

HOBBS OCD
SEP 26 2017

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		3. Lease Serial No. NMNM0897
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 APACHE CORPORATION (873)		7. If Unit or CA Agreement, Name and No.
3a. Address 303 Veterans Airpark Lane #1000 Midland TX		8. Lease Name and Well No. 319564 BLACK & TAN 27 FEDERAL C 307H
3b. Phone No. (include area code) (432)818-1000		9. API Well No. 30-025-44044
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE / 215 FSL / 782 FEL / LAT 32.5374365 / LONG -103.5420357 At proposed prod. zone NENE / 280 FNL / 1025 FEL / LAT 32.5505983 / LONG -103.5428302		10. Field and Pool, or Exploratory BONE SPRING / LEA, BONE SPRING, S
11. Sec., T. R. M. or Blk. and Survey or Area SEC 27 / T20S / R34E / NMP	12. County or Parish LEA	13. State NM
14. Distance in miles and direction from nearest town or post office* 25 miles	15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 215 feet	16. No. of acres in lease 240
17. Spacing Unit dedicated to this well 160	18. Distance from proposed location* to nearest well, drilling, completed, 40 feet applied for, on this lease, ft. 40 feet	19. Proposed Depth 11050 feet / 15751 feet
20. BLM/BIA Bond No. on file FED: NMB000736	21. Elevations (Show whether DF, KDB, RT, GL., etc.) 3715 feet	22. Approximate date work will start* 09/20/2017
23. Estimated duration 35 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) Sorina Flores / Ph: (432)818-1167	Date 02/07/2017
Title Supv of Drilling Services		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 09/22/2017
Title Supervisor Multiple Resources		
Office CARLSBAD		

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 09/26/17

Double

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

1. SHL: SESE / 215 FSL / 782 FEL / TWSP: 20S / RANGE: 34E / SECTION: 27 / LAT: 32.5374365 / LONG: -103.5420357 (TVD: 0 feet, MD: 0 feet)
PPP: SESE / 215 FSL / 782 FEL / TWSP: 20S / RANGE: 34E / SECTION: 27 / LAT: 32.5374365 / LONG: -103.5420357 (TVD: 8575 feet, MD: 8575 feet)
BHL: NENE / 280 FNL / 1025 FEL / TWSP: 20S / RANGE: 34E / SECTION: 27 / LAT: 32.5505983 / LONG: -103.5428302 (TVD: 11050 feet, MD: 15751 feet)

BLM Point of Contact

Name: Deborah McKinney
Title: Legal Instruments Examiner
Phone: 5752345931
Email: dmckinne@blm.gov

CONFIDENTIAL

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

CONFIDENTIAL



APD ID: 10400010834

Submission Date: 02/07/2017

Highlighted data
reflects the most
recent changes

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400010834

Tie to previous NOS?

Submission Date: 02/07/2017

BLM Office: CARLSBAD

User: Sorina Flores

Title: Supv of Drilling Services

Federal/Indian APD: FED

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

Lease number: MNM0897

Lease Acres: 240

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: APACHE CORPORATION

Operator letter of designation:

Operator Info

Operator Organization Name: APACHE CORPORATION

Operator Address: 303 Veterans Airpark Lane #1000

Zip: 79705

Operator PO Box:

Operator City: Midland

State: TX

Operator Phone: (432)818-1000

Operator Internet Address:

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: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: BONE SPRING

Pool Name: LEA, BONE
SPRING, S

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

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

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: OTHER

Describe sub-type: DEVELOPMENT

Distance to town: 25 Miles

Distance to nearest well: 40 FT

Distance to lease line: 215 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: BlkTan27FedCom307H_PlatREV2_sign_04-13-2017.pdf

Well work start Date: 09/20/2017

Duration: 35 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	215	FSL	782	FEL	20S	34E	27	Aliquot SESE	32.5374365	-103.5420357	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 0897	3715	0	0
KOP Leg #1	215	FSL	782	FEL	20S	34E	27	Aliquot SESE	32.5374365	-103.5420357	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 0897	-6832	10547	10547
PPP Leg #1	215	FSL	782	FEL	20S	34E	27	Aliquot SESE	32.5374365	-103.5420357	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 0897	-4860	8575	8575

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

	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	280	FNL	102 5	FEL	20S	34E	27	Aliquot NENE	32.55059 83	- 103.5428 302	LEA	NEW MEXI CO	FIRS T PRIN	F	NMNM 082	- 733 5	157 51	110 50
BHL Leg #1	280	FNL	102 5	FEL	20S	34E	27	Aliquot NENE	32.55059 83	- 103.5428 302	LEA	NEW MEXI CO	FIRS T PRIN	F	NMNM 082	- 733 5	157 51	110 50



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: Sorina Flores

Signed on: 02/01/2017

Title: Supv of Drilling Services

Street Address: 303 Veterans Airpark Ln #1000

City: Midland

State: TX

Zip: 79705

Phone: (432)818-1167

Email address: sorina.flores@apachecorp.com

Field Representative

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

APD ID: 10400010834

Submission Date: 02/07/2017

Highlighted data reflects the most recent changes

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
17746	RUSTLER	3715	1635	1635		POTASH	No
18574	SALADO	1745	1970	1970		POTASH	No
17724	TANSILL	340	3375	3375		OIL	No
17694	YATES	180	3535	3535		NATURAL GAS,OIL	No
17740	CAPITAN REEF	-1043	4758	4758		OTHER : WATER	No
15315	DELAWARE	-1965	5680	5680		OIL	No
17688	BONE SPRING	-4860	8575	8575		OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 12500

Equipment: Rotating Head, Mud Gas Separator, Blow Down Pit, Flare Line

Requesting Variance? NO

Variance request:

Testing Procedure: BOP/BOPE will be tested by independent service company to 250psi low and high pressure indicated above per Onshore Order 2 requirements. System may be upgraded to higher pressure but sill tested to WP listed . If system is upgraded, all components installed will be functional and tested. Pipe rams will be operationally checked each 24 hr period. Blind rams will be operationally checked on each TOOH. These checks will be noted on daily tour sheets. Other accessories to BOP equipment will include Kelly cock and floor safety valve (inside BOP), choke lines and choke manifold. (see attached schematic)

Choke Diagram Attachment:

BlkTan27Fed307H_BOP_Manif_SchemREV_07-18-2017.pdf

BOP Diagram Attachment:

BlkTan27Fed307H_BOP_Manif_SchemREV_07-18-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

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	INTERMEDIATE	12.25	9.625	NEW	API	N	0	900	0	900	-7335	-8235	900	J-55	40	BUTT	5.37	1.7	BUOY	2.24	BUOY	1.96
2	SURFACE	17.5	13.375	NEW	API	N	0	1700	0	1700	-7335	-9035	1700	J-55	54.5	BUTT	2.15	1.82	BUOY	4.04	BUOY	3.79
3	INTERMEDIATE	12.25	9.625	NEW	API	N	900	5780	900	5780	-8235	-13115	4880	J-55	40	LTC	1.54	1.87	BUOY	1.8	BUOY	2.15
4	PRODUCTION	8.75	5.5	NEW	API	N	0	15751	0	15751	-7335	-23086	15751	P-110	17	BUTT	1.34	1.28	BUOY	2.12	BUOY	2.03

Casing Attachments

Casing ID: 1 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BlkTan27FedCom307H_IntermCsgAssum_04-06-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Casing Attachments

Casing ID: 2 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BlkTan27FedCom307H_SurfCsgAssump_04-06-2017.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BlkTan27FedCom307H_IntermCsgAssum_04-06-2017.pdf

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BlkTan27FedCom307H_ProdCsgAssump_04-06-2017.pdf

Section 4 - Cement

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1285	650	1.73	13.5	1124	25	CI C	4% Bentonite + 1% CaCl2
SURFACE	Tail		1285	1700	300	1.33	14.8	399	25	CI C	1% CaCl2
INTERMEDIATE	Lead		0	5144	1043	1.89	12.9	1966.06	25	CI C	5% NaCl + 6% Bentonite + 2 lb/sk Kolseal + 0.125 lb/sk CF + 0.4% Retarder
INTERMEDIATE	Tail		5144	5780	200	1.34	14.8	268	25	CI C	0.2% Retarder
INTERMEDIATE	Lead		0	5144	1043	1.89	12.9	1966.06	25	CI C	5% NaCl + 6% Bentonite + 2 lb/sk Kolseal + 0.125 lb/sk CF + 0.4% Retarder
INTERMEDIATE	Tail		5144	5780	200	1.34	14.8	268	25	CI C	0.2% Retarder
PRODUCTION	Lead		3000	10547	936	2.32	11.9	2171	20	CI H	10% Gel + 5% Salt
PRODUCTION	Tail		10547	15751	1102	1.44	12.8	1586.88	20	TXI Lite	0.3% Fluid Loss + 0.2% Retarder

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

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

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
0	1700	SPUD MUD	8.3	9							
1700	5780	SALT SATURATED	9.8	10.5							
5780	11124	OTHER : CUT BRINE	8.6	9.5							

Section 6 - Test, Logging, Coring

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

Drill stem test will be based on geological sample shows. Onshore Order 2.111.D shall be followed. Will run GR/CNL from TD to surf (horizontal well - vertical portion of hole). Stated logs run will be in the completion report & submitted to BLM.

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

CBL,CNL/FDC,DS,GR,MWD,MUDLOG,TL

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5206

Anticipated Surface Pressure: 2757.4

Anticipated Bottom Hole Temperature(F): 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? YES

Describe:

Capitan Reef poses lost circulation potential

Contingency Plans geohazards description:

For Capitan Reef we will be switching over to a fresh water system if lost circ is encountered. A 2 stage cement job will be proposed to get cement to surface.

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

BkTan27FedCom307H_H2SOpsContPlan_04-06-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BlkTan27FedCom307H_WallPlot_04-06-2017.pdf

BlkTan27FedCom307H_DirPlan_04-06-2017.pdf

Other proposed operations facets description:

**Cement contingency plan attached if loss circulation is encountered. System does not allow for contingency plans. Complete csg & cmt plan attached due to system irregularities.

**Cmt info is duplicated on Section 4 for Interm cmt. AFMSS requires same segments in cmt & csg.. AFMSS application is needing to correlate section 3 and section 4. Lucinda Lewis with AFMSS is aware of the issue. AFMSS team working on the issue. Casing & Cement detail attached.

**Apache requesting variance to use flexible hose between BOP & Manifold, see attachment for additional information.

*Anticipated Completion Date: 3/28/2018

*Anticipated First Production Date: 5/5/2018

Other proposed operations facets attachment:

BlkTan27FedCom307H_CsgDetail_04-06-2017.pdf

BlkTan27FedCom307H_CmtDetail_04-06-2017.pdf

BlkTan27FedCom307H_308H_GasCapturePlan_07-18-2017.pdf

Other Variance attachment:

BlkTan27FedCom307H_Flexline_04-06-2017.pdf



APD ID: 10400010834	Submission Date: 02/07/2017	Highlighted data reflects the most recent changes Show Final Text
Operator Name: APACHE CORPORATION		
Well Name: BLACK & TAN 27 FEDERAL COM	Well Number: 307H	
Well Type: OIL WELL	Well Work Type: Drill	

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

BlkTan27FedCom307H_ExistRds_04-06-2017.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

BlkTan27FedCom307H_NewRoad_04-06-2017.pdf

New road type: LOCAL

Length: 804.93 Feet

Width (ft.): 25

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: ROAD WILL BE CROWNED FOR WATER DRAINAGE AND TO CONTROL EROSION

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Access surfacing type: OTHER

Access topsoil source: OFFSITE

Access surfacing type description: Caliche provided by lessor pursuant Surface Use Agmt

Access onsite topsoil source depth:

Offsite topsoil source description: Topsoil provided by lessor pursuant Surface Use Agmt

Onsite topsoil removal process:

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: ROAD WILL BE CROWNED FOR WATER DRAINAGE

Road Drainage Control Structures (DCS) description: ROAD WILL BE CROWNED TO ALLOW FOR WATER DRAINAGE

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:

BlkTan27FedCom307H_1MiRadius_04-06-2017.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Estimated Production Facilities description:

Production Facilities description: A 4.5 inch, 804.99 foot, buried fiberglass PL, rated 1500psi, operating approx 200psi, to transport production will be installed from proposed well to proposed offsite production facility. A 30 feet wide disturbance will be needed to install buried PL. In areas where blading is allowed, topsoil will be stockpiled and separated from excavated trench mineral material. Final reclamation procedures will match procedures in plans for surface reclamation. When excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over pipeline will be evident. The proposed pipeline does not cross lease boundaries, so a ROW will not need to be acquired from BLM.

Production Facilities map:

BlackTan27FedCom304H_PL_02-01-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: INTERMEDIATE/PRODUCTION CASING

Water source type: OTHER

Describe type: BRINE

Source latitude: 32.48407

Source longitude: -103.15848

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

Source land ownership: FEDERAL

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 4000

Source volume (acre-feet): 0.51557237

Source volume (gal): 168000

Water source use type: INTERMEDIATE/PRODUCTION CASING,
SURFACE CASING

Water source type: GW WELL

Describe type:

Source latitude: 32.62567

Source longitude: -103.51543

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

Source land ownership: FEDERAL

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3000

Source volume (acre-feet): 0.3866793

Source volume (gal): 126000

Water source and transportation map:

BlkTan27FedCom307H_FW_04-06-2017.pdf

BlkTan27FedCom307H_BrineWtr_04-06-2017.pdf

Water source comments:

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:

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

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 provided by lessor pursuant surface use agmt.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling fluid, during drilling ops and completion ops, will be stored safely and recycled to next well. Any excess will be hauled to approved NMOCD disposal facility

Amount of waste: 2500 barrels

Waste disposal frequency : One Time Only

Safe containment description: Drilling fluids will be stored in sealed frac tanks

Safe containmant attachment:

Waste disposal type: RECYCLE

Disposal location ownership: OTHER

Disposal type description:

Disposal location description: Next well or trucked to an approved disposal facility

Waste type: DRILLING

Waste content description: Excess cement returns

Amount of waste: 40 barrels

Waste disposal frequency : Weekly

Safe containment description: Cement returns will be stored in steel roll off bins

Safe containmant attachment:

Waste disposal type: OTHER

Disposal location ownership: PRIVATE

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Disposal type description: Haul to private facility

Disposal location description: R360, 6601 W Hobbs Hwy, Carlsbad, NM 88220

Waste type: GARBAGE

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

Amount of waste: 1500 pounds

Waste disposal frequency : Weekly

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

Safe containmant attachment:

Waste disposal type: OTHER

Disposal location ownership: STATE

Disposal type description: land fill

Disposal location description: Lea County Landfill

Waste type: SEWAGE

Waste content description: Human waste and grey water

Amount of waste: 2000 gallons

Waste disposal frequency : Weekly

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

Safe containmant attachment:

Waste disposal type: OTHER

Disposal location ownership: STATE

Disposal type description: Municipal waste facility

Disposal location description: Hobbs Municipal Waste 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

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Cuttings will be stored in steel haul off bins and taken to an NMOCD approved disposal facility

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

BlkTan27FedCom307H_RigLayout_04-06-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: During construction, proper erosion control methods will be used to control erosion, runoff and siltation of surrounding area

Drainage/Erosion control reclamation: Proper erosion control methods will be used to control erosion, runoff and siltation of surrounding areas

Wellpad long term disturbance (acres): 3.902

Wellpad short term disturbance (acres): 3.902

Access road long term disturbance (acres): 0.462

Access road short term disturbance (acres): 0.462

Pipeline long term disturbance (acres): 0.0003815427

Pipeline short term disturbance (acres): 0.0003815427

Other long term disturbance (acres): 0.158

Other short term disturbance (acres): 0.158

Total long term disturbance: 4.5223813

Total short term disturbance: 4.5223813

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with surrounding topography as much as possible. Where applicable, any fill material of well pad will be backfilled into the cut to bring area back to original contour.

Topsoil redistribution: Topsoil will be evenly distributed and aggressively revegetated over the entire disturbed area not needed for all-weather operations.

Soil treatment: After all disturbed areas have been properly prepared, areas will need to be seeded with recommended seed mixture, free of noxious weeds. Final seedbed prep will consist of contour cultivating to a depth of 4-6 inches within 24 hrs prior to seeding, dozer tracking or other imprinting in order to break soil crust to create seed germination micro-sites.

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

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
-----------	-------------

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name:

Last Name:

Phone:

Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: No invasive species present. Standard regular maintenance to maintain to maintain a clear location and road.

Weed treatment plan attachment:

Monitoring plan description: Identify area supporting weeds prior to construction, prevent introduction and spread of weeds from construction equipment during construction and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

Monitoring plan attachment:

Success standards: Maintain all disturbed areas as per Gold Book standards

Pit closure description: N/A

Pit closure attachment:

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:

Operator Name: APACHE CORPORATION

Well Name: BLACK & TAN 27 FEDERAL COM

Well Number: 307H

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: T over V Ranch C/O Dan Berry

Fee Owner Address: PO Box 160, Eunice, NM 88231

Phone: (575)369-5266

Email:

Surface use plan certification: YES

Surface use plan certification document:

BlkTan27FedCom307H_SurfAgmt_04-06-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: Surface access agmt has been negotiated with private land owner. No bond necessary

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: Onsite completed by Jeffery Robertson on 1/13/2016. Arch survey has been completed by Boone Arch Services. Operator Rep: Larry VanGilder, Drlg Supt, 432-818-1965 or 432-557-1097; Operator Production Rep: Lou Phillips, 575-393-2144. Apache plans to insall an overhead electrical line for the proposed well. Length of line will be 230.11 feet with approx. 30 feet of disturbance. Elect line will be constructed to provide protection from raptor electrocution. Proposed line does not cross lease boundaries. ROW grant will not need to be acquired from BLM.

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

BlkTan27FedCom307H_ElectLine_04-06-2017.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:

Assigned injection well API number?

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Injection well name:

Injection well API number:

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 Information

Federal/Indian APD: FED

BLM Bond number: NMB000736

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: