HOBBS OCD
JUL 10 2017
RECEIVED

OCD HOBBS

Form 3160-3
(March 2012)

SECRETARY'S POTASH

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM17440

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. (318328)
TENDERLOIN FEDERAL COM 4H

2. Name of Operator
COG OPERATING LLC (229137)

9. API Well No.
30-025-43891

3a. Address
600 West Illinois Ave Midland TX 79701

3b. Phone No. *(include area code)*
(432)683-7443

10. Field and Pool, or Exploratory (28432)
GRAMA RIDGE / BONE SPRING, WEST

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWSW / 655 FSL / 660 FWL / LAT 32.400785 / LONG -103.532497
At proposed prod. zone NWNW / 200 FNL / 660 FWL / LAT 32.427465 / LONG -103.53251

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 12 / T22S / R33E / NMP

14. Distance in miles and direction from nearest town or post office*
14 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
200 feet

16. No. of acres in lease
1794.49

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
1551 feet

19. Proposed Depth
10850 feet / 20876 feet

20. BLM/BIA Bond No. on file
FED: NMB000215

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3525 feet

22. Approximate date work will start*
04/01/2017

23. Estimated duration
30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Mayte Reyes / Ph: (575)748-6945	01/24/2017

Title
Regulatory Analyst

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	07/05/2017

Title	Office
Supervisor Multiple Resources	HOBBS

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

KZ 07/14/17

APD ID: 10400010556
Operator Name: COG OPERATING LLC
Well Name: TENDERLOIN FEDERAL COM
Well Type: OIL WELL

Submission Date: 01/24/2017
Federal/Indian APD: FED
Well Number: 4H
Well Work Type: Drill

Highlight All Changes

Application

Section 1 - General

APD ID: 10400010556
Tie to previous NOS?
Submission Date: 01/24/2017
BLM Office: HOBBS
User: Mayte Reyes
Title: Regulatory Analyst
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM17440
Lease Acres: 1794.49
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? NO
Federal or Indian agreement:
Agreement number:
Agreement name:
Keep application confidential? YES
Permitting Agent? NO
APD Operator: COG OPERATING LLC
Operator letter of designation:
Keep application confidential? YES

Operator Info

Operator Organization Name: COG OPERATING LLC
Operator Address: 600 West Illinois Ave
Zip: 79701
Operator PO Box:
Operator City: Midland
State: TX
Operator Phone: (432)683-7443
Operator Internet Address: RODOM@CONCHO.COM

Section 2 - Well Information

Well in Master Development Plan? NO
Mater Development Plan name:
Well in Master SUPO? NO
Master SUPO name:
Well in Master Drilling Plan? NO
Master Drilling Plan name:

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** GRAMA RIDGE **Pool Name:** BONE SPRING, WEST

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

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: SINGLE WELL **Multiple Well Pad Name:** **Number:**

Well Class: HORIZONTAL **Number of Legs:**

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 14 Miles **Distance to nearest well:** 1551 FT **Distance to lease line:** 200 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: COG_Tenderloin_4H_C102_06-13-2017.pdf

Well work start Date: 04/01/2017 **Duration:** 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	655	FSL	660	FWL	22S	33E	12	Aliquot SWSW	32.400785	-103.532497	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 17440	3525	0	0
KOP Leg #1	655	FSL	660	FWL	22S	33E	12	Aliquot SWSW	32.400785	-103.532497	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 17440	3525	0	0
PPP Leg #1	330	FSL	660	FWL	22S	33E	12	Aliquot SWSW	32.399892	-103.532496	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 17440	-6907	10432	10432

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	330	FNL	660	FWL	22S	33E	1	Aliquot NWNW	32.427465	-103.532509	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 96243	-7326	20600	10851
BHL Leg #1	200	FNL	660	FWL	22S	33E	1	Aliquot NWNW	32.427465	-103.532511	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 96243	-7325	20876	10850

Drilling Plan

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
17318	UNKNOWN	0	0	0		NONE	No
17348	RUSTLER	-1550	1550	1550		NONE	No
17349	TOP OF SALT	-1650	1650	1650		NONE	No
17350	BASE OF SALT	-3580	3580	3580		NONE	No
17304	YATES	-3740	3740	3740		NONE	No
17372	CAPITAN REEF	-3750	3750	3750		NONE	No
17318	UNKNOWN	-5230	5230	5230		NATURAL GAS,OIL	No
17339	CHERRY CANYON	-5970	5970	5970		NATURAL GAS,OIL	No
18614	BONE SPRING LIME	-8841	8841	8841		NATURAL GAS,OIL	No
18666	BONE SPRINGS UPPER SHAL	-8992	8992	8992		NATURAL GAS,OIL	No
18658	BONE SPRING LOWER	-9320	9320	9320		NATURAL GAS,OIL	No
17359	BONE SPRING 1ST	-9948	9948	9948		NATURAL GAS,OIL	No
17364	BONE SPRING 2ND	-10550	10550	10550		NATURAL GAS,OIL	Yes
17366	BONE SPRING 3RD	-11700	11700	11700		NATURAL GAS,OIL	No

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M **Rating Depth:** 12000

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

Variance request: A variance is requested for the use of a flexible choke line from the BOP to choke manifold. See attached for specs and hydrostatic test chart.
Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional and tested.

