| Form 3160-3 (June 2015) | | | OMB No | APPROVED 0. 1004-0137 | | |
|--|----------------|---|-------------------------|-------------------------------|--|--|
| UNITED STATES | 5 | | Expires: Ja | nuary 31, 2018 | | |
| DEPARTMENT OF THE I BUREAU OF LAND MANA | | | 5. Lease Serial No. | | | |
| APPLICATION FOR PERMIT TO D | RILL OR | REENTER | 6. If Indian, Allotee | or Tribe Name | | |
| | | | 7. If Unit or CA Agr | eement, Name and No. | | |
| | EENTER | | C | | | |
| | ther . | | 8. Lease Name and V | Well No. | | |
| 1c. Type of Completion: Hydraulic Fracturing Si | ngle Zone | Multiple Zone | [330 | 652] | | |
| 2. Name of Operator | | | 9. API Well No. | | | |
| [325830] | | | 30 | -025-49051 | | |
| 3a. Address | 3b. Phone N | No. (include area code) | 10. Field and Pool, c | or Exploratory [96399] | | |
| 4. Location of Well (Report location clearly and in accordance w | vith any State | e requirements.*) | 11. Sec., T. R. M. or | Blk. and Survey or Area | | |
| At surface | | | | | | |
| At proposed prod. zone | | | | | | |
| 14. Distance in miles and direction from nearest town or post offi | ice* | | 12. County or Parish | 13. State | | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) | 16. No of a | cres in lease 17. Spacir | ng Unit dedicated to th | nis well | | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | 19. Propose | ad Depth 20/BLM/ | BIA Bond No. in file | | | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) | 22. Approx | imate date work will start* | 23. Estimated duration | | | |
| | 24. Attac | chments | | | | |
| The following, completed in accordance with the requirements of (as applicable) | f Onshore Oil | and Gas Order No. 1, and the H | lydraulic Fracturing ru | ıle per 43 CFR 3162.3-3 | | |
| Well plat certified by a registered surveyor. A Drilling Plan. | | 4. Bond to cover the operation Item 20 above). | s unless covered by an | existing bond on file (see | | |
| 3. A Surface Use Plan (if the location is on National Forest System | | 5. Operator certification. | | | | |
| SUPO must be filed with the appropriate Forest Service Office |). | 6. Such other site specific information BLM. | mation and/or plans as | may be requested by the | | |
| 25. Signature | Name | e (Printed/Typed) | | Date | | |
| Title | | | | | | |
| Approved by (Signature) | Name | e (Printed/Typed) | | Date | | |
| Title | Office | 2 | | | | |
| Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached. | t holds legal | or equitable title to those rights | in the subject lease wh | nich would entitle the | | |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, m of the United States any false, fictitious or fraudulent statements of the United States and the statements of the United States and the statement of the United States and the statement of the United States and the statement of th | | | | ny department or agency | | |
| GCP Rec 04/26/2021 | | | | | | |





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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.

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 155 FNL / 2200 FEL / TWSP: 20S / RANGE: 33E / SECTION: 16 / LAT: 32.579978 / LONG: -103.666831 (TVD: 0 feet, MD: 0 feet) PPP: NWSE / 2641 FNL / 2311 FEL / TWSP: 20S / RANGE: 33E / SECTION: 21 / LAT: 32.558633 / LONG: -103.667175 (TVD: 11176 feet, MD: 18505 feet) PPP: NWNE / 0 FSL / 2311 FEL / TWSP: 20S / RANGE: 33E / SECTION: 21 / LAT: 32.565892 / LONG: -103.667178 (TVD: 11091 feet, MD: 15864 feet) PPP: NWNE / 100 FNL / 2310 FEL / TWSP: 20S / RANGE: 33E / SECTION: 16 / LAT: 32.580133 / LONG: -103.667491 (TVD: 10647 feet, MD: 10682 feet) BHL: SWSE / 50 FSL / 2310 FEL / TWSP: 20S / RANGE: 33E / SECTION: 21 / LAT: 32.551509 / LONG: -103.667169 (TVD: 11266 feet, MD: 21214 feet)

BLM Point of Contact

Name: Gavin Mickwee Title: Land Law Examiner Phone: (575) 234-5972 Email: gmickwee@blm.gov

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.

 District I

 1625 N. French Dr., Hobbs, NM 88240

 Phone: (575) 393-6161 Fax: (575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone: (575) 748-1283 Fax: (575) 748-9720

 District III

 1000 Rio Brazos Road, Aztec, NM 87410

 Phone: (505) 334-6178 Fax: (505) 334-6170

 District IV

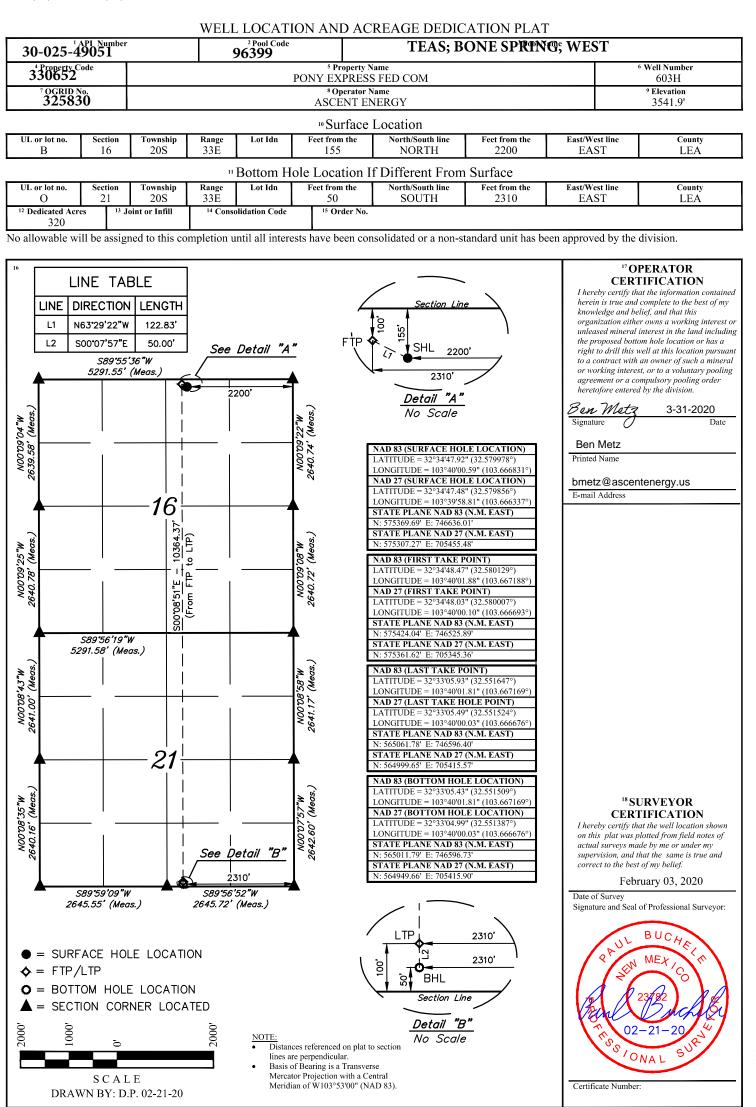
 1220 S. St. Francis Dr., Santa Fe, NM 87505

 Phone: (505) 476-3460 Fax: (505) 476-3462

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

AMENDED REPORT



District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Submit Original

to Appropriate

District Office

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

GAS CAPTURE PLAN

Date: 7-23-2020

 \boxtimes Original

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

□ Amended - Reason for Amendment:

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

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

Well(s)/Production Facility – Name of facility

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

| Well Name | API | Well Location (ULSTR) | Footages | Expected MCF/D | Flared or Vented | Comments |
|------------------------------|------------------------|--------------------------|------------------------|-------------------|---------------------|---|
| Pony Express Fed Com 305H | 03-025 | B-16-20S-33E | 355' FNL, 2226' FEL | 200 | ~30 days | Flare until well clean, then connect |
| Pony Express Fed Com 306H | 03-025 | B-16-20S-33E | 355' FNL, 2151' FEL | 200 | ~30 days | Flare until well clean, then connect |
| Pony Express Fed Com 403H | 03-025 | B-16-20S-33E | 355' FNL, 2201' FEL | 200 | ~30 days | Flare until well clean, then connect |
| Pony Express Fed Com 504H | 03-025 | B-16-20S-33E | 155' FNL, 2175' FEL | 200 | ~30 days | Flare until well clean, then connect |
| Pony Express Fed Com 603H | 03-025 49051 | B-16-20S-33E | 155' FNL, 2200' FWL | 200 | ~30 days | Flare until well clean, then connect |
| Pony Express Fed Com 703H | 03-025 | B-16-20S-33E | 155' FNL, 2150' FEL | 200 | ~30 days | Flare until well clean, then connect |
| Pony Express Fed Com 707H | 03-025 | B-16-20S-33E | 355' FNL, 2176' FEL | 200 | ~30 days | Flare until well clean, then connect |

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from the production facility has not yet been dedicated. One possible outlet is 3 Bear Energy. 3Bear has an existing gas pipeline in NW Section 11, T20S R33E. Ascent Energy, LLC and 3Bear Energy have agreements in place to extend the gas pipeline to the Silver & Pony Express drill pads. Ascent Energy, LLC will provide (periodically) to 3Bear a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Ascent Energy, LLC and 3Bear will have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at 3Bear Processing Plant at a yet to be determined location. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

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

Energy, ELC's benefit the system can take this gas upon completion of the

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

Alternatives to Reduce Flaring

•

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

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

Onshore Order 1 8 Point Drilling Plan

1. <u>Geologic Formations/Estimated Tops</u>

| Formation | Lithology | MD | TVD | Mineral Resources |
|---------------------------------------|------------------|-------|-------|-----------------------|
| Upper Permian | Sandstone | 0 | 0 | Useable Water |
| Rustler | Anhydrite | 1266 | 1266 | None |
| Salado | Salt | 1606 | 1606 | None |
| Base Salado Salt | Salt | 2836 | 2826 | None |
| Tansil | Limestone | 2902 | 2891 | None |
| Yates | Carbonates | 3071 | 3056 | Natural Gas, Oil, CO2 |
| Capitan Reef | Limestone | 3295 | 3276 | Useable Water |
| Delaware – Mt. Group | Sandstone | 5268 | 5246 | Natural Gas, Oil, CO2 |
| Cherry Canyon | Sandstone | 6378 | 5356 | Natural Gas, Oil, CO2 |
| Brushy Canyon | Sandstone | 6638 | 6616 | Natural Gas, Oil, CO2 |
| Bone Spring | Limestone | 8198 | 8176 | Natural Gas, Oil, CO2 |
| Bone Spring - Avalon | Shale | 9318 | 8296 | Natural Gas, Oil, CO2 |
| Bone Spring – Leonard B | Limestone, Shale | 9733 | 8711 | Natural Gas, Oil, CO2 |
| 1 st Bone Spring Sandstone | Sandstone | 9268 | 9246 | Natural Gas, Oil, CO2 |
| 2 nd Bone Spring Carbonate | Carbonates | 9555 | 9533 | Natural Gas, Oil, CO2 |
| 2 nd Bone Spring Sandstone | Sandstone | 9784 | 9762 | Natural Gas, Oil, CO2 |
| 3 rd Bone Spring Carbonate | Carbonates | 10330 | 10308 | Natural Gas, Oil, CO2 |
| 3 rd Bone Spring Sandstone | Sandstone | 10706 | 10668 | Natural Gas, Oil, CO2 |
| TD | Sandstone | 21214 | 11266 | Natural Gas, Oil, CO2 |

Notable Zones: 3rd Bone Spring Sand is the target formation. Closest water well (CP 00317) is 8858' NW. Depth to water is 325', total depth is 680'.

2. <u>Blowout Prevention Equipment</u>

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



- d. Testing Procedures: After surface casing is set and the BOP is nippled up, the BOP pressure tests will be made with a third-party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP will be tested in this manner after nipple-up if any break of the stack occurs as wells as every 30 days.
- e. Requesting Variance:
 - Variance is requested to use a co-flex line between the BOP and choke manifold instead of using a 4" 0. D. steel line. Choke and kill line data book are attached. If this hose is unavailable, then a hose of equal or higher rating will be used.
 - ii. 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.
 - iii. Ascent requests a variance to run a multi-bowl speed head for setting the Intermediate 1, Intermediate 2, and Production Strings.
 Speed head will be installed by the vendor's representative(s). Well head welding will be monitored by the vendor's representative.

3. <u>Casing</u>

| | Hole | h | nterval | 1 | nterval | | | | Conn | | New/ | DF | DF | DF |
|------------|-------|-----------|---------|----|---------|--------|--------|---------|----------|---------|------|----------|-------|---------|
| Interval | Size | | MD | | TVD | Csg OD | Weight | Grade | Туре | Conn | Used | Collapse | Burst | Tension |
| Surface | 17.5 | 0' | 1,291' | 0' | 1,291' | 13.375 | 54.5 | J-55 | STC | API | New | 1.75 | 3.58 | 3.02 |
| 1st Int | 12.25 | 0' | 3,004' | 0' | 2,991' | 9.625 | 40.0 | J-55 | LTC | API | New | 1.65 | 1.99 | 2.06 |
| 2nd Int | 8.75 | 0' | 5,268' | 0' | 5,246' | 7.625 | 29.7 | HCP-110 | EZGO FJ3 | Non-API | New | 3.75 | 2.45 | 2.38 |
| Production | 6.75 | 0' | 21,214' | 0' | 11,266' | 5.5 | 20.0 | HCP-110 | EZGO HT | Non-API | New | 2.17 | 2.16 | 1.53 |

*Casing Assumption Worksheet to be attached

Variance:

- A 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.
- 4. <u>Cement</u>



| Section | Depth | Туре | Cmt Top | Excess | Ft ³ | Sacks | BBLS | Wt. ppg | Yld Ft³/sk | Slurry Description |
|--------------|---------|------|---------|--------|-----------------|-------|------|------------|------------|----------------------|
| Surface | 13.375 | Lead | 0 | 100% | 1,057 | 615 | 188 | 13.5 | 1.728 | Class C |
| Surface | 1291' | Tail | 791' | 100% | 695 | 550 | 124 | 14.8 | 1.332 | Class C |
| 1 | 9.625 | Lead | 0 | 100% | 915 | 530 | 163 | 12.7 | 1.728 | Class C |
| 1st Int | 3004' | Tail | 2004' | 100% | 626 | 485 | 112 | 14.8 | 1.332 | Class C |
| 2 d lint | 7.625 | Lead | 0 | 50% | 472 | 235 | 84 | 12.7 | 2.039 | Class C |
| 2nd Int | 5268' | Tail | 3968' | 50% | 196 | 155 | 35 | 14.8 | 1.368 | Class C |
| Duraduration | 5.5 | Lead | 0 | 25% | 562 | 195 | 100 | 11 | 2.887 | TXI Nine Lite Cement |
| Production | 21,214' | Tail | 5,500' | 25% | 4,962 | 3375 | 884 | 13.2 | 1.472 | 35/65 Poz H |

5. Circulating Medium (Mud Program)

- a. Mud System Type: Closed loop
- b. Air/Gas Drilling: No
- c. What will be on location to control well or mitigate other conditions: All necessary additives (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.
- d. Describe the mud monitoring system: Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (e.g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.

| Int | terval | Туре | Weight | Viscosity | Water Loss |
|--------|---------|-------------|---------|-----------|------------|
| 0' | 1,291' | Fresh Water | 8.4-9.6 | 34-38 | N/C |
| 1,291' | 3,004' | Brine Water | 10 | 28-34 | N/C |
| 3,004' | 5,268' | Fresh Water | 8.4-8.6 | 28-34 | N/C |
| 5,268' | 21,214' | OBM | 9-9.5 | 40-45 | N/C |

6. Test, Logging & Coring

- List of production tests including testing procedures, equipment and safety measures: GR will be collected while drilling through the MWD tools from 9.625" casing shoe to TD. A 2-person mud logging program will be used from 9.625" casing shoe to TD.
- b. Open/cased hole logs run in the well: No open hole logs
- c. Coring operations description for the well: No core, drill stem test, or open hole log is planned.



7. Anticipated Pressure

- a. Anticipated bottom hole pressure: Maximum expected bottom hole pressure is 3000 psi.
- Anticipated bottom hole temperature: Expected bottom hole temperature is 171° F.
- c. Abnormal pressures, temperatures, or potential geologic hazards: No abnormal pressure or temperature is expected.
- d. Hydrogen sulfide drilling operations plan required: Yes
 - i. H₂S monitoring and detection equipment will be used from surface casing point to TD.
 - ii. Ascent does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Ascent has an H2S safety package on all wells and an "H2S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

8. Other Information

- a. Anticipated spud date is upon approval. It is expected it will take 3 months to drill and complete the well.
- b. Ascent requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Ascent will secure the wellhead area by placing a guard rail around the cellar. Pressure will be monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Ascent will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.
- c. Ascent requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event the wells are batch drilled, after drilling surface, 1st intermediate, and 2nd intermediate hole sections and cementing 2nd intermediate casing, a 10M dry hole cap with bleed off valve will

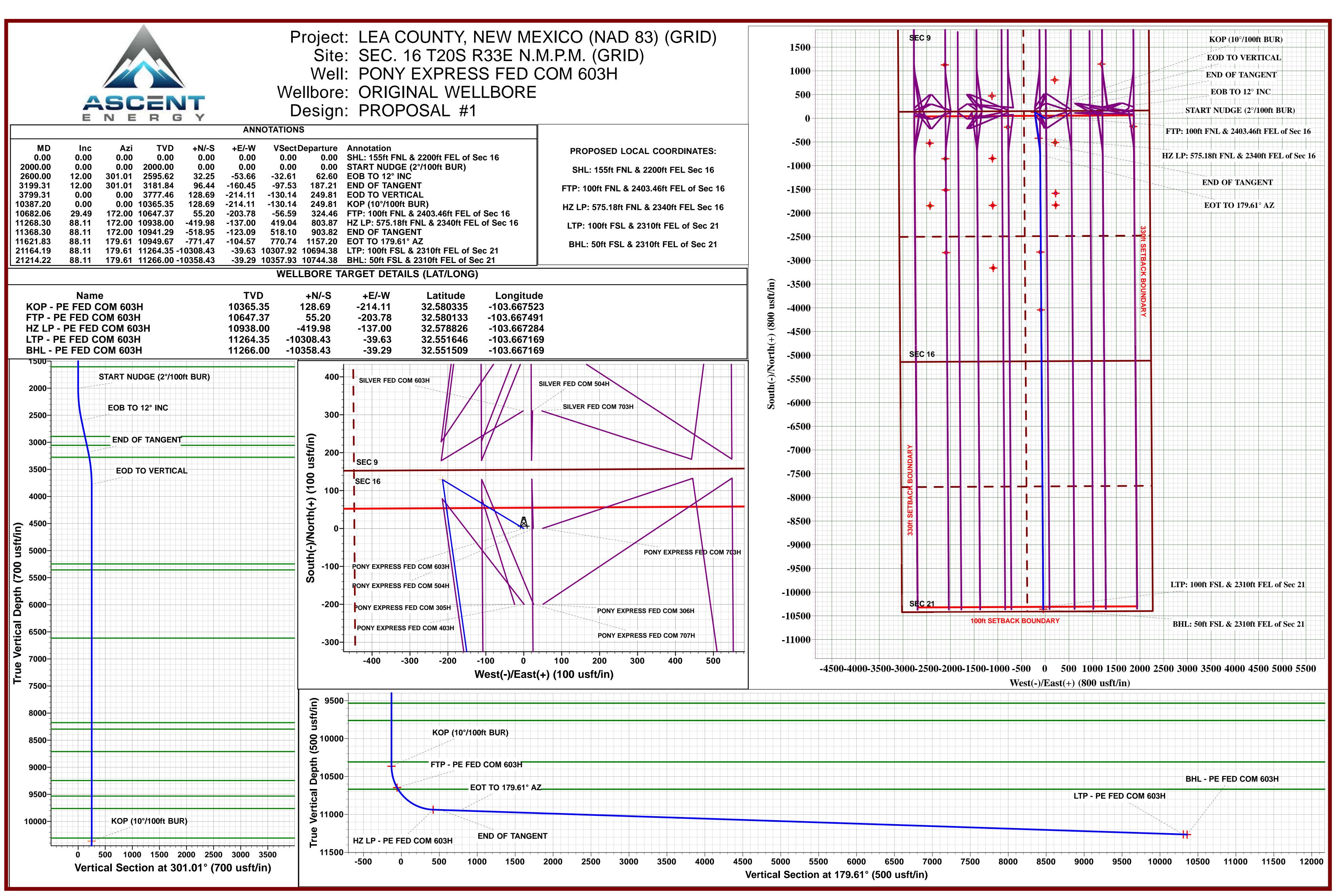


> be installed. The rig will then walk to another well on the pad. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

9. Lessee's or Operator's Representative

| <u>Permit Matters</u> | Drilling, Completions, Production & Operational Matters |
|---------------------------|---|
| UELS, LLC | Ascent Energy, LLC |
| 85 S 200 E | 1125 17 th St., Suite 410 |
| Vernal, UT 84078 | Denver, CO 80202 |
| Amy Doebele- Permit Agent | Gema Volek- Drilling Manager |
| 435-789-1017 | 785-312-2092 |
| adoebele@uintahgroup.com | gvolek@ascentenergy.us |





| | Database 1 | | | Lo | cal Co-ord | linate Refer | rence: W | Well PONY EXPRESS FED COM 603H | | | |
|---|--|---|--|---|---|---|---|--|---|---|--|
| | ASCENT EN | | | | D Referen | ce: | K | KB 25' @ 3566.00usft | | | |
| | | TY, NEW ME | XICO (NAD 8 | 3) MI | D Reference | e: | К | KB 25' @ 3566.00usft | | | |
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| | IGRF202 | 20 | 2020-03-18 | | 6.76 | 60.25 47,823.58794 | | | | • | |
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| f | PROPOSAL | #1 | | | | | | | | | |
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| | | | Phase: | PROTO | TYPE | Tie O | n Depth: | | 0.00 | | |
| ion: | | Depth F | om (TVD) | + | N/-S | +E/-W | 1 | Dire | ection | | |
| | | • | • • | • • | | | | | | | |
| | | 0 | .00 | C | 0.00 | 0.00 | | 17 | 9.61 | | |
| • | | | | | | | | | | | |
| 5 | | | | | | Devi | D. 11 I | T | | | |
| | | Vortical | 66 | | _ | | | | | | |
| Inc | Azi | Depth | (usft) | +N/-S | +E/-W | (°/100usf | (°/100usf | | TFO | | |
| (°) | (°) | Dopui | (uon) | (usft) | (usft) | () | (710003) | (710000) | (°) | Target | |
| 0.00 | 0.00 | 0.00 | -3,566.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| 0.00 | | | 4 500 00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| 0.00 | 0.00 | 2,000.00 | -1,566.00 | | | | | | | | |
| | 0.00 301.01 | 2,000.00 2,595.62 | -1,566.00 -970.38 | 32.25 | -53.66 | 2.00 | 2.00 | 0.00 | 301.01 | | |
| 0.00 | | | | | -53.66 -160.45 | 2.00 0.00 | 2.00 0.00 | 0.00 0.00 | 301.01 0.00 | | |
| 0.00 12.00 | 301.01 | 2,595.62 | -970.38 | 32.25 | | | | | | | |
| 0.00 12.00 12.00 | 301.01 301.01 | 2,595.62 3,181.84 3,777.46 10,365.35 | -970.38 -384.16 | 32.25 96.44 128.69 128.69 | -160.45 | 0.00 | 0.00 | 0.00 | 0.00 180.00 0.00 | KOP - PE FED COI | |
| 0.00 12.00 12.00 0.00 | 301.01 301.01 0.00 | 2,595.62 3,181.84 3,777.46 | -970.38 -384.16 211.46 | 32.25 96.44 128.69 | -160.45 -214.11 | 0.00 2.00 | 0.00 -2.00 | 0.00 0.00 | 0.00 180.00 0.00 172.00 | KOP - PE FED COI | |
| 0.00 12.00 12.00 0.00 0.00 | 301.01 301.01 0.00 0.00 | 2,595.62 3,181.84 3,777.46 10,365.35 | -970.38 -384.16 211.46 6,799.35 | 32.25 96.44 128.69 128.69 | -160.45 -214.11 -214.11 | 0.00 2.00 0.00 | 0.00 -2.00 0.00 | 0.00 0.00 0.00 0.00 0.00 | 0.00 180.00 0.00 | KOP - PE FED COI | |
| 0.00 12.00 12.00 0.00 0.00 88.11 | 301.01 301.01 0.00 0.00 172.00 | 2,595.62 3,181.84 3,777.46 10,365.35 10,938.00 | -970.38 -384.16 211.46 6,799.35 7,372.00 | 32.25 96.44 128.69 128.69 -419.98 | -160.45 -214.11 -214.11 -137.00 | 0.00 2.00 0.00 10.00 | 0.00 -2.00 0.00 10.00 | 0.00 0.00 0.00 0.00 | 0.00 180.00 0.00 172.00 | KOP - PE FED COI | |
| e | ertainty F + ertainty | PONY EXP ORIGINAL A PROPOSAL US State Plan North America New Mexico E SEC. 16 T20 Map ertainty: PONY EXPR +N/-S +E/-W ertainty ORIGINAL A Model Na IGRF202 PROPOSAL | PONY EXPRESS FED CO ORIGINAL WELLBORE PROPOSAL #1 LEA COUNTY, NEW MEX US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone SEC. 16 T20S R33E N.M. Map ertainty: 0.00 usft PONY EXPRESS FED CO +N/-S 13.63 usft +E/-W 2,460.40 usft ORIGINAL WELLBORE ORIGINAL WELLBORE IGRF2020 PROPOSAL #1 | PROPOSAL #1 LEA COUNTY, NEW MEXICO (NAD 83 US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone SEC. 16 T20S R33E N.M.P.M. (GRID) Map Easting: Map PONY EXPRESS FED COM 603H +N/-S 13.63 usft Northing: Easting: PONY EXPRESS FED COM 603H +N/-S 13.63 usft Northing: Easting: PONY EXPRESS FED COM 603H PONY EXPRESS | PONY EXPRESS FED COM 603H Su ORIGINAL WELLBORE PROPOSAL #1 LEA COUNTY, NEW MEXICO (NAD 83) (GRID) US State Plane 1983 US State Plane 1983 Sys North American Datum 1983 Sys New Mexico Eastern Zone SEC. 16 T20S R33E N.M.P.M. (GRID) Map Easting: SEC. 16 T20S R33E N.M.P.M. (GRID) Map Easting: PONY EXPRESS FED COM 603H +N/-S 13.63 usft Northing: +E/-W 2,460.40 usft Easting: ertainty 0.00 usft Wellhead Elevation: ORIGINAL WELLBORE Model Name Sample Date IGRF2020 2020-03-18 PROPOSAL #1 PROPOSAL #1 | PONY EXPRESS FED COM 603H ORIGINAL WELLBORE PROPOSAL #1 Survey Calci LEA COUNTY, NEW MEXICO (NAD 83) (GRID) US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone System Datum SEC. 16 T20S R33E N.M.P.M. (GRID) SEC. 16 T20S R33E N.M.P.M. (GRID) State Plane 1983 Northing: 575,356. Map Easting: 744,175. PONY EXPRESS FED COM 603H 1. PONY EXPRESS FED COM 603H 1. PONY EXPRESS FED COM 603H 744,175. +N/-S 13.63 usft Northing: 57 PONY EXPRESS FED COM 603H 74 +N/-S 13.63 usft Northing: 74 ertainty 0.00 usft Wellhead Elevation: 74 ORIGINAL WELLBORE ORIGINAL WELLBORE 0.00 usft 0.00 usft PROPOSAL #1 Phase: PROTOTYPE 0.00 on: Depth From (TVD) +N/-S (usft) (usft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | PONY EXPRESS FED COM 603H ORIGINAL WELLBORE PROPOSAL #1 Survey Calculation Meth ORIGINAL WELLBORE PROPOSAL #1 LEA COUNTY, NEW MEXICO (NAD 83) (GRID) US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone System Datum: SEC. 16 T20S R33E N.M.P.M. (GRID) SEC. 16 T20S R33E N.M.P.M. (GRID) 575,356.07 usft La Map Easting: 744,175.82 usft Lo PONY EXPRESS FED COM 603H 1.10ft Gr PONY EXPRESS FED COM 603H 575,369.70 us 1.10ft +N/-S 13.63 usft Northing: 575,369.70 us +E/-W 2,460.40 usft Easting: 746,636.11 us ortiginAL WELLBORE 0.00 usft Wellhead Elevation: us ORIGINAL WELLBORE 0.00 usft 6.76 PROPOSAL #1 Phase: PROTOTYPE Tie O on: Depth From (TVD) +N/-S +E/-W (usft) 0.00 0.00 0.00 0.00 0.00 0.00 | PONY EXPRESS FED COM 603H ORIGINAL WELLBORE PROPOSAL #1 Survey Calculation Method: M LEA COUNTY, NEW MEXICO (NAD 83) (GRID) US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone System Datum: Mean SEC. 16 T20S R33E N.M.P.M. (GRID) Northing: 575,356.07 usft 744,175.82 usft Latitude: Map Basting: 744,175.82 usft Latitude: PONY EXPRESS FED COM 603H 1.10ft Grid Converg PONY EXPRESS FED COM 603H 1.10ft Grid Converg +N/-S 13.63 usft Northing: 575,369.70 usft Latitude: ertainty 0.00 usft Northing: 746,636.11 usft Long ertainty 0.00 usft Wellhead Elevation: usft Grou ORIGINAL WELLBORE ORIGINAL WELLBORE Declination Dip Am Model Name Sample Date Declination Oip Am (°) IGRF2020 2020-03-18 6.76 60.2 PROPOSAL #1 Phase: PROTOTYPE Tie On Depth: on: Depth From (TVD) +N/-S +E/-W (usft) 0.00 0.00 0.00 0.00 0.0 | PONY EXPRESS FED COM 603H ORIGINAL WELLBORE PROPOSAL #1 Survey Calculation Method: Minimum Curvesting LEA COUNTY, NEW MEXICO (NAD 83) (GRID) US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone System Datum: Mean Sea Level US State Plane 1983 New Mexico Eastern Zone Using geodetic s Using geodetic s SEC. 16 T20S R33E N.M.P.M. (GRID) Northing: 575,356.07 usft 1.10 ft Latitude: Longitude: Map Easting: 744,175.82 usft 1.10 ft Latitude: Ground Level: Latitude: Longitude: PONY EXPRESS FED COM 603H ++ ++ Northing: 575,369.70 usft +E/-W Latitude: Longitude: PONY EXPRESS FED COM 603H | PONY EXPRESS FED COM 603H ORIGINAL WELLBORE PROPOSAL #1 Survey Calculation Method: Minimum Curvature LEA COUNTY, NEW MEXICO (NAD 83) (GRID) US State Plane 1983 New Mexico Eastern 20ne System Datum: Mean Sea Level North American Datum 1983 New Mexico Eastern Zone Using geodetic scale factor Using geodetic scale factor SEC. 16 T20S R33E N.M.P.M. (GRID) Northing: 575,356.07 usft Latitude: Map Easting: 744,175.82 usft Longitude: origit Convergence: Infinitude: Longitude: PONY EXPRESS FED COM 603H +M/-S 1.3.63 usft Northing: 575,369.70 usft Latitude: +E/-W 2,460.40 usft Easting: 746,636.11 usft Longitude: Congitude: ertainty 0.00 usft Wellhead Elevation: usft Ground Level: ORIGINAL WELLBORE ORIGINAL WELLBORE PROPOSAL #1 0.00 0.00 0.00 0.00 on: Depth From (TVD) +N/-S +E/-W Direction (') (') 0.00 0.00 0.00 0.00 179.61 | |

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| Database: Company: Project: | Database 1 ASCENT ENERGY LEA COUNTY, NEW MEXICO (NAD 83) (GRID) | Local Co-ordinate Reference: TVD Reference: MD Reference: | Well PONY EXPRESS FED COM 603H KB 25' @ 3566.00usft KB 25' @ 3566.00usft |
|-----------------------------------|--|---|--|
| Site: | SEC. 16 T20S R33E N.M.P.M. (GRID) | North Reference: | Grid |
| Well: | PONY EXPRESS FED COM 603H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

Planned Survey

| (usft) (°) (usft) (usft) (usft) (usft) (usft) (usft) (usft) (usft) (usft) (°/100usft) (°/100usft) | 0.00 0.00 0.00 0.00 0.00 |
|---|---|
| 0.00 0.00 0.00 3,566.00 0.00 | 0.00 0.00 0.00 0.00 |
| 200.00 0.00 0.00 200.00 3,366.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 |
| | 0.00 0.00 |
| | 0.00 |
| 300.00 0.00 0.00 300.00 3,266.00 0.00 0.00 0.00 0.00 0.00 | |
| 400.00 0.00 0.00 400.00 3,166.00 0.00 0.00 0.00 0.00 0.00 | |
| 500.00 0.00 0.00 500.00 3,066.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 600.00 0.00 0.00 600.00 2,966.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 700.00 0.00 0.00 700.00 2,866.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 800.00 0.00 0.00 800.00 2,766.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 900.00 0.00 0.00 900.00 2,666.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,000.00 0.00 0.00 1,000.00 2,566.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,100.00 0.00 0.00 1,100.00 2,466.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,200.00 0.00 0.00 1,200.00 2,366.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| RSTLR | |
| 1,266.00 0.00 1,266.00 2,300.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,300.00 0.00 1,300.00 2,266.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,400.00 0.00 0.00 1,400.00 2,166.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,500.00 0.00 0.00 1,500.00 2,066.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,600.00 0.00 0.00 1,600.00 1,966.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| SALDO | |
| 1,606.00 0.00 1,606.00 1,960.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,700.00 0.00 0.00 1,700.00 1,866.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,800.00 0.00 1,800.00 1,766.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 1,900.00 0.00 1,900.00 1,666.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| START NUDGE (2°/100ft BUR) | |
| 2,000.00 0.00 0.00 2,000.00 1,566.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 |
| 2,100.00 2.00 301.01 2,099.98 1,466.02 0.90 -1.50 -0.91 2.00 2.00 2,200.00 4.00 301.01 2,109.84 1,266.16 2.50 5.08 3.64 2.00 2.00 | 0.00 |
| 2,200.00 4.00 301.01 2,199.84 1,366.16 3.59 -5.98 -3.64 2.00 2.00 | 0.00 |
| 2,300.00 6.00 301.01 2,299.45 1,266.55 8.08 -13.45 -8.18 2.00 2.00 | 0.00 |
| 2,400.00 8.00 301.01 2,398.70 1,167.30 14.36 -23.90 -14.52 2.00 2.00 | 0.00 |
| 2,500.00 10.00 301.01 2,497.47 1,068.53 22.42 -37.30 -22.67 2.00 2.00 | 0.00 |
| EOB TO 12° INC | 0.00 |
| 2,600.00 12.00 301.01 2,595.62 970.38 32.25 -53.66 -32.61 2.00 2.00 2,700.00 12.00 301.01 2,693.44 872.56 42.96 -71.48 -43.45 0.00 0.00 | <i>0.00</i> 0.00 |
| | |
| 2,800.00 12.00 301.01 2,791.25 774.75 53.67 -89.30 -54.28 0.00 0.00 | 0.00 |
| 2,900.00 12.00 301.01 2,889.07 676.93 64.38 -107.12 -65.11 0.00 0.00 | 0.00 |
| TANSIL 2,901.98 12.00 301.01 2,891.00 675.00 64.59 -107.47 -65.32 0.00 0.00 | 0.00 |
| 2,901.96 12.00 301.01 2,961.00 675.00 64.59 -107.47 -65.32 0.00 0.00 3,000.00 12.00 301.01 2,986.88 579.12 75.09 -124.94 -75.94 0.00 0.00 | 0.00 |
| YATES | 0.00 |
| 3,070.66 12.00 301.01 3,056.00 510.00 82.66 -137.53 -83.60 0.00 0.00 | 0.00 |
| | |
| 3,100.00 12.00 301.01 3,084.70 481.30 85.80 -142.76 -86.77 0.00 0.00 | 0.00 |
| END OF TANGENT 3,199.31 12.00 301.01 3,181.84 384.16 96.44 -160.45 -97.53 0.00 0.00 | 0.00 |
| 3,199.31 12.00 301.01 3,181.84 384.16 96.44 -160.45 -97.53 0.00 0.00 3,200.00 11.99 301.01 3,182.51 383.49 96.51 -160.58 -97.60 2.00 -2.00 | 0.00 |
| CAPITAN_REEF_TOP | 0.00 |
| 3,295.25 10.08 301.01 3,276.00 290.00 105.90 -176.20 -107.10 2.00 -2.00 | 0.00 |
| 3,300.00 9.99 301.01 3,280.67 285.33 106.33 -176.91 -107.53 2.00 -2.00 | 0.00 |
| | 0.00 |
| 3,400.00 7.99 301.01 3,379.44 186.56 114.38 -190.30 -115.67 2.00 -2.00 3,500.00 5.99 301.01 3,478.69 87.31 120.64 -200.72 -122.01 2.00 -2.00 | 0.00 |
| 3,500.00 3.99 301.01 3,578.31 -12.31 125.12 -208.17 -126.53 2.00 -2.00 | 0.00 |
| | 2.00 |

2020-03-28 12:36:49PM

COMPASS 5000.15 Build 90

| Database: Company: Project: | Database 1 ASCENT ENERGY LEA COUNTY, NEW MEXICO (NAD 83) (GRID) | Local Co-ordinate Reference: TVD Reference: MD Reference: | Well PONY EXPRESS FED COM 603H KB 25' @ 3566.00usft KB 25' @ 3566.00usft |
|-----------------------------------|--|---|--|
| Site: | SEC. 16 T20S R33E N.M.P.M. (GRID) | North Reference: | Grid |
| Well: | PONY EXPRESS FED COM 603H | 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) |
|-----------------------------|---------------------|---------------------|-----------------------------|-------------------------------|-------------------------|---------------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 3,700.00 | 1.99 | 301.01 | 3,678.17 | -112.17 | 127.80 | -212.63 | -129.25 | 2.00 | -2.00 | 0.00 |
| | O VERTIC | | | | | | | | | |
| 3,799.31 | 0.00 | 0.00 | 3,777.46 | -211.46 | 128.69 | -214.11 | -130.14 | 2.00 | -2.00 | 0.00 |
| 3,800.00 | 0.00 | 0.00 | 3,778.15 | -212.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 0.00 | 0.00 | 3,878.15 | -312.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,000.00 4,100.00 | 0.00 0.00 | 0.00 0.00 | 3,978.15 4,078.15 | -412.15 -512.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| 4,100.00 | 0.00 | 0.00 | 4,078.15 | -612.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 0.00 | 0.00 | 4,278.15 | -712.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 0.00 | 0.00 | 4,378.15 | -812.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 0.00 | 0.00 | 4,478.15 | -912.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 0.00 | 0.00 | 4,578.15 | -1,012.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 0.00 | 0.00 | 4,678.15 | -1,112.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 0.00 | 0.00 | 4,778.15 | -1,212.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 0.00 | 0.00 | 4,878.15 | -1,312.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 0.00 | 0.00 | 4,978.15 | -1,412.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,100.00 5,200.00 | 0.00 0.00 | 0.00 0.00 | 5,078.15 5,178.15 | -1,512.15 -1,612.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | | | 5,170.15 | -1,012.15 | 120.03 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | DELAWARI | | E 246 00 | 4 690 00 | 100.00 | 244.44 | 120 14 | 0.00 | 0.00 | 0.00 |
| 5,267.85 5.300.00 | 0.00 0.00 | <i>0.00</i> 0.00 | 5,246.00 5,278.15 | -1,680.00 -1,712.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| -, | RY_CANY | | 0,270.10 | 1,712.10 | 120.00 | 214.11 | 100.14 | 0.00 | 0.00 | 0.00 |
| 5,377.85 | 0.00 | 0.00 | 5,356.00 | -1,790.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 0.00 | 0.00 | 5,378.15 | -1,812.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 0.00 | 0.00 | 5,478.15 | -1,912.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 0.00 | 0.00 | 5,578.15 | -2,012.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 0.00 | 0.00 | 5,678.15 | -2,112.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 0.00 | 0.00 | 5,778.15 | -2,212.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 5,900.00 6,000.00 | 0.00 0.00 | 0.00 0.00 | 5,878.15 5,978.15 | -2,312.15 -2,412.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | | | | | | | | | | |
| 6,100.00 6,200.00 | 0.00 0.00 | 0.00 0.00 | 6,078.15 6,178.15 | -2,512.15 -2,612.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| 6,300.00 | 0.00 | 0.00 | 6,278.15 | -2,712.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 0.00 | 0.00 | 6,378.15 | -2,812.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 0.00 | 0.00 | 6,478.15 | -2,912.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 0.00 | 0.00 | 6,578.15 | -3,012.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | HY_CANY | | | | | | | | | |
| 6,637.85 | 0.00 | 0.00 | 6,616.00 | -3,050.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 0.00 | 0.00 | 6,678.15 6 778 15 | -3,112.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 6,800.00 6,900.00 | 0.00 0.00 | 0.00 0.00 | 6,778.15 6,878.15 | -3,212.15 -3,312.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | | | | | | | | | | |
| 7,000.00 7,100.00 | 0.00 0.00 | 0.00 0.00 | 6,978.15 7,078.15 | -3,412.15 -3,512.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| 7,200.00 | 0.00 | 0.00 | 7,178.15 | -3,612.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 0.00 | 0.00 | 7,278.15 | -3,712.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 7,400.00 | 0.00 | 0.00 | 7,378.15 | -3,812.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 0.00 | 0.00 | 7,478.15 | -3,912.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 0.00 | 0.00 | 7,578.15 | -4,012.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 0.00 | 0.00 | 7,678.15 | -4,112.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 7,800.00 7,900.00 | 0.00 0.00 | 0.00 0.00 | 7,778.15 7,878.15 | -4,212.15 -4,312.15 | 128.69 128.69 | -214.11 -214.11 | -130.14 -130.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| - | | | | | | | | | | |
| 8,000.00 | 0.00 | 0.00 | 7,978.15 | -4,412.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |

| (usft) 8,100.00 BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | Inc (°) 0.00 | Azi (°) 0.00 0.00 0.00 0.00 0.00 | TVD (usft) 8,078.15 8,176.00 8,178.15 8,278.15 | SS (usft) -4,512.15 | +N/-S (usft) | +E/-W (usft) | Vertical Section | Dogleg Rate | Build Rate | Turn Rate |
|--|---|--|--|----------------------------|-----------------|-----------------|---------------------|----------------|---------------|--------------|
| MD (usft) 8,100.00 BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | (°) 0.00 ME 0.00 0.00 0.00 0.00 0.00 0.00 | (°) 0.00 0.00 0.00 0.00 | (usft) 8,078.15 8,176.00 8,178.15 | (usft) -4,512.15 | (usft) | | Section | Rate | Rate | Rate |
| (usft) 8,100.00 BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | (°) 0.00 ME 0.00 0.00 0.00 0.00 0.00 0.00 | (°) 0.00 0.00 0.00 0.00 | (usft) 8,078.15 8,176.00 8,178.15 | (usft) -4,512.15 | (usft) | | Section | Rate | Rate | Rate |
| (usft) 8,100.00 BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | (°) 0.00 ME 0.00 0.00 0.00 0.00 0.00 0.00 | (°) 0.00 0.00 0.00 0.00 | (usft) 8,078.15 8,176.00 8,178.15 | (usft) -4,512.15 | (usft) | | Section | Rate | Rate | Rate |
| (usft) 8,100.00 BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | (°) 0.00 ME 0.00 0.00 0.00 0.00 0.00 0.00 | (°) 0.00 0.00 0.00 0.00 | (usft) 8,078.15 8,176.00 8,178.15 | (usft) -4,512.15 | (usft) | | | | | |
| 8,100.00 BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | 0.00 ME 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 | 8,078.15 8,176.00 8,178.15 | -4,512.15 | | (usft) | (110++) | | | 101100 01 |
| BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | ME 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 | 8,176.00 8,178.15 | | 400.00 | (| (usft) | (°/100usft) | (°/100usft) | (°/100usft) |
| BSPG_LII 8,197.85 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | ME 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 | 8,176.00 8,178.15 | | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 8,200.00 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 | 8,178.15 | | | | | | | |
| 8,300.00 AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | 0.00 0.00 0.00 0.00 | 0.00 | | -4,610.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| AVLN 8,317.85 8,400.00 8,500.00 8,600.00 | 0.00 0.00 0.00 | | 8,278.15 | -4,612.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 8,317.85 8,400.00 8,500.00 8,600.00 | 0.00 0.00 | 0.00 | | -4,712.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 8,317.85 8,400.00 8,500.00 8,600.00 | 0.00 0.00 | 0.00 | | | | | | | | |
| 8,400.00 8,500.00 8,600.00 | 0.00 0.00 | 0.00 | 8,296.00 | -4,730.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 8,500.00 8,600.00 | 0.00 | 0.00 | 8,378.15 | -4,812.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | | 0.00 | 8,478.15 | -4,912.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 0.00 | 0.00 | 8,578.15 | -5,012.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 8,678.15 | -5,112.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| LEONARI | DB | | | | | | | | | |
| | 0.00 | 0.00 | 8,711.00 | -5,145.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 8,778.15 | -5,212.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 8,878.15 | -5,312.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 8,978.15 | -5,412.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 0.00 | 0.00 | 9,078.15 | -5,512.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 0.00 | 0.00 | 9,178.15 | -5,612.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 1ST_BSP | | 0.00 | 5,170.15 | 3,012.13 | 120.00 | 214.11 | 130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,246.00 | -5,680.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,278.15 | -5,712.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,378.15 | -5,812.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,478.15 | -5,912.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 2ND BSP | 00 | | | | | | | | | |
| | 0.00 | 0.00 | 9,533.00 | -5,967.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,578.15 | -6,012.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,678.15 | -6,112.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 2ND BSP | | | -, | | | | | | | |
| | 0.00 | 0.00 | 9,762.00 | -6,196.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 0.00 | 0.00 | 9,778.15 | -6,212.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 0.00 | 0.00 | 9,878.15 | -6,312.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 9,978.15 | -6,412.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 10,078.15 | -6,512.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 10,178.15 | -6,612.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 10,278.15 | -6,712.15 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| 3RD_BSP | | | | | | | | | | |
| | 0.00 | 0.00 | 10,308.00 | -6,742.00 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| KOP (10°/ | | | 10,300.00 | -0,742.00 | 120.09 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 0.00 | 0.00 | 10,365.35 | -6,799.35 | 128.69 | -214.11 | -130.14 | 0.00 | 0.00 | 0.00 |
| | 1.28 | 172.00 | 10,378.15 | -6,812.15 | 128.55 | -214.09 | -130.00 | 10.00 | 10.00 | 0.00 |
| | 11.28 | 172.00 | 10,477.42 | -6,911.42 | 117.73 | -212.57 | -119.17 | 10.00 | 10.00 | 0.00 |
| | 21.28 | 172.00 | 10,573.29 | -7,007.29 | 90.00 | -208.67 | -91.42 | 10.00 | 10.00 | 0.00 |
| | | 2403 46ft EE | EL of Sec 16 | | | | | | | |
| | 29.49 | 172.00 | 10,647.37 | -7,081.37 | 55.20 | -203.78 | -56.59 | 10.00 | 10.00 | 0.00 |
| | 31.28 | 172.00 | 10,662.84 | -7,096.84 | 46.22 | -203.78 | -47.59 | 10.00 | 10.00 | 0.00 |
| 3RD_BSP | | | ., | , | | | | | | |
| | 31.89 | 172.00 | 10,668.00 | -7,102.00 | 43.07 | -202.08 | -44.45 | 10.00 | 10.00 | 0.00 |
| | 41.28 | 172.00 | 10,743.35 | -7,177.35 | -12.31 | -194.29 | 10.98 | 10.00 | 10.00 | 0.00 |
| | 51.28 | 172.00 | 10,812.38 | -7,246.38 | -83.79 | -184.25 | 82.53 | 10.00 | 10.00 | 0.00 |
| | 61.28 | 172.00 | 10,867.82 | -7,301.82 | -166.05 | -172.69 | 164.87 | 10.00 | 10.00 | 0.00 |
| | 71.28 | 172.00 | 10,908.00 | -7,342.00 | -256.59 | -172.09 | 255.50 | 10.00 | 10.00 | 0.00 |
| | 31.28 | 172.00 | 10,931.68 | -7,365.68 | -352.67 | -146.46 | 351.67 | 10.00 | 10.00 | 0.00 |

2020-03-28 12:36:49PM

COMPASS 5000.15 Build 90

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| Database: Company: Project: | Database 1 ASCENT ENERGY LEA COUNTY, NEW MEXICO (NAD 83) (GRID) | Local Co-ordinate Reference: TVD Reference: MD Reference: | Well PONY EXPRESS FED COM 603H KB 25' @ 3566.00usft KB 25' @ 3566.00usft |
|-----------------------------------|--|---|--|
| Site: | SEC. 16 T20S R33E N.M.P.M. (GRID) | North Reference: | Grid |
| Well: | PONY EXPRESS FED COM 603H | 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) |
|---|------------------------|----------------|------------------|------------------------|------------------------|------------------------|--------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| | HZ LP | : 575.18ft Fl | NL & 2340ft I | FEL of Sec 16 | | | | | | | |
| | 11,268.30 | 88.11 | 172.00 | 10,938.00 | -7,372.00 | -419.98 | -137.00 | 419.04 | 10.00 | 10.00 | 0.00 |
| | 11,300.00 | 88.11 | 172.00 | 10,939.04 | -7,373.04 | -451.35 | -132.59 | 450.44 | 0.00 | 0.00 | 0.00 |
| | END O | F TANGEN | т | | | | | | | | |
| | 11,368.30 | 88.11 | 172.00 | 10,941.29 | -7,375.29 | -518.95 | -123.09 | 518.10 | 0.00 | 0.00 | 0.00 |
| | 11,400.00 | 88.11 | 172.95 | 10,942.34 | -7,376.34 | -550.36 | -118.94 | 549.54 | 3.00 | -0.01 | 3.00 |
| | 11,500.00 | 88.11 | 175.95 | 10,945.64 | -7,379.64 | -649.83 | -109.28 | 649.07 | 3.00 | 0.00 | 3.00 |
| _ | 11,600.00 | 88.11 | 178.95 | 10,948.95 | -7,382.95 | -749.66 | -104.84 | 748.93 | 3.00 | 0.00 | 3.00 |
| | | O 179.61° A | | | | | | | | | |
| | 11,621.83 | 88.11 | 179.61 | 10,949.67 | -7,383.67 | -771.47 | -104.57 | 770.74 | 3.00 | 0.01 | 3.00 |
| | 11,700.00 | 88.11 | 179.61 | 10,952.25 | -7,386.25 | -849.60 | -104.04 | 848.88 | 0.00 | 0.00 | 0.00 |
| | 11,800.00 | 88.11 | 179.61 | 10,955.54 | -7,389.54 | -949.55 | -103.36 | 948.82 | 0.00 | 0.00 | 0.00 |
| | 11,900.00 | 88.11 | 179.61 | 10,958.84 | -7,392.84 | -1,049.49 | -102.67 | 1,048.77 | 0.00 | 0.00 | 0.00 |
| | 12,000.00 12,100.00 | 88.11 88.11 | 179.61 179.61 | 10,962.14 10,965.44 | -7,396.14 -7,399.44 | -1,149.43 -1,249.38 | -101.99 -101.31 | 1,148.71 1,248.66 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | | | | | | | | | | | |
| | 12,200.00 | 88.11 | 179.61 | 10,968.73 | -7,402.73 | -1,349.32 | -100.63 | 1,348.60 | 0.00 | 0.00 | 0.00 |
| | 12,300.00 12,400.00 | 88.11 88.11 | 179.61 179.61 | 10,972.03 10,975.33 | -7,406.03 -7,409.33 | -1,449.26 -1,549.21 | -99.95 -99.27 | 1,448.55 1,548.50 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | 12,400.00 | 88.11 | 179.61 | 10,978.63 | -7,409.33 | -1,649.21 | -99.27 -98.59 | 1,648.44 | 0.00 | 0.00 | 0.00 |
| | 12,600.00 | 88.11 | 179.61 | 10,981.93 | -7,415.93 | -1,749.09 | -97.91 | 1,748.39 | 0.00 | 0.00 | 0.00 |
| | 12,700.00 | 88.11 | 179.61 | 10,985.22 | -7,419.22 | -1,849.04 | -97.23 | 1.848.33 | 0.00 | 0.00 | 0.00 |
| | 12,700.00 | 88.11 | 179.61 | 10,985.22 | -7,419.22 | -1,948.98 | -97.23 | 1,948.28 | 0.00 | 0.00 | 0.00 |
| | 12,900.00 | 88.11 | 179.61 | 10,991.82 | -7,425.82 | -2,048.92 | -95.87 | 2,048.22 | 0.00 | 0.00 | 0.00 |
| | 13,000.00 | 88.11 | 179.61 | 10,995.12 | -7,429.12 | -2,148.87 | -95.19 | 2,148.17 | 0.00 | 0.00 | 0.00 |
| | 13,100.00 | 88.11 | 179.61 | 10,998.41 | -7,432.41 | -2,248.81 | -94.51 | 2,248.12 | 0.00 | 0.00 | 0.00 |
| | 13,200.00 | 88.11 | 179.61 | 11,001.71 | -7,435.71 | -2,348.75 | -93.83 | 2,348.06 | 0.00 | 0.00 | 0.00 |
| | 13,300.00 | 88.11 | 179.61 | 11,005.01 | -7,439.01 | -2,448.70 | -93.15 | 2,448.01 | 0.00 | 0.00 | 0.00 |
| | 13,400.00 | 88.11 | 179.61 | 11,008.31 | -7,442.31 | -2,548.64 | -92.47 | 2,547.95 | 0.00 | 0.00 | 0.00 |
| | 13,500.00 | 88.11 | 179.61 | 11,011.60 | -7,445.60 | -2,648.58 | -91.79 | 2,647.90 | 0.00 | 0.00 | 0.00 |
| | 13,600.00 | 88.11 | 179.61 | 11,014.90 | -7,448.90 | -2,748.53 | -91.11 | 2,747.84 | 0.00 | 0.00 | 0.00 |
| | 13,700.00 | 88.11 | 179.61 | 11,018.20 | -7,452.20 | -2,848.47 | -90.43 | 2,847.79 | 0.00 | 0.00 | 0.00 |
| | 13,800.00 | 88.11 | 179.61 | 11,021.50 | -7,455.50 | -2,948.41 | -89.75 | 2,947.73 | 0.00 | 0.00 | 0.00 |
| | 13,900.00 | 88.11 | 179.61 | 11,024.80 | -7,458.80 | -3,048.36 | -89.07 | 3,047.68 | 0.00 | 0.00 | 0.00 |
| | 14,000.00 | 88.11 | 179.61 | 11,028.09 | -7,462.09 | -3,148.30 | -88.38 | 3,147.63 | 0.00 | 0.00 | 0.00 |
| | 14,100.00 | 88.11 | 179.61 | 11,031.39 | -7,465.39 | -3,248.24 | -87.70 | 3,247.57 | 0.00 | 0.00 | 0.00 |
| | 14,200.00 | 88.11 | 179.61 | 11,034.69 | -7,468.69 | -3,348.19 | -87.02 | 3,347.52 | 0.00 | 0.00 | 0.00 |
| | 14,300.00 | 88.11 | 179.61 | 11,037.99 | -7,471.99 | -3,448.13 | -86.34 | 3,447.46 | 0.00 | 0.00 | 0.00 |
| | 14,400.00 | 88.11 | 179.61 | 11,041.28 | -7,475.28 | -3,548.07 | -85.66 | 3,547.41 | 0.00 | 0.00 | 0.00 |
| | 14,500.00 14,600.00 | 88.11 88.11 | 179.61 179.61 | 11,044.58 11,047.88 | -7,478.58 -7,481.88 | -3,648.02 -3,747.96 | -84.98 -84.30 | 3,647.35 3,747.30 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | | | | | - | - | | - | | | |
| | 14,700.00 | 88.11 | 179.61 | 11,051.18 | -7,485.18 | -3,847.90 | -83.62 | 3,847.25 | 0.00 | 0.00 | 0.00 |
| | 14,800.00 14,900.00 | 88.11 88.11 | 179.61 179.61 | 11,054.48 11,057.77 | -7,488.48 -7,491.77 | -3,947.85 -4,047.79 | -82.94 -82.26 | 3,947.19 4,047.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| | 15,000.00 | 88.11 | 179.61 | 11,061.07 | -7,491.77 | -4,047.79 -4,147.73 | -82.20 | 4,047.14 4,147.08 | 0.00 | 0.00 | 0.00 |
| | 15,100.00 | 88.11 | 179.61 | 11,064.37 | -7,498.37 | -4,247.68 | -80.90 | 4,247.03 | 0.00 | 0.00 | 0.00 |
| | 15,200.00 | 88.11 | 179.61 | 11,067.67 | -7,501.67 | -4,347.62 | -80.22 | 4,346.97 | 0.00 | 0.00 | 0.00 |
| | 15,200.00 | 88.11 | 179.61 | 11,070.96 | -7,501.67 | -4,347.62 -4,447.56 | -80.22 -79.54 | 4,346.97 4,446.92 | 0.00 | 0.00 | 0.00 |
| | 15,400.00 | 88.11 | 179.61 | 11,074.26 | -7,508.26 | -4,547.51 | -78.86 | 4,546.86 | 0.00 | 0.00 | 0.00 |
| | 15,500.00 | 88.11 | 179.61 | 11,077.56 | -7,511.56 | -4,647.45 | -78.18 | 4,646.81 | 0.00 | 0.00 | 0.00 |
| | 15,600.00 | 88.11 | 179.61 | 11,080.86 | -7,514.86 | -4,747.39 | -77.50 | 4,746.76 | 0.00 | 0.00 | 0.00 |
| | 15,700.00 | 88.11 | 179.61 | 11,084.16 | -7,518.16 | -4,847.34 | -76.82 | 4,846.70 | 0.00 | 0.00 | 0.00 |
| | 15,800.00 | 88.11 | 179.61 | 11,087.45 | -7,521.45 | -4,947.28 | -76.14 | 4,946.65 | 0.00 | 0.00 | 0.00 |
| | 15,900.00 | 88.11 | 179.61 | 11,090.75 | -7,524.75 | -5,047.22 | -75.46 | 5,046.59 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | |

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COMPASS 5000.15 Build 90

| Database: Company: Project: | Database 1 ASCENT ENERGY LEA COUNTY, NEW MEXICO (NAD 83) (GRID) | Local Co-ordinate Reference: TVD Reference: MD Reference: | Well PONY EXPRESS FED COM 603H KB 25' @ 3566.00usft KB 25' @ 3566.00usft |
|-----------------------------------|--|---|--|
| Site: | SEC. 16 T20S R33E N.M.P.M. (GRID) | North Reference: | Grid |
| Well: | PONY EXPRESS FED COM 603H | 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) |
|---|--|--|---|---|---|--|--|--------------------------------------|--------------------------------------|--------------------------------------|
| 16,000.00 | 88.11 | 179.61 | 11,094.05 | -7,528.05 | -5,147.17 | -74.78 | 5,146.54 | 0.00 | 0.00 | 0.00 |
| 16,100.00 | 88.11 | 179.61 | 11,097.35 | -7,531.35 | -5,247.11 | -74.09 | 5,246.48 | 0.00 | 0.00 | 0.00 |
| 16,200.00 | 88.11 | 179.61 | 11,100.64 | -7,534.64 | -5,347.05 | -73.41 | 5,346.43 | 0.00 | 0.00 | 0.00 |
| 16,300.00 | 88.11 | 179.61 | 11,103.94 | -7,537.94 | -5,447.00 | -72.73 | 5,446.37 | 0.00 | 0.00 | 0.00 |
| 16,400.00 | 88.11 | 179.61 | 11,107.24 | -7,541.24 | -5,546.94 | -72.05 | 5,546.32 | 0.00 | 0.00 | 0.00 |
| 16,500.00 | 88.11 | 179.61 | 11,110.54 | -7,544.54 | -5,646.88 | -71.37 | 5,646.27 | 0.00 | 0.00 | 0.00 |
| 16,600.00 | 88.11 | 179.61 | 11,113.83 | -7,547.83 | -5,746.83 | -70.69 | 5,746.21 | 0.00 | 0.00 | 0.00 |
| 16,700.00 16,800.00 16,900.00 17,000.00 17,100.00 | 88.11 88.11 88.11 88.11 88.11 88.11 | 179.61 179.61 179.61 179.61 179.61 | 11,117.13 11,120.43 11,123.73 11,127.03 11,130.32 | -7,551.13 -7,554.43 -7,557.73 -7,561.03 -7,564.32 | -5,846.77 -5,946.71 -6,046.66 -6,146.60 -6,246.54 | -70.01 -69.33 -68.65 -67.97 -67.29 | 5,846.16 5,946.10 6,046.05 6,145.99 6,245.94 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 |
| 17,200.00 17,300.00 17,400.00 17,500.00 17,600.00 | 88.11 88.11 88.11 88.11 88.11 88.11 | 179.61 179.61 179.61 179.61 179.61 | 11,133.62 11,136.92 11,140.22 11,143.51 11,146.81 | -7,567.62 -7,570.92 -7,574.22 -7,577.51 -7,580.81 | -6,346.49 -6,446.43 -6,546.37 -6,646.32 -6,746.26 | -66.61 -65.93 -65.25 -64.57 -63.89 | 6,345.89 6,445.83 6,545.78 6,645.72 6,745.67 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 |
| 17,700.00 17,800.00 17,900.00 18,000.00 18,100.00 | 88.11 88.11 88.11 88.11 88.11 88.11 | 179.61 179.61 179.61 179.61 179.61 | 11,150.11 11,153.41 11,156.71 11,160.00 11,163.30 | -7,584.11 -7,587.41 -7,590.71 -7,594.00 -7,597.30 | -6,846.20 -6,946.15 -7,046.09 -7,146.03 -7,245.98 | -63.21 -62.53 -61.85 -61.17 -60.49 | 6,845.61 6,945.56 7,045.50 7,145.45 7,245.40 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 |
| 18,200.00 | 88.11 | 179.61 | 11,166.60 | -7,600.60 | -7,345.92 | -59.80 | 7,345.34 | 0.00 | 0.00 | 0.00 |
| 18,300.00 | 88.11 | 179.61 | 11,169.90 | -7,603.90 | -7,445.86 | -59.12 | 7,445.29 | 0.00 | 0.00 | 0.00 |
| 18,400.00 | 88.11 | 179.61 | 11,173.19 | -7,607.19 | -7,545.81 | -58.44 | 7,545.23 | 0.00 | 0.00 | 0.00 |
| 18,500.00 | 88.11 | 179.61 | 11,176.49 | -7,610.49 | -7,645.75 | -57.76 | 7,645.18 | 0.00 | 0.00 | 0.00 |
| 18,600.00 | 88.11 | 179.61 | 11,179.79 | -7,613.79 | -7,745.69 | -57.08 | 7,745.12 | 0.00 | 0.00 | 0.00 |
| 18,700.00 | 88.11 | 179.61 | 11,183.09 | -7,617.09 | -7,845.64 | -56.40 | 7,845.07 | 0.00 | 0.00 | 0.00 |
| 18,800.00 | 88.11 | 179.61 | 11,186.39 | -7,620.39 | -7,945.58 | -55.72 | 7,945.02 | 0.00 | 0.00 | 0.00 |
| 18,900.00 | 88.11 | 179.61 | 11,189.68 | -7,623.68 | -8,045.52 | -55.04 | 8,044.96 | 0.00 | 0.00 | 0.00 |
| 19,000.00 | 88.11 | 179.61 | 11,192.98 | -7,626.98 | -8,145.47 | -54.36 | 8,144.91 | 0.00 | 0.00 | 0.00 |
| 19,100.00 | 88.11 | 179.61 | 11,196.28 | -7,630.28 | -8,245.41 | -53.68 | 8,244.85 | 0.00 | 0.00 | 0.00 |
| 19,200.00 | 88.11 | 179.61 | 11,199.58 | -7,633.58 | -8,345.35 | -53.00 | 8,344.80 | 0.00 | 0.00 | 0.00 |
| 19,300.00 | 88.11 | 179.61 | 11,202.87 | -7,636.87 | -8,445.30 | -52.32 | 8,444.74 | 0.00 | 0.00 | 0.00 |
| 19,400.00 | 88.11 | 179.61 | 11,206.17 | -7,640.17 | -8,545.24 | -51.64 | 8,544.69 | 0.00 | 0.00 | 0.00 |
| 19,500.00 | 88.11 | 179.61 | 11,209.47 | -7,643.47 | -8,645.18 | -50.96 | 8,644.63 | 0.00 | 0.00 | 0.00 |
| 19,600.00 | 88.11 | 179.61 | 11,212.77 | -7,646.77 | -8,745.12 | -50.28 | 8,744.58 | 0.00 | 0.00 | 0.00 |
| 19,700.00 | 88.11 | 179.61 | 11,216.06 | -7,650.06 | -8,845.07 | -49.60 | 8,844.53 | 0.00 | 0.00 | 0.00 |
| 19,800.00 | 88.11 | 179.61 | 11,219.36 | -7,653.36 | -8,945.01 | -48.92 | 8,944.47 | 0.00 | 0.00 | 0.00 |
| 19,900.00 | 88.11 | 179.61 | 11,222.66 | -7,656.66 | -9,044.95 | -48.24 | 9,044.42 | 0.00 | 0.00 | 0.00 |
| 20,000.00 | 88.11 | 179.61 | 11,225.96 | -7,659.96 | -9,144.90 | -47.56 | 9,144.36 | 0.00 | 0.00 | 0.00 |
| 20,100.00 | 88.11 | 179.61 | 11,229.26 | -7,663.26 | -9,244.84 | -46.88 | 9,244.31 | 0.00 | 0.00 | 0.00 |
| 20,200.00 | 88.11 | 179.61 | 11,232.55 | -7,666.55 | -9,344.78 | -46.20 | 9,344.25 | 0.00 | 0.00 | 0.00 |
| 20,300.00 | 88.11 | 179.61 | 11,235.85 | -7,669.85 | -9,444.73 | -45.51 | 9,444.20 | 0.00 | 0.00 | 0.00 |
| 20,400.00 | 88.11 | 179.61 | 11,239.15 | -7,673.15 | -9,544.67 | -44.83 | 9,544.14 | 0.00 | 0.00 | 0.00 |
| 20,500.00 | 88.11 | 179.61 | 11,242.45 | -7,676.45 | -9,644.61 | -44.15 | 9,644.09 | 0.00 | 0.00 | 0.00 |
| 20,600.00 | 88.11 | 179.61 | 11,245.74 | -7,679.74 | -9,744.56 | -43.47 | 9,744.04 | 0.00 | 0.00 | 0.00 |
| 20,700.00 | 88.11 | 179.61 | 11,249.04 | -7,683.04 | -9,844.50 | -42.79 | 9,843.98 | 0.00 | 0.00 | 0.00 |
| 20,800.00 | 88.11 | 179.61 | 11,252.34 | -7,686.34 | -9,944.44 | -42.11 | 9,943.93 | 0.00 | 0.00 | 0.00 |
| 20,900.00 | 88.11 | 179.61 | 11,255.64 | -7,689.64 | -10,044.39 | -41.43 | 10,043.87 | 0.00 | 0.00 | 0.00 |
| 21,000.00 | 88.11 | 179.61 | 11,258.94 | -7,692.94 | -10,144.33 | -40.75 | 10,143.82 | 0.00 | 0.00 | 0.00 |
| 21,100.00 | 88.11 | 179.61 | 11,262.23 | -7,696.23 | -10,244.27 | -40.07 | 10,243.76 | 0.00 | 0.00 | 0.00 |

2020-03-28 12:36:49PM

| Database: | Database 1 | Local Co-ordinate Reference: | Well PONY EXPRESS FED COM 603H |
|-----------|---|------------------------------|--------------------------------|
| Company: | ASCENT ENERGY | TVD Reference: | KB 25' @ 3566.00usft |
| Project: | LEA COUNTY, NEW MEXICO (NAD 83) (GRID) | MD Reference: | KB 25' @ 3566.00usft |
| Site: | SEC. 16 T20S R33E N.M.P.M. (GRID) | North Reference: | Grid |
| Well: | PONY EXPRESS FED COM 603H | 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) |
|--------------|--------------|---------------|---------------|--------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| LTP: 1 | 00ft FSL & | 2310ft FEL o | f Sec 21 | | | | | | | |
| 21,164.19 | 88.11 | 179.61 | 11,264.35 | -7,698.35 | -10,308.43 | -39.63 | 10,307.92 | 0.00 | 0.00 | 0.00 |
| 21,200.00 | 88.11 | 179.61 | 11,265.53 | -7,699.53 | -10,344.22 | -39.39 | 10,343.71 | 0.00 | 0.00 | 0.00 |
| BHL: 5 | 50ft FSL & 2 | 2310ft FEL of | Sec 21 | | | | | | | |
| 21,214.22 | 88.11 | 179.61 | 11,266.00 | -7,700.00 | -10,358.43 | -39.29 | 10,357.93 | 0.00 | 0.00 | 0.00 |

Formations

| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|--------------|---------------|-------------------|-----------|------------|-------------------------|
| 1,266.00 | 1,266.00 | RSTLR | | 0.00 | |
| 1,606.00 | 1,606.00 | SALDO | | 0.00 | |
| 2,901.98 | 2,891.00 | TANSIL | | 0.00 | |
| 3,070.66 | 3,056.00 | YATES | | 0.00 | |
| 3,295.25 | 3,276.00 | CAPITAN_REEF_TOP | | 0.00 | |
| 5,267.85 | 5,246.00 | TOP_DELAWARE_SAND | | 0.00 | |
| 5,377.85 | 5,356.00 | CHERRY_CANYON | | 0.00 | |
| 6,637.85 | 6,616.00 | BRUSHY_CANYON | | 0.00 | |
| 8,197.85 | 8,176.00 | BSPG_LIME | | 0.00 | |
| 8,317.85 | 8,296.00 | AVLN | | 0.00 | |
| 8,732.85 | 8,711.00 | LEONARD_B | | 0.00 | |
| 9,267.85 | 9,246.00 | 1ST_BSPG_SND | | 0.00 | |
| 9,554.85 | 9,533.00 | 2ND_BSPG | | 0.00 | |
| 9,783.85 | 9,762.00 | 2ND_BSPG_SND | | 0.00 | |
| 10,329.85 | 10,308.00 | 3RD_BSPG_C | | 0.00 | |
| 10,706.06 | 10,668.00 | 3RD_BSPG_S | | 0.00 | |

Plan Annotations

| | | Local | Coordinates | | |
|-----------|----------------|-----------------|-----------------|--|--|
| Mi (us | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 0.0 | | 0.00 | 0.00 | SHL: 155ft FNL & 2200ft FEL of Sec 16 | |
| 2,000 | 2,000.00 | 0.00 | 0.00 | START NUDGE (2°/100ft BUR) | |
| 2,600 | 0.00 2,595.62 | 32.25 | -53.66 | EOB TO 12° INC | |
| 3,199 | 9.31 3,181.84 | 96.44 | -160.45 | END OF TANGENT | |
| 3,799 | 9.31 3,777.46 | 128.69 | -214.11 | EOD TO VERTICAL | |
| 10,38 | 7.20 10,365.35 | 5 128.69 | -214.11 | KOP (10°/100ft BUR) | |
| 10,68 | 2.06 10,647.37 | 55.20 | -203.78 | FTP: 100ft FNL & 2403.46ft FEL of Sec 16 | |
| 11,26 | 8.30 10,938.00 | -419.98 | -137.00 | HZ LP: 575.18ft FNL & 2340ft FEL of Sec 16 | |
| 11,36 | 8.30 10,941.29 | -518.95 | -123.09 | END OF TANGENT | |
| 11,62 | 1.83 10,949.67 | -771.47 | -104.57 | EOT TO 179.61° AZ | |
| 21,16 | 4.19 11,264.35 | -10,308.43 | -39.63 | LTP: 100ft FSL & 2310ft FEL of Sec 21 | |
| 21,21 | 4.22 11,266.00 | -10,358.43 | -39.29 | BHL: 50ft FSL & 2310ft FEL of Sec 21 | |

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

| OPERATOR'S NAME: LEASE NO.: | Ascent Energy NMNM013280 |
|--------------------------------|------------------------------------|
| LOCATION: | Section 16, T.20 S., R.33 E., NMPM |
| COUNTY: | Lea County, New Mexico |

| WELL NAME & NO.: | Pony Express Fed Com 603H |
|----------------------------|---------------------------|
| SURFACE HOLE FOOTAGE: | 155'/N & 2200'/E |
| BOTTOM HOLE FOOTAGE | 50'/S & 2310'/E |

COA

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

A. HYDROGEN SULFIDE

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

B. CASING

- 1. The **13-3/8** inch surface casing shall be set at approximately _1302_ feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of

<u>24 hours in the Potash Area</u> 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 1st Intermediate casing is:
 Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- In <u>R111 Potash Areas</u> if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.
- In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 (Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 3. The minimum required fill of cement behind the 7-5/8 inch 2^{nd} Intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Excess calculates to 24%. Additional cement maybe required.
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **50 feet(3255 ft)** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
 - 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface 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 Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - Eddy County Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. Operator is approve 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. Operator is approve 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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24 hours</u>. 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. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL
- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the

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plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

Approval Date: 04/28/2021

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.

ZS 012821

Approval Date: 04/28/2021

H₂S Drilling Operations Plan

- 1. All personnel will be trained in H₂S working conditions as required by Onshore Order 6 before drilling out of the surface casing.
- 2. Two briefing areas will be established. Each briefing area will be \geq 150' from the wellhead, perpendicular from one another, and easily entered and exited. See H₂S page 4 for more details.
- 3. H₂S Safety Equipment/Systems:
 - a. Well Control Equipment
 - i. Flare line will be \geq 150' from the wellhead and ignited by a flare gun
 - ii. Beware of SO₂ created by flaring
 - iii. Choke manifold will have a remotely operated choke
 - iv. Mud gas separator
 - b. Protective Equipment for Personnel
 - Every person on site will wear a personal H₂S and SO₂ 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.
 - ii. 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.
 - iii. Four work/escape packs will be on the rig floor. Each pack will have a sufficiently long hose to allow unimpaired work activity.
 - iv. Four emergency escape packs will be in the doghouse for emergency evacuation.
 - v. Hand signals will be used when wearing protective breathing apparatus.
 - vi. Stokes litter or stretcher
 - vii. Two full OSHA compliant body harnesses
 - viii. A 100' long x 5/8" OSHA compliant rope
 - ix. One 20-pound ABC fire extinguisher
 - c. H2S Detection & Monitoring Equipment
 - Every person on site will wear a personal H₂S and SO₂ 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.
 - ii. A stationary detector with three sensors will be in the doghouse
 - iii. Sensors will be installed on the rig floor, bell nipple, and at the end of the flow line or where drilling fluids are discharged.
 - iv. Visual alarm will be triggered at 10 ppm.
 - v. Audible alarm will be triggered at 10 ppm.
 - vi. Calibration will occur at least every 30 days. Gas sample tubes will be kept in the safety trailer.

d. Visual Warning System

- i. A color-coded H₂S condition sign will be set at each pad entrance.
- ii. Color-coded condition flag will be installed to indicate current H₂S conditions.
- iii. Two wind socks will be installed that will be visible from all sides.

e. Mud Program

- i. A water based mud with a pH of > 10 will be maintained to control corrosion, H_2S gas returns to the surface, and minimize sulfide stress cracking and embrittlement.
- ii. Drilling mud containing H₂S gas will be degassed at an optimum location for the rig configuration.
- iii. This gas will be piped into the flare system.
- iv. Enough mud additives will be on location to scavenge and/or neutralize H₂S where formation pressures are unknown.

f. Metallurgy

- i. All equipment that has the potential to be exposed to H₂S will be suitable for H₂S 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).
- g. Communication from well site
 - i. Cell phones and/or two-way radios will be used to communicate from the well site.
- 4. A remote-controlled choke, mud-gas separator, and a rotating head will be installed before drilling or testing any formation expected to contain H₂S.

Ascent Emergency Contact Numbers

Company Personnel to be Notified

| Ascent Emergency Contact | (303) 281-9951 |
|--|----------------------|
| Gema Volek (Vice President of Drilling) | Cell: (785) 312-2092 |
| Matt Ward (Chief Operations Officer) | Cell: (303) 506-6647 |
| Dean Gimbel (Vice President Completions) | Cell: (303) 945-1323 |

Local and 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 |

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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 Department 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 |
| United States Environmental Protection Agency | (800) 887-6063 |
| (USEPA Region 6 Dallas) | (214) 665-6444 |

Air Evacuation

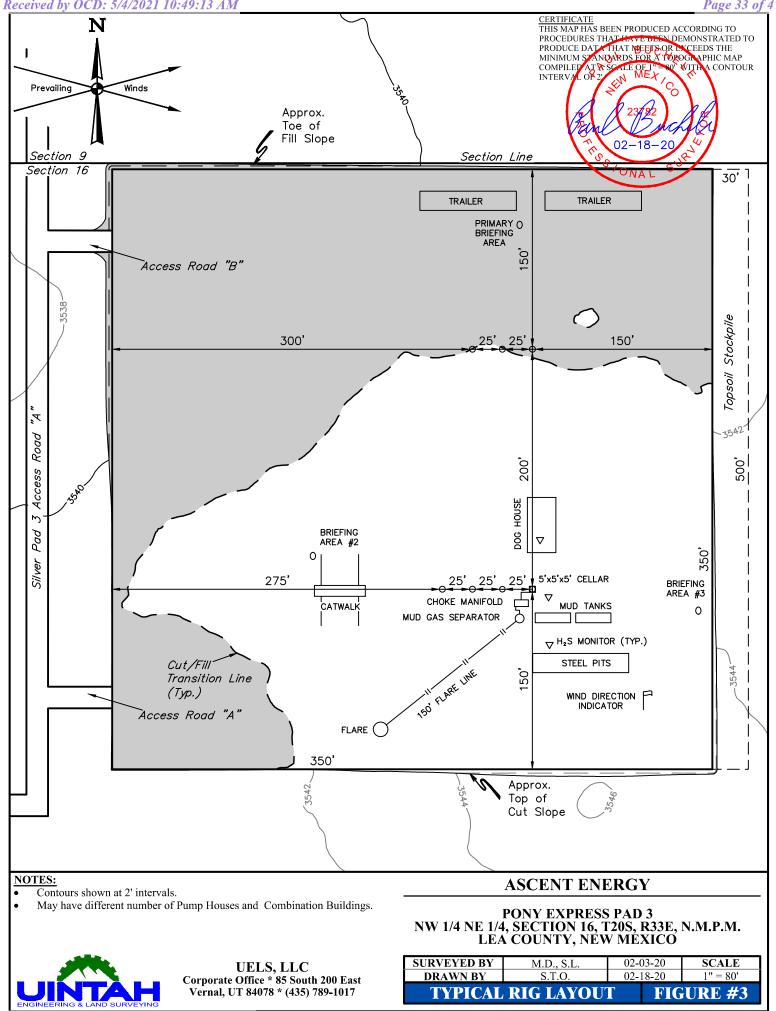
| Med Flight Air Ambulance (Albuquerque) | (800) 842-4431 |
|--|----------------|
| Lifeguard (Albuquerque) | (888) 866-7256 |

Veterinarians

| Dal Paso Animal Hospital (Hobbs) | (575) 397-2286 |
|---|----------------|
| Hobbs Animal Clinic And Pet Care (Hobbs) | (575) 392-5563 |
| Great Plains Veterinary Clinic and Hospital (Hobbs) | (505) 392-5513 |

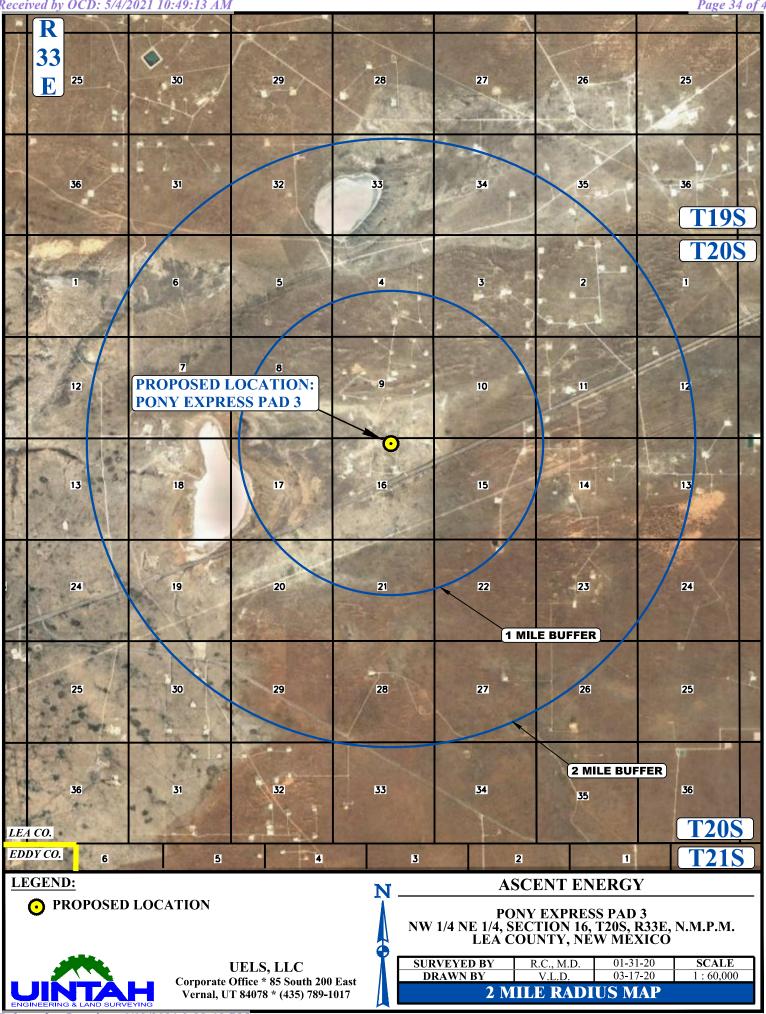
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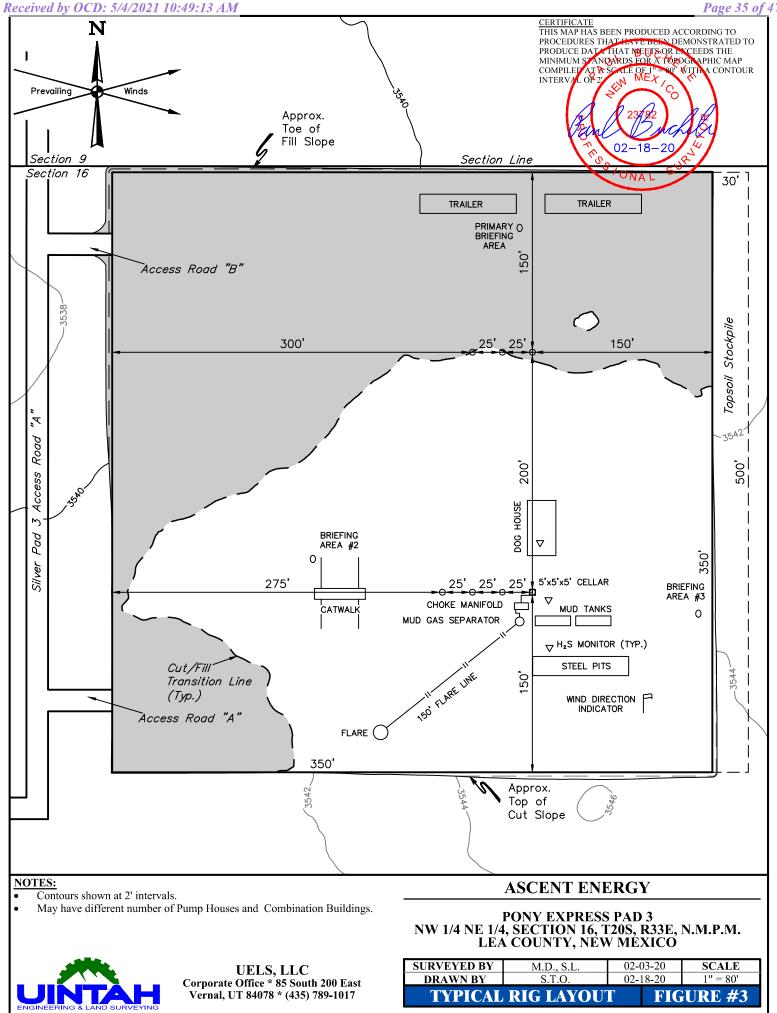


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Onshore Order No.1 Surface Use Plan of Operations

 Pony Express Fed Com 305H

 SHL: 355' FNL, 2226' FEL SEC. 16, T20S, R33E

 Pony Express Fed Com 403H

 SHL: 355' FNL, 2201' FEL SEC. 16, T20S, R33E

 Pony Express Fed Com 603H

 SHL: 155' FNL, 2200' FEL SEC. 16, T20S, R33E

 Pony Express Fed Com 707H

 SHL: 355' FNL, 2176' FEL SEC. 16, T20S, R33E

 Pony Express Fed Com 306H

 SHL: 355' FNL, 2151' FEL SEC. 16, T20S, R33E

 Pony Express Fed Com 504H

 SHL: 155' FNL, 2175' FEL SEC. 16, T20S, R33E

 Pony Express Fed Com 703H

 SHL: 155' FNL, 2150' FEL SEC. 16, T20S, R33E

This surface use plan of operations provides site specific information for the above referenced wells located on the Pony Express 3 Pad within the proposed Lone Ranger Drill Island.

 <u>Existing Roads</u> *See Pony Express Pad 3 & Pony Express East CTB TOPO A & B – Access Road Map(s)

Existing roads providing access to the well site are shown on Topo Maps A and B. Nonstate roads will be maintained as needed to Gold Book standards. This includes pulling ditches, preserving the crown, and cleaning culverts. This will be done at least once a year, and more often as needed.

Proceed in a westerly, then southwesterly direction from Hobbs, New Mexico along Highway 180 approximately 33.3 miles to the junction of this road and an existing road to the northwest; turn right then proceed in a northwesterly, then westerly, then northerly direction approximately 0.6 miles to the beginning of the proposed Silver 3 Pad access road "A" to the east; follow road flags in a easterly, then northerly direction approximately 743' to the beginning of the proposed access road "A" to the east; follow road flags in an easterly direction approximately 62' to the proposed location. Total distance from Hobbs, New Mexico to the proposed well location is approximately 34.1 miles.

 <u>New Roads</u> *See Pony Express Pad 3 & Pony Express East CTB TOPO B - Access Road Map & R-O-W Plats

There will be 196' of new resource roads that will be crowned and ditched. The proposed construction width will be 30' with a 14' wide driving surface, and be surfaced with caliche. Maximum disturbed width = 30', maximum grade = 3%, maximum cut/fill = 3'. No culvert, cattle guard, or vehicle turn out is needed. Upgrading will consist of filling potholes with caliche.

- a. Road "A" Dimensions (Permanent road): 62'
- b. Road "B" Dimensions (Permanent road): 62'
- c. Road "C" Dimensions (Permanent road to CTB): 72'

New road access erosion control: Crowned and ditched



- Location of Existing Wells *See Pony Express Pad 3 Topo C: Well Proximity Map. Existing oil, gas, water and P&A wells within a mile of the proposed wellbore. No SWD or injection well is within a mile radius.
- 4. Location of Existing and/or Proposed Production Facilities *See Pony Express Pad 3 Figure 3-4 & Pony Express East CTB Figure 1

Flare(s) will be set on the southernmost bottom of the well pad. Separators and treaters will be placed in the southeast corner of the well pad. A central tank battery (CTB) will be built south of the well pad. Tanks will be in the northwest corner of the CTB.

A 229' long x 3' wide x 3' deep trench will run between the well pad and CTB. Trench will hold 4" 0.D. steel, HDPE, or composite oil line, fuel gas and gas sale lines, and SWD line. (There will be one trench per well. Trenches will be 3' apart. There will be 7 wells on the pad.)

A 10' long above ground powerline will run between the well pad and CTB

- Location and Types of Water Supply *See Water Transportation Map Water will be trucked from the 3Bear Libby water station on private land, located NE1/4 Section 26, T20S, R34E.
- 6. <u>Construction Materials</u> *See Construction Materials Source Map

NM One Call (811), offset operators will be notified before construction starts, if necessary. Top 4" of soil and brush will be stockpiled east of the well pad. V-door will face east. Closed loop drilling system will be used. Top 4" of soil and brush will be piled east of the CTB. Caliche will be hauled from an existing caliche pit on private (Berry) land in E2N34 35-20S-34E.

7. Methods of Handling Waste

All trash will be placed in a portable trash cage. It will be hauled to the Lea County landfill. There will be no trash burning. Contents (drill cuttings, mud, salts, and other chemicals) of the mud tanks will be hauled to state approved disposal site at R360's state approved (NM-01-0006) disposal site at Halfway, NM. Human waste will be disposed of in chemical toilets and hauled to the Hobbs wastewater treatment plant. **Reserve pit:** No reserve pit planned.

8. Ancillary Facilities

There will be no airstrip or camp. Camper trailers will be on location for the company man, tool pusher, and mud logger.

9. <u>Well Site Layout</u> *See Pony Express Pad 3 Figures 1-3 & Pony Express East CTB Figures 1 & 2



Also see Rig Layout (Figure #3) for depictions of the well pad, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. <u>Plans for Final Surface Reclamation</u> *See Pony Express Pad 3 Figure 4

Interim Reclamation: Once the last well has been drilled, then the pad will be interim reclaimed to a reduced working surface area. The reclaimed area will be recontoured and reseeded to match preconstruction grades.

Final Reclamation: Once the last well is plugged, then the pad, CTB, and new road will be reclaimed within 6 months of plugging. Disturbed areas will be recontoured to match pre- construction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with BLM requirements. Road will be blocked. Noxious weeds will be controlled.

| APPROXIMATE SURFACE DISTURBANCE AREAS | DISTANCE | ACRES |
|---|----------|-------|
| WELL SITE DISTURBANCE | NA | 6.180 |
| CTB SITE DISTURBANCE | NA | 3.241 |
| 10' WIDE POWER LINE R-O-W DISTURBANCE | 10' | 0.002 |
| 10' WIDE POWER LINE TO CTB R-O-W DISTURBANCE | 90' | 0.021 |
| 30' WIDE FLOWLINE R-O-W DISTURBANCE | 229' | 0.158 |
| 30' WIDE ROAD "A" PERMANENT ROAD R-O-W DISTURBANCE | 62' | 0.043 |
| 30' WIDE ROAD "B" PERMANENT ROAD R-O-W DISTURBANCE | 62' | 0.043 |
| 30' WIDE ROAD "C" PERMANENT ROAD TO CTB R-O-W DISTURBANCE | 72' | 0.049 |
| TOTAL SURFACE USE AREA: | | 9.737 |

11. Surface Ownership

Well site: Surface owner: State of New Mexico Contact/Office location: State of New Mexico

P.O. Box 1148 Santa Fe, NM 87504 505-827-5760 Roads (New/Existing): Surface owner: State of New Mexico Contact/Office location:

State of New Mexico P.O. Box 1148 Santa Fe, NM 87504 505-827-5760



12. Additional Information

An onsite inspection was conducted for Pony Express Pad 3 on January 29, 2020. In attendance at the inspection were the following individuals:

Agency/Company

| Jeffery Roberts | Bureau of Land Management |
|--------------------|---------------------------|
| Chaz Sartin | Bureau of Land Management |
| Jim Rutley | Bureau of Land Management |
| Ben Metz | Ascent Energy, LLC |
| Gema Volek | Ascent Energy, LLC |
| Amy Doebele | UELS, LLC |
| Bryan Bergstresser | UELS, LLC |
| Shane Lobdell | UELS, LLC |
| Michael Daniels | UELS, LLC |
| | |

Field representative will be: Gema Volek Drilling Manager Ascent Energy, LLC 1125 17th St., Suite 410 Denver, CO 80202 Office: (720) 710-8999 Cell: (785) 312-2092



| Database: | Database 1 | Local Co-ordinate Reference: | Well PONY EXPRESS FED COM 603H |
|-----------|---|------------------------------|--------------------------------|
| Company: | ASCENT ENERGY | TVD Reference: | KB 25' @ 3566.00usft |
| Project: | LEA COUNTY, NEW MEXICO (NAD 83) (GRID) | MD Reference: | KB 25' @ 3566.00usft |
| Site: | SEC. 16 T20S R33E N.M.P.M. (GRID) | North Reference: | Grid |
| Well: | PONY EXPRESS FED COM 603H | 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) |
|--------------------------------------|------------|--------------|---------------|--------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| LTP: 1 | 00ft FSL & | 2310ft FEL o | f Sec 21 | | | | | | | |
| 21,164.19 | 88.11 | 179.61 | 11,264.35 | -7,698.35 | -10,308.43 | -39.63 | 10,307.92 | 0.00 | 0.00 | 0.00 |
| 21,200.00 | 88.11 | 179.61 | 11,265.53 | -7,699.53 | -10,344.22 | -39.39 | 10,343.71 | 0.00 | 0.00 | 0.00 |
| BHL: 50ft FSL & 2310ft FEL of Sec 21 | | | | | | | | | | |
| 21,214.22 | 88.11 | 179.61 | 11,266.00 | -7,700.00 | -10,358.43 | -39.29 | 10,357.93 | 0.00 | 0.00 | 0.00 |

Formations

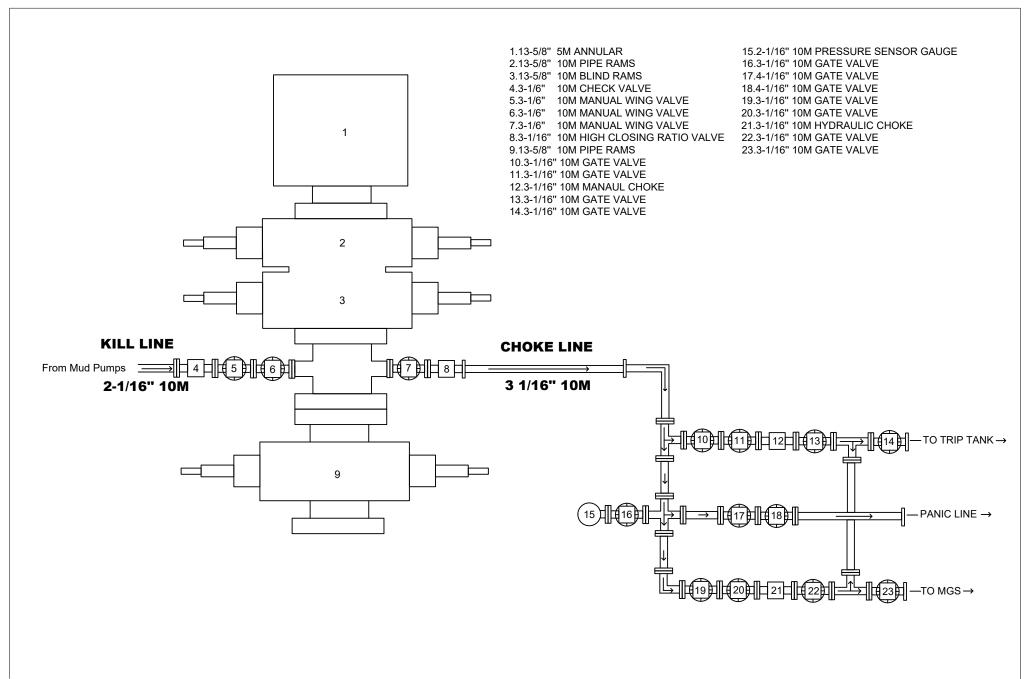
| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|--------------|---------------|-------------------|--------------|------------|-------------------------|
| 1,266.00 | 1,266.00 | RSTLR | | 0.00 | |
| 1,606.00 | 1,606.00 | SALDO | | 0.00 | |
| 2,901.98 | 2,891.00 | TANSIL | | 0.00 | |
| 3,070.66 | 3,056.00 | YATES | | 0.00 | |
| 3,295.25 | 3,276.00 | CAPITAN_REEF_TOP | | 0.00 | |
| 5,267.85 | 5,246.00 | TOP_DELAWARE_SAND | | 0.00 | |
| 5,377.85 | 5,356.00 | CHERRY_CANYON | | 0.00 | |
| 6,637.85 | 6,616.00 | BRUSHY_CANYON | | 0.00 | |
| 8,197.85 | 8,176.00 | BSPG_LIME | | 0.00 | |
| 8,317.85 | 8,296.00 | AVLN | | 0.00 | |
| 8,732.85 | 8,711.00 | LEONARD_B | LEONARD_B | | |
| 9,267.85 | 9,246.00 | 1ST_BSPG_SND | | 0.00 | |
| 9,554.85 | 9,533.00 | 2ND_BSPG | | 0.00 | |
| 9,783.85 | 9,762.00 | 2ND_BSPG_SND | 2ND_BSPG_SND | | |
| 10,329.85 | 10,308.00 | 3RD_BSPG_C | | 0.00 | |
| 10,706.06 | 10,668.00 | 3RD_BSPG_S | | 0.00 | |

Plan Annotations

| Local Coordinates | | | | | | |
|-------------------|---------------|-----------------|-----------------|--|--|--|
| MD (usft) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Comment | | |
| 0.00 | 0.00 | 0.00 | 0.00 | SHL: 155ft FNL & 2200ft FEL of Sec 16 | | |
| 2,000.00 | 2,000.00 | 0.00 | 0.00 | START NUDGE (2°/100ft BUR) | | |
| 2,600.00 | 2,595.62 | 32.25 | -53.66 | EOB TO 12° INC | | |
| 3,199.31 | 3,181.84 | 96.44 | -160.45 | END OF TANGENT | | |
| 3,799.31 | 3,777.46 | 128.69 | -214.11 | EOD TO VERTICAL | | |
| 10,387.20 | 10,365.35 | 128.69 | -214.11 | KOP (10°/100ft BUR) | | |
| 10,682.06 | 10,647.37 | 55.20 | -203.78 | FTP: 100ft FNL & 2403.46ft FEL of Sec 16 | | |
| 11,268.30 | 10,938.00 | -419.98 | -137.00 | HZ LP: 575.18ft FNL & 2340ft FEL of Sec 16 | | |
| 11,368.30 | 10,941.29 | -518.95 | -123.09 | END OF TANGENT | | |
| 11,621.83 | 10,949.67 | -771.47 | -104.57 | EOT TO 179.61° AZ | | |
| 21,164.19 | 11,264.35 | -10,308.43 | -39.63 | LTP: 100ft FSL & 2310ft FEL of Sec 21 | | |
| 21,214.22 | 11,266.00 | -10,358.43 | -39.29 | BHL: 50ft FSL & 2310ft FEL of Sec 21 | | |

Ascent Energy

5M BOPE & CHOKE MANIFOLD DIAGRAM





Blowout Prevention and Control Well Kick: Shut-In Procedures

Primary Kick Indicators

If any primary kick indicators are observed, report them IMMEDIATEALY TO THE DRILLER and initiate the proper shut-in procedures.

- 1. Increase flow rate.
- 2. Pit volume gain.
- 3. Well flows with pump off.
- 4. Hole not taking proper amount of mud on trips.

If a kick occurs while drilling:

- 1. Raise the Kelly until a tool joint is above the rotary table.
- 2. Stop the mud pumps.
- 3. Open the hydraulic gate valve.
- 4. Close the annular preventer.
- 5. Close the hydraulic choke.
- 6. Notify the Drill Site Manager and Drilling Manager.
- 7. Read and record:
 - a. Shut-in drill pipe pressure,
 - b. Shut-in annulus pressure, and
 - c. Pit gain.
- 8. Prepare the well-killing spreadsheet.

If a kick occurs during a trip:

- 1. Set the top tool joint on the slips.
- 2. Install and make up a full-opening, full opened safety valve in the fill pipe.
- 3. Close the safety valve.
- 4. Open the hydraulic gate valve.
- 5. Close the annular preventer.
- 6. Close the hydraulic choke.
- 7. Notify the Drill Site Manager and Drilling Manager.
- 8. Pick up the Kelly and make it up.
- 9. Open the safety valve.
- 10.Read and record:
 - a. Shut-in drill pipe pressure,
 - b. Shut-in casing pressure, and
 - c. Pit gain.
- 11.Prepare the well-killing spreadsheet.

Ascent Energy, LLC Blowout Prevention and Control Well Kick Shut-In Procedures

It is assumed the hydraulic choke is always open while drilling or tripping. Note: check all lines and valves for leaks after the well has been shut-in.

Crewmember Stations for well kicks after the well has been shut-in:

| Crewmember | Station |
|--------------|---|
| Driller | On the brake. |
| Derrickman | Check pumps, line up mud and mixing equipment, check mud weight in pits. |
| Motorman | On hydraulic closing unit. |
| Floorhand #1 | On hydraulic choke control panel to watch and record shut-in procedures. |
| Floorhand #2 | Check BOPs, choke manifold, etc. for leaks then go to floor with driller. |
| Toolpusher | Make sure all crewmembers carry out their assignments. |

| letal One Corp. | ELLICHMAN | FLUSHMAX-III | | |) |
|--------------------------------------|---|---|---|--|---|
| | FLOSHWAZ | FLOSHMAX-III | | 25-Jan-17 | |
| Metal One | Connection Dat | a Shoot | | | |
| | Connection Dat | la Sheel | Rev. | N - 1 | |
| | Geometry | | | <u>S.I.</u> | |
| | Pipe Body | | | | |
| | Grade | P110 | | P110 | |
| | Pipe OD (D) | 7 5/8 | in | 193.68 | mm |
| FLUSHMAX-III | 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 | | | | |
| | Connection Box OD (W) | 7.625 | in | 102 69 | mm |
| | PIN ID | 6.875 | in in | <u>193.68</u> 174.63 | mm |
| | Make up Loss | 3.040 | in | 77.22 | mm |
| 2 | Box Critical Area | | | | mm |
| 2 | | 4.424 | in ² | 2854 | mm ² |
| Box | Joint load efficiency | 60 | % | <u>60</u> | % |
| critical area | Thread Taper Number of Threads | | | 4" per ft) TPI | |
| Make | Performance | | | | |
| up d | Performance Performance Properties | for Pipe Body | | | |
| up → d | Performance Performance Properties S.M.Y.S. | for Pipe Body | 1 | 4,177 | kN |
| up oss | Performance Properties | | | | kN MPa |
| oss Pin | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength | 939 9,470 5,350 | kips psi psi | <mark>4,177</mark> 65.31 36.90 | MPa MPa |
| up oss | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. = Minim | 939 9,470 5,350 fied Minimum YI num Internal Yiel | kips psi psi ELD Strer d Pressur | <mark>4,177</mark> 65.31 36.90 ngth of Pipe bo | MPa MPa ody |
| poss 2 Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci | 939 9,470 5,350 fied Minimum YI num Internal Yiel | / psi psi ELD Strer d Pressur | <mark>4,177</mark> 65.31 36.90 ngth of Pipe body re of Pipe body | MPa MPa ody |
| poss 2 Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. = Minim Performance Properties | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips | / psi psi ELD Strer d Pressur on (60% | <mark>4,177</mark> 65.31 36.90 ngth of Pipe bo | MPa MPa ody |
| poss 2 Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. = Minim Performance Properties Tensile Yield load | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips | / psi psi ELD Strer d Pressur on (60% (| 4,177 65.31 36.90 ngth of Pipe body re of Pipe body of S.M.Y.S.) | MPa MPa ody |
| poss 2 Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. = Minim Performance Properties Tensile Yield load Min. Compression Yield | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips | / kips psi psi ELD Strer d Pressur on (60% c (80% c) | 4,177 65.31 36.90 ngth of Pipe both re of Pipe both of S.M.Y.S. | MPa MPa ody |
| up oss Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. = Minim Performance Properties Tensile Yield Ioad Min. Compression Yield Internal Pressure | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips | / kips psi psi ELD Strer d Pressur on (60% c (80% c) | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S | MPa MPa ody |
| Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. = Minim Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips 7,580 psi | / kips psi psi ELD Strer d Pressur on (60% (60% (80% 100% o 25 | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S | MPa MPa ody |
| Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Speci M.I.Y.P. Special MI.Y.P. Minim Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. | 939 9,470 5,350 fied Minimum YI for Connecti 563 kips 563 kips 7,580 psi | kips psi psi ELD Strer d Pressur on (60%) (80%) 100% o 25 ft-lb | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S | MPa MPa ody v |
| up oss Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specir M.I.Y.P. Minim Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. | 939 9,470 5,350 fied Minimum YI for Connection 563 kips 563 kips 7,580 psi 7,580 psi 15,500 17,200 | / kips psi psi ELD Strer d Pressur on (60% (60% (60% (60% 0% (60% 0% 0% (60% 0% 0% 0% (60% 0% 0% 0% 0% 0% 0% 0% 0% 0% | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S 5 21,000 23,300 | MPa MPa ody v trength N-m N-m |
| up oss Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specir M.I.Y.P. Minim Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max. | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips 7,580 psi 7,580 psi 15,500 17,200 18,900 | / kips psi psi ELD Strer d Pressur on (60% (60% (60% (80% 100% o 25 ft-lb ft-lb ft-lb | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S 5 21,000 23,300 25,600 | MPa MPa ody v trength N-m N-m |
| up loss Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note Note S.M.Y.S.= Specific M.I.Y.P. Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max. Operational Max. | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips 7,580 psi 7,580 psi 15,500 17,200 18,900 23,600 | kips psi psi LD Strer d Pressur on (60% c (60% c 100% o 25 ft-lb ft-lb ft-lb ft-lb ft-lb | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S 5 21,000 23,300 25,600 32,000 | MPa MPa ody v trength N-m N-m N-m N-m |
| Pin critica area | Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specir M.I.Y.P. Minim Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max. | 939 9,470 5,350 fied Minimum YI num Internal Yiel for Connecti 563 kips 563 kips 7,580 psi 7,580 psi 15,500 17,200 18,900 23,600 | kips psi psi LD Strer d Pressur on (60% c (60% c 100% o 25 ft-lb ft-lb ft-lb ft-lb ft-lb | 4,177 65.31 36.90 ngth of Pipe body of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) f Collapse S 5 21,000 23,300 25,600 32,000 | MPa MPa ody v trength N-m N-m N-m N-m |

responsibility for any errors with respect to this information.

Statements regarding the suitability of products for certain types of applications are based on Metal One's knowledge of typical requirements that are often placed on Metal One products in standard well configurations. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application

Released to introducts described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer

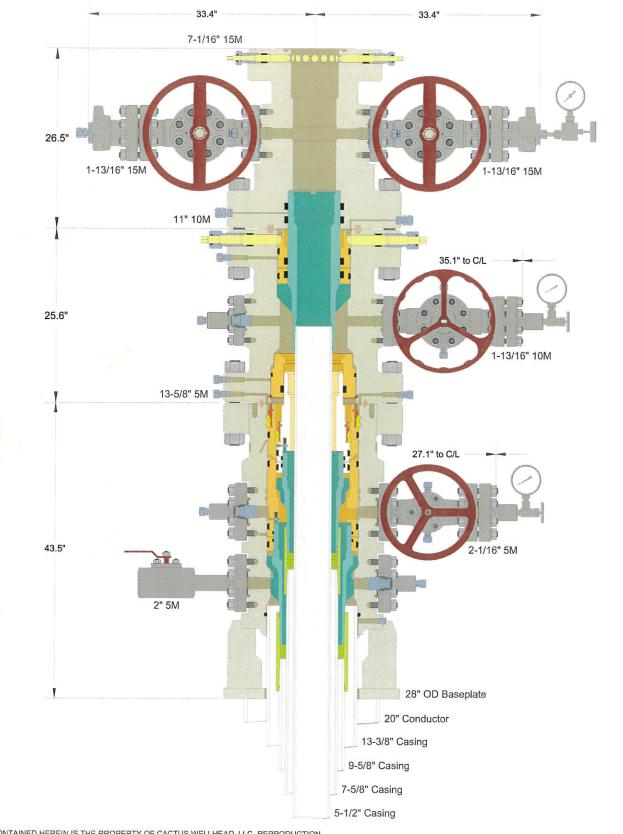
| tal One Corp. | CEOCON | 05000111 | | | 2 - R |
|---------------------------------------|---|---|--|---|---|
| Matal One | GEOCONN | | Date | 5-00 | ct-16 |
| Metal <mark>O</mark> ne | Connection Data | a Sheet | Rev. | N | -0 |
| | Geometry | | | | |
| | | imperi | | <u>S.I.</u> | |
| | Pipe Body Grade | D110 | | D110 | |
| | Pipe OD (D) | P110 5 1/2 | in | P110 139.70 | mm |
| GEOCONN | Weight | 20.00 | lb/ft | | mm |
| GLUUUIII | Wall Thickness (t) | | Contraction of the local division of the loc | 29.76 | kg/m |
| | Pipe ID (d) | 0.361 | in | 9.17 | mm |
| | Drift Dia. | 4.778 | in | 121.36 | mm |
| | Dhit Dia. | 4.653 | in | 118.19 | mm |
| ⊸ | Connection | | | | |
| ⊸ D | Coupling OD (W) | 6.050 | in | 153.67 | mm |
| | Coupling Length (NL) | 8.350 | in | 212.09 | mm |
| Δ | Make up Loss | 4.125 | in | 104.78 | mm |
| -b | Pipe Critical Area | 5.83 | in ² | 3,758 | mm ² |
| 8 | Box Critical Area | 6.10 | in ² | 3,935 | mm ² |
| | Thread Taper | | / 16 (3/4 | | |
| 5 | Number of Threads | | <u>5 TF</u> | | -1. 1. J. |
| | Performance | | 011 | | |
| | Performance | - Ded | | | |
| | Performance Performance Properties | | / | | |
| | Performance Performance Properties S.M.Y.S. | 641 | kips | 2,850 | kN MPa |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. | <mark>641</mark> 12,640 | kips psi | <mark>2,850</mark> 87.17 | MPa |
| CALIFORNIA CALIFORNIA | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength | 641 12,640 11,100 | kips psi psi | 2,850 87.17 76.55 | MPa MPa |
| CALIFORNIA CALIFORNIA | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif | 641 12,640 11,100 fied Minimum YI | / psi psi ELD Stren | <mark>2,850</mark> 87.17 76.55 agth of Pipe bo | MPa MPa odv |
| CALIFORNIA CALIFORNIA | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim | 641 12,640 11,100 fied Minimum YI num Internal Yiel | kips psi psi ELD Stren d Pressure | <mark>2,850</mark> 87.17 76.55 agth of Pipe bo | MPa MPa odv |
| CALIFORNIA CALIFORNIA | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | / psi psi ELD Stren d Pressure on | 2,850 87.17 76.55 Ingth of Pipe body e of Pipe body | MPa MPa odv |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | kips psi psi ELD Stren d Pressure on 100% of | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. | MPa MPa |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | / psi psi ELD Stren d Pressure on 100% of 100% of | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. | MPa MPa |
| CALCULATION OF THE OWNER OF THE OWNER | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | / psi psi ELD Stren d Pressure on 100% of 100% of 100% of | 2,850 87.17 76.55 agth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | kips psi psi ELD Stren d Pressure on 100% of 100% of 100% of | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | / psi psi ELD Stren d Pressure on 100% of 100% of 100% of | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti | kips psi psi ELD Stren d Pressure on 100% of 100% of 100% of | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) | 641 12,640 11,100 fied Minimum YI for Connecti | / psi psi ELD Stren d Pressure on 100% of 100% of 100% of 290 | 2,850 87.17 76.55 agth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. | 641 12,640 11,100 fied Minimum YI for Connecti for Connecti | / psi psi ELD Stren d Pressure on 100% of 100% of 100% of 290 ft-lb | 2,850 87.17 76.55 agth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. | 641 12,640 11,100 fied Minimum YI for Connecti for Connecti 14,600 16,200 | / psi psi ELD Stren d Pressure on 100% of 100% of 100% of 290 ft-lb | 2,850 87.17 76.55 Ingth of Pipe body s.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S 7 19,700 21,900 | MPa MPa ody v |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Dopti. Max. | 641 12,640 11,100 fied Minimum YI for Connecti for Connecti 14,600 16,200 17,800 | kips psi psi ELD Stren d Pressure 00 100% of ft-lb ft-lb ft-lb ft-lb | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S D 19,700 21,900 24,100 | MPa MPa ody v itrength N-m N-m N-m |
| | Performance Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max. Operational Max. | 641 12,640 11,100 fied Minimum YI for Connecti for Connecti 14,600 16,200 17,800 19,500 | / kips psi psi ELD Stren d Pressure on 100% of 100% of 100% of 290 ft-lb ft-lb ft-lb ft-lb | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S D 19,700 21,900 24,100 26,400 | MPa MPa ody v trength N-m N-m N-m N-m |
| | Performance Performance Properties S.M.Y.S. M.I.Y.P. Collapse Strength Note S.M.Y.S.= Specif M.I.Y.P. = Minim Performance Properties Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Dopti. Max. | 641 12,640 11,100 fied Minimum YI num Internal Yiel for Connecti for Connecti 16,200 16,200 17,800 19,500 orque can be app | / kips psi psi ELD Stren d Pressure on 100% of 100% of 100% of 290 ft-lb ft-lb ft-lb ft-lb | 2,850 87.17 76.55 Igth of Pipe body of Pipe body S.M.Y.S. S.M.Y.S. M.I.Y.P. Collapse S D 19,700 21,900 24,100 26,400 | MPa MPa ody v trength N-m N-m N-m N-m |

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Statements regarding the suitability of products for certain types of applications are based on Metal One's knowledge of typical requirements that are often placed on Metal One products in standard well configurations. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application

The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to <u>http://www.mtlo.co.jp/mo-con/_images/top/WebsiteTerms_Active_20333287_1.pdf</u> the contents of which are incorporated by reference into this Connection Data Sheet.

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CACTUS WELLHEAD LLC

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 Released to Imaging: 6/18/2021 3:29:18 PM

ASCENT ENERGY, LLC **DELAWARE BASIN** DLE DRAWN 06APR18 APPRV DRAWING NO.

ODE0002219

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

| Operator: | OGRID: |
|---------------------|---|
| ASCENT ENERGY, LLC. | 325830 |
| 1125 17th St | Action Number: |
| Denver, CO 80202 | 26808 |
| | Action Type: |
| | [C-101] BLM - Federal/Indian Land Lease (Form 3160-3) |

CONDITIONS

| Created By | Condition | Condition Date |
|---------------|--|-------------------|
| pkautz | Will require a File As Drilled C-102 and a Directional Survey with the C-104 | 6/18/2021 |
| | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string | 6/18/2021 |

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