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Form 3160-3
(June 2015)

HOBBS OCD
DEC 05 2019
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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.
NMNM057683

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.
GAVILON FED COM
201H (126516)

2. Name of Operator
ASCENT ENERGY LLC (325830)

9. API Well No.
30-025-46580

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 (30213)
HAT MESA / BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface SWSW / 125 FSL / 617 FWL / LAT 32.522694 / LONG -103.674823

At proposed prod. zone NWNW / 330 FNL / 365 FWL / LAT 32.550476 / LONG -103.675658

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 33 / T20S / R33E / NMP

14. Distance in miles and direction from nearest town or post office*
24 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)
125 feet

16. No of acres in lease
640

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
1855 feet

19. Proposed Depth
8775 feet / 18989 feet

20. BLM/BIA Bond No. in file
FED: NMB001496

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3657 feet

22. Approximate date work will start*
07/01/2018

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: (505)466-8120	05/21/2018
Title: President		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Christopher Walls / Ph: (575)234-2234	11/26/2019
Title: Petroleum Engineer	Office: CARLSBAD	

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

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

ECA Rec 12/05/19

KZ 12/11/19

Double sided

gc

(Continued on page 2)

APPROVED WITH CONDITIONS

Approval Date: 11/25/2019

*(Instructions on page 2)

INSTRUCTIONS

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

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

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

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

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

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

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

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

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

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

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

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

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

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Additional Operator Remarks

Location of Well

1. SHL: SWSW / 125 FSL / 617 FWL / TWSP: 20S / RANGE: 33E / SECTION: 33 / LAT: 32.522694 / LONG: -103.674823 (TVD: 0 feet, MD: 0 feet)

   PPP: SWSW / 125 FSL / 617 FWL / TWSP: 20S / RANGE: 33E / SECTION: 33 / LAT: 32.522694 / LONG: -103.674823 (TVD: 0 feet, MD: 0 feet)

   PPP: LOT 1 / 0 FNL / 1231 FEL / TWSP: 21S / RANGE: 32E / SECTION: 4 / LAT: 32.522329 / LONG: -103.675194 (TVD: 3389 feet, MD: 3400 feet)

   PPP: SWSW / 0 FSL / 381 FWL / TWSP: 20S / RANGE: 33E / SECTION: 33 / LAT: 32.522328 / LONG: -103.675642 (TVD: 8674 feet, MD: 8784 feet)

   PPP: SWSW / 0 FSL / 377 FWL / TWSP: 20S / RANGE: 33E / SECTION: 28 / LAT: 32.53684 / LONG: -103.67565 (TVD: 8765 feet, MD: 14064 feet)

   PPP: NWSW / 1320 FSL / 377 FWL / TWSP: 20S / RANGE: 33E / SECTION: 28 / LAT: 32.540495 / LONG: -103.675653 (TVD: 8768 feet, MD: 15384 feet)

   PPP: SWNW / 2640 FNL / 378 FWL / TWSP: 20S / RANGE: 33E / SECTION: 28 / LAT: 32.544195 / LONG: -103.675654 (TVD: 8751 feet, MD: 16704 feet)

   BHL: NWNW / 330 FNL / 365 FWL / TWSP: 20S / RANGE: 33E / SECTION: 28 / LAT: 32.550476 / LONG: -103.675658 (TVD: 8775 feet, MD: 18989 feet)

BLM Point of Contact

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: 5752342224

Email: tortiz@blm.gov

Approval Date: 11/25/2019

Review and Appeal Rights

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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Ascent Energy, LLC**
LEASE NO.:	**NMNM-057683**
WELL NAME & NO.:	**Gavilon Fed Com 201H**
SURFACE HOLE FOOTAGE:	**0125' FSL & 0617' FWL**
BOTTOM HOLE FOOTAGE	**0330' FNL & 0365' FWL Sec. 28, T. 20 S., R 33 E.**
LOCATION:	**Section 33, T. 20 S., R 33 E., NMPM**
COUNTY:	**County, New Mexico**

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

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

Potential hazards:

Capitan Reef
R-111-P Potash
Possibility of water flows in the Artesia, Salado, and Capitan Reef.
Possibility of lost circulation in the Red Beds, Artesia, Rustler, Delaware, and Capitan Reef.

Approval Date: 11/25/2019

B. **CASING**

1. The **13-3/8** inch surface casing shall be set at approximately **1520** feet (**in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet 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 casing is:

    - Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Potash.**

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

    - Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef and Potash. Excess calculates to 10% - Additional cement may be required.**

- ❖ In R111 Potash 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.

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

   - Cement should tie-back at least **50 feet above the Capitan Reef** (Top of Capitan Reef estimated at 3730'). Operator shall provide method of verification.

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 casing shoe shall be **5000 (5M)** 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 Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, 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.

Operator to submit anti-collision report due to the Gavilon Federal 1 (30-025-24417) to the BLM prior to drilling this well.

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)

☐ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 3933612

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. 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.

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

5. 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.

6. 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.

7. 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.

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

    a. 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).

b. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer.

c. 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.

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

e. 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.

f. 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.

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.

JAM 110119

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 201H
SURFACE HOLE FOOTAGE:	617'/W & 125'/S
BOTTOM HOLE FOOTAGE	330'/N & 365'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 303H
SURFACE HOLE FOOTAGE:	125'/S & 642'/W
BOTTOM HOLE FOOTAGE	330'/N & 365'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 304H
SURFACE HOLE FOOTAGE:	125'/S & 767'/W
BOTTOM HOLE FOOTAGE	330'/N & 1015'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 401H
SURFACE HOLE FOOTAGE:	125'/S & 667'/W
BOTTOM HOLE FOOTAGE	330'/N & 365'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 503H
SURFACE HOLE FOOTAGE:	125'/S & 742'/W
BOTTOM HOLE FOOTAGE	330'/N & 390'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 504H
SURFACE HOLE FOOTAGE:	125'/S & 817'/W
BOTTOM HOLE FOOTAGE	330'/N & 1290'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA

Approval Date: 11/25/2019

OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 602H
SURFACE HOLE FOOTAGE:	125'/S & 692'/W
BOTTOM HOLE FOOTAGE	330'/N & 365'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 703H
SURFACE HOLE FOOTAGE:	125'/S & 717'/W
BOTTOM HOLE FOOTAGE	330'/N & 365'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA
OPERATOR'S NAME:	ASCENT ENERGY LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	GAVILON FED COM 704H
SURFACE HOLE FOOTAGE:	125'/S & 792'/W
BOTTOM HOLE FOOTAGE	330'/N & 1030'/W
LOCATION:	SECTION 33, T20S, R33E, NMPM
COUNTY:	LEA

TABLE OF CONTENTS

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.

Access Roads
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.

Potash Minerals:

Lessees must comply with the 2012Secretarial 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 Gavilon Drill Island (See Potash Memo and Map in attached file for Drill Island description).

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 twenty-five (25) 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.

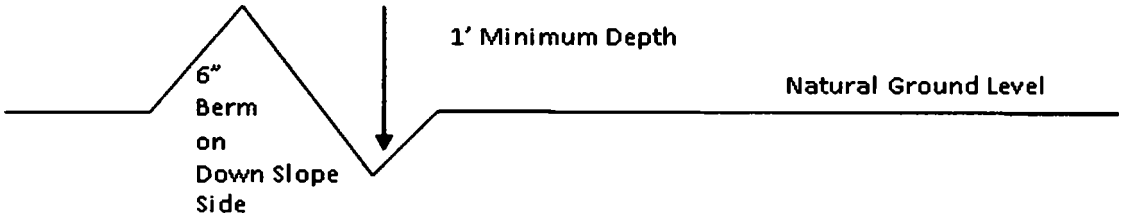
Ditching
Ditching shall be required on both sides of the road.

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

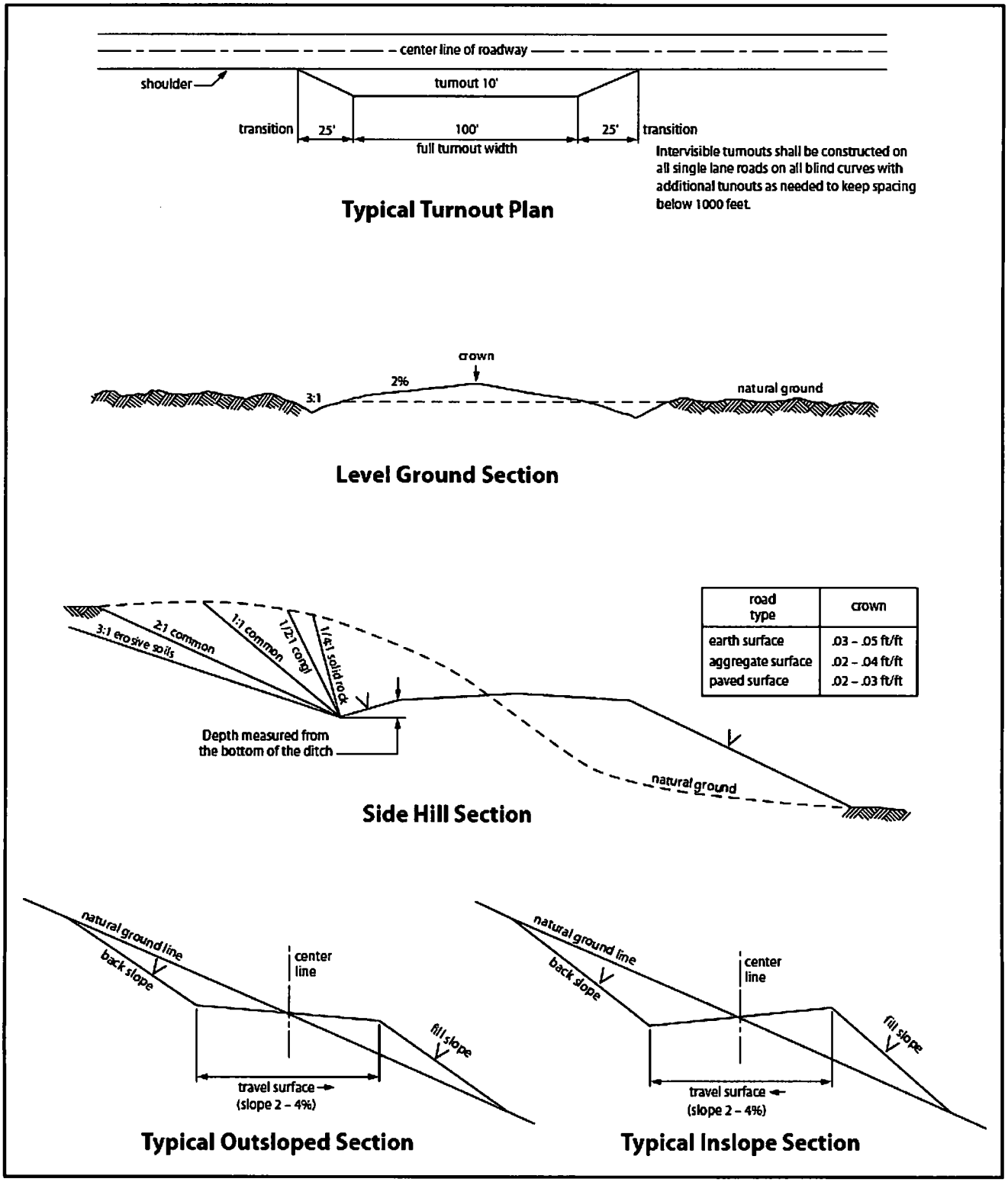


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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 application (Grant, APD, or Sundry Notice) 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 **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **20** 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 **30** 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:

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.

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:

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.

TANK BATTERY:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

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.