Choke Diagram Attachment:

COG Tenderloin 4H_2M Choke_01-24-2017.pdf

BOP Diagram Attachment:

COG Tenderloin 4H_2M BOP_01-24-2017.pdf

Pressure Rating (PSI): 3M **Rating Depth:** 23000

Equipment: Annular. The BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.
Requesting Variance? NO

Variance request: A variance is requested for the use of a flexible choke line from the BOP to choke manifold. See attached for specs and hydrostatic test chart.
Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional and tested.

Choke Diagram Attachment:

COG Tenderloin 4H_3M Choke_01-24-2017.pdf

BOP Diagram Attachment:

COG Tenderloin 4H_3M BOP_01-24-2017.pdf

COG_Tenderloin_4H_Flex_Hose_06-13-2017.pdf

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Section 3 - Casing

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	17.5	13.375	NEW	API	N	0	1625	0	1625	-6907	-8532	1625	J-55	54.5	STC	1.52	4.78	DRY	5.8	DRY	5.
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5255	0	5255	-6907	-12162	5255	J-55	40	LTC	1.08	0.94	DRY	2.47	DRY	2.
3	PRODUCTION	8.75	5.5	NEW	API	N	0	20876	0	20876	-6907	-27783	20876	P-110	17	LTC	1.41	2.52	DRY	2.41	DRY	2.

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Taperd String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Tenderloin_4H_Casing_Prog_06-13-2017.pdf

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Casing Attachments

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Taperd String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Tenderloin_4H_Casing_Prog_06-13-2017.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Taperd String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Tenderloin_4H_Casing_Prog_06-13-2017.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead	1625	0	1625	690	2	12.7	1380	50	Lead: 35:65:6 C Blend	No additives.
SURFACE	Tail		0	1625	250	1.34	14.8	335	50	C	2% CaCl2
INTERMEDIATE	Lead	5255	0	5255	640	2	12.7	1280		Lead: Class C	4% Gel + 1% CaC12
INTERMEDIATE	Tail			5255	200	1.35	14.8	270	50	Tail: Class C	2% CaCl

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead	5255	0	5255	260	1.98	12.7	514		C Blend 35:65:6	No additives
INTERMEDIATE	Tail		0	5255	200	1.34	14.8	268	50	C	2% CaCl
PRODUCTION	Lead	20876	0	20876	890	2.5	11.9	2225	30	Lead: 50:50:10 H Blend	No additives
PRODUCTION	Tail		0	20876	2790	1.24	14.4	3459	30	Tail: 50:50:2 Class H Blend	No additives

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1625	5255	OTHER : Saturated Brine	8.3	8.7							
5255	20876	OTHER : CUT BRINE	8.6	9.4							
0	1625	OTHER : Fresh water gel	8.6	8.8							

Section 6 - Test, Logging, Coring

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

None planned

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

CNL,GR

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5305 **Anticipated Surface Pressure:** 2917.78

Anticipated Bottom Hole Temperature(F): 165

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:

COG Tenderloin 4H_H2S SUP_01-24-2017.pdf

COG Tenderloin 4H_H2S Diagram_01-24-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG_Tenderloin_4H_Direc_Plan_06-13-2017.pdf

Other proposed operations facets description:

None

Other proposed operations facets attachment:

COG_Tenderloin_4H_Drilling_Prog_06-13-2017.pdf

Other Variance attachment:

SUPO

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

COG_Tenderloin_4H_Exisitng_Road_06-22-2017.pdf

Existing Road Purpose: ACCESS **Row(s) Exist?** YES

ROW ID(s)

ID: R35684, R35688, NM136356

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

COG_Tenderloin_4H_Maps_Plat_06-22-2017.pdf

New road type: RESOURCE

Length: 1002.7 Feet **Width (ft.):** 30

Max slope (%): 33 **Max grade (%):** 1

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

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

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Blading

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

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: None necessary

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

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

COG_Tenderloin_4H_1_Mile_Data_06-13-2017.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: If the well is productive, contemplated facilities will be as follows: A tank battery and facilities will be constructed as shown on Production Facility Layout. The tank battery and facilities including all flow lines and piping will be installed according to API specifications.

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Water source use type: ICE PAD CONSTRUCTION & MAINTENANCE, STIMULATION, SURFACE CASING **Water source type:** OTHER

Describe type: Fresh water will be furnished by the CP-1455 water well located in Section 18, T22S, R34E, the water will be purchased from Gregory Glenn's Water Well, PO Box 692, Tatum, NM 88267. **Source longitude:**

Source latitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: PIPELINE

Source transportation land ownership: PRIVATE

Water source volume (barrels): 450000 **Source volume (acre-feet):** 58.001892

Source volume (gal): 18900000

Water source use type: INTERMEDIATE/PRODUCTION CASING **Water source type:** OTHER

Describe type: Brine water will be provided by Salty Dog Brine Station.

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: COMMERCIAL

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 30000 **Source volume (acre-feet):** 3.866793

Source volume (gal): 1260000

Water source and transportation map:

COG Tenderloin 4H_Fresh Water_01-24-2017.pdf

COG Tenderloin 4H_Brine Water_01-24-2017.pdf

Water source comments: Fresh water will be furnished by the CP-1455 water well located in Section 18, T22S, R34E, the water will be purchased from Gregory Glenn's Water Well, PO Box 692, Tatum, NM 88267. Brine water will be provided by Salty Dog Brine Station.

New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from an approved BLM caliche pit located in Section 23. T22S. R33E, or BLM approved caliche pit located in Section 13. T22S. R32E
Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

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

Amount of waste: 6000 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal location description: Trucked to an approved disposal facility

Waste type: SEWAGE

Waste content description: Human waste and gray water

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

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

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

Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Waste type: GARBAGE

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

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Trucked to an approved disposal facility.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Roll off cutting containers on tracks

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

Ancillary Facilities attachment:

COG_Tenderloin_4H_GCP_06-13-2017.pdf

Comments: Gas Capture Plan attached

Section 9 - Well Site Layout

Well Site Layout Diagram:

COG_Tenderloin_4H_Prod_Facility_06-22-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: The well pad location and adjacent landscape is relatively flat, therefore no erosion control structure are needed. Less than 3' of elevation drop across the entire site where the pad is located.
Drainage/Erosion control reclamation: N/A

Wellpad long term disturbance (acres): 2.83	**Wellpad short term disturbance (acres):** 3.54
Access road long term disturbance (acres): 0.32	**Access road short term disturbance (acres):** 0.32
Pipeline long term disturbance (acres): 0	**Pipeline short term disturbance (acres):** 0
Other long term disturbance (acres): 0	**Other short term disturbance (acres):** 0
Total long term disturbance: 3.15	**Total short term disturbance:** 3.86

Reconstruction method: Portions of the pad not needed for production operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused. The stockpiled topsoil will be spread out over reclaimed area and reseeded with BLM approved seed mixture.
Topsoil redistribution: Southeast and East 60'

Soil treatment: None

Existing Vegetation at the well pad: Shinnery Oak/Mesquite grassland

Existing Vegetation at the well pad attachment:

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

Existing Vegetation Community at the road attachment:

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

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: N/A

Existing Vegetation Community at other disturbances attachment:

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type: **Seed source:**

Seed name:

Source name: **Source address:**

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre: **Proposed seeding season:**

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Rand **Last Name:** French

Phone: (432)254-5556 **Email:** rfrench@concho.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: N/A

Weed treatment plan attachment:

Monitoring plan description: N/A

Monitoring plan attachment:

Success standards: N/A

Pit closure description: N/A

Pit closure attachment:

COG Tenderloin 4H_Closed Loop System_01-24-2017.pdf

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: NM OIL CONSERVATION DIVISION, 1625 N FRENCH DRIVE, HOBBS, NM 88240. 575-393-6161

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite completed on 11/17/2016 by Gerald Herrera (COG) and Jeff Robertson (BLM).

Other SUPO Attachment

COG_Tenderloin_4H_Certification_06-13-2017.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: **PWD disturbance (acres):**

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:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

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: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **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 site facilities information:

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

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: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

Bond Info

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000215

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

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.

Operator Name: COG OPERATING LLC

Well Name: TENDERLOIN FEDERAL COM **Well Number:** 4H

NAME: Mayte Reyes **Signed on:** 01/24/2017

Title: Regulatory Analyst

Street Address: 2208 W Main Street

City: Artesia **State:** NM **Zip:** 88210

Phone: (575)748-6945

Email address: Mreyes1@concho.com

Field Representative

Representative Name: Rand French

Street Address: 2208 West Main Street

City: Artesia **State:** NE **Zip:** 88210

Phone: (575)748-6940

Email address: rfrench@concho.com

Payment Info

Payment

APD Fee Payment Method: PAY.GOV

pay.gov Tracking ID: 26098N1Q