Carlsbad Fie		ffice			
Form 3160-3 (March 2012) UNITED STATES		HOBBS	5 00	D FORM OMB N Expires O	APPROVED io. 1004-0137 ictober 31, 2014
DEPARTMENT OF THE	INTERIOR	FEB 0		5. Lease Serial No. NMNM121490	
APPLICATION FOR PERMIT TO	DRILL OF		IVE	6. If Indian, Allotee	or Tribe Name
la. Type of work: 🗹 DRILL 🗌 REENTI				7. If Unit or CA Agre	ement, Name and No.
lb. Type of Well: 🔽 Oil Well 🔲 Gas Well 🛄 Other	Si	ngle Zone 🔽 Multip	le Zone	8. Lease Name and N COLGROVE 35 FE	Well No. 315730 D COM 706H
2. Name of Operator EOG RESOURCES INC 7377	.)		X	9. API Well No. 30-025-	- 43571
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002	3b. Phone No (713)651-7	0. (include area code) 7000		10. Field and Pool, or I RED HILLS / WC-0	
4. Location of Well (Report location clearly and in accordance with an				11. Sec., T. R. M. or B	lk. and Survey or Area
At surface LOT 2 / 302 FSL / 1960 FEL / LAT 32.000963 At proposed prod. zone NWNE / 230 FNL / 1650 FEL / LAT		and the second second	4571	SEC 35 / T26S / R	33E / NMP
 14. Distance in miles and direction from nearest town or post office* 22.5 miles 				12. County or Parish LEA	13. State NM
15. Distance from proposed* location to nearest 230 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a 1305.2	acres in lease	17. Spacin 236.28	ng Unit dedicated to this	well
 Distance from proposed location* to nearest well, drilling, completed, 661 feet applied for, on this lease, ft. 	19. Propose 12465 fee	d Depth et / 19788 feet	20. BLM/ FED: N	BIA Bond No. on file M2308	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3327 feet	22 Approxi	imate date work will star	rt*	23. Estimated duration	n
	24. Atta			20 00,0	
 The following, completed in accordance with the requirements of Onsho Well plat certified by a registered surveyor. 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). 		 Bond to cover the Item 20 above). Operator certification 	he operatio	ons unless covered by an	existing bond on file (see s may be required by the
25. Signature (Electronic Submission)		(Printed/Typed) Wagner / Ph: (432)	686-3689)	Date 07/25/2016
Title Regulatory Specialsit					
Approved by (Signature) (Electronic Submission)	5 C C C C C C C C C C C C C C C C C C C	: (Printed/Typed) Layton / Ph: (575)2	234-5959		Date 01/30/2017
Title Supervisor Multiple Resources	Office				
Application approval does not warrant or certify that the applicant hole conduct operations thereon. Conditions of approval, if any, are attached.	ls legal or equi	itable title to those righ	ts in the sul	bject lease which would e	entitle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	rime for any p to any matter v	erson knowingly and w within its jurisdiction.	villfully to r	nake to any department o	or agency of the United
(Continued on page 2)	YED WI	TH CONDITI	ONS		ructions on page 2)
ATTIO					

KZ 106/17 02/06/17

FMSS

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

APD ID: 10400003301

Operator Name: EOG RESOURCES INC Well Name: COLGROVE 35 FED COM Well Type: OIL WELL

APD Print Report

/31/2017

Submission Date: 07/25/2016 Federal/Indian APD: FED Well Number: 706H Well Work Type: Drill

Zip: 77002

Highlight All Changes

HOBBS OCD FEB 0 6 2017 RECEIVED

Application

Section 1 - General

APD ID: 10400003301 Tie to previous NOS? Submission Date: 07/25/2016 **BLM Office: HOBBS** User: Stan Wagner Title: Regulatory Specialsit Federal/Indian APD: FED Is the first lease penetrated for production Federal or Indian? FED Lease number: NMNM121490 Lease Acres: 1305.2 Reservation: Surface access agreement in place? Allotted? Federal or Indian agreement: Agreement in place? NO Agreement number: Agreement name: Keep application confidential? YES Permitting Agent? NO APD Operator: EOG RESOURCES INC **Operator letter of designation:** Keep application confidential? YES

Operator Info

Operator Organization Name: EOG RESOURCES INC Operator Address: 1111 Bagby Sky Lobby2 Operator PO Box: Operator City: Houston State: TX Operator Phone: (713)651-7000 Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NOMater Development Plan name:Well in Master SUPO? NOMaster SUPO name:Well in Master Drilling Plan? NOMaster Drilling Plan name:

Operator Name:	EOG	RESOURCES INC
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Well Name: COLGROVE 35 FED COM

Well Number: 706H

Well Name: COLGROVE 35 FED COM Field/Pool or Exploratory? Field and Pool Well Number: 706H Field Name: RED HILLS Well API Number: Pool Name: WC-025 S263327G

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Describe other minerals:

Is the proposed well in a Helium production area? N Use Existing Well Pad? NO Type of Well Pad: MULTIPLE WELL Well Class: HORIZONTAL Well Work Type: Drill Well Type: OIL WELL **Describe Well Type:**

Multiple Well Pad Name: COLGROVE 35 FED COM Number of Legs: 1

Vertical Datum: NAVD88

New surface disturbance? Number: 705H/706H

Distance to lease line: 230 FT

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 22.5 Miles

Reservoir well spacing assigned acres Measurement: 236.28 Acres

Colgrove 35 Fed Com 706H Signed C-102 08-01-2016.pdf Well plat:

Well work start Date: 11/01/2016 Duration: 25 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR **Describe Survey Type:** Datum: NAD27

Survey number:

	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPA	L County: LEA
	Latitude: 32.0009631	Longitude: -103.5404636	
SHL	Elevation: 3327	MD : 0	TVD: 0
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM121490	
	NS-Foot: 302	NS Indicator: FSL	
	EW-Foot: 1960	EW Indicator: FEL	
	Twsp: 26S	Range: 33E	Section: 35
	Aliquot:	Lot: 2	Tract:

Distance to nearest well: 661 FT

Operator Name: EOG RESOURCES INC Well Name: COLGROVE 35 FED COM

	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA
	Latitude: 32.0002725	Longitude: -103.5395088
KOP	Elevation: -8644	MD: 11981 TVD: 11971
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM121490
	NS-Foot: 52	NS Indicator: FSL
,	EW-Foot: 1661	EW Indicator: FEL
	Twsp: 26S	Range: 33E Section: 35
	Aliquot:	Lot: 2 Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA
	Latitude: 32.001041	Longitude: -103.5394459
PPP	Elevation: -9095	MD : 12544 TVD : 12422
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM121490
	NS-Foot: 330	NS Indicator: FSL
	EW-Foot: 1644	EW Indicator: FEL
	Twsp: 26S	Range: 33E Section: 35
	Aliquot:	Lot: 2 Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA
	Latitude: 32.0206614	Longitude: -103.5394569
EXIT	Elevation: -9138	MD : 19688 TVD : 12465
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM121490
	NS-Foot: 330	NS Indicator: FNL
	EW-Foot: 1650	EW Indicator: FEL
	Twsp: 26S	Range: 33E Section: 26
	Aliquot: NWNE	Lot: Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA
	Latitude: 32.0209363	Longitude: -103.5394571
BHL	Elevation: -9138	MD : 19788 TVD : 12465
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM121490
	NS-Foot: 230	NS Indicator: FNL
	EW-Foot: 1650	EW Indicator: FEL

Well Name: COLGROVE 35 FED CO	M Well Number	: 706H
Twsp: 26S	Range: 33E	Section: 26
Aliquot: NWNE	Lot:	Tract:
	Drilling Plan	
Section 1 - Geologic F	ormations	
D: Surface formation	Name: RUSTLER	
Lithology(ies):		
ANHYDRITE		
Elevation: 2507	True Vertical Depth: 820	Measured Depth: 820
Mineral Resource(s):	inde Venical Deptil. 620	Measured Depth. 020
NONE		
Is this a producing formation? N		
ID: Formation 1	Name: TOP OF SALT	
Lithology(ies):		
Elevation: 2167	True Vertical Depth: 1160	Measured Depth: 1160
Mineral Resource(s):		
NONE		
Is this a producing formation? N		
D: Formation 2	Name: BASE OF SALT	
Lithology(ies):		
SALT		
Elevation: -1453	True Vertical Depth: 4780	Measured Depth: 4780
Mineral Resource(s):		
NONE		

1

4

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Operator Name: EOG RESOURCES INC	C	
Well Name: COLGROVE 35 FED COM	Well Number: 706	Н
D: Formation 3	Name: LAMAR LS	
Lithology(ies):		
LIMESTONE		
Elevation: -1703	True Vertical Depth: 5030	Measured Depth: 5030
Mineral Resource(s):	inde venical Deptil. 5050	Measured Deptil. 5050
NONE		
s this a producing formation? N		
D: Formation 4	Name: BELL CANYON	
Lithology(ies):		
SANDSTONE		
Elevation: -1733	True Vertical Depth: 5060	Measured Depth: 5060
Mineral Resource(s):		
NATURAL GAS		
OIL		
s this a producing formation? Y		
D: Formation 5	Name: CHERRY CANYON	
_ithology(ies):		
SANDSTONE		
Elevation: -2758	True Vertical Depth: 6085	Measured Depth: 6085
Mineral Resource(s):		
NATURAL GAS		
OIL		
s this a producing formation? Y		
D: Formation 6	Name: BRUSHY CANYON	
.ithology(ies):		
SANDSTONE		
Elevation: -4433	True Vertical Depth: 7760	Measured Depth: 7760

1

Operator Name: EOG RESOURCES IN	С	
Well Name: COLGROVE 35 FED COM	Well Number: 70	6H
Mineral Resource(s):		
NATURAL GAS		
OIL		
Is this a producing formation? Y		
D: Formation 7	Name: BONE SPRING LIME	
Lithology(ies):		
LIMESTONE		
Elevation: -5918	True Vertical Depth: 9245	Measured Depth: 9245
Mineral Resource(s):		
NONE		
s this a producing formation? N		
D: Formation 8	Name: BONE SPRING 1ST	
Lithology(ies):		
SANDSTONE		
Elevation: -6848	True Vertical Depth: 10175	Measured Depth: 10175
Mineral Resource(s):		
NATURAL GAS		
OIL		
s this a producing formation? Y		
D: Formation 9	Name: BONE SPRING 2ND	
_ithology(ies):		
SANDSTONE		
Elevation: -7353	True Vertical Depth: 10680	Measured Depth: 10680
Mineral Resource(s):		
NATURAL GAS		
OIL		
s this a producing formation? Y		

Well Name: COLGROVE 35 FED COM	Well Number	: 706H
ID: Formation 10	Name: BONE SPRING 3RD	
Lithology(ies):		
SANDSTONE		
Elevation: -8433	True Vertical Depth: 11760	Measured Depth: 11760
Mineral Resource(s):		
NATURAL GAS		
OIL		
Is this a producing formation? Y		
D: Formation 11	Name: WOLFCAMP	
Lithology(ies):		
SHALE		
Elevation: -8898	True Vertical Depth: 12225	Measured Depth: 12225
Mineral Resource(s):		
NATURAL GAS		
OIL		
Is this a producing formation? Y		

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 12465

Equipment: 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 (5000-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 and Gas order No. 2.

Requesting Variance? YES

Variance request: Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line). 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 maximize cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

Testing Procedure: Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 3500/ 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 5000/ 250 psig and the annular preventer to 3500/ 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.

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Choke Diagram Attachment:

5 M Choke Manifold Diagram (3-21-14)_06-02-2016.pdf

BOP Diagram Attachment:

5 M BOP Diagram (8-14-14)_06-02-2016.pdf

Section 3 - Casing String Type: INTERMEDIATE **Other String Type:** Hole Size: 8.75 Top setting depth MD: 0 Top setting depth TVD: 0 Top setting depth MSL: 3327 Bottom setting depth MD: 11300 Bottom setting depth TVD: 11300 Bottom setting depth MSL: -7973 Calculated casing length MD: 11300 Casing Size: 7.625 **Other Size** Other Grade: Grade: HCP-110 Weight: 29.7 Other Joint Type: Flushmax III Joint Type: OTHER Condition: NEW Inspection Document: Standard: API **Spec Document:** Tapered String?: N **Tapered String Spec:**

Safety Factors

Collapse Design Safety Factor: 1.125 Joint Tensile Design Safety Factor type: BUOYANT Body Tensile Design Safety Factor type: BUOYANT Casing Design Assumptions and Worksheet(s): Burst Design Safety Factor: 1.25 Joint Tensile Design Safety Factor: 1.6 Body Tensile Design Safety Factor: 1.6

Colgrove 35 Fed Com 706H BLM Plan_08-11-2016.pdf

Operator Name: EOG RESOURCES IN	
Well Name: COLGROVE 35 FED COM	Well Number: 706H
)
String Type: PRODUCTION	Other String Type:
Hole Size: 6.75	
Top setting depth MD: 0	Top setting depth TVD: 0
Top setting depth MSL: 3327	
Bottom setting depth MD: 10800	Bottom setting depth TVD: 10800
Bottom setting depth MSL: -7473	
Calculated casing length MD: 10800	
Casing Size: 5.5	Other Size
Grade: HCP-110	Other Grade:
Neight: 23	
Joint Type: OTHER	Other Joint Type: VAM TOP HT
Condition: NEW	
nspection Document:	
Standard: API	
Spec Document:	
Tapered String?: N	
Tapered String Spec:	
Safety Factors	
Collapse Design Safety Factor: 1.12	5 Burst Design Safety Factor: 1.25

Joint Tensile Design Safety Factor type: BUOYANT Body Tensile Design Safety Factor type: BUOYANT Casing Design Assumptions and Worksheet(s): Joint Tensile Design Safety Factor: 1.25 Body Tensile Design Safety Factor: 1.6

Colgrove 35 Fed Com 706H BLM Plan_08-11-2016.pdf

1		
Operator Name: EOG RESOURCES IN	С	
Well Name: COLGROVE 35 FED COM		Well Number: 706H
String Type: SURFACE	Other String Type	:
Hole Size: 14.75		
Top setting depth MD: 0		Top setting depth TVD: 0
Top setting depth MSL:		
Bottom setting depth MD: 845		Bottom setting depth TVD: 845
Bottom setting depth MSL: 2482		
Calculated casing length MD: 845		
Casing Size: 10.75	Other Size	
Grade: J-55	Other Grade:	
Weight: 40.5		
Joint Type: STC	Other Joint Type:	
Condition: NEW		
Inspection Document:		
Standard: API		
Spec Document:		
Tapered String?: N		
Tapered String Spec:		
Safety Factors		
Collapse Design Safety Factor: 1.12	5	Burst Design Safety Factor: 1.25

Joint Tensile Design Safety Factor type: BUOYANT Body Tensile Design Safety Factor type: BUOYANT Casing Design Assumptions and Worksheet(s): Burst Design Safety Factor: 1.25 Joint Tensile Design Safety Factor: 1.6 Body Tensile Design Safety Factor: 1.6

Colgrove 35 Fed Com 706H BLM Plan_08-11-2016.pdf

Operator Name: EOG RES	SOURCES INC	
Well Name: COLGROVE 3	5 FED COM	Well Number: 706H
String Type: PRODUCTION	Other String	g Type:
Hole Size: 6.75		
Top setting depth MD: 1080	00	Top setting depth TVD: 10800
Top setting depth MSL: -74	473	
Bottom setting depth MD:	19788	Bottom setting depth TVD: 12465
Bottom setting depth MSL:	: -9138	
Calculated casing length M	1D: 8988	
Casing Size: 5.5	Other Size	
Grade: HCP-110	Other Grade	e:
Weight: 23		
Joint Type: OTHER	Other Joint	Type: VAM SG
Condition: NEW		
Inspection Document:		
Standard: API		
Spec Document:		
Tapered String?: N		
Tapered String Spec:		
Safety Facto	ors	

Collapse Design Safety Factor: 1.125 Joint Tensile Design Safety Factor type: BUOYANT Body Tensile Design Safety Factor type: BUOYANT Casing Design Assumptions and Worksheet(s): Burst Design Safety Factor: 1.25 Joint Tensile Design Safety Factor: 1.6 Body Tensile Design Safety Factor: 1.6

Colgrove 35 Fed Com 706H BLM Plan_08-11-2016.pdf

Section 4 - Cement

Casing String Type: SURFACE

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Stage Tool Depth:

Lead

Top MD of Segment: 0	Bottom MD Segment: 845	Cement Type: Class C
Additives: Class C + 4.0% Bentonite +		Yield (cu.ff./sk): 1.73
0.6% CD-32 + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)	Volume (cu.ft.): 562	Percent Excess: 25
Pensity: 13.5		
	Bottom MD Segment: 845	Cement Type: Class C
Top MD of Segment: 845	Bottom MD Segment: 845 Quantity (sks): 200	Cement Type: Class C Yield (cu.ff./sk): 1.34
Top MD of Segment: 845 Additives: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium		

Density: 14.8

Casing String Type: INTERMEDIATE

Stage Tool Depth:

1	Δ	2	d	
<u>–</u>		a	u	

CPT503P Density: 14.4

Top MD of Segment: 0	Bottom MD Segment: 11300	Cement Type: Class C
Additives: Class C + 5% Gypsum + 3%	Quantity (sks): 2250	Yield (cu.ff./sk): 1.38
CaCl2 Density: 14.8	Volume (cu.ft.): 3105	Percent Excess: 25
Tail		
Top MD of Segment: 11300	Bottom MD Segment: 11300	Cement Type: Class H
Additives: 50:50 Class H:Poz + 0.25%	Quantity (sks): 550	Yield (cu.ff./sk): 1.2
CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25%	Volume (cu.ft.): 660	Percent Excess: 25

Casing String Type: PRODUCTION

Stage Tool Depth:		
Lead		
Top MD of Segment: 10800	Bottom MD Segment: 19788	Cement Type: Class H
Additives: Class H + 0.1% C-20 +	Quantity (sks): 725	Yield (cu.ff./sk): 1.26
0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,800')	Volume (cu.ft.): 913	Percent Excess: 25
Density: 14.1		

Operator Name: EOG RESOURCES INC		
Well Name: COLGROVE 35 FED COM	Well Number: 706H	
)
Stage Tool Depth:		
Lead		
Top MD of Segment: 10800	Bottom MD Segment: 19788	Cement Type: Class H
Additives: Class H + 0.1% C-20 +	Quantity (sks): 725	Yield (cu.ff./sk): 1.26
0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,800')	Volume (cu.ft.): 913	Percent Excess: 25
Density: 14.1	4	

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: (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. **Describe the mud monitoring system 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.

Circulating Medium Table

Top Depth: 845	Bottom Depth: 11300
Mud Type: SALT SATURATED	
Min Weight (Ibs./gal.): 8.8	Max Weight (Ibs./gal.): 10
Density (lbs/cu.ft.):	Gel Strength (lbs/100 sq.ft.):
PH:	Viscosity (CP):
Filtration (cc):	Salinity (ppm):
Additional Characteristics:	
Top Depth: 11300	Bottom Depth: 19788
Top Depth: 11300 Mud Type: OIL-BASED MUD	Bottom Depth: 19788
	Bottom Depth: 19788 Max Weight (Ibs./gal.): 11.5
Mud Type: OIL-BASED MUD	
Mud Type: OIL-BASED MUD Min Weight (Ibs./gal.): 10	Max Weight (Ibs./gal.): 11.5
Mud Type: OIL-BASED MUD Min Weight (Ibs./gal.): 10 Density (Ibs/cu.ft.):	Max Weight (Ibs./gal.): 11.5 Gel Strength (Ibs/100 sq.ft.):

Operator Name: EOG RESOURCES INC		
Well Name: COLGROVE 35 FED COM	Well Number: 706H	
	5. 	
Top Depth: 0	Bottom Depth: 845	
Mud Type: WATER-BASED MUD		
Min Weight (lbs./gal.): 8.6	Max Weight (Ibs./gal.): 8.8	
Density (lbs/cu.ft.):	Gel Strength (lbs/100 sq.ft.):	
PH:	Viscosity (CP):	
Filtration (cc):	Salinity (ppm):	D
Additional Characteristics:		

Section 6 - Test, Logging, Coring

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

Open-hole logs are not planned for this well.

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

Coring operation description for the well: None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7454

Anticipated Surface Pressure: 7454

Anticipated Bottom Hole Temperature(F): 182

Anticipated abnormal proessures, 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:

Colgrove 35 Fed Com 706H H2S Plan Summary_07-21-2016.pdf

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Colgrove 35 Fed Com 706H Planning Report_07-21-2016.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Co-Flex Hose Test Chart_06-03-2016.pdf Co-Flex Hose Certification 06-03-2016.PDF Endurance 36 State Com 707H Well Site Diagram 06-03-2016.pdf Endurance 36 State Com 707H BLM Drill Plan 07-12-2016.pdf Endurance 36 State Com 707H Proposed Wellbore 07-12-2016.pdf 7.625 29.70lb P-110 FlushMax III Spec Sheet_07-21-2016.pdf CDS_5.500_23.00lb_P110_VAMî TOP HT_07-21-2016.pdf 5.5 23lb HCP-110 VAM Top HT_07-21-2016.pdf Colgrove 35 Fed Com 706H Proposed Wellbore_07-21-2016.pdf Colgrove 35 Fed Com 706H BLM Plan 07-21-2016.pdf Colgrove 35 Fed Com 706H Well Site Diagram 07-21-2016.pdf Colgrove 35 Fed Com 706H Proposed Wellbore_07-21-2016.pdf Colgrove 35 Fed Com 706H BLM Plan 07-21-2016.pdf Colgrove 35 Fed Com 706H Well Site Diagram_07-21-2016.pdf Colgrove 35 Fed Com 706H BLM Plan_07-21-2016.pdf Colgrove 35 Fed Com 706H BLM Plan 07-21-2016.pdf Colgrove 35 Fed Com 706H BLM Plan_07-21-2016.pdf

Other Variance attachment:

SUPO

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Colgrove 35 Fed Com 706H exhibit 2_07-18-2016.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

ROW ID(s)

ID:

Do the existing roads need to be improved? NO Existing Road Improvement Description:

Existing Road Improvement Attachment:

Row(s) Exist? NO

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Colgrove 35 Fed Com 706H exhibit 2B_07-18-2016.pdf.

New road type: RESOURCE

Length: 3428 Feet Width (ft.): 24

Max slope (%): 2

Max grade (%): 20

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 24

New road access erosion control: Newly constructed or reconstructed roads will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road. We plan to grade and water twice a year. **New road access plan or profile prepared?** NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Access surfacing type description: 6" of Compacted Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: An adequate amount of topsoil/root zone will be stripped by dozer from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram / survey plat. Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: No drainage crossings

Road Drainage Control Structures (DCS) description: N/A

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: Colgrove 35 Fed Com 706H exhibit 3_07-18-2016.pdf Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT Estimated Production Facilities description: Production Facilities description: Production Facilities map: SK_COLGROVE_EXHIBIT5_REV2_07-18-2016.pdf Colgrove 35 Fed Com PL_07-18-2016.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Well Name: COLGROVE 35 FED COM

Water source use type: OTHER

Describe type:

Source latitude:

Source datum:

Water source permit type: WATER RIGHT

Source land ownership: STATE

Water source transport method: PIPELINE, TRUCKING

Source transportation land ownership: STATE

Water source volume (barrels): 720000

Source volume (gal): 30240000

Source volume (acre-feet): 92.80303

Water source and transportation map:

Colgrove 35 Fed Com Water Source Map 08-11-2016.docx

Water source comments: We plan to use 4, 4-inch poly lines from the frac pond to location for drilling. 1, 12-inch lay flat hose from the pond to location for frac. New water well? NO

New Water Well Info

Well latitude:	I latitude: Well Longitude:	
Well target aquifer:		
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:

Well Number: 706H

Water source type: RECYCLED

Source longitude:

50

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Section 6 - Construction Materials

Construction Materials description: Caliche utilized for the drilling pad will be obtained either from an existing approved mineral pit, or by benching into a hill, which will allow the pad to be level with existing caliche from the cut, or extracted by "Flipping" the well location. A mineral material permit will be obtained from BLM prior to excavating any caliche on Federal Lands. Amount will vary for each pad.

Construction Materials source location attachment:

Caliche Map_07-12-2016.docx

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly. Human waste and grey water will be properly contained of and disposed of properly. After drilling and completion operations; trash, chemicals, salts, frac sand, and other waste material will be removed and disposed of properly at a state approved disposal facility. **Amount of waste:** 0 barrels

Waste disposal frequency : Daily

Safe containment description: Steel Tanks

Safe containmant attachment:

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

Disposal location description: Trucked to NMOCD 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

Well Name: COLGROVE 35 FED COM

Well Number: 706H

 Description of cuttings location
 Closed Loop System. Drill cuttings will be disposed of into steel tanks and taken to an NMOCD approved disposal facility.

 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?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Colgrove 35 Fed Com 706H exhibit 2A_07-18-2016.pdf Colgrove 35 Fed Com 706H exhibit 2B_07-18-2016.pdf **Comments:** Exhibit 2A & Exhibit 2B

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

Wellpad long term disturbance (acres): 3.122	Wellpad short term disturbance (acres): 4.029
Access road long term disturbance (acres): 1.8887	Access road short term disturbance (acres): 1.8887
Pipeline long term disturbance (acres): 1.2692838	Pipeline short term disturbance (acres): 2.1154728
Other long term disturbance (acres): 0	Other short term disturbance (acres): 0
Total long term disturbance: 6.2799835	Total short term disturbance: 8.033173

Reconstruction method: In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads. Areas planned for interim reclamation will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts and fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites. **Soil treatment:** Re-seed according to BLM standards. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

Existing Vegetation at the well pad: Grass, forbs, and small woody vegetation, such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and respreads evenly on the site following topsoil respreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils.

Existing Vegetation at the well pad attachment:

Colgrove 35 Fed Com 706H exhibit 2B_07-18-2016.pdf

Existing Vegetation Community at the road: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. **Existing Vegetation Community at the road attachment:**

Existing Vegetation Community at the pipeline: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. **Existing Vegetation Community at the pipeline attachment:**

Existing Vegetation Community at other disturbances: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. **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

Operator Name: EOG RESOURCES INC		
Well Name: COLGROVE 35 FED COM	Well Number: 706H	
Seed type:	Seed source:	
Seed name:		
Source name:	Source address:	
Source phone:		
Seed cultivar:		
Seed use location:		
PLS pounds per acre:	Proposed seeding season:	

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

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Stan

Phone: (432)686-3689

Last Name: Wagner

Email: stan wagner@eogresources.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: All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds. Weeds will be treated if found. Weed treatment plan attachment:

Monitoring plan description: Reclamation will be completed within 6 months of well plugging. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds.

Monitoring plan attachment:

Success standards: N/A

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface Ownership

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: USFWS Local Office: Other Local Office: USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: Oliver KiehneFee Owner Address: P.O. Box 135 Orla, TX 79770Phone: (575)399-9281Email:Surface use plan certification: NOSurface use plan certification document:Surface access agreement or bond: AgreementSurface access agreement or bond: AgreementSurface Access Agreement Need description: Surface use agreement in place.Surface Access Bond BLM or Forest Service:BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

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

Use APD as ROW?

ROW Applications

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Well Name: COLGROVE 35 FED COM

Well Number: 706H

SUPO Additional Information: OnSite meeting conducted 4/26/16

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

Colgrove 35 Fed Com 706H exhibit 2C_07-21-2016.pdf Colgrove 35 Fed Com 706H L&E_07-21-2016.pdf Colgrove 35 Fed Com 706H exhibit 2B_07-21-2016.pdf Colgrove 35 Fed Com #706H Well Site Diagram_07-21-2016.xls Colgrove 35 Fed Com 706H deficiency letter _08-11-2016.pdf

PWD

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:

PWD disturbance (acres):

Operator Name: EOG RESOURCES INC Well Name: COLGROVE 35 FED COM

Well Number: 706H

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:

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:

PWD disturbance (acres):

Well Name: COLGROVE 35 FED COM

Well Number: 706H

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:

Injection well type:

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:
 PWD disturbance (acres):

 Surface discharge PWD discharge volume (bbl/day):
 Surface Discharge NPDES Permit?

 Surface Discharge NPDES Permit attachment:
 Surface Discharge NPDES Permit attachment

PWD disturbance (acres):

Injection well name: Injection well API number:

Well Name: COLGROVE 35 FED COM

Well Number: 706H

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:

PWD disturbance (acres):

Bond Info

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?

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:

Operator Certification

Well Name: COLGROVE 35 FED COM

Well Number: 706H

Signed on: 07/25/2016

Zip: 79702

Zip: 79706

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

 NAME: Stan Wagner

 Title: Regulatory Specialsit

 Street Address: 5509 Champions Drive

 City: Midland
 State: TX

 Phone: (432)686-3689

Email address: Stan_Wagner@eogresources.com

Field Representative

Representative Name: James Barwis Street Address: 5509 Champions Drive

City: Midland State: TX

Phone: (432)425-1204

Email address: james_barwis@eogresources.com

Payment Info

Payment

APD Fee Payment Method:	BLM DIRECT
CBS Receipt number:	3613136