ж. 		HOBB	5 00	;D		
Form 3160-3 (March 2012) UNITED STATES			2 201	OMB N Evoires O	APPROVE o. 1004-013 ctober 31, 2	7
DEPARTMENT OF THE I		R	EIV	5 Lease Serial No. MMM66927 6. If Indian, Allotee		
BUREAU OF LAND MANA APPLICATION FOR PERMIT TO I		DR REENTER	EIV	6. If Indian, Allotee	or Tribe 1	Name
la. Type of work:	R			7. If Unit or CA Agree	ement, Na	me and No.
lb. Type of Well: 🖌 Oil Well 🗌 Gas Well 🗌 Other	¥	Single Zone 🔲 Multip	e Zone	8. Lease Name and W RUBY 2 FED COM		(31832
2. Name of Operator EOG RESOURCES INC 7777	)			9. API Well No. <b>30-025</b>	- 4	3894
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002	3b. Phone 1 (713)651	No. (include area code) -7000		10. Field and Pool, or E RED HILLS / HARD		10010
<ol> <li>Location of Well (Report location clearly and in accordance with any At surface NENW / 220 FNL / 2150 FWL / LAT 32.07909 At proposed prod. zone SESW / 230 FSL / 2061 FWL / LAT</li> </ol>	9 / LONG	-103.4423259	6047	11. Sec., T. R. M. or Bl SEC 2 / T26S / R34		1
<ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>15 miles</li> </ol>				12. County or Parish LEA		13. State NM
5. Distance from proposed* location to nearest 220 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of 2480	f acres in lease	17. Spacin 320	g Unit dedicated to this v	vell	
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, 577 feet applied for, on this lease, ft.</li> </ol>		sed Depth eet / 22751 feet	20. BLM/ FED: NI	BIA Bond No. on file M2308		
<ol> <li>Elevations (Show whether DF, KDB, RT, GL, etc.)</li> <li>3294 feet</li> </ol>	22. Appro 07/01/20	ximate date work will star 017	t*	23. Estimated duration 25 days	n	
	24. Att	tachments				
<ol> <li>The following, completed in accordance with the requirements of Onshor</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).</li> </ol>		<ol> <li>Bond to cover th Item 20 above).</li> <li>Operator certific</li> </ol>	e operatio ation	is form: ns unless covered by an ormation and/or plans as	-	
25. Signature (Electronic Submission)		ne <i>(Printed/Typed)</i> in Wagner / Ph: (432)	686-3689		Date 01/31/2	2017
itle Regulatory Specialsit						
Approved by (Signature) (Electronic Submission)		ne (Printed/Typed) dy Layton / Ph: (575)2	34-5959		Date 06/05/	2017
Title Supervisor Multiple Resources		RLSBAD				
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.	s legal or eq	quitable title to those right	s in the sub	oject lease which would e	ntitle the a	applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	ime for any	person knowingly and w	villfully to r	nake to any department o	or agency	of the United

(Continued on page 2)

8



\*(Instructions on page 2)

K=1/2/17

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07/03/2017

### **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

Signed on: 01/31/2017

Title: Regulatory Specialsit

Street Address: 5509 Champions Drive

City: Midland

h ----- (400)000 0000

Zip: 79702

Phone: (432)686-3689

Email address: Stan\_Wagner@eogresources.com

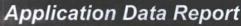
State: TX

### **Field Representative**

Representative Name: James BarwisStreet Address: 5509 Champions DriveCity: MidlandState: TXPhone: (432)425-1204Email address: james barwis@eogresources.com

Zip: 79706





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07/03/2017

#### APD ID: 10400010136

**Operator Name: EOG RESOURCES INC** 

Well Name: RUBY 2 FED COM

Well Type: OIL WELL

#### Submission Date: 01/31/2017

Well Number: 704H Well Work Type: Drill

#### Section 1 - General

APD ID:	10400010136	Tie to previous NOS?	Submission Date: 01/31/2017
BLM Office:	CARLSBAD	User: Stan Wagner	Title: Regulatory Specialsit
Federal/India	an APD: FED	Is the first lease penetrate	d for production Federal or Indian? FED
Lease numb	er: NMNM66927	Lease Acres: 2480	
Surface acc	ess agreement in place?	Allotted?	Reservation:
Agreement i	n place? NO	Federal or Indian agreeme	nt:
Agreement I	number:		
Agreement I	name:		
Keep applic	ation confidential? NO		
Permitting A	gent? NO	APD Operator: EOG RESC	URCES INC
Operator let	ter of designation:		
Keep applic	ation confidential? NO		

### **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:

Zip: 77002

### **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: RUBY 2 FED COM	Well Number: 704H	Well API Number:
Field/Pool or Exploratory? Field and Pool	Field Name: RED HILLS	Pool Name: HARDIN TANK

Page 1 of 3

WOLFCAMP

Operator Name: EOG RESOURCES IN	IC
Well Name: RUBY 2 FED COM	

Well Number: 704H

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 New surface disturbance? Multiple Well Pad Name: RUBY Number: 704H/705H Type of Well Pad: MULTIPLE WELL 2 FED COM Well Class: HORIZONTAL Number of Legs: 1 Well Work Type: Drill Well Type: OIL WELL **Describe Well Type:** Well sub-Type: INFILL Describe sub-type: Distance to town: 15 Miles Distance to nearest well: 577 FT Distance to lease line: 220 FT Reservoir well spacing assigned acres Measurement: 320 Acres Well plat: ruby2fedcom704H\_signed C-102\_01-26-2017.pdf Well work start Date: 07/01/2017 **Duration: 25 DAYS** 

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number:

#### Aliquot/Lot/Tract ease Number **EW Indicator** NS Indicator ongitude Elevation ease Type EW-Foot Meridian NS-Foot -atitude Section Range County State Twsp TVD MD SHL Aliquot 32.07909 NEW NEW S STATE 329 0 220 FNL 215 FWL 26S 34E 2 LEA 0 MEXI MEXI 103.4423 4 0 NENW 9 Leg 259 CO CO #1 NEW NEW S KOP FWL 26S 34E Aliquot LEA STATE 121 121 52 FNL 206 2 32.07943 MEXI MEXI 889 89 87 NENW 69 103.4421 5 Leg CO CO 297 3 #1 NEW NEW S PPP Aliquot STATE 127 126 330 FWL 26S 34E 2 32.07867 LEA **FNL** 206 MEXI MEXI 933 44 NENW 17 103.4421 31 1 Leg CO 442 CO 7 #1

Vertical Datum: NAVD88

Well Name: RUBY 2 FED COM

### Well Number: 704H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
EXIT Leg #1	330	FSL	206 1	FWL	26S	34E	11	Aliquot SESW	32.05145 72	- 103.4421 416	LEA	NEW MEXI CO		F	NMNM 66927	- 944 8	226 51	127 42
BHL Leg #1	230	FSL	206 1	FWL	26S	34E	11	Aliquot SESW	32.05130 81	- 103.4426 047	LEA	NEW MEXI CO		F	NMNM 66927	- 944 9	227 51	127 43



Drilling Plan Data Report

07/03/2017

APD ID: 10400010136

**Operator Name: EOG RESOURCES INC** 

Well Name: RUBY 2 FED COM

Well Type: OIL WELL

Submission Date: 01/31/2017

Well Number: 704H

Well Work Type: Drill

### **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
17746	RUSTLER	2460	834	834	ANHYDRITE	NONE	No
17718	TOP SALT	1082	1378	1378	SALT	NONE	No
17722	BASE OF SALT	-1496	3956	3956	SALT	NONE	No
17719	LAMAR	-2839	5299	5299	LIMESTONE	NONÉ	No
15332	BELL CANYON	-2871	5331	5331	SANDSTONE	NATURAL GAS,OIL	No
15316	CHERRY CANYON	-3843	6303	6303	SANDSTONE	NATURAL GAS,OIL	No
17713	BRUSHY CANYON	-5350	7810	7810	SANDSTONE	NATURAL GAS,OIL	No
17721	BONE SPRING LIME	-6954	9414	9414	LIMESTONE	NONE	No
15338	BONE SPRING 1ST	-7987	10447	10447	SANDSTONE	NATURAL GAS,OIL	No
17737	BONE SPRING 2ND	-8568	11028	11028	SANDSTONE	NATURAL GAS,OIL	No
17738	BONE SPRING 3RD	-9629	12089	12089	SANDSTONE	NATURAL GAS,OIL	No
17709	WOLFCAMP	-10069	12529	12529	SHALE	NATURAL GAS,OIL	Yes

### Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 12675

**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

#### Well Name: RUBY 2 FED COM

Well Number: 704H

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.

**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.

#### **Choke Diagram Attachment:**

ruby2fedcom704H 5 M Choke Manifold Diagram (3-21-14)\_01-26-2017.pdf

#### **BOP Diagram Attachment:**

ruby2fedcom704H 5 M BOP Diagram (8-14-14)\_01-26-2017.pdf

### Section 3 - Casing

			1			_															1	T
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 length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.7 5	10.75	NEW	API	N	0	860	0	860	-9449	- 10309	860	J-55	40.5	STC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
2	INTERMED IATE	9.87 5	7.625	NEW	API	N	0	1000	0	1000	-9449	- 10449	1000	HCP -110	29.7	LTC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
3	INTERMED IATE	9.87 5	7.625	NEW	API	N	1000	3000	1000	3000	- 10449	- 12449	2000	OTH ER	29.7	OTHER	1.12 5	1.25	BUOY	1.6	BUOY	1.6
4	PRODUCTI ON	6.75	5.5	NEW	API	N	0	11200	0	11200		- 20649	11200	OTH ER	20	OTHER	1.12 5	1.25	BUOY	1.6	BUOY	1.6
5	INTERMED IATE	8.75	7.625	NEW	API	N	3000	11700	3000	11700	- 12449		8700	HCP -110	29.7	OTHER	1.12 5	1.25	BUOY	1.6	BUOY	1.6
6	PRODUCTI ON	6.75	5.5	NEW	API	N	11200	22751	11200			- 22192	11551	OTH ER	20	OTHER	1.12 5	1.25	BUOY	1.6	BUOY	1.6

#### **Casing Attachments**

Well Name: RUBY 2 FED COM

Well Number: 704H

Casing ID:	1 String Type:SURFACE
Inspection E	
Spec Docun	nent:
Taperd Strin	ig Spec:
Casing Desi	gn Assumptions and Worksheet(s):
Ruby 2	2 Fed Com 704H BLM Plan_01-26-2017.pdf
Casing ID:	2 String Type: INTERMEDIATE
Inspection [	Document:
Spec Docun	nent:
_	
Taperd Strir	ig Spec:
Casing Desi	gn Assumptions and Worksheet(s):
	2 Fed Com 704H BLM Plan_01-26-2017.pdf
Casing ID:	
Inspection [	)ocument:
Spec Docun	nent.
opeo booun	
Taperd Strir	ng Spec:
	gn Assumptions and Worksheet(s):
Casing Desi	

## Operator Name: EOG RESOURCES INC Well Name: RUBY 2 FED COM

**Section 4 - Cement** 

Well Number: 704H

Casing Attachments
Casing ID: 4 String Type: PRODUCTION
Inspection Document:
Spec Document:
Taperd String Spec:
Casing Design Assumptions and Worksheet(s):
Ruby 2 Fed Com 704H BLM Plan_01-26-2017.pdf
Casing ID: 5 String Type:INTERMEDIATE Inspection Document:
Spec Document:
Taperd String Spec:
Casing Design Assumptions and Worksheet(s):
Ruby 2 Fed Com 704H BLM Plan_01-26-2017.pdf
Casing ID: 6 String Type: PRODUCTION
Inspection Document:
Spec Document:
Taperd String Spec:
Casing Design Assumptions and Worksheet(s):
Ruby 2 Fed Com 704H BLM Plan_01-26-2017.pdf

#### Well Name: RUBY 2 FED COM

#### Well Number: 704H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	0	0	0	0	0		0	0
INTERMEDIATE	Lead		0	0	0	0	0	0		0	0
SURFACE	Lead		0	860	325	1.73	13.5	562	25	Class C	Class C + 4.0% Bentonite + 0.6% CD-
SURFACE	Tail		860	860	200	1.34	14.8	268	25	Class C	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake +
INTERMEDIATE	Lead		0	1170 0	2250	1.38	14.8	3105		Class C	Class C + 5% Gypsum + 3% CaCl2 pumped
INTERMEDIATE	Tail		1170 0	1170 0	550	1.2	14.4	660	25	Class H	50:50 Class H:Poz + 0.25% CPT20A +
PRODUCTION	Lead		1060 0	2018 5	725	1.26	14.1	913		Class H	Class H + 0.1% C-20 + 0.05% CSA-1000 +
PRODUCTION	Lead		1120 0	2275 1	1000	1.26	14.1	1260		Class H	Class H + 0.1% C-20 + 0.05% CSA-1000 +

### 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	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	На	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
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#### \* \* 6\*

### Operator Name: EOG RESOURCES INC Well Name: RUBY 2 FED COM

#### Well Number: 704H

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
860	1170 0	SALT SATURATED	8.8	10							
1170 0	2275 1	OIL-BASED MUD	10	11.5							
0	860	WATER-BASED MUD	8.6	8.8							

### 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: 7579

Anticipated Surface Pressure: 4775.54

Anticipated Bottom Hole Temperature(F): 181

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:

Ruby 2 Fed Com 704H H2S Plan Summary\_01-26-2017.pdf

Well Name: RUBY 2 FED COM

Well Number: 704H

### **Section 8 - Other Information**

#### Proposed horizontal/directional/multi-lateral plan submission:

Ruby 2 Fed Com 704H Wall Plot\_01-26-2017.pdf

Ruby 2 Fed Com 704H Planning Report\_01-26-2017.pdf

Other proposed operations facets description:

#### Other proposed operations facets attachment:

ruby2fedcom704H 5.500in 20.00 VST P110EC DWC\_C-IS MS Spec Sheet\_01-26-2017.pdf Ruby 2 Fed Com 704H rig layout\_01-26-2017.pdf ruby2fedcom704H 5.500in 20.00 VST P110EC VAM SFC Spec Sheet\_01-26-2017.pdf ruby2fedcom704H 7.625in 29.7 P110EC VAM SLIJ-II\_01-26-2017.pdf ruby2fedcom704H 7.625in 29.70 P-110 FlushMax III Spec Sheet\_01-26-2017.pdf ruby2fedcom704H Co-Flex Hose Certification\_01-26-2017.PDF ruby2fedcom704H Co-Flex Hose Test Chart\_01-26-2017.pdf

#### Other Variance attachment:

Ruby 2 Fed Com 704H BLM Plan\_01-26-2017.pdf



BUREAU OF LAND MANAGEMENT

APD ID: 10400010136

Operator Name: EOG RESOURCES INC

Well Name: RUBY 2 FED COM

Well Type: OIL WELL

### Submission Date: 01/31/2017

Well Number: 704H Well Work Type: Drill

# **Section 1 - Existing Roads**

Will existing roads be used? YES Existing Road Map: RUBY 2 FED COM\_704H\_vicinity map\_01-19-2017.pdf Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? YES

ROW ID(s)

ID:

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:

Ruby 2 Fed Com infrastructure sketch\_01-19-2017.pdf Ruby 2 Fed Com 704H\_padsite\_01-19-2017.pdf RUBY 2 FED COM\_704H\_wellsite\_01-19-2017.pdf

New road type: RESOURCE

Length: 517 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

Page 1 of 9

Well Name: RUBY 2 FED COM

Well Number: 704H

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

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:

RUBY 2 FED COM\_704H\_radius map\_01-19-2017.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: Ruby 2 Fed Com infrastructure sketch Production Facilities map:

Well Name: RUBY 2 FED COM

Well Number: 704H

Ruby 2 Fed Com infrastructure sketch\_01-19-2017.pdf

Section 5 - Location a	and Types of Water S	upply
Water Source Ta	ble	
Water source use type: OTHER		Water source type: RECYCLED
Describe type:		
Source latitude:		Source longitude:
Source datum:		
Water source permit type: WATER	RIGHT	
Source land ownership: FEDERAL		
Water source transport method: P	IPELINE, TRUCKING	
Source transportation land owner	ship: FEDERAL	
Water source volume (barrels): 0		Source volume (acre-feet): 0
Source volume (gal): 0		
later source and transportation map	p:	
uby 2 Fed Com Water Source and Ca	liche map_01-19-2017.docx	
ater source comments:		
ew water well? NO		
New Water Well I	nfo	
Well latitude:	Well Longitude:	Well datum:
Well target aquifer:		
Est. depth to top of aquifer(ft):	Est thickness of aquifer:	
Aquifer comments:		
Aquifer documentation:		
/ell depth (ft):	Well casing typ	pe:
/ell casing outside diameter (in.):	Well casing inside diameter (in.):	

Used casing source:

Casing top depth (ft.):

**Completion Method:** 

Drill material:

Grout depth:

Drilling method:

New water well casing?

Grout material:

Casing length (ft.):

Well Production type:

Water well additional information:

Page 3 of 9

Well Name: RUBY 2 FED COM

Well Number: 704H

State appropriation permit:

Additional information attachment:

#### **Section 6 - Construction Materials**

**Construction Materials description:** Caliche will be supplied from pits shown on the attached caliche source map. 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. The procedure for "Flipping" a well location is as follows: \* -An adequate amount of topsoil/root zone (usually top 6 inches of soil) will be stripped from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram/survey plat. -An area will be used within the proposed well site dimensions to excavate caliche. Subsoil will be removed and stockpiled within the surveyed well pad dimensions. -Once caliche/surfacing mineral is found, the mineral material will be excavated and stock piled within the approved drilling pad dimensions. -Then, subsoil will be pushed back in the excavated hole and caliche will be spread accordingly across the entire well pad and road (if available). -Neither caliche, nor subsoil will be stock piled outside of the well pad dimensions. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat. \* In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit or other established mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or federal land.

**Construction Materials source location attachment:** 

Ruby 2 Fed Com Water Source and Caliche map\_01-19-2017.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.)

Well Name: RUBY 2 FED COM

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#### 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 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 depth (ft.)

Cuttings area width (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:

Ruby 2 Fed Com 704H padsite 01-19-2017.pdf RUBY 2 FED COM\_704H\_wellsite\_01-19-2017.pdf Ruby 2 Fed Com 704H rig layout\_01-26-2017.pdf Comments: Exhibit 2A-Wellsite & Exhibit 2B-Padsite Rig Layout Exhibit 4

### 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

Well Number: 704H

reestablished and that erosion is controlled.

Wellpad long term disturbance (acres): 2.692837	Wellpad short term disturbance (acres): 4.178145
Access road long term disturbance (acres): 0.284848	Access road short term disturbance (acres): 0.284848
Pipeline long term disturbance (acres): 0.4063361	Pipeline short term disturbance (acres): 0.67722684
Other long term disturbance (acres): 0	Other short term disturbance (acres): 0
Total long term disturbance: 3.384021	Total short term disturbance: 5.1402197

**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.

**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:

RUBY 2 FED COM\_704H\_interim reclamation\_01-19-2017.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

Well Name: RUBY 2 FED COM

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Seedling transplant description attachment: Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

### Seed Management

Sood Summany	Total pounds/Acre:
PLS pounds per acre:	Proposed seeding season:
Seed use location:	
Seed cultivar:	
Source phone:	
Source name:	Source address:
Seed name:	
Seed type:	Seed source:
Seed Table	

Seed Summary		Total
Seed Type	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:

Well Name: RUBY 2 FED COM

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Success standards: N/A Pit closure description: NA

Pit closure attachment:

### Section 11 - Surface Ownership

Disturbance type: WELL PAD Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: STATE OF NEW MEXICO Military Local Office: USFWS Local Office: USFS Region:

USFS Forest/Grassland:

**USFS Ranger District:** 

 Fee Owner: Oliver Kiehne
 Fee Owner Address: P.O. Box 135 Orla, TX 79770

 Phone: (575)399-9281
 Email:

 Surface use plan certification: NO
 Email:

 Surface use plan certification document:
 Surface access agreement or bond: Agreement

 Surface Access Agreement Need description: surface use agreement
 Surface Access Bond BLM or Forest Service:

 BLM Surface Access Bond number:
 USFS Surface access bond number:

Well Number: 704H

### Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

**SUPO Additional Information:** An onsite meeting was conducted 12/14/16. Poly lines are planned to transport water for operations. Will truck if necessary. See attached SUPO Plan. **Use a previously conducted onsite?** YES

Previous Onsite information: Onsite meeting conducted 12/14/16.

### **Other SUPO Attachment**

Ruby 2 Fed Com 704H\_SUPO\_01-19-2017.pdf RUBY2FEDCOM\_704H\_COMBINED\_01-26-2017.PDF ruby2fedcom704H\_signed C-102\_01-26-2017.pdf



### **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: 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):



### **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 07/03/2017

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: