.00	30-31	NC	FW/Cut Brine
Production	6-1/8"	12.50	50-60	<10	OBM

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Name	Туре	Sacks	Yield	Weight	
Surface	Lead	800	1.82	13.5	
	Tail	340	1.38	14.8	
TOC = 0'			100% Exces	S	
Intermediate	Lead	1290	1.82	12.8	
	Tail	500	1.38	14.8	
TOC = 0'		100% Excess			
Intermediate 2	Lead	520	2.36	11.5	
	Tail	320	1.38	14.8	
TOC = 420		75% Excess			
Production	Tail	500	1.17	15.8	
TOC = 11,70	00'		10% Excess		

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Blend
Class C + Bentonite + 2% CaCL2 + 3% NaCl + LCM
Class C + 5% NaCl + LCM
Centralizers per Onshore Order 2.III.B.1f
Class C + Bentonite + 2% CaCL2 + 3% NaCl + LCM
Class C + 5% NaCl + LCM
2 on btm jt, 1 on 2nd jt, 1 every 4th jt to surface
TXI + Fluid Loss + Dispersant + Retarder + LCM
TXI + Fluid Loss + Dispersant + Retarder + LCM
2 on btm jt, 1 on 2nd jt, 1 every 4th jt to top of tail
cement (500' above TOC)
Class H + Fluid Loss + Dispersant + Retarder + LCM
2 on btm jt, 1 on 2nd jt, 1 every other jt to top of
curve

Top Cement
Surface
Surface
4200
4200
4200
11700
11700

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Top Cement
Surface
Surface
4200
4200
11600
11600

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U. S. Steel Tubular Products

5.500" 20.00lbs/ft (0.361" Wall) P110 HP USS-EAGLE SFH™

MECHANICAL PROPERTIES	Pipe	USS-EAGLE SFH™	
Minimum Yield Strength	125,000		psi
Maximum Yield Strength	140,000		psi
Minimum Tensile Strength	130,000		psi
DIMENSIONS	Pipe	USS-EAGLE SFH™	
Outside Diameter	5.500	5.830	in.
Wall Thickness	0.361		in.
Inside Diameter	4.778	4.693	in.
Standard Drift	4.653	4.653	in.
Alternate Drift	-	4.653	in.
Nominal Linear Weight, T&C	20.00	-	lbs/ft
Plain End Weight	19.83		lbs/ft
SECTION AREA	Pipe	USS-EAGLE SFH™	
Critical Area	5.828	5.027	sq. in.
loint Efficiency		86.3	%
Joint Endency		00.0	·•
PERFORMANCE	Pipe		~
PERFORMANCE Minimum Collapse Pressure	Pipe 13,150	USS-EAGLE SFH™ 13,150	psi
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance	Pipe 13,150	USS-EAGLE SFH™ 13,150 13,150	psi psi
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure	Pipe 13,150 14,360	USS-EAGLE SFH™ 13,150 13,150 14,360	psi psi psi psi
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength	Pipe 13,150 14,360 729,000	USS-EAGLE SFH™ 13,150 13,150 14,360	psi psi psi Ibs
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength	Pipe 13,150 14,360 729,000	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000	psi psi psi Ibs Ibs
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000	psi psi psi lbs lbs lbs
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating Reference Length	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000 20,933	psi psi psi lbs lbs lbs ft
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating Reference Length Maximum Uniaxial Bend Rating	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000 20,933 89.7	psi psi psi lbs lbs ft deg/100 ft
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating Reference Length Maximum Uniaxial Bend Rating	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000 20,933 89.7 USSEAGLE SFH™	psi psi psi lbs lbs ft deg/100 ft
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating Reference Length Maximum Uniaxial Bend Rating Make-UP Loss	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000 20,933 89.7 USS:EAGLE SFH™	psi psi psi lbs lbs lbs ft deg/100 ft
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating Reference Length Maximum Uniaxial Bend Rating Make-Up Dark Make-Up Loss Minimum Make-Up Torque	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000 20,933 89.7 USSEAGLE SFH™ 5,92 14,200	psi psi psi lbs lbs lbs ft deg/100 ft in. ft-lbs
PERFORMANCE Minimum Collapse Pressure External Pressure Leak Resistance Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Compression Rating Reference Length Maximum Uniaxial Bend Rating Make-Up Loss Minimum Make-Up Torque Maximum Make-Up Torque	Pipe 13,150 14,360 729,000 	USS-EAGLE SFH™ 13,150 13,150 14,360 628,000 628,000 20,933 89.7 USS EAGLE SFH™ 5.92 14,200 16,800	psi psi psi lbs lbs lbs ft deg/100 ft in. ft-lbs ft-lbs

Legal Notice

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USS

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.

> U. S. Steel Tubular Products 1-877-893-9461 460 Wildwood Forest Drive, Suite 300S connections@us Spring, Texas 77380

connections@uss.com www.usstubular.com

TECHNICAL SPECIFICATIONS

These specifications are furnished for general information only and are not intended for design purposes. This information is preliminary and may change subject to a final design by VAM-USA Engineering. This is not a controlled document.

DWC/C-IS standard	MS		Casing	5.500" O.D.	20.00 lb./ft.	VST P-110EC
			Material			
VST P-110	EC		Grade			FIN FILM
125,0	000		Minimum Yield Strength (p	si.)		
135,0	000		Minimum Ultimate Strength	n (psi.)		
			Pipe Dimensions		<u> </u>	ACU CAR
5.5	500		Nominal Pipe Body OD (in	.)	VAM-USA	
4.7	778		Nominal Pipe Body ID (in.)	Ì	4424 W. San Houston TX	n Houston Pkwy, Suite 150 77041
0.3	361		Nominal Wall Thickness (in	n.)	Phone: (713	3) 479-3200
20	.00		Nominal Weight (lbs./ft.)		Fax: (713) 4 E-mail: VAM	179-3234 USAsales@na.vallourec.com
19	.83		Plain End Weight (lbs./ft.)			0
5.8	328		Nominal Pipe Body Area (sq. in.)		
			Pipe Body Performance	Properties		
729,0	000		Minimum Pipe Body Yield	Strength (lbs.)		
12,0	090		Minimum Collapse Pressu	re (psi.)		
14,3	360		Minimum Internal Yield Pre	essure (psi.)		
13,1	100		Hydrostatic Test Pressure	(psi.)		
			Connection Dimensions			
6.1	115		Connection OD (in.)			
4.7	778		Connection ID (in.)			
4.6	653		Connection Drift Diameter	(in.)		
4	.13		Make-up Loss (in.)			
5.8	328		Critical Area (sq. in.)			
10	0.0		Joint Efficiency (%)			
			Connection Performance	Properties		
729,0	000	(1)	Joint Strength (lbs.)			
26,0)40	(2)	Reference String Length (ft.) 1.4 Design I	Factor	
728,0	000	(3)	API Joint Strength (lbs.)			
729,0	000		Compression Rating (lbs.)			
12,0)90		API Collapse Pressure Ra	ting (psi.)		
14,3	360	(4)	API Internal Pressure Res	istance (psi.)		
10	4.2		Maximum Uniaxial Bend R	ating (degrees/1	00 ft.)	
			Approximated Field End	Torque Values		
16,6	600	(5)	Minimum Final Torque (ft	lbs.)		
19,1	00	(5)	Maximum Final Torque (ft.	-lbs.)		
21,6	600	(6)	Connection Yield Torque (ftlbs.)		
(1) Joint Stren	igth is th	e minim	um pipe body yield strength multipli	ed by the connection	critical area.	

(2) Reference String Length is the joint strength divided by both the weight in air and the design factor.

- (3) API Joint Strength is for reference only. It is calculated from Formulas 42 and 43 in the API Bulletin 5C3.
- (4) API Internal Pressure Resistance is calculated from Formulas 31, 32, and 35 in the API Bulletin 5C3.
- (5) Torque values are approximated and may be affected by field conditions.

(6) Connection yield torque is not to be exceeded.

Connection specifications within the control of VAM-USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades u obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advi to obtain current connection specifications and verify pipe mechanical properties for each application.

CONNECTION DATA SHEET (Imperial Units)

Connection: VAM® HTF-NR 7,625" 29,70# P110EC Alternate Drift: 6,750"

Drawing: PD-101836P PD-101836B

Isolated connection



C 7 6)D :25"	WEIGHT	WALL	GRADE	API DRIFT	
, v	23	29,70 ib/ft	0,375	PHUEC	6,750"	
PIPE BC	DY PRO	PERTIES:		CONNE	CTION PRC	PERTIES:
utside Diameter	inch	7,625		Connection OD (nom)	inch	. 7 ,70 1
nternal Diameter	inch	6.875		Connection ID	inch	6,782
ominal Area	sqin.	8,541		Make-up Loss	inch . inch	4,657
			Ì	Box critical area	%PBYS	58%
				Pin critical area	%PBYS	67%
ield Strength	klb .	1,068		Yield Strength	kib	619.,
Itimate Strength	klb	1 153		Ultimate strength	klb	669
				Structural compression	, kib	776
		10 700		Compression with sealabil	ity <i>klb</i>	371
	psi	10 / 60	· [MIYP	psi	10.760
onapse Pressure	psi	30/0		Ext Pressure Resistance	e psi	5070
				Regular Make-up Torqui	≘ ft.lb	
					Min	9 600
				the second states of the second	Opt	11 300
			{	ne filma and charles a cont	, wax	13 000,01
				Maximum Torque with S	ealability	ft.Ib 58 500
				Maximum Torsional Val	ue	ft.lb 73 000

No one knows VAM like VAM

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No one khowe vym like vym ubal@vamfieldsorvifcf.com brazil@vamfieldservifce.com brazil@vamfieldservifce.com canada@vamfieldservice.com ingapora@vamfieldservice.com moxico@vamfieldservice.com do vAhi Specialists svaljable worldwide/24/7, for Rig Site Assistance



<u>____</u>

Designed by : X. MENCAGLIA Reference: VRCC16-1177 Revision : 0 July 19, 2016 Date :

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Production Company
LEASE NO.:	NMLC0063798
WELL NAME & NO.:	212H-Charles Ling Fed Com
SURFACE HOLE FOOTAGE:	360'/N & 1847'/W
BOTTOM HOLE FOOTAGE	240'/S & 1649'/W
LOCATION:	T-24S, R-33E, S-11. NMPM
COUNTY:	LEA, NM

Potash	None	✓ Secretary	
Cave/Karst Potential	C Low		High
Variance	• None	← Flex Hose	C Other
Wellhead	Conventional	Multibowl	
Other	□4 String Area	□Capitan Reef	□WIPP

All previous COAs still apply except for the following:

First intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

1. The minimum required fill of cement behind the 9 5/8 inch first intermediate casing is:

Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Second intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

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

Cement as proposed. Operator shall provide method of verification.

3. The minimum required fill of cement behind the 5 1/2 inch production casing is:

Cement as proposed. Operator shall provide method of verification.

MHH 12102018

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)
 - Chaves and Roosevelt Counties Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (575) 627-0272. After office hours call (575)
 - 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
- 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</u> <u>hours</u>. WOC time will be recorded in the driller's log.
- <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.

- 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.