Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
LEATHERNECK	207H	3001547045	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	138H	3001546896	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	137H	3001546895	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	128H	3001546903	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	127H	3001546894	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	208H	3001547046	NMNM0003677	NMNM0003677	MATADOR

Procedure Description: BLM Bond No: NMB000107 9 Surety Bond:RLB0015172 Matador requests the option for a production casing change to one of the following: 5-1/2” 20# P110 CYHC upgraded connection to Hunting Tec-Lock Wedge SC from Top MD 0’ to Bottom MD of Total Depth 7” 29# P110EC from Top MD of 0’ to Bottom MD of each individual well’s respective top of curve or kick off point and 5-1/2” 20# P110 CYHC Tec-Lock Wedge SC from Top MD of each individual well’s respective top of curve or kick off point to Bottom MD of Total Depth. Spec Sheets are attached. Cement volumes will be adjusted accordingly with lead and tail tops to be maintained at original approved design depths.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

5.5_in_Tec_Lock_Wedge_P_110_CYHC_20210219130643.pdf

7_P110EC_DWC_C_20210219130643.PDF

Conditions of Approval

Additional Reviews

LEATHERNECK_3029_FED_COM_128H_BATCH_SUNDRY_Drilling_Calculations_20210316184006.pdf

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Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
LEATHERNECK	207H	3001547045	NMNM0003677	NMNM0003677	MATADOR
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LEATHERNECK	137H	3001546895	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	128H	3001546903	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	127H	3001546894	NMNM0003677	NMNM0003677	MATADOR
LEATHERNECK	208H	3001547046	NMNM0003677	NMNM0003677	MATADOR

Name: MATADOR PRODUCTION COMPANY

Title: Regulatory

Street Address: 5400 LBJ FREEWAY STE 1500

City: DALLAS **State:** TX

Phone: (972) 371-5448

Email address: nicky.fitzgerald@matadorresources.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone: (972)371-5448

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 03/29/2021

Signature: Chris Walls

CONFIDENTIAL

302029 LOT 4 ATS-19-3131 LEATHERNECK 3029 FED COM 128H BATCH SUNDRY Eddy NMNM0003677
Matador 13-22 03162021 RI

Leatherneck 3029 Fed Com 128H BATCH SUNDRY

20 surface csg in a 26 inch hole. Design Factors — Surface

Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	94.00	J 55	BTC	37.29	2.84	3.32	400	12	5.67	5.48	37,600
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,302			Tail Cmt	does not	circ to sfc.	Totals:	400				37,600

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
26	1.5053	1060	1431	#N/A	#N/A	8.80	372	2M	2.50

13 3/8 casing inside the 20 Design Factors — Int 1

Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	J 55	BTC	13.05	1.78	1.97	1,200	4	3.88	3.04	65,400
w/8.4#/g mud, 30min Sfc Csg Test psig:						Totals:	1,200				65,400
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		400				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	900	1490	963	55	10.20	703	2M	1.56

Class 'H' tail cmt yld > 1.20

9 5/8 casing inside the 13 3/8 Design Factors — Int 2

Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J 55	BTC	5.08	1.86	1.04	3,100	3	1.88	3.66	124,000
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,412						Totals:	3,100				124,000
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		1200				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	940	1570	1030	52	8.60	2097	3M	0.81

Class 'C' tail cmt yld > 1.35

5 1/2 casing inside the 9 5/8 Design Factors — Prod 1

Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	P 110	TLW	4.52	3.41	3.76	17,981	4	6.85	6.20	359,620
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,719						Totals:	17,981				359,620
The cement volume(s) are intended to achieve a top of				2900	ft from surface or a		200				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	3370	5185	3811	36	9.40			1.44

Class 'H' tail cmt yld > 1.20 Capitan Reef est top XXXX.

#N/A

Carlsbad Field Office 3/16/2021

TEC-LOCK WEDGE

5.500" 20 LB/FT (.361"Wall)
Benteler P110 CY HC

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 HC	
Mill/Specification:	Benteler	
Yield Strength:	125,000	psi
Tensile Strength:	130,000	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:	13,000	psi

Connection Data

Standard OD:	5.920	in
Pin Bored ID:	4.778	in
Critical Section Area:	5.656	in^2
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:	13,000	psi
Maximum Bend:	101.2	°/100ft

Operational Data

Minimum Makeup Torque:	15,000	ft*lbf
Optimum Makeup Torque:	18,700	ft*lbf
Maximum Makeup Torque:	41,200	ft*lbf
Minimum Yield:	45,800	ft*lbf
Makeup Loss:	5.97	in

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

HUNTING

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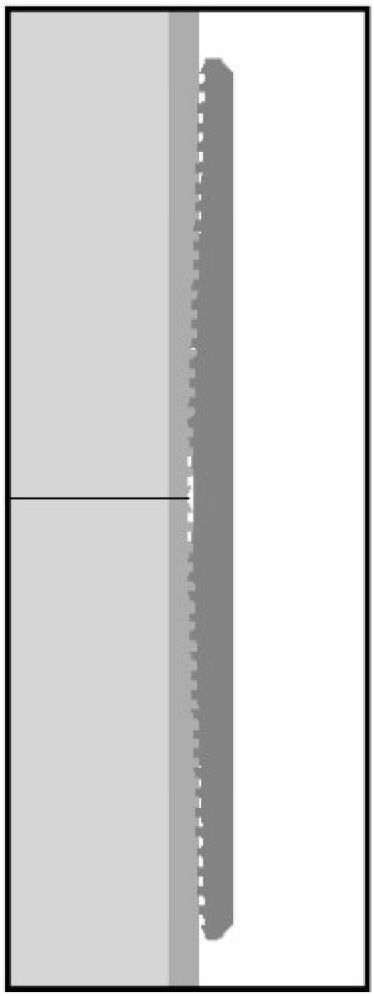
Technical Specifications

Connection Type:	Size(O.D.):	Weight (Wall):	Grade:
DWC/C Casing	7 in	29.00 lb/ft (0.408 in)	VMS P110 EC

2012 API Spec 5CT Coupling O.D.

	Material
VMS P110 EC	Grade
125,000	Minimum Yield Strength (psi)
135,000	Minimum Ultimate Strength (psi)
	Pipe Dimensions
7.000	Nominal Pipe Body O.D. (in)
6.184	Nominal Pipe Body I.D.(in)
0.408	Nominal Wall Thickness (in)
29.00	Nominal Weight (lbs/ft)
28.75	Plain End Weight (lbs/ft)
8.449	Nominal Pipe Body Area (sq in)
	Pipe Body Performance Properties
1,056,000	Minimum Pipe Body Yield Strength (lbs)
9,580	Minimum Collapse Pressure (psi)
12,750	Minimum Internal Yield Pressure (psi)
11,700	Hydrostatic Test Pressure (psi)
	Connection Dimensions
7.875	Connection O.D. (in)
6.184	Connection I.D. (in)
6.125	Connection Drift Diameter (in)
4.50	Make-up Loss (in)
8.449	Critical Area (sq in)
100.0	Joint Efficiency (%)
	Connection Performance Properties
1,056,000	Joint Strength (lbs)
26,010	Reference String Length (ft) 1.4 Design Factor
1,045,000	API Joint Strength (lbs)
528,000	Compression Rating (lbs)
9,580	API Collapse Pressure Rating (psi)
12,750	API Internal Pressure Resistance (psi)
40.9	Maximum Uniaxial Bend Rating [degrees/100 ft]
	Appoximated Field End Torque Values
26,800	Minimum Final Torque (ft-lbs)
31,300	Maximum Final Torque (ft-lbs)
35,800	Connection Yield Torque (ft-lbs)

VAM-USA
4424 W. Sam Houston Pkwy. Suite 150
Houston, TX 77041
Phone: 713-479-3200
Fax: 713-479-3234
E-mail: VAMUSAsales@na.vallourec.com



For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

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 were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

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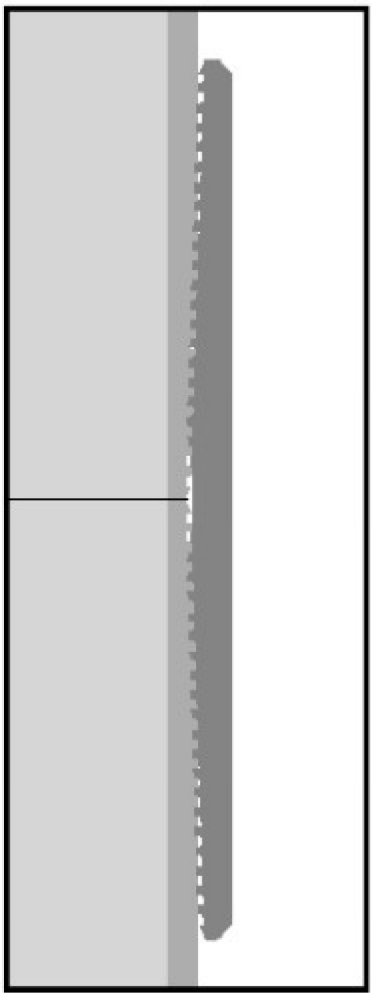
DWC Connection Data Notes:

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a give pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.



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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 22194

COMMENTS

Operator:	OGRID:	Action Number:	Action Type:
MATADOR PRODUCTION COMPANY One Lincoln Centre 5400 LBJ Freeway, Ste 1500 Dallas, TX75240	228937	22194	C-103A

Created By	Comment	Comment Date
kpickford	KP GEO Review 3/29/2021	03/29/2021
jagarcia	Accepted for Record	03/29/2021

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CONDITIONS

Action 22194

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
MATADOR PRODUCTION COMPANY One Lincoln Centre 5400 LBJ Freeway, Ste 1500 Dallas, TX75240	228937	22194	C-103A

OCD Reviewer	Condition
kpickford	Adhere to previous NMOCD Conditions of Approval