Form 3160-3
(June 2015)

OCD – HOBBS
08/14/2020
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FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM127892

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No.
BIG STAG FED COM
[327306]
304H

2. Name of Operator
ASCENT ENERGY LLC [325830]

9. API Well No. 30-025-47561

3a. Address
1621 18th Street, Suite 200, Denver, CO 80202

3b. Phone No. *(include area code)*
(720) 710-8999

10. Field and Pool, or Exploratory [97895]
WC-025 G-08 S213304D; BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NWNE / 195 FNL / 2241 FEL / LAT 32.50015 / LONG -103.627095
At proposed prod. zone NWNE / 1270 FNL / 2310 FEL / LAT 32.482678 / LONG -103.627335

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 12/T21S/R32E/NMP

14. Distance in miles and direction from nearest town or post office*
22 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)
195 feet

16. No of acres in lease
480

17. Spacing Unit dedicated to this well
200.0

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

19. Proposed Depth
9198 feet / 15669 feet

20. BLM/BIA Bond No. in file
FED: NMB001698

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3795 feet

22. Approximate date work will start*
10/01/2020

23. Estimated duration
90 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

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 requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	BRIAN WOOD / Ph: (720) 710-8999	03/28/2020

Title
President

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	08/12/2020

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

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.

GCP Rec 08/14/2020

SL

APPROVED WITH CONDITIONS

KZ
08/23/2020

Approval Date: 08/12/2020

(Continued on page 2)

*(Instructions on page 2)

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 305H
SURFACE HOLE FOOTAGE:	100'/N & 2080'/W
BOTTOM HOLE FOOTAGE	1271'/N & 2310'/W
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 306H
SURFACE HOLE FOOTAGE:	100'/N & 2005'/W
BOTTOM HOLE FOOTAGE	1271'/N & 1650'/W
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 403H
SURFACE HOLE FOOTAGE:	100'/N & 2055'/W
BOTTOM HOLE FOOTAGE	1271'/N & 2310'/W
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 504H
SURFACE HOLE FOOTAGE:	100'/S & 2054'/W
BOTTOM HOLE FOOTAGE	1271'/N & 2178'/W
LOCATION:	SECTION 1, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 602H
SURFACE HOLE FOOTAGE:	100'/S & 2029'/W
BOTTOM HOLE FOOTAGE	1271'/N & 1650'/W
LOCATION:	SECTION 1, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 705H
SURFACE HOLE FOOTAGE:	100'/S & 2079'/W
BOTTOM HOLE FOOTAGE	1271'/N & 2310'/W
LOCATION:	SECTION 1, T21S, R32E, NMPM
COUNTY:	LEA

Approval Date: 08/12/2020

OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BULL FED COM 706H
SURFACE HOLE FOOTAGE:	100'/N & 2030'/W
BOTTOM HOLE FOOTAGE	1271'/N & 1650'/W
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BUCKS FED COM 301H
SURFACE HOLE FOOTAGE:	100'/N & 601'/E
BOTTOM HOLE FOOTAGE	1266'/N & 330'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BUCKS FED COM 302H
SURFACE HOLE FOOTAGE:	75'/N & 601'/E
BOTTOM HOLE FOOTAGE	1267'/N & 990'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BUCKS FED COM 401H
SURFACE HOLE FOOTAGE:	50'/N & 601'/E
BOTTOM HOLE FOOTAGE	1266'/N & 330'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BUCKS FED COM 502H
SURFACE HOLE FOOTAGE:	75'/N & 401'/E
BOTTOM HOLE FOOTAGE	1267'/N & 1254'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG BUCKS FED COM 702H
SURFACE HOLE FOOTAGE:	25'/N & 601'/E
BOTTOM HOLE FOOTAGE	1267'/N & 990'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA

OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG STAG FED COM 303H
SURFACE HOLE FOOTAGE:	195'/N & 2166'/E
BOTTOM HOLE FOOTAGE	1268'/N & 1650'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG STAG FED COM 304H
SURFACE HOLE FOOTAGE:	195'/N & 2241'/E
BOTTOM HOLE FOOTAGE	1270'/N & 2310'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG STAG FED COM 402H
SURFACE HOLE FOOTAGE:	195'/N & 2191'/E
BOTTOM HOLE FOOTAGE	1268'/N & 1650'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM092187
WELL NAME & NO.:	BIG STAG FED COM 704H
SURFACE HOLE FOOTAGE:	195'/N & 2216'/E
BOTTOM HOLE FOOTAGE	1270'/N & 2310'/E
LOCATION:	SECTION 12, T21S, R32E, NMPM
COUNTY:	LEA

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

Notification
Topsoil
Closed Loop System
Well Pads
Roads

☐ **Road Section Diagram**

☐ **Production (Post Drilling)**

Well Structures & Facilities
Pipelines
Oil and Gas Related Sites

☐ **Interim Reclamation**

☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Wildlife:

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

New Wildlife Water Construction Stipulations

Ascent Energy LLC will be required to construct a new wildlife water to replace the QU #45 wildlife water and will contact Keith Simpson, President of Southeast New Mexico Wildlife (SENMW) and Tom Denniston at the Bureau of Land Management (BLM) prior to the start of dissembling of the Wildlife Water QU #45 or construction of the new wildlife water, whichever comes first. Keith may be reached at 575-361-2917 and Tom may be reached at 575-234-5923 (ldenniston@blm.gov). The new wildlife water will be constructed and approved before construction or drilling of any of the Big Bull, Big Stag, or Big Buck infrastructure. The old QU #45 wildlife water will be fully disassembled and taken to a state approved waste facility or recycled within 3 months of the first Big Stagg or Big Buck well spud date. Ascent will relocate the wildlife water QU #45 to:
-103 degrees 37'28.44"W, 32 degrees 29'38.82"N. Ascent will fully construct the new wildlife water to the approved specifications of the BLM Wildlife Department and SENMW. Ascent will be accepting all costs and labor to appropriately disassemble QU #45 wildlife water and to construct the new wildlife water. Lastly, Ascent LLC is required to contact Keith Simpson and Tom Denniston upon completion for the final approval of the new wildlife water. The new wildlife water will be assembled to BLM standards using the following:

- 3 C-perlin 25’
- 1 Gutter 26’, 15’ to center
- 1 Gutter downspout
- Angled spout 8” to 9”
- down spout 3’8”
- 1 1225 Gal Polytank
- Rainwater Drinker

- Overflow pipe
  - 3 90° Elbow Joints $2^{3/4}$” OD $2^{1/2}$” ID
  - 1 PVC Pipe $2^{1/2}$”OD, $2^{1/4}$”ID
  - 2 PVC Pipe $5^{1/2}$” to 6”
  - 1 PVC Pipe Connector $2^{3/4}$”OD w/6 sided angel points

- 9 5 ft to 6 ft metal pipe $2^{1/4}$” dependent on slope of terrain

- 2 1” aluminum or metal pipe w/valve ass’y

- 1 $1^{1/4}$” OD polypipe various length dependent on need.

- Fence
- 3 strand wire
  - Top 2 strand barbed wire
  - Bottom strand smooth wire
  - T-posts
  - 4 metal pipe corner posts

- Each corner contains 3 metal pipes with diagonal posts

- Fence length
  - ~50 yards X ~75 yards

- 1 Gate
  - ~15’8”
  - 3 strand smooth wire

- 2 T-posts that have the T removed

- The roofing needs to be at a slope so the rainwater drains down into the gutter.

- R Panel

Approval Date: 08/12/2020

Please contact Tom and Keith for wildlife water construction guidance and questions on BLM and SENMW wildlife water specifications.

Potash Resources:

Lessees must comply with the 2012 Secretarial Potash Order. The Order is designed to manage the efficient development of oil, gas, and potash resources. Section 6 of the Order provides general provisions which must be followed to minimize conflict between the industries and ensure the safety of operations. To minimize impacts to potash resources, the proposed well is confined within the boundaries of the established Big Bucks Drill Island.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

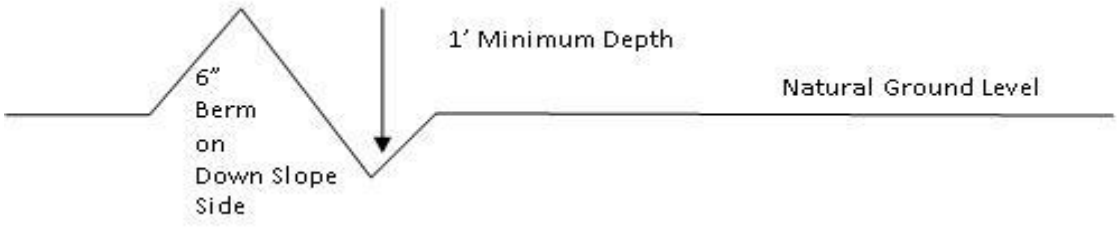
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Cattle guards An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Livestock Watering Requirement Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

Public Access
Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

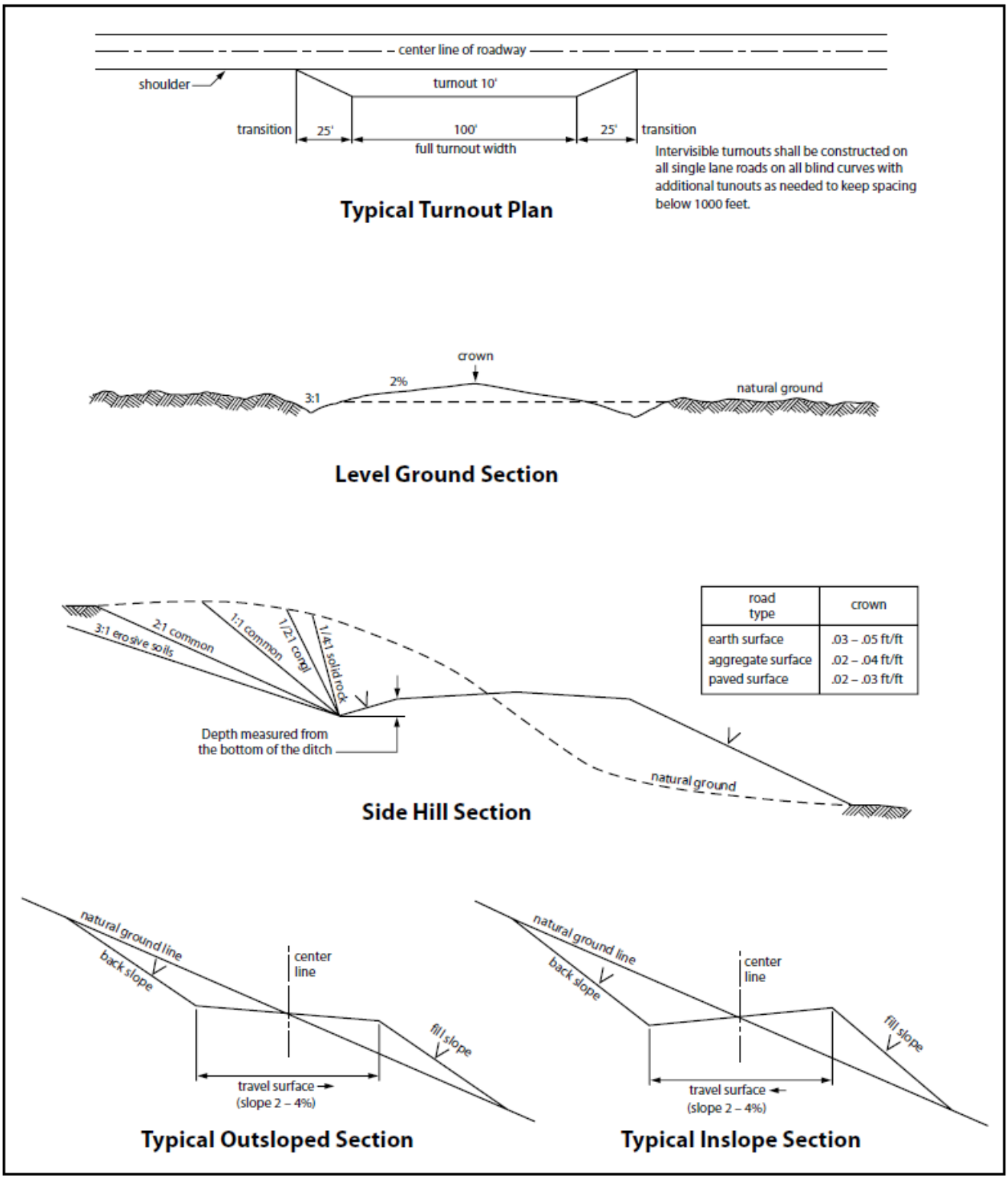


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone*.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the APD and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system,

impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **60** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **60** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation*.)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **60** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

( ) seed mixture 1 ( ) seed mixture 3

( ) seed mixture 2 ( ) seed mixture 4

(X) seed mixture 2/LPC ( ) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches that are not otherwise fenced, screened, or netted to prevent livestock, wildlife, and

humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

19. Special Stipulations:

Wildlife:

Lesser Prairie-Chicken

Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching:
Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Hydrology:

BURIED PIPELINE(S):
When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

C. OIL AND GAS RELATED SITES

STANDARD STIPULATIONS FOR OIL AND GAS RELATED SITES

A copy of the application (Grant/Sundry Notice) and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant and for all response costs, penalties, damages, claims, and other costs arising from the provisions of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Chap. 82, Section 6901 et. seq., from the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Chap. 109, Section 9601 et. seq., and from other applicable environmental statues.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the site or related pipeline(s), any oil or other pollutant should be discharged from site facilities, the pipeline(s) or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil of other pollutant, wherever

found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

5. Sites shall be maintained in an orderly, sanitary condition at all times. Waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, brines, chemicals, oil drums, ashes, and equipment.

6. The operator will notify the Bureau of Land Management (BLM) authorized officer and nearest Fish and Wildlife Service (FWS) Law Enforcement office within 24 hours, if the operator discovers a dead or injured federally protected species (i.e., migratory bird species, bald or golden eagle, or species listed by the FWS as threatened or endangered) in or adjacent to a pit, trench, tank, exhaust stack, or fence. (If the operator is unable to contact the FWS Law Enforcement office, the operator must contact the nearest FWS Ecological Services office.)

7. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is **Shale Green**, Munsell Soil Color Chart Number 5Y 4/2.

8. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

9. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. There are several options available for purchasing mineral material: contact the BLM office (575-234-5972).

10. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

11. Once the site is no longer in service or use, the site must undergo final abandonment. At final abandonment, the site and access roads must undergo "final" reclamation so that the character and productivity of the land are restored. Earthwork for final reclamation must be completed within six (6) months of the abandonment of the site. All pads and facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact. After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

12. The holder shall stockpile an adequate amount of topsoil where blading occurs. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles. The topsoil will be used for final reclamation.

13. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

( ) seed mixture 1	( ) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
(X) seed mixture 2/LPC	( ) Aplomado Falcon Mixture

14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.

15. Open-topped Tanks - The operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the

operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps

16. The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an

impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

17. Open-Vent Exhaust Stack Exclosures – The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

18. Containment Structures - Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

19. Special Stipulations:

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the well pad during the life of the well will be corrected within two weeks and proper measures will be taken to prevent future erosion.

Wildlife:

Lesser Prairie-Chicken

Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted. Exhaust noise from permanent engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

Hydrology:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce

the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Ascent Energy LLC**
LEASE NO.:	**NMNM127892**
WELL NAME & NO.:	Big Stag Federal Com 304H
SURFACE HOLE FOOTAGE:	195'/N & 2241'/E
BOTTOM HOLE FOOTAGE	1270'/N & 2310'/E
LOCATION:	Section 12, T.21 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

COA

H2S	◉ Yes	○ No	
Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☑ 4 String Area	☑ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Bone Spring** Formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8 inch** surface casing shall be set at approximately **1,675 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8 inch** intermediate 1 casing and shall be set at approximately **3,300 feet** is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

❖ In R111 Potash Areas if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.

❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The minimum required fill of cement behind the **7-5/8 inch** intermediate 2 casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.**

The Intermediate 2 Casing has an excess of 24%. Additional cement may be needed.

4. The minimum required fill of cement behind the **5-1/2 inch** production casing is:

    - Cement should tie-back at least **50 feet** on top of Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. If cement does not circulate see B.1.a, c-d above.
      Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface and intermediate casing shoes shall be **5000 (5M)** psi. **Variance is approved to use a 3000 (3M) Annular which shall be tested to 3000 (3M) psi.**

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of **4** hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

YJ (07/30/2020)

APD ID: 10400055610 **Submission Date:** 03/28/2020

Operator Name: ASCENT ENERGY LLC

Well Name: BIG STAG FED COM **Well Number:** 304H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
699893	QUATERNARY	3795	0	0	OTHER : None	NONE	N
699894	RUSTLER ANHYDRITE	2192	1603	1603	ANHYDRITE	NONE	N
699895	SALADO	1887	1908	1908	SALT	NONE	N
699896	BASE OF SALT	792	3003	3016	SALT	NONE	N
699897	TANSILL	637	3158	3173	LIMESTONE	NONE	N
699898	YATES	477	3318	3338	SANDSTONE, SHALE	NATURAL GAS, OIL	N
699899	CAPITAN REEF	152	3643	3669	LIMESTONE	USEABLE WATER	N
699900	DEAN SAND	-1478	5273	6008	SANDSTONE	NATURAL GAS, OIL	N
699901	CHERRY CANYON	-2178	5973	6008	SANDSTONE	NATURAL GAS, OIL	N
699902	BRUSHY CANYON	-3348	7143	7178	SANDSTONE	NATURAL GAS, OIL	N
699903	BONE SPRING LIME	-5053	8848	8883	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
699904	BONE SPRING	-5103	8898	9048	LIMESTONE, OTHER, SHALE : Avalon Sand	NATURAL GAS, OIL	N
699905	BONE SPRING	-5398	9193	9337	LIMESTONE, OTHER, SHALE : Leonard	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: ASCENT ENERGY LLC

Well Name: BIG STAG FED COM **Well Number:** 304H

Pressure Rating (PSI): 5M **Rating Depth:** 15000

Equipment: A 15,000 a 5,000 psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.
Requesting Variance? YES

Variance request: Ascent requests a variance to run a multi-bowl speed head for setting the Intermediate 1, Intermediate 2, and Production Strings. Ascent requests a variance to drill this well using a co-flex line between the BOP and choke manifold (instead of the 4” OD steel line). Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Ascent requests a variance to have the option of batch drilling this well with other wells on the same pad. In the even the wells are batch drilled, after drilling surface, 1st intermediate, and 2nd intermediate hole sections and cementing 2nd intermediate casing, a 10M dry hole cap with bleed off valve will be installed. The rig will then walk to another well on the pad. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe. Ascent requests a variance to wave the centralizer requirement for the run 7-5/8” EZGO FJ3 casing inside 8.75” hole. Variance is also requested to wave any centralizer requirements for the 5-1/2” EZGO HT casing the 6-3/4” hole size. Ascent requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Ascent will secure the wellhead area by placing a guard rail around the cellar. Pressure will be monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Ascent will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.
Testing Procedure: After surface casing is set and the BOP is nippled up, the BOP pressure tests will be made with a third-party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP will be tested in this manner after nipple-up if any break of the stack occurs as wells as every 30 days.
Choke Diagram Attachment:

BigStag_304H_BOP_Choke_20200703111817.pdf

BOP Diagram Attachment:

BigStag_304H_BOP_Choke_20200703112139.pdf

Operator Name: ASCENT ENERGY LLC

Well Name: BIG STAG FED COM **Well Number:** 304H

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	1628	0	1628	3795	2167	1628	J-55	54.5	ST&C	1.39	2.84	DRY	2.72	DRY	2.72
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3173	0	3158	3795	637	3173	J-55	40	LT&C	1.57	1.89	DRY	2	DRY	2
3	INTERMEDIATE	8.75	7.625	NEW	NON API	N	0	5758	0	5723	3795	-1928	5758	HCP-110	29.7	OTHER - EZGO FJ3	3.44	2.24	DRY	2.25	DRY	2.25
4	PRODUCTION	6.75	5.5	NEW	NON API	N	0	15669	0	9198	3795	-5403	15669	HCP-110	20	OTHER - EZGO HT	2.66	2.65	DRY	1.76	DRY	1.76

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20200328055358.pdf

Operator Name: ASCENT ENERGY LLC

Well Name: BIG STAG FED COM **Well Number:** 304H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20200328055505.pdf

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

Inspection Document:

Spec Document:

CDS_7.625_29.7lbs_P110_HC_EZGO_FJ3_20200328055614.pdf

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20200328055639.pdf

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

Inspection Document:

Spec Document:

CDS_5.5_20lb_P110_HC_EZGO_HT__5.9_coupling_od__20200328055733.pdf

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20200328055800.pdf

Section 4 - Cement

Operator Name: ASCENT ENERGY LLC

Well Name: BIG STAG FED COM **Well Number:** 304H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1128	885	1.72	13.5	1526	100	Class C HALCEM System	4% Bentonite
SURFACE	Tail		1128	1628	550	1.33	14.8	695	100	Class C HALCEM System	None
INTERMEDIATE	Lead		0	2173	540	1.72	12.7	932	100	Class C HALCEM System	4% Bentonite
INTERMEDIATE	Tail		2173	3173	485	1.33	14.8	626	100	Class C HALCEM System	None
INTERMEDIATE	Lead		0	4458	265	2.03	12.7	538	50	Class C EconoCem HLC	5% Salt + 3% Microbond + 3 lbm/sk Kol-Seal + 0.3% HR 800
INTERMEDIATE	Tail		4458	5758	155	1.37	14.8	196	50	Class C HALCEM System	3% Microbond
PRODUCTION	Lead		0	5500	160	2.88	11	453	25	NeoCem PL	3% Microbond
PRODUCTION	Tail		5500	15669	2185	1.47	13.2	3211	25	NeoCem PT	3% Microbond

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: All necessary mud products (e. g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions.

Describe the mud monitoring system utilized: Electronic Pason mud monitor system complying with Onshore Order 1 will be used.

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

Operator Name: ASCENT ENERGY LLC

Well Name: BIG STAG FED COM **Well Number:** 304H

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	1628	OTHER : Fresh water	8.4	9.6							
1628	3173	OTHER : Brine water	10	10							
3173	5758	OTHER : Fresh water	8.4	8.6							
5758	15669	OTHER : Cut Brine/Gel	8.5	9.3							

Section 6 - Test, Logging, Coring

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

Electric Logging Program: No open-hole logs are planned at this time for the pilot hole.

GR will be collected while drilling through the MWD tools from 9.625 casing shoe to TD.

A 2-person mud logging program will be used from 9.625 casing shoe to TD.

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

GAMMA RAY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No DSTs or cores are planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3000 **Anticipated Surface Pressure:** 972

Anticipated Bottom Hole Temperature(F): 152

Anticipated abnormal pressures, 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:

BigStag_H2S_plan_20200328061203.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BigStag_304H_Horizontal_Plan_20200328061221.pdf

Other proposed operations facets description:

Deficiency letter dated 5/29 states Directional Drill Plan not attached. It was attached as Horizontal Plan.

Other proposed operations facets attachment:

BigStag_CoFlex_Certs_20200328061334.pdf
BigStag_304H_Anticollision_Report_20200328061347.pdf
BigStag_speedhead_20200328061358.pdf
BigStag_304H_Drill_Plan_v2_20200604140727.pdf

Other Variance attachment:

Big Stag Fed Com 304H
Drilling Operations Plan
SHL 195' FNL & 2241' FEL, Sec. 12
BHL 1270' FNL & 2310' FEL, Sec. 13
T. 21S., R. 32E Lea County, NM

Ground Elevation above Sea Level: 3795'

DRILLING PROGRAM

Proposed Drilling Depth:
15,669' MD / 9,198' TVD

Type of well:
Horizontal well, no pilot hole

Permitted Well Type:
Oil

Geologic Name of Surface Formation:
Quaternary Deposits

KOP Lat/Long (NAD83):
32.500910 N / -103.627897 W

TD Lat/Long (NAD83):
32.499368 N / -103.627480 W

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	1603	1603	Anhydrite	None
Salado	1908	1908	Salt	None
Base Salt	3003	3016		None
Tansil	3158	3173	Limestone	None
Yates	3318	3338	Shale/Sandstone	Hydrocarbons
Capitan Reef	3643	3669	Limestone	Water
Delaware Sand	5723	5758	Sandstone	Hydrocarbons
Cherry Canyon	5973	6008	Sandstone	Hydrocarbons
Brushy Canyon	7143	7178	Sandstone	Hydrocarbons
Bone Spring Lime	8848	8883	Lmst/SS	Hydrocarbons
Avalon	8998	9048	Lmst/SH	Hydrocarbons
Leonard	9193	9337	Lmst/ SH	Hydrocarbons
KOP	8655	8690		
TD	9198	15669		

Big Stag Fed Com 304H
Drilling Operations Plan
SHL 195' FNL & 2241' FEL, Sec. 12
BHL 1270' FNL & 2310' FEL, Sec. 13
T. 21S., R. 32E Lea County, NM

2. Notable Zones

Leonard B is the target formation.

3. Pressure Control

Pressure Control Equipment (See Schematics):
A 15,000' a 5,000 psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.

BOP Test procedure will be as follows:
After surface casing is set and the BOP is nippled up, the BOP pressure tests will be made with a third-party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP will be tested in this manner after nipple-up if any break of the stack occurs as wells as every 30 days.

Variance Requests:

Ascent requests a variance to run a multi-bowl speed head for setting the Intermediate 1, Intermediate 2, and Production Strings. Ascent requests a variance to drill this well using a co-flex line between the BOP and choke manifold (instead of the 4" OD steel line). Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Ascent requests a variance to have the option of batch drilling this well with other wells on the same pad. In the even the wells are batch drilled, after drilling surface, 1st intermediate, and 2nd intermediate hole sections and cementing 2nd intermediate casing, a 10M dry hole cap with bleed off valve will be installed. The rig will then walk to another well on the pad. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.
Ascent requests a variance to wave the centralizer requirement for the run 7-5/8" EZGO FJ3 casing inside 8.75" hole. Variance is also requested to wave any centralizer requirements for the 5-1/2" EZGO HT casing the 6-3/4" hole size.
Ascent requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Ascent will secure the wellhead area by placing a guard rail around the cellar. Pressure will be

monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Ascent will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.

4. Casing & Cement

All Casing will be new.

Interval	Hole Size	Interval MD		Interval TVD		Csg OD	Weight	Grade	Conn Type	Conn	New/ Used	Tappered	DF Collapse	DF Burst	DF Tension
Surface	17.5	0'	1,628'	0'	1,628'	13.375	54.5	J-55	STC	API	New	No	1.39	2.84	2.72
1st Int	12.25	0'	3,173'	0'	3,158'	9.625	40.0	J-55	LTC	API	New	No	1.57	1.89	2.00
2nd Int	8.75	0'	5,758'	0'	5,723'	7.625	29.7	HCP-110	EZGO FJ3	Non-API	New	No	3.44	2.24	2.25
Production	6.75	0'	15,669'	0'	9,198'	5.5	20.0	HCP-110	EZGO HT	Non-API	New	No	2.66	2.65	1.76

Section	Depth	Type	Cmt Top	Excess	Ft^3	Sacks	BBLS	Wt. ppg	Yld Ft^3/sk	Mix Water Gal/sk	Slurry Description
Surface	13.375	Lead	0	100%	1,526	885	272	13.5	1.728	9.21	Class C HALCEM System+ 4% Bentonite
	1628'	Tail	1128'	100%	695	550	124	14.8	1.332	6.42	Class C HALCEM System
1st Int	9.625	Lead	0	100%	932	540	166	12.7	1.728	10.67	Class C HALCEM System+ 4% Bentonite
	3173'	Tail	2173'	100%	626	485	112	14.8	1.332	6.42	Class C HALCEM System
2nd Int	7.625	Lead	0	50%	538	265	96	12.7	2.039	10.67	Class C EconoCem HLC + 5% Salt + 3% Microbond + 3 lbm/sk Kol-Seal + 0.3% HR-800
	5758'	Tail	4458'	50%	196	155	35	14.8	1.368	6.42	Class C HALCEM System + 3% Microbond
Production	5.5	Lead	0	25%	453	160	81	11	2.887	17.38	NeoCem PL + 3% Microbond
	15,669'	Tail	5,500'	25%	3,211	2185	572	13.2	1.472	7.47	NeoCem PT + 3% Microbond

5. Mud Program

Interval		Type	Weight	Viscosity	Water Loss
0'	1,628'	Fresh Water	8.4-9.6	34-38	N/C
1,628'	3,173'	Brine Water	10	28-34	N/C
3,173'	5,758'	Fresh Water	8.4-8.6	28-34	N/C
5,758'	15,669'	Cut Brine/Gel	8.5-9.3	28-34	N/C

Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (e. g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.

Big Stag Fed Com 304H
Drilling Operations Plan
SHL 195' FNL & 2241' FEL, Sec. 12
BHL 1270' FNL & 2310' FEL, Sec. 13
T. 21S., R. 32E Lea County, NM

6. Cores, Tests, & Logs

- Electric Logging Program: No open-hole logs are planned at this time for the pilot hole.
- GR will be collected while drilling through the MWD tools from 9.625" casing shoe to TD.
- A 2-person mud logging program will be used from 9.625" casing shoe to TD.
- No DSTs or cores are planned at this time.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈3,000 psi. Expected bottom hole temperature is ≈152˚ F.

- Kelly cock will be kept in the drill string at all times.
- A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- H_2S monitoring and detection equipment will be utilized from surface casing point to TD.

Ascent does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Ascent has an H2S safety package on all wells and an "H2S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

8. Other Information

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.

ASCENT ENERGY

LEA COUNTY, NEW MEXICO (NAD 83) (GRID)
SEC. 1 T21S R32E N.M.P.M. (GRID)
BIG STAG FED COM 304H

ORIGINAL WELLBORE
07 March, 2020

Plan: PROPOSAL #1

Project: LEA COUNTY, NEW MEXICO (NAD 83) (GRID)
Site: SEC. 1 T21S R32E N.M.P.M. (GRID)
Well: BIG STAG FED COM 304H
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 195ft FNL & 2241ft FEL of Sec 12
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
2600.00	12.00	317.81	2595.62	46.39	-42.04	-46.63	62.60	EOB TO 12° INC
3782.92	12.00	317.81	3752.69	228.61	-207.21	-229.84	308.55	END OF TANGENT
4382.92	0.00	0.00	4348.32	275.00	-249.25	-276.47	371.15	EOD TO VERTICAL
8689.64	0.00	0.00	8655.04	275.00	-249.25	-276.47	371.15	KOP (10°/100ft BUR)
9163.40	47.38	166.70	9076.63	95.00	-206.70	-96.23	556.39	FTP: 100ft FNL & 2447.7ft FEL of Sec 12
9592.44	90.28	166.70	9227.99	-285.32	-116.80	284.62	946.91	HZ LP: 480.32ft FNL & 2360ft FEL of Sec 12
10024.37	90.28	179.66	9225.86	-713.26	-65.61	712.86	1378.82	EOT TO 179.66° AZ
15618.50	90.28	179.66	9198.25	-6307.23	-32.20	6306.93	6972.89	LTP: 1220ft FNL & 2310ft FEL of Sec 13
15668.51	90.28	179.66	9198.00	-6357.23	-31.90	6356.93	7022.89	BHL: 1270ft FNL & 2310ft FEL of Sec 13

PROPOSED LOCAL COORDINATES:

