Form 3160 -3 (March 2012)		OBBS O	CD	OMB	APPROVE No. 1004-013 October 31, 2	7
UNITED STATES Department of the 1			118	5. Lease Serial No.		···
BUREAU OF LAND MANA		APR	_	NMNM120907 < 6. If Indian, Allotee		lama //
	DRILL OF	REENTER	VED		\sim	\bigvee
Ia. Type of work: DRILL REENTE	R	Repair		7 If Unit or CA Age	eement, Na	me`and No. >
lb. Type of Well: Oil Well Gas Well Other	√ Sir	ngle Zone 🔲 Multi	ple Zone 📝	 Lease Name and EIDER FEDERAL 	Well No. (203H	314193)
2. Name of Operator COG PRODUCTION LLC (21794)	5)	MIN P	. //	9. APÌ Wèll-No.		11626
		(include area code)		10. Field and Pool, or	Exploratory	
2208 West Main Street Artesia NM 88210	(575)748-6	1	\sim	WILDCAT / BONE		17. 1980
4. Location of Well (Report location clearly and in accordance with any	v State requirem	ents.*)	$\overline{)}$	11. Sec., T. R. M. or E	31k. and Sur	vey or Area
At surface SESW / 240 FSL / 2030 FWL / LAT 32.167484	4 / LONG -1	03.647426		SEC 35 / T24S / R	32E / NM	IP
At proposed prod. zone NESW / 2410 FSL / 1980 FWL / LA	T 32.18797	9 / LONG -103:64	7584	\geq		
 Distance in miles and direction from nearest town or post office* 22 miles 	/		\backslash	12. County or Parish LEA		13. State NM
15. Distance from proposed* location to nearest 240 feet property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of a 1840	cres in lease	17. Spacin 240	g Unit dedicated to this	well	
18. Distance from proposed location*	19- Proposed	Denth	20. BLM/	BIA Bond No. on file		
to nearest well, drilling, completed, 1433 feet applied for, on this lease, ft.	/ · \	16745 feet	FED: NI	MB000860		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3526 feet	22. Approxit 02/01/20,1	nate date work will sta 7	irt*	23. Estimated duration 30 days	n	
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshore	e Oil and Gas	Order No.1, must be a	ittached to th	is form:		
 Well plat certified by a registered surveyor. A Drilling Plan. 		4. Bond to cover 1 Item 20 above).		ns unless covered by an	existing b	ond on file (see
 A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office). 	Lands, the	 Operator certifi Such other site BLM. 		ormation and/or plans as	s may be re	quired by the
25. Signature (Electronic-Submission)		(Printed/Typed) e Reyes / Ph: (575)748-6945	,	Date 10/10/2	017
Title Regulatory Analyst						
Approved by (Signature)		(Printed/Typed) Layton / Ph: (575)	234-5959		Date 03/22/2	2018
Title Supervisor Multiple Resources	Office	SBAD				
Application approval does not warrant or certify that the applicant holds conduct operations thereon./ Conditions of approval, if any, are attached.			nts in the sub	ject lease which would o	entitle the a	pplicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cristates any false, fictitious or fraudulent statements or representations as to	ime for any po o any matter w	erson knowingly and ithin its jurisdiction.	willfully to n	nake to any department of	or agency (of the United
(Continued on page 2)				*(Inst	ructions	on page 2)
OCP Rec 04/03/18	. S			•		
TOP IST BSS 4904 TUD		H CONDIT	IONS	KZ		1.6
TO WELL 9392 CONDAN	111 (CA			~~//	9 Y/I	10
APPKUY	10.0			041		

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APP pproval Date: 03/22/2018

INSTRUCTIONS

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 1: 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 well, 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 directionally 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.

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.

NOTICES

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 well 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 will 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 collects this information to allow 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 Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Form 3160-3, page 2)

(Continued on page 3)

Approval Date: 03/22/2018

Additional Operator Remarks

Location of Well

1. SHL: SESW / 240 FSL / 2030 FWL / TWSP: 24S / RANGE: 32E / SECTION: 35 / LAT: 32.167484 / LONG: -103.647426 (TVD: 0 Reg. MD: 0.6

PPP: SESW / 330 FSL / 1980 FWL / TWSP: 24S / RANGE: 32E / SECTION: 35 / LAT: 32.167731 / LONG: -103.6475872(TVD: 6200 feet, MD: 6200 feet) BHL: NESW / 2410 FSL / 1980 FWL / TWSP: 24S / RANGE: 32E / SECTION: 26 / LAT: 32.187979 / LONG: -103.647584 (TVD: 93922feet, MD: 16745 feet)

BLM Point of Contact

Name: Sipra Dahal Title: Legal Instruments Examiner Phone: 5752345983 Email: sdahal@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.

(Form 3160-3, page 4)

FAFMSS

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

Application Data Report

03/26/2018

APD ID: 10400023141

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Type: OIL WELL

Submission Date: 10/10/2017

Zip: 88210

Well Number: 203H Well Work Type: Drill Highlighted data reflects the most recent changes <u>Show Final Text</u>

Section 1 - General		
APD ID: 10400023141	Tie to previous NOS?	Submission Date: 10/10/2017
BLM Office: CARLSBAD	User: Mayte Reyes	Title: Regulatory Analyst
Federal/Indian APD: FED	Is the first lease penetrated for	or production Federal or Indian? FED
Lease number: NMNM120907	Lease Acres: 1840	
Surface access agreement in place?	Allotted? Re:	servation:
Agreement in place? NO	Federal or Indian agreement:	
Agreement number:		
Agreement name:		
Keep application confidential? YES		
Permitting Agent? NO	APD Operator: COG PRODUC	CTION LLC
Operator letter of designation:		

Operator Info

Operator Organization Name: COG PRODUCTION LLC

Operator Address: 2208 West Main Street

Operator PO Box:

Operator City: Artesia State: NM

Operator Phone: (575)748-6940

Operator Internet Address: mreyes1@concho.com

Section 2 - Well Information

Well in Master Development Plan? NO	Mater Development Plan name:	
Well in Master SUPO? NO	Master SUPO name:	
Well in Master Drilling Plan? NO	Master Drilling Plan name:	
Well Name: EIDER FEDERAL	Well Number: 203H	Well API Number:
Field/Pool or Exploratory? Field and Pool	Field Name: WILDCAT	Pool Name: BONE SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Page 1 of 3

Operator Name: COG PRODUCTION LLC
Well Name: EIDER FEDERAL

Well Number: 203H

Desc	ribe c	other	miner	als:														
Is the	e prop	osed	well i	n a H	elium	prod	uctio	n area?	N Use E	Existing W	ell Pac	1? NO	Ne	w s	surface o	listuri	oance	?
	of Wo				.E WE	LL			FEDE	ple Well P RAL per of Leg		ne: ElC			ber: 103⊦ 304H, 2		H, 104	iΗ,
Well	Work	Туре	: Drill							-								
Well	Type:	OIL	NELL															
Desc	ribe V	Vell T	ype:												•			
Well	sub-T	ype:	INFILI	-														
Desc	ribe s	ub-ty	pe:															
Dista	ince t	o tow	n : 22	Miles			Dist	ance to	nearest v	vell: 1433	FŤ	Dist	ance t	o le	ase line	: 240 I	т	
Rese	ervoir	well s	spacin	ig ass	ignec	l acre	s Mea	asurem	ent: 240 A	cres								
Well	plat:	СС	DG_Ei	der_2	03Н_0	C102_	2017	1009144	4256.pdf									
Well	work	start	Date:	02/01	/2017				Durat	t ion: 30 DA	AYS							
[0	4	<u> </u>				T - 1											
	Sec	tion	3 - V	Vell	Loca	ation												
Surve	еу Ту	be: RI	ECTAI	NGUL	AR													
Desc	ribe S	urvey	у Туре	e :														
Datu	m: NA	D83							Vertic	al Datum	NAVE	88	•					
Surv	ey nu	mber:									-							
	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
	240	FSL	203 0	FWL	· · · · ·	32E		SESW	32.16748 4	- 103.6474 26		NEW MEXI	NEW MEXI		NMNM 120907		0	0
	240	FSL	203 0	FWL	24S	32E		SESW	32.16748 4	- 103.6474 26		NEW MEXI	NEW MEXI	I	NMNM 120907 _.		0	0
	330	FSL	198 0	FWL	24S	32E		SESW	32.16773 1	- 103.6475 87		NEW MEXI	NEW MEXI		NMNM 120907		620 0^	620 0

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

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Well Number: 203H

NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
231	FSL	198	FWL	24S	32E	26		32.18770	-	LEA	NEW	NEW	F	NMNM	-	165	937
0		0					NESW	4	103.6475		MEXI	MEXI		120907	584	00	3
 									84						7		
241	FSL	198	FWL	24S	32E	26		32.18797	-	LEA	NEW	NEW	F	NMNM	-	167	939
0		0					NESW	9	103.6475		MEXI	MEXI		120907	586	45	2
									84						6		

FMSS

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

Drilling Plan Data Report

03/26/2018

APD ID: 10400023141

Well Type: OIL WELL

Submission Date: 10/10/2017

Well Number: 203H

Highlighted data reflects the most recent changes Show Final Text

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1	QUATERNARY	3526	0	0		NONE	No
2	RUSTLER	2589	937	937	·	NONE	No
3	TOP SALT	2256	1270	1270		NONE	No
4	BASE OF SALT	-1078	4604	4604		NONE	No
5	LAMAR	-1306	4832	4832		NONE	No
· 6	BELL CANYON	-1347	4873	4873	· · ·	NONE	No
7	CHERRY CANYON	-2256	5782	5782		NATURAL GAS,OIL	No
8	BRUSHY CANYON	-3636	7162	7162	SCHIST	NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5278	8804	8804	<u>_</u>	NATURAL GAS,OIL	No
10	UPPER AVALON SHALE	-5623	9149	9149		NATURAL GAS,OIL	No
11		-5811	9337	9337		NATURAL GAS,OIL	No
12	BONE SPRING 1ST	-6379	9905	9905		NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M

Rating Depth: 4860

Equipment: Annular. The BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the

Page 1 of 6

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

COG_Eider_203H_2M_Choke_20171009145603.pdf

BOP Diagram Attachment:

COG_Eider_203H_2M_BOP_20171009145609.pdf

COG_Eider_203H_Flex_Hose_20171009145618.pdf

Pressure Rating (PSI): 3M

Rating Depth: 9392

Equipment: Annular, Blind Ram, Pipe Ram. The BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

COG_Eider_203H_3M_Choke_20171009145658.pdf

BOP Diagram Attachment:

COG_Eider_203H_Flex_Hose_20171009145645.pdf

COG_Eider_203H_3M_BOP_20171009145651.pdf

·		<u> </u>				1			r	· · · · · · ·					r—		1	r –	,			r—
Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	965	0	965			965	J-55	54.5	STC	2.56	1.27	DRY	9.77	DRY	9.77
2	INTERMED IATE	12.2 5	9.625	NEW	API	Y	0	4860	0	4860			4860	L-80	40	LTC	1.21	1.6	DRY	5.73	DRY	5.73
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	16745	0	16745			16745	P- 110	17	LTC	1.65	2.95	DRY	2.79	DRY	2.79

Section 3 - Casing

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

Casing Attachments

Casing ID: 1

String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Eider_203H_Casing_Prog_20171010064532.pdf

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

COG_Eider_203H_Casing_Prog_20171010064518.pdf

Casing Design Assumptions and Worksheet(s):

COG_Eider_203H_Casing_Prog_20171010064524.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Eider_203H_Casing_Prog_20171010064547.pdf

Section 4 - Cement

Well Number: 203H

String Type	Lead/Tail	Stage Tool	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		- 0	965	390	1.75	13.5	682	50	Class C	4% Gel + 1% CaCl2
SURFACE	Tail			965	250	1.34	14.8	335	50	Class C	2% CaCl2
INTERMEDIATE	Lead		970	4865	930	2	12.7	1860	50	Lead: 35:65:6 C Blend	As needed.
INTERMEDIATE	Tail			4865	250	1.34	14.8	335	50	Tail: Class C	2% CaC12
PRODUCTION	Lead		4865	1657 6	630	2.5	11.9	1525	25	Lead: 50:50:10 H Blend	As needed.
PRODUCTION	Tail			1657 6	2000	1.24	14.4	2480	25	Tail: 50:50:2 Class H Blend	As needed.

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirement will be kept on location at all times.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	На	Viscosity (CP)	Satinity (ppm)	Filtration (cc)	Additional Characteristics
965	4860	OTHER : Saturated Brine	10	10.1							Saturated Brine
4860	1657 6	OTHER : Cut Brine	8.6	9.3							Cut Brine

Well Number: 203H

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	965	OTHER : FW	8.6	8.8							FW Gel
		Gel									

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

None planned.

List of open and cased hole logs run in the well:

OTH

Other log type(s):

CNL/GR

Coring operation description for the well:

None planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4545

Anticipated Surface Pressure: 2478.75

Anticipated Bottom Hole Temperature(F): 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

COG_Eider_203H_H2S_Plan_20171010065226.pdf COG_Eider_203H_H2S_Schematic_20171010065233.pdf Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG_Eider_203H_Directional_20171010065250.pdf COG_Eider_203H_AC_Report_20171010065258.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

COG_Eider_203H_Drilling_Prog_20171010065306.pdf

Other Variance attachment:





2,000 psi BOP Schematic





2.1



GATES E & S NORTH AMERICA, INC DU-TEX 134 44TH STREET CORPUS CHRISTI, TEXAS 78405
 PHONE:
 361-887-9807

 FAX:
 361-887-0812

 EMAIL:
 crpe&s@gates.com

 WEB:
 www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	SPECIALTY SALES, INC.	Test Date:	11/21/2013
Customer Ref. :	49680-5	Hose Serial No.:	D-112113-8
Invoice No. :	197465	Created By:	Norma M.

Product Description:		10K3.050.0CK31/1610KFLGE/	Ε
End Fitting 1 :	3 1/16 10K FLG	End Filting 2 :	3 1/16 10K FLG
Gates Part No. :	47773-4290	Assembly Code :	L34558092713D-112113-8
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

			1 DA
Quality Manager :	QUALITY	Technical Supervisor :	PRODUCTION
Date :	11/22/2013	Date :	11/2008
Signature :	Artozt	Signature :	NP X I
	0		Form PTC - 01 Rev.0 2





GATES E & S NORTH AMERICA, INC DU-TEX 134 44TH STREET CORPUS CHRISTI, TEXAS 78405 PHONE: 361-887-9807 FAX: 361-887-0812 EMAIL: crpe&s@gates.com WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	SPECIALTY SALES, INC.	Test Date:	11/21/2013
Customer Ref. :	49680-S	Hose Serial No.:	D-112113-8
Invoice No. :	197465	Created By:	Norma M.
Product Description:	· · · · · · · · · · · · · · · · · · ·	10K3.050.0CK31/1610KFLGE/	/E
			-
End Fitting 1 :	3 1/16 10K FLG	End Fitting 2 :	3 1/16 10K FLG
Gates Part No. :	47773-4290	Assembly Code :	L34558092713D-112113-8
Working Pressure ·	10.000 PSI	Test Pressure	15.000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

		1 DA
QUALITY	Technical Supervisor :	PRODUCTION
11/22/2013	Date :	C11/73/2013
Lotat	Signature :	NR III
		Form PTC - 01 Rev.0 2
		11/22/2013 Date :



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3,000 psi BOP Schematic







Hole Size	Ca	asing	Csg. Size	Weight	Grada	Conn.	SF	SF Burst	SF
	From	То	CS9. 5120	(lbs)	Graue	Conn.	Collapse	SF Burst	Tension
17.5"	0	965	13.375"	54.5	J55	STC	2.56	1.27	9.77
[`] 12.25"	0	4000	9.625"	40	J55	LTC	1.22	1.10	3.25
12.25"	4000	4860	9.625"	40	L80	LTC	1.21	1.60	5.73
8.75"	0	16,745	5.5"	17	P110	LTC	1.65	2.95	2.79
			BLN	1 Minimun	n Safety	Factor	1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

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Hole Size	Ca	asing	Csg. Size	Weight	Grada	Conn.	SF	SF Burst	SF
HOIE SIZE	From	То	Csg. Size	(lbs)	Grade	Conn.	Collapse	SF BUISL	Tension
17.5"	0	965	13.375"	54.5	J55	STC	2.56	1.27	9.77
12.25"	0	4000	9.625"	40	J55	LTC	1.22	1.10	3.25
12.25"	4000	4860	9.625"	40	L80	LTC	1.21	1.60	5.73
8.75"	0	16,745	5.5"	17	P110	LTC	1.65	2.95	2.79
			BLM	1 Minimur	n Safety	/Factor	1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Hole Size	Ca	asing	Csg. Size	Weight	Grada	Conn.	SF	SF Burst	SF
nole Size	From	То	Csy. 512e	(lbs)	Graue	Conn.	Collapse	SF Burst	Tension
17.5"	0	965	13.375"	54.5	J55	STC	2.56	1.27	9.77
12.25"	0	4000	9.625"	40	J55	LTC	1.22	1.10	3.25
12.25"	4000	4860	9.625"	40	L80	LTC	1.21	1.60	5.73
8.75"	0	16,745	5.5"	17	P110	LTC	1.65	2.95	2.79
			BLN	M Minimur	n Safety	/ Factor	1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Ca	asing	Csg. Size	Weight	Grade	Conn	SF	SF Burst	SF
Hole Size	From	То	Csy. Size	(lbs)	Graue	Conn.	Collapse	Sr Burst	Tension
17.5"	0	965	13.375"	54.5	J55	STC	2.56	1.27	9.77
12.25"	0	4000	9.625"	40	J55	LTC	1.22	1.10	3.25
12.25"	4000	4860	9.625"	40	L80	LTC	1.21	1.60	5.73
8.75"	0	16,745	5.5"	17 [,]	P110	LTC	1.65	2.95	2.79
			BLM	1 Minimun	n Safety	Factor	1.125	[.] 1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

1. Geologic Formations

Tν	/D of target	9,392' EOL	Pilot hole depth	NA	
ME	D at TD:	16,745'	Deepest expected fresh water:	380'	I
Formatio	n D	epth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Haz	ards*
Quaternary Fill		Surface	Water		
Rustler		937	Water		
Top of Salt		1270	Salt		
Base of Salt		4604	Salt	•	
Lamar		4832	Salt Water		
Bell Canyon		4873	Salt Water		
		5700	0'1/0		

Dell Canyon	4073	Salt water	
Cherry Canyon	5782	Oil/Gas	· ·
Brushy Canyon	7162	Oil/Gas	
Bone Spring Lime	8804	Oil/Gas	
U. Avalon Shale	9149	Oil/Gas	
L. Avalon Shale	9337	Oil/Gas	
1st Bone Spring Sand	9905	Not Penetrated	
2nd Bone Spring Sand	Х	Not Penetrated	
3rd Bone Spring Sand	Х	Not Penetrated	
Wolfcamp	X	Not Penetrated	

2. Casing Program

Hole Size	Ca	asing	Csg. Size	Weight	Grada	Grade Conn.	SF	SF Burst	SF
Hole Size	From	То	Usg. Size	(lbs)	Graue	Conn.	Collapse	SF Buist	Tension
17.5"	0	965	13.375"	54.5	J55	STC	2.56	1.27	9.77
12.25"	0	4000	9.625"	40	J55	LTC	1.22	1.10	3.25
12.25"	4000	4860	9.625"	40	L80	LTC	1.21	1.60	5.73
8.75"	0	16,745	5.5"	17	P110	LTC	1.65	2.95	2.79
			BL№	1 Minimur	n Safety	Factor	1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface.

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

	Y or N
s casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
ls premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
ls well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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September 29, 2017

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3. Cementing Program

Casing	# Sks	Wt. Ib/ gal	YId ft3/ sack	H₂0 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	390	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
Sull.	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Inter.	930	12.7	2.0	9.6	16	Lead: 35:65:6 C Blend
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl
5.5 Prod	630	11.9	2.5	19	72	Lead: 50:50:10 H Blend
5.5 PIOU	2000	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	3,500'	25% OH in Lateral (KOP to EOL) – 40% OH in Vertical

4. Pressure Control Equipment

	A variance is requested for the use of a diverter on the surface casing.
N	See attached for schematic

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Ту	pe	x	Tested to:
			Ann	ular	х	2000 psi
			Blind	Ram		
12-1/4"	13-5/8"	2M	Pipe Ram			. 2M
			Double Ram			
			Other*			
			Ann	iular	x	50% testing pressure
<u> </u>	13-5/8"	3M			х	
					х	` 3M
			Doubl	e Ram		
			Other*			

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2.					
×	On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.					
۰Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.					
,	N Are anchors required by manufacturer?					
N	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.					

5. Mud Program

	Depth	Time	Weight	Vicesity	Water Less	
From	То	Туре	(ppg)	Viscosity	Water Loss	
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C	
Surf csg	9-5/8" Int shoe	Saturated Brine	10 - 10.1	28-34	N/C	
9-5/8" Int shoe	Lateral TD	Cut Brine	8.6 - 9.3	28-34	N/C	

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

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Logging, Coring and Testing.		
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.	
Y	No Logs are planned based on well control or offset log information.	
N	Drill stem test? If yes, explain.	
N	Coring? If yes, explain.	

Additional logs planned		Interval		
Ν	Resistivity	Pilot Hole TD to ICP		
Ν	Density	Pilot Hole TD to ICP		
Y	CBL	Production casing (If cement not circulated to surface)		
Υ	Mud log	Intermediate shoe to TD		
Ν	PEX			

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4545 psi at 9392' TVD
Abnormal Temperature	NO 150 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H2S is present

Y H2S Plan attached

8. Other Facets of Operation

Y	Is it a walking operation?
N	ls casing pre-set?

x	H2S Plan.			
х	BOP & Choke Schematics.			
x	Directional Plan			

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

APD ID: 10400023141

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Type: OIL WELL

Submission Date: 10/10/2017

Well Number: 203H Well Work Type: Drill Highlighted data reflects the most recent changes <u>Show Final Text</u>

03/26/2018

SUPO Data Report

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

COG Eider 203H_Existing_Road_20171010065321.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? YES

II Sr.

ROW ID(s)

ID: NM132549

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

COG_Eider_203H_Maps_Plats_20171010065343.pdf

New road type: RESOURCE

Length: 4954.4 Feet Width (ft.): 30

Max slope (%): 33

Max grade (%): 1

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Water will be diverted where necessary to avoid ponding, prevent erosion, maintain food drainage, and to be consistent with local drainage patterns. **New road access plan or profile prepared?** NO

New road access plan attachment:

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Blading

Access other construction information: No turnouts are planned. Re-routing access road around proposed well location.

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: None necessary.

Road Drainage Control Structures (DCS) description: None needed.

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

COG_Eider_203H_1_Mile_Data_20171010065358.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Production will be sent to the Eider CTB 1, which is adjacent to the Eider Federal 203H well pad.

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

Section 5 - Location and Types of Water Sup	ipiy
Water Source Table	
Water source use type: ICE PAD CONSTRUCTION & MAINTENANCE, STIMULATION, SURFACE CASING Describe type: Fresh Water	Water source type: OTHER
Source latitude:	Source longitude:
Source datum:	
Water source permit type: PRIVATE CONTRACT	
Source land ownership: PRIVATE	
Water source transport method: PIPELINE	
Source transportation land ownership: PRIVATE	
Water source volume (barrels): 337500	Source volume (acre-feet): 43.50142
Source volume (gal): 14175000	
Water source use type: INTERMEDIATE/PRODUCTION CASING	Water source type: OTHER
Describe type: Brine Water	
Source latitude:	Source longitude:
Source datum:	
Water source permit type: PRIVATE CONTRACT	
Source land ownership: COMMERCIAL	
Water source transport method: TRUCKING	
Source transportation land ownership: COMMERCIAL	
Water source volume (barrels): 22500	Source volume (acre-feet): 2.9000947
Source volume (gal): 945000	

Water source and transportation map:

COG_Eider_203H_Fresh_H2O_20171010110213.pdf

COG_Eiders_203H_Brine_20171010110222.pdf

Water source comments: The fresh water will be obtained from Mark McCloy water well located in Section 33, T24S, R33E, or from Rock House Ranch (575) 885-4195, Brine water will be purchased from Mesquite Services (575) 887-4847. No water well will be drilled on the location.

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Well Number: 203H

Est. depth to top of aquifer(ft):	Est thickness of aquifer:	
Aquifer comments:		
Aquifer documentation:		
Well depth (ft):	Well casing type:	
Well casing outside diameter (in.):	Well casing inside diameter (in.):	
New water well casing?	Used casing source:	
Drilling method:	Drill material:	
Grout material:	Grout depth:	
Casing length (ft.):	Casing top depth (ft.):	
Well Production type:	Completion Method:	
Water well additional information:		
State appropriation permit:	· · · · ·	
Additional information attachment:		

Section 6 - Construction Materials

Construction Materials description: Caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from Mack Chase caliche pit located in Section 20, T24S, R33E. (575) 748-1288.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: SEWAGE

Waste content description: Human waste and gray water.

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

Safe containment description: Waste will be properly contained and disposed of properly at a state approved disposal facility.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

FACILITY

Disposal type description:

Disposal location description: Trucked to an approved disposal facility.

Waste type: DRILLING

Waste content description: Drilling fluids and produced oil land water while drilling and completion operations.

Amount of waste: 6000 barrels

Waste disposal frequency : One Time Only

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

Safe containment description: All drilling waste will be stored safely and disposed of properly.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY

Disposal type description:

Disposal location description: Trucked to an approved disposal facility.

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations.

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. **Safe containmant attachment**:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY

Disposal type description:

Disposal location description: Trucked to an approved disposal facility.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Roll off cutting containers on tracks.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

Operator Name: COG PRODUCTION LLC

Well Name: EIDER FEDERAL

Well Number: 203H

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

Ancillary Facilities attachment:

Eider Federal 203 GCP 20171010065434.pdf

Comments: GCP Attached.

Section 9 - Well Site Layout

Well Site Layout Diagram:

COG_Eider_203H_CTB_Flowlines_20171010065456.pdf COG_Eider_203H_Prod_Facility_20171010081805.pdf COG_Eider_CTB_1_20171010110239.pdf **Comments:** Production will be sent to the Eider CTB 1, which is adjacent to the Eider Federal 203H well pad.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: EIDER FEDERAL

Multiple Well Pad Number: 103H, 203H, 104H, 303H, 304H, 204H

Recontouring attachment:

Drainage/Erosion control construction: If needed, immediately following pad construction approximately 400' of straw waddles will be placed on the west side of the location, and 400' of straw waddles will be placed on the south side of the location to reduce sediment impacts to fragile/sensitive soils.

Drainage/Erosion control reclamation: N/A

Well pad proposed disturbance (acres):	Well pad interim reclamation (acres): 4.54	Well pad long term disturbance (acres): 3.16
Road proposed disturbance (acres):	Road interim reclamation (acres): 1.59	Road long term disturbance (acres):
Powerline proposed disturbance (acres): Pipeline proposed disturbance (acres): Other proposed disturbance (acres):	Powerline interim reclamation (acres): Pipeline interim reclamation (acres): 0 Other interim reclamation (acres): 0 Total interim reclamation: 6.13	Powerline long term disturbance
Total proposed disturbance:		Total long term disturbance: 4.75

Reconstruction method: Portions of the pad not needed for production operationswill be re-contoured to its original state as much as possible. The caliche that is removed will be reused. The stockpiled topsoil will be spread out over reclaimed area

Page 6 of 10

Well Number: 203H

and reseeded with BLM approved seed mixture Topsoil redistribution: West 80'. East 60' Soil treatment: None Existing Vegetation at the well pad: Shinnery Oak/Mesquite grassland. Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Shinnery Oak/Mesquite grassland. Existing Vegetation Community at the road attachment: Existing Vegetation Community at the pipeline: Shinnery Oak/Mesquite grassland. Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: N/A Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed name:

Source name:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Seed source:

Source address:

Proposed seeding season:

Well Number: 203H

Seed Summary		Total pounds/Acre:
Seed Type	Pounds/Acre	

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Rand

Phone: (432)254-5556

Last Name: French Email: rfrench@concho.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: N/A

Weed treatment plan attachment:

Monitoring plan description: N/A

Monitoring plan attachment:

Success standards: N/A

Pit closure description: N/A

Pit closure attachment:

COG_Eider_203H_Closed_Loop_20171010065543.pdf

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

Well Number: 203H

Use APD as ROW?

DOD Local Office:	
NPS Local Office:	
State Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO ROW Type(s):

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite conpleted on 8/22/2017 by Rand French (COG) and Jeff Robertson (BLM).

Other SUPO Attachment

COG_Eider_203H_Certification_20171010065604.pdf

Page 9 of 10



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

PWD Data Report

03/26/2018

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO **Produced Water Disposal (PWD) Location: PWD** surface owner: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment: Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

PWD disturbance (acres):

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

PWD disturbance (acres):

PWD disturbance (acres):

Injection well type:

2

Injection well number:

Assigned injection well API number?

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Surface discharge PWD discharge volume (bbl/day): Surface Discharge NPDES Permit? Surface Discharge NPDES Permit attachment: Surface Discharge site facilities information: Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met? Other regulatory requirements attachment: Injection well name:

Injection well API number:

PWD disturbance (acres):

PWD disturbance (acres):

FMSS

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

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000860

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

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:

Bond Info Data Report

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