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

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BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

12/01/2019

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Brian Wood **Signed on:** 05/21/2018

Title: President

Street Address:

City: **State:** **Zip:**

Phone: (505)466-8120

Email address: afmss@permitswest.com

Field Representative

Representative Name: JODY ROBINS

Street Address: 1621 18TH ST, 200

City: DENVER **State:** CO **Zip:** 80202

Phone: (720)524-3449

Email address:

AFMSS

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

Application Data Report

12/01/2019

APD ID: 10400030418

Submission Date: 05/21/2018

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM

Well Number: 201H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400030418

Tie to previous NOS? N

Submission Date: 05/21/2018

BLM Office: CARLSBAD

User: Brian Wood

Title: President

Federal/Indian APD: FED

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

Lease number: NMNM057683

Lease Acres: 640

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? YES

APD Operator: ASCENT ENERGY LLC

Operator letter of designation:

Operator Info

Operator Organization Name: ASCENT ENERGY LLC

Operator Address: 1621 18th Street, Suite 200

Zip: 80202

Operator PO Box:

Operator City: Denver

State: CO

Operator Phone: (720)710-8999

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: GAVILON FED COM

Well Number: 201H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: HAT MESA

Pool Name: BONE SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER,NATURAL

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Is the proposed well in an area containing other mineral resources? USEABLE WATER,NATURAL GAS,CO2,OIL,POTASH

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** GAVILON FED COM WEST **Number:** 1

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 24 Miles **Distance to nearest well:** 1855 FT **Distance to lease line:** 125 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Gavilon_201H_Plat_GasCapPlan_20180521134009.pdf

Well work start Date: 07/01/2018 **Duration:** 90 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 23786 **Reference Datum:**

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce
SHL Leg #1	125	FSL	617	FWL	20S	33E	33	Aliquot SWSW	32.522694	-103.674823	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 057683	3657	0	0	
KOP Leg #1	161	FNL	1369	FEL	21S	32E	4	Lot 2	32.521885	-103.67564	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014791	-4621	8315	8278	
PPP Leg	2640	FNL	378	FWL	20S	33E	28	Aliquot SWN	32.544195	-103.6756	LEA	NEW MEXI	NEW MEXI	F	NMNM 089889	-509	16704	8751	

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

Drilling Plan Data Report

12/01/2019

APD ID: 10400030418

Submission Date: 05/21/2018

Highlighted data reflects the most recent changes

Show Final Text

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM

Well Number: 201H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	—	3657	0	0	OTHER : Quaternary caliche	USEABLE WATER	N
2	RUSTLER ANHYDRITE	2227	1430	1430		NONE	N
3	TOP SALT	1867	1790	1790		NONE	N
4	CASTILE	407	3250	3266	ANHYDRITE	NONE	N
5	YATES	167	3490	3512	OTHER : Carbonates	NATURAL GAS,CO2,OIL	N
6	CAPITAN REEF	-258	3915	3977	LIMESTONE	USEABLE WATER	N
7	DELAWARE	-1343	5000	5036	OTHER,SANDSTONE : Mt. Group	NATURAL GAS,CO2,OIL	N
8	CHERRY CANYON	-1843	5500	5536	SANDSTONE	NATURAL GAS,CO2,OIL	N
9	BRUSHY CANYON	-3183	6840	6876	SANDSTONE	NATURAL GAS,CO2,OIL	N
10	BONE SPRING	-4788	8445	8485	LIMESTONE	NATURAL GAS,CO2,OIL	N
11	BONE SPRING	-4845	8502	8549	LIMESTONE	NATURAL GAS,CO2,OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 10000

Equipment: Blow out preventer equipment (BOPE) will consist of a single ram, mud cross and double ram type (10,000 psi WP) preventer, and an annular preventer (5000 psi WP). Both units will be hydraulically operated. Ram type will be equipped with blind rams on the bottom and drill pipe rams on the top. Auxiliary equipment: A 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.

Requesting Variance? YES

Variance request: Variance is requested to use a co-flex line between the BOP and choke manifold instead of using a 4" O. D. steel line. Choke and kill line data book is attached. If this hose is unavailable, then a hose of equal or higher rating will be used. Variance is requested to use a speed head (aka, multi-bowl wellhead). Diagram is attached. After running the 13.375"

pressure tested to 250 psi low, followed by a test to 5000-psi high. Pressure test will be repeated at least every 30 days as required by Onshore Order 2.

Testing Procedure: Minimum working pressure of the BOP and related BOPE below the surface casing will be 5000-psi. All BOPE will be tested in accordance with Onshore Order 2. All BOPE will be tested using a conventional test plug – not a cup or J packer. Both surface and intermediate casing will be tested as required by Onshore Order 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater. Before drilling out the surface casing: ram type BOP and accessory equipment will be tested to 5000/250 psig annular preventer will be tested to 3500/250 psig surface casing will be tested to 1500 psi for 30 minutes Before drilling out the intermediate casing: ram type BOP and accessory equipment will be tested to 5000/250 psig annular preventer will be tested to 3500/250 psig intermediate casing will be tested to 2000 psi for 30 minutes Intermediate casing will be landed using a mandrel hanger and separate pack off. After installation, the pack off and lower flange will be pressure tested to 5000 psi. A hydraulically operated choke will be installed before drilling out of the intermediate casing shoe. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each TOOH. These checks will be noted on the daily tour sheets. Speed head will be installed by the vendor's representative(s). Well head welding will be monitored by the vendor's representative(s).

Choke Diagram Attachment:

Gavilon_201H_BOP_Choke_20191018094405.pdf

BOP Diagram Attachment:

Gavilon_201H_BOP_Choke_20191018094412.pdf

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	1445	0	1445	3657		1445	J-55	54.5	ST&C	1.125	1.125	DRY	1.6	DRY	1.6
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3300	0	3283			3300	J-55	36	LT&C	1.125	1.125	DRY	1.6	DRY	1.6
3	INTERMEDIATE	8.75	7.625	NEW	API	N	0	4850	0	4814	3657		4850	HCP-110	29.7	OTHER - EZGO FJ3	1.125	1.125	DRY	1.6	DRY	1.6
4	PRODUCTION	6.75	5.5	NEW	API	N	0	18989	0	8775	3657		18989	HCP-110	20	OTHER - EZGO FJ3	1.125	1.125	DRY	1.6	DRY	1.6

Casing Attachments

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Gavilon_201H_Casing_Design_Assumptions_20180521135451.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Gavilon_201H_Casing_Design_Assumptions_20180521135614.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Gavilon_201H_Casing_Design_Assumptions_20180521135733.pdf

EZGO_7.625in_Casing_Spec_20191018111350.pdf

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Gavilon_201H_Casing_Design_Assumptions_20180521135922.pdf

EZGO_5.5in_Casing_Spec_20191018111429.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1445	560	1.73	13.5	967	100	Class C HALCEM System	4% bentonite
SURFACE	Tail		0	1445	420	1.33	14.8	559	100	Class C HALCEM System	none
INTERMEDIATE	Lead		0	3300	540	1.73	12.7	933	100	Class C HALCEM System	4% bentonite
INTERMEDIATE	Tail		0	3300	485	1.33	14.8	646	100	Class C HALCEM System	none
INTERMEDIATE	Lead		0	4850	195	2.04	12.7	397	50	Class C EconoCem HLC	5% salt + 3% Microbond + 3 lb/sk Kol-seal + 0.3% HR-800
INTERMEDIATE	Tail		0	4850	155	1.37	14.8	212	50	Class C HALCEM System	3% Microbond
PRODUCTION	Lead		0	18989	535	2.89	11	1544	50	NeoCem PL	3% Microbond
PRODUCTION	Tail		0	18989	2295	1.47	13.2	3378	50	NeoCEM PT	3% Microbond

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

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 additivess (e. g., barite, bentonite, LCM) to maintain mud properties and meet minimum lost circulation and weight increase needs will be on site at all times. Mud program may change due to hole conditions. A closed loop system will be used.
Describe the mud monitoring system utilized: An electronic pit volume totalizer (PVT) will be used to monitor volume, flow rate, pump pressure, and stroke rate.

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
0	1445	OTHER : Fresh water	8.6	9							
1445	3300	OTHER : Brine water	9	9.6							
3300	4850	OTHER : Fresh water	8.6	9.2							
4850	18989	OTHER : Cut brine/gel	8.8	9.2							

Section 6 - Test, Logging, Coring

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

GR-CCL will be run in cased hole during completion phase of operations.

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

GR

Coring operation description for the well:

No core, drill stem test, or open hole log is planned.

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4046 **Anticipated Surface Pressure:** 2115.5

Anticipated Bottom Hole Temperature(F): 160

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:

Gavilon_201H_H2S_Plan_20180521140825.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Gavilon_201H_Horizontal_Drill_Plan_20190927090624.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

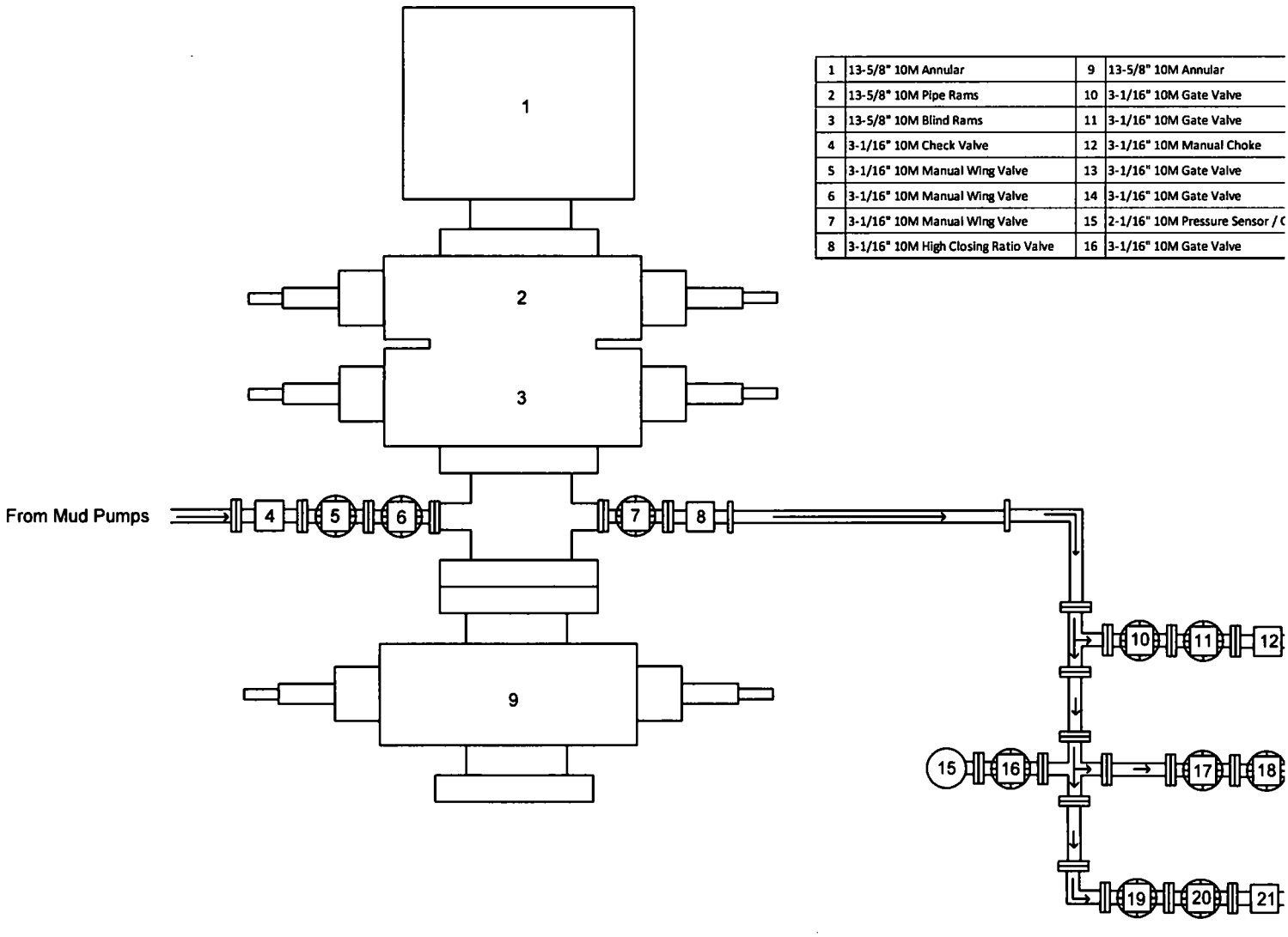
Gavilon_201H_Speedhead_Specs_20180521140922.pdf
Gavilon_201H_Drill_Plan_20180521140943.pdf
CoFlex_Certs_20190927090654.pdf
Gavilon_201H_Anti_Collision_Report_20190927090717.pdf

Other Variance attachment:

Gavilon_201H_Casing_Cementing_Variance_20180521140901.docx
Gavilon_201H_Surface_Rig_Variance_20190927090747.pdf

ASCENT ENERGY - NABORS X04

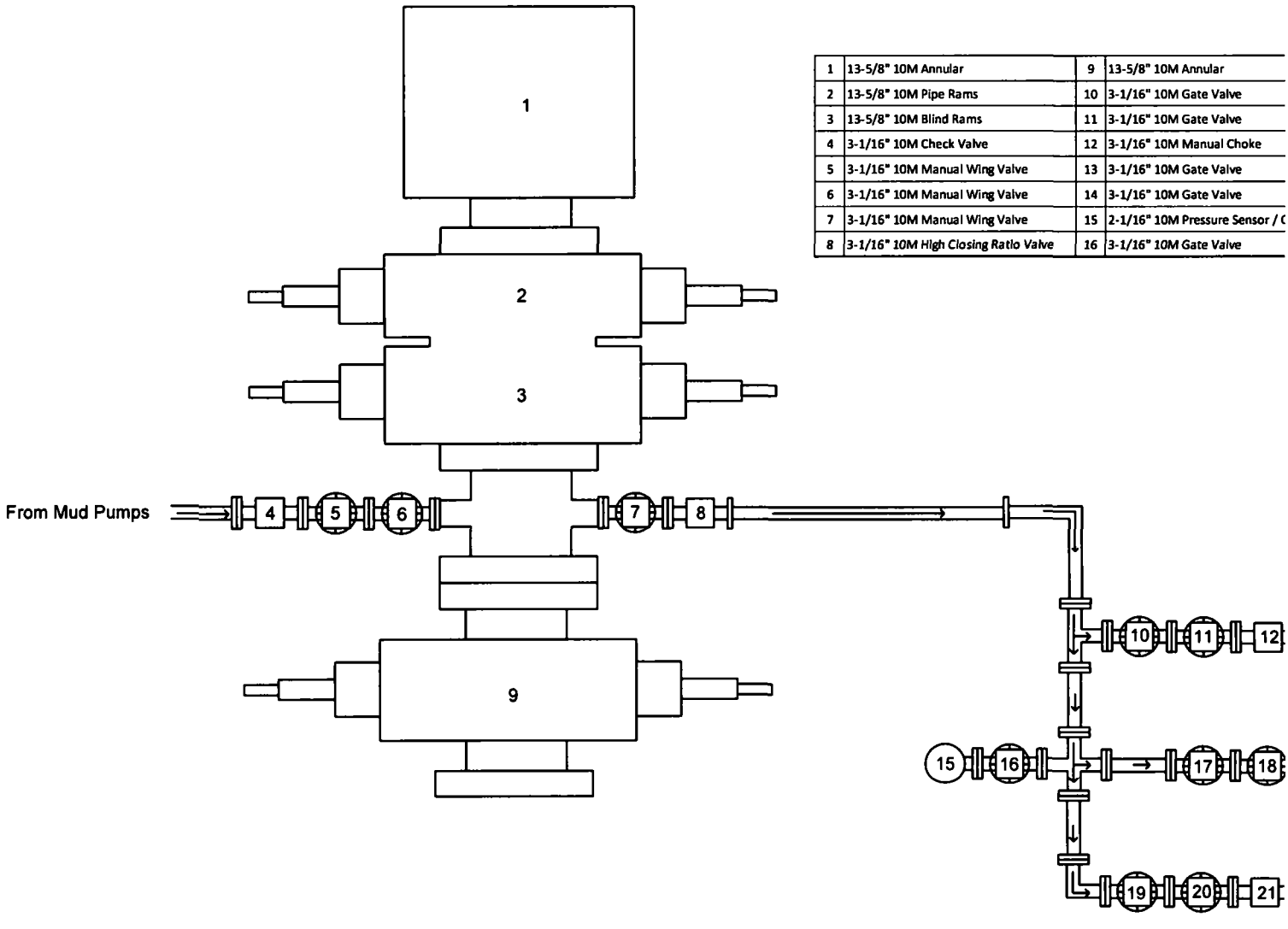
BOPE & CHOKE MANIFOLD DIAGRAM



1	13-5/8" 10M Annular	9	13-5/8" 10M Annular
2	13-5/8" 10M Pipe Rams	10	3-1/16" 10M Gate Valve
3	13-5/8" 10M Blind Rams	11	3-1/16" 10M Gate Valve
4	3-1/16" 10M Check Valve	12	3-1/16" 10M Manual Choke
5	3-1/16" 10M Manual Wing Valve	13	3-1/16" 10M Gate Valve
6	3-1/16" 10M Manual Wing Valve	14	3-1/16" 10M Gate Valve
7	3-1/16" 10M Manual Wing Valve	15	2-1/16" 10M Pressure Sensor / (
8	3-1/16" 10M High Closing Ratio Valve	16	3-1/16" 10M Gate Valve

ASCENT ENERGY - NABORS X04

BOPE & CHOKE MANIFOLD DIAGRAM



1	13-5/8" 10M Annular	9	13-5/8" 10M Annular
2	13-5/8" 10M Pipe Rams	10	3-1/16" 10M Gate Valve
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5	3-1/16" 10M Manual Wing Valve	13	3-1/16" 10M Gate Valve
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7	3-1/16" 10M Manual Wing Valve	15	2-1/16" 10M Pressure Sensor / C
8	3-1/16" 10M High Closing Ratio Valve	16	3-1/16" 10M Gate Valve

Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
J-55	STC	1.125	1.25	1.60
J-55	LTC	1.125	1.25	1.60
HCP-110	FlushMax III	1.125	1.25	1.60
P-110EC	GEOCONN	1.125	1.25	1.60

							Calculated DFs		
Setting Depth (MD)	Setting Depth (TVD)	MW	FG	Collapse	Burst	Tensile	DF Collapse	DF Burst	DF Tension
1,445'	1,445'	8.8	9.5	1130	2730	514	1.71	2.59	2.88
3,300'	3,300'	10.0	10.2	2020	3520	453	1.18	2.33	2.07
4,850'	4,850'	9.0	11	8800	7580	563	3.88	1.95	2.31
18,989	8,775'	9.2	13	12090	14360	641	2.88	1.30	2.33

Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
J-55	STC	1.125	1.25	1.60
J-55	LTC	1.125	1.25	1.60
HCP-110	FlushMax III	1.125	1.25	1.60
P-110EC	GEOCONN	1.125	1.25	1.60

							Calculated DFs		
Setting Depth (MD)	Setting Depth (TVD)	MW	FG	Collapse	Burst	Tensile	DF Collapse	DF Burst	DF Tension
1,445'	1,445'	8.8	9.5	1130	2730	514	1.71	2.59	2.88
3,300'	3,300'	10.0	10.2	2020	3520	453	1.18	2.33	2.07
4,850'	4,850'	9.0	11	8800	7580	563	3.88	1.95	2.31
18,989	8,775'	9.2	13	12090	14360	641	2.88	1.30	2.33

Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
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4,850'	4,850'	9.0	11	8800	7580	563	3.88	1.95	2.31
18,989	8,775'	9.2	13	12090	14360	641	2.88	1.30	2.33

EZGO™ Connection Data Sheet

Your Requirements

Pipe Size (OD): **7.625 in**	Weight: **29.7 lb/ft**	Grade: **P-110 HC**	Connection: **EZGO™ FJ3**

Material	
Grade	P110 HC
Minimum Yield Strength	125,000 psi
Minimum Ultimate Strength	135,000 psi

Pipe Dimensions	
Nominal OD	7.625 in
Nominal ID	6.875 in
Nominal Wall Thickness	0.375 in
Nominal Weight	29.7 lbs/ft
Plain End Weight	29.06 lbs/ft
Nominal Pipe Body Area	8.541 sq in

Pipe Body Performance	
Minimum Pipe Body Yield Strength	1,069,000 lbs
Minimum Collapse Pressure	7,360 psi
Minimum Internal Yield Pressure	10,760 psi
Hydrostatic Test Pressure	9,800 psi

Torque Values	
Minimum Final Torque	4,600 ft-lbs
Maximum Final Torque	6,000 ft-lbs

EZGO™ Connection Dimensions	
Connection OD	7.625 in
Connection ID	6.782 in
Connection Drift Diameter	6.750 in
Make-Up Loss	4.39 in
Joint Efficiency	65.0 %

EZGO™ Connection Performance	
Joint Strength	694,000 lbs
Compression Rating	416,000 lbs
Collapse Pressure Rating	7,360 psi
Internal Pressure Resistance	10,760 psi
Maximum Uniaxial Bend Rating	29.3°/100 ft
String Length (1.4 Design Factor)	17,060 ft

Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
J-55	STC	1.125	1.25	1.60
J-55	LTC	1.125	1.25	1.60
HCP-110	FlushMax III	1.125	1.25	1.60
P-110EC	GEOCONN	1.125	1.25	1.60

							Calculated DFs		
Setting Depth (MD)	Setting Depth (TVD)	MW	FG	Collapse	Burst	Tensile	DF Collapse	DF Burst	DF Tension
1,445'	1,445'	8.8	9.5	1130	2730	514	1.71	2.59	2.88
3,300'	3,300'	10.0	10.2	2020	3520	453	1.18	2.33	2.07
4,850'	4,850'	9.0	11	8800	7580	563	3.88	1.95	2.31
18,989	8,775'	9.2	13	12090	14360	641	2.88	1.30	2.33

EZGO™ Connection Data Sheet

Your Requirements

Pipe Size (OD): **5.50 in** Weight: **20 lb/ft** Grade: **P110 HC** Connection: **EZGO™ FJ3**

Material	
Grade	P-110 HC
Minimum Yield Strength	125,000 psi
Minimum Ultimate Strength	135,000 psi

Pipe Dimensions	
Nominal OD	5.5 in
Nominal ID	4.778 in
Nominal Wall Thickness	0.361 in
Nominal Weight	20.00 lbs/ft
Plain End Weight	19.83 lbs/ft
Nominal Pipe Body Area	5.828 sq in

Pipe Body Performance	
Minimum Pipe Body Yield Strength	729,000 lbs
Minimum Collapse Pressure	12,090 psi
Minimum Internal Yield Pressure	14,360 psi
Hydrostatic Test Pressure	13,100 psi

Torque Values	
Minimum Final Torque	2,400 ft-lbs
Maximum Final Torque	3,700 ft-lbs

EZGO™ Connection Dimensions	
Connection OD	5.50 in
Connection ID	4.708 in
Connection Drift Diameter	4.653 in
Make-Up Loss	4.64 in
Joint Efficiency	59 %

EZGO™ Connection Performance	
Joint Strength	430,000 lbs
Compression Rating	258,000 lbs
Collapse Pressure Rating	12,090 psi
Internal Pressure Resistance	14,360 psi
Maximum Uniaxial Bend Rating	36°/100 ft

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 location 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

Jody Robins, Vice President, Drilling	Office: (720) 710-8999
	Mobile: (303) 905-1858
Matt Ward, Chief Operations Officer	Mobile: (303) 506-6647
Dean Gimbel, Vice President Completions	Mobile: (303) 945-1323
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

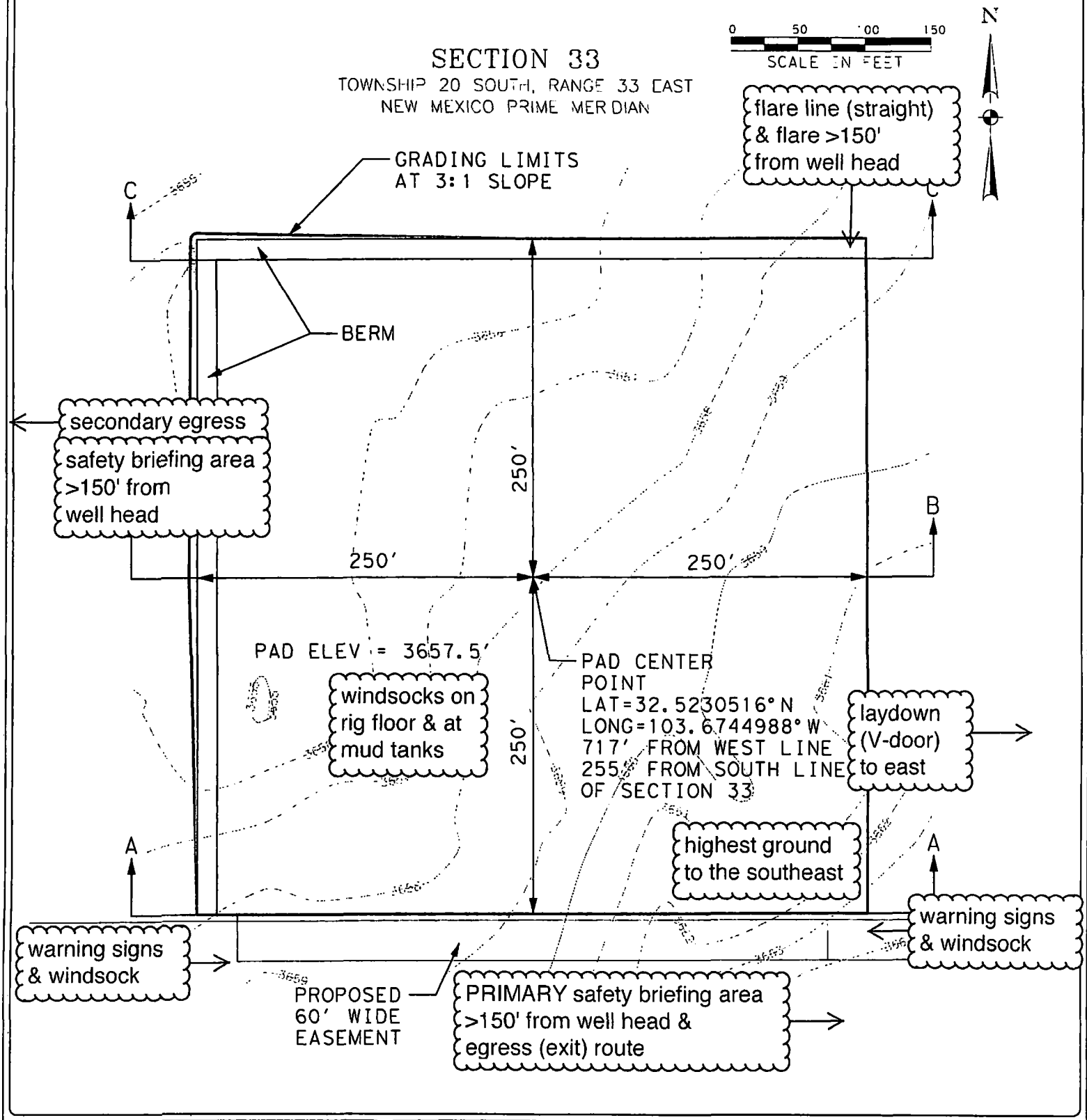
Dal Paso Animal Hospital (Hobbs)	(575) 397-2286
Hobbs Animal Clinic & Pet Care (Hobbs)	(575) 392-5563
Great Plains Veterinary Clinic & Hospital (Hobbs)	(575) 392-5513

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



FSC INC
SURVEYORS+ENGINEERS
2205 WALNUT STREET / COLUMBUS, TX 78934
1.855.637.5725 / WWW.FSCINC.NET
TBPE FIRM # 17957 / TBPLS # 10000100

PERMITTING

PERMITTING REVIEW ONLY

THESE DOCUMENTS ARE FOR PERMITTING REVIEW AND NOT FOR BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

KIRK E. LOWE	23827
NAME	P.E. NO.
DATE	05/01/2018

GAVILON WEST #1 PROPOSED PAD

LEA COUNTY, NEW MEXICO

SITE LAYOUT AND GRADING

ASCENT ENERGY, LLC
1621 18TH ST., STE 200
DENVER, CO 80202

ASCENT ENERGY

REVISIONS		
NO.	DATE	DESCRIPTION

Project No.:	2018010116
Issued:	05/01/18
Drawn By:	FSC
Checked By:	KL

ASCENT ENERGY

Project: LEA COUNTY, NEW MEXICO (NAI
Site: SW SW SEC 33 T20S R33E N.M.P
Well: GAVILON FED COM 201H
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

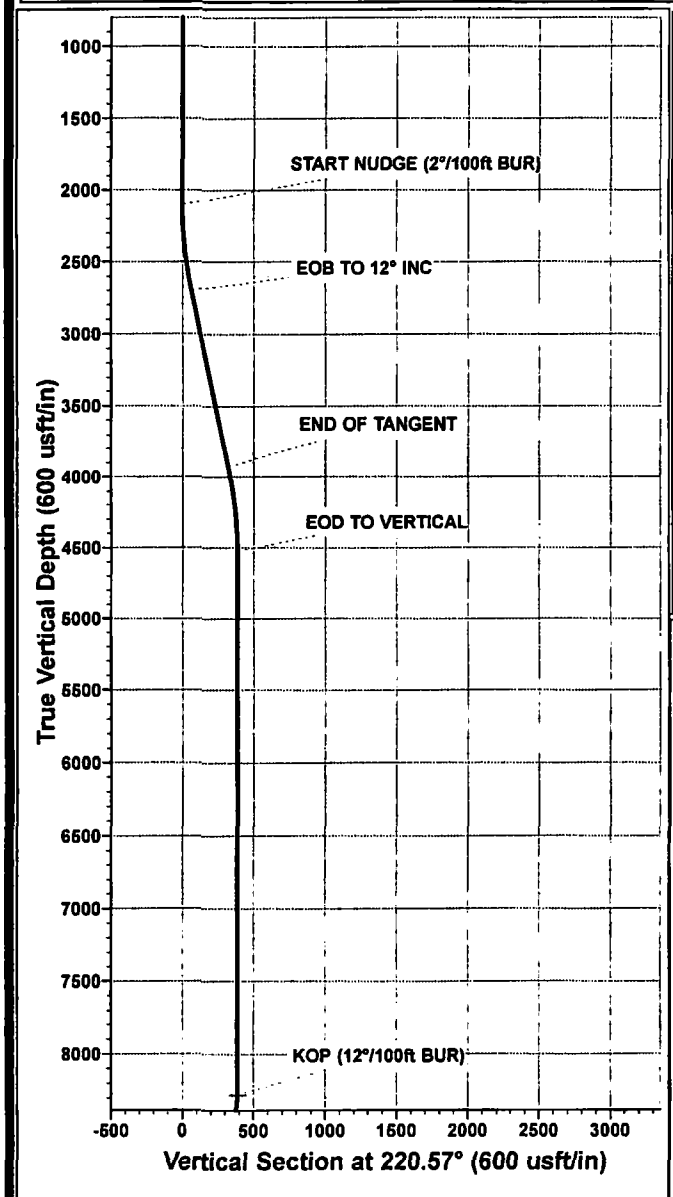
ANNOTATIONS

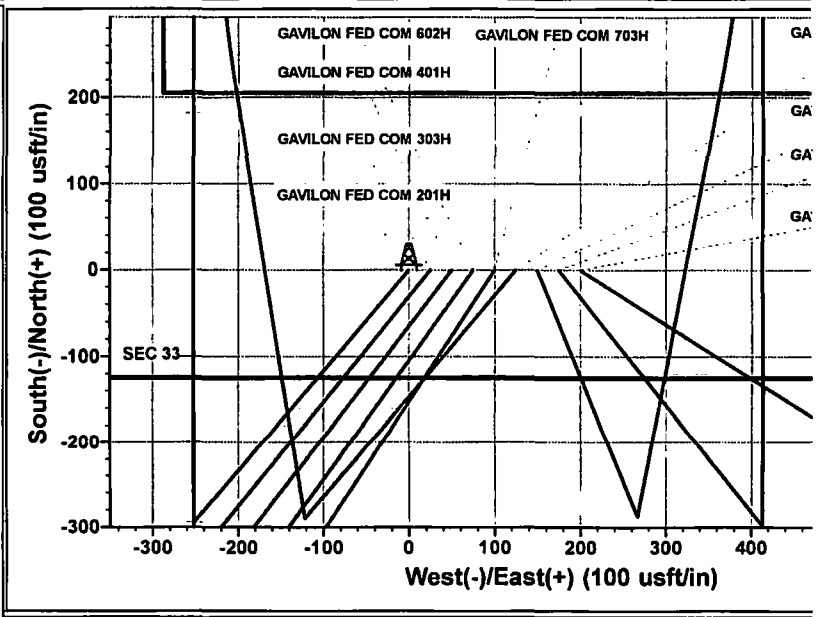
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 125ft FSL & 617ft FWL of Sec 33
2100.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
2695.62	2700.00	12.00	220.57	-47.55	-40.72	-46.50	62.60	EOB TO 12° INC
3928.52	3960.44	12.00	220.57	-246.62	-211.15	-241.16	324.66	END OF TANGENT
4524.14	4560.44	0.00	0.00	-294.17	-251.87	-287.66	387.27	EOD TO VERTICAL
8278.49	8314.79	0.00	0.00	-294.17	-251.87	-287.66	387.27	KOP (12°/100ft BUR)
8755.95	9063.87	89.89	359.97	182.38	-252.12	188.74	863.82	HZ LP: 307ft FSL & 365ft FWL of Sec 33
8756.00	9088.87	89.89	359.97	207.38	-252.13	213.73	888.82	FTP: 332ft FSL & 365ft FWL of Sec 33
8774.88	18987.67	89.89	359.97	10106.16	-257.33	10109.44	10787.60	LTP: 332ft FNL & 365ft FWL of Sec 28
8775.00	18989.49	89.89	359.97	10107.98	-257.32	10111.26	10789.42	BHL: 330ft FNL & 365ft FWL of Sec 28

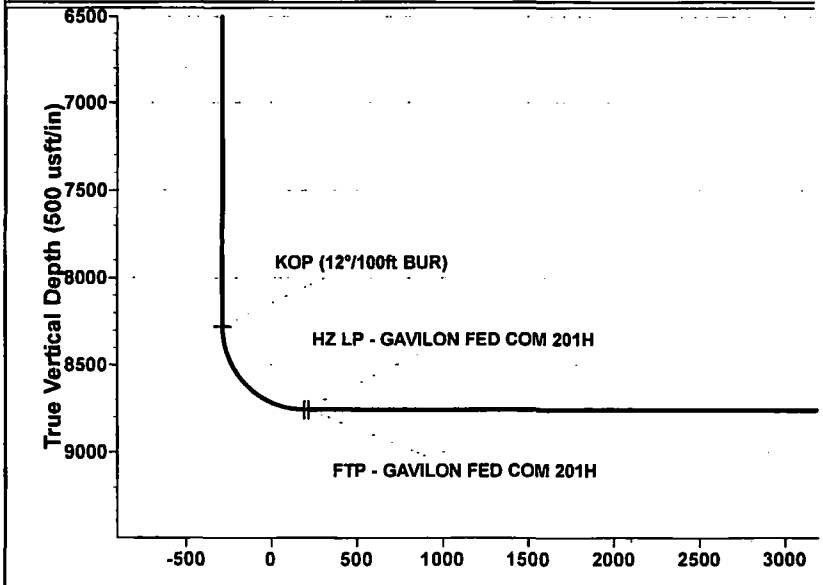
PROPOSED LOCAL
SHL: 125ft FSL & 61
HZ LP: 307ft FSL & 36
FTP : 332ft FSL & 36
LTP: 332ft FNL & 365
BHL : 330ft FNL & 36

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - GAVILON FED COM 201H	8278.49	-294.17	-251.87	32.521885	-103.675640
HZ LP - GAVILON FED COM 201H	8755.95	182.38	-252.12	32.523195	-103.675641
FTP - GAVILON FED COM 201H	8756.00	207.38	-252.14	32.523264	-103.675641
LTP - GAVILON FED COM 201H	8774.99	10106.16	-257.32	32.550471	-103.675658
BHL - GAVILON FED COM 201H	8775.00	10107.98	-257.32	32.550476	-103.675658







Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GAVILON FED COM 201H
Company:	ASCENT ENERGY	**TVD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Project:	LEA COUNTY, NEW MEXICO (NAD 83)	**MD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Site:	SW SW SEC 33 T20S R33E N.M.P.M.	**North Reference:**	True
Well:	GAVILON FED COM 201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project LEA COUNTY, NEW MEXICO (NAD 83)

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 SW SW SEC 33 T20S R33E N.M.P.M.

Site Position:		**Northing:**	554,513.87 usft	**Latitude:**	32.522694
From:	Lat/Long	**Easting:**	744,303.22 usft	**Longitude:**	-103.674823
Position Uncertainty:	0.00 usft	**Slot Radius:**	1.10000 ft	**Grid Convergence:**	0.35 °

Well GAVILON FED COM 201H

Well Position	**+N/-S**	0.00 usft	**Northing:**	554,513.87 usft	**Latitude:**	32.522694
	+E/-W	0.00 usft	**Easting:**	744,303.22 usft	**Longitude:**	-103.674823
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,657.00 usft

Wellbore ORIGINAL WELLBORE

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	05/04/2018	6.94	60.31	48,020

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 (°)
	8,775.00	0.00	0.00	358.54

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	-3,682.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	-1,582.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,700.00	12.00	220.57	2,695.62	-986.38	-47.55	-40.72	2.00	2.00	0.00	220.57	
3,960.44	12.00	220.57	3,928.52	246.52	-246.62	-211.15	0.00	0.00	0.00	0.00	
4,560.44	0.00	0.00	4,524.14	842.14	-294.17	-251.87	2.00	-2.00	0.00	180.00	
8,314.79	0.00	0.00	8,278.49	4,596.49	-294.17	-251.87	0.00	0.00	0.00	0.00	KOP - GAVILON FE
9,063.87	89.89	359.97	8,755.95	5,073.95	182.38	-252.12	12.00	12.00	0.00	359.97	HZ LP - GAVILON I
9,088.87	89.89	359.97	8,756.00	5,074.00	207.38	-252.13	0.00	0.00	0.00	0.00	
18,989.49	89.89	359.97	8,775.00	5,093.00	10,107.98	-257.32	0.00	0.00	0.00	0.00	BHL - GAVILON FE

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GAVILON FED COM 201H
Company:	ASCENT ENERGY	**TVD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Project:	LEA COUNTY, NEW MEXICO (NAD 83)	**MD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Site:	SW SW SEC 33 T20S R33E N.M.P.M.	**North Reference:**	True
Well:	GAVILON FED COM 201H	**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: 125ft FSL & 617ft FWL of Sec 33										
0.00	***0.00***	***0.00***	***0.00***	***3,682.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
100.00	0.00	0.00	100.00	3,582.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	3,482.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	3,382.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	3,282.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	3,182.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	3,082.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	2,982.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	2,882.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	2,782.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	2,682.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	2,582.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	2,482.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	2,382.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	2,282.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	2,182.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	2,082.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	1,982.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	1,882.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	1,782.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	1,682.00	0.00	0.00	0.00	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
2,100.00	***0.00***	***0.00***	***2,100.00***	***1,582.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
2,200.00	2.00	220.57	2,199.98	1,482.02	-1.33	-1.14	-1.30	2.00	2.00	0.00
2,300.00	4.00	220.57	2,299.84	1,382.16	-5.30	-4.54	-5.18	2.00	2.00	0.00
2,400.00	6.00	220.57	2,399.45	1,282.55	-11.92	-10.21	-11.66	2.00	2.00	0.00
2,500.00	8.00	220.57	2,498.70	1,183.30	-21.18	-18.13	-20.71	2.00	2.00	0.00
2,600.00	10.00	220.57	2,597.47	1,084.53	-33.06	-28.31	-32.33	2.00	2.00	0.00
EOB TO 12° INC										
2,700.00	***12.00***	***220.57***	***2,695.62***	***986.38***	***-47.55***	***-40.72***	***-46.50***	***2.00***	***2.00***	***0.00***
2,800.00	12.00	220.57	2,793.44	888.56	-63.35	-54.24	-61.95	0.00	0.00	0.00
2,900.00	12.00	220.57	2,891.25	790.75	-79.14	-67.76	-77.39	0.00	0.00	0.00
3,000.00	12.00	220.57	2,989.07	692.93	-94.93	-81.28	-92.83	0.00	0.00	0.00
3,100.00	12.00	220.57	3,086.88	595.12	-110.73	-94.80	-108.28	0.00	0.00	0.00
3,200.00	12.00	220.57	3,184.70	497.30	-126.52	-108.33	-123.72	0.00	0.00	0.00
3,300.00	12.00	220.57	3,282.51	399.49	-142.31	-121.85	-139.17	0.00	0.00	0.00
3,400.00	12.00	220.57	3,380.33	301.67	-158.11	-135.37	-154.61	0.00	0.00	0.00
3,500.00	12.00	220.57	3,478.14	203.86	-173.90	-148.89	-170.05	0.00	0.00	0.00
3,600.00	12.00	220.57	3,575.96	106.04	-189.69	-162.42	-185.50	0.00	0.00	0.00
3,700.00	12.00	220.57	3,673.77	8.23	-205.48	-175.94	-200.94	0.00	0.00	0.00
3,800.00	12.00	220.57	3,771.59	-89.59	-221.28	-189.46	-216.38	0.00	0.00	0.00
3,900.00	12.00	220.57	3,869.40	-187.40	-237.07	-202.98	-231.83	0.00	0.00	0.00
END OF TANGENT										
3,960.44	***12.00***	***220.57***	***3,928.52***	***-246.52***	***-246.62***	***-211.15***	***-241.16***	***0.00***	***0.00***	***0.00***
4,000.00	11.21	220.57	3,967.27	-285.27	-252.66	-216.33	-247.07	2.00	-2.00	0.00
4,100.00	9.21	220.57	4,065.68	-383.68	-266.12	-227.86	-260.24	2.00	-2.00	0.00
4,200.00	7.21	220.57	4,164.65	-482.65	-276.97	-237.14	-270.84	2.00	-2.00	0.00
4,300.00	5.21	220.57	4,264.06	-582.06	-285.18	-244.18	-278.88	2.00	-2.00	0.00
4,400.00	3.21	220.57	4,363.79	-681.79	-290.76	-248.95	-284.33	2.00	-2.00	0.00
4,500.00	1.21	220.57	4,463.71	-781.71	-293.69	-251.46	-287.19	2.00	-2.00	0.00
EOD TO VERTICAL										
4,560.44	***0.00***	***0.00***	***4,524.14***	***-842.14***	***-294.17***	***-251.87***	***-287.66***	***2.00***	***-2.00***	***0.00***
4,600.00	0.00	0.00	4,563.70	-881.70	-294.17	-251.87	-287.66	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GAVILON FED COM 201H
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Project:	LEA COUNTY, NEW MEXICO (NAD 83)	**MD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Site:	SW SW SEC 33 T20S R33E N.M.P.M.	**North Reference:**	True
Well:	GAVILON FED COM 201H	**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)
4,700.00	0.00	0.00	4,663.70	-981.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
4,800.00	0.00	0.00	4,763.70	-1,081.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
4,900.00	0.00	0.00	4,863.70	-1,181.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,000.00	0.00	0.00	4,963.70	-1,281.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,100.00	0.00	0.00	5,063.70	-1,381.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,200.00	0.00	0.00	5,163.70	-1,481.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,300.00	0.00	0.00	5,263.70	-1,581.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,400.00	0.00	0.00	5,363.70	-1,681.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,500.00	0.00	0.00	5,463.70	-1,781.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,600.00	0.00	0.00	5,563.70	-1,881.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,700.00	0.00	0.00	5,663.70	-1,981.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,800.00	0.00	0.00	5,763.70	-2,081.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
5,900.00	0.00	0.00	5,863.70	-2,181.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,000.00	0.00	0.00	5,963.70	-2,281.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,100.00	0.00	0.00	6,063.70	-2,381.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,200.00	0.00	0.00	6,163.70	-2,481.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,300.00	0.00	0.00	6,263.70	-2,581.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,400.00	0.00	0.00	6,363.70	-2,681.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,500.00	0.00	0.00	6,463.70	-2,781.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,600.00	0.00	0.00	6,563.70	-2,881.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,700.00	0.00	0.00	6,663.70	-2,981.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,800.00	0.00	0.00	6,763.70	-3,081.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
6,900.00	0.00	0.00	6,863.70	-3,181.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,000.00	0.00	0.00	6,963.70	-3,281.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,100.00	0.00	0.00	7,063.70	-3,381.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,200.00	0.00	0.00	7,163.70	-3,481.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,300.00	0.00	0.00	7,263.70	-3,581.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,400.00	0.00	0.00	7,363.70	-3,681.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,500.00	0.00	0.00	7,463.70	-3,781.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,600.00	0.00	0.00	7,563.70	-3,881.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,700.00	0.00	0.00	7,663.70	-3,981.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,800.00	0.00	0.00	7,763.70	-4,081.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
7,900.00	0.00	0.00	7,863.70	-4,181.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
8,000.00	0.00	0.00	7,963.70	-4,281.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
8,100.00	0.00	0.00	8,063.70	-4,381.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
8,200.00	0.00	0.00	8,163.70	-4,481.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
8,300.00	0.00	0.00	8,263.70	-4,581.70	-294.17	-251.87	-287.66	0.00	0.00	0.00
KOP (12°/100ft BUR)										
8,314.79	***0.00***	***0.00***	***8,278.49***	***-4,596.49***	***-294.17***	***-251.87***	***-287.66***	***0.00***	***0.00***	***0.00***
8,400.00	10.23	359.97	8,363.25	-4,681.25	-286.59	-251.87	-280.08	12.00	12.00	0.00
8,500.00	22.23	359.97	8,459.09	-4,777.09	-258.70	-251.89	-252.20	12.00	12.00	0.00
8,600.00	34.23	359.97	8,547.04	-4,865.04	-211.49	-251.91	-205.01	12.00	12.00	0.00
8,700.00	46.23	359.97	8,623.25	-4,941.25	-147.02	-251.95	-140.57	12.00	12.00	0.00
8,800.00	58.23	359.97	8,684.39	-5,002.39	-68.13	-251.99	-61.69	12.00	12.00	0.00
8,900.00	70.23	359.97	8,727.80	-5,045.80	21.76	-252.04	28.17	12.00	12.00	0.00
9,000.00	82.23	359.97	8,751.56	-5,069.56	118.71	-252.09	125.09	12.00	12.00	0.00
HZ LP: 307ft FSL & 365ft FWL of Sec 33										
9,063.87	***89.89***	***359.97***	***8,755.95***	***-5,073.95***	***182.38***	***-252.12***	***188.74***	***12.00***	***12.00***	***0.00***
FTP: 332ft FSL & 365ft FWL of Sec.33										
9,088.87	***89.89***	***359.97***	***8,756.00***	***-5,074.00***	***207.38***	***-252.13***	***213.73***	***0.00***	***0.00***	***0.00***
9,100.00	89.89	359.97	8,756.02	-5,074.02	218.51	-252.14	224.86	0.00	0.00	0.00
9,200.00	89.89	359.97	8,756.21	-5,074.21	318.51	-252.19	324.82	0.00	0.00	0.00
9,300.00	89.89	359.97	8,756.40	-5,074.40	418.51	-252.24	424.79	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GAVILON FED COM 201H
Company:	ASCENT ENERGY	**TVD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Project:	LEA COUNTY, NEW MEXICO (NAD 83)	**MD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Site:	SW SW SEC 33 T20S R33E N.M.P.M.	**North Reference:**	True
Well:	GAVILON FED COM 201H	**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)
9,400.00	89.89	359.97	8,756.59	-5,074.59	518.51	-252.30	524.76	0.00	0.00	0.00
9,500.00	89.89	359.97	8,756.78	-5,074.78	618.51	-252.35	624.73	0.00	0.00	0.00
9,600.00	89.89	359.97	8,756.97	-5,074.97	718.51	-252.40	724.70	0.00	0.00	0.00
9,700.00	89.89	359.97	8,757.16	-5,075.16	818.51	-252.45	824.67	0.00	0.00	0.00
9,800.00	89.89	359.97	8,757.35	-5,075.35	918.51	-252.51	924.64	0.00	0.00	0.00
9,900.00	89.89	359.97	8,757.54	-5,075.54	1,018.51	-252.56	1,024.61	0.00	0.00	0.00
10,000.00	89.89	359.97	8,757.74	-5,075.74	1,118.51	-252.61	1,124.57	0.00	0.00	0.00
10,100.00	89.89	359.97	8,757.93	-5,075.93	1,218.51	-252.66	1,224.54	0.00	0.00	0.00
10,200.00	89.89	359.97	8,758.12	-5,076.12	1,318.51	-252.72	1,324.51	0.00	0.00	0.00
10,300.00	89.89	359.97	8,758.31	-5,076.31	1,418.51	-252.77	1,424.48	0.00	0.00	0.00
10,400.00	89.89	359.97	8,758.50	-5,076.50	1,518.51	-252.82	1,524.45	0.00	0.00	0.00
10,500.00	89.89	359.97	8,758.69	-5,076.69	1,618.51	-252.87	1,624.42	0.00	0.00	0.00
10,600.00	89.89	359.97	8,758.88	-5,076.88	1,718.51	-252.93	1,724.39	0.00	0.00	0.00
10,700.00	89.89	359.97	8,759.07	-5,077.07	1,818.51	-252.98	1,824.36	0.00	0.00	0.00
10,800.00	89.89	359.97	8,759.26	-5,077.26	1,918.51	-253.03	1,924.32	0.00	0.00	0.00
10,900.00	89.89	359.97	8,759.45	-5,077.45	2,018.51	-253.08	2,024.29	0.00	0.00	0.00
11,000.00	89.89	359.97	8,759.64	-5,077.64	2,118.51	-253.14	2,124.26	0.00	0.00	0.00
11,100.00	89.89	359.97	8,759.83	-5,077.83	2,218.51	-253.19	2,224.23	0.00	0.00	0.00
11,200.00	89.89	359.97	8,760.02	-5,078.02	2,318.51	-253.24	2,324.20	0.00	0.00	0.00
11,300.00	89.89	359.97	8,760.22	-5,078.22	2,418.51	-253.29	2,424.17	0.00	0.00	0.00
11,400.00	89.89	359.97	8,760.41	-5,078.41	2,518.51	-253.35	2,524.14	0.00	0.00	0.00
11,500.00	89.89	359.97	8,760.60	-5,078.60	2,618.50	-253.40	2,624.11	0.00	0.00	0.00
11,600.00	89.89	359.97	8,760.79	-5,078.79	2,718.50	-253.45	2,724.07	0.00	0.00	0.00
11,700.00	89.89	359.97	8,760.98	-5,078.98	2,818.50	-253.50	2,824.04	0.00	0.00	0.00
11,800.00	89.89	359.97	8,761.17	-5,079.17	2,918.50	-253.56	2,924.01	0.00	0.00	0.00
11,900.00	89.89	359.97	8,761.36	-5,079.36	3,018.50	-253.61	3,023.98	0.00	0.00	0.00
12,000.00	89.89	359.97	8,761.55	-5,079.55	3,118.50	-253.66	3,123.95	0.00	0.00	0.00
12,100.00	89.89	359.97	8,761.74	-5,079.74	3,218.50	-253.71	3,223.92	0.00	0.00	0.00
12,200.00	89.89	359.97	8,761.93	-5,079.93	3,318.50	-253.77	3,323.89	0.00	0.00	0.00
12,300.00	89.89	359.97	8,762.12	-5,080.12	3,418.50	-253.82	3,423.86	0.00	0.00	0.00
12,400.00	89.89	359.97	8,762.31	-5,080.31	3,518.50	-253.87	3,523.82	0.00	0.00	0.00
12,500.00	89.89	359.97	8,762.50	-5,080.50	3,618.50	-253.92	3,623.79	0.00	0.00	0.00
12,600.00	89.89	359.97	8,762.70	-5,080.70	3,718.50	-253.98	3,723.76	0.00	0.00	0.00
12,700.00	89.89	359.97	8,762.89	-5,080.89	3,818.50	-254.03	3,823.73	0.00	0.00	0.00
12,800.00	89.89	359.97	8,763.08	-5,081.08	3,918.50	-254.08	3,923.70	0.00	0.00	0.00
12,900.00	89.89	359.97	8,763.27	-5,081.27	4,018.50	-254.13	4,023.67	0.00	0.00	0.00
13,000.00	89.89	359.97	8,763.46	-5,081.46	4,118.50	-254.18	4,123.64	0.00	0.00	0.00
13,100.00	89.89	359.97	8,763.65	-5,081.65	4,218.50	-254.24	4,223.61	0.00	0.00	0.00
13,200.00	89.89	359.97	8,763.84	-5,081.84	4,318.50	-254.29	4,323.57	0.00	0.00	0.00
13,300.00	89.89	359.97	8,764.03	-5,082.03	4,418.50	-254.34	4,423.54	0.00	0.00	0.00
13,400.00	89.89	359.97	8,764.22	-5,082.22	4,518.50	-254.39	4,523.51	0.00	0.00	0.00
13,500.00	89.89	359.97	8,764.41	-5,082.41	4,618.50	-254.45	4,623.48	0.00	0.00	0.00
13,600.00	89.89	359.97	8,764.60	-5,082.60	4,718.50	-254.50	4,723.45	0.00	0.00	0.00
13,700.00	89.89	359.97	8,764.79	-5,082.79	4,818.50	-254.55	4,823.42	0.00	0.00	0.00
13,800.00	89.89	359.97	8,764.98	-5,082.98	4,918.50	-254.60	4,923.39	0.00	0.00	0.00
13,900.00	89.89	359.97	8,765.18	-5,083.18	5,018.50	-254.66	5,023.36	0.00	0.00	0.00
14,000.00	89.89	359.97	8,765.37	-5,083.37	5,118.50	-254.71	5,123.32	0.00	0.00	0.00
14,100.00	89.89	359.97	8,765.56	-5,083.56	5,218.50	-254.76	5,223.29	0.00	0.00	0.00
14,200.00	89.89	359.97	8,765.75	-5,083.75	5,318.50	-254.81	5,323.26	0.00	0.00	0.00
14,300.00	89.89	359.97	8,765.94	-5,083.94	5,418.50	-254.87	5,423.23	0.00	0.00	0.00
14,400.00	89.89	359.97	8,766.13	-5,084.13	5,518.50	-254.92	5,523.20	0.00	0.00	0.00
14,500.00	89.89	359.97	8,766.32	-5,084.32	5,618.50	-254.97	5,623.17	0.00	0.00	0.00
14,600.00	89.89	359.97	8,766.51	-5,084.51	5,718.50	-255.02	5,723.14	0.00	0.00	0.00
14,700.00	89.89	359.97	8,766.70	-5,084.70	5,818.50	-255.08	5,823.11	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GAVILON FED COM 201H
Company:	ASCENT ENERGY	**TVD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Project:	LEA COUNTY, NEW MEXICO (NAD 83)	**MD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Site:	SW SW SEC 33 T20S R33E N.M.P.M.	**North Reference:**	True
Well:	GAVILON FED COM 201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

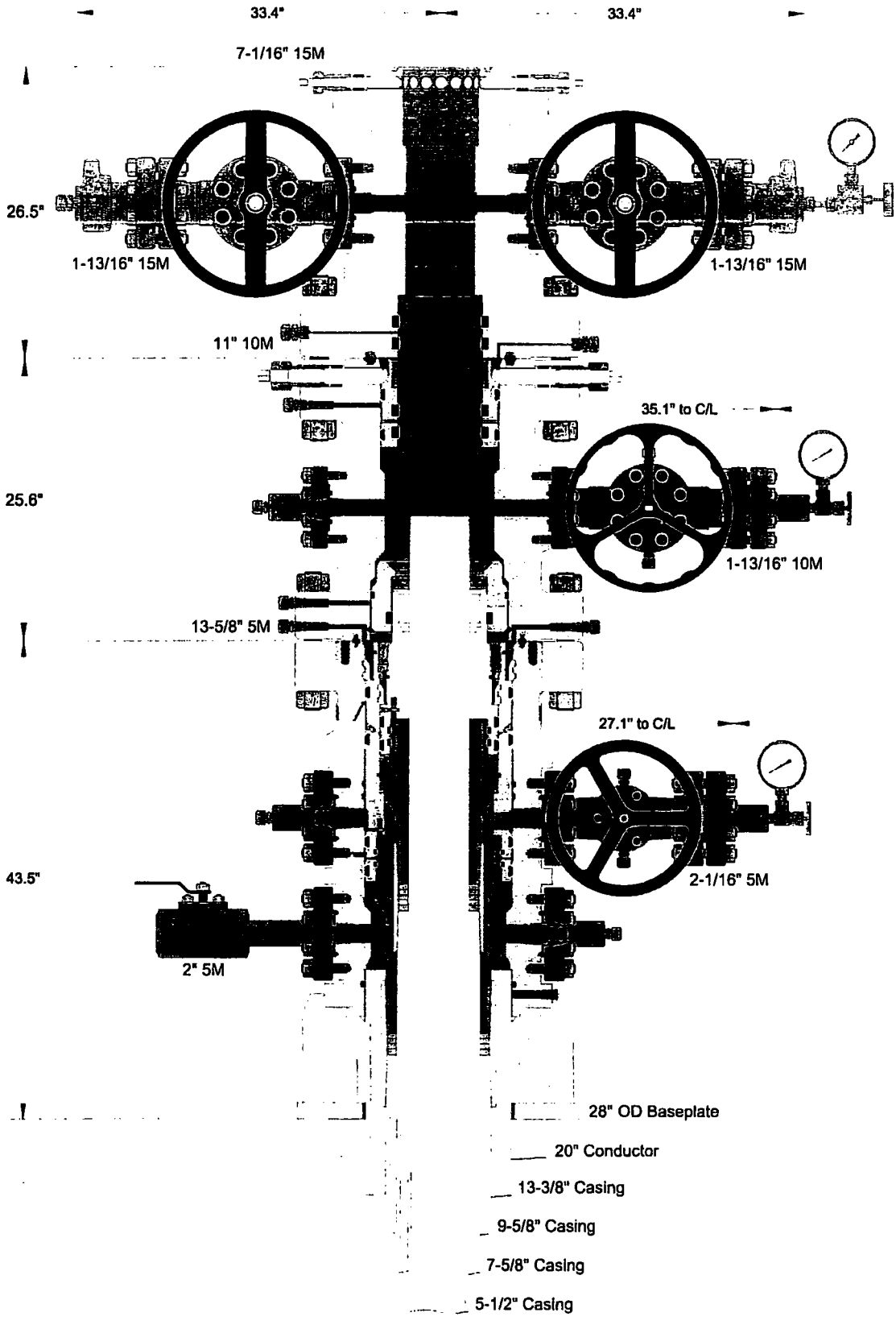
Planned Survey

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)
14,800.00	89.89	359.97	8,766.89	-5,084.89	5,918.50	-255.13	5,923.07	0.00	0.00	0.00
14,900.00	89.89	359.97	8,767.08	-5,085.08	6,018.50	-255.18	6,023.04	0.00	0.00	0.00
15,000.00	89.89	359.97	8,767.27	-5,085.27	6,118.50	-255.23	6,123.01	0.00	0.00	0.00
15,100.00	89.89	359.97	8,767.46	-5,085.46	6,218.50	-255.29	6,222.98	0.00	0.00	0.00
15,200.00	89.89	359.97	8,767.66	-5,085.66	6,318.50	-255.34	6,322.95	0.00	0.00	0.00
15,300.00	89.89	359.97	8,767.85	-5,085.85	6,418.50	-255.39	6,422.92	0.00	0.00	0.00
15,400.00	89.89	359.97	8,768.04	-5,086.04	6,518.50	-255.44	6,522.89	0.00	0.00	0.00
15,500.00	89.89	359.97	8,768.23	-5,086.23	6,618.50	-255.50	6,622.86	0.00	0.00	0.00
15,600.00	89.89	359.97	8,768.42	-5,086.42	6,718.50	-255.55	6,722.82	0.00	0.00	0.00
15,700.00	89.89	359.97	8,768.61	-5,086.61	6,818.50	-255.60	6,822.79	0.00	0.00	0.00
15,800.00	89.89	359.97	8,768.80	-5,086.80	6,918.50	-255.65	6,922.76	0.00	0.00	0.00
15,900.00	89.89	359.97	8,768.99	-5,086.99	7,018.50	-255.71	7,022.73	0.00	0.00	0.00
16,000.00	89.89	359.97	8,769.18	-5,087.18	7,118.50	-255.76	7,122.70	0.00	0.00	0.00
16,100.00	89.89	359.97	8,769.37	-5,087.37	7,218.50	-255.81	7,222.67	0.00	0.00	0.00
16,200.00	89.89	359.97	8,769.56	-5,087.56	7,318.50	-255.86	7,322.64	0.00	0.00	0.00
16,300.00	89.89	359.97	8,769.75	-5,087.75	7,418.50	-255.92	7,422.61	0.00	0.00	0.00
16,400.00	89.89	359.97	8,769.94	-5,087.94	7,518.50	-255.97	7,522.57	0.00	0.00	0.00
16,500.00	89.89	359.97	8,770.14	-5,088.14	7,618.50	-256.02	7,622.54	0.00	0.00	0.00
16,600.00	89.89	359.97	8,770.33	-5,088.33	7,718.49	-256.07	7,722.51	0.00	0.00	0.00
16,700.00	89.89	359.97	8,770.52	-5,088.52	7,818.49	-256.13	7,822.48	0.00	0.00	0.00
16,800.00	89.89	359.97	8,770.71	-5,088.71	7,918.49	-256.18	7,922.45	0.00	0.00	0.00
16,900.00	89.89	359.97	8,770.90	-5,088.90	8,018.49	-256.23	8,022.42	0.00	0.00	0.00
17,000.00	89.89	359.97	8,771.09	-5,089.09	8,118.49	-256.28	8,122.39	0.00	0.00	0.00
17,100.00	89.89	359.97	8,771.28	-5,089.28	8,218.49	-256.34	8,222.36	0.00	0.00	0.00
17,200.00	89.89	359.97	8,771.47	-5,089.47	8,318.49	-256.39	8,322.32	0.00	0.00	0.00
17,300.00	89.89	359.97	8,771.66	-5,089.66	8,418.49	-256.44	8,422.29	0.00	0.00	0.00
17,400.00	89.89	359.97	8,771.85	-5,089.85	8,518.49	-256.49	8,522.26	0.00	0.00	0.00
17,500.00	89.89	359.97	8,772.04	-5,090.04	8,618.49	-256.55	8,622.23	0.00	0.00	0.00
17,600.00	89.89	359.97	8,772.23	-5,090.23	8,718.49	-256.60	8,722.20	0.00	0.00	0.00
17,700.00	89.89	359.97	8,772.42	-5,090.42	8,818.49	-256.65	8,822.17	0.00	0.00	0.00
17,800.00	89.89	359.97	8,772.62	-5,090.62	8,918.49	-256.70	8,922.14	0.00	0.00	0.00
17,900.00	89.89	359.97	8,772.81	-5,090.81	9,018.49	-256.76	9,022.11	0.00	0.00	0.00
18,000.00	89.89	359.97	8,773.00	-5,091.00	9,118.49	-256.81	9,122.07	0.00	0.00	0.00
18,100.00	89.89	359.97	8,773.19	-5,091.19	9,218.49	-256.86	9,222.04	0.00	0.00	0.00
18,200.00	89.89	359.97	8,773.38	-5,091.38	9,318.49	-256.91	9,322.01	0.00	0.00	0.00
18,300.00	89.89	359.97	8,773.57	-5,091.57	9,418.49	-256.97	9,421.98	0.00	0.00	0.00
18,400.00	89.89	359.97	8,773.76	-5,091.76	9,518.49	-257.02	9,521.95	0.00	0.00	0.00
18,500.00	89.89	359.97	8,773.95	-5,091.95	9,618.49	-257.07	9,621.92	0.00	0.00	0.00
18,600.00	89.89	359.97	8,774.14	-5,092.14	9,718.49	-257.12	9,721.89	0.00	0.00	0.00
18,700.00	89.89	359.97	8,774.33	-5,092.33	9,818.49	-257.18	9,821.86	0.00	0.00	0.00
18,800.00	89.89	359.97	8,774.52	-5,092.52	9,918.49	-257.23	9,921.82	0.00	0.00	0.00
18,900.00	89.89	359.97	8,774.71	-5,092.71	10,018.49	-257.28	10,021.79	0.00	0.00	0.00
LTP: 332ft FNL & 365ft FWL of Sec 28										
18,987.67	***89.89***	***359.97***	***8,774.88***	***-5,092.88***	***10,106.16***	***-257.33***	***10,109.44***	***0.00***	***0.00***	***0.00***
BHL: 330ft FNL & 365ft FWL of Sec 28										
18,989.49	***89.89***	***359.97***	***8,775.00***	***-5,093.00***	***10,107.98***	***-257.32***	***10,111.26***	***0.00***	***0.00***	***0.00***

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GAVILON FED COM 201H
Company:	ASCENT ENERGY	**TVD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Project:	LEA COUNTY, NEW MEXICO (NAD 83)	**MD Reference:**	KB-EST @ 3682.00usft (Original Well Elev)
Site:	SW SW SEC 33 T20S R33E N.M.P.M.	**North Reference:**	True
Well:	GAVILON FED COM 201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
0.00	0.00	0.00	0.00	SHL: 125ft FSL & 617ft FWL of Sec 33
2,100.00	2,100.00	0.00	0.00	START NUDGE (2°/100ft BUR)
2,700.00	2,695.62	-47.55	-40.72	EOB TO 12° INC
3,960.44	3,928.52	-246.62	-211.15	END OF TANGENT
4,560.44	4,524.14	-294.17	-251.87	EOD TO VERTICAL
8,314.79	8,278.49	-294.17	-251.87	KOP (12°/100ft BUR)
9,063.87	8,755.95	182.38	-252.12	HZ LP: 307ft FSL & 365ft FWL of Sec 33
9,088.87	8,756.00	207.38	-252.13	FTP: 332ft FSL & 365ft FWL of Sec 33
18,987.67	8,774.88	10,106.16	-257.33	LTP: 332ft FNL & 365ft FWL of Sec 28
18,989.49	8,775.00	10,107.98	-257.32	BHL: 330ft FNL & 365ft FWL of Sec 28



CACTUS WELLHEAD LLC

ASCENT ENERGY, LLC
DELAWARE BASIN

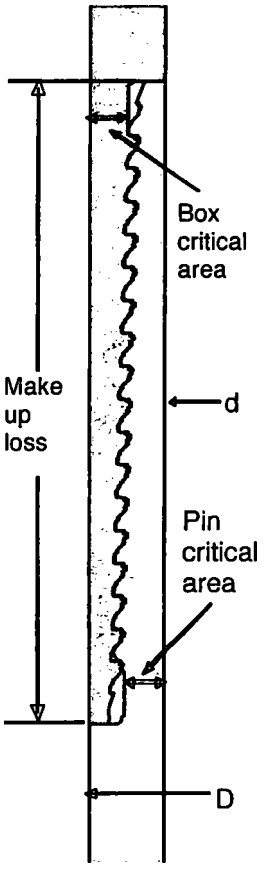
13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" 5M MBU-3T Wellhead System
With 13-5/8" 5M x 11" 10M CTH-P-HPS-F Tubing Spool
And 11" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head

DRAWN	DLE	06APR18
APPRV		
DRAWING NO.	ODE0002219	

Metal One Corp. *Metal One*	**FLUSHMAX-III** **Connection Data Sheet**	Page	44-O
		Date	25-Jan-17
		Rev.	N - 1

Geometry

FLUSHMAX-III



	Imperial		S.I.	
Pipe Body				
Grade	P110		P110	
Pipe OD (D)	7 5/8	in	193.68	mm
Weight	29.70	lb/ft	44.20	kg/m
Actual weight	29.04		43.21	kg/m
Wall Thickness (t)	0.375	in	9.53	mm
Pipe ID (d)	6.875	in	174.63	mm
Pipe body cross section	8.537	in^2	5,508	mm^2
Drift Dia.	6.750	in	171.45	mm
Connection				
Box OD (W)	7.625	in	193.68	mm
PIN ID	6.875	in	174.63	mm
Make up Loss	3.040	in	77.22	mm
Box Critical Area	4.424	in^2	2854	mm^2
Joint load efficiency	60	%	60	%
Thread Taper	1 / 16 (3/4" per ft)			
Number of Threads	5 TPI			

Performance

Performance Properties for Pipe Body

S.M.Y.S.	**939**	**kips**	**4,177**	**kN**
M.I.Y.P.	9,470	psi	65.31	MPa
Collapse Strength	**5,350**	**psi**	**36.90**	**MPa**

Note S.M.Y.S.= Specified Minimum YIELD Strength of Pipe body
M.I.Y.P. = Minimum Internal Yield Pressure of Pipe body

Performance Properties for Connection

Tensile Yield load	**563 kips (60% of S.M.Y.S.)**
Min. Compression Yield	563 kips (60% of S.M.Y.S.)
Internal Pressure	**7,580 psi (80% of M.I.Y.P.)**
External Pressure	100% of Collapse Strength
Max. DLS (deg. /100ft)	**25**

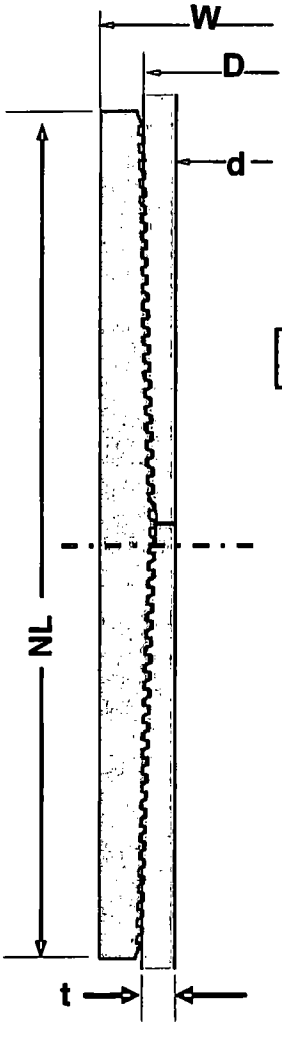
Recommended Torque

Min.	**15,500**	**ft-lb**	**21,000**	**N-m**
Opti.	17,200	ft-lb	23,300	N-m
Max.	**18,900**	**ft-lb**	**25,600**	**N-m**
Operational Max.	23,600	ft-lb	32,000	N-m

Note : Operational Max. torque can be applied for high torque application

Metal One Corp. *Metal One*	**GEOCONN** **Connection Data Sheet**	Page	32 - R
		Date	5-Oct-16
		Rev.	N-0

GEOCONN



Geometry

	Imperial		S.I.	
Pipe Body				
Grade	P110		P110	
Pipe OD (D)	5 1/2	in	139.70	mm
Weight	20.00	lb/ft	29.76	kg/m
Wall Thickness (t)	0.361	in	9.17	mm
Pipe ID (d)	4.778	in	121.36	mm
Drift Dia.	4.653	in	118.19	mm
Connection				
Coupling OD (W)	6.050	in	153.67	mm
Coupling Length (NL)	8.350	in	212.09	mm
Make up Loss	4.125	in	104.78	mm
Pipe Critical Area	5.83	in^2	3,758	mm^2
Box Critical Area	6.10	in^2	3,935	mm^2
Thread Taper	1 / 16 (3/4" per ft)			
Number of Threads	5 TPI			

Performance

Performance Properties for Pipe Body

S.M.Y.S.	**641**	**kips**	**2,850**	**kN**
M.I.Y.P.	12,640	psi	87.17	MPa
Collapse Strength	**11,100**	**psi**	**76.55**	**MPa**

Note S.M.Y.S.= Specified Minimum YIELD Strength of Pipe body
M.I.Y.P. = Minimum Internal Yield Pressure of Pipe body

Performance Properties for Connection

Min. Connection Joint Strength	**100% of S.M.Y.S.**
Min. Compression Yield	100% of S.M.Y.S.
Internal Pressure	**100% of M.I.Y.P.**
External Pressure	100% of Collapse Strength
Max. DLS (deg. /100ft)	**>90**

Recommended Torque

Min.	**14,600**	**ft-lb**	**19,700**	**N-m**
Opti.	16,200	ft-lb	21,900	N-m
Max.	**17,800**	**ft-lb**	**24,100**	**N-m**
Operational Max.	19,500	ft-lb	26,400	N-m

Note : Operational Max. torque can be applied for high torque application

Connection Yield Torque	22,900	ft-lb	31,000	N-m

Ascent Energy, LLC
Gavilon Fed Com 201H
SHL 125' FSL & 617' FWL Sec. 33
BHL 330' FNL & 365' FWL Sec. 28
T. 20 S., R. 33 E., Lea County, NM

Drilling Program

1. ESTIMATED TOPS

Formation Name	TVD	MD	Bearing
Quaternary caliche	000'	000'	water
Rustler anhydrite	1430'	1430'	N/A
Top salt	1790'	1790'	N/A
Castile anhydrite	3250'	3266'	N/A
Yates carbonates	3490'	3512'	hydrocarbons
Capitan Reef limestone	3915'	3977'	water
Delaware Mt. Group sandstones	5000'	5036'	hydrocarbons
Cherry Canyon sandstone	5500'	5536'	hydrocarbons
Brushy Canyon sandstone	6840'	6876'	hydrocarbons
(KOP	8278'	8315'	hydrocarbons)
Bone Spring limestone	8445'	8485'	hydrocarbons
Bone Spring sandstone (goal)	8502'	8549'	hydrocarbons
TD	8775'	18989'	hydrocarbons

2. NOTABLE ZONES

Bone Spring (Avalon) sand is the goal. Closest water well (CP 01151 POD1) is 10,774' northeast. Depth to water was not reported in the 823' deep well.

3. PRESSURE CONTROL

Blow out preventer equipment (BOPE) will consist of a single ram, mud cross and double ram type (10,000 psi WP) preventer, and an annular preventer (5000 psi WP). Both units will be hydraulically operated. Ram type will be equipped with blind rams on the bottom and drill pipe rams on the top.

Auxiliary equipment:
A 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.

Minimum working pressure of the BOP and related BOPE below the surface casing will be 5000-psi.

All BOPE will be tested in accordance with Onshore Order 2. All BOPE will be tested using a conventional test plug – not a cup or J packer. Both surface and intermediate casing will be tested as required by Onshore Order 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

Before drilling out the surface casing:
ram type BOP and accessory equipment will be tested to 5000/250 psig
annular preventer will be tested to 3500/250 psig
surface casing will be tested to 1500 psi for 30 minutes

Before drilling out the intermediate casing:
ram type BOP and accessory equipment will be tested to 5000/250 psig
annular preventer will be tested to 3500/250 psig
intermediate casing will be tested to 2000 psi for 30 minutes

Intermediate casing will be landed using a mandrel hanger and separate pack off. After installation, the pack off and lower flange will be pressure tested to 5000 psi. A hydraulically operated choke will be installed before drilling out of the intermediate casing shoe.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each TOOH. These checks will be noted on the daily tour sheets.

Variance is requested to use a co-flex line between the BOP and choke manifold instead of using a 4" O. D. steel line. Choke and kill line data book is attached. If this hose is unavailable, then a hose of equal or higher rating will be used.

Variance is requested to use a speed head (aka, multi-bowl wellhead). Diagram is attached. After running the 13.375" surface casing, a 13.625" BOP/BOPE system with a ≥5000 psi WP will be installed on the wellhead system. It will be pressure tested to 250 psi low, followed by a test to 5000-psi high. Pressure test will be repeated at least every 30 days as required by Onshore Order 2.

Speed head will be installed by the vendor's representative(s). Well head welding will be monitored by the vendor's representative(s).

4. CASING & CEMENT

All casing will be API and new. See attached casing assumption worksheet.

Hole O. D.	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 1445'	0' - 1445'	Surface 13.375"	54.5	J-55	STC	1.125	1.125	1.6
12.25"	0' - 3300'	0' - 3283'	Inter. 1 9.625"	36	J-55	LTC	1.125	1.125	1.6
8.75"	0' – 4850'	0' – 4814'	Inter. 2 7.625"	29.7	HCP-110	Flush Max III	1.125	1.125	1.6
6.75"	0' - 18989'	0' – 8775'	Product. 5.5"	20	P-110 EC	GEOCONN	1.125	1.125	1.6

Variance is requested to waive centralizer requirements for the 7.625" casing. An expansion additive will be used in the cement slurry for the entire length of the 8.75" hole to maximize cement bond and zone isolation.

Variance is also requested to waive centralizers requirements for the 5.5" casing. An expansion additive will be used in the cement slurry for the entire length of the 6.75" hole to maximize cement bond and zone isolation.

Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	560	1.728	967	13.5	Class C HALCEM system + 4% bentonite
	Tail	420	1.332	559	14.8	Class C HALCEM system
TOC = GL		100% Excess				
Intermediate 1	Lead	540	1.728	933	12.7	Class C HALCEM system + 4% bentonite
	Tail	485	1.332	646	14.8	Class C HALCEM system
TOC = GL		100% Excess				
Intermediate 2	Lead	195	2.039	397	12.7	Class C EconoCem HLC + 5% salt + 3% Microbond + 3 lb/sk Kol-seal + 0.3% HR-800
	Tail	155	1.368	212	14.8	Class C HALCEM system + 3% Microbond
TOC = GL		50% Excess				
Production	Lead	535	2.887	1544	11.0	NeoCem PL + 3% Microbond
	Tail	2295	1.472	3378	13.2	NeoCem PT + 3% Microbond
TOC = GL		50% Excess				

5. MUD PROGRAM

An electronic pit volume totalizer (PVT) will be used to monitor volume, flow rate, pump pressure, and stroke rate. All necessary additivess (e. g., barite, bentonite, LCM) to maintain mud properties and meet minimum lost circulation and weight increase needs will be on site at all times. Mud program may change due to hole conditions. A closed loop system will be used.

Type	Interval (MD)	lb/gal	Viscosity	Fluid Loss
fresh water	0' - 1445'	8.6 - 9.0	28-34	N/C
brine water	1445' - 3300'	9.0 - 9.6	28-34	N/C
fresh water	3300' - 4850'	8.6 - 9.2	28-34	N/C
cut brine/gel	4850' - 18989'	8.8 - 9.2	28-34	N/C

6. CORES, TESTS, & LOGS

No core, drill stem test, or open hole log is planned.

GR-CCL will be run in cased hole during completion phase of operations.

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈4046 psig. Expected bottom hole temperature is ≈160° F.

H2S monitoring and detection equipment will be used from surface casing point to TD.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take ≈3-4 months to drill and complete the well.

Variance is requested for the option to contract a surface rig to drill surface hole, set surface casing, and cement the surface casing. If the timing between rigs is such that Ascent would not be able to preset the surface casing, then the primary rig will MIRU and drill the well in its entirety.

Denver CO 80202
Office: (720) 524-3449
Cell: (303) 905-1858

AFMSS

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

PWD Data Report

12/01/2019

APD ID: 10400030418 **Submission Date:** 05/21/2018

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

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

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

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

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

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

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

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

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

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

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

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

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

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

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

12/01/2019

APD ID: 10400030418

Submission Date: 05/21/2018

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM

Well Number: 201H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001496

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

Operator Name: ASCENT ENERGY LLC

Well Name: GAVILON FED COM **Well Number:** 201H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce
PPP Leg #1-2	1320	FSL	377	FWL	20S	33E	28	Aliquot NWSW	32.540495	-103.675653	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 111243	-5111	15384	8768	
PPP Leg #1-3	0	FSL	377	FWL	20S	33E	28	Aliquot SWSW	32.53684	-103.67565	LEA	NEW MEXICO	NEW MEXICO	F	FEE	-5108	14064	8765	
PPP Leg #1-4	0	FSL	381	FWL	20S	33E	33	Aliquot SWSW	32.522328	-103.675642	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 057683	-5017	8784	8674	
PPP Leg #1-5	0	FNL	1231	FEL	21S	32E	4	Lot 1	32.522329	-103.675194	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014791	268	3400	3389	
PPP Leg #1-6	125	FSL	617	FWL	20S	33E	33	Aliquot SWSW	32.522694	-103.674823	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 057683	3657	0	0	
EXIT Leg #1	330	FNL	365	FWL	20S	33E	28	Aliquot NWNW	32.550476	-103.675658	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 089889	-5118	18989	8775	
BHL Leg #1	330	FNL	365	FWL	20S	33E	28	Aliquot NWNW	32.550476	-103.675658	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 089889	-5118	18989	8775	