SHL: 195ft FNL & 2241ft FEL Sec 12

FTP: 100ft FNL & 2447.7ft FEL of Sec 12

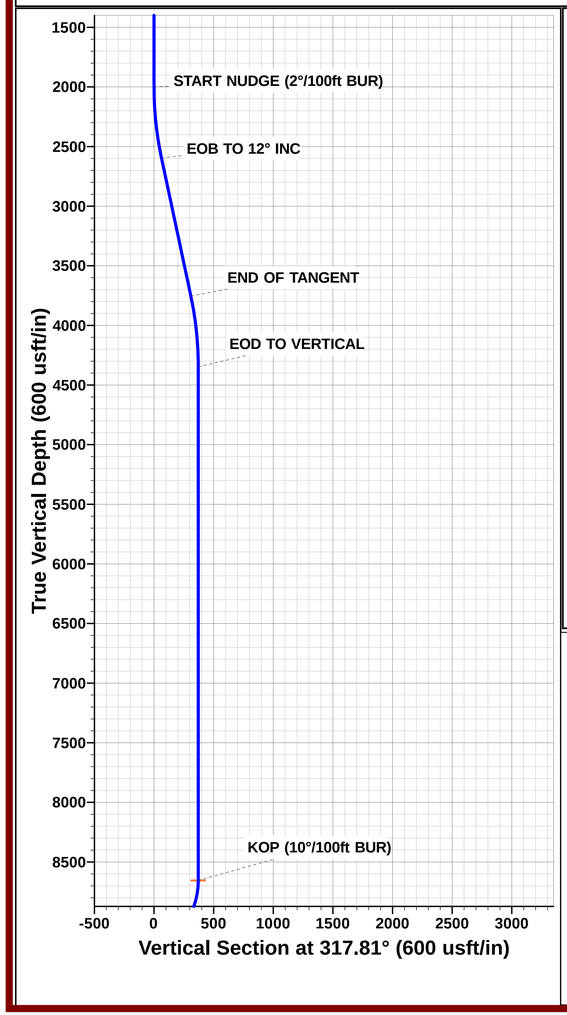
HZ LP: 480.32ft FNL & 2360ft FEL Sec 12

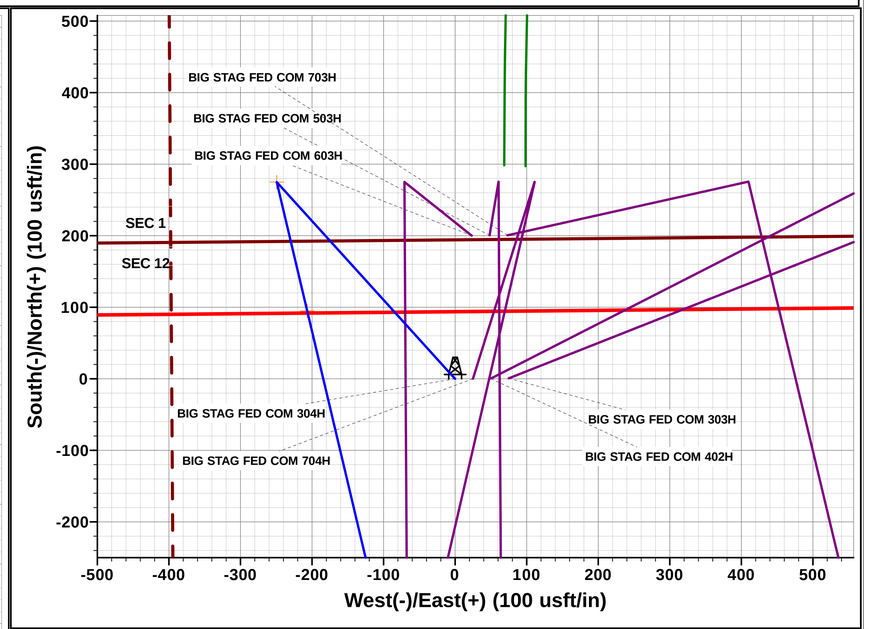
LTP: 1220ft FNL & 2310ft FEL of Sec 13

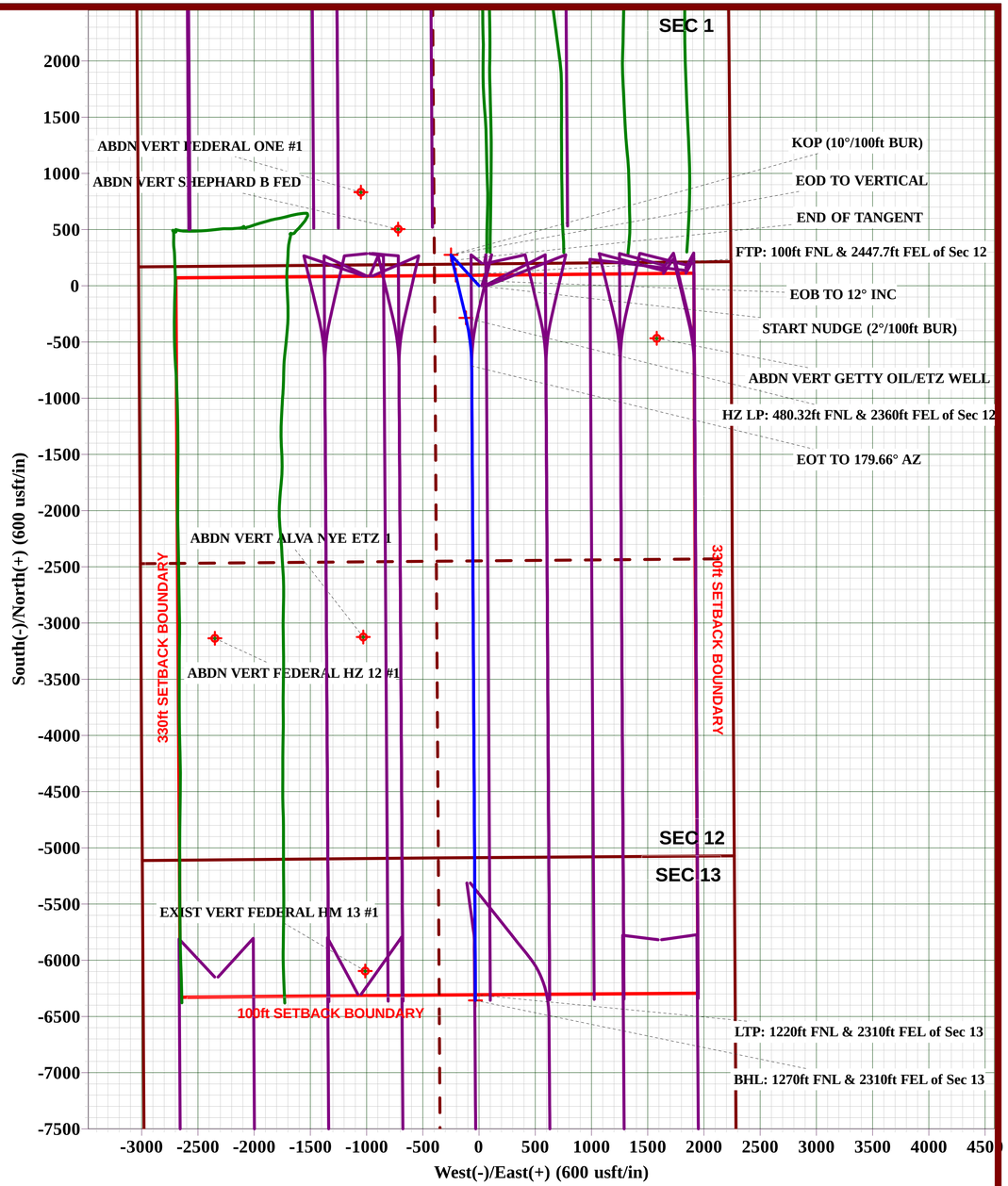
BHL: 1270ft FNL & 2310ft FEL of Sec 13

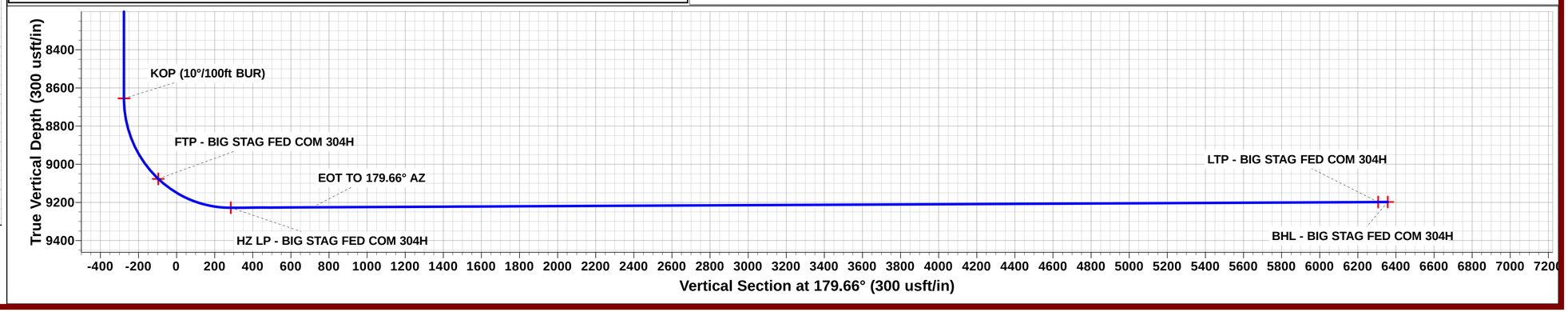
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - BIG STAG FED COM 304H	8655.04	275.00	-249.25	32.500910	-103.627897
FTP - BIG STAG FED COM 304H	9076.63	95.00	-206.70	32.500415	-103.627763
BHL - BIG STAG FED COM 304H	9198.00	-6357.23	-31.90	32.482678	-103.627335
LTP - BIG STAG FED COM 304H	9198.25	-6307.23	-32.20	32.482815	-103.627335
HZ LP - BIG STAG FED COM 304H	9227.99	-285.32	-116.80	32.499368	-103.627480









Database:	Database 1	**Local Co-ordinate Reference:**	Well BIG STAG FED COM 304H
Company:	ASCENT ENERGY	**TVD Reference:**	KB EST 25ft @ 3818.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	**MD Reference:**	KB EST 25ft @ 3818.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	**North Reference:**	Grid
Well:	BIG STAG FED COM 304H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project LEA COUNTY, NEW MEXICO (NAD 83) (GRID)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site SEC. 1 T21S R32E N.M.P.M. (GRID)

Site Position:		**Northing:**	546,692.70 usft	**Latitude:**	32.500955
From:	Map	**Easting:**	758,094.60 usft	**Longitude:**	-103.630248
Position Uncertainty:	0.00 usft	**Slot Radius:**	1.10 ft	**Grid Convergence:**	0.38 °

Well BIG STAG FED COM 304H

Well Position	**+N/-S**	-286.41 usft	**Northing:**	546,406.30 usft	**Latitude:**	32.500150
	+E/-W	974.04 usft	**Easting:**	759,068.60 usft	**Longitude:**	-103.627095
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,793.00 usft

Wellbore ORIGINAL WELLBORE

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2020-03-05	6.74	60.19	47,782.38071351

Design PROPOSAL #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.66

Plan Sections

MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf	Build Rate (°/100usf	Turn Rate (°/100usf	TFO (°)	Target
0.00	0.00	0.00	0.00	-3,818.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	-1,818.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	12.00	317.81	2,595.62	-1,222.38	46.39	-42.04	2.00	2.00	0.00	317.81	
3,782.92	12.00	317.81	3,752.69	-65.31	228.61	-207.21	0.00	0.00	0.00	0.00	
4,382.92	0.00	0.00	4,348.32	530.32	275.00	-249.25	2.00	-2.00	0.00	180.00	
8,689.64	0.00	0.00	8,655.04	4,837.04	275.00	-249.25	0.00	0.00	0.00	0.00	KOP - BIG STAG F
9,592.44	90.28	166.70	9,227.99	5,409.99	-285.32	-116.80	10.00	10.00	0.00	166.70	
10,024.37	90.28	179.66	9,225.86	5,407.86	-713.26	-65.61	3.00	0.00	3.00	89.96	
15,668.51	90.28	179.66	9,198.00	5,380.00	-6,357.23	-31.90	0.00	0.00	0.00	0.00	BHL - BIG STAG FE

Database:	Database 1	**Local Co-ordinate Reference:**	Well BIG STAG FED COM 304H
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Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	**North Reference:**	Grid
Well:	BIG STAG FED COM 304H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
SHL: 195ft FNL & 2241ft FEL of Sec 12										
0.00	***0.00***	***0.00***	***0.00***	***3,818.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
100.00	0.00	0.00	100.00	3,718.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	3,618.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	3,518.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	3,418.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	3,318.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	3,218.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	3,118.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	3,018.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	2,918.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	2,818.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	2,718.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	2,618.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	2,518.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	2,418.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	2,318.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	2,218.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	2,118.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	2,018.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	1,918.00	0.00	0.00	0.00	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
2,000.00	***0.00***	***0.00***	***2,000.00***	***1,818.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
2,100.00	2.00	317.81	2,099.98	1,718.02	1.29	-1.17	-1.30	2.00	2.00	0.00
2,200.00	4.00	317.81	2,199.84	1,618.16	5.17	-4.69	-5.20	2.00	2.00	0.00
2,300.00	6.00	317.81	2,299.45	1,518.55	11.63	-10.54	-11.69	2.00	2.00	0.00
2,400.00	8.00	317.81	2,398.70	1,419.30	20.66	-18.72	-20.77	2.00	2.00	0.00
2,500.00	10.00	317.81	2,497.47	1,320.53	32.25	-29.23	-32.42	2.00	2.00	0.00
EOB TO 12° INC										
2,600.00	***12.00***	***317.81***	***2,595.62***	***1,222.38***	***46.39***	***-42.04***	***-46.63***	***2.00***	***2.00***	***0.00***
2,700.00	12.00	317.81	2,693.44	1,124.56	61.79	-56.00	-62.12	0.00	0.00	0.00
2,800.00	12.00	317.81	2,791.25	1,026.75	77.20	-69.97	-77.61	0.00	0.00	0.00
2,900.00	12.00	317.81	2,889.07	928.93	92.60	-83.93	-93.10	0.00	0.00	0.00
3,000.00	12.00	317.81	2,986.88	831.12	108.01	-97.89	-108.58	0.00	0.00	0.00
3,100.00	12.00	317.81	3,084.70	733.30	123.41	-111.85	-124.07	0.00	0.00	0.00
3,200.00	12.00	317.81	3,182.51	635.49	138.82	-125.82	-139.56	0.00	0.00	0.00
3,300.00	12.00	317.81	3,280.33	537.67	154.22	-139.78	-155.05	0.00	0.00	0.00
3,400.00	12.00	317.81	3,378.14	439.86	169.63	-153.74	-170.54	0.00	0.00	0.00
3,500.00	12.00	317.81	3,475.96	342.04	185.03	-167.71	-186.02	0.00	0.00	0.00
3,600.00	12.00	317.81	3,573.77	244.23	200.44	-181.67	-201.51	0.00	0.00	0.00
3,700.00	12.00	317.81	3,671.59	146.41	215.84	-195.63	-217.00	0.00	0.00	0.00
END OF TANGENT										
3,782.92	***12.00***	***317.81***	***3,752.69***	***65.31***	***228.61***	***-207.21***	***-229.84***	***0.00***	***0.00***	***0.00***
3,800.00	11.66	317.81	3,769.41	48.59	231.21	-209.56	-232.45	2.00	-2.00	0.00
3,900.00	9.66	317.81	3,867.68	-49.68	244.91	-221.98	-246.23	2.00	-2.00	0.00
4,000.00	7.66	317.81	3,966.54	-148.54	256.07	-232.09	-257.44	2.00	-2.00	0.00
4,100.00	5.66	317.81	4,065.86	-247.86	264.66	-239.88	-266.08	2.00	-2.00	0.00
4,200.00	3.66	317.81	4,165.52	-347.52	270.67	-245.33	-272.13	2.00	-2.00	0.00
4,300.00	1.66	317.81	4,265.41	-447.41	274.11	-248.44	-275.58	2.00	-2.00	0.00
EOD TO VERTICAL										
4,382.92	***0.00***	***0.00***	***4,348.32***	***-530.32***	***275.00***	***-249.25***	***-276.47***	***2.00***	***-2.00***	***0.00***
4,400.00	0.00	0.00	4,365.40	-547.40	275.00	-249.25	-276.47	0.00	0.00	0.00
4,500.00	0.00	0.00	4,465.40	-647.40	275.00	-249.25	-276.47	0.00	0.00	0.00

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Well:	BIG STAG FED COM 304H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.00	0.00	0.00	4,565.40	-747.40	275.00	-249.25	-276.47	0.00	0.00	0.00
4,700.00	0.00	0.00	4,665.40	-847.40	275.00	-249.25	-276.47	0.00	0.00	0.00
4,800.00	0.00	0.00	4,765.40	-947.40	275.00	-249.25	-276.47	0.00	0.00	0.00
4,900.00	0.00	0.00	4,865.40	-1,047.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,000.00	0.00	0.00	4,965.40	-1,147.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,100.00	0.00	0.00	5,065.40	-1,247.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,200.00	0.00	0.00	5,165.40	-1,347.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,300.00	0.00	0.00	5,265.40	-1,447.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,400.00	0.00	0.00	5,365.40	-1,547.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,500.00	0.00	0.00	5,465.40	-1,647.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,600.00	0.00	0.00	5,565.40	-1,747.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,700.00	0.00	0.00	5,665.40	-1,847.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,800.00	0.00	0.00	5,765.40	-1,947.40	275.00	-249.25	-276.47	0.00	0.00	0.00
5,900.00	0.00	0.00	5,865.40	-2,047.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,000.00	0.00	0.00	5,965.40	-2,147.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,100.00	0.00	0.00	6,065.40	-2,247.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,200.00	0.00	0.00	6,165.40	-2,347.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,300.00	0.00	0.00	6,265.40	-2,447.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,400.00	0.00	0.00	6,365.40	-2,547.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,500.00	0.00	0.00	6,465.40	-2,647.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,600.00	0.00	0.00	6,565.40	-2,747.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,700.00	0.00	0.00	6,665.40	-2,847.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,800.00	0.00	0.00	6,765.40	-2,947.40	275.00	-249.25	-276.47	0.00	0.00	0.00
6,900.00	0.00	0.00	6,865.40	-3,047.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,000.00	0.00	0.00	6,965.40	-3,147.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,100.00	0.00	0.00	7,065.40	-3,247.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,200.00	0.00	0.00	7,165.40	-3,347.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,300.00	0.00	0.00	7,265.40	-3,447.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,400.00	0.00	0.00	7,365.40	-3,547.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,500.00	0.00	0.00	7,465.40	-3,647.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,600.00	0.00	0.00	7,565.40	-3,747.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,700.00	0.00	0.00	7,665.40	-3,847.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,800.00	0.00	0.00	7,765.40	-3,947.40	275.00	-249.25	-276.47	0.00	0.00	0.00
7,900.00	0.00	0.00	7,865.40	-4,047.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,000.00	0.00	0.00	7,965.40	-4,147.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,100.00	0.00	0.00	8,065.40	-4,247.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,200.00	0.00	0.00	8,165.40	-4,347.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,300.00	0.00	0.00	8,265.40	-4,447.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,400.00	0.00	0.00	8,365.40	-4,547.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,500.00	0.00	0.00	8,465.40	-4,647.40	275.00	-249.25	-276.47	0.00	0.00	0.00
8,600.00	0.00	0.00	8,565.40	-4,747.40	275.00	-249.25	-276.47	0.00	0.00	0.00
KOP (10°/100ft BUR)										
8,689.64	***0.00***	***0.00***	***8,655.04***	***-4,837.04***	***275.00***	***-249.25***	***-276.47***	***0.00***	***0.00***	***0.00***
8,700.00	1.04	166.70	8,665.40	-4,847.40	274.91	-249.23	-276.38	10.00	10.00	0.00
8,800.00	11.04	166.70	8,764.72	-4,946.72	264.69	-246.81	-266.15	10.00	10.00	0.00
8,900.00	21.04	166.70	8,860.70	-5,042.70	237.84	-240.47	-239.26	10.00	10.00	0.00
9,000.00	31.04	166.70	8,950.44	-5,132.44	195.18	-230.38	-196.54	10.00	10.00	0.00
9,100.00	41.04	166.70	9,031.20	-5,213.20	138.00	-216.86	-139.29	10.00	10.00	0.00
FTP: 100ft FNL & 2447.7ft FEL of Sec 12										
9,163.40	***47.38***	***166.70***	***9,076.63***	***-5,258.63***	***95.00***	***-206.70***	***-96.23***	***10.00***	***10.00***	***0.00***
9,200.00	51.04	166.70	9,100.54	-5,282.54	68.04	-200.33	-69.23	10.00	10.00	0.00
9,300.00	61.04	166.70	9,156.33	-5,338.33	-12.57	-181.27	11.49	10.00	10.00	0.00
9,400.00	71.04	166.70	9,196.90	-5,378.90	-101.38	-160.28	100.43	10.00	10.00	0.00

Database:	Database 1	**Local Co-ordinate Reference:**	Well BIG STAG FED COM 304H
Company:	ASCENT ENERGY	**TVD Reference:**	KB EST 25ft @ 3818.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	**MD Reference:**	KB EST 25ft @ 3818.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	**North Reference:**	Grid
Well:	BIG STAG FED COM 304H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,500.00	81.04	166.70	9,221.00	-5,403.00	-195.71	-137.98	194.88	10.00	10.00	0.00
HZ LP: 480.32ft FNL & 2360ft FEL of Sec 12										
9,592.44	***90.28***	***166.70***	***9,227.99***	***-5,409.99***	***-285.32***	***-116.80***	***284.62***	***10.00***	***10.00***	***0.00***
9,600.00	90.28	166.93	9,227.95	-5,409.95	-292.67	-115.07	291.98	3.00	0.00	3.00
9,700.00	90.28	169.93	9,227.46	-5,409.46	-390.63	-95.01	390.06	3.00	0.00	3.00
9,800.00	90.28	172.93	9,226.97	-5,408.97	-489.50	-80.11	489.01	3.00	0.00	3.00
9,900.00	90.28	175.93	9,226.48	-5,408.48	-589.01	-70.40	588.58	3.00	0.00	3.00
10,000.00	90.28	178.93	9,225.98	-5,407.98	-688.90	-65.91	688.50	3.00	0.00	3.00
EOT TO 179.66° AZ										
10,024.37	***90.28***	***179.66***	***9,225.86***	***-5,407.86***	***-713.26***	***-65.61***	***712.86***	***3.00***	***0.00***	***3.00***
10,100.00	90.28	179.66	9,225.49	-5,407.49	-788.89	-65.16	788.49	0.00	0.00	0.00
10,200.00	90.28	179.66	9,224.99	-5,406.99	-888.89	-64.56	888.49	0.00	0.00	0.00
10,300.00	90.28	179.66	9,224.50	-5,406.50	-988.89	-63.96	988.49	0.00	0.00	0.00
10,400.00	90.28	179.66	9,224.01	-5,406.01	-1,088.88	-63.36	1,088.49	0.00	0.00	0.00
10,500.00	90.28	179.66	9,223.51	-5,405.51	-1,188.88	-62.77	1,188.49	0.00	0.00	0.00
10,600.00	90.28	179.66	9,223.02	-5,405.02	-1,288.88	-62.17	1,288.49	0.00	0.00	0.00
10,700.00	90.28	179.66	9,222.53	-5,404.53	-1,388.88	-61.57	1,388.49	0.00	0.00	0.00
10,800.00	90.28	179.66	9,222.03	-5,404.03	-1,488.87	-60.98	1,488.48	0.00	0.00	0.00
10,900.00	90.28	179.66	9,221.54	-5,403.54	-1,588.87	-60.38	1,588.48	0.00	0.00	0.00
11,000.00	90.28	179.66	9,221.04	-5,403.04	-1,688.87	-59.78	1,688.48	0.00	0.00	0.00
11,100.00	90.28	179.66	9,220.55	-5,402.55	-1,788.86	-59.18	1,788.48	0.00	0.00	0.00
11,200.00	90.28	179.66	9,220.06	-5,402.06	-1,888.86	-58.59	1,888.48	0.00	0.00	0.00
11,300.00	90.28	179.66	9,219.56	-5,401.56	-1,988.86	-57.99	1,988.48	0.00	0.00	0.00
11,400.00	90.28	179.66	9,219.07	-5,401.07	-2,088.85	-57.39	2,088.48	0.00	0.00	0.00
11,500.00	90.28	179.66	9,218.58	-5,400.58	-2,188.85	-56.80	2,188.48	0.00	0.00	0.00
11,600.00	90.28	179.66	9,218.08	-5,400.08	-2,288.85	-56.20	2,288.48	0.00	0.00	0.00
11,700.00	90.28	179.66	9,217.59	-5,399.59	-2,388.85	-55.60	2,388.47	0.00	0.00	0.00
11,800.00	90.28	179.66	9,217.10	-5,399.10	-2,488.84	-55.00	2,488.47	0.00	0.00	0.00
11,900.00	90.28	179.66	9,216.60	-5,398.60	-2,588.84	-54.41	2,588.47	0.00	0.00	0.00
12,000.00	90.28	179.66	9,216.11	-5,398.11	-2,688.84	-53.81	2,688.47	0.00	0.00	0.00
12,100.00	90.28	179.66	9,215.61	-5,397.61	-2,788.83	-53.21	2,788.47	0.00	0.00	0.00
12,200.00	90.28	179.66	9,215.12	-5,397.12	-2,888.83	-52.61	2,888.47	0.00	0.00	0.00
12,300.00	90.28	179.66	9,214.63	-5,396.63	-2,988.83	-52.02	2,988.47	0.00	0.00	0.00
12,400.00	90.28	179.66	9,214.13	-5,396.13	-3,088.82	-51.42	3,088.47	0.00	0.00	0.00
12,500.00	90.28	179.66	9,213.64	-5,395.64	-3,188.82	-50.82	3,188.46	0.00	0.00	0.00
12,600.00	90.28	179.66	9,213.15	-5,395.15	-3,288.82	-50.23	3,288.46	0.00	0.00	0.00
12,700.00	90.28	179.66	9,212.65	-5,394.65	-3,388.82	-49.63	3,388.46	0.00	0.00	0.00
12,800.00	90.28	179.66	9,212.16	-5,394.16	-3,488.81	-49.03	3,488.46	0.00	0.00	0.00
12,900.00	90.28	179.66	9,211.67	-5,393.67	-3,588.81	-48.43	3,588.46	0.00	0.00	0.00
13,000.00	90.28	179.66	9,211.17	-5,393.17	-3,688.81	-47.84	3,688.46	0.00	0.00	0.00
13,100.00	90.28	179.66	9,210.68	-5,392.68	-3,788.80	-47.24	3,788.46	0.00	0.00	0.00
13,200.00	90.28	179.66	9,210.18	-5,392.18	-3,888.80	-46.64	3,888.46	0.00	0.00	0.00
13,300.00	90.28	179.66	9,209.69	-5,391.69	-3,988.80	-46.05	3,988.45	0.00	0.00	0.00
13,400.00	90.28	179.66	9,209.20	-5,391.20	-4,088.79	-45.45	4,088.45	0.00	0.00	0.00
13,500.00	90.28	179.66	9,208.70	-5,390.70	-4,188.79	-44.85	4,188.45	0.00	0.00	0.00
13,600.00	90.28	179.66	9,208.21	-5,390.21	-4,288.79	-44.25	4,288.45	0.00	0.00	0.00
13,700.00	90.28	179.66	9,207.72	-5,389.72	-4,388.79	-43.66	4,388.45	0.00	0.00	0.00
13,800.00	90.28	179.66	9,207.22	-5,389.22	-4,488.78	-43.06	4,488.45	0.00	0.00	0.00
13,900.00	90.28	179.66	9,206.73	-5,388.73	-4,588.78	-42.46	4,588.45	0.00	0.00	0.00
14,000.00	90.28	179.66	9,206.24	-5,388.24	-4,688.78	-41.87	4,688.45	0.00	0.00	0.00
14,100.00	90.28	179.66	9,205.74	-5,387.74	-4,788.77	-41.27	4,788.44	0.00	0.00	0.00
14,200.00	90.28	179.66	9,205.25	-5,387.25	-4,888.77	-40.67	4,888.44	0.00	0.00	0.00
14,300.00	90.28	179.66	9,204.76	-5,386.76	-4,988.77	-40.07	4,988.44	0.00	0.00	0.00

Database:	Database 1	**Local Co-ordinate Reference:**	Well BIG STAG FED COM 304H
Company:	ASCENT ENERGY	**TVD Reference:**	KB EST 25ft @ 3818.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	**MD Reference:**	KB EST 25ft @ 3818.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	**North Reference:**	Grid
Well:	BIG STAG FED COM 304H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,400.00	90.28	179.66	9,204.26	-5,386.26	-5,088.76	-39.48	5,088.44	0.00	0.00	0.00
14,500.00	90.28	179.66	9,203.77	-5,385.77	-5,188.76	-38.88	5,188.44	0.00	0.00	0.00
14,600.00	90.28	179.66	9,203.27	-5,385.27	-5,288.76	-38.28	5,288.44	0.00	0.00	0.00
14,700.00	90.28	179.66	9,202.78	-5,384.78	-5,388.76	-37.69	5,388.44	0.00	0.00	0.00
14,800.00	90.28	179.66	9,202.29	-5,384.29	-5,488.75	-37.09	5,488.44	0.00	0.00	0.00
14,900.00	90.28	179.66	9,201.79	-5,383.79	-5,588.75	-36.49	5,588.43	0.00	0.00	0.00
15,000.00	90.28	179.66	9,201.30	-5,383.30	-5,688.75	-35.89	5,688.43	0.00	0.00	0.00
15,100.00	90.28	179.66	9,200.81	-5,382.81	-5,788.74	-35.30	5,788.43	0.00	0.00	0.00
15,200.00	90.28	179.66	9,200.31	-5,382.31	-5,888.74	-34.70	5,888.43	0.00	0.00	0.00
15,300.00	90.28	179.66	9,199.82	-5,381.82	-5,988.74	-34.10	5,988.43	0.00	0.00	0.00
15,400.00	90.28	179.66	9,199.33	-5,381.33	-6,088.73	-33.50	6,088.43	0.00	0.00	0.00
15,500.00	90.28	179.66	9,198.83	-5,380.83	-6,188.73	-32.91	6,188.43	0.00	0.00	0.00
15,600.00	90.28	179.66	9,198.34	-5,380.34	-6,288.73	-32.31	6,288.43	0.00	0.00	0.00
LTP: 1220ft FNL & 2310ft FEL of Sec 13										
15,618.50	***90.28***	***179.66***	***9,198.25***	***-5,380.25***	***-6,307.23***	***-32.20***	***6,306.93***	***0.00***	***0.00***	***0.00***
BHL: 1270ft FNL & 2310ft FEL of Sec 13										
15,668.51	***90.28***	***179.66***	***9,198.00***	***-5,380.00***	***-6,357.23***	***-31.90***	***6,356.93***	***0.00***	***0.00***	***0.00***

Plan Annotations

		Local Coordinates		
MD (usft)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Comment
0.00	0.00	0.00	0.00	SHL: 195ft FNL & 2241ft FEL of Sec 12
2,000.00	2,000.00	0.00	0.00	START NUDGE (2°/100ft BUR)
2,600.00	2,595.62	46.39	-42.04	EOB TO 12° INC
3,782.92	3,752.69	228.61	-207.21	END OF TANGENT
4,382.92	4,348.32	275.00	-249.25	EOD TO VERTICAL
8,689.64	8,655.04	275.00	-249.25	KOP (10°/100ft BUR)
9,163.40	9,076.63	95.00	-206.70	FTP: 100ft FNL & 2447.7ft FEL of Sec 12
9,592.44	9,227.99	-285.32	-116.80	HZ LP: 480.32ft FNL & 2360ft FEL of Sec 12
10,024.37	9,225.86	-713.26	-65.61	EOT TO 179.66° AZ
15,618.50	9,198.25	-6,307.23	-32.20	LTP: 1220ft FNL & 2310ft FEL of Sec 13
15,668.51	9,198.00	-6,357.23	-31.90	BHL: 1270ft FNL & 2310ft FEL of Sec 13

ASCENT ENERGY

H_2S Drilling Operations Plan

a. All personnel will be trained in H_2S working conditions as required by Onshore Order 6 before drilling out of the surface casing.

b. Two briefing areas will be established. Each briefing area will be ≥150' from the wellhead, perpendicular from one another, and easily entered and exited. See H_2S page 5 for more details.

c. H_2S Safety Equipment/Systems:

i. Well Control Equipment

- Flare line will be ≥150' from the wellhead and ignited by a flare gun.
- Beware of SO_2 created by flaring.
- Choke manifold will have a remotely operated choke.
- Mud gas separator

ii. Protective Equipment for Personnel

- Every person on site will wear a personal H_2S and SO_2 monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the waist or chest.
- One self-contained breathing apparatus (SCBA) 30-minute rescue pack will be at each briefing area. Two 30-minute SCBA packs will be stored in the safety trailer.
- Four work/escape packs will be on the rig floor. Each pack will have a sufficiently long hose to allow unimpaired work activity.
- Four emergency escape packs will be in the doghouse for emergency evacuation.
- Hand signals will be used when wearing protective breathing apparatus.
- Stokes litter or stretcher
- Two full OSHA compliant body harnesses
- A 100' long x 5/8" OSHA compliant rope
- One 20-pound ABC fire extinguisher

iii. H_2S Detection & Monitoring Equipment

- Every person on site will wear a personal H_2S and SO_2 monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the waist or chest.

- A stationary detector with three sensors will be in the doghouse.
- Sensors will be installed on the rig floor, bell nipple, and at the end of the flow line or where drilling fluids are discharged.
- Visual alarm will be triggered at 10 ppm.
- Audible alarm will be triggered at 10 ppm.
- Calibration will occur at least every 30 days. Gas sample tubes will be kept in the safety trailer.

iv. Visual Warning System

- A color-coded H_2S condition sign will be set at each pad entrance.
- Color-coded condition flag will be installed to indicate current H_2S conditions.
- Two wind socks will be installed that will be visible from all sides.

v. Mud Program

- A water based mud with a pH of $\geq$10 will be maintained to control corrosion, H_2S gas returns to the surface, and minimize sulfide stress cracking and embrittlement.
- Drilling mud containing H_2S gas will be degassed at an optimum location for the rig configuration.
- This gas will be piped into the flare system.
- Enough mud additives will be on site to scavenge and/or neutralize H_2S where formation pressures are unknown.

vi. Metallurgy

- All equipment that has the potential to be exposed to H_2S will be suitable for H_2S service.
- Equipment that will meet these metallurgical standards include the drill string, casing, wellhead, BOP assembly, casing head and spool, rotating head, kill lines, choke, choke manifold and lines, valves, mud-gas separators, DST tools, test units, tubing, flanges, and other related equipment (elastomer packings and seals).

vii. Communication from well site

- Cell phones and/or two-way radios will be used to communicate from the well site.

d. A remote-controlled choke, mud-gas separator, and a rotating head will be installed before drilling or testing any formation expected to contain H_2S.

Company Personnel to be Notified

Dean Gimbel, Vice President Completions	Office: (720) 710-8995
	Mobile: (303) 945-1323
Matt Ward, Chief Operations Officer	Mobile: (303) 506-6647
Ascent Emergency Contact Number	(303) 281-9951

Local & County Agencies

Monument Fire Department	911 or (575) 393-4339
Hobbs Fire Marshal	(575) 391-8185
Lea County Sheriff (Lovington)	911 or (575) 396-3611
Lea County Emergency Management (Lovington)	(575) 396-8602
Lea Regional Medical Center Hospital (Hobbs)	(575) 492-5000

State Agencies

NM State Police (Hobbs)	(575) 392-5588
NM Oil Conservation (Hobbs)	(575) 370-3186
NM Oil Conservation (Santa Fe)	(505) 476-3440
NM Dept. of Transportation (Roswell)	(575) 637-7201

Federal Agencies

BLM Carlsbad Field Office	(575) 234-5972
BLM Hobbs Field Station	(575) 393-3612
National Response Center	(800) 424-8802
US EPA Region 6 (Dallas)	(800) 887-6063
	(214) 665-6444

Veterinarians

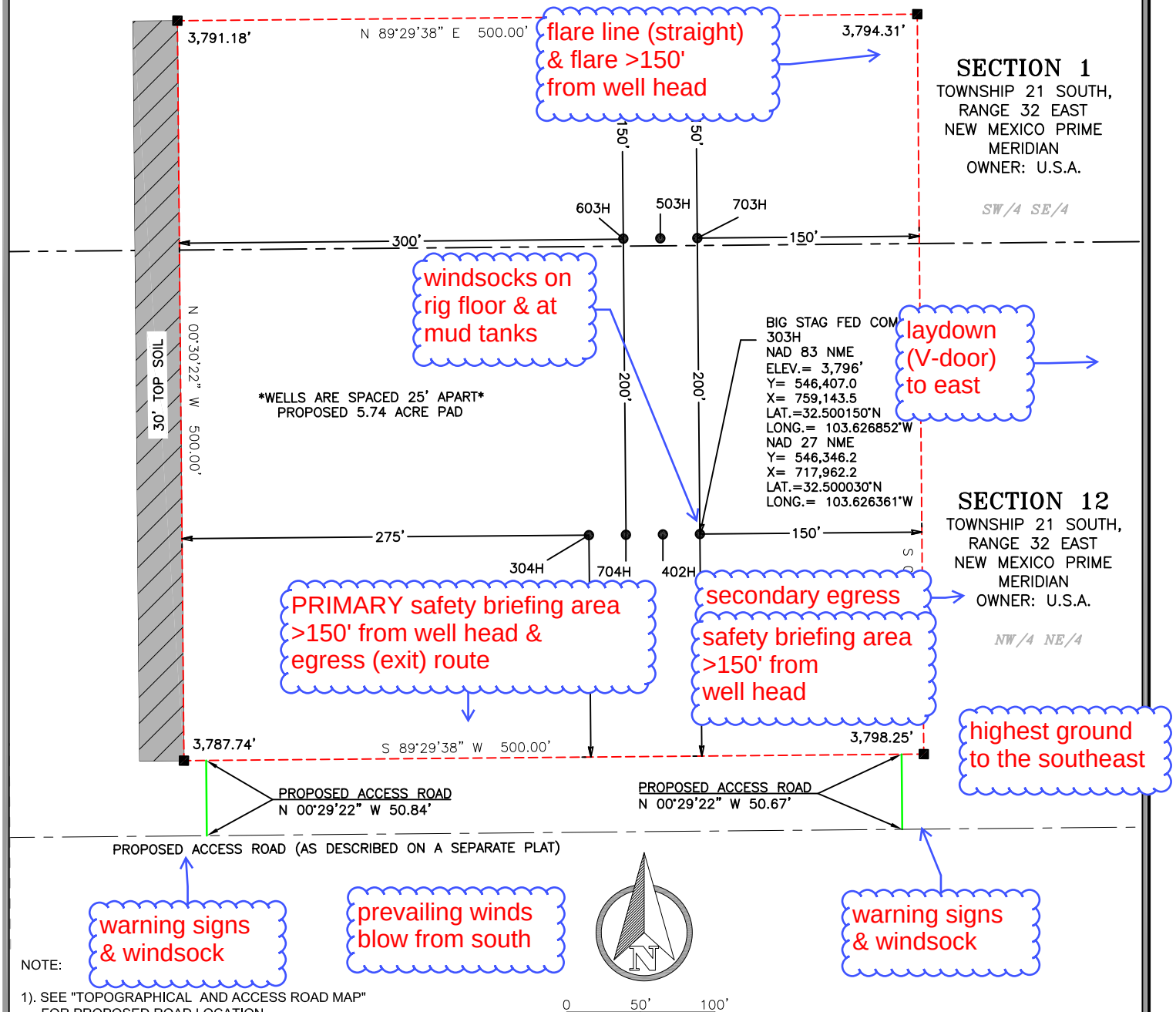
Dal Paso Animal Hospital (Hobbs)	(575) 397-2286
Hobbs Animal Clinic & Pet Care (Hobbs)	(575) 392-5563
Great Plains Veterinary Clinic & Hospital (Hobbs)	(575) 392-5513

Residents within 2 miles

No residents are within 2 miles.

Air Evacuation

Med Flight Air Ambulance (Albuquerque)	(800) 842-4431
Lifeguard (Albuquerque)	(888) 866-7256



NOTE:

1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF N.M. HIGHWAY 176 AND BOOTLEG LANE, GO SOUTH ON BOOTLEG LANE APPROX. 1.7 MILES . TURN LEFT (EAST) ON A GRAVEL ROAD AND GO APPROX. 0.47 MILES TURN LEFT (NORTH) ,THE LOCATION IS TO THE NORTH.

LEGEND

- PROPOSED ACCESS RD.
- PROPOSED PAD
- SECTION LINE

I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

MARK DILLON HARP
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 23786

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

ASCENT ENERGY, LLC.

WELL SITE PLAN

BIG STAG FED COM 303H
LOCATED 2,166 FEET FROM THE EAST LINE AND 195 FEET FROM THE NORTH LINE OF SECTION 12, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M. LEA COUNTY, NEW MEXICO

DATE:	02-26-2020	PROJECT NO:	2020010112
DRAWN BY:	RR	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 3
FIELD CREW:	RE	REVISION:	0

P:\PROJECTS\2020\20200010112-ASCENT-BIG_STAG_FED_COM_303H-LEA\DWG\PACKET\2020010112-ASCENT-BIG_STAG_303H_WELL_SITE.dwg

Ascent Energy, LLC

Big Stag Fed Com Pad
H_2S Contingency Plan:
2 Mile Radius Map

Section 1, Township 21S, Range 32E
Lea County, New Mexico

Pad Location

1:27,000

0 0.25 0.5 1

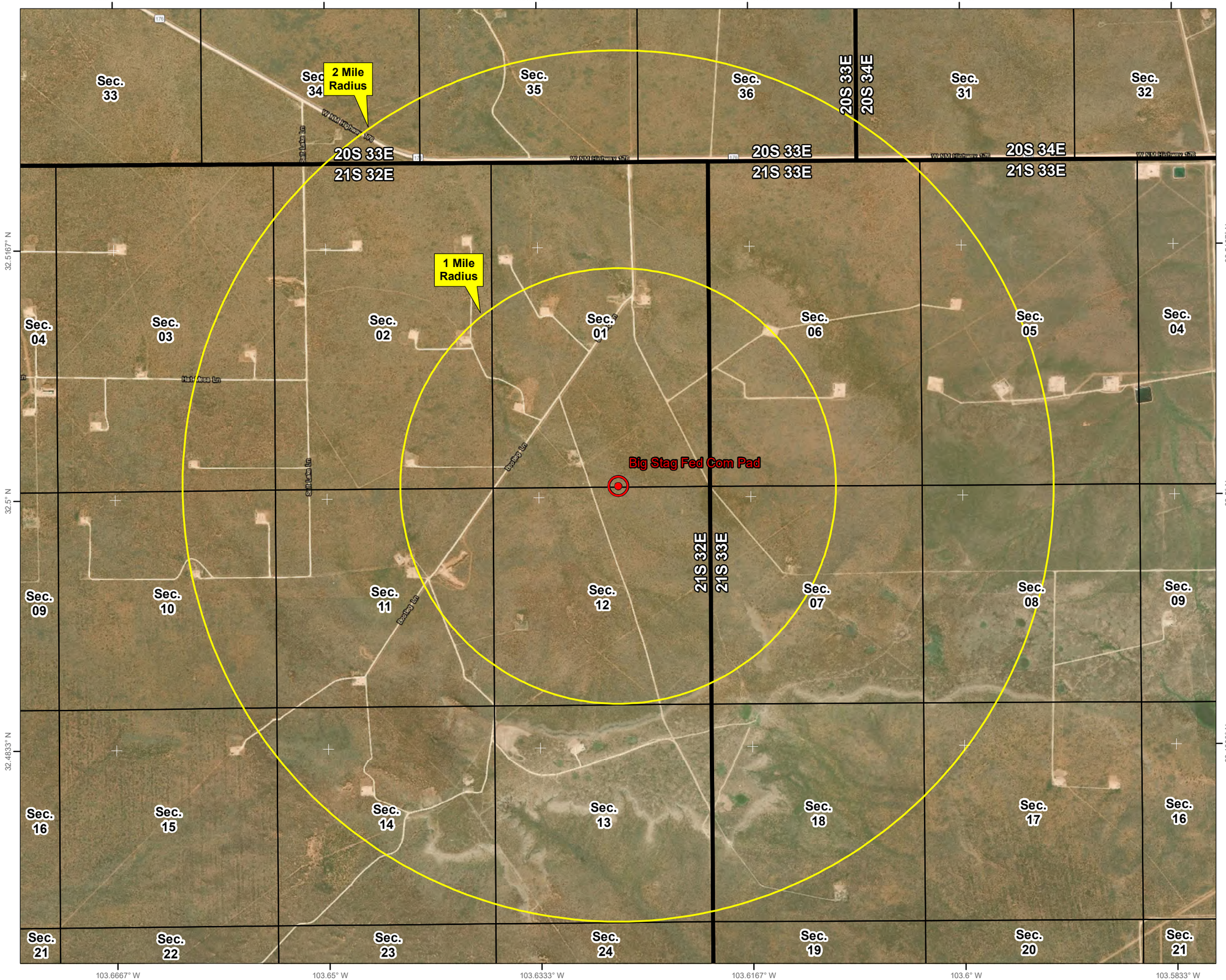
Miles

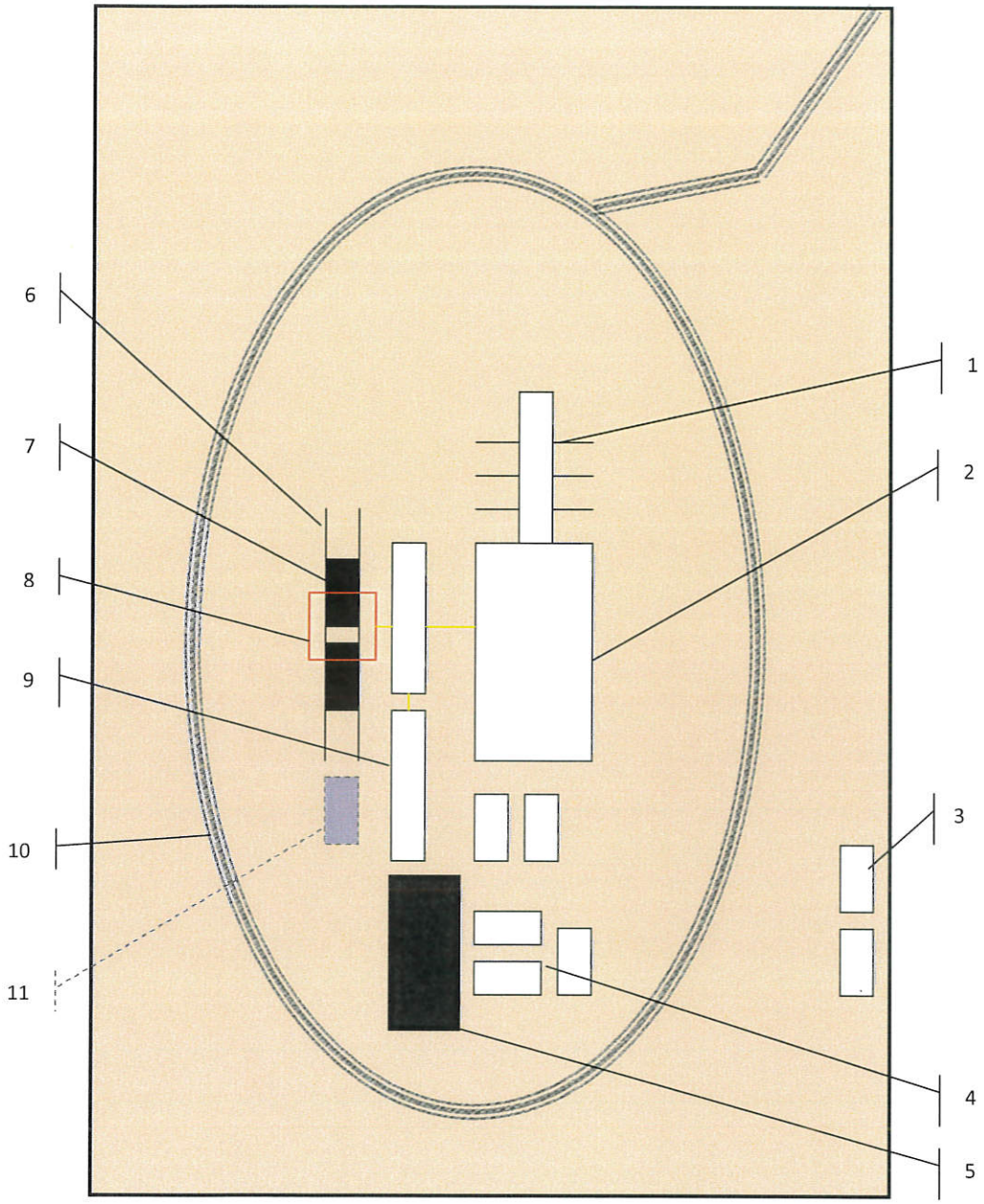
N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., March 24, 2020
for Ascent Energy LLC





Schematic Closed Loop Drilling Rig*

1. **Pipe Rack**
2. **Drill Rig**
3. **House Trailers/ Offices**
4. **Generator/Fuel/Storage**
5. **Overflow-Frac Tank**
6. **Skids**
7. **Roll Offs**
8. **Hopper or Centrifuge**
9. **Mud Tanks**
10. **Loop Drive**
11. Generator (only for use with centrifuge)

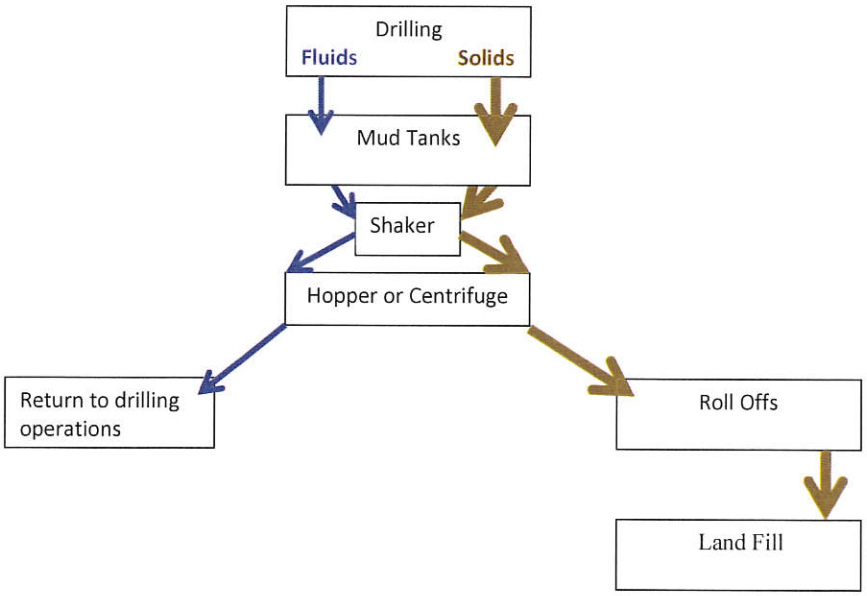
*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

Above: Centrifugal Closed Loop System

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

Closed Loop Drilling System: Mud tanks to right (1)
Hopper in air to settle out solids (2)
Water return pipe (3)
Shaker between hopper and mud tanks (4)
Roll offs on skids (5)

Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil Field Service

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

OCD – HOBBS
08/14/2020
RECEIVED

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025 47561	97895	WC-025 G-08 S213304D; BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
327306	BIG STAG FED COM	304H

[7] OGRID No.	[8] Operator Name	[9] Elevation
325830	ASCENT ENERGY, LLC.	3,795'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	12	21 S	32 E		195	NORTH	2,241	EAST	LEA

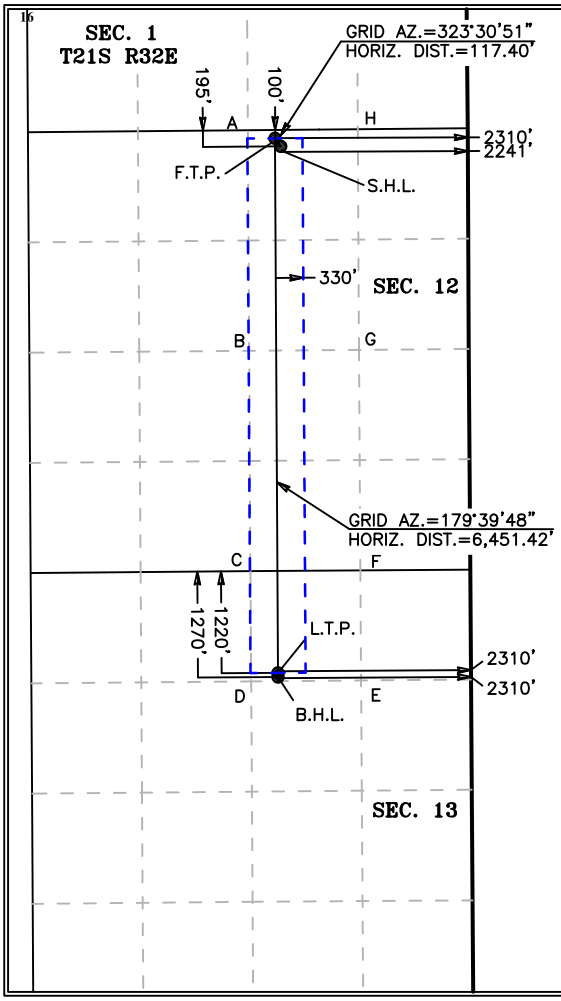
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	13	21 S	32 E		1,270	NORTH	2,310	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
200			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[16]



SHL (NAD83 NME)		LTP (NAD83 NME)	
Y =	546,406.3	Y =	540,099.3
X =	759,068.6	X =	759,036.3
LAT. =	32.500150 °N	LAT. =	32.482815 °N
LONG. =	103.627095 °W	LONG. =	103.627335 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	546,500.6	Y =	540,049.3
X =	758,998.8	X =	759,036.7
LAT. =	32.500410 °N	LAT. =	32.482678 °N
LONG. =	103.627319 °W	LONG. =	103.627335 °W

CORNER COORDINATES (NAD83 NME)

A - Y =	546,597.8 N ,	X =	758,674.7 E
B - Y =	543,956.2 N ,	X =	758,690.6 E
C - Y =	541,317.0 N ,	X =	758,706.4 E
D - Y =	539,996.6 N ,	X =	758,714.8 E
E - Y =	540,007.9 N ,	X =	760,030.6 E
F - Y =	541,325.6 N ,	X =	760,022.1 E
G - Y =	543,967.1 N ,	X =	760,005.4 E
H - Y =	546,609.4 N ,	X =	759,991.5 E

SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	546,345.5	Y =	540,038.7
X =	717,887.3	X =	717,854.8
LAT. =	32.500029 °N	LAT. =	32.482695 °N
LONG. =	103.626605 °W	LONG. =	103.626845 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	546,439.9	Y =	539,988.7
X =	717,817.5	X =	717,855.1
LAT. =	32.500290 °N	LAT. =	32.482557 °N
LONG. =	103.626829 °W	LONG. =	103.626845 °W

CORNER COORDINATES (NAD27 NME)

A - Y =	546,537.0 N ,	X =	717,493.4 E
B - Y =	543,895.4 N ,	X =	717,509.2 E
C - Y =	541,256.3 N ,	X =	717,524.9 E
D - Y =	539,935.9 N ,	X =	717,533.3 E
E - Y =	539,947.2 N ,	X =	718,849.2 E
F - Y =	541,264.9 N ,	X =	718,840.7 E
G - Y =	543,906.3 N ,	X =	718,824.1 E
H - Y =	546,548.6 N ,	X =	718,810.3 E

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cory Walk — 3-26-20
Signature — Date

Cory Walk
Printed Name

cory@permitswest.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

02-06-2020
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number — RR — 2020010113

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State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

OCD – HOBBS
08/14/2020
RECEIVED

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 3-24-20

X Original

Operator & OGRID No.: Ascent Energy, LLC (325830)

☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	SHL (ULSTR)	SHL Footages	Expected MCF/D	Flared or Vented	Comments
Big Stag Fed Com 303H	30-025-	B-12-21s-32e	195' FNL & 2166' FEL	200	≈30 days	flare until well clean, then connect
Big Stag Fed Com 304H	30-025- 47561	B-12-21s-32e	195' FNL & 2241' FEL	200	≈30 days	flare until well clean, then connect
Big Stag Fed Com 402H	30-025-	B-12-21s-32e	195' FNL & 2191' FEL	200	≈30 days	flare until well clean, then connect
Big Stag Fed Com 503H	30-025-	O-1-21s-32e	5' FSL & 2191' FEL	200	≈30 days	flare until well clean, then connect
Big Stag Fed Com 603H	30-025-	O-1-21s-32e	5' FSL & 2216' FEL	200	≈30 days	flare until well clean, then connect
Big Stag Fed Com 703H	30-025-	O-1-21s-32e	5' FSL & 2167' FEL	200	≈30 days	flare until well clean, then connect
Big Stag Fed Com 704H	30-025-	B-12-21s-32e	195' FNL & 2216' FEL	200	≈30 days	flare until well clean, then connect

Gathering System and Pipeline Notification

Well will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. Gas produced from this production facility has not yet been dedicated. Ascent Energy, LLC will provide (periodically) to 3Bear Field Services, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Ascent Energy, LLC and 3Bear Field Services, LLC will have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at 3Bear Field Services, LLC Processing Plant at Marathon Road. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on 3Bear Field Services, LLC system at that time. Based on current information, it is Ascent Energy, LLC's belief the system ultimately can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
    - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
    - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease

Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines