Form 3160-3
(October 2024)

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM0475051

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.: JURNEGAN BS FED COM 003H

*Please refer to most recently approved NOI appended to this application for updated changes to well

2. Name of Operator: FLAT CREEK RESOURCES LLC

9. API Well No.: 30-015-58065

3a. Address: 777 MAIN STREET, SUITE 3600, FORT WORTH, TX 761

3b. Phone No. *(include area code)*: (817) 310-8570

10. Field and Pool, or Exploratory: WILLOW LAKE/BONE SPRING WEST

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

At surface: SWSW / 1106 FSL / 733 FWL / LAT 32.1986895 / LONG -104.2871807

At proposed prod. zone: NESE / 1900 FSL / 15 FEL / LAT 32.2007606 / LONG -104.2554092

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 22/T24S/R26E/NMP

14. Distance in miles and direction from nearest town or post office*: 5 miles

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 733 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 640.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 30 feet

19. Proposed Depth: 7099 feet / 17264 feet

20. BLM/BIA Bond No. in file: FED: NMB001675

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3335 feet

22. Approximate date work will start*: 11/01/2025

23. Estimated duration: 60 days

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	CORY WALK / Ph: (817) 310-8570	03/24/2025

Title: Permitting Agent

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	CODY LAYTON / Ph: (575) 234-5959	10/14/2025

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

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

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 10/14/2025

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As-Drilled

*Please refer to most recently approved NOI appended to this application for the C-102 and Plat

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-	96415	WILLOW LAKE; BONE SPRING, WEST

Property Code	Property Name	Well Number
	JURNEGAN BS FED COM	3H

OGRID No.	Operator Name	Ground Level Elevation
374034	FLAT CREEK RESOURCES, LLC.	3335'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☒ Federal

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
M	22	24-S	26-E	-	1106' S	733' W	N 32.1986895	W 104.2871807	EDDY

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
I	23	24-S	26-E	-	1900' S	15' E	N 32.2007606	W 104.2554092	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidated Code
640				

Order Numbers

Well Setbacks are under Common Ownership: ☐ Yes ☐ No

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
L	22	24-S	26-E	-	1900' S	15' W	N 32.2008575	W 104.2894887	EDDY

First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
L	22	24-S	26-E	-	1899' S	100' W	N 32.2008568	W 104.2892139	EDDY

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
I	23	24-S	26-E	-	1899' S	100' E	N 32.2007614	W 104.2556840	EDDY

Unitized Area or Area of Uniform Intrest	Spacing Unity Type	Ground Floor Elevation
	☒ Horizontal ☐ Vertical	----

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief; and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

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 order from the division.

Rodney Littleton 3/5/2025

Signature Date

Rodney Littleton

Print Name

rlittleton@freedomenergy.com

E-mail Address

SURVEYORS CERTIFICATION

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

RAMON DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

3/5/2025 9:09:12 AM

Signature and Seal of Professional Surveyor Date

Certificate Number

Date of Survey

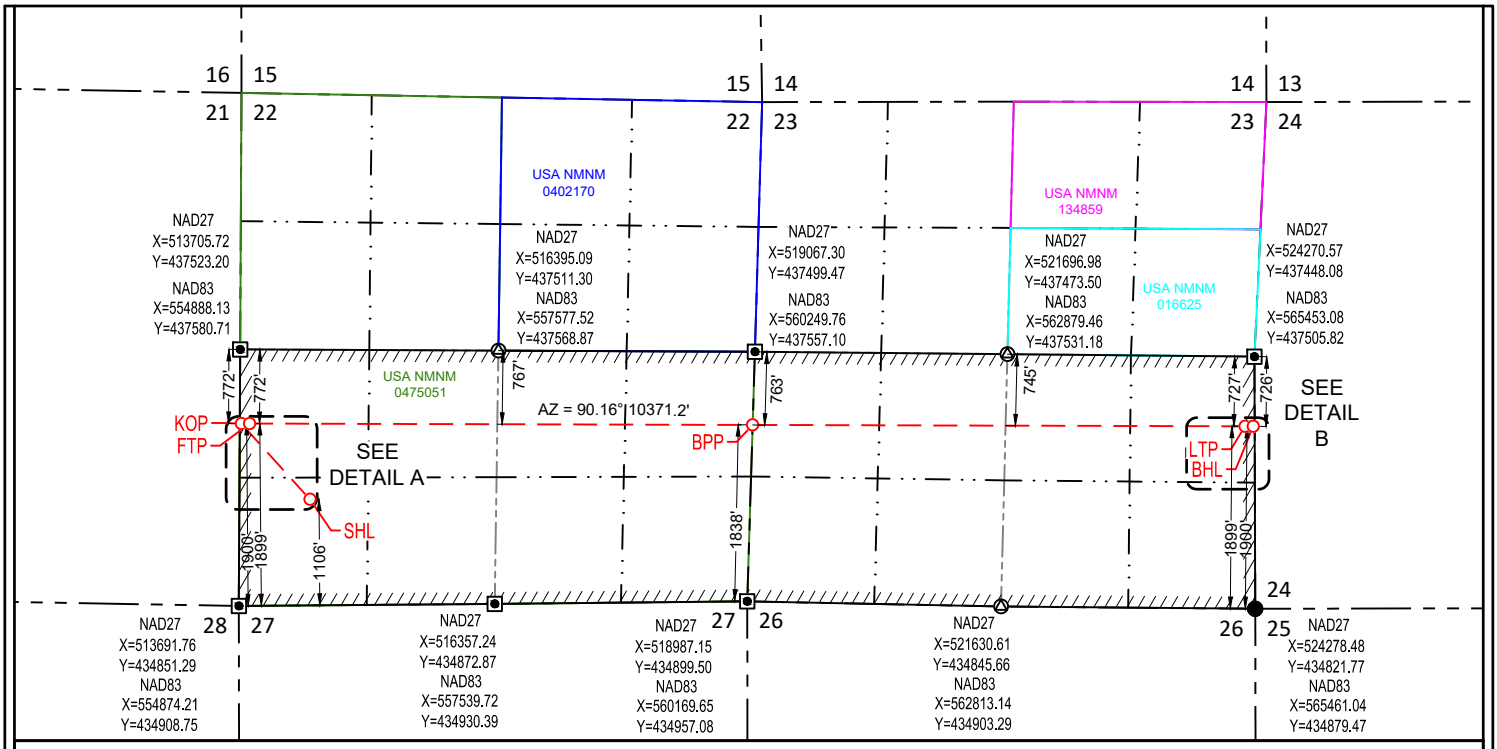
10/29/2024

S:\SURVEY\FLAT_CREEK_RESOURCES_LLC\JURNEGAN_23-24S-26E\FINAL_PRODUCTS\LO_JURNEGAN_BS_FED_COM_3H_REV2.dwg | UREN A 3/5/2025 9:03:9 AM

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: [X] Initial Submittal [ ] Amended Report [ ] As Drilled

Property Name and Well Number

JURNEGAN BS FED COM 3H



SURFACE LOCATION (SHL)
NEW MEXICO EAST
NAD 1983
X=555613 Y=436021
LAT.: N 32.1986895
LONG.: W 104.2871807
NAD 1927
X=514431 Y=435963
LAT.: N 32.1985711
LONG.: W 104.2866804
1106' FSL 733' FWL

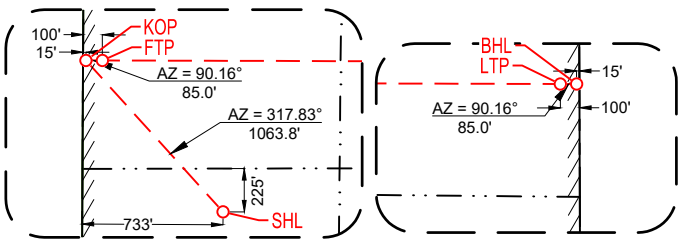
KICK OFF POINT (KOP)
NEW MEXICO EAST
NAD 1983
X=554899 Y=436809
LAT.: N 32.2008575
LONG.: W 104.2894887
NAD 1927
X=513717 Y=436752
LAT.: N 32.2007392
LONG.: W 104.2889883
1900' FSL 15' FWL

FIRST TAKE POINT (FTP)
NEW MEXICO EAST
NAD 1983
X=554984 Y=436809
LAT.: N 32.2008568
LONG.: W 104.2892139
NAD 1927
X=513802 Y=436751
LAT.: N 32.2007385
LONG.: W 104.2887135
1899' FSL 100' FWL

BLM PERF. POINT (BPP)
NEW MEXICO EAST
NAD 1983
X=560226 Y=436794
LAT.: N 32.2008097
LONG.: W 104.2722661
NAD 1927
X=519044 Y=436737
LAT.: N 32.2006910
LONG.: W 104.2717663
1838' FSL 0' FWL

LAST TAKE POINT (LTP)
NEW MEXICO EAST
NAD 1983
X=565355 Y=436780
LAT.: N 32.2007614
LONG.: W 104.2556840
NAD 1927
X=524173 Y=436722
LAT.: N 32.2006424
LONG.: W 104.2551847
1899' FSL 100' FEL

BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST
NAD 1983
X=565440 Y=436780
LAT.: N 32.2007606
LONG.: W 104.2554092
NAD 1927
X=524258 Y=436722
LAT.: N 32.2006416
LONG.: W 104.2549099
1900' FSL 15' FEL



DETAIL VIEW A
SCALE: 1" = 1000'

DETAIL VIEW B
SCALE: 1" = 1000'

SURVEYORS CERTIFICATION

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

10/29/2024
Date of Survey
Signature and Seal of Professional Surveyor:

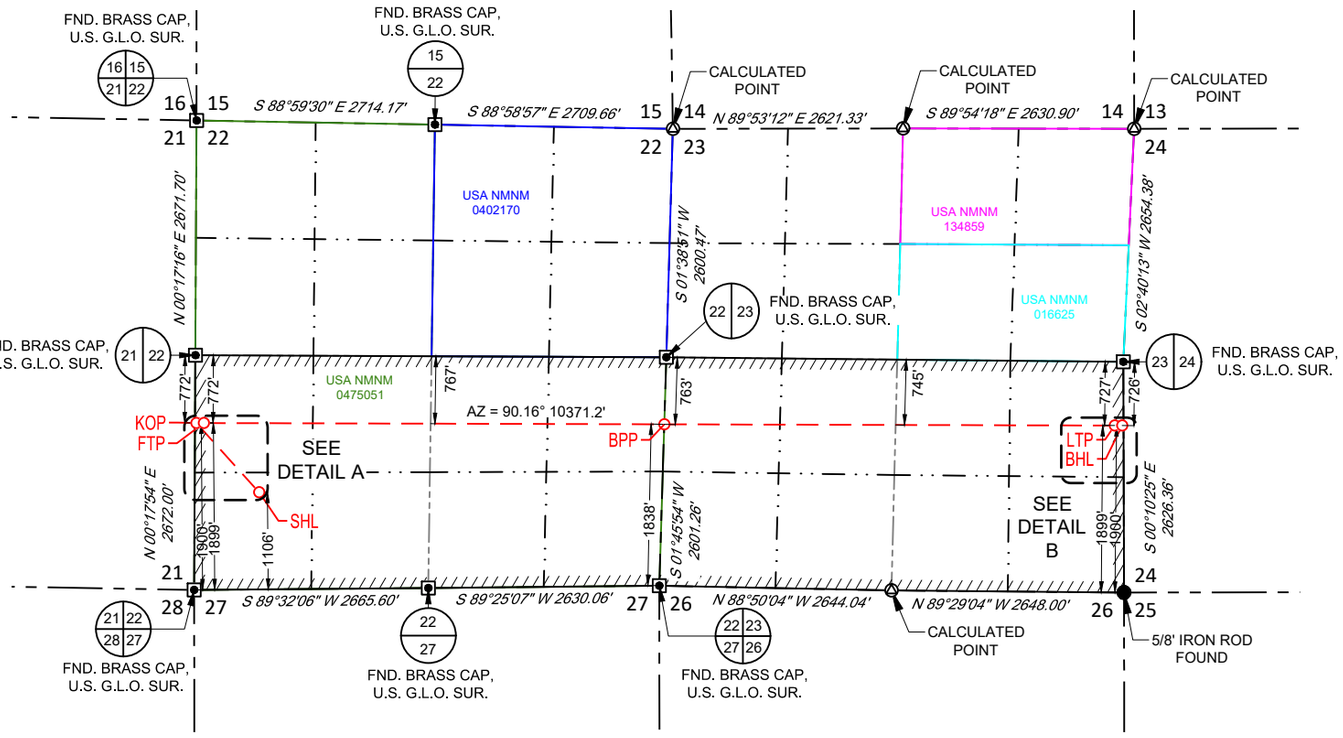
RAMON DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

3/5/2025 9:09:13 AM

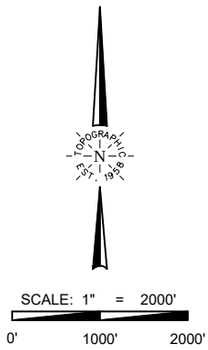
S:\SURVEY\FLAT_CREEK_RESOURCES\BS_LL\JURNEGAN_23-24\E-PAD_PRODUCTS\LO_JURNEGAN_BS_FED_COM_3H_REV2.dwg EURENA 3/5/2025 9:09 AM

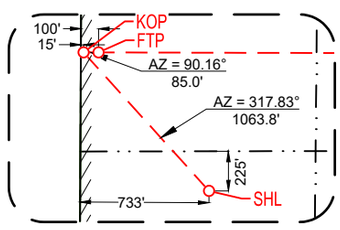
FLAT CREEK RESOURCES

SECTION 22, TOWNSHIP 24-S, RANGE 26-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

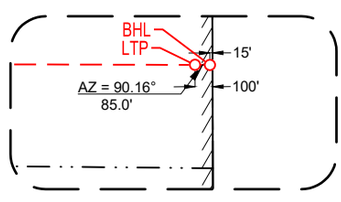


SURFACE LOCATION (SHL)	KICK OFF POINT (KOP)	FIRST TAKE POINT (FTP)
NEW MEXICO EAST NAD 1983 X=555613 Y=436021 LAT.: N 32.1986895 LONG.: W 104.2871807 1106' FSL 733' FWL	NEW MEXICO EAST NAD 1983 X=554899 Y=436809 LAT.: N 32.2008575 LONG.: W 104.2894887 1900' FSL 15' FWL	NEW MEXICO EAST NAD 1983 X=554984 Y=436809 LAT.: N 32.2008568 LONG.: W 104.2892139 1899' FSL 100' FWL
BLM PERF. POINT (BPP)	**LAST TAKE POINT (LTP)**	**BOTTOM HOLE LOCATION (BHL)**
NEW MEXICO EAST NAD 1983 X=560226 Y=436794 LAT.: N 32.2008097 LONG.: W 104.2722661 1838' FSL 0' FWL	NEW MEXICO EAST NAD 1983 X=565355 Y=436780 LAT.: N 32.2007614 LONG.: W 104.2556840 1899' FSL 100' FEL	NEW MEXICO EAST NAD 1983 X=565440 Y=436780 LAT.: N 32.2007606 LONG.: W 104.2554092 1900' FSL 15' FEL





DETAIL VIEW A
SCALE: 1" = 1000'



DETAIL VIEW B
SCALE: 1" = 1000'

LEASE NAME & WELL NO.: JURNEGAN BS FED COM 3H

SECTION 22 TWP 24-S RGE 26-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 1106' FSL & 733' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-529, & US-82W, GO WEST ON US-82W ±18.9 MILES, THENCE LEFT ON ILLINOIS CAMP RD ±9.4 MILES, THENCE RIGHT ON NETHERLIN RD. ±0.2 MILES, THENCE SOUTHWEST (LEFT) ON A LEASE RD. ±7489 FEET, THENCE NORTH (RIGHT) ON A PROPOSED ROAD ±32 FEET TO A POINT ±437 FEET SOUTHEAST OF THE LOCATION.

RAMON DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

3/5/2025 9:09:13 AM

Ramon A. Dominguez, P.S. No. 24508

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY FLAT CREEK RESOURCES, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

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: Flat Creek Resources, LLC **OGRID:** 374034 **Date:** 03 / 11 / 2025

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
Jurnegan BS Fed Com 3H		M-22-24S-26E	1106' S 773' W	1500	3200	3500
Jurnegan BS Fed Com 4H		M-22-24S-26E	1087' S 757' W	1500	3200	3500
Jurnegan BS Fed Com 7H		M-22-24S-26E	1069' S 781' W	750	2300	1950
Jurnegan BS Fed Com 8H		M-22-24S-26E	1050' S 805' W	750	2300	1950

IV. Central Delivery Point Name: Jurnegan South Pad Tank Battery [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
Jurnegan BS Fed Com 3H		July 1,2026	July 15,2026	Sept. 1, 2026	Oct. 1, 2026	Oct. 15, 2026
Jurnegan BS Fed Com 4H		July 2,2026	July 30,2026	Sept. 1, 2026	Oct. 1, 2026	Oct. 15, 2026
Jurnegan BS Fed Com 7H		July 1, 2027	July 15, 2027	Sept. 1, 2027	Oct. 1, 2027	Oct. 15, 2027
Jurnegan BS Fed Com 8H		July 2, 2027	July 30, 2027	Sept. 1, 2027	Oct. 1, 2027	Oct. 15, 2027

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:	Rodney Littleton
Printed Name:	Rodney Littleton
Title:	VP of Drilling
E-mail Address:	rlittleton@freedomenergy.com
Date:	March 12, 2025
Phone:	817-310-8570

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. SEPARATION EQUIPMENT

Flat Creek Resources, LLC, will install:

- four 48” OD x 15’, 500#, 3 phase separators
- one 96” OD x 20’, 250# heater treater
- four 750 BBL water tanks
- three 750 BBL oil tanks
- one 15’6” x 30’, 1000 BBL gun barrel
- one 72” OD x 15’ gas scrubber
- one vapor recovery tower
- one vapor recovery unit
- vapor recovery piping for oil and water tanks

System is designed to capture 120% of the expected gas volume from separation all the way through the vapor recovery equipment.

VII. OPERATIONAL PRACTICES

NMAC 19.15.27.8 (A) Venting & Flaring of Natural Gas

1. Flat Creek Resources will comply with NMAC 19.15.27.8 – venting and flaring of gas during drilling, completion, or production that constitutes waste as defined in 19.15.2 is banned.

NMAC 19.15.27.8 (B) Venting & Flaring During Drilling

1. Flat Creek will combust gas if technically feasible during drilling operations using best industry practices.
2. A flare stack with a 100% capacity for expected volume will be set on the pad greater than 100 feet from the nearest well head and storage tank.
3. In an emergency, Flat Creek will vent the gas in order to avoid substantial impact. Flat Creek will report vented or flared gas to the NMOCD.

NMAC 19.15.27.8 (C) Venting & Flaring During Completion or Recompletion

1. Facilities will be built and ready from the first day of flowback.
2. Test separator will properly separate gas and liquids. Temporary test separator will be used initially to process volumes. In addition, separator will be tied into flowback tanks which will be tied into the gas processing equipment for sale down a pipeline.
3. Should the facility not be ready to process gas or the gas does not meet quality standards then the flowback will be delayed until the facility and pipeline are ready.

NMAC 19.15.27.8 (D) Venting & Flaring During Production

Flat Creek will not vent or flare natural gas except:

1. During and emergency or malfunction.
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided
    a. Flat Creek does not vent after the well achieves a stabilized rate and pressure
    b. Flat Creek will be on-site while unloading liquids by manual purging and take all reasonable actions to achieve a stabilized rate and pressure as soon as possible
    c. Flat Creek will optimize the system to minimize gas venting if the well is equipped with a plunger lift or auto control system
    d. Best management practices will be used during downhole well maintenance
3. During the following activities unless prohibited
    a. Gauging or sampling a storage tank or low-pressure production vessel
    b. Loading out liquids from a storage tank
    c. Repair and maintenance
    d. Normal operations of a gas-activated pneumatic controller or pump
    e. Normal operation of a storage tank but not including venting from a thief hatch
    f. Normal operation of a dehydration units
    g. Normal operations of compressors, engines, turbines, valves, flanges, & connectors
    h. During bradenhead, packer leakage test, or production test lasting less than 24 hours
    i. When natural gas does not meet the gathering line specifications

j. Commissioning of pipelines, equipment, or facilities only for as long as necessary to purge introduced impurities

NMAC 19.15.27.8 (E) Performance Standards

1. Flat Creek used a safety factor to design the separation and storage equipment. The equipment will be routed toa vapor recovery system and uses a flare as back up to startup, shutdown, maintenance, or malfunction of the VRU system.
2. Flat Creek will install a flare that will handle the full volume of vapors from the facility in case of VRU failure. It will have an auto-ignition system.
3. Flare stacks will be appropriately sized and designed to ensure proper combustion efficiency
    a. Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.
    b. Flare stacks will be located greater than 100 feet from well head and storage tanks and securely anchored
4. Flat Creek will conduct an AVO inspection on all components for leaks and defects every week.
5. Flat Creek will make and keep records of AVO inspection available to the NMOCD for at least 5 years.
6. Flat Creek may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
7. Facilities will be designed to minimize waste.
8. Flat Creek will resolve emergencies as promptly as possible.

NMAC 19.15.27.8 (F) Measuring or Estimating Vented and Flared Natural Gas

1. Flat Creek will have meters on both the low pressure and high-pressure sides of the flares. Volumes will be recorded in the SCADA system.
2. Flat Creek will install equipment to measure the volume of flared natural gas that has an average production of greater than 60 MCFD.
3. Flat Creek's measuring equipment will conform to industry standards.
4. Measurement system will be designed such that it cannot be bypassed except for inspections and servicing the meters.
5. Flat Creek will estimate the volume of vented or flared gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
6. Flat Creek will estimate the volume of vented and/or flared gas based on the results of an annual GOR test for wells that do not require measuring equipment reported on form C-116.
7. Flat Creek will install measuring equipment whenever the NMOCD determines that metering is necessary.

VIII. BEST MANAGEMENT PRACTICES

Flat Creek Resources, LLC, will minimize venting during maintenance by:

1. System will be designed and operated to route storage tank and process equipment emissions to the VRU. If the VRU is not operable, then the vapors will be routed to the flare.
2. Scheduling maintenance for multiple tasks to minimize the need for blowdowns.
3. After completion of maintenance, gas will be flared until it meets pipeline specifications.

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

Drilling Plan Data Report
10/15/2025

APD ID: 10400104123
Submission Date: 03/24/2025

Operator Name: FLAT CREEK RESOURCES LLC

Well Name: JURNEGAN BS FED COM
Well Number: 003H

Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
16590529	QUATERNARY	3335	0	0	OTHER : None	NONE	N
16590530	UNKNOWN	3309	26	26	ALLUVIUM	USEABLE WATER	N
16590531	RUSTLER ANHYDRITE	3105	230	230	ANHYDRITE	NONE	N
16590532	TOP SALT	2135	1200	1200	SALT	NONE	N
16590533	BASE OF SALT	1835	1500	1500	SALT	NONE	N
16590534	LAMAR	1535	1800	1800	LIMESTONE	NONE	N
16590535	BELL CANYON	1435	1900	1900	SANDSTONE	NONE	N
16590536	CHERRY CANYON	653	2682	2700	SANDSTONE	NONE	N
16590541	BRUSHY CANYON	-308	3643	3700	SANDSTONE	NONE	N
16590537	BONE SPRING LIME	-1941	5276	5400	LIMESTONE	NATURAL GAS, OIL	N
16590538	BONE SPRING 1ST	-2865	6200	6339	SANDSTONE	NATURAL GAS, OIL	N
16590539	BONE SPRING 2ND	-3051	6386	6525	SHALE	NATURAL GAS, OIL	N
16590540	BONE SPRING 2ND	-3241	6576	6725	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: FLAT CREEK RESOURCES LLC

Well Name: JURNEGAN BS FED COM **Well Number:** 003H

Pressure Rating (PSI): 10M **Rating Depth:** 20000

Equipment: A 20,000', 10,000 psi BOP stack will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer, and an annular preventer (5000-psi WP). Both units will be hydraulically operated, and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with 43 CFR 3172.

Requesting Variance? YES

Variance request: Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).
Testing Procedure: 1. Use water to test BOPs. 2. Make up test assembly (test plug) and set in the wellhead profile. Ensure the casing valve is left open. Monitor the casing valve outlet while testing for potential leak past the test plug. 3. Circulate through the choke/kill lines, choke manifold, standpipe manifold, and valves to ensure that all lines are full of water. This will prevent pressure drop (compression) while testing. 4. Line up test unit and test rams, valves and lines as per the chart below. 5. Pressure tests must be low and high, respectively, and the pressure should stabilize with minimum bleed off within 10 minutes. If a test plug is utilized, no bleed-off of pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Pressure should be recorded on a chart recorder (add scale to be use) 6. Any equipment that does not pass the pressure test must be reported to the drilling supervisor. Equipment must be repaired and retested. 7. Continue with pressure testing until all equipment has been tested as per the specific rig requirements. 8. Rig down test assembly. 9. All tests and drills to be recorded in the drilling log.

Choke Diagram Attachment:

Choke_Rev_20250319095454.pdf

Choke_Rev_20250904082714.pdf

BOP Diagram Attachment:

10M_BOP_5M_Annular_Diagram_20250319095502.pdf

10M_BOP_5M_Annular_Diagram_20250904082726.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	400	0	400	3335	2935	400	J-55	45.5	ST&C	11.2	19.1	DRY	44.1	DRY	44.1
2	INTERMEDIATE	9.875	7.625	NEW	API	N	0	1780	0	1778	3329	1557	1780	OTHER - P-110 HC	29.7	BUTT	7.7	7.4	DRY	12.9	DRY	12.9
3	PRODUCTION	6.75	5.5	NEW	NON API	N	0	17305	0	7099	3329	-3764	17305	OTHER - P-110 HC	20	OTHER - TCBC-HT	3.4	3.5	DRY	4.7	DRY	4.7

Operator Name: FLAT CREEK RESOURCES LLC

Well Name: JURNEGAN BS FED COM **Well Number:** 003H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Jurnegan_BS_3H_Casing_Design_Assumptions_20250319095539.pdf

Jurnegan_BS_3H_Casing_Design_Assumptions_20250904082746.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Jurnegan_BS_3H_Casing_Design_Assumptions_20250319095601.pdf

Jurnegan_BS_3H_Casing_Design_Assumptions_20250904082908.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

5.5in_Casing_Spec_20lb_TCBC_HT_20250319095628.pdf

5.5in_Casing_Spec_20lb_TCBC_HT_20250904082925.pdf

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Jurnegan_BS_3H_Casing_Design_Assumptions_20250319095643.pdf

Jurnegan_BS_3H_Casing_Design_Assumptions_20250904082936.pdf

Operator Name: FLAT CREEK RESOURCES LLC

Well Name: JURNEGAN BS FED COM **Well Number:** 003H

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	200	135	1.68	12.8	227	100	35/65 Poz Premium C	5% bwow Sodium chloride + 6% bentonite gel + 0.4% CPT-503P + 0.125 lbs/sk Dura fiber
SURFACE	Tail		200	400	170	1.34	14.8	228	100	Class C	1% Calcium chloride + 0.25 lb/sk cellophane flake
INTERMEDIATE	Lead		0	1280	250	1.68	12.8	420	50	35/65 Poz Premium C	5% bwow Sodium chloride + 6% bentonite gel + 0.4% CPT-503P + 0.125 lbs/sk Dura fiber
INTERMEDIATE	Tail		1280	1780	85	1.74	13.5	148	50	Class C	1% calcium chloride + 4% bentonite gel + 0.4% CPT-503P + 0.125 lbs/sk Dura fiber
PRODUCTION	Lead		0	6500	225	2.82	10.4	635	15	Class H	10% bwoc light weight bead + 5% silica fume alternative + 0.2% suspension aid + 0.3% fluid loss additive + 0.3% dispersant + 0.2% cement retarder
PRODUCTION	Tail		6500	17305	735	1.42	13.2	1044	15	35/65 Poz Premium H	0.2% CPT-23

Operator Name: FLAT CREEK RESOURCES LLC

Well Name: JURNEGAN BS FED COM **Well Number:** 003H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials (e. g., barite, bentonite, LCM) to maintain mud properties and meet minimum lost circulation and weight increase requirements will always be kept on site.
Describe the mud monitoring system utilized: An electronic pit volume totalizer (PVT) mud system will monitor pit volumes for gains or losses, flow rate, pump pressures, and stroke rate.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	400	OTHER : Fresh Water Spud Mud	8.8	8.8							
1780	17305	OTHER : Cut Brine	9.4	9.4							
400	1780	OTHER : Cut Brine	10	10							

Section 6 - Test, Logging, Coring

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

Production tests include Gama Ray log and resistivity log. No open and cased hole logs are planned at this time.

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

POROSITY-RESISTIVITY LOG,

Coring operation description for the well:

No coring operation is planned.

Operator Name: FLAT CREEK RESOURCES LLC

Well Name: JURNEGAN BS FED COM **Well Number:** 003H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3181 **Anticipated Surface Pressure:** 1619

Anticipated Bottom Hole Temperature(F): 153

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Jurnegan_South_H2S_Plan_20250319095826.pdf
Jurnegan_South_H2S_Plan_20250904082958.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Jurnegan_South_H2S_Plan_20250319095919.pdf
Jurnegan_BS_3H_Directional_Plan_20250904083024.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Jurnegan_BS_3H_Drill_Plan_20250319095937.pdf
Jurnegan_BS_3H_Anticollision_Report_20250319095949.pdf
CoFlex_Certs_Rev_20250319100001.pdf
BOP_Wellhead_Testing_v2_20250319100017.pdf
Wellhead_Diagram_20250319100031.pdf
Jurnegan_South_WMP_20250319100053.pdf
Jurnegan_BS_3H_Drill_Plan_20250904083037.pdf
Jurnegan_BS_3H_Anticollision_Report_20250904083048.pdf
CoFlex_Certs_Rev_20250904083100.pdf
Wellhead_Diagram_20250904083114.pdf
BOP_Wellhead_Testing_v2_20250904083126.pdf
Jurnegan_South_WMP_20250904083145.pdf

Other Variance request(s)?: N

Other Variance attachment:

Freedom Energy

Field: Eddy County, NM NAD83
Location: Jurnegan
Well: Jurnegan BS Fed Com 3H
OH
Plan: Plan 1
3330'GL + 26.5'KB @ 3356.50usft

Azimuths to Grid North
True North: -0.02°
Magnetic North: 6.43°

Magnetic Field
Strength: 47040.1nT
Dip Angle: 59.66°
Date: 12/26/2024
Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 6.43°

PROJECT DETAILS: Eddy County, NM NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

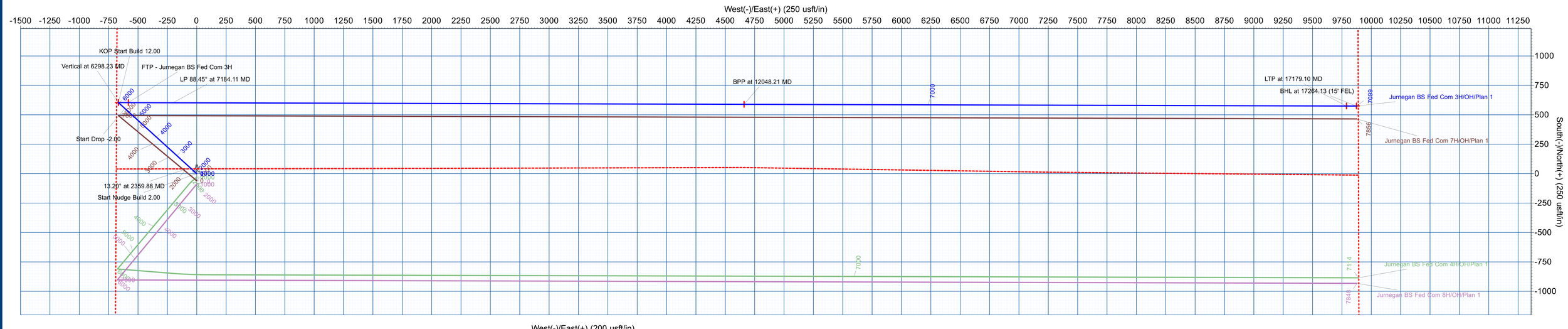
LEGACY DIRECTIONAL

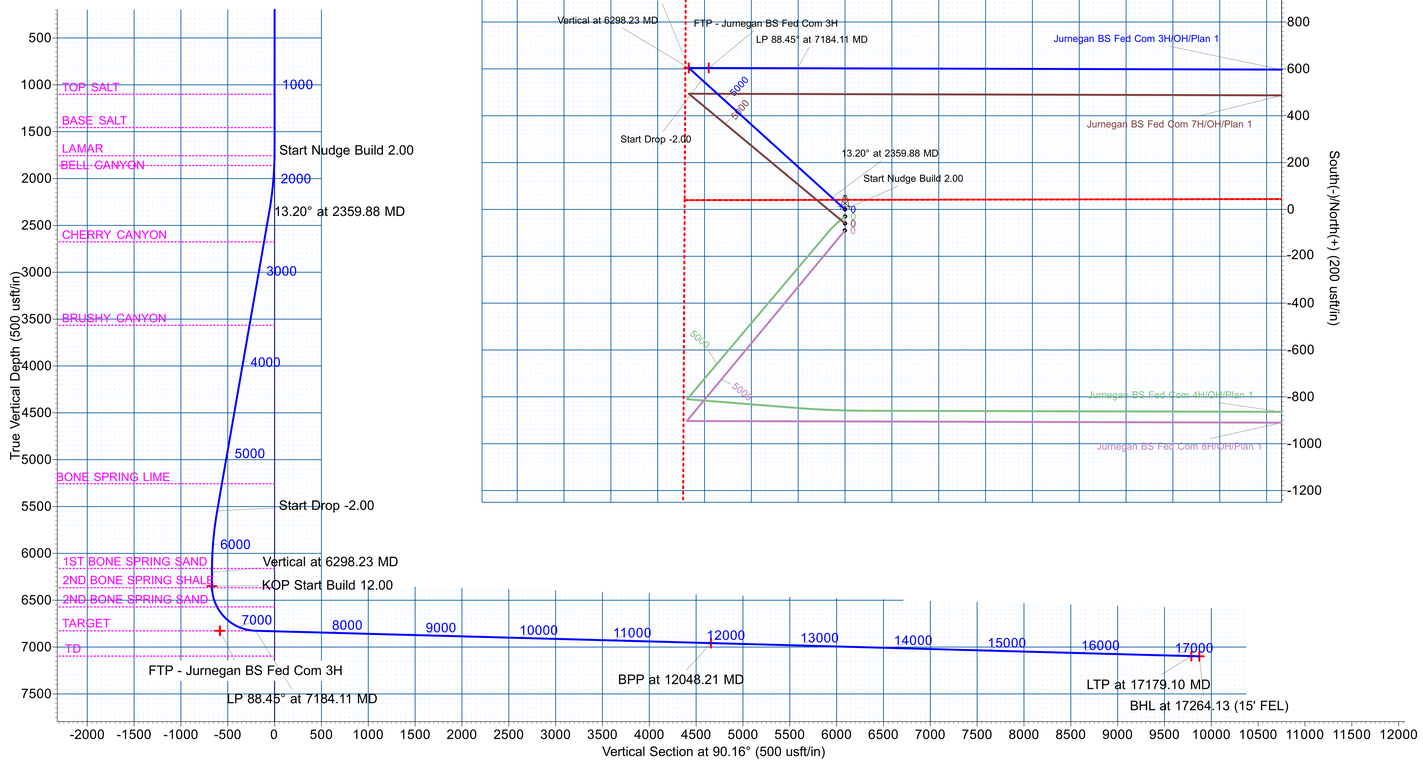
WELL DETAILS: Jurnegan BS Fed Com 3H

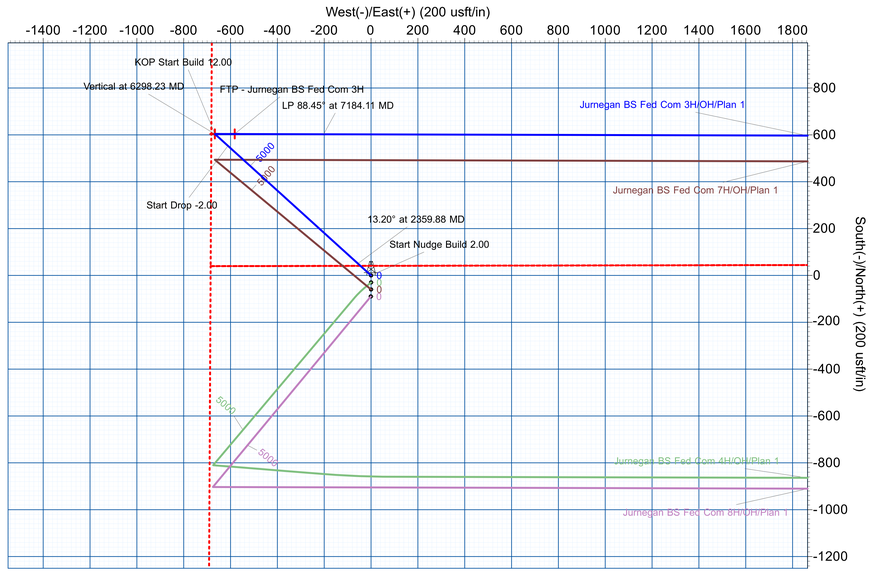
3330'GL + 26.5'KB @ 3356.50usft 3330.00

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.00	0.00	436205.00	555566.00	32.199196	-104.287333

Rig: H&P 651







DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Jurnegan BS Fed Com 3H	6348.55	604.00	-667.00	436809.00	554899.00	32.200857	-104.289489
FTP - Jurnegan BS Fed Com 3H	6826.00	604.00	-582.00	436809.00	554984.00	32.200857	-104.289214
BPP - Jurnegan BS Fed Com 3H	6957.57	589.00	4660.00	436794.00	560226.00	32.200809	-104.272267
LTP - Jurnegan BS Fed Com 3H	7096.36	575.00	9789.00	436780.00	565355.00	32.200762	-104.255685
BHL - Jurnegan BS Fed Com 3H	7098.66	575.00	9874.00	436780.00	565440.00	32.200761	-104.255410

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00
3	2359.88	13.20	312.16	2354.06	50.79	-56.09	2.00	312.16	-56.23
4	5638.35	13.20	312.16	5545.94	553.21	-610.91	0.00	0.00	-612.46
5	6298.23	0.00	0.08	6200.00	604.00	-667.00	2.00	180.00	-668.68
6	6446.78	0.00	0.08	6348.55	604.00	-667.00	0.00	0.08	-668.68
7	7184.11	88.45	90.16	6826.00	602.70	-202.30	12.00	90.16	-203.98
8	12048.21	88.45	90.16	6957.57	589.12	4660.00	0.00	0.00	4658.34
9	17179.10	88.45	90.16	7096.36	574.80	9789.00	0.00	0.00	9787.36
10	17264.13	88.45	90.16	7098.66	574.56	9874.00	0.00	0.00	9872.36

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
26.00	26.00	SALADO
1101.00	1101.00	TOP SALT
1456.00	1456.00	BASE SALT
1756.00	1756.00	LAMAR
1861.00	1861.08	BELL CANYON
2676.00	2690.55	CHERRY CANYON
3566.00	3604.70	BRUSHY CANYON
5256.00	5340.54	BONE SPRING LIME
6161.00	6259.23	1ST BONE SPRING SAND
6366.00	6464.23	2ND BONE SPRING SHALE
6571.00	6678.18	2ND BONE SPRING SAND
6826.00	7184.11	TARGET
7096.00	17165.88	TD

Plan: Plan 1 (Jurnegan BS Fed Com 3H/OH)
Created By: Jenise Kirkpatrick Date: 10:44, December 26 2024

*Please refer to most recently approved NOI appended to this application for the directional plan

Freedom Energy

Eddy County, NM NAD83
Jurnegan
Jurnegan BS Fed Com 3H

OH

Plan: Plan 1

Standard Planning Report

26 December, 2024

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project	Eddy County, NM NAD83		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Jurnegan				
Site Position:		**Northing:**	439,291.00 usft	**Latitude:**	32.207680
From:	Map	**Easting:**	555,610.00 usft	**Longitude:**	-104.287187
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well	Jurnegan BS Fed Com 3H						
Well Position	**+N/-S**	0.00 usft	**Northing:**	436,205.00 usft	**Latitude:**	32.199196
	+E/-W	0.00 usft	**Easting:**	555,566.00 usft	**Longitude:**	-104.287334
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,330.00 usft
Grid Convergence:		0.02 °				

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2020	12/26/2024	6.46	59.66	47,040.11741485

Design	Plan 1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	90.16	

Plan Survey Tool Program **Date** 12/26/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,264.13	Plan 1 (OH)	MWD	
				OWSG MWD - Standard	

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (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	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,359.88	13.20	312.16	2,354.06	50.79	-56.09	2.00	2.00	0.00	312.16	
5,638.35	13.20	312.16	5,545.94	553.21	-610.91	0.00	0.00	0.00	0.00	
6,298.23	0.00	0.08	6,200.00	604.00	-667.00	2.00	-2.00	0.00	180.00	
6,446.78	0.00	0.08	6,348.55	604.00	-667.00	0.00	0.00	0.00	0.08	
7,184.11	88.45	90.16	6,826.00	602.70	-202.30	12.00	12.00	0.00	90.16	
12,048.21	88.45	90.16	6,957.57	589.12	4,660.00	0.00	0.00	0.00	0.00	BPP - Jurnegan BS F
17,179.10	88.45	90.16	7,096.36	574.80	9,789.00	0.00	0.00	0.00	0.00	LTP - Jurnegan BS Fe
17,264.13	88.45	90.16	7,098.66	574.56	9,874.00	0.00	0.00	0.00	0.00	BHL - Jurnegan BS F

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.00	0.00	0.00	26.00	0.00	0.00	0.00	0.00	0.00	0.00
SALADO									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,101.00	0.00	0.00	1,101.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP SALT									
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,456.00	0.00	0.00	1,456.00	0.00	0.00	0.00	0.00	0.00	0.00
BASE SALT									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Nudge Build 2.00									
1,756.00	1.12	312.16	1,756.00	0.37	-0.41	-0.41	2.00	2.00	0.00
LAMAR									
1,800.00	2.00	312.16	1,799.98	1.17	-1.29	-1.30	2.00	2.00	0.00
1,861.08	3.22	312.16	1,861.00	3.04	-3.36	-3.36	2.00	2.00	0.00
BELL CANYON									
1,900.00	4.00	312.16	1,899.84	4.68	-5.17	-5.19	2.00	2.00	0.00
2,000.00	6.00	312.16	1,999.45	10.53	-11.63	-11.66	2.00	2.00	0.00
2,100.00	8.00	312.16	2,098.70	18.71	-20.67	-20.72	2.00	2.00	0.00
2,200.00	10.00	312.16	2,197.47	29.21	-32.26	-32.34	2.00	2.00	0.00
2,300.00	12.00	312.16	2,295.62	42.02	-46.40	-46.52	2.00	2.00	0.00
2,359.88	13.20	312.16	2,354.06	50.79	-56.09	-56.23	2.00	2.00	0.00
13.20° at 2359.88 MD									
2,400.00	13.20	312.16	2,393.12	56.94	-62.87	-63.03	0.00	0.00	0.00
2,500.00	13.20	312.16	2,490.48	72.26	-79.80	-80.00	0.00	0.00	0.00
2,600.00	13.20	312.16	2,587.84	87.59	-96.72	-96.97	0.00	0.00	0.00
2,690.55	13.20	312.16	2,676.00	101.46	-112.05	-112.33	0.00	0.00	0.00
CHERRY CANYON									
2,700.00	13.20	312.16	2,685.20	102.91	-113.65	-113.93	0.00	0.00	0.00
2,800.00	13.20	312.16	2,782.56	118.24	-130.57	-130.90	0.00	0.00	0.00
2,900.00	13.20	312.16	2,879.91	133.56	-147.49	-147.86	0.00	0.00	0.00
3,000.00	13.20	312.16	2,977.27	148.89	-164.42	-164.83	0.00	0.00	0.00
3,100.00	13.20	312.16	3,074.63	164.21	-181.34	-181.80	0.00	0.00	0.00
3,200.00	13.20	312.16	3,171.99	179.54	-198.26	-198.76	0.00	0.00	0.00
3,300.00	13.20	312.16	3,269.35	194.86	-215.19	-215.73	0.00	0.00	0.00
3,400.00	13.20	312.16	3,366.71	210.19	-232.11	-232.70	0.00	0.00	0.00
3,500.00	13.20	312.16	3,464.07	225.51	-249.03	-249.66	0.00	0.00	0.00
3,600.00	13.20	312.16	3,561.43	240.84	-265.96	-266.63	0.00	0.00	0.00
3,604.70	13.20	312.16	3,566.00	241.56	-266.75	-267.42	0.00	0.00	0.00

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
BRUSHY CANYON									
3,700.00	13.20	312.16	3,658.79	256.16	-282.88	-283.59	0.00	0.00	0.00
3,800.00	13.20	312.16	3,756.14	271.49	-299.80	-300.56	0.00	0.00	0.00
3,900.00	13.20	312.16	3,853.50	286.81	-316.73	-317.53	0.00	0.00	0.00
4,000.00	13.20	312.16	3,950.86	302.14	-333.65	-334.49	0.00	0.00	0.00
4,100.00	13.20	312.16	4,048.22	317.46	-350.57	-351.46	0.00	0.00	0.00
4,200.00	13.20	312.16	4,145.58	332.79	-367.50	-368.42	0.00	0.00	0.00
4,300.00	13.20	312.16	4,242.94	348.11	-384.42	-385.39	0.00	0.00	0.00
4,400.00	13.20	312.16	4,340.30	363.44	-401.34	-402.36	0.00	0.00	0.00
4,500.00	13.20	312.16	4,437.66	378.76	-418.27	-419.32	0.00	0.00	0.00
4,600.00	13.20	312.16	4,535.02	394.09	-435.19	-436.29	0.00	0.00	0.00
4,700.00	13.20	312.16	4,632.37	409.41	-452.11	-453.26	0.00	0.00	0.00
4,800.00	13.20	312.16	4,729.73	424.74	-469.04	-470.22	0.00	0.00	0.00
4,900.00	13.20	312.16	4,827.09	440.06	-485.96	-487.19	0.00	0.00	0.00
5,000.00	13.20	312.16	4,924.45	455.39	-502.88	-504.15	0.00	0.00	0.00
5,100.00	13.20	312.16	5,021.81	470.71	-519.81	-521.12	0.00	0.00	0.00
5,200.00	13.20	312.16	5,119.17	486.04	-536.73	-538.09	0.00	0.00	0.00
5,300.00	13.20	312.16	5,216.53	501.36	-553.65	-555.05	0.00	0.00	0.00
5,340.54	13.20	312.16	5,256.00	507.57	-560.52	-561.93	0.00	0.00	0.00
BONE SPRING LIME									
5,400.00	13.20	312.16	5,313.89	516.69	-570.58	-572.02	0.00	0.00	0.00
5,500.00	13.20	312.16	5,411.24	532.01	-587.50	-588.98	0.00	0.00	0.00
5,600.00	13.20	312.16	5,508.60	547.34	-604.42	-605.95	0.00	0.00	0.00
5,638.35	13.20	312.16	5,545.94	553.21	-610.91	-612.46	0.00	0.00	0.00
Start Drop -2.00									
5,700.00	11.96	312.16	5,606.11	562.23	-620.87	-622.44	2.00	-2.00	0.00
5,800.00	9.96	312.16	5,704.28	574.99	-634.97	-636.57	2.00	-2.00	0.00
5,900.00	7.96	312.16	5,803.05	585.45	-646.52	-648.15	2.00	-2.00	0.00
6,000.00	5.96	312.16	5,902.31	593.59	-655.50	-657.16	2.00	-2.00	0.00
6,100.00	3.96	312.16	6,001.93	599.40	-661.92	-663.59	2.00	-2.00	0.00
6,200.00	1.96	312.16	6,101.79	602.87	-665.75	-667.43	2.00	-2.00	0.00
6,259.23	0.78	312.16	6,161.00	603.82	-666.80	-668.49	2.00	-2.00	0.00
1ST BONE SPRING SAND									
6,298.23	0.00	0.08	6,200.00	604.00	-667.00	-668.68	2.00	-2.00	0.00
Vertical at 6298.23 MD									
6,300.00	0.00	0.00	6,201.77	604.00	-667.00	-668.68	0.00	0.00	0.00
6,400.00	0.00	0.00	6,301.77	604.00	-667.00	-668.68	0.00	0.00	0.00
6,446.78	0.00	0.00	6,348.55	604.00	-667.00	-668.68	0.00	0.00	0.00
KOP Start Build 12.00									
6,450.00	0.39	90.16	6,351.77	604.00	-666.99	-668.67	12.00	12.00	0.00
6,464.23	2.09	90.16	6,366.00	604.00	-666.68	-668.37	12.00	12.00	0.00
2ND BONE SPRING SHALE									
6,475.00	3.39	90.16	6,376.75	604.00	-666.17	-667.85	12.00	12.00	0.00
6,500.00	6.38	90.16	6,401.66	603.99	-664.04	-665.72	12.00	12.00	0.00
6,525.00	9.38	90.16	6,426.42	603.98	-660.61	-662.29	12.00	12.00	0.00
6,550.00	12.38	90.16	6,450.97	603.97	-655.89	-657.57	12.00	12.00	0.00
6,575.00	15.38	90.16	6,475.24	603.95	-649.89	-651.58	12.00	12.00	0.00
6,600.00	18.38	90.16	6,499.16	603.93	-642.63	-644.32	12.00	12.00	0.00
6,625.00	21.38	90.16	6,522.66	603.91	-634.13	-635.82	12.00	12.00	0.00
6,650.00	24.38	90.16	6,545.69	603.88	-624.42	-626.10	12.00	12.00	0.00
6,675.00	27.38	90.16	6,568.18	603.85	-613.51	-615.19	12.00	12.00	0.00
6,678.18	27.76	90.16	6,571.00	603.85	-612.04	-613.72	12.00	12.00	0.00
2ND BONE SPRING SAND									

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,700.00	30.38	90.16	6,590.07	603.82	-601.43	-603.12	12.00	12.00	0.00
6,725.00	33.38	90.16	6,611.30	603.78	-588.23	-589.92	12.00	12.00	0.00
6,750.00	36.37	90.16	6,631.81	603.74	-573.94	-575.62	12.00	12.00	0.00
6,775.00	39.37	90.16	6,651.54	603.70	-558.59	-560.28	12.00	12.00	0.00
6,800.00	42.37	90.16	6,670.44	603.65	-542.24	-543.92	12.00	12.00	0.00
6,825.00	45.37	90.16	6,688.46	603.60	-524.91	-526.60	12.00	12.00	0.00
6,850.00	48.37	90.16	6,705.55	603.55	-506.67	-508.35	12.00	12.00	0.00
6,875.00	51.37	90.16	6,721.66	603.50	-487.56	-489.24	12.00	12.00	0.00
6,900.00	54.37	90.16	6,736.75	603.44	-467.63	-469.31	12.00	12.00	0.00
6,925.00	57.37	90.16	6,750.78	603.39	-446.94	-448.62	12.00	12.00	0.00
6,950.00	60.37	90.16	6,763.70	603.33	-425.54	-427.22	12.00	12.00	0.00
6,975.00	63.37	90.16	6,775.49	603.26	-403.50	-405.18	12.00	12.00	0.00
7,000.00	66.36	90.16	6,786.11	603.20	-380.87	-382.55	12.00	12.00	0.00
7,025.00	69.36	90.16	6,795.53	603.14	-357.71	-359.39	12.00	12.00	0.00
7,050.00	72.36	90.16	6,803.72	603.07	-334.10	-335.78	12.00	12.00	0.00
7,075.00	75.36	90.16	6,810.67	603.00	-310.08	-311.77	12.00	12.00	0.00
7,100.00	78.36	90.16	6,816.35	602.94	-285.74	-287.42	12.00	12.00	0.00
7,125.00	81.36	90.16	6,820.75	602.87	-261.13	-262.82	12.00	12.00	0.00
7,150.00	84.36	90.16	6,823.86	602.80	-236.33	-238.01	12.00	12.00	0.00
7,175.00	87.36	90.16	6,825.67	602.73	-211.40	-213.08	12.00	12.00	0.00
7,184.11	88.45	90.16	6,826.00	602.70	-202.30	-203.98	12.00	12.00	0.00
LP 88.45° at 7184.11 MD - TARGET									
7,200.00	88.45	90.16	6,826.43	602.66	-186.41	-188.09	0.00	0.00	0.00
7,300.00	88.45	90.16	6,829.13	602.38	-86.45	-88.13	0.00	0.00	0.00
7,400.00	88.45	90.16	6,831.84	602.10	13.51	11.83	0.00	0.00	0.00
7,500.00	88.45	90.16	6,834.54	601.82	113.48	111.80	0.00	0.00	0.00
7,600.00	88.45	90.16	6,837.25	601.54	213.44	211.76	0.00	0.00	0.00
7,700.00	88.45	90.16	6,839.95	601.26	313.40	311.72	0.00	0.00	0.00
7,800.00	88.45	90.16	6,842.66	600.98	413.37	411.69	0.00	0.00	0.00
7,900.00	88.45	90.16	6,845.36	600.70	513.33	511.65	0.00	0.00	0.00
8,000.00	88.45	90.16	6,848.07	600.42	613.29	611.61	0.00	0.00	0.00
8,100.00	88.45	90.16	6,850.77	600.15	713.26	711.58	0.00	0.00	0.00
8,200.00	88.45	90.16	6,853.48	599.87	813.22	811.54	0.00	0.00	0.00
8,300.00	88.45	90.16	6,856.18	599.59	913.18	911.50	0.00	0.00	0.00
8,400.00	88.45	90.16	6,858.89	599.31	1,013.14	1,011.47	0.00	0.00	0.00
8,500.00	88.45	90.16	6,861.59	599.03	1,113.11	1,111.43	0.00	0.00	0.00
8,600.00	88.45	90.16	6,864.30	598.75	1,213.07	1,211.39	0.00	0.00	0.00
8,700.00	88.45	90.16	6,867.00	598.47	1,313.03	1,311.36	0.00	0.00	0.00
8,800.00	88.45	90.16	6,869.71	598.19	1,413.00	1,411.32	0.00	0.00	0.00
8,900.00	88.45	90.16	6,872.41	597.91	1,512.96	1,511.28	0.00	0.00	0.00
9,000.00	88.45	90.16	6,875.12	597.63	1,612.92	1,611.25	0.00	0.00	0.00
9,100.00	88.45	90.16	6,877.82	597.35	1,712.89	1,711.21	0.00	0.00	0.00
9,200.00	88.45	90.16	6,880.53	597.07	1,812.85	1,811.17	0.00	0.00	0.00
9,300.00	88.45	90.16	6,883.23	596.80	1,912.81	1,911.14	0.00	0.00	0.00
9,400.00	88.45	90.16	6,885.94	596.52	2,012.77	2,011.10	0.00	0.00	0.00
9,500.00	88.45	90.16	6,888.64	596.24	2,112.74	2,111.06	0.00	0.00	0.00
9,600.00	88.45	90.16	6,891.35	595.96	2,212.70	2,211.03	0.00	0.00	0.00
9,700.00	88.45	90.16	6,894.05	595.68	2,312.66	2,310.99	0.00	0.00	0.00
9,800.00	88.45	90.16	6,896.76	595.40	2,412.63	2,410.95	0.00	0.00	0.00
9,900.00	88.45	90.16	6,899.46	595.12	2,512.59	2,510.92	0.00	0.00	0.00
10,000.00	88.45	90.16	6,902.17	594.84	2,612.55	2,610.88	0.00	0.00	0.00
10,100.00	88.45	90.16	6,904.87	594.56	2,712.52	2,710.84	0.00	0.00	0.00
10,200.00	88.45	90.16	6,907.58	594.28	2,812.48	2,810.81	0.00	0.00	0.00

Legacy Directional Drilling

Planning Report

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Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.00	88.45	90.16	6,910.28	594.00	2,912.44	2,910.77	0.00	0.00	0.00
10,400.00	88.45	90.16	6,912.99	593.73	3,012.40	3,010.74	0.00	0.00	0.00
10,500.00	88.45	90.16	6,915.69	593.45	3,112.37	3,110.70	0.00	0.00	0.00
10,600.00	88.45	90.16	6,918.40	593.17	3,212.33	3,210.66	0.00	0.00	0.00
10,700.00	88.45	90.16	6,921.10	592.89	3,312.29	3,310.63	0.00	0.00	0.00
10,800.00	88.45	90.16	6,923.81	592.61	3,412.26	3,410.59	0.00	0.00	0.00
10,900.00	88.45	90.16	6,926.51	592.33	3,512.22	3,510.55	0.00	0.00	0.00
11,000.00	88.45	90.16	6,929.22	592.05	3,612.18	3,610.52	0.00	0.00	0.00
11,100.00	88.45	90.16	6,931.92	591.77	3,712.15	3,710.48	0.00	0.00	0.00
11,200.00	88.45	90.16	6,934.63	591.49	3,812.11	3,810.44	0.00	0.00	0.00
11,300.00	88.45	90.16	6,937.33	591.21	3,912.07	3,910.41	0.00	0.00	0.00
11,400.00	88.45	90.16	6,940.04	590.93	4,012.04	4,010.37	0.00	0.00	0.00
11,500.00	88.45	90.16	6,942.74	590.65	4,112.00	4,110.33	0.00	0.00	0.00
11,600.00	88.45	90.16	6,945.45	590.38	4,211.96	4,210.30	0.00	0.00	0.00
11,700.00	88.45	90.16	6,948.15	590.10	4,311.92	4,310.26	0.00	0.00	0.00
11,800.00	88.45	90.16	6,950.86	589.82	4,411.89	4,410.22	0.00	0.00	0.00
11,900.00	88.45	90.16	6,953.56	589.54	4,511.85	4,510.19	0.00	0.00	0.00
12,000.00	88.45	90.16	6,956.27	589.26	4,611.81	4,610.15	0.00	0.00	0.00
12,048.21	88.45	90.16	6,957.57	589.12	4,660.00	4,658.34	0.00	0.00	0.00
BPP at 12048.21 MD									
12,100.00	88.45	90.16	6,958.97	588.98	4,711.78	4,710.11	0.00	0.00	0.00
12,200.00	88.45	90.16	6,961.68	588.70	4,811.74	4,810.08	0.00	0.00	0.00
12,300.00	88.45	90.16	6,964.38	588.42	4,911.70	4,910.04	0.00	0.00	0.00
12,400.00	88.45	90.16	6,967.09	588.14	5,011.67	5,010.00	0.00	0.00	0.00
12,500.00	88.45	90.16	6,969.79	587.86	5,111.63	5,109.97	0.00	0.00	0.00
12,600.00	88.45	90.16	6,972.50	587.58	5,211.59	5,209.93	0.00	0.00	0.00
12,700.00	88.45	90.16	6,975.20	587.30	5,311.55	5,309.89	0.00	0.00	0.00
12,800.00	88.45	90.16	6,977.91	587.03	5,411.52	5,409.86	0.00	0.00	0.00
12,900.00	88.45	90.16	6,980.61	586.75	5,511.48	5,509.82	0.00	0.00	0.00
13,000.00	88.45	90.16	6,983.32	586.47	5,611.44	5,609.78	0.00	0.00	0.00
13,100.00	88.45	90.16	6,986.02	586.19	5,711.41	5,709.75	0.00	0.00	0.00
13,200.00	88.45	90.16	6,988.73	585.91	5,811.37	5,809.71	0.00	0.00	0.00
13,300.00	88.45	90.16	6,991.43	585.63	5,911.33	5,909.67	0.00	0.00	0.00
13,400.00	88.45	90.16	6,994.14	585.35	6,011.30	6,009.64	0.00	0.00	0.00
13,500.00	88.45	90.16	6,996.84	585.07	6,111.26	6,109.60	0.00	0.00	0.00
13,600.00	88.45	90.16	6,999.55	584.79	6,211.22	6,209.56	0.00	0.00	0.00
13,700.00	88.45	90.16	7,002.25	584.51	6,311.18	6,309.53	0.00	0.00	0.00
13,800.00	88.45	90.16	7,004.96	584.23	6,411.15	6,409.49	0.00	0.00	0.00
13,900.00	88.45	90.16	7,007.66	583.95	6,511.11	6,509.45	0.00	0.00	0.00
14,000.00	88.45	90.16	7,010.37	583.68	6,611.07	6,609.42	0.00	0.00	0.00
14,100.00	88.45	90.16	7,013.07	583.40	6,711.04	6,709.38	0.00	0.00	0.00
14,200.00	88.45	90.16	7,015.78	583.12	6,811.00	6,809.34	0.00	0.00	0.00
14,300.00	88.45	90.16	7,018.48	582.84	6,910.96	6,909.31	0.00	0.00	0.00
14,400.00	88.45	90.16	7,021.18	582.56	7,010.93	7,009.27	0.00	0.00	0.00
14,500.00	88.45	90.16	7,023.89	582.28	7,110.89	7,109.23	0.00	0.00	0.00
14,600.00	88.45	90.16	7,026.59	582.00	7,210.85	7,209.20	0.00	0.00	0.00
14,700.00	88.45	90.16	7,029.30	581.72	7,310.81	7,309.16	0.00	0.00	0.00
14,800.00	88.45	90.16	7,032.00	581.44	7,410.78	7,409.13	0.00	0.00	0.00
14,900.00	88.45	90.16	7,034.71	581.16	7,510.74	7,509.09	0.00	0.00	0.00
15,000.00	88.45	90.16	7,037.41	580.88	7,610.70	7,609.05	0.00	0.00	0.00
15,100.00	88.45	90.16	7,040.12	580.61	7,710.67	7,709.02	0.00	0.00	0.00
15,200.00	88.45	90.16	7,042.82	580.33	7,810.63	7,808.98	0.00	0.00	0.00
15,300.00	88.45	90.16	7,045.53	580.05	7,910.59	7,908.94	0.00	0.00	0.00
15,400.00	88.45	90.16	7,048.23	579.77	8,010.56	8,008.91	0.00	0.00	0.00

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,500.00	88.45	90.16	7,050.94	579.49	8,110.52	8,108.87	0.00	0.00	0.00
15,600.00	88.45	90.16	7,053.64	579.21	8,210.48	8,208.83	0.00	0.00	0.00
15,700.00	88.45	90.16	7,056.35	578.93	8,310.44	8,308.80	0.00	0.00	0.00
15,800.00	88.45	90.16	7,059.05	578.65	8,410.41	8,408.76	0.00	0.00	0.00
15,900.00	88.45	90.16	7,061.76	578.37	8,510.37	8,508.72	0.00	0.00	0.00
16,000.00	88.45	90.16	7,064.46	578.09	8,610.33	8,608.69	0.00	0.00	0.00
16,100.00	88.45	90.16	7,067.17	577.81	8,710.30	8,708.65	0.00	0.00	0.00
16,200.00	88.45	90.16	7,069.87	577.53	8,810.26	8,808.61	0.00	0.00	0.00
16,300.00	88.45	90.16	7,072.58	577.26	8,910.22	8,908.58	0.00	0.00	0.00
16,400.00	88.45	90.16	7,075.28	576.98	9,010.19	9,008.54	0.00	0.00	0.00
16,500.00	88.45	90.16	7,077.99	576.70	9,110.15	9,108.50	0.00	0.00	0.00
16,600.00	88.45	90.16	7,080.69	576.42	9,210.11	9,208.47	0.00	0.00	0.00
16,700.00	88.45	90.16	7,083.40	576.14	9,310.08	9,308.43	0.00	0.00	0.00
16,800.00	88.45	90.16	7,086.10	575.86	9,410.04	9,408.39	0.00	0.00	0.00
16,900.00	88.45	90.16	7,088.81	575.58	9,510.00	9,508.36	0.00	0.00	0.00
17,000.00	88.45	90.16	7,091.51	575.30	9,609.96	9,608.32	0.00	0.00	0.00
17,100.00	88.45	90.16	7,094.22	575.02	9,709.93	9,708.28	0.00	0.00	0.00
17,165.88	88.45	90.16	7,096.00	574.84	9,775.79	9,774.14	0.00	0.00	0.00
TD									
17,179.10	88.45	90.16	7,096.36	574.80	9,789.00	9,787.36	0.00	0.00	0.00
LTP at 17179.10 MD									
17,200.00	88.45	90.16	7,096.92	574.74	9,809.89	9,808.25	0.00	0.00	0.00
17,264.13	88.45	90.16	7,098.66	574.56	9,874.00	9,872.36	0.00	0.00	0.00
BHL at 17264.13 (15' FEL)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP - Jurnegan BS Fed - plan hits target center - Point	0.00	0.08	6,348.55	604.00	-667.00	436,809.00	554,899.00	32.200858	-104.289489
FTP - Jurnegan BS Fed - plan misses target center by 140.54usft at 6870.04usft MD (6718.54 TVD, 603.51 N, -491.42 E) - Point	0.00	0.08	6,826.00	604.00	-582.00	436,809.00	554,984.00	32.200857	-104.289214
BPP - Jurnegan BS Fed - plan misses target center by 0.12usft at 12048.21usft MD (6957.57 TVD, 589.12 N, 4660.00 E) - Point	0.00	0.08	6,957.57	589.00	4,660.00	436,794.00	560,226.00	32.200809	-104.272267
LTP - Jurnegan BS Fed - plan misses target center by 0.20usft at 17179.10usft MD (7096.36 TVD, 574.80 N, 9789.00 E) - Point	0.00	0.08	7,096.36	575.00	9,789.00	436,780.00	565,355.00	32.200762	-104.255685
BHL - Jurnegan BS Fed - plan misses target center by 0.44usft at 17264.13usft MD (7098.66 TVD, 574.56 N, 9874.00 E) - Point	0.00	0.08	7,098.66	575.00	9,874.00	436,780.00	565,440.00	32.200761	-104.255410

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
26.00	26.00	SALADO			
1,101.00	1,101.00	TOP SALT			
1,456.00	1,456.00	BASE SALT			
1,756.00	1,756.00	LAMAR			
1,861.08	1,861.00	BELL CANYON			
2,690.55	2,676.00	CHERRY CANYON			
3,604.70	3,566.00	BRUSHY CANYON			
5,340.54	5,256.00	BONE SPRING LIME			
6,259.23	6,161.00	1ST BONE SPRING SAND			
6,464.23	6,366.00	2ND BONE SPRING SHALE			
6,678.18	6,571.00	2ND BONE SPRING SAND			
7,184.11	6,826.00	TARGET			
17,165.88	7,096.00	TD			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,700.00	1,700.00	0.00	0.00	Start Nudge Build 2.00
2,359.88	2,354.06	50.79	-56.09	13.20° at 2359.88 MD
5,638.35	5,545.94	553.21	-610.91	Start Drop -2.00
6,298.23	6,200.00	604.00	-667.00	Vertical at 6298.23 MD
6,446.78	6,348.55	604.00	-667.00	KOP Start Build 12.00
7,184.11	6,826.00	602.70	-202.30	LP 88.45° at 7184.11 MD
12,048.21	6,957.57	589.12	4,660.00	BPP at 12048.21 MD
17,179.10	7,096.36	574.80	9,789.00	LTP at 17179.10 MD
17,264.13	7,098.66	574.56	9,874.00	BHL at 17264.13 (15' FEL)

*Please refer to the appended approved NOI for additional or updated COAs for this well.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Flat Creek Resources LLC**
LOCATION:	Section 22, T.24 S., R.26 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	**Jurnegan BS Fed Com 1H**
ATS/API ID:	**ATS-25-1275**
APD ID:	**10400104086**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan BS Fed Com 2H**
ATS/API ID:	**ATS-25-1276**
APD ID:	**10400104092**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan BS Fed Com 3H**
ATS/API ID:	**ATS-25-1280**
APD ID:	**10400104123**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan BS Fed Com 4H**
ATS/API ID:	**ATS-25-1281**
APD ID:	**10400104124**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan BS Fed Com 5H**
ATS/API ID:	**ATS-25-1277**
APD ID:	**10400104093**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan BS Fed Com 6H**
ATS/API ID:	**ATS-25-1279**
APD ID:	**10400104102**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan BS Fed Com 7H**
ATS/API ID:	**ATS-25-1282**
APD ID:	**10400104125**
Sundry ID:	**N/a**

Approval Date: 10/14/2025

WELL NAME & NO.:	**Jurnegan BS Fed Com 8H**
ATS/API ID:	**ATS-25-1283**
APD ID:	**10400104126**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan WC Fed Com 1H**
ATS/API ID:	**ATS-25-1284**
APD ID:	**10400104103**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Jurnegan WC Fed Com 2H**
ATS/API ID:	**ATS-25-1285**
APD ID:	**10400104109**
Sundry ID:	**N/a**

COA

Approval Date: 10/14/2025

H2S	No		
Potash	None	None	
Cave/Karst Potential	Low		
Cave/Karst Potential	☑ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	Conventional and Multibowl		
Other	☐ 4 String ☐ 5 String	Capitan Reef None	☐ WIPP
Other	Pilot Hole None	☐ Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter None	Primary Cement Squeeze None
Special Requirements	☐ Water Disposal/Injection	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry	Waste Prevention Waste MP	
Special Requirements Variance	☐ BOPE Break Testing ☐ Offline BOPE Testing	☐ Offline Cementing	☐ Casing Clearance

Approval Date: 10/14/2025

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **150 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **14 3/4** inch in diameter.

    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 **8 hours** 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 **7-5/8** inch intermediate casing is:

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

    ❖ In Critical Cave/Karst Areas cement must come to surface on the first three casing strings.

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

    - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **10-3/4** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated

date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- 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
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

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 **43 CFR part 3170 Subpart 3172** 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.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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 **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

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 43 CFR 3172.6(b)(9) 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** 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 8 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 **43 CFR part 3170 Subpart 3172**.

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.

Long Vo (LVO) 4/30/2025

Approval Date: 10/14/2025

Hydrogen Sulfide Drilling

Operations Plan

Flat Creek Resources

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min pressure demand air packs

2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
- An audio alarm system will be installed on the derrick floor and in the doghouse

3 Windsocks and / Wind Streamers:

- Windsocks at mud pit area should be high enough to be visible
- Windsock on the rig floor and / top of doghouse should be high enough to be visible

4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
    - Green Flag – Normal Safe Operation Condition
    - Yellow Flag – Potential Pressure and Danger
    - Red Flag – Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

5 Well Control Equipment:

- See Drilling Operations Plan Schematics

6 Communication:

- While working under masks chalkboards will be used for communications
- Hand signals will be used where chalk board is inappropriate
- Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drilling Stem Testing:

- No DST cores are planned at this time

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

11 Emergency Contacts

Emergency Contacts		
Carlsbad Police Department	575.887.7551	911
Carlsbad Medical Center	575.887.4100	911
Eddy County Fire Service	575.628.5450	911
Eddy County Sherriff	575.887.7551	911
Lea County Fire Service	575.391.2983	911
Lea County Sherriff	575.396.3611	911
Jal Police Department	575.395.2121	911
Jal Fire Department	575.395.2221	911
Flat Creek Resources	817.731.4100	

Flat Creek Resources, LLC

Jurnegan Fed Com - South Pad H2S Map

Section 22, Township 24S, Range 26E
Eddy County, New Mexico

Pad Center Point

N

1:27,000

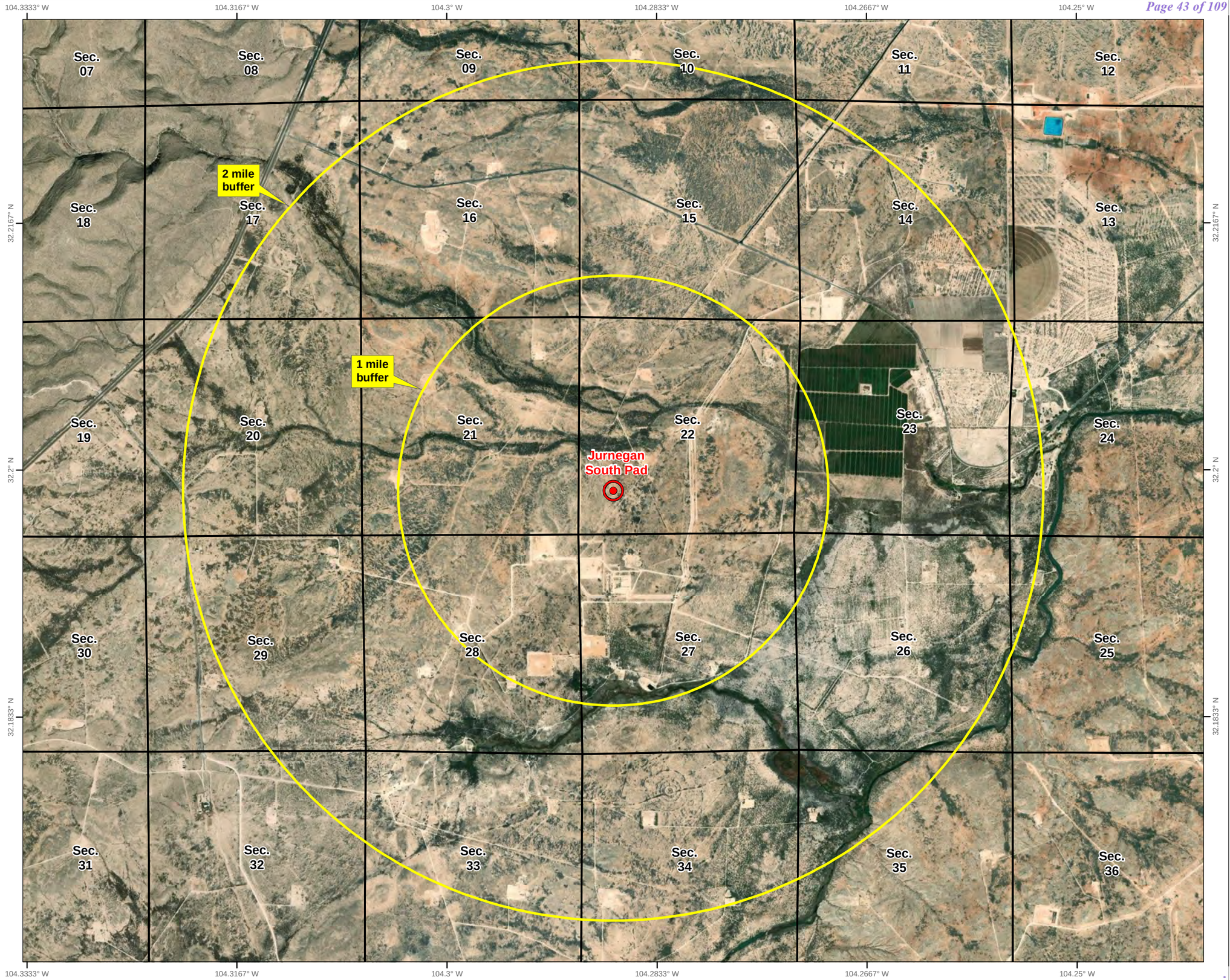
0 1,000 2,000

Feet

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

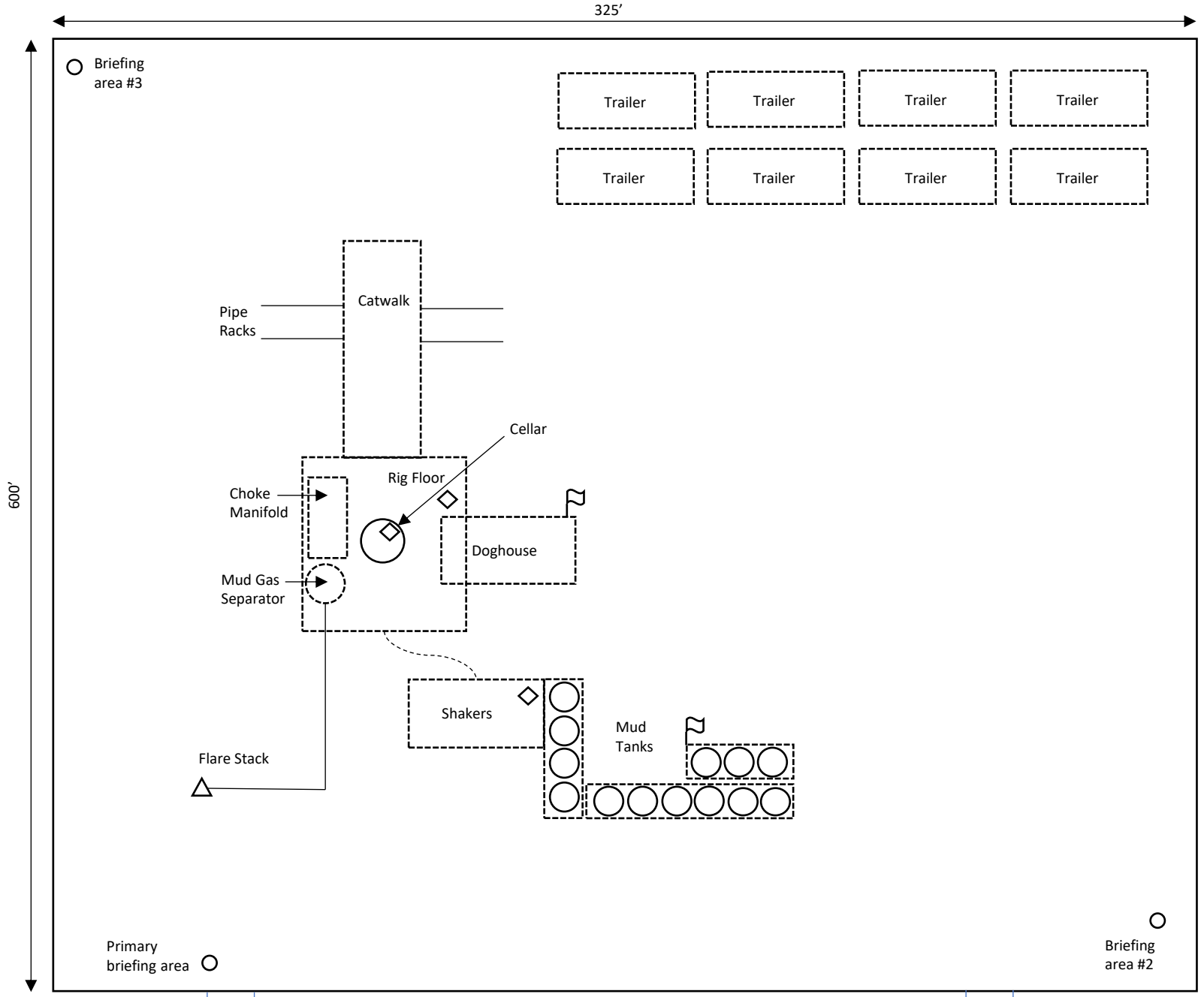
PERMITS WEST

Prepared by Permits West, Inc., Mar. 13, 2025
for Flat Creek Resources, LLC

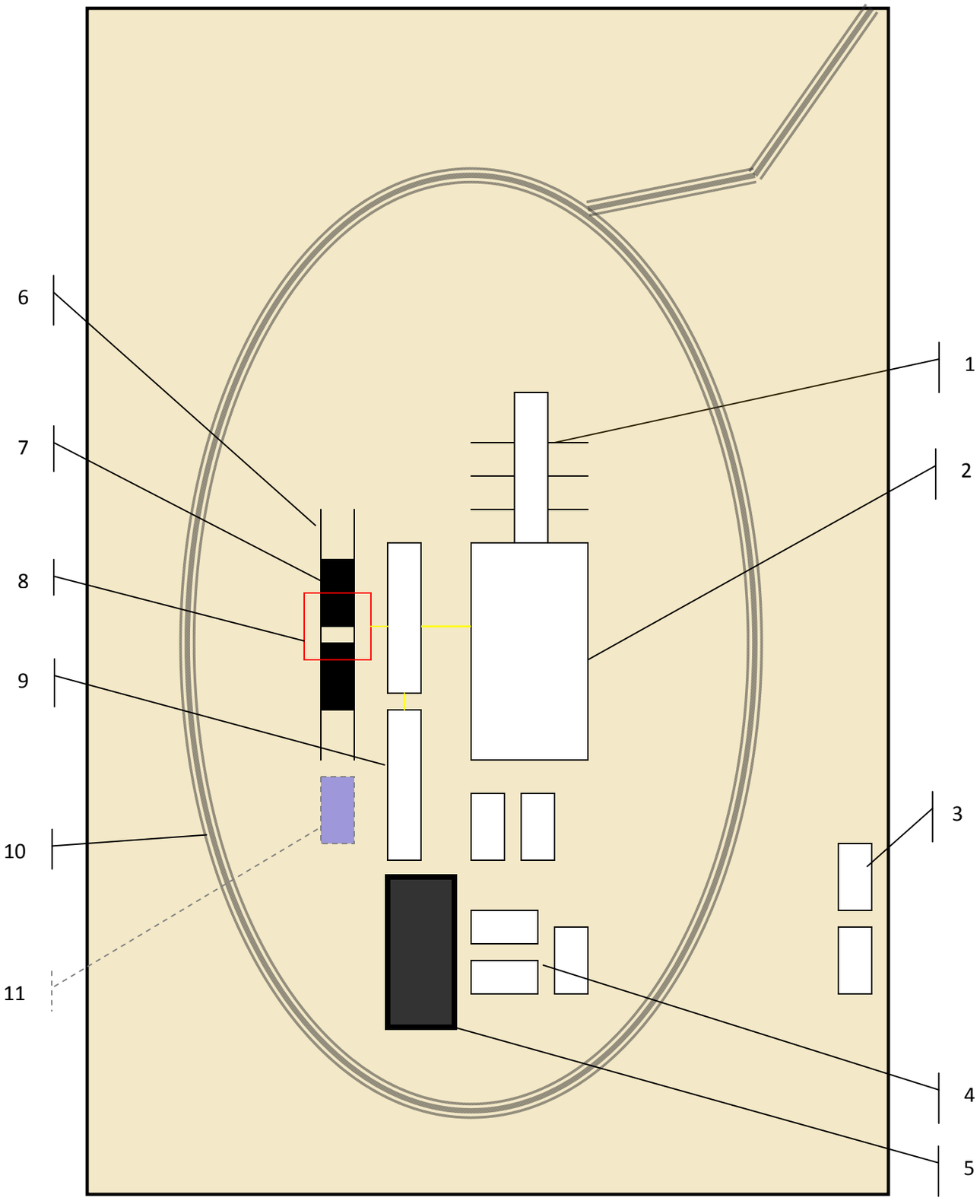


Rig Diagram
Jurnegan South Pad
Tap Rock Operating, LLC
22-24S-26E
Eddy County, NM

- Briefing Area
- Current Well
- Flare Stack
- H2S Monitor
- Wind Indicator
- Mud Gas Separator



*not to scale



Schematic Closed Loop Drilling Rig*

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

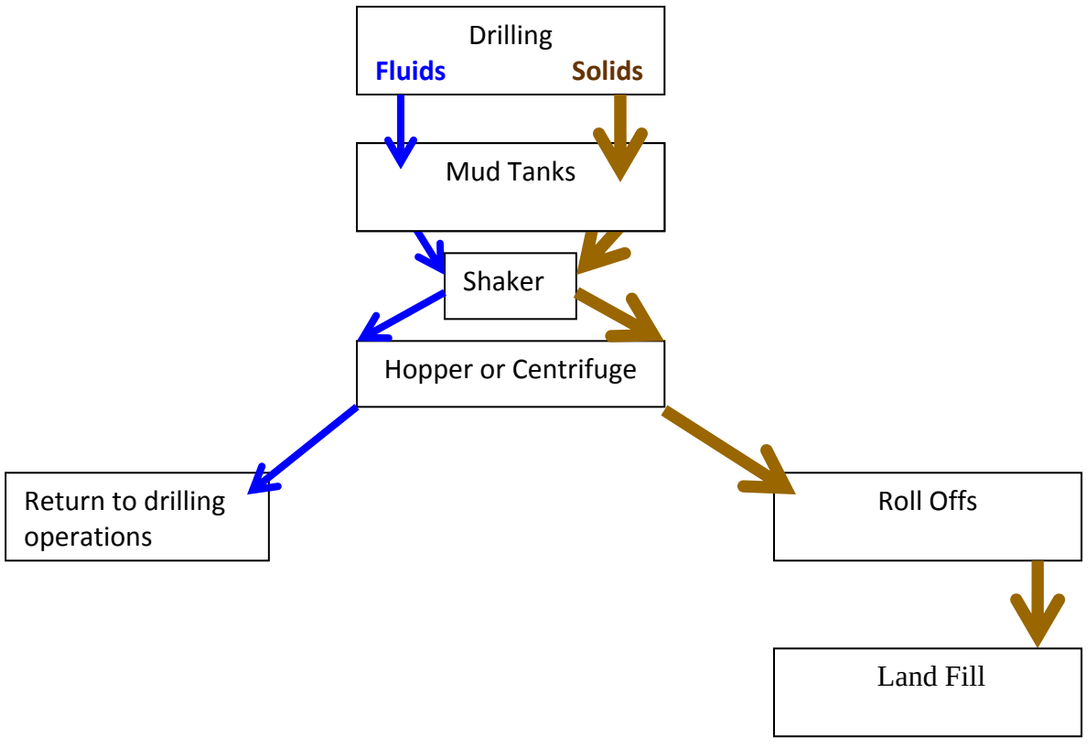
***Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available**

Above: Centrifugal Closed Loop System

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

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

Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil Field Service

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM0475051

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
JURNEGAN BS FED COM/003H

2. Name of Operator FLAT CREEK RESOURCES LLC

9. API Well No.
30-015-58065

3a. Address 777 MAIN STREET, SUITE 3600, FORT WORTH

3b. Phone No. *(include area code)* (817) 310-8570

10. Field and Pool or Exploratory Area
WILLOW LAKE/BONE SPRING WEST

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SEC 22/T24S/R26E/NMP

11. Country or Parish, State
EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Flat Creek Resources, LLC would like to request to move the Surface Hole Location from 1106' FSL & 733' FWL, Section 22, T. 24S, R. 26E, SWSW (32.1986895, -104.2871807) to 1041' FSL & 899' FWL, Section 22, T. 24S, R. 26E, SWSW (32.1985142, -104.2866461). Flat Creek also requests a variance on Break Testing the BOP. Please see attached Break Testing procedure, drill plan, directional plan, anticollision report, and C102 plat for more detailed information. APD ID No. 10400104123.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
CORY WALK / Ph: (505) 466-8120

Title Permitting Agent

Signature (Electronic Submission)

Date 01/30/2026

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by
CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title Petroleum Engineer

Date 02/04/2026

Conditions of approval, if any, are attached. Approval of this notice 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.

Office CARLSBAD

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.

(Instructions on page 2)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Flat Creek Resources LLC**
LOCATION:	Section 22, T.24 S., R.26 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	**Jurnegan BS Fed Com 3H**
ATS/API ID:	**ATS-25-1280**
APD ID:	**10400104123**
Sundry ID:	**2884327**

COA

H2S	No		
Potash	None	None	
Cave/Karst Potential	Low		
Cave/Karst Potential	☑ Critical		
Variance	☐ None	☑ Flex Hose	☐ Other
Wellhead	Conventional and Multibowl		
Other	☐ 4 String ☐ 5 String	Capitan Reef: None	☐ WIPP
Other	Pilot Hole: None	☐ Open Annulus	
Cementing	Contingency Squeeze: None	Echo-Meter: None	Primary Cement Squeeze: None
Special Requirements	☐ Water Disposal/Injection	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry	Waste Prevention: Waste MP	
Special Requirements Variance	☑ BOPE Break Testing ☐ Offline BOPE Testing	☐ Offline Cementing	☐ Casing Clearance

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately 150 feet (a minimum of 70 feet into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **14 3/4** inch in diameter.

    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 **8 hours** 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 **7-5/8** inch intermediate casing is:

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

    ❖ In Critical Cave/Karst Areas cement must come to surface on the first three casing strings.

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

   - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Operator shall provide method of verification.
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
     Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi. **Annular which shall be tested to 2100 (70% Working Pressure) psi.**

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **10-3/4** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

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

e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- 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.

BOPE Break Testing Variance (Approved)

- BOPE Break Testing is ONLY permitted for 5M psi MASP or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- The BLM is to be contacted **(575-361-2822 Eddy County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21**-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.
- The BOPE testing shall be conducted while the rig is stationary.

Intermediate Break Testing Section:

- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200’ TVD tolerance between intermediate shoes is allowable).

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
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

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 **43 CFR part 3170 Subpart 3172** 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.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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. Acceptable Method of Cement Verifications:

    a. Observing cement circulated to surface.
    b. Cement bond log (CBL).
    c. Temperature log within 8-10 hours after completing the cement job.
    d. Echometer (if a second-stage bradenhead squeeze is being used).

5. 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.

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

7. 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.

8. 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.

9. 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 **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

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 43 CFR 3172.6(b)(9) 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 cement), 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).

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c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** 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 8 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.

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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.

Long Vo (LVO) 2/3/2026

22-24-26-M Sundry ID 2884327 Jurnegan BS Fed Com 3H Eddy NM0475051 Flat Creek Resources LLC 13-22h 11-14-2024 LV.xlsm

Jurnegan BS Fed Com 3H

10 3/4	surface csg in a	14 3/4	inch hole.		Design Factors			Surface				
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	45.50	j 55	stc	72.23	30.48	3.87	150	52	6.72	58.76	6,825
"B"			stc				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500		Tail Cmt	does not	circ to sfc.	Totals:	150				6,825

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
14 3/4	0.5563	305	455	83	445	8.80	533	2M	1.50

Site plat (pipe racks S or E) as per O.O.1 III.D.4.i not found.

7 5/8	casing inside the	10 3/4			Design Factors			Int 1			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	p 110	btc	17.77	5.79	2.73	1,780	10	4.97	10.04	52,866
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500					Totals:	1,780				52,866
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		150				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
9 7/8	0.2148	335	568	383	48	10.00	1904	2M	0.69
D V Tool(s):							sum of sx	Σ CuFt	Σ%excess
by stage % :		#VALUE!	#VALUE!				335	568	48

Class 'C' tail cmt yld > 1.35

5 1/2	casing inside the	7 5/8			Design Factors			Prod 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	hcp 110	tcbc-ht	4.23	3.32	3.46	17,364	3	6.30	6.04	347,280
"B"							0				0
"C"							0				0
"D"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 1,561					Totals:	17,364				347,280
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		1780				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
6 3/4	0.0835	960	1678	1467	14	9.40			0.43

Class 'C' tail cmt yld > 1.35

#N/A

0		5 1/2			Design Factors			<Choose Casing>			
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			0.00				0				0
"B"			0.00				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:					Totals:	0				0
	Cmt vol calc below includes this csg, TOC intended			#N/A	ft from surface or a		#N/A				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A				

#N/A Capitan Reef est top XXXX.

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-58065	96415	WILLOW LAKE; BONE SPRING, WEST

Property Code	Property Name	Well Number
339064	JURNEGAN BS FED COM	3H

OGRID No.	Operator Name	Ground Level Elevation
374034	FLAT CREEK RESOURCES, LLC.	3330'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal
Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☒ Federal

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
M	22	24-S	26-E	-	1041' S	899' W	N 32.1985142	W 104.2866461	EDDY

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
I	23	24-S	26-E	-	1900' S	15' E	N 32.2007606	W 104.2554092	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidated Code
640	Defining	30-015-xxxxx (3H)	N	C

Order Numbers: N/A
Well Setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
L	22	24-S	26-E	-	1900' S	15' W	N 32.2008575	W 104.2894887	EDDY

First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
L	22	24-S	26-E	-	1899' S	100' W	N 32.2008568	W 104.2892139	EDDY

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
I	23	24-S	26-E	-	1899' S	100' E	N 32.2007614	W 104.2556840	EDDY

Unitized Area or Area of Uniform Intrest	Spacing Unity Type	Ground Floor Elevation
pending (com)	☒ Horizontal ☐ Vertical	3330'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief; and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

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 order from the division.

Rodney Littleton — November 20, 2025

Signature — Date

Rodney Littleton

Print Name

rlittleton@freedomenergy.com

E-mail Address

SURVEYORS CERTIFICATION

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

RAMON DOMINGUEZ — NEW MEXICO — 24508 — PROFESSIONAL SURVEYOR

11/20/2025 9:42:53 AM

Signature and Seal of Professional Surveyor — Date

Certificate Number

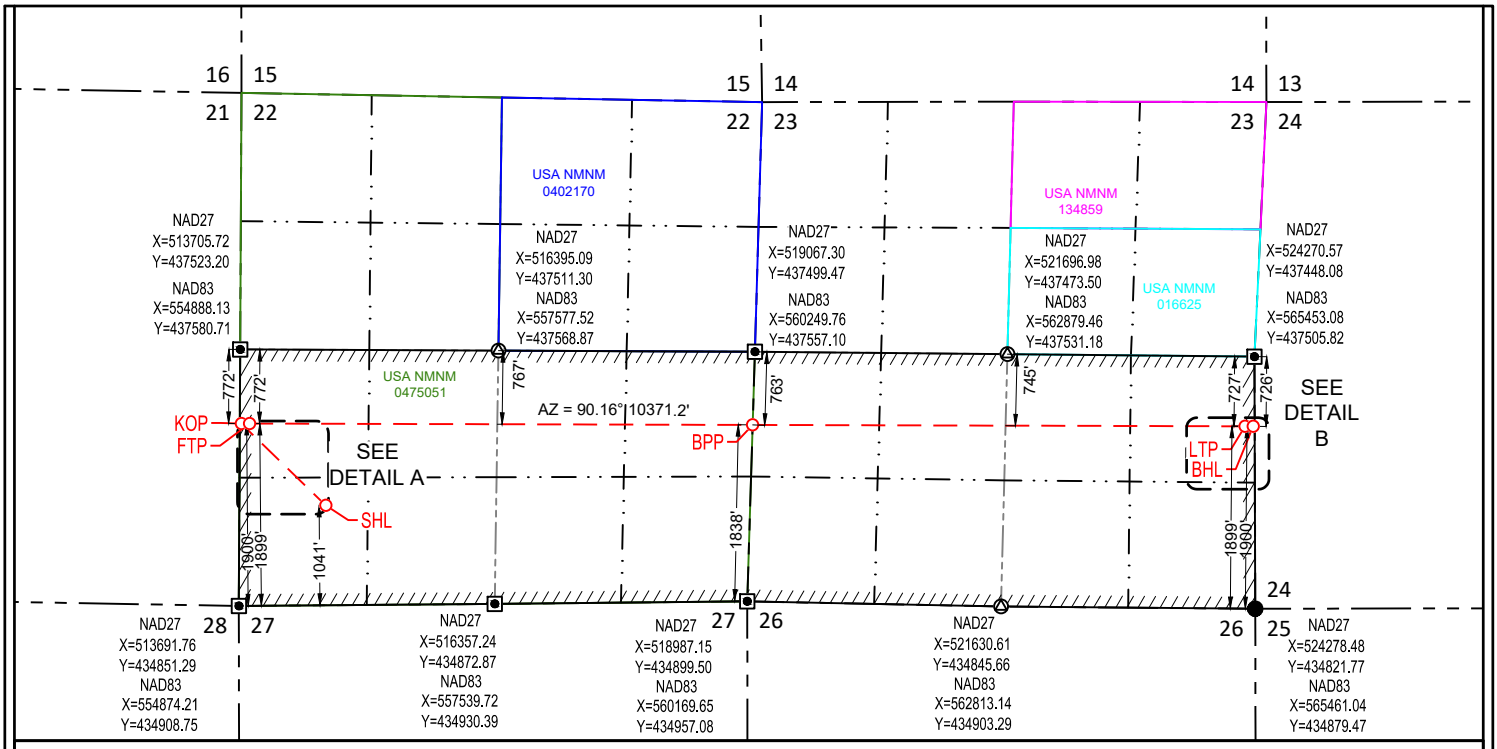
Date of Survey: 10/29/2024

S:\SURVEY\FLAT_CREEK_RESOURCES_LLC\JURNEGAN_23-24S-26E\FINAL_PRODUCTS\0_JURNEGAN_BS_FED_COM_3H_REV3.dwg MATTHEW HUGHES 11/20/2025 9:42 AM

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

Property Name and Well Number

JURNEGAN BS FED COM 3H



SURFACE LOCATION (SHL)
NEW MEXICO EAST
NAD 1983
X=555779 Y=435957
LAT.: N 32.1985142
LONG.: W 104.2866461
NAD 1927
X=514431 Y=435863
LAT.: N 32.1985711
LONG.: W 104.2866803
1041' FSL 899' FWL

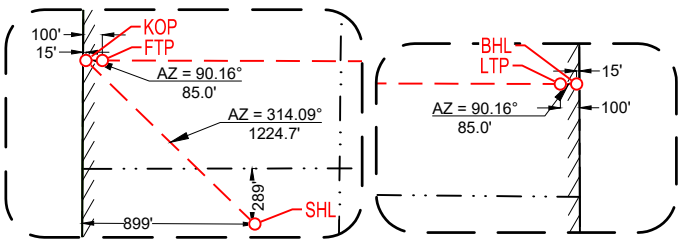
KICK OFF POINT (KOP)
NEW MEXICO EAST
NAD 1983
X=554899 Y=436809
LAT.: N 32.2008575
LONG.: W 104.2894887
NAD 1927
X=513717 Y=436752
LAT.: N 32.2007392
LONG.: W 104.2889883
1900' FSL 15' FWL

FIRST TAKE POINT (FTP)
NEW MEXICO EAST
NAD 1983
X=554984 Y=436809
LAT.: N 32.2008568
LONG.: W 104.2892139
NAD 1927
X=513802 Y=436751
LAT.: N 32.2007385
LONG.: W 104.2887135
1899' FSL 100' FWL

BLM PERF. POINT (BPP)
NEW MEXICO EAST
NAD 1983
X=560226 Y=436794
LAT.: N 32.2008097
LONG.: W 104.2722661
NAD 1927
X=519044 Y=436737
LAT.: N 32.2006910
LONG.: W 104.2717663
1838' FSL 0' FWL

LAST TAKE POINT (LTP)
NEW MEXICO EAST
NAD 1983
X=565355 Y=436780
LAT.: