

HOBBS OCD

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 30 2017

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM114997
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator COG OPERATING LLC (229131)		7. If Unit or CA Agreement, Name and No. NMNM136125
3a. Address 600 West Illinois Ave Midland TX 79701		8. Lease Name and Well No. (315648) STOVE PIPE FEDERAL COM 1H
3b. Phone No. (include area code) (432)683-7443		9. API Well No. 30-025-43838
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface LOT 1 / 420 FNL / 515 FEL / LAT 32.165571 / LONG -103.399696 At proposed prod. zone SESE / 200 FSL / 330 FEL / LAT 32.138217 / LONG -103.399147		10. Field and Pool, or Exploratory WC-025 G-09 S243532M / WOLFBONE (98098)
11. Sec., T. R. M. or Blk. and Survey or Area SEC 6 / T25S / R35E / NMP		12. County or Parish LEA
13. State NM		14. Distance in miles and direction from nearest town or post office* 12 miles
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 160.6	17. Spacing Unit dedicated to this well 320.35
18. Distance from proposed location* to nearest well, drilling, completed, 1084 feet applied for, on this lease, ft.	19. Proposed Depth 12514 feet / 22300 feet	20. BLM/BIA Bond No. on file FED: NMB000215
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3295 feet	22. Approximate date work will start* 03/01/2017	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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) Mayte Reyes / Ph: (575)748-6945	Date 01/11/2017
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 05/25/2017
Title Supervisor Multiple Resources		
Office 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)

APPROVED WITH CONDITIONS

Ka (Instructions on page 2)
05/30/17



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

Application Data Report

05/25/2017

APD ID: 10400008623

Submission Date: 01/11/2017

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400008623

Tie to previous NOS?

Submission Date: 01/11/2017

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: NMNM114997

Lease Acres: 160.6

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? YES

Federal or Indian agreement: FEDERAL

Agreement number: NMNM136125

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

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WC-025 G-09
S243532M

Pool Name: WOLFBONE

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Is the proposed well in an area containing other mineral resources? 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: 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: 12 Miles

Distance to nearest well: 1084 FT

Distance to lease line: 200 FT

Reservoir well spacing assigned acres Measurement: 320.35 Acres

Well plat: COG_Stove_Pipe_1H__C102_03-22-2017.pdf

Well work start Date: 03/01/2017

Duration: 30 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: 32.165571

Longitude: -103.399696

SHL

Elevation: 3295

MD: 22267

TVD: 12514

Leg #: 1

Lease Type: FEDERAL

Lease #: NMNM114997

NS-Foot: 420

NS Indicator: FNL

EW-Foot: 515

EW Indicator: FEL

Twsp: 25S

Range: 35E

Section: 6

Aliquot:

Lot: 1

Tract:

Operator Name: COG OPERATING LLC
Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.165571	Longitude: -103.399696	
KOP	Elevation: 3295	MD: 22267	TVD: 12514
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM114997	
	NS-Foot: 420	NS Indicator: FNL	
	EW-Foot: 515	EW Indicator: FEL	
	Twsp: 25S	Range: 35E	Section: 6
	Aliquot:	Lot: 1	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.165572	Longitude: -103.3991	
PPP	Elevation: -8741	MD: 12036	TVD: 12036
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM114997	
	NS-Foot: 420	NS Indicator: FNL	
	EW-Foot: 330	EW Indicator: FEL	
	Twsp: 25S	Range: 35E	Section: 6
	Aliquot:	Lot: 1	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.138572	Longitude: -103.399147	
EXIT	Elevation: -9133	MD: 22100	TVD: 12428
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM119760	
	NS-Foot: 330	NS Indicator: FSL	
	EW-Foot: 330	EW Indicator: FEL	
	Twsp: 25S	Range: 35E	Section: 7
	Aliquot: SESE	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.138217	Longitude: -103.399147	
BHL	Elevation: -9219	MD: 22300	TVD: 12514
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM119760	
	NS-Foot: 200	NS Indicator: FSL	
	EW-Foot: 330	EW Indicator: FEL	

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Twsp: 25S

Range: 35E

Section: 7

Aliquot: SESE

Lot:

Tract:



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

Drilling Plan Data Report

05/25/2017

APD ID: 10400008623

Submission Date: 01/11/2017

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

ID: Surface formation

Name: UNKNOWN

Lithology(ies):

Elevation: 0

True Vertical Depth: 0

Measured Depth: 0

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1

Name: RUSTLER

Lithology(ies):

Elevation: -831

True Vertical Depth: 831

Measured Depth: 831

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2

Name: TOP OF SALT

Lithology(ies):

Elevation: -1273

True Vertical Depth: 1273

Measured Depth: 1273

Mineral Resource(s):

NONE

Is this a producing formation? N

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

ID: Formation 3

Name: BASE OF SALT

Lithology(ies):

Elevation: -5126

True Vertical Depth: 5126

Measured Depth: 5126

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 4

Name: LAMAR LS

Lithology(ies):

Elevation: -5440

True Vertical Depth: 5440

Measured Depth: 5440

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 5

Name: BELL CANYON

Lithology(ies):

Elevation: -5481

True Vertical Depth: 5481

Measured Depth: 5481

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 6

Name: CHERRY CANYON

Lithology(ies):

Elevation: -6445

True Vertical Depth: 6445

Measured Depth: 6445

Mineral Resource(s):

NATURAL GAS

OIL

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Is this a producing formation? N

ID: Formation 7

Name: BRUSHY CANYON

Lithology(ies):

Elevation: -8045

True Vertical Depth: 8045

Measured Depth: 8045

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 8

Name: BONE SPRING LIME

Lithology(ies):

Elevation: -9315

True Vertical Depth: 9315

Measured Depth: 9315

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 9

Name: BONE SPRINGS UPPER SHAL

Lithology(ies):

Elevation: -9360

True Vertical Depth: 9360

Measured Depth: 9360

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 10

Name: BONE SPRING LOWER

Lithology(ies):

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Elevation: -9565

True Vertical Depth: 9565

Measured Depth: 9565

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 11

Name: BONE SPRING 1ST

Lithology(ies):

Elevation: -10572

True Vertical Depth: 10572

Measured Depth: 10572

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 12

Name: BONE SPRING 2ND

Lithology(ies):

Elevation: -11104

True Vertical Depth: 11104

Measured Depth: 11104

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 13

Name: BONE SPRING 3RD

Lithology(ies):

Elevation: -12107

True Vertical Depth: 12107

Measured Depth: 12107

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

ID: Formation 14

Name: WOLFCAMP

Lithology(ies):

Elevation: -12559

True Vertical Depth: 12559

Measured Depth: 12559

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

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 Stove Pipe 1H_2M Choke_01-09-2017.pdf

BOP Diagram Attachment:

COG Stove Pipe 1H_2M BOP_01-09-2017.pdf

Pressure Rating (PSI): 5M

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 Stove Pipe 1H_5M Choke_01-09-2017.pdf

BOP Diagram Attachment:

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

COG Stove Pipe 1H_5M Choke_01-09-2017.pdf

COG Stove Pipe 1H_5M BOP_01-09-2017.pdf

Section 3 - Casing

String Type: SURFACE

Other String Type:

Hole Size: 17.5

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -8741

Bottom setting depth MD: 860

Bottom setting depth TVD: 860

Bottom setting depth MSL: -9601

Calculated casing length MD: 860

Casing Size: 13.375

Other Size

Grade: J-55

Other Grade:

Weight: 68

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: 4.96

Burst Design Safety Factor: 0.79

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 11.54

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 11.54

Casing Design Assumptions and Worksheet(s):

COG Stove Pipe 1H_Casing Program_01-24-2017.pdf

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

String Type: INTERMEDIATE

Other String Type:

Hole Size: 12.25

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -8741

Bottom setting depth MD: 11939

Bottom setting depth TVD: 11939

Bottom setting depth MSL: -20680

Calculated casing length MD: 11939

Casing Size: 9.625

Other Size

Grade: L-80

Other Grade:

Weight: 47

Joint Type: OTHER

Other Joint Type: BTC

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.27

Burst Design Safety Factor: 1.23

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 1.94

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 1.94

Casing Design Assumptions and Worksheet(s):

COG Stove Pipe 1H_Casing Program_01-24-2017.pdf

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -8741

Bottom setting depth MD: 22300

Bottom setting depth TVD: 11939

Bottom setting depth MSL: -20680

Calculated casing length MD: 22300

Casing Size: 5.5

Other Size

Grade: P-110

Other Grade:

Weight: 23

Joint Type: OTHER

Other Joint Type: BTC

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 2.13

Burst Design Safety Factor: 2.26

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 2.53

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 2.53

Casing Design Assumptions and Worksheet(s):

COG Stove Pipe 1H_Casing Program_01-24-2017.pdf

Section 4 - Cement

Casing String Type: SURFACE

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 860

Cement Type: Class C

Additives: 4% Gel + 1% CaCl₂

Quantity (sks): 330

Yield (cu.ff./sk): 1.75

Density: 13.5

Volume (cu.ft.): 577

Percent Excess: 50

Tail

Top MD of Segment: 0

Bottom MD Segment: 860

Cement Type: C

Additives: 2% CaCl₂

Quantity (sks): 250

Yield (cu.ff./sk): 1.34

Density: 14.8

Volume (cu.ft.): 335

Percent Excess: 50

Casing String Type: INTERMEDIATE

Stage Tool Depth: 3970

Lead

Top MD of Segment: 0

Bottom MD Segment: 11939

Cement Type: C Blend 35:65:6

Additives: No additives

Quantity (sks): 2600

Yield (cu.ff./sk): 2

Density: 12.7

Volume (cu.ft.): 5200

Percent Excess: 50

Tail

Top MD of Segment: 0

Bottom MD Segment: 11939

Cement Type: C

Additives: 2% CaCl₂

Quantity (sks): 250

Yield (cu.ff./sk): 1.34

Density: 14.8

Volume (cu.ft.): 335

Percent Excess: 50

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 22300

Cement Type: Lead: 50:50:10 H Blend

Additives: No additives

Quantity (sks): 120

Yield (cu.ff./sk): 2.5

Density: 11.9

Volume (cu.ft.): 300

Percent Excess: 30

Tail

Top MD of Segment: 0

Bottom MD Segment: 22300

Cement Type: Tail: 50:50:2 Class H Blend

Additives: No additives

Quantity (sks): 2720

Yield (cu.ff./sk): 1.24

Density: 14.4

Volume (cu.ft.): 3372

Percent Excess: 30

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

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: 860

Mud Type: OTHER

Min Weight (lbs./gal.): 8.4

Density (lbs/cu.ft.):

PH:

Filtration (cc):

Additional Characteristics:

Bottom Depth: 11939

Brine Diesel Emulsion

Max Weight (lbs./gal.): 9

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

Viscosity (CP):

Salinity (ppm):

Top Depth: 11939

Mud Type: OIL-BASED MUD

Min Weight (lbs./gal.): 9.6

Density (lbs/cu.ft.):

PH:

Filtration (cc):

Additional Characteristics:

Bottom Depth: 22300

Max Weight (lbs./gal.): 10.5

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

Viscosity (CP):

Salinity (ppm):

Operator Name: COG OPERATING LLC
Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Top Depth: 0	Bottom Depth: 860
Mud Type: OTHER	Fresh water gel
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:	

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: 6835

Anticipated Surface Pressure: 4081.92

Anticipated Bottom Hole Temperature(F): 180

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:

COG Stove Pipe 1H_H2S SUP_01-09-2017.pdf

COG Stove Pipe 1H_H2S Schematic_01-09-2017.pdf

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG Stove Pipe 1H_AC Report_01-10-2017.pdf

COG Stove Pipe 1H_Directional Plan_01-24-2017.pdf

Other proposed operations facets description:

None

Other proposed operations facets attachment:

COG Stove Pipe 1H_Drilling Plan_01-24-2017.pdf

Other Variance attachment:

COG Stove Pipe 1H_Flex Hose Variance_01-09-2017.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:

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:

Describe 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:

Describe 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:

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:



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

Bond Info Data Report

05/25/2017

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:



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

SUPO Data Report

05/25/2017

APD ID: 10400008623

Submission Date: 01/11/2017

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? NO

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

COG Stove Pipe 1H_Maps Plats_01-24-2017.pdf

New road type: RESOURCE

Length: 1748 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

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

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 Stove Pipe 1H_1 Mile Map Data_01-24-2017.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: Production will be sent to the Stove Pipe Federal Com #2H Central Tank Battery facility. A surface flow line of approximately 1546.2' of 3" steel pipe carrying oil, gas and water under a maximum pressure of 125 psi will follow the road to the facility at the Stove Pipe Federal Com #2H Central Tank Battery location. We plan to install a 4" surface polyethylene pipe transporting Gas Lift Gas from the Stove Pipe Federal Com #2H Central Tank Battery to the Stove Pipe Federal Com #1H. The surface Gas Lift Gas pipe of approximately 1546.2' under a maximum pressure of 125 psi will be installed no farther than 10 feet from the edge of the road.

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

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

Water source type: OTHER

Describe type: Fresh water will be furnished by the J-5 water well located in Section 13, T26S, R35E, the water will be purchased from Gregory Rock House Ranch LLC, 1108 W Pierce Street, Carlsbad, NM 88220.

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 Malaga Brine Station. Brine water will be purchased from Mesquite SWD Inc., P O Box 1479, Carlsbad, NM 88221. Phone: 575-706-1840

Source longitude:

Source latitude:

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 Stove Pipe 1H_Brine Water_01-10-2017.pdf

COG Stove Pipe 1H_Fresh Water_01-10-2017.pdf

Water source comments: Fresh water will be furnished by the J-5 water well located in Section 13, T26S, R35E, the water will be purchased from Gregory Rock House Ranch LLC, 1108 W Pierce Street, Carlsbad, NM 88220. Brine water will be provided by Malaga Brine Station. Brine water will be purchased from Mesquite SWD Inc., P O Box 1479, Carlsbad, NM 88221. Phone: 575-706-1840

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:

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from a BLM approved caliche pit. Candidate source will be caliche pit from Bert Madera located in Section 6. T24S. R35E.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: SEWAGE

Waste content description: Human waste and gray water

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Waste type: DRILLING

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

Amount of waste: 6000 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

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: 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

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

Ancillary Facilities attachment:

COG Stove Pipe 1H_GCP_01-10-2017.pdf

Comments: Gas Capture Plan attached

Section 9 - Well Site Layout

Well Site Layout Diagram:

COG Stove Pipe 1H_Production Facility_01-10-2017.pdf

COG Stove Pipe 1H_Flowline_01-11-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: Due to the flat topography that is identified on the 600' x 600' plat there is no need for erosion control structures.

Drainage/Erosion control reclamation: N/A

Wellpad long term disturbance (acres): 2.35

Wellpad short term disturbance (acres): 3.4

Access road long term disturbance (acres): 0.56

Access road short term disturbance (acres): 0.56

Pipeline long term disturbance (acres): 3.5353534E-7

Pipeline short term disturbance (acres): 3.5353534E-7

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 2.9100003

Total short term disturbance: 3.9600003

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 65'

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

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: N/A

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed 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
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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

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

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 Stove Pipe 1H_Closed Loop System_01-10-2017.pdf

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Operator Name: COG OPERATING LLC

Well Name: STOVE PIPE FEDERAL COM

Well Number: 1H

Fee Owner: Bert Madera

Fee Owner Address: PO Box 2795, Ruidoso NM 88355

Phone: (575)631-4444

Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: As per Surface Use and Occupancy Agreement between COG Operating LLC and S&S, Inc., dated

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite completed on 10/27/2016 by Gerald Herrera (COG) and Jeff Robertson (BLM).

Other SUPO Attachment

COG Stove Pipe 1H_Certification_01-10-2017.pdf

COG Stove Pipe 1H_Closed Loop System_01-13-2017.pdf



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



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: Mayte Reyes

Signed on: 01/09/2017

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: NM

Zip: 88210

Phone: (575)748-6940

Email address: rfrench@concho.com