

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-025-54949
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		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 acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). </div> <div style="width: 48%;"> 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM. </div> </div>		
25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached.		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.		

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number 30-025- 54949	Pool Code 96438	Pool Name HAT MESA; WOLFCAMP	
Property Code 332434	Property Name GAVILON FED COM	Well Number 702H	
ORGID No. 228937	Operator Name MATADOR PRODUCTION COMPANY	Ground Level Elevation 3,672'	
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

Surface Location									
UL O	Section 33	Township 20 S	Range 33 E	Lot	Ft. from N/S 445' FSL	Ft. from E/W 1,693' FEL	Latitude 32.523570	Longitude -103.665157	County LEA

Bottom Hole Location									
UL B	Section 28	Township 20 S	Range 33 E	Lot	Ft. from N/S 50' FNL	Ft. from E/W 1,650' FEL	Latitude 32.551233	Longitude -103.665028	County LEA

Dedicated Acres 320	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL O	Section 33	Township 20 S	Range 33 E	Lot	Ft. from N/S 445' FSL	Ft. from E/W 1,693' FEL	Latitude 32.523570	Longitude -103.665157	County LEA

First Take Point (FTP)									
UL O	Section 33	Township 20 S	Range 33 E	Lot	Ft. from N/S 100' FSL	Ft. from E/W 1,650' FEL	Latitude 32.522622	Longitude -103.665018	County LEA

Last Take Point (LTP)									
UL B	Section 28	Township 20 S	Range 33 E	Lot	Ft. from N/S 100' FNL	Ft. from E/W 1,650' FWL	Latitude 32.551095	Longitude -103.665028	County LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3,672'
---	--	--------------------------------

OPERATOR CERTIFICATIONS		SURVEYOR CERTIFICATIONS	
<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling form the division.</p> <p><i>Nicky Fitzgerald</i> 5/9/2025</p>		<p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.</p> <p><i>[Signature]</i> 23 April 2025</p> <p>TIM C. PAPPAS REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 21209</p>	
Signature Nicky Fitzgerald		Signature and Seal of Professional Surveyor	
Printed Name nicky.fitzgerald@matadorresources.com		Certificate Number TIM C. PAPPAS 21209	Date of Survey 04/22/2025
Email Address			

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



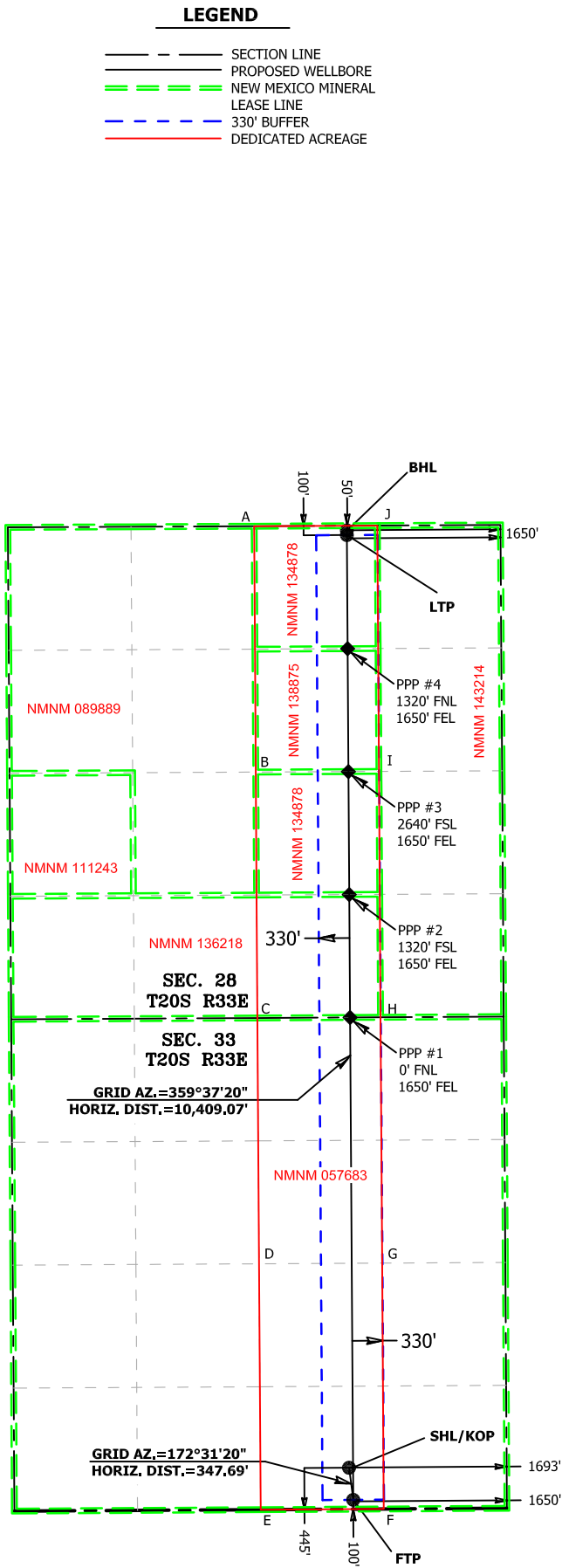
2205 Walnut Street - Columbus, TX 78934
Ph: 979.732.3114 - Fax: 979.732.5271
TBPLS FIRM 10000100 - TBPE FIRM 17957
www.fscinc.net

DATE:	04-21-2025	PROJECT NO:	2025040123
DRAWN BY:	KC	SCALE:	1" = 1800'
CHECKED BY:	LM	SHEET:	1 OF 2
FIELD CREW:	IR	REVISION:	NO

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is the closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



COORDINATE TABLE					
SHL/KOP (NAD 83 NME)			SHL/KOP (NAD 27 NME)		
Y =	554,851.1	N	Y =	554,790.1	N
X =	747,280.4	E	X =	706,099.7	E
LAT. =	32.523570	°N	LAT. =	32.523450	°N
LONG. =	103.665157	°W	LONG. =	103.664664	°W
FTP (NAD 83 NME)			FTP (NAD 27 NME)		
Y =	554,506.4	N	Y =	554,445.3	N
X =	747,325.7	E	X =	706,144.9	E
LAT. =	32.522622	°N	LAT. =	32.522501	°N
LONG. =	103.665018	°W	LONG. =	103.664524	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	564,865.3	N	Y =	564,804.0	N
X =	747,257.4	E	X =	706,077.0	E
LAT. =	32.551095	°N	LAT. =	32.550975	°N
LONG. =	103.665028	°W	LONG. =	103.664534	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	564,915.3	N	Y =	564,854.0	N
X =	747,257.0	E	X =	706,076.6	E
LAT. =	32.551233	°N	LAT. =	32.551113	°N
LONG. =	103.665028	°W	LONG. =	103.664534	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	559,685.7	N	Y =	559,624.5	N
X =	747,291.5	E	X =	706,110.9	E
LAT. =	32.536858	°N	LAT. =	32.536738	°N
LONG. =	103.665023	°W	LONG. =	103.664529	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 27 NME)		
Y =	561,005.7	N	Y =	560,944.5	N
X =	747,282.8	E	X =	706,102.3	E
LAT. =	32.540490	°N	LAT. =	32.540366	°N
LONG. =	103.669340	°W	LONG. =	103.664530	°W
PPP #3 (NAD 83 NME)			PPP #3 (NAD 27 NME)		
Y =	562,325.7	N	Y =	562,264.5	N
X =	747,274.1	E	X =	706,093.6	E
LAT. =	32.544115	°N	LAT. =	32.543995	°N
LONG. =	103.665026	°W	LONG. =	103.664532	°W
PPP #4 (NAD 83 NME)			PPP #4 (NAD 27 NME)		
Y =	563,645.5	N	Y =	563,584.2	N
X =	747,265.4	E	X =	706,085.0	E
LAT. =	32.547742	°N	LAT. =	32.547622	°N
LONG. =	103.665027	°W	LONG. =	103.664533	°W

CORNER COORDINATES (NAD83 NME)					
A - Y =	564,960.1	N	A - X =	746,261.4	E
B - Y =	562,320.6	N	B - X =	746,278.9	E
C - Y =	559,680.3	N	C - X =	746,296.5	E
D - Y =	557,040.9	N	D - X =	746,313.9	E
E - Y =	554,400.4	N	E - X =	746,331.3	E
F - Y =	554,408.4	N	F - X =	747,653.8	E
G - Y =	557,048.2	N	G - X =	747,636.5	E
H - Y =	559,687.5	N	H - X =	747,618.9	E
I - Y =	562,327.4	N	I - X =	747,601.6	E
J - Y =	564,967.0	N	J - X =	747,584.1	E
CORNER COORDINATES (NAD27 NME)					
A - Y =	564,898.8	N	A - X =	705,081.1	E
B - Y =	562,259.4	N	B - X =	705,098.5	E
C - Y =	559,619.1	N	C - X =	705,115.9	E
D - Y =	556,979.8	N	D - X =	705,133.2	E
E - Y =	554,339.3	N	E - X =	705,150.5	E
F - Y =	554,347.3	N	F - X =	706,473.0	E
G - Y =	556,987.1	N	G - X =	706,455.8	E
H - Y =	559,626.3	N	H - X =	706,438.4	E
I - Y =	562,266.2	N	I - X =	706,421.1	E
J - Y =	564,905.7	N	J - X =	706,403.7	E



2205 Walnut Street - Columbus, TX 78934
Ph: 979.732.3114 - Fax: 979.732.5271
TBPLS FIRM 10000100 - TBPE FIRM 17957
www.fscInc.net

DATE: 04-21-2025 PROJECT NO: 2025040123
DRAWN BY: KC SCALE: 1" = 1,800'
CHECKED BY: LM SHEET: 2 OF 2
FIELD CREW: IR REVISION: NO

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Matador Production Company **OGRID:** 228937 **Date:** 2/12/2024

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Gavilon Fed Com 402H	30-025	UL-N Sec 33 T20S R33E	355' FSL 2051' FWL	1,250 BOPD	1,750 MCFD	3,000 BWPD
Gavilon Fed Com 702H	30-025	UL-O Sec 33 T20S R33E	445' FSL 1693' FEL	750 BOPD	1,000 MCFD	3,000 BWPD

IV. Central Delivery Point Name: Gavilon TB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Gavilon Fed Com 402H	30-025	TBD	TBD	TBD	TBD	TBD
Gavilon Fed Com 702H	30-025	TBD	TBD	TBD	TBD	TBD

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices


1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Mark Gonzales
Title: Operations Engineer
E-mail Address: mark.gonzales@matadorresources.com
Date: 2/12/2024
Phone: (915) 240-3468
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Addendum to Natural Gas Management Plan for Matador's

Gavilon Fed Com #402H and #702H

VI. Separation Equipment

Flow from each well will be routed via a flowline to a 48"x15' three phase separator dedicated to the well. The first stage separators are sized with input from BRE ProMax and API 12J. Anticipated production rates for each well can be seen in the table below. Liquid retention times at expected maximum rates will be >3 minutes. Gas will be routed from the first stage separator to sales. Hydrocarbon liquids are dumped from the first stage separator and commingled to one or more heater treaters. The flash gas from the heater treater(s) could either be sent to sales or routed to a compressor if the sales line pressure is higher than the MAWP of the heater treater (125 psi). From the heater treaters, hydrocarbon liquid will be routed to the tanks where vapor is compressed by a VRU if technically feasible to either sales or a compressor if the sales line pressure is higher than the VRU's maximum discharge pressure (~150 psi). Therefore, Matador has sized our separation equipment to optimize gas capture and our separation equipment is of sufficient size to handle the expected volumes of gas.

Well Name	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Gavilon Fed Com 402H	1,250 BOPD	1,750 MCFD	3,000 BWPD
Gavilon Fed Com 702H	750 BOPD	1,000 MCFD	3,000 BWPD

VII. Operation Practices

Although not a complete recitation of all our efforts to comply with a subsection A through F of 19.15.27.8 NMAC, a summary is as follows. During drilling, Matador will have a properly sized flare stack at least 100 feet from the nearest surface hole. During initial flowback we will route the flowback fluids into completion or storage tanks and, to the extent possible, flare rather than vent any gas. We will commence operation of a separator as soon as technically feasible, and have instructed our team that we want to connect the gas to sales as soon as possible but not later than 30 days after initial flowback.

Regarding production operations, we have designed our production facilities to be compliant with the requirements of Part E of 19.15.27.8 NMAC. We will instruct our team to perform the AVOs on the frequency required under the rules. While the well is producing, we will take steps to minimize flaring during maintenance, as set forth below, and we have a process in place for the measuring of any flared gas and the reporting of any reportable flaring events.

VII. Best Management Practices

Steps are taken to minimize venting during active or planned maintenance when technically feasible including:

- Isolating the affected component and reducing pressure through process piping
- Blowing down the equipment being maintained to a control device

- Performing preventative maintenance and minimizing the duration of maintenance activities
- Shutting in sources of supply as possible
- Other steps that are available depending on the maintenance being performed

Ascent Energy, LLC
 Well Name: Gavilon Fed Com 702H
 SHL 445' FSL, 1693' FEL
 SWSE, Section 33, T20S, R33E
 Lea County, New Mexico

Onshore Order 1
8 Point Drilling Plan

1. Geologic Formations/Estimated Tops

Formation	Lithology	MD	TVD	Mineral Resources
Upper Permian	Sandstone	0	0	Useable Water
Rustler	Anhydrite	1496	1496	None
Salado	Salt	1866	1866	None
Base Salado Salt	Salt	3134	3131	None
Tansil	Limestone	3287	3281	None
Yates	Carbonates	3487	3476	Natural Gas, Oil, CO2
Capitan Reef	Limestone	3793	3776	Useable Water
Delaware – Mt. Group	Sandstone	5051	4996	Natural Gas, Oil, CO2
Cherry Canyon	Sandstone	5727	5676	Natural Gas, Oil, CO2
Brushy Canyon	Sandstone	6872	6821	Natural Gas, Oil, CO2
Bone Spring	Limestone	8597	8546	Natural Gas, Oil, CO2
Bone Spring - Avalon	Shale	8642	8591	Natural Gas, Oil, CO2
Bone Spring – Leonard B	Limestone, Shale	8947	8896	Natural Gas, Oil, CO2
1 st Bone Spring Sandstone	Sandstone	9627	9576	Natural Gas, Oil, CO2
2 nd Bone Spring Carbonate	Carbonates	9937	9886	Natural Gas, Oil, CO2
2 nd Bone Spring Sandstone	Sandstone	10165	10114	Natural Gas, Oil, CO2
3 rd Bone Spring Carbonate	Carbonates	10793	10742	Natural Gas, Oil, CO2
3 rd Bone Spring Sandstone	Sandstone	11196	11141	Natural Gas, Oil, CO2
Wolfcamp	Shale	11638	11461	Natural Gas, Oil, CO2
TD	Shale	21919	11456	Natural Gas, Oil, CO2

Notable Zones: Wolfcamp A is the target formation.

Closest water well (CP 01151) is 8374' NE. Depth to water was not reported in the 823' deep well.

2. Blowout Prevention Equipment

- 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



Ascent Energy, LLC
 Well Name: Gavilon Fed Com 702H
 SHL 445' FSL, 1693' FEL
 SWSE, Section 33, T20S, R33E
 Lea County, New Mexico

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 nipped 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:
 - i. Variance is requested to use a co-flex line between the BOP and choke manifold instead of using a 4" O. D. steel line. Choke and kill line data book 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. Casing

Interval	Hole Size	Interval MD	Interval TVD	Csg OD	Weight	Grade	Conn Type	Conn	New/Used	DF Collapse	DF Burst	DF Tension
Cond	30"	0 80	0 80	30	52.78	5L B	Weld	API	New			
Surface	24	0' 1,521'	0' 1,521'	20	133.0	J-55	BTC	API	New	1.98	3.41	4.57
1st Int	17.5	0' 3,287'	0' 3,281'	13.375	68.0	J-55	STC	API	New	1.14	1.78	2.09
2nd Int	12.25	0' 5,051'	0' 4,996'	9.625	40.0	J-55	LTC	API	New	1.89	1.34	2.00
3rd int	8.75	0' 11,638'	0' 11,461'	7.625	29.7	HCP-110	EZGO HT	Non-API	New	1.42	1.40	1.27
Production	6.75	0' 21,919'	0' 11,518'	5.5	20.0	HCP-110	EZGO HT	Non-API	New	2.20	1.39	1.51

*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.



Ascent Energy, LLC
 Well Name: Gavilon Fed Com 702H
 SHL 445' FSL, 1693' FEL
 SWSE, Section 33, T20S, R33E
 Lea County, New Mexico

4. Cement

Section	Depth	Type	Cmt Top	Excess	Ft ³	Sacks	BBLs	Wt. ppg	Yld Ft ³ /sk	Slurry Description
Surface	20	Lead	0	100%	1,903	1105	339	13.5	1.728	Class C
	1521'	Tail	1021'	100%	960	780	171	14.8	1.332	Class C
1st Int	13.375	Lead	0	250%	3,289	1420	586	12.7	2.32	Class C
	3287'	Tail	2287'	50%	1,042	810	186	14.8	1.33	Class C
2nd Int (1st Stg)	9.625	Lead	3337	200%	389	180	69	12.7	2.2	Class C
	5051'	Tail	3751'	25%	509	400	91	14.8	1.33	Class C
2nd Int (2nd Stg)	9.625	Lead	0	10%	671	290	120	12.7	2.32	Class C
	5051'	Tail	2037'	10%	448	350	80	14.8	1.33	Class C
3rd Int	7.625	Lead	0'	100%	548	310	98	12	1.78	50/50 Poz H
	11638'	Tail	5046'	50%	994	885	177	14.8	1.14	25/75 Poz H
Production	5.5	Lead	0	10%	838	340	149	11	2.48	TXI Nine Lite Cement
	21,919'	Tail	9,000'	25%	1,349	920	240	13.2	1.472	35/65 Poz H

Note: Int 2 is two stage cement job. **DVT to be placed @ approximately 3337'**. 50ft from previous casing shoe and will be adjusted real time

5. Circulating Medium (Mud Program)

- Mud System Type: Closed
- Air/Gas Drilling: No
- 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.
- 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.

Interval		Type	Weight	Viscosity	Water Loss
0'	1,521'	Fresh Water	8.4-9.6	34-38	N/C
1,521'	3,287'	Brine Water	10	28-34	N/C
3,287'	5,051'	Fresh Water	8.4-8.6	28-34	N/C
5,051'	11,638'	OBM	8.8-9.2	28-34	N/C
11,638'	21,919'	OBM	10-10.5	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.



Ascent Energy, LLC
Well Name: Gavilon Fed Com 702H
SHL 445' FSL, 1693' FEL
SWSE, Section 33, T20S, R33E
Lea County, New Mexico

- 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 4000 psi.
- b. Anticipated bottom hole temperature: Expected bottom hole temperature is 173° 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.



Ascent Energy, LLC
Well Name: Gavilon Fed Com 702H
SHL 445' FSL, 1693' FEL
SWSE, Section 33, T20S, R33E
Lea County, New Mexico

- 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

Permit Matters

UELS, LLC
85 S 200 E
Vernal, UT 84078
Amy Doebele- Permit Agent
435-789-1017
adoebele@uintahgroup.com

Drilling, Completions, Production & Operational Matters

Ascent Energy, LLC
1125 17th St., Suite 410
Denver, CO 80202
Gema Volek- Drilling Manager
785-312-2092
gvolek@ascentenergy.us



Ascent Energy, LLC
 Well Name: Gavilon Fed Com 702H
 SHL 445' FSL, 1693' FEL
 SWSE, Section 33, T20S, R33E
 Lea County, New Mexico

Casing Assumptions

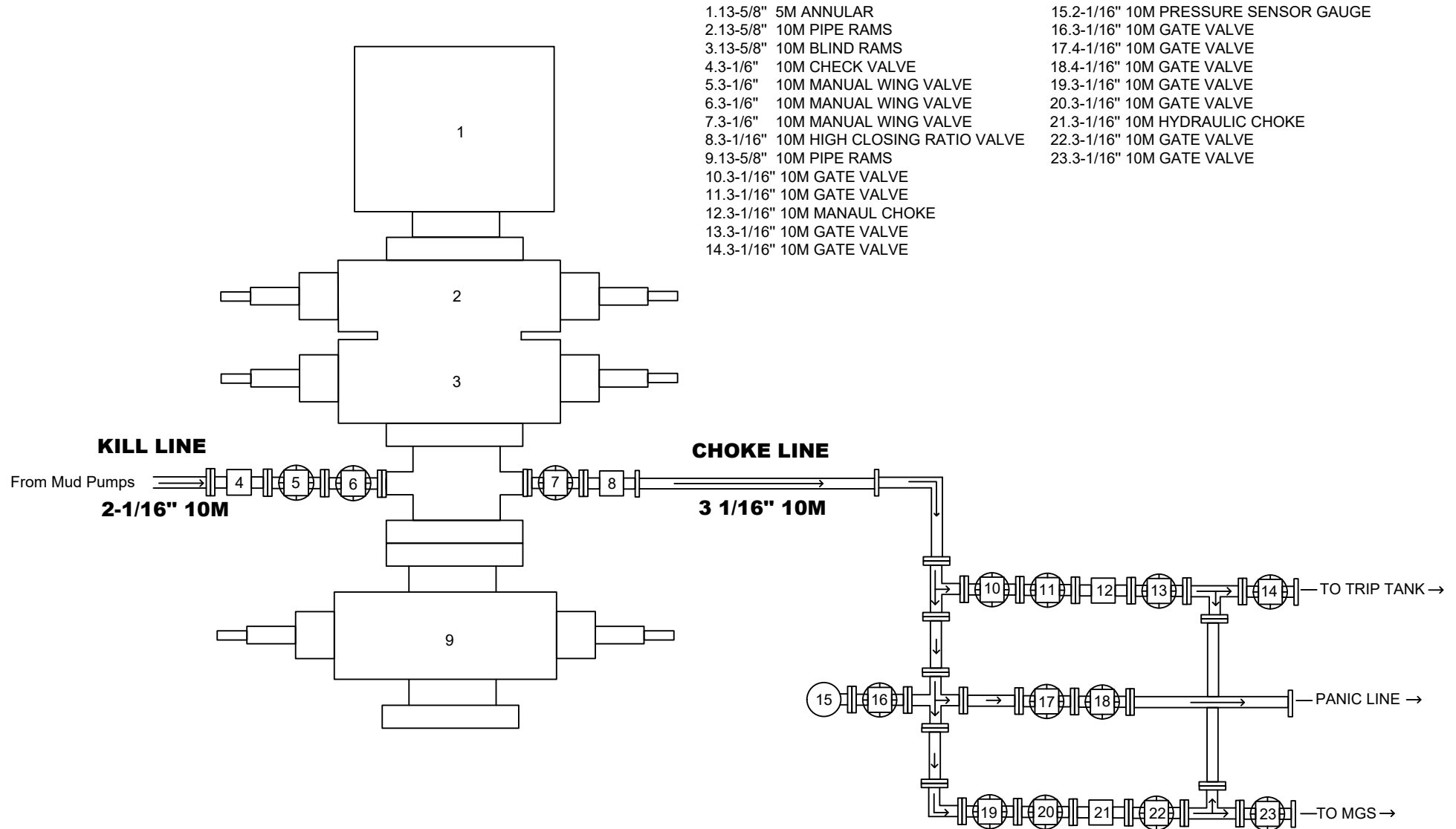
Interval	Hole Size	Interval MD	Interval TVD	Csg OD	Weight	Grade	Conn Type	Conn	New/Used	Tapped	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
Cond	30"	0' 80'	0' 80'	30	52.78	5L B	Weld	API	New	No	NA	NA	NA
Surface	24	0' 1,521'	0' 1,521'	20	133.0	J-55	BTC	API	New	No	1.125	1.25	1.60
1st Int	17.5	0' 3,287'	0' 3,281'	13.375	68.0	J-55	STC	API	New	No	1.125	1.25	1.60
2nd Int	12.25	0' 5,051'	0' 4,996'	9.625	40.0	J-55	LTC	API	New	No	1.125	1.25	1.60
3rd int	8.75	0' 11,638'	0' 11,461'	7.625	29.7	HCP-110	EZGO HT	Non-API	New	No	1.125	1.25	1.30
Production	6.75	0' 21,919'	0' 11,518'	5.5	20.0	HCP-110	EZGO HT	Non-API	New	No	1.125	1.25	1.60

Setting Depth (MD)	Setting Depth (TVD)	MW	FG	GG/KM	Collapse	Burst	Tensile	DF Collapse	DF Burst	DF Tension
1,521'	1,521'	9.6	0.7	0.11	1500	3060	1380	1.98	3.41	4.57
3,287'	3,281'	10	0.7	0.11	1950	3450	675	1.14	1.78	2.09
5,051'	4,996'	8.6	0.7	0.11	4230	3950	604	1.89	1.34	2.00
11,638'	11,461'	9.2	0.7	0.11	7780	9467	567	1.42	1.40	1.27
21,919	11,518'	10.5	0.7	0.11	13840	9470	499	2.20	1.39	1.51



Ascent Energy

5M BOPE & CHOKE MANIFOLD DIAGRAM



ASCENT ENERGY

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

SEC. 33 T20S R33E N.M.P.M. (GRID)

GAVILON FED COM 702H

ORIGINAL WELLBORE

PROPOSAL #1

Anticollision Report

02 April, 2020

Anticollision Report

Company:	ASCENT ENERGY	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	TVD Reference:	KB EST 25' @ 3696.00usft
Reference Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	GAVILON FED COM 702H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 10,000.00usft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	2020-04-01		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	21,918.92	PROPOSAL #1 (ORIGINAL WELLBORE)	OWSG (Rev2) MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SEC. 33 T20S R33E N.M.P.M. (GRID)						
EXIST VERT GAVILAN FEDERAL #1 - Wellbore #1 - De	13,390.71	11,468.78	2,983.66	2,704.30	10.680	CC
EXIST VERT GAVILAN FEDERAL #1 - Wellbore #1 - De	13,400.00	11,468.73	2,983.67	2,704.23	10.677	ES
EXIST VERT GAVILAN FEDERAL #1 - Wellbore #1 - De	13,700.00	11,466.87	2,999.64	2,717.46	10.630	SF
EXIST VERT OPAL 28 FED #001 - EXIST VERT OPAL 2	18,332.93	11,403.20	987.49	566.97	2.348	CC, ES, SF
EXIST VERT TOMAHAWK 28 FEDERAL #1 - Wellbore #	20,315.91	11,382.42	1,663.86	1,287.27	4.418	CC, ES
EXIST VERT TOMAHAWK 28 FEDERAL #1 - Wellbore #	20,400.00	11,381.90	1,665.98	1,288.31	4.411	SF
GAVILON FED COM 301H - ORIGINAL WELLBORE - P	2,600.00	2,600.00	25.00	6.81	1.374	Level 3, CC
GAVILON FED COM 301H - ORIGINAL WELLBORE - P	8,400.00	8,394.72	50.03	-7.72	0.866	Level 3, ES, SF
GAVILON FED COM 302H - ORIGINAL WELLBORE - P	2,400.00	2,400.00	24.83	8.08	1.482	Level 3, CC, ES, SF
GAVILON FED COM 303H - ORIGINAL WELLBORE - P	2,000.00	1,986.00	2,893.90	2,880.06	209.088	CC, ES
GAVILON FED COM 303H - ORIGINAL WELLBORE - P	21,918.92	19,199.73	4,172.84	3,879.55	14.228	SF
GAVILON FED COM 304H - ORIGINAL WELLBORE - P	5,793.32	5,769.36	2,544.66	2,502.23	59.966	CC
GAVILON FED COM 304H - ORIGINAL WELLBORE - P	8,500.00	8,464.14	2,544.99	2,484.52	42.086	ES
GAVILON FED COM 304H - ORIGINAL WELLBORE - P	21,918.92	19,219.19	3,671.20	3,399.00	13.487	SF
GAVILON FED COM 305H - ORIGINAL WELLBORE - P	2,200.00	2,196.00	1,573.10	1,557.79	102.748	CC, ES
GAVILON FED COM 305H - ORIGINAL WELLBORE - P	21,918.92	19,248.52	3,227.11	2,978.66	12.989	SF
GAVILON FED COM 306H - ORIGINAL WELLBORE - P	5,793.29	5,781.18	1,225.28	1,182.80	28.846	CC
GAVILON FED COM 306H - ORIGINAL WELLBORE - P	8,500.00	8,477.90	1,225.75	1,165.23	20.257	ES
GAVILON FED COM 306H - ORIGINAL WELLBORE - P	21,918.92	19,243.88	2,867.41	2,652.46	13.340	SF
GAVILON FED COM 401H - ORIGINAL WELLBORE - P	9,555.44	9,690.70	2,631.19	2,563.71	38.992	CC, ES
GAVILON FED COM 401H - ORIGINAL WELLBORE - P	21,918.92	19,923.02	3,226.72	2,929.05	10.840	SF
GAVILON FED COM 402H - ORIGINAL WELLBORE - P	9,465.92	9,502.55	1,318.52	1,251.56	19.692	CC, ES
GAVILON FED COM 402H - ORIGINAL WELLBORE - P	21,918.92	19,966.82	2,262.60	2,023.39	9.459	SF
GAVILON FED COM 403H - ORIGINAL WELLBORE - P	5,143.79	5,121.53	98.62	61.33	2.645	CC
GAVILON FED COM 403H - ORIGINAL WELLBORE - P	9,100.00	9,073.01	116.18	52.00	1.810	ES, SF
GAVILON FED COM 501H - ORIGINAL WELLBORE - P	5,477.61	5,456.94	104.52	64.54	2.614	CC
GAVILON FED COM 501H - ORIGINAL WELLBORE - P	10,100.00	10,078.62	105.27	33.78	1.473	Level 3, ES, SF
GAVILON FED COM 502H - ORIGINAL WELLBORE - P	2,000.00	2,000.00	213.53	199.64	15.372	CC, ES
GAVILON FED COM 502H - ORIGINAL WELLBORE - P	21,918.92	20,826.94	1,355.20	1,112.42	5.582	SF
GAVILON FED COM 503H - ORIGINAL WELLBORE - P	2,200.00	2,186.00	2,869.03	2,853.76	187.832	CC, ES
GAVILON FED COM 503H - ORIGINAL WELLBORE - P	21,918.92	20,863.18	3,461.35	3,123.66	10.250	SF
GAVILON FED COM 504H - ORIGINAL WELLBORE - P	5,793.32	5,767.13	2,379.23	2,337.23	56.650	CC
GAVILON FED COM 504H - ORIGINAL WELLBORE - P	10,100.00	10,061.21	2,379.75	2,308.49	33.392	ES
GAVILON FED COM 504H - ORIGINAL WELLBORE - P	21,918.92	20,750.05	2,714.01	2,389.33	8.359	SF
GAVILON FED COM 505H - ORIGINAL WELLBORE - P	5,793.31	5,759.61	1,554.37	1,512.50	37.129	CC
GAVILON FED COM 505H - ORIGINAL WELLBORE - P	10,200.00	10,158.96	1,554.77	1,482.74	21.584	ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



ASCENT ENERGY

**LEA COUNTY, NEW MEXICO (NAD 83) (GRID)
SEC. 33 T20S R33E N.M.P.M. (GRID)
GAVILON FED COM 702H**

ORIGINAL WELLBORE

02 April, 2020

Plan: PROPOSAL #1



Project: LEA COUNTY, NEW MEXICO (NAD 83) (GRID)
Site: SEC. 33 T20S R33E N.M.P.M. (GRID)
Well: GAVILON FED COM 702H
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

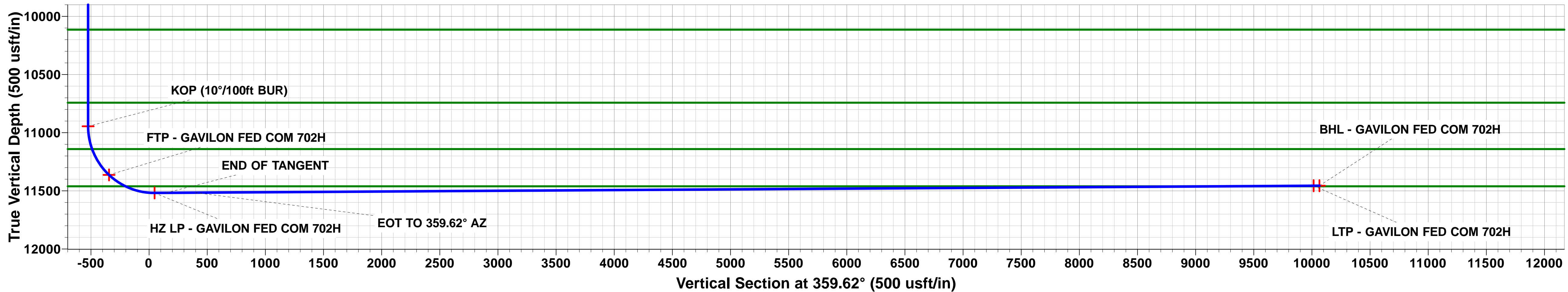
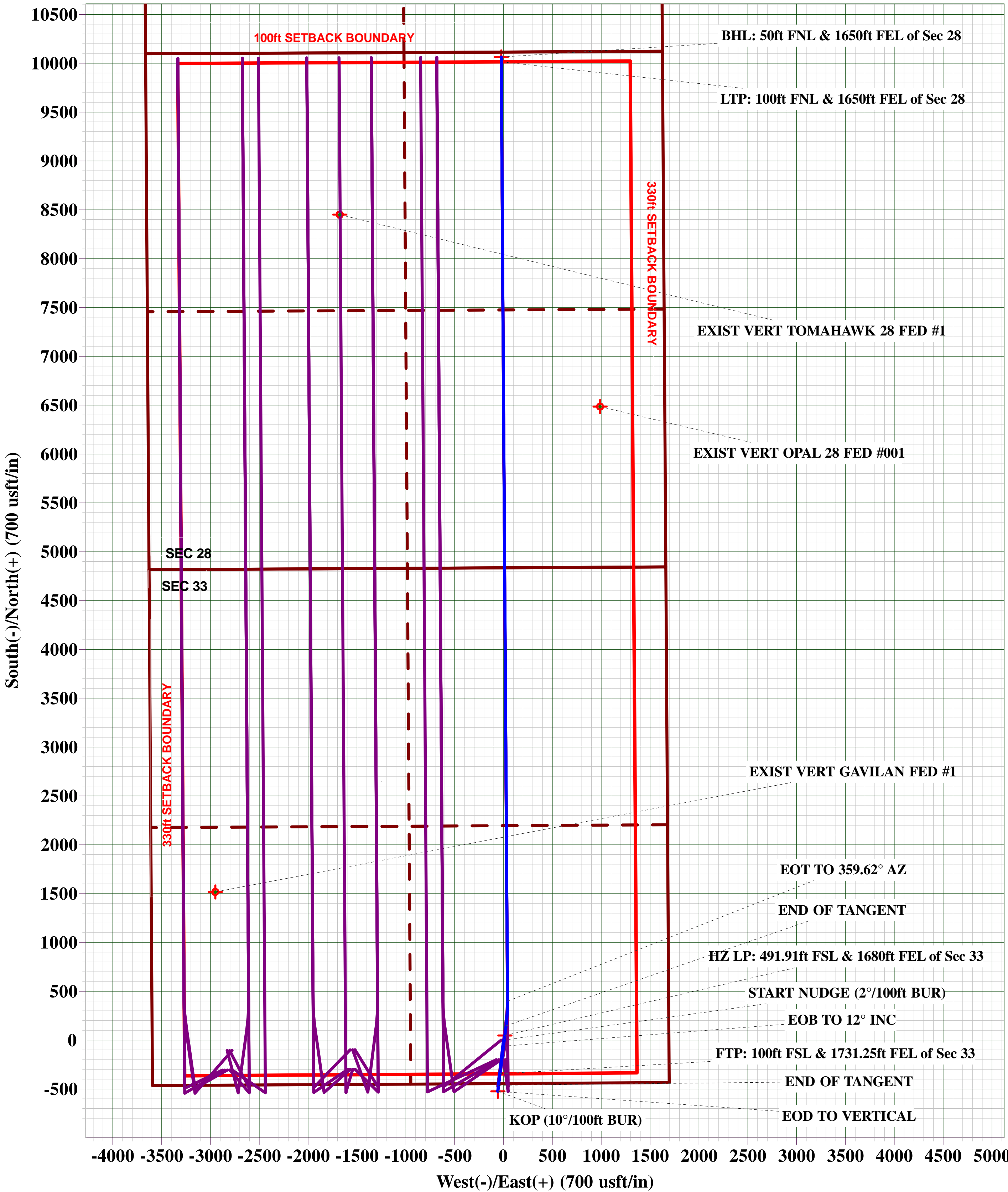
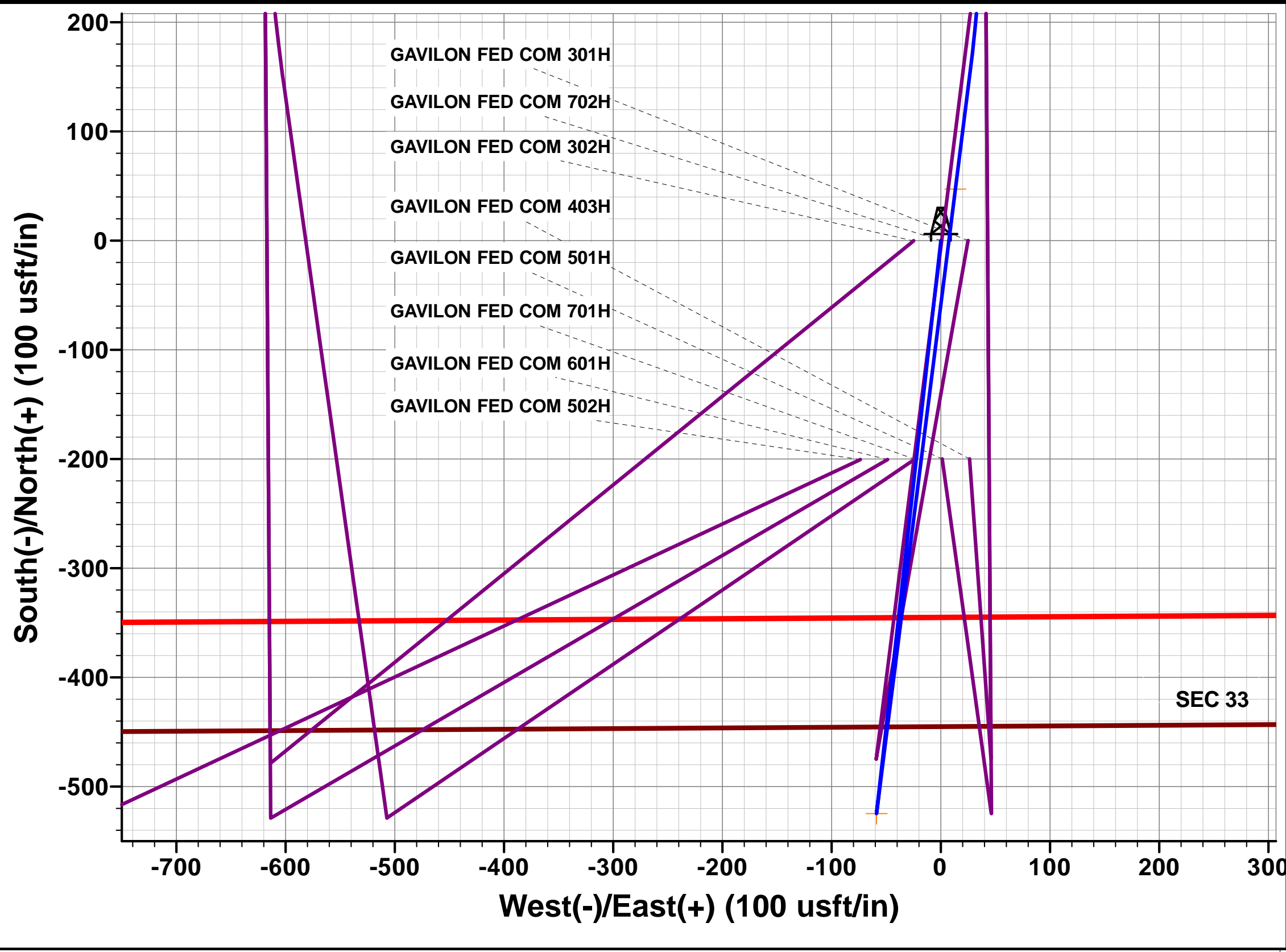
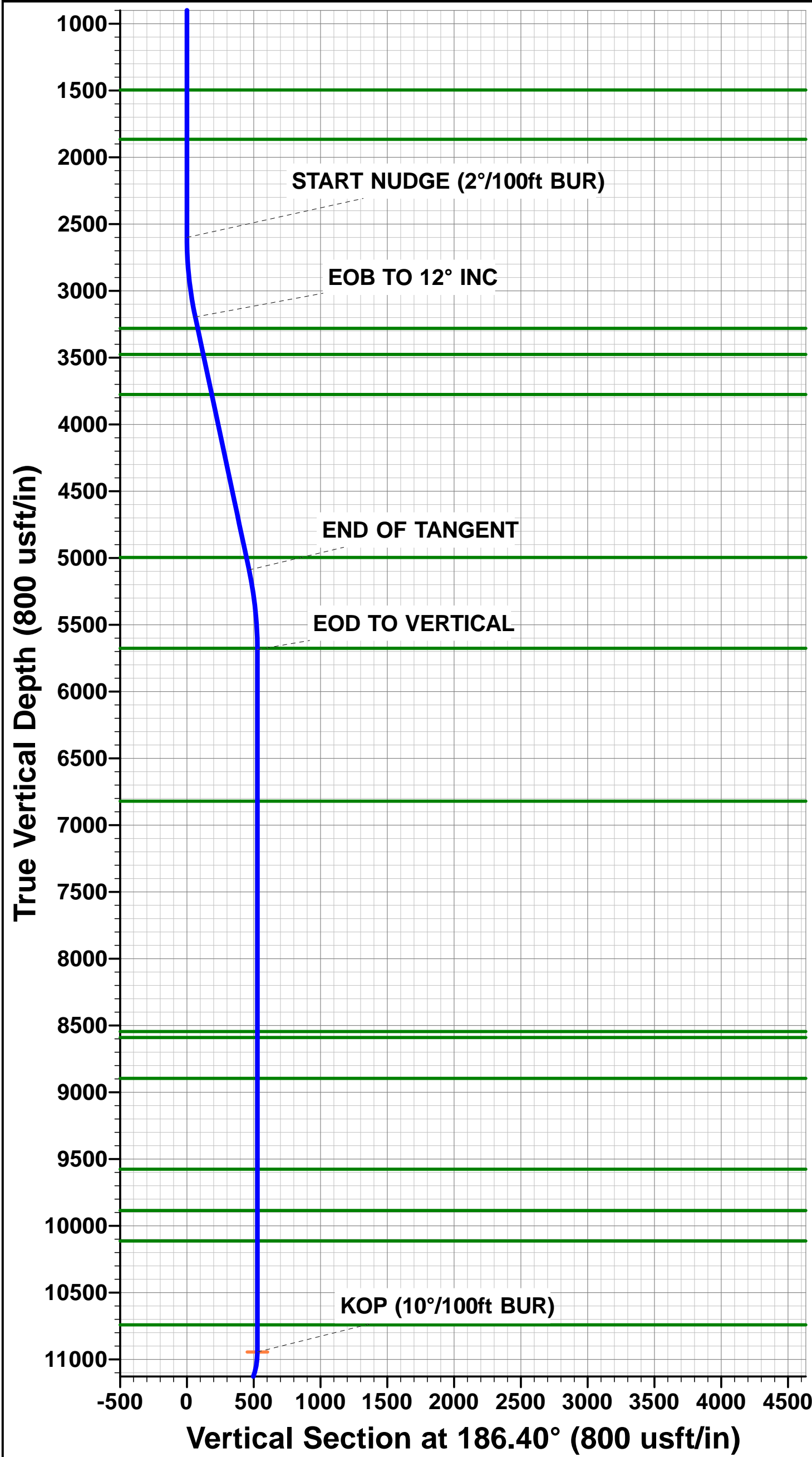
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSection	Departure	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 445ft FSL & 1693ft FEL of Sec 33
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
3200.00	12.00	186.40	3195.62	-62.21	-6.98	-62.16	62.60	EOB TO 12° INC
5136.91	12.00	186.40	5090.20	-462.41	-51.87	-462.05	465.31	END OF TANGENT
5736.91	0.00	0.00	5685.83	-524.62	-58.85	-524.22	527.91	EOD TO VERTICAL
10996.13	0.00	0.00	10945.05	-524.62	-58.85	-524.22	527.91	KOP (10°/100ft BUR)
11465.07	46.89	7.20	11363.36	-344.62	-36.11	-344.38	709.65	FTP: 100ft FSL & 1731.25ft FEL of Sec 33
11899.63	90.35	7.20	11518.00	47.29	13.40	47.20	1104.37	HZ LP: 491.91ft FSL & 1680ft FEL of Sec 33
11999.63	90.35	7.20	11517.39	146.50	25.93	146.33	1204.37	END OF TANGENT
12252.31	90.35	359.62	11515.83	398.54	40.95	398.26	1457.04	EOT TO 359.62° AZ
21868.92	90.35	359.62	11456.31	10014.76	-22.92	10014.69	11073.47	LTP: 100ft FNL & 1650ft FEL of Sec 28
21918.92	90.35	359.62	11456.00	10064.76	-23.25	10064.69	11123.47	BHL: 50ft FNL & 1650ft FEL of Sec 28

PROPOSED LOCAL COORDINATES:

SHL: 445ft FSL & 1693ft FEL of Sec 33
FTP: 100ft FSL & 1731.25ft FEL of Sec 33
HZ LP: 491.91ft FSL & 1680ft FEL of Sec 33
LTP: 100ft FNL & 1650ft FEL of Sec 28
BHL: 50ft FNL & 1650ft FEL of Sec 28

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - GAVILON FED COM 702H	10945.05	-524.62	-58.85	32.522129	-103.665359
FTP - GAVILON FED COM 702H	11363.36	-344.62	-36.11	32.522623	-103.665282
BHL - GAVILON FED COM 702H	11456.00	10064.76	-23.25	32.551233	-103.665028
LTP - GAVILON FED COM 702H	11456.31	10014.76	-22.92	32.551096	-103.665028
HZ LP - GAVILON FED COM 702H	11518.00	47.29	13.40	32.523700	-103.665113



Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	SEC. 33 T20S R33E N.M.P.M. (GRID)		
Site Position:		Northing:	554,744.90 usft
From:	Map	Easting:	744,451.60 usft
Position Uncertainty:	0.00 usft	Slot Radius:	1.10 ft
		Latitude:	32.523326
		Longitude:	-103.674337
		Grid Convergence:	0.35 °

Well	GAVILON FED COM 702H		
Well Position	+N/-S	106.20 usft	Northing:
	+E/-W	2,828.92 usft	Easting:
Position Uncertainty		0.00 usft	Wellhead Elevation:
			usft
			Latitude:
			32.523570
			Longitude:
			-103.665157
			Ground Level:
			3,671.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2020-03-19	6.76	60.20	47,789.16380932

Design	PROPOSAL #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.62

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	-3,696.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,600.00	-1,096.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,200.00	12.00	186.40	3,195.62	-500.38	-62.21	-6.98	2.00	2.00	0.00	186.40	
5,136.91	12.00	186.40	5,090.20	1,394.20	-462.41	-51.87	0.00	0.00	0.00	0.00	
5,736.91	0.00	0.00	5,685.83	1,989.83	-524.62	-58.85	2.00	-2.00	0.00	180.00	
10,996.13	0.00	0.00	10,945.05	7,249.05	-524.62	-58.85	0.00	0.00	0.00	0.00	KOP - GAVILON FE
11,899.63	90.35	7.20	11,518.00	7,822.00	47.29	13.40	10.00	10.00	0.00	7.20	
11,999.63	90.35	7.20	11,517.39	7,821.39	146.50	25.93	0.00	0.00	0.00	0.00	
12,252.31	90.35	359.62	11,515.83	7,819.83	398.54	40.95	3.00	0.00	-3.00	-89.94	
21,918.92	90.35	359.62	11,456.00	7,760.00	10,064.76	-23.25	0.00	0.00	0.00	0.00	BHL - GAVILON FE

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
SHL: 445ft FSL & 1693ft FEL of Sec 33										
0.00	0.00	0.00	0.00	3,696.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	3,596.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	3,496.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	3,396.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	3,296.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	3,196.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	3,096.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	2,996.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	2,896.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	2,796.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	2,696.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	2,596.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	2,496.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	2,396.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	2,296.00	0.00	0.00	0.00	0.00	0.00	0.00
RSTLR										
1,496.00	0.00	0.00	1,496.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	2,196.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	2,096.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	1,996.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	1,896.00	0.00	0.00	0.00	0.00	0.00	0.00
SALDO										
1,866.00	0.00	0.00	1,866.00	1,830.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	1,796.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	1,696.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	1,596.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	1,496.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	1,396.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	1,296.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	1,196.00	0.00	0.00	0.00	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
2,600.00	0.00	0.00	2,600.00	1,096.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	2.00	186.40	2,699.98	996.02	-1.73	-0.19	-1.73	2.00	2.00	0.00
2,800.00	4.00	186.40	2,799.84	896.16	-6.93	-0.78	-6.93	2.00	2.00	0.00
2,900.00	6.00	186.40	2,899.45	796.55	-15.60	-1.75	-15.58	2.00	2.00	0.00
3,000.00	8.00	186.40	2,998.70	697.30	-27.71	-3.11	-27.68	2.00	2.00	0.00
3,100.00	10.00	186.40	3,097.47	598.53	-43.25	-4.85	-43.22	2.00	2.00	0.00
EOB TO 12° INC										
3,200.00	12.00	186.40	3,195.62	500.38	-62.21	-6.98	-62.16	2.00	2.00	0.00
TANSIL										
3,287.28	12.00	186.40	3,281.00	415.00	-80.25	-9.00	-80.19	0.00	0.00	0.00
3,300.00	12.00	186.40	3,293.44	402.56	-82.87	-9.30	-82.81	0.00	0.00	0.00
3,400.00	12.00	186.40	3,391.25	304.75	-103.54	-11.61	-103.46	0.00	0.00	0.00
YATES										
3,486.64	12.00	186.40	3,476.00	220.00	-121.44	-13.62	-121.34	0.00	0.00	0.00
3,500.00	12.00	186.40	3,489.07	206.93	-124.20	-13.93	-124.10	0.00	0.00	0.00
3,600.00	12.00	186.40	3,586.88	109.12	-144.86	-16.25	-144.75	0.00	0.00	0.00
3,700.00	12.00	186.40	3,684.70	11.30	-165.52	-18.57	-165.39	0.00	0.00	0.00
CAPITAN REEF TOP										
3,793.34	12.00	186.40	3,776.00	-80.00	-184.81	-20.73	-184.66	0.00	0.00	0.00
3,800.00	12.00	186.40	3,782.51	-86.51	-186.18	-20.89	-186.04	0.00	0.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	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)
3,900.00	12.00	186.40	3,880.33	-184.33	-206.84	-23.20	-206.68	0.00	0.00	0.00
4,000.00	12.00	186.40	3,978.14	-282.14	-227.50	-25.52	-227.33	0.00	0.00	0.00
4,100.00	12.00	186.40	4,075.96	-379.96	-248.17	-27.84	-247.98	0.00	0.00	0.00
4,200.00	12.00	186.40	4,173.77	-477.77	-268.83	-30.16	-268.62	0.00	0.00	0.00
4,300.00	12.00	186.40	4,271.59	-575.59	-289.49	-32.47	-289.27	0.00	0.00	0.00
4,400.00	12.00	186.40	4,369.40	-673.40	-310.15	-34.79	-309.91	0.00	0.00	0.00
4,500.00	12.00	186.40	4,467.22	-771.22	-330.81	-37.11	-330.56	0.00	0.00	0.00
4,600.00	12.00	186.40	4,565.03	-869.03	-351.47	-39.43	-351.21	0.00	0.00	0.00
4,700.00	12.00	186.40	4,662.84	-966.84	-372.14	-41.74	-371.85	0.00	0.00	0.00
4,800.00	12.00	186.40	4,760.66	-1,064.66	-392.80	-44.06	-392.50	0.00	0.00	0.00
4,900.00	12.00	186.40	4,858.47	-1,162.47	-413.46	-46.38	-413.14	0.00	0.00	0.00
5,000.00	12.00	186.40	4,956.29	-1,260.29	-434.12	-48.70	-433.79	0.00	0.00	0.00
TOP DELAWARE SAND										
5,040.60	12.00	186.40	4,996.00	-1,300.00	-442.51	-49.64	-442.17	0.00	0.00	0.00
5,100.00	12.00	186.40	5,054.10	-1,358.10	-454.78	-51.02	-454.43	0.00	0.00	0.00
END OF TANGENT										
5,136.91	12.00	186.40	5,090.20	-1,394.20	-462.41	-51.87	-462.05	0.00	0.00	0.00
5,200.00	10.74	186.40	5,152.06	-1,456.06	-474.77	-53.26	-474.40	2.00	-2.00	0.00
5,300.00	8.74	186.40	5,250.61	-1,554.61	-491.58	-55.14	-491.20	2.00	-2.00	0.00
5,400.00	6.74	186.40	5,349.70	-1,653.70	-504.96	-56.64	-504.57	2.00	-2.00	0.00
5,500.00	4.74	186.40	5,449.19	-1,753.19	-514.89	-57.76	-514.50	2.00	-2.00	0.00
5,600.00	2.74	186.40	5,548.97	-1,852.97	-521.37	-58.49	-520.97	2.00	-2.00	0.00
5,700.00	0.74	186.40	5,648.92	-1,952.92	-524.38	-58.82	-523.98	2.00	-2.00	0.00
CHERRY CANYON										
5,727.08	0.20	186.40	5,676.00	-1,980.00	-524.60	-58.85	-524.20	2.00	-2.00	0.00
EOD TO VERTICAL										
5,736.91	0.00	0.00	5,685.83	-1,989.83	-524.62	-58.85	-524.22	2.00	-2.00	1,766.66
5,800.00	0.00	0.00	5,748.92	-2,052.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
5,900.00	0.00	0.00	5,848.92	-2,152.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,000.00	0.00	0.00	5,948.92	-2,252.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,100.00	0.00	0.00	6,048.92	-2,352.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,200.00	0.00	0.00	6,148.92	-2,452.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,300.00	0.00	0.00	6,248.92	-2,552.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,400.00	0.00	0.00	6,348.92	-2,652.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,500.00	0.00	0.00	6,448.92	-2,752.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,600.00	0.00	0.00	6,548.92	-2,852.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,700.00	0.00	0.00	6,648.92	-2,952.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,800.00	0.00	0.00	6,748.92	-3,052.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
BRUSHY CANYON										
6,872.08	0.00	0.00	6,821.00	-3,125.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
6,900.00	0.00	0.00	6,848.92	-3,152.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,000.00	0.00	0.00	6,948.92	-3,252.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,100.00	0.00	0.00	7,048.92	-3,352.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,200.00	0.00	0.00	7,148.92	-3,452.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,300.00	0.00	0.00	7,248.92	-3,552.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,400.00	0.00	0.00	7,348.92	-3,652.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,500.00	0.00	0.00	7,448.92	-3,752.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,600.00	0.00	0.00	7,548.92	-3,852.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,700.00	0.00	0.00	7,648.92	-3,952.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,800.00	0.00	0.00	7,748.92	-4,052.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
7,900.00	0.00	0.00	7,848.92	-4,152.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,000.00	0.00	0.00	7,948.92	-4,252.92	-524.62	-58.85	-524.22	0.00	0.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	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)
8,100.00	0.00	0.00	8,048.92	-4,352.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,200.00	0.00	0.00	8,148.92	-4,452.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,300.00	0.00	0.00	8,248.92	-4,552.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,400.00	0.00	0.00	8,348.92	-4,652.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,500.00	0.00	0.00	8,448.92	-4,752.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
BSPG_LIME										
8,597.08	0.00	0.00	8,546.00	-4,850.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,600.00	0.00	0.00	8,548.92	-4,852.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
AVLN										
8,642.08	0.00	0.00	8,591.00	-4,895.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,700.00	0.00	0.00	8,648.92	-4,952.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,800.00	0.00	0.00	8,748.92	-5,052.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
8,900.00	0.00	0.00	8,848.92	-5,152.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
LEONARD_B										
8,947.08	0.00	0.00	8,896.00	-5,200.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,000.00	0.00	0.00	8,948.92	-5,252.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,100.00	0.00	0.00	9,048.92	-5,352.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,200.00	0.00	0.00	9,148.92	-5,452.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,300.00	0.00	0.00	9,248.92	-5,552.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,400.00	0.00	0.00	9,348.92	-5,652.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,500.00	0.00	0.00	9,448.92	-5,752.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,600.00	0.00	0.00	9,548.92	-5,852.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
1ST_BSPG_SND										
9,627.08	0.00	0.00	9,576.00	-5,880.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,700.00	0.00	0.00	9,648.92	-5,952.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,800.00	0.00	0.00	9,748.92	-6,052.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
9,900.00	0.00	0.00	9,848.92	-6,152.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
2ND_BSPG										
9,937.08	0.00	0.00	9,886.00	-6,190.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,000.00	0.00	0.00	9,948.92	-6,252.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,100.00	0.00	0.00	10,048.92	-6,352.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
2ND_BSPG_SND										
10,165.08	0.00	0.00	10,114.00	-6,418.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,200.00	0.00	0.00	10,148.92	-6,452.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,300.00	0.00	0.00	10,248.92	-6,552.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,400.00	0.00	0.00	10,348.92	-6,652.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,500.00	0.00	0.00	10,448.92	-6,752.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,600.00	0.00	0.00	10,548.92	-6,852.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,700.00	0.00	0.00	10,648.92	-6,952.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
3RD_BSPG										
10,793.08	0.00	0.00	10,742.00	-7,046.00	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,800.00	0.00	0.00	10,748.92	-7,052.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
10,900.00	0.00	0.00	10,848.92	-7,152.92	-524.62	-58.85	-524.22	0.00	0.00	0.00
KOP (10°/100ft BUR)										
10,996.13	0.00	0.00	10,945.05	-7,249.05	-524.62	-58.85	-524.22	0.00	0.00	0.00
11,000.00	0.39	7.20	10,948.92	-7,252.92	-524.61	-58.85	-524.21	10.00	10.00	0.00
11,100.00	10.39	7.20	11,048.35	-7,352.35	-515.30	-57.67	-514.91	10.00	10.00	0.00
3RD BSPG S										
11,196.12	20.00	7.20	11,141.00	-7,445.00	-490.34	-54.52	-489.97	10.00	10.00	0.00
11,200.00	20.39	7.20	11,144.65	-7,448.65	-489.01	-54.35	-488.64	10.00	10.00	0.00
11,300.00	30.39	7.20	11,234.87	-7,538.87	-446.53	-48.99	-446.20	10.00	10.00	0.00
11,400.00	40.39	7.20	11,316.30	-7,620.30	-389.15	-41.74	-388.87	10.00	10.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	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)
FTP: 100ft FSL & 1731.25ft FEL of Sec 33										
11,465.07	46.89	7.20	11,363.36	-7,667.36	-344.62	-36.11	-344.38	10.00	10.00	0.00
11,500.00	50.39	7.20	11,386.44	-7,690.44	-318.62	-32.83	-318.39	10.00	10.00	0.00
11,600.00	60.39	7.20	11,443.17	-7,747.17	-237.07	-22.52	-236.91	10.00	10.00	0.00
WC A										
11,638.37	64.22	7.20	11,461.00	-7,765.00	-203.37	-18.27	-203.24	10.00	10.00	0.00
11,700.00	70.39	7.20	11,484.77	-7,788.77	-146.99	-11.14	-146.91	10.00	10.00	0.00
11,800.00	80.39	7.20	11,509.96	-7,813.96	-51.11	0.97	-51.11	10.00	10.00	0.00
HZ LP: 491.91ft FSL & 1680ft FEL of Sec 33										
11,899.63	90.35	7.20	11,518.00	-7,822.00	47.29	13.40	47.20	10.00	10.00	0.00
11,900.00	90.35	7.20	11,517.99	-7,821.99	47.66	13.45	47.57	0.00	0.00	0.00
END OF TANGENT										
11,999.63	90.35	7.20	11,517.39	-7,821.39	146.50	25.93	146.33	0.00	0.00	0.00
12,000.00	90.35	7.19	11,517.38	-7,821.38	146.87	25.98	146.69	3.00	0.00	-3.00
12,100.00	90.35	4.19	11,516.77	-7,820.77	246.36	35.89	246.12	3.00	0.00	-3.00
12,200.00	90.35	1.19	11,516.15	-7,820.15	346.24	40.58	345.96	3.00	0.00	-3.00
EOT TO 359.62° AZ										
12,252.31	90.35	359.62	11,515.83	-7,819.83	398.54	40.95	398.26	3.00	0.00	-3.00
12,300.00	90.35	359.62	11,515.54	-7,819.54	446.23	40.63	445.95	0.00	0.00	0.00
12,400.00	90.35	359.62	11,514.92	-7,818.92	546.23	39.97	545.95	0.00	0.00	0.00
12,500.00	90.35	359.62	11,514.30	-7,818.30	646.23	39.30	645.95	0.00	0.00	0.00
12,600.00	90.35	359.62	11,513.68	-7,817.68	746.22	38.64	745.95	0.00	0.00	0.00
12,700.00	90.35	359.62	11,513.06	-7,817.06	846.22	37.98	845.95	0.00	0.00	0.00
12,800.00	90.35	359.62	11,512.44	-7,816.44	946.21	37.31	945.95	0.00	0.00	0.00
12,900.00	90.35	359.62	11,511.82	-7,815.82	1,046.21	36.65	1,045.94	0.00	0.00	0.00
13,000.00	90.35	359.62	11,511.20	-7,815.20	1,146.21	35.98	1,145.94	0.00	0.00	0.00
13,100.00	90.35	359.62	11,510.58	-7,814.58	1,246.20	35.32	1,245.94	0.00	0.00	0.00
13,200.00	90.35	359.62	11,509.96	-7,813.96	1,346.20	34.66	1,345.94	0.00	0.00	0.00
13,300.00	90.35	359.62	11,509.35	-7,813.35	1,446.19	33.99	1,445.94	0.00	0.00	0.00
13,400.00	90.35	359.62	11,508.73	-7,812.73	1,546.19	33.33	1,545.93	0.00	0.00	0.00
13,500.00	90.35	359.62	11,508.11	-7,812.11	1,646.18	32.66	1,645.93	0.00	0.00	0.00
13,600.00	90.35	359.62	11,507.49	-7,811.49	1,746.18	32.00	1,745.93	0.00	0.00	0.00
13,700.00	90.35	359.62	11,506.87	-7,810.87	1,846.18	31.34	1,845.93	0.00	0.00	0.00
13,800.00	90.35	359.62	11,506.25	-7,810.25	1,946.17	30.67	1,945.93	0.00	0.00	0.00
13,900.00	90.35	359.62	11,505.63	-7,809.63	2,046.17	30.01	2,045.92	0.00	0.00	0.00
14,000.00	90.35	359.62	11,505.01	-7,809.01	2,146.16	29.34	2,145.92	0.00	0.00	0.00
14,100.00	90.35	359.62	11,504.39	-7,808.39	2,246.16	28.68	2,245.92	0.00	0.00	0.00
14,200.00	90.35	359.62	11,503.78	-7,807.78	2,346.16	28.01	2,345.92	0.00	0.00	0.00
14,300.00	90.35	359.62	11,503.16	-7,807.16	2,446.15	27.35	2,445.92	0.00	0.00	0.00
14,400.00	90.35	359.62	11,502.54	-7,806.54	2,546.15	26.69	2,545.91	0.00	0.00	0.00
14,500.00	90.35	359.62	11,501.92	-7,805.92	2,646.14	26.02	2,645.91	0.00	0.00	0.00
14,600.00	90.35	359.62	11,501.30	-7,805.30	2,746.14	25.36	2,745.91	0.00	0.00	0.00
14,700.00	90.35	359.62	11,500.68	-7,804.68	2,846.14	24.69	2,845.91	0.00	0.00	0.00
14,800.00	90.35	359.62	11,500.06	-7,804.06	2,946.13	24.03	2,945.91	0.00	0.00	0.00
14,900.00	90.35	359.62	11,499.44	-7,803.44	3,046.13	23.37	3,045.90	0.00	0.00	0.00
15,000.00	90.35	359.62	11,498.82	-7,802.82	3,146.12	22.70	3,145.90	0.00	0.00	0.00
15,100.00	90.35	359.62	11,498.20	-7,802.20	3,246.12	22.04	3,245.90	0.00	0.00	0.00
15,200.00	90.35	359.62	11,497.59	-7,801.59	3,346.11	21.37	3,345.90	0.00	0.00	0.00
15,300.00	90.35	359.62	11,496.97	-7,800.97	3,446.11	20.71	3,445.90	0.00	0.00	0.00
15,400.00	90.35	359.62	11,496.35	-7,800.35	3,546.11	20.05	3,545.90	0.00	0.00	0.00
15,500.00	90.35	359.62	11,495.73	-7,799.73	3,646.10	19.38	3,645.89	0.00	0.00	0.00
15,600.00	90.35	359.62	11,495.11	-7,799.11	3,746.10	18.72	3,745.89	0.00	0.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	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)
15,700.00	90.35	359.62	11,494.49	-7,798.49	3,846.09	18.05	3,845.89	0.00	0.00	0.00
15,800.00	90.35	359.62	11,493.87	-7,797.87	3,946.09	17.39	3,945.89	0.00	0.00	0.00
15,900.00	90.35	359.62	11,493.25	-7,797.25	4,046.09	16.72	4,045.89	0.00	0.00	0.00
16,000.00	90.35	359.62	11,492.63	-7,796.63	4,146.08	16.06	4,145.88	0.00	0.00	0.00
16,100.00	90.35	359.62	11,492.02	-7,796.02	4,246.08	15.40	4,245.88	0.00	0.00	0.00
16,200.00	90.35	359.62	11,491.40	-7,795.40	4,346.07	14.73	4,345.88	0.00	0.00	0.00
16,300.00	90.35	359.62	11,490.78	-7,794.78	4,446.07	14.07	4,445.88	0.00	0.00	0.00
16,400.00	90.35	359.62	11,490.16	-7,794.16	4,546.07	13.40	4,545.88	0.00	0.00	0.00
16,500.00	90.35	359.62	11,489.54	-7,793.54	4,646.06	12.74	4,645.87	0.00	0.00	0.00
16,600.00	90.35	359.62	11,488.92	-7,792.92	4,746.06	12.08	4,745.87	0.00	0.00	0.00
16,700.00	90.35	359.62	11,488.30	-7,792.30	4,846.05	11.41	4,845.87	0.00	0.00	0.00
16,800.00	90.35	359.62	11,487.68	-7,791.68	4,946.05	10.75	4,945.87	0.00	0.00	0.00
16,900.00	90.35	359.62	11,487.06	-7,791.06	5,046.04	10.08	5,045.87	0.00	0.00	0.00
17,000.00	90.35	359.62	11,486.45	-7,790.45	5,146.04	9.42	5,145.86	0.00	0.00	0.00
17,100.00	90.35	359.62	11,485.83	-7,789.83	5,246.04	8.76	5,245.86	0.00	0.00	0.00
17,200.00	90.35	359.62	11,485.21	-7,789.21	5,346.03	8.09	5,345.86	0.00	0.00	0.00
17,300.00	90.35	359.62	11,484.59	-7,788.59	5,446.03	7.43	5,445.86	0.00	0.00	0.00
17,400.00	90.35	359.62	11,483.97	-7,787.97	5,546.02	6.76	5,545.86	0.00	0.00	0.00
17,500.00	90.35	359.62	11,483.35	-7,787.35	5,646.02	6.10	5,645.86	0.00	0.00	0.00
17,600.00	90.35	359.62	11,482.73	-7,786.73	5,746.02	5.43	5,745.85	0.00	0.00	0.00
17,700.00	90.35	359.62	11,482.11	-7,786.11	5,846.01	4.77	5,845.85	0.00	0.00	0.00
17,800.00	90.35	359.62	11,481.49	-7,785.49	5,946.01	4.11	5,945.85	0.00	0.00	0.00
17,900.00	90.35	359.62	11,480.87	-7,784.87	6,046.00	3.44	6,045.85	0.00	0.00	0.00
18,000.00	90.35	359.62	11,480.26	-7,784.26	6,146.00	2.78	6,145.85	0.00	0.00	0.00
18,100.00	90.35	359.62	11,479.64	-7,783.64	6,246.00	2.11	6,245.84	0.00	0.00	0.00
18,200.00	90.35	359.62	11,479.02	-7,783.02	6,345.99	1.45	6,345.84	0.00	0.00	0.00
18,300.00	90.35	359.62	11,478.40	-7,782.40	6,445.99	0.79	6,445.84	0.00	0.00	0.00
18,400.00	90.35	359.62	11,477.78	-7,781.78	6,545.98	0.12	6,545.84	0.00	0.00	0.00
18,500.00	90.35	359.62	11,477.16	-7,781.16	6,645.98	-0.54	6,645.84	0.00	0.00	0.00
18,600.00	90.35	359.62	11,476.54	-7,780.54	6,745.97	-1.21	6,745.83	0.00	0.00	0.00
18,700.00	90.35	359.62	11,475.92	-7,779.92	6,845.97	-1.87	6,845.83	0.00	0.00	0.00
18,800.00	90.35	359.62	11,475.30	-7,779.30	6,945.97	-2.53	6,945.83	0.00	0.00	0.00
18,900.00	90.35	359.62	11,474.69	-7,778.69	7,045.96	-3.20	7,045.83	0.00	0.00	0.00
19,000.00	90.35	359.62	11,474.07	-7,778.07	7,145.96	-3.86	7,145.83	0.00	0.00	0.00
19,100.00	90.35	359.62	11,473.45	-7,777.45	7,245.95	-4.53	7,245.82	0.00	0.00	0.00
19,200.00	90.35	359.62	11,472.83	-7,776.83	7,345.95	-5.19	7,345.82	0.00	0.00	0.00
19,300.00	90.35	359.62	11,472.21	-7,776.21	7,445.95	-5.86	7,445.82	0.00	0.00	0.00
19,400.00	90.35	359.62	11,471.59	-7,775.59	7,545.94	-6.52	7,545.82	0.00	0.00	0.00
19,500.00	90.35	359.62	11,470.97	-7,774.97	7,645.94	-7.18	7,645.82	0.00	0.00	0.00
19,600.00	90.35	359.62	11,470.35	-7,774.35	7,745.93	-7.85	7,745.81	0.00	0.00	0.00
19,700.00	90.35	359.62	11,469.73	-7,773.73	7,845.93	-8.51	7,845.81	0.00	0.00	0.00
19,800.00	90.35	359.62	11,469.11	-7,773.11	7,945.93	-9.18	7,945.81	0.00	0.00	0.00
19,900.00	90.35	359.62	11,468.50	-7,772.50	8,045.92	-9.84	8,045.81	0.00	0.00	0.00
20,000.00	90.35	359.62	11,467.88	-7,771.88	8,145.92	-10.50	8,145.81	0.00	0.00	0.00
20,100.00	90.35	359.62	11,467.26	-7,771.26	8,245.91	-11.17	8,245.81	0.00	0.00	0.00
20,200.00	90.35	359.62	11,466.64	-7,770.64	8,345.91	-11.83	8,345.80	0.00	0.00	0.00
20,300.00	90.35	359.62	11,466.02	-7,770.02	8,445.90	-12.50	8,445.80	0.00	0.00	0.00
20,400.00	90.35	359.62	11,465.40	-7,769.40	8,545.90	-13.16	8,545.80	0.00	0.00	0.00
20,500.00	90.35	359.62	11,464.78	-7,768.78	8,645.90	-13.82	8,645.80	0.00	0.00	0.00
20,600.00	90.35	359.62	11,464.16	-7,768.16	8,745.89	-14.49	8,745.80	0.00	0.00	0.00
20,700.00	90.35	359.62	11,463.54	-7,767.54	8,845.89	-15.15	8,845.79	0.00	0.00	0.00
20,800.00	90.35	359.62	11,462.93	-7,766.93	8,945.88	-15.82	8,945.79	0.00	0.00	0.00
20,900.00	90.35	359.62	11,462.31	-7,766.31	9,045.88	-16.48	9,045.79	0.00	0.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	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)
21,000.00	90.35	359.62	11,461.69	-7,765.69	9,145.88	-17.15	9,145.79	0.00	0.00	0.00
21,100.00	90.35	359.62	11,461.07	-7,765.07	9,245.87	-17.81	9,245.79	0.00	0.00	0.00
21,200.00	90.35	359.62	11,460.45	-7,764.45	9,345.87	-18.47	9,345.78	0.00	0.00	0.00
21,300.00	90.35	359.62	11,459.83	-7,763.83	9,445.86	-19.14	9,445.78	0.00	0.00	0.00
21,400.00	90.35	359.62	11,459.21	-7,763.21	9,545.86	-19.80	9,545.78	0.00	0.00	0.00
21,500.00	90.35	359.62	11,458.59	-7,762.59	9,645.85	-20.47	9,645.78	0.00	0.00	0.00
21,600.00	90.35	359.62	11,457.97	-7,761.97	9,745.85	-21.13	9,745.78	0.00	0.00	0.00
21,700.00	90.35	359.62	11,457.35	-7,761.35	9,845.85	-21.79	9,845.77	0.00	0.00	0.00
21,800.00	90.35	359.62	11,456.74	-7,760.74	9,945.84	-22.46	9,945.77	0.00	0.00	0.00
LTP: 100ft FNL & 1650ft FEL of Sec 28										
21,868.92	90.35	359.62	11,456.31	-7,760.31	10,014.76	-22.92	10,014.69	0.00	0.00	0.00
21,900.00	90.35	359.62	11,456.12	-7,760.12	10,045.84	-23.12	10,045.77	0.00	0.00	0.00
BHL: 50ft FNL & 1650ft FEL of Sec 28										
21,918.92	90.35	359.62	11,456.00	-7,760.00	10,064.76	-23.25	10,064.69	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,496.00	1,496.00	RSTLR		0.00	
1,866.00	1,866.00	SALDO		0.00	
3,287.28	3,281.00	TANSIL		0.00	
3,486.64	3,476.00	YATES		0.00	
3,793.34	3,776.00	CAPITAN_REEF_TOP		0.00	
5,040.60	4,996.00	TOP_DELAWARE_SAND		0.00	
5,727.08	5,676.00	CHERRY_CANYON		0.00	
6,872.08	6,821.00	BRUSHY_CANYON		0.00	
8,597.08	8,546.00	BSPG_LIME		0.00	
8,642.08	8,591.00	AVLN		0.00	
8,947.08	8,896.00	LEONARD_B		0.00	
9,627.08	9,576.00	1ST_BSPG_SND		0.00	
9,937.08	9,886.00	2ND_BSPG		0.00	
10,165.08	10,114.00	2ND_BSPG_SND		0.00	
10,793.08	10,742.00	3RD_BSPG		0.00	
11,196.12	11,141.00	3RD BSPG S		0.00	
11,638.37	11,461.00	WC A		0.00	

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well GAVILON FED COM 702H
Company:	ASCENT ENERGY	TVD Reference:	KB EST 25' @ 3696.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB EST 25' @ 3696.00usft
Site:	SEC. 33 T20S R33E N.M.P.M. (GRID)	North Reference:	Grid
Well:	GAVILON FED COM 702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 445ft FSL & 1693ft FEL of Sec 33
2,600.00	2,600.00	0.00	0.00	START NUDGE (2°/100ft BUR)
3,200.00	3,195.62	-62.21	-6.98	EOB TO 12° INC
5,136.91	5,090.20	-462.41	-51.87	END OF TANGENT
5,736.91	5,685.83	-524.62	-58.85	EOD TO VERTICAL
10,996.13	10,945.05	-524.62	-58.85	KOP (10°/100ft BUR)
11,465.07	11,363.36	-344.62	-36.11	FTP: 100ft FSL & 1731.25ft FEL of Sec 33
11,899.63	11,518.00	47.29	13.40	HZ LP: 491.91ft FSL & 1680ft FEL of Sec 33
11,999.63	11,517.39	146.50	25.93	END OF TANGENT
12,252.31	11,515.83	398.54	40.95	EOT TO 359.62° AZ
21,868.92	11,456.31	10,014.76	-22.92	LTP: 100ft FNL & 1650ft FEL of Sec 28
21,918.92	11,456.00	10,064.76	-23.25	BHL: 50ft FNL & 1650ft FEL of Sec 28

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Ascent Energy LLC
LEASE NO.:	NMNM057683
WELL NAME & NO.:	Gavilon Federal Com 702H
SURFACE HOLE FOOTAGE:	445'/S & 1693'/E
BOTTOM HOLE FOOTAGE:	50'/N & 1650'/E
LOCATION:	Section 33, T.20 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input checked="" type="checkbox"/> 4 String Area	<input checked="" type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Hat Mesa Pool** 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 **20 inch** surface casing shall be set at approximately **1,487 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **13-3/8 inch** intermediate 1 casing and shall be set at approximately **3,307 feet** is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 - ❖ In R111 Potash Areas if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
3. The minimum required fill of cement behind the **9-5/8 inch** intermediate 2 casing and shall be set at approximately **4,982 feet** is:

Option 1:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.
4. The minimum required fill of cement behind the **7-5/8 inch** intermediate 3 casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.
5. The minimum required fill of cement behind the **5-1/2 inch** production casing with a tie-back into the previous casing to the surface is:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

PRODUCTION CASING HAS AN EXCESS OF 13%. ADDITIONAL CEMENT MAY BE NEEDED.

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, intermediate 1, and intermediate 2 casing shoe shall be **5000 (5M) psi. Variance is approved to use a 3000 (3M) Annular which shall be tested to 3000 (3M) psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
3. 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 intermediate 3 casing shoe shall be **5000 (5M) psi.**

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

YJ (01/27/2021)

Ascent Energy, LLC
 Well Name: Gavilon Fed Com 702H
 SHL 445' FSL, 1693' FEL
 SWSE, Section 33, T20S, R33E
 Lea County, New Mexico

Casing Assumptions

Interval	Hole Size	Interval MD	Interval TVD	Csg OD	Weight	Grade	Conn Type	Conn	New/Used	Tapped	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
Cond	30"	0' 80'	0' 80'	30	52.78	5L B	Weld	API	New	No	NA	NA	NA
Surface	24	0' 1,521'	0' 1,521'	20	133.0	J-55	BTC	API	New	No	1.125	1.25	1.60
1st Int	17.5	0' 3,287'	0' 3,281'	13.375	68.0	J-55	STC	API	New	No	1.125	1.25	1.60
2nd Int	12.25	0' 5,051'	0' 4,996'	9.625	40.0	J-55	LTC	API	New	No	1.125	1.25	1.60
3rd int	8.75	0' 11,638'	0' 11,461'	7.625	29.7	HCP-110	EZGO HT	Non-API	New	No	1.125	1.25	1.30
Production	6.75	0' 21,919'	0' 11,518'	5.5	20.0	HCP-110	EZGO HT	Non-API	New	No	1.125	1.25	1.60

Setting Depth (MD)	Setting Depth (TVD)	MW	FG	GG/KM	Collapse	Burst	Tensile	DF Collapse	DF Burst	DF Tension
1,521'	1,521'	9.6	0.7	0.11	1500	3060	1380	1.98	3.41	4.57
3,287'	3,281'	10	0.7	0.11	1950	3450	675	1.14	1.78	2.09
5,051'	4,996'	8.6	0.7	0.11	4230	3950	604	1.89	1.34	2.00
11,638'	11,461'	9.2	0.7	0.11	7780	9467	567	1.42	1.40	1.27
21,919	11,518'	10.5	0.7	0.11	13840	9470	499	2.20	1.39	1.51



Ascent Energy, LLC
GAVILON WEST 3
SWSE SEC 33, T20S, R33E N.M.P.M.
Lea County, New Mexico

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
 - i. 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
 - i. 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

Ascent Energy, LLC
GAVILON WEST 3
SWSE SEC 33, T20S, R33E N.M.P.M.
Lea County, New Mexico

- 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, H₂S 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.
 - ii. 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 Energy, LLC
 GAVILON WEST 3
 SWSE SEC 33, T20S, R33E N.M.P.M.
 Lea County, New Mexico

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

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 (USEPA Region 6 Dallas)	(800) 887-6063 (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



Blowout Prevention and Control Well Kick: Shut-In Procedures

Primary Kick Indicators

If any primary kick indicators are observed, report them IMMEDIATELY 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.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 461666

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 461666
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
nfitzgerald	Cement is required to circulate on both surface and intermediate1 strings of casing.	5/13/2025
nfitzgerald	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	5/13/2025
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	8/12/2025
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	8/12/2025
jeffrey.harrison	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.	8/12/2025
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	8/12/2025
jeffrey.harrison	This well is within the Capitan Reef. The first intermediate casing string shall be set and cemented back to surface immediately above the Capitan Reef. The second intermediate string shall be set and cemented back to surface immediately below the base of the Capitan Reef.	8/12/2025
jeffrey.harrison	This well is within the designated 4-string area. Four full casing strings must be utilized for this well.	8/12/2025
jeffrey.harrison	This well is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the order.	8/12/2025
jeffrey.harrison	Designs must align to one of the six options mandated within R-111-Q. No alterations or modifications are permitted to any of the casing design options mandated within order R-111-Q. If you have any questions, please contact Justin.Wrinkle@emnrd.nm.gov.	8/12/2025