



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

## APD Print Report

04/03/2017

APD ID: 10400010153

Operator Name: EOG RESOURCES INC

Well Name: RUBY 2 FED COM

Well Type: OIL WELL

Submission Date: 01/31/2017

Federal/Indian APD: FED

Well Number: 705H

Well Work Type: Drill

Highlight

All Changes

HOBBS OCD  
AUG 23 2017  
RECEIVED

### Application

#### Section 1 - General

APD ID: 10400010153

BLM Office: CARLSBAD

Federal/Indian APD: FED

Lease number: NMNM66927

Surface access agreement in place?

Agreement in place? NO

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

Operator letter of designation:

Keep application confidential? NO

Tie to previous NOS?

User: Stan Wagner

Is the first lease penetrated for production Federal or Indian? FED

Lease Acres: 2480

Allotted?

Reservation:

Federal or Indian agreement:

Submission Date: 01/31/2017

Title: Regulatory Specialist

APD Operator: EOG RESOURCES INC

#### Operator Info

Operator Organization Name: EOG RESOURCES INC

Operator Address: 1111 Bagby Sky Lobby2

Operator PO Box:

Zip: 77002

Operator City: Houston

State: TX

Operator Phone: (713)651-7000

Operator Internet Address:

#### Section 2 - Well Information

Well in Master Development Plan? NO

Well in Master SUPO? NO

Well in Master Drilling Plan? NO

Master Development Plan name:

Master SUPO name:

Master Drilling Plan name:

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**Well API Number:**

**Field/Pool or Exploratory?** Field and Pool

**Field Name:** RED HILLS

**Pool Name:** HARDIN TANK;  
WOLFCAMP

**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?**

**Type of Well Pad:** MULTIPLE WELL

**Multiple Well Pad Name:** RUBY  
2 FED COM

**Number:** 704H/705H

**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:** ruby2fedcom705H\_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

**Vertical Datum:** NAVD88

**Survey number:**

**STATE:** NEW MEXICO

**Meridian:** NEW MEXICO PRINCIPAL **County:** LEA

**Latitude:** 32.0790976

**Longitude:** -103.4422129

**SHL**

**Elevation:** 3295

**MD:** 0

**TVD:** 0

**Leg #: 1**

**Lease Type:** STATE

**Lease #:** STATE

**NS-Foot:** 220

**NS Indicator:** FNL

**EW-Foot:** 2185

**EW Indicator:** FWL

**Twsp:** 26S

**Range:** 34E

**Section:** 2

**Aliquot:** NENW

**Lot:**

**Tract:**

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.0789711	<b>Longitude:</b> -103.4417494	
KOP	<b>Elevation:</b> -8893	<b>MD:</b> 12198	<b>TVD:</b> 12188
<b>Leg #: 1</b>	<b>Lease Type:</b> STATE	<b>Lease #:</b> STATE	
	<b>NS-Foot:</b> 50	<b>NS Indicator:</b> FNL	
	<b>EW-Foot:</b> 2565	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 26S	<b>Range:</b> 34E	<b>Section:</b> 2
	<b>Aliquot:</b> NENW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.0786681	<b>Longitude:</b> -103.4404508	
PPP	<b>Elevation:</b> -9336	<b>MD:</b> 12752	<b>TVD:</b> 12631
<b>Leg #: 1</b>	<b>Lease Type:</b> STATE	<b>Lease #:</b> STATE	
	<b>NS-Foot:</b> 330	<b>NS Indicator:</b> FNL	
	<b>EW-Foot:</b> 2588	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 26S	<b>Range:</b> 34E	<b>Section:</b> 2
	<b>Aliquot:</b> NENW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.0514536	<b>Longitude:</b> -103.4404408	
EXIT	<b>Elevation:</b> -9447	<b>MD:</b> 22659	<b>TVD:</b> 12742
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMNM66927	
	<b>NS-Foot:</b> 330	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 2588	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 26S	<b>Range:</b> 34E	<b>Section:</b> 11
	<b>Aliquot:</b> SESW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.0513039	<b>Longitude:</b> -103.4409039	
BHL	<b>Elevation:</b> -9448	<b>MD:</b> 22759	<b>TVD:</b> 12743
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMNM66927	
	<b>NS-Foot:</b> 230	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 2588	<b>EW Indicator:</b> FWL	

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**Twsp:** 26S

**Range:** 34E

**Section:** 11

**Aliquot:** SESW

**Lot:**

**Tract:**

## Drilling Plan

### Section 1 - Geologic Formations

**ID:** Surface formation

**Name:** RUSTLER

**Lithology(ies):**

ANHYDRITE

**Elevation:** 2461

**True Vertical Depth:** 834

**Measured Depth:** 834

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 1

**Name:** TOP SALT

**Lithology(ies):**

SALT

**Elevation:** 1083

**True Vertical Depth:** 1378

**Measured Depth:** 1378

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 2

**Name:** BASE OF SALT

**Lithology(ies):**

SALT

**Elevation:** -1495

**True Vertical Depth:** 3956

**Measured Depth:** 3956

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**ID:** Formation 3

**Name:** LAMAR

**Lithology(ies):**

LIMESTONE

**Elevation:** -2838

**True Vertical Depth:** 5299

**Measured Depth:** 5299

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 4

**Name:** BELL CANYON

**Lithology(ies):**

SANDSTONE

**Elevation:** -2870

**True Vertical Depth:** 5331

**Measured Depth:** 5331

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 5

**Name:** CHERRY CANYON

**Lithology(ies):**

SANDSTONE

**Elevation:** -3842

**True Vertical Depth:** 6303

**Measured Depth:** 6303

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 6

**Name:** BRUSHY CANYON

**Lithology(ies):**

SANDSTONE

**Elevation:** -5349

**True Vertical Depth:** 7810

**Measured Depth:** 7810



**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 7

**Name:** BONE SPRING LIME

**Lithology(ies):**

LIMESTONE

**Elevation:** -6953

**True Vertical Depth:** 9414

**Measured Depth:** 9414

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 8

**Name:** BONE SPRING 1ST

**Lithology(ies):**

SANDSTONE

**Elevation:** -7986

**True Vertical Depth:** 10447

**Measured Depth:** 10447

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 9

**Name:** BONE SPRING 2ND

**Lithology(ies):**

SANDSTONE

**Elevation:** -8567

**True Vertical Depth:** 11028

**Measured Depth:** 11028

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**ID:** Formation 10

**Name:** BONE SPRING 3RD

**Lithology(ies):**

SANDSTONE

**Elevation:** -9628

**True Vertical Depth:** 12089

**Measured Depth:** 12089

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 11

**Name:** WOLFCAMP

**Lithology(ies):**

SHALE

**Elevation:** -10068

**True Vertical Depth:** 12529

**Measured Depth:** 12529

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** Y

## 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 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.

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**Choke Diagram Attachment:**

ruby2fedcom705H 5 M Choke Manifold Diagram (3-21-14)\_01-26-2017.pdf

**BOP Diagram Attachment:**

ruby2fedcom705H 5 M BOP Diagram (8-14-14)\_01-26-2017.pdf

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### Section 3 - Casing

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**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 8.75

**Top setting depth MD:** 3000

**Top setting depth TVD:** 3000

**Top setting depth MSL:** 295

**Bottom setting depth MD:** 11700

**Bottom setting depth TVD:** 11700

**Bottom setting depth MSL:** -8405

**Calculated casing length MD:** 8700

**Casing Size:** 7.625

**Other Size**

**Grade:** HCP-110

**Other Grade:**

**Weight:** 29.7

**Joint Type:** OTHER

**Other Joint Type:** Flushmax III

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf

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**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 9.875

**Top setting depth MD:** 1000

**Top setting depth TVD:** 1000

**Top setting depth MSL:** 2295

**Bottom setting depth MD:** 3000

**Bottom setting depth TVD:** 3000

**Bottom setting depth MSL:** 295

**Calculated casing length MD:** 2000

**Casing Size:** 7.625

**Other Size**

**Grade:** OTHER

**Other Grade:** P-110EC

**Weight:** 29.7

**Joint Type:** OTHER

**Other Joint Type:** SLIJ II

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**String Type:** SURFACE

**Other String Type:**

**Hole Size:** 14.75

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** 3295

**Bottom setting depth MD:** 860

**Bottom setting depth TVD:** 860

**Bottom setting depth MSL:** 2435

**Calculated casing length MD:** 860

**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:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 9.875

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** 3295

**Bottom setting depth MD:** 1000

**Bottom setting depth TVD:** 1000

**Bottom setting depth MSL:** 2295

**Calculated casing length MD:** 1000

**Casing Size:** 7.625

**Other Size**

**Grade:** HCP-110

**Other Grade:**

**Weight:** 29.7

**Joint Type:** LTC

**Other Joint Type:** Flushmax III

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 6.75

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** 3295

**Bottom setting depth MD:** 11200

**Bottom setting depth TVD:** 11200

**Bottom setting depth MSL:** -7905

**Calculated casing length MD:** 11200

**Casing Size:** 5.5

**Other Size**

**Grade:** OTHER

**Other Grade:** P-110EC

**Weight:** 20

**Joint Type:** OTHER

**Other Joint Type:** DWC/C-IS MS

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf



**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 6.75

**Top setting depth MD:** 11200

**Top setting depth TVD:** 11200

**Top setting depth MSL:** -7905

**Bottom setting depth MD:** 22759

**Bottom setting depth TVD:** 12743

**Bottom setting depth MSL:** -9448

**Calculated casing length MD:** 11559

**Casing Size:** 5.5

**Other Size**

**Grade:** OTHER

**Other Grade:** P-110EC

**Weight:** 20

**Joint Type:** OTHER

**Other Joint Type:** VAM SFC

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf

### Section 4 - Cement

**Casing String Type:** INTERMEDIATE

Operator Name: EOG RESOURCES INC

Well Name: RUBY 2 FED COM

Well Number: 705H

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 0

Cement Type: 0

Additives: 0

Quantity (sks): 0

Yield (cu.ff./sk): 0

Density: 0

Volume (cu.ft.): 0

Percent Excess:

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 0

Cement Type: 0

Additives: 0

Quantity (sks): 0

Yield (cu.ff./sk): 0

Density: 0

Volume (cu.ft.): 0

Percent Excess:

Casing String Type: SURFACE

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 860

Cement Type: Class C

Additives: Class C + 4.0% Bentonite +  
0.6% CD-32 + 0.5% CaCl<sub>2</sub> + 0.25 lb/sk  
Cello-Flake (TOC @ Surface)

Quantity (sks): 325

Yield (cu.ff./sk): 1.73

Volume (cu.ft.): 562

Percent Excess: 25

~~Density:~~ 13.5

Trail  
Top MD of Segment: 860

Bottom MD Segment: 860

Cement Type: Class C

Quantity (sks): 200

Yield (cu.ff./sk): 1.34

Additives: Class C + 0.6% FL-62 +  
0.25 lb/sk Cello-Flake + 0.2% Sodium  
Metasilicate

Volume (cu.ft.): 268

Percent Excess: 25

Density: 14.8

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 11700

Cement Type: Class C

Additives: Class C + 5% Gypsum + 3%  
CaCl<sub>2</sub> pumped via Bradenhead (TOC @  
surface)

Quantity (sks): 2250

Yield (cu.ff./sk): 1.38

Volume (cu.ft.): 3105

Percent Excess: 25

~~Density:~~ 14.8

Trail  
Top MD of Segment: 11700

Bottom MD Segment: 11700

Cement Type: Class H

Quantity (sks): 550

Yield (cu.ff./sk): 1.2

Additives: 50:50 Class H:Poz + 0.25%  
CPT20A + 0.40% CPT49 + 0.20%

Volume (cu.ft.): 660

Percent Excess: 25

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

CPT35 + 0.80% CPT16A + 0.25%  
CPT503P pumped conventionally  
**Density:** 14.4

**Percent Excess:** 25

**Casing String Type:** PRODUCTION

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 10600

**Bottom MD Segment:** 20185

**Cement Type:** Class H

**Additives:** Class H + 0.1% C-20 +  
0.05% CSA-1000 + 0.20% C-49 +  
0.40% C-17 (TOC @ 10,600')  
**Density:** 14.1

**Quantity (sks):** 725

**Yield (cu.ff./sk):** 1.26

**Volume (cu.ft.):** 913

**Percent Excess:** 25

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 11200

**Bottom MD Segment:** 22759

**Cement Type:** Class H

**Additives:** Class H + 0.1% C-20 +  
0.05% CSA-1000 + 0.20% C-49 +  
0.40% C-17 (TOC @ 11200')  
**Density:** 14.1

**Quantity (sks):** 1000

**Yield (cu.ff./sk):** 1.26

**Volume (cu.ft.):** 1260

**Percent Excess:** 25

## 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

**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

**Top Depth:** 860

**Bottom Depth:** 11700

**Mud Type:** SALT SATURATED

**Min Weight (lbs./gal.):** 8.8

**Max Weight (lbs./gal.):** 10

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 11700

**Bottom Depth:** 22759

**Mud Type:** OIL-BASED MUD

**Min Weight (lbs./gal.):** 10

**Max Weight (lbs./gal.):** 11.5

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 0

**Bottom Depth:** 860

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.6

**Max Weight (lbs./gal.):** 8.8

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

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## 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



**Operator Name:** EOG RESOURCES INC

**Well Name:** RUBY 2 FED COM

**Well Number:** 705H

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 7579

**Anticipated Surface Pressure:** 4775.54

**Anticipated Bottom Hole Temperature(F):** 181

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

Ruby 2 Fed Com 705H H2S Plan Summary\_01-26-2017.pdf

### Section 8 - Other Information

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

Ruby 2 Fed Com 705H Wall Plot\_01-26-2017.pdf

Ruby 2 Fed Com 705H Planning Report\_01-26-2017.pdf

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

Ruby 2 Fed Com 705H rig layout\_01-26-2017.pdf

ruby2fedcom705H 5.500in 20.00 VST P110EC DWC\_C-IS MS Spec Sheet\_01-26-2017.pdf

ruby2fedcom705H 5.500in 20.00 VST P110EC VAM SFC Spec Sheet\_01-26-2017.pdf

ruby2fedcom705H 7.625in 29.7 P110EC VAM SLIJ-II\_01-26-2017.pdf

ruby2fedcom705H Co-Flex Hose Certification\_01-26-2017.PDF

ruby2fedcom705H 7.625in 29.70 P-110 FlushMax III Spec Sheet\_01-26-2017.pdf

ruby2fedcom705H Co-Flex Hose Test Chart\_01-26-2017.pdf

**Other Variance attachment:**

Ruby 2 Fed Com 705H BLM Plan\_01-26-2017.pdf

SUPO

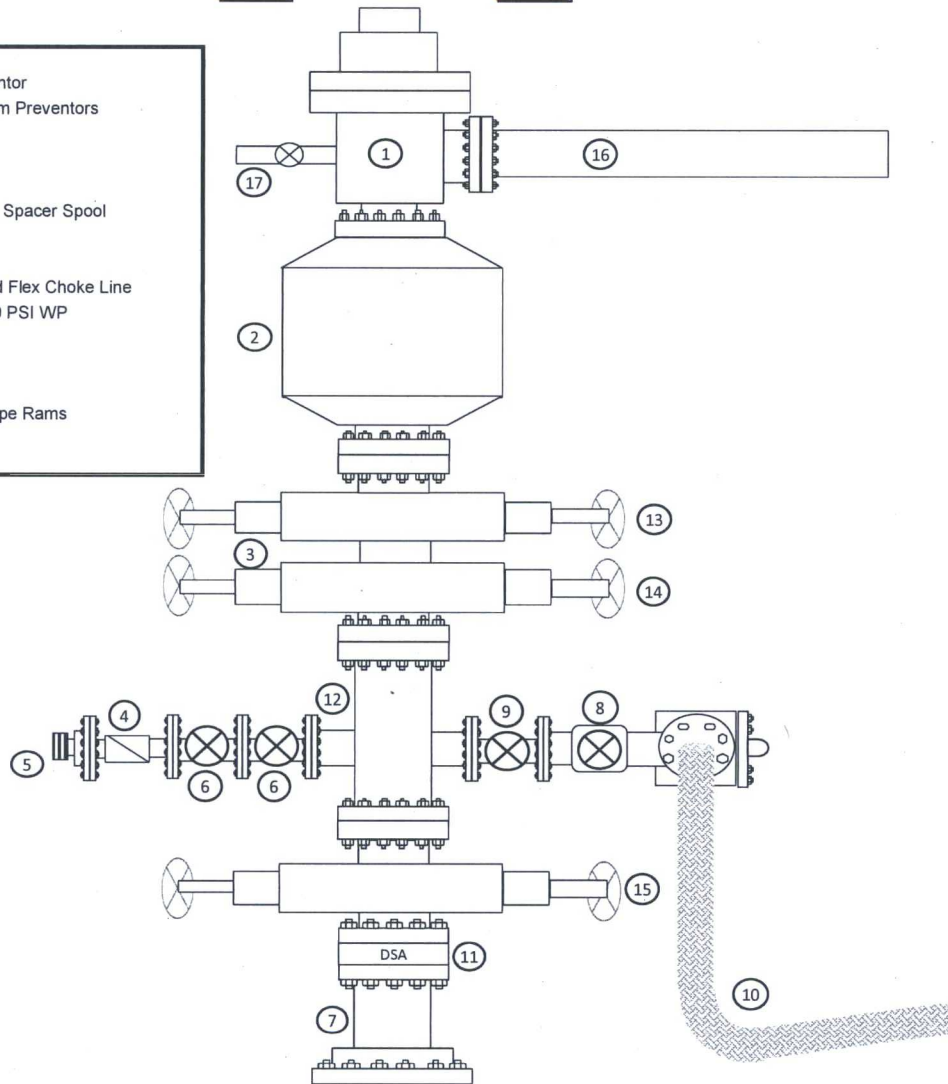
# Exhibit 1

## EOG Resources

### 5M BOPE

Rig Floor

1. 13 5/8" Rotating Head
2. NOV 13 5/8" 5,000 PSI WP GK Annular Preventor
3. 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors
4. 2 1/16" - 10,000 PSI WP Check Valve
5. 10,000 PSI WP - 1502 Union to kill line
6. 2 1/16" - 10,000 PSI WP Manual Valves
7. 13 5/8" 3,000 PSI WP x 13 5/8" 5,000 PSI WP Spacer Spool
8. 4 1/16" 10,000 PSI WP HCR Valve
9. 4 1/16" 10,000 PSI WP Manual Valve
10. 6" OD x 3" ID 10,000 PSI WP Steel Armoured Flex Choke Line
11. DSA - 13 5/8" 10,000 PSI WP x 13 5/8" 5,000 PSI WP
12. Mud Cross - 13 5/8" 10,000 PSI WP
13. Blind Rams
14. Pipe Rams
15. 13 5/8" Cameron Type "U" 10,000 PSI WP Pipe Rams
16. Flow Line
17. 2" Fill Line



**EOG Resources**  
**5M BOPE**

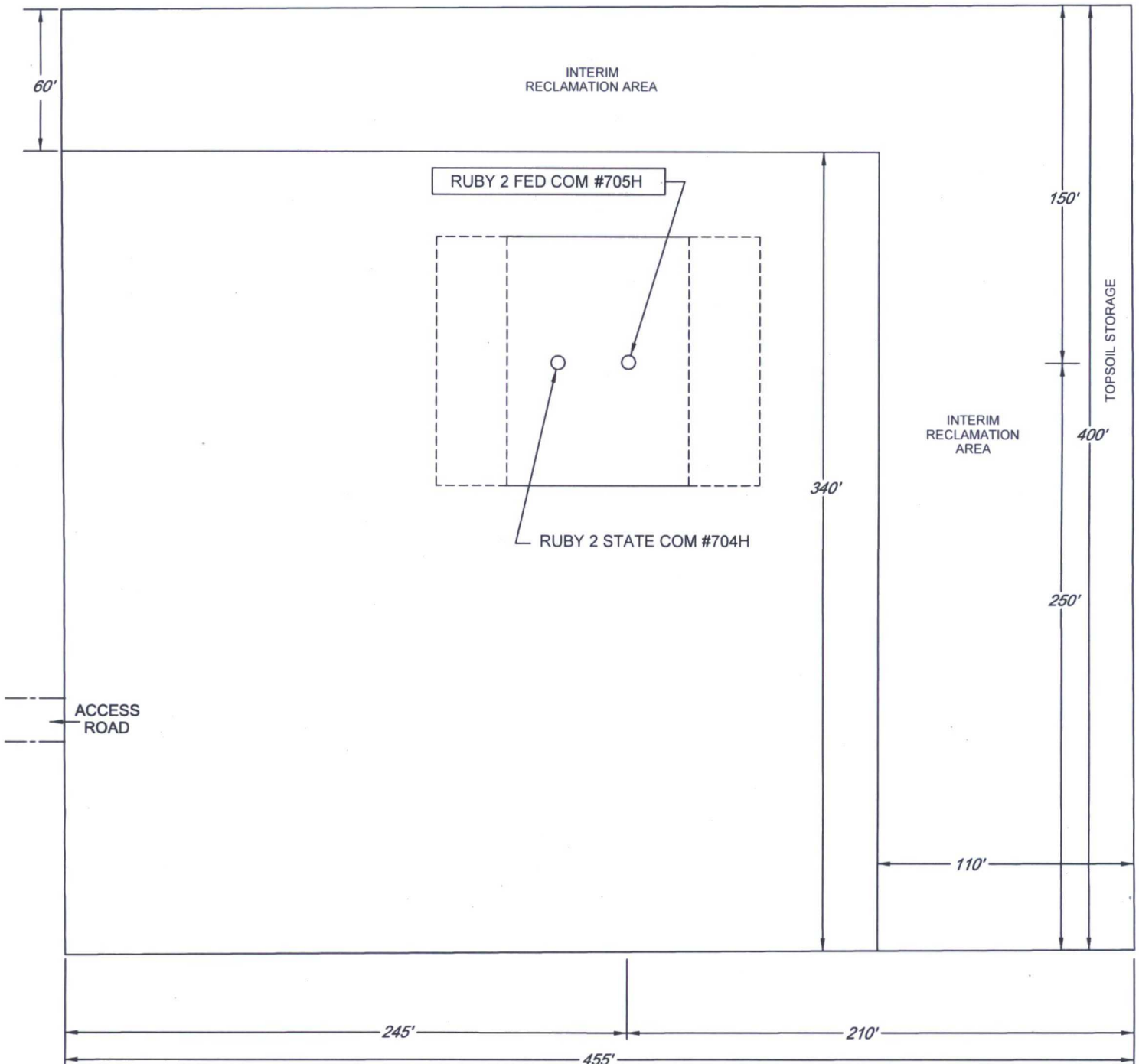
- ## EOG Resources 5M BOPE
- To Shale Shaker
- 150' to Flare

Mud Gas Separator
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EXHIBIT 2C  
RECLAMATION AND FACILITY DIAGRAM - PRODUCTION FACILITIES DIAGRAM

SECTION 2, TOWNSHIP 26-S, RANGE 34-E, N.M.P.M.  
LEA COUNTY, NEW MEXICO

DETAIL VIEW  
SCALE: 1" = 60'



LEASE NAME & WELL NO.: RUBY 2 FED COM #705H  
#705H LATITUDE N 32.0789720 #705H LONGITUDE W 103.4417480



Exhibit 4  
EOG Resources  
Ruby 2 Fed Com #705H

Well Site Diagram

