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Form 3160-3 (June 2015)		JAN 09 20	-	OMB N	APPROVED lo. 1004-0137 anuary 31, 2018
UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MAN	NTERIOR	RECEIVE	ED	5. Lease Serial No. NMNM026394	
APPLICATION FOR PERMIT TO D		_		6. If Indian, Allotee	e or Tribe Name
	EENTER		<u></u>	7. If Unit or CA Ag	reement, Name and No.
	ther	Multiple Zone		8. Lease Name and GREEN DRAKE 1 701H	
2. Name of Operator EOG RESOURCES INCORPORATED (7377)				9. API Well No. 30-025	- 48475
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002	3b. Phone N (713)651-7	lo. <i>(include area cod</i> 000	e)	10. Field and Pool, RED-HILLS / WC-	
4. Location of Well (Report location clearly and in accordance of At surface NWSW / 2390 FSL / 627 FWL / LAT 32.129 At proposed prod. zone SWSW / 100 FSL / 330 FWL / L	904 / LONG	-103.5837312	347029	11. Sec., T. R. M. o SEC 16 / T25S / R	r Blk. and Survey or Area 333E / NMP
14. Distance in miles and direction from nearest town or post offi 22 miles				12. County or Paris LEA	h 13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No of ac 2560	eres in lease	17. Spaci 480	ng Unit dedicated to t	this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 330 feet	19. Propose 12394 feet	d Depth / 19968 feet	20. BLM FED: NN	/BIA Bond No. in file 12308	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3419 feet	22. Approxi 01/01/2019	mate date work will	l. start*	23. Estimated durat 25 days	ion
	24. Attac	hments		- I	·····
The following, completed in accordance with the requirements of (as applicable) 1. Well plat certified by a registered surveyor.	f Onshore Oil				rule per 43 CFR 3162.3-3
 A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office 		Item 20 above). 5. Operator certific	ation.	-	s may be requested by the
25. Signature (Electronic Submission)		(Printed/Typed) Vagner / Ph: (432)	386-3689		Date 08/16/2018
Title Regulatory Specialsit					
Approved by (Signature) (Electronic Submission)		(Printed/Typed) en / Ph: (575)234-5	978		Date 11/30/2018
Title Wildlife Biologist	Office CARL				L
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	t holds legal o	or equitable title to th	ose rights	in the subject lease w	hich would entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, m of the United States any false, fictitious or fraudulent statements of					any department or agency
GCP Dec 1/9/19	VEN WI	TH CONDIT	IONS	Kz oil	0/19
(Continued on page 2)		: 11/30/2018	-	*(In:	structions on page 2)

*(Instructions on page 2)

INSTRUCTIONS

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GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

SHL: NWSW / 2390 FSL / 627 FWL / TWSP: 255 / RANGE: 33E / SECTION: 16 / LAT: 32.129904 / LONG: -103.5837312 (TVD: 0 feet, MD: 0 feet)
 PPP: NWSW / 2540 FSL / 330 FWL / TWSP: 255 / RANGE: 33E / SECTION: 16 / LAT: 32.1303182 / LONG: -103.5846903 (TVD: 12129 feet, MD: 12144 feet)
 BHL: SWSW / 100 FSL / 330 FWL / TWSP: 255 / RANGE: 33E / SECTION: 21 / LAT: 32.1090931 / LONG: -103.5847029 (TVD: 12394 feet, MD: 19968 feet)

BLM Point of Contact

Name: Katrina Ponder Title: Geologist Phone: 5752345969 Email: kponder@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

10,000 PSI BOP Annular Variance Request

EOG Resources request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOP).

1. Component and Preventer Compatibility Tables

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The tables below outlines the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

	12-1/4" Intermediate Hole Section 10M psi requirement				
Component	OD	Primary Preventer	RWP	Aiternate Preventer(s)	RWP
Drillpipe	5.000" or	Annular	5M	Upper 3.5 - 5.5" VBR	10M
	4.500"			Lower 3.5 - 5.5" VBR	10M
HWDP	5.000" or	Annular	5M	Upper 3.5 - 5.5" VBR	10M
	4.500"			Lower 3.5 - 5.5" VBR	10M
Jars	6.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
DCs and MWD tools	6.500" - 8.000"	Annular	5M	-	-
Mud Motor	8.000" – 9.625"	Annular	5M	-	-
1 st Intermediate casing	9.625″	Annular	5M	-	-
Open-hole	-	Blind Rams	10M	-	-

den en e	8-3/4" Intermediate Hole Section 10M psi requirement				
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or	Annular	5M	Upper 3.5 - 5.5" VBR	10M
	4.500"			Lower 3.5 - 5.5" VBR	10M
HWDP	5.000" or	Annular	5M	Upper 3.5 - 5.5" VBR	10M
	4.500"			Lower 3.5 - 5.5" VBR	10M
Jars	6.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
DCs and MWD tools	6.500" - 8.000"	Annular	5M		-
Mud Motor	6.750" - 8.000"	Annular	5M	_	-
2 nd Intermediate casing	7.625″	Annular	5M	-	-
Open-hole	-	Blind Rams	10M		-



Manufacturer: Midwest Hose & Specialty

Serial Number: SN#90067

Length: 35'

Size: OD = 8" ID = 4"

Ends: Flanges Size: 4-1/16*

WP Rating: 10,000 psi Anchors required by manfacturer: No

MIDWEST

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HOSE AND SPECIALTY INC.

IN"	TERNA	. HYDROST	ATIC TES	REPOR	Т
Customer: CACTUS				P.O. Numt RIG #123	
		HOSE SPECI	FICATIONS	Asset # N	/10761
Туре: С	HOKE LIN	E		Length:	35'
I.D.	4"	INCHES	O.D.	8"	INCHES
WORKING PR	ESSURE	TEST PRESSUR	Ê	BURST PRES	SURE
10,000	PSI	15,000	PSI		PSI
		COUP	LINGS		
Type of En 4	d Fitting 1/16 10K F	LANGE			
Type of Co S	upling: WEDGED		MANUFACTU MIDWEST HOS		ALTY
		PROC	EDURE		
H		/ pressure tested w	ith water at employ	temperatura.	
1		TEST PRESSURE	1	URST PRESSU	
	1	MIN.			0 <i>PSI</i>
COMMENTS: SN#90067 M10761 Hose is covered with stainless steel armour cover and wraped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes					
Date: 6/	6/2011	Tested By: BOBBY FINK		Approved: MENDI J	ACKSON



Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Bobby Fink

Approved By: Mendi Jackson

Bill

, Mendi Jackson

september of the



10,000 PSI BOP Annular Variance Request

EOG Resources request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOP).

1. Component and Preventer Compatibility Tables

9.625"

-

1st Intermediate casing

Open-hole

the drilling fluid, docum	ents that two barrie	ers to flow will be ma	intaineo	d at all times.	
and a start of the		Intermediate Hole Se OM psi requirement	ection		
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5 - 5.5" VBR Lower 3.5 - 5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5 - 5.5" VBR Lower 3.5 - 5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	Upper 3.5 - 5.5" VBR Lower 3.5 - 5.5" VBR	10M 10M
DCs and MWD tools	6.500" - 8.000"	Annular	5M	-	-
Mud Motor	8.000" - 9.625"	Annular	5M	-	-

Annular

Blind Rams

5M

10M

-

-

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The tables below outlines the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

8-3/4" Intermediate Hole Section 10M psi requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or	Annular	5M	Upper 3.5 - 5.5" VBR	10M
	4.500"			Lower 3.5 - 5.5" VBR	10M
HWDP	5.000" or	Annular	5M	Upper 3.5 - 5.5" VBR	10M
	4.500"			Lower 3.5 - 5.5" VBR	10M
Jars	6.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
DCs and MWD tools	6.500" – 8.000"	Annular	5M	-	-
Mud Motor	6.750" - 8.000"	Annular	5M	-	-
2 nd Intermediate casing	7.625″	Annular	5M	-	-
Open-hole	-	Blind Rams	10M	-	-

6-3/4" Production Hole Section 10M psi requirement					
Component	e záros OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
HWDP	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
DCs and MWD tools	4.750" – 5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Mud Motor	4.750" – 5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Mud Motor	5.500" – 5.750"	Annular	5M	-	-
Production casing	5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Open-hole	-	Blind Rams	10M	-	-

VBR = Variable Bore Ram



2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the EOG Resources drilling supervisor's office on location, and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

- 1. Sound alarm (alert crew)
- 2. Space out drill string
- 3. Shut down pumps (stop pumps and rotary)
- 4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

- 1. Sound alarm (alert crew)
- 2. Stab full opening safety valve and close
- 3. Space out drill string
- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

- 1. Sound alarm (alert crew)
- 2. Stab crossover and full opening safety valve and close
- 3. Space out string

- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Shut-in with blind rams. (HCR and choke will already be in the closed position.)
- 3. Confirm shut-in
- 4. Notify toolpusher/company representative
- 5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
- 6. Regroup and identify forward plan

General Procedures While Pulling BHA thru Stack

- 1. PRIOR to pulling last joint of drillpipe thru the stack.
 - a. Perform flowcheck, if flowing:
 - b. Sound alarm (alert crew)
 - c. Stab full opening safety valve and close
 - d. Space out drill string with tool joint just beneath the upper variable bore rams.
 - e. Shut-in using upper variable bore rams. (HCR and choke will already be in the closed position.)
 - f. Confirm shut-in
 - g. Notify toolpusher/company representative
 - h. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - i. Regroup and identify forward plan
- 2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm (alert crew)
 - b. Stab crossover and full opening safety valve and close
 - c. Space out drill string with upset just beneath the upper variable bore rams.
 - d. Shut-in using upper variable bore rams. (HCR and choke will already be in the closed position.)
 - e. Confirm shut-in
 - f. Notify toolpusher/company representative
 - g. Read and record the following:
 - i. SIDPP and SICP

ii. Pit gain

iii. Time

- h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm (alert crew)
 - b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario.
 - c. If impossible to pick up high enough to pull the string clear of the stack:
 - d. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
 - e. Space out drill string with tooljoint just beneath the upper variable bore ram.
 - f. Shut-in using upper variable bore ram. (HCR and choke will already be in the closed position.)
 - g. Confirm shut-in
 - h. Notify toolpusher/company representative
 - i. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - j. Regroup and identify forward plan

Metal One Corp.	MO-F	YÌ	Page	MCT	
			Date	3-Nov	-16
Metal One	Connection [Data Sheet		~	
		· · · · ·	Rev.	0	
	ACTECHNELLAY!	Imperi	<u>al</u>	<u>S.I.</u>	
	Pipe Body				
	LEET OPENED AND AND AND AND AND AND AND AND AND AN	Construction of Contractional Design of the State of the		ग्रम्माणः(सन्ध्र)	
	Pipe OD (D)	7 5/8	in	193.68	mm
MO-FXL	Weldbergessessand			A 44 25 M	Ko/m
	Actual weight	29.04		43.26	kg/m
	Wall I hickness (m)			<u>9.53</u> 174.63	
	Pipe body/cross sectio	<u> </u>	in Minister	174.05 (25.508)//	mm
	Drift Dia.	6.750	in	171.45	semm mm
	6		1]	17 1.90	1
	Connection		natu panhajanantingi taaniningi p	ning a factor of the second	nonesta en ante fatta menderale al fatta da
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	Eox Gingalaiga	9.2 9.7 1/1		309233	
Вох	dom loss officiency	70		<u></u>	
critical area	Thread Taper	NUMBER OF A DESCRIPTION	/ 10 (1.	and the second	
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up C	SAMP/ASSAMPASSARES		al cieks at		
up C	Performance Properti M.I.Y.P. 1	es for Pipe Body 10,760	psi	74.21	MPa
up toss D Pin critical	MI.Y.P. 1	10,760	psi		
up toss D	M.I.Y.P. *1 Marte Station Station Note S.M.Y.S.= Sp	10,760 Annum YI	DSI ELD Stren	gth of Pipe bo	sida anti- iciy
up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S Sp M.I.Y.P. = M	10,760 Hecified Minimum YII	ELD Stren	gth of Pipe bo of Pipe body	sida anti- iciy
up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = M *1 Based on V	10,760 ecified Minimum YII inimum Internal Yiel /SB P110HC (YS=1	ELD Stren d Pressure 25~140ksi	gth of Pipe bo of Pipe body	sida anti- iciy
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up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = Mi *1 Based on V Performance Properti Min. Compression Yield	10,760 Auto active Minimum Yill inimum Internal Yiel /SB P110HC (YS=1 ies for Connection	ELD Stren d Pressure 25~140ksi on s (70% c	gth of Pipe bo of Pipe body) of S.M.Y.S.)	dy '
up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = M *1 Based on V Performance Properti	10,760 Auto active Minimum Yill inimum Internal Yiel /SB P110HC (YS=1 ies for Connection	ELD Stren d Pressure 25~140ksi on s (70% c	gth of Pipe bo of Pipe body)	dy '
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up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = Mi *1 Based on V Performance Properti Min. Compression Yield	10,760 Attion active Minimum YII inimum Internal Yiel /SB P110HC (YS=1 es for Connection 747 kip:	ELD Stren d Pressure 25~140ksi on s (70% c	gth of Pipe bo of Pipe body) of S.M.Y.S.)	dy '
up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = Mi *1 Based on V Performance Properti Min. Compression Yield External Pressure Recommended Torqu	10,760 ecified Minimum YII inimum Internal Yiel /SB P110HC (YS=1 ies for Connection 747 kip: ////////////////////////////////////	ELD Stren d Pressure 25~140ksi on s (70% o 100% o	gth of Pipe bo of Pipe body) 1 S.M.Y.S.) Collapse S	dy dy Strength
up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = Mi *1 Based on V Performance Properti Min. Compression Yield External Pressure Recommended Torque Opti.	10,760 ecified Minimum YI inimum Internal Yiel /SB P110HC (YS= 1 ies for Connection 747. kip: 247. kip:	ELD Stren d Pressure 25~140ksi on s (70% c	gth of Pipe bo of Pipe body) of S.M.Y.S.)	dy '
up toss D Pin critical	M.I.Y.P. *1 Note S.M.Y.S.= Sp M.I.Y.P. = Mi *1 Based on V Performance Properti Min. Compression Yield External Pressure Recommended Torqu	10,760 ecified Minimum YI inimum Internal Yiel /SB P110HC (YS= 1 ies for Connection 747. kip: 247. kip:	ELD Stren d Pressure 25~140ksi on s (70% o 100% o	gth of Pipe bo of Pipe body) 1 S.M.Y.S.) Collapse S	dy dy Strength

1. GEOLOGIC NAME OF SURFACE FORMATION: Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,014'
Top of Salt	1,339'
Base of Salt	4,708'
Lamar	4,956'
Bell Canyon	4,979'
Cherry Canyon	5,964'
Brushy Canyon	7,560'
Bone Spring Lime	9,101'
1 st Bone Spring Sand	10,105'
2 nd Bone Spring Shale	10,318'
2 nd Bone Spring Sand	10,608'
3 rd Bone Spring Carb	11,155'
3 rd Bone Spring Sand	11,807'
Wolfcamp	12,265'
TD	12,394'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0-400'	Fresh Water
Cherry Canyon	5,964'	Oil
Brushy Canyon	7,560'	Oil
1 st Bone Spring Sand	10,105'	Oil
2 nd Bone Spring Shale	10,318'	Oil
2 nd Bone Spring Sand	10,608'	Oil
3 rd Bone Spring Carb	11,155'	Oil
3 rd Bone Spring Sand	11,807'	Oil
Wolfcamp	12,265'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13.375" casing at 1,040' and circulating cement back to surface.

Hole		Csg				DF _{min}	DFmin	DF _{min}
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
17.5"	0 – 1,040'	13.375"	54.5#	J55	LTC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - 4,800'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0-11,300'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0' - 10,800'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.60
6.75"	10,800'-19,968'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60

4. CASING PROGRAM - NEW

Variance is requested to wave the centralizer requirements for the 7-5/8" FJ casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to wave any centralizer requirements for the 5-1/2" FJ casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested for the 7-5/8" x 5-1/2" casing (minimum clearance) from the top of the cement overlap to surface.

Depth	No. Sacks	Wt. ppg	Yld Ft³/ft	Mix Water Gal/sk	Slurry Description
13-3/8" 1,040'	600	13.5	1.73	9.13	Lead: Class C + 4.0% Bentonite + 0.6% CD- $32 + 0.5\%$ CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	200	14.8	1.34	6.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
9-5/8" 4,800'	1780	12.7	2.20	11.64	Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)
	200	16.0	1.12	4.75	Tail: Class C + 0.13% C-20
7-5/8" 11,300'	340	11.5	2.72	15.70	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,300')
	210	16.0	1.12	4.74	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
5-1/2" 19,968'	950	14.1	1.26	5.80	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,800')

<u>Cementing Program</u>:

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (10,000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Variance is requested to use a 5,000 psi annular BOP with the 10,000 psi BOP stack.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5000/250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Туре	Weight (ppg)	Viscosity	Water Loss	
0-1,040'	Fresh - Gel	8.6-8.8	28-34	N/c	
1,040' - 4,800'	Brine	10.0-10.2	28-34	N/c	
4,800' – 11,300'	Oil Base	8.7-9.4	58-68	N/c - 6	
11,300' – 19,968'	Oil Base	10.0-14.0	58-68	3 - 6	
Lateral					

The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 14.0 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR-CCL Will be run in cased hole during completions phase of operations.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom-hole temperature (BHT) at TD is 181 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 9022 psig (based on 14.0 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 7,300' to Intermediate casing point.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

(A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both "A" and "B" sections). The weld will be tested to 1000 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 10,000 psi.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Stream Flo FBD100 Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

6-3/4" Production Hole Section 10M psi requirement							
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP		
Drillpipe	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M		
				Lower 3.5 - 5.5" VBR	10M		
HWDP	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M		
				Lower 3.5 - 5.5" VBR	10M		
DCs and MWD tools	4.750" – 5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M		
				Lower 3.5 - 5.5" VBR	10M		
Mud Motor	4.750" – 5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M		
				Lower 3.5 - 5.5" VBR	10M		
Mud Motor	5.500" – 5.750"	Annular	5M	-	-		
Production casing	5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M		
				Lower 3.5 - 5.5" VBR	10M		
Open-hole	-	Blind Rams	10M	-	-		

VBR = Variable Bore Ram



2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the EOG Resources drilling supervisor's office on location, and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

- 1. Sound alarm (alert crew)
- 2. Space out drill string
- 3. Shut down pumps (stop pumps and rotary)
- 4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

- 1. Sound alarm (alert crew)
- 2. Stab full opening safety valve and close
- 3. Space out drill string
- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

- 1. Sound alarm (alert crew)
- 2. Stab crossover and full opening safety valve and close
- 3. Space out string

- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Shut-in with blind rams. (HCR and choke will already be in the closed position.)
- 3. Confirm shut-in
- 4. Notify toolpusher/company representative
- 5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
- 6. Regroup and identify forward plan

General Procedures While Pulling BHA thru Stack

- 1. PRIOR to pulling last joint of drillpipe thru the stack.
 - a. Perform flowcheck, if flowing:
 - b. Sound alarm (alert crew)
 - c. Stab full opening safety valve and close
 - d. Space out drill string with tool joint just beneath the upper variable bore rams.
 - e. Shut-in using upper variable bore rams. (HCR and choke will already be in the closed position.)
 - f. Confirm shut-in
 - g. Notify toolpusher/company representative
 - h. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - i. Regroup and identify forward plan
- 2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm (alert crew)
 - b. Stab crossover and full opening safety valve and close
 - c. Space out drill string with upset just beneath the upper variable bore rams.
 - d. Shut-in using upper variable bore rams. (HCR and choke will already be in the closed position.)
 - e. Confirm shut-in
 - f. Notify toolpusher/company representative
 - g. Read and record the following:
 - i. SIDPP and SICP

- ii. Pit gain
- iii. Time
- h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm (alert crew)
 - b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario.
 - c. If impossible to pick up high enough to pull the string clear of the stack:
 - d. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
 - e. Space out drill string with tooljoint just beneath the upper variable bore ram.
 - f. Shut-in using upper variable bore ram. (HCR and choke will already be in the closed position.)
 - g. Confirm shut-in
 - h. Notify toolpusher/company representative
 - i. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - j. Regroup and identify forward plan



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Bond Information

Federal/Indian APD: FED

BLM Bond number: NM2308

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Bond Info Data Report

12/10/2018

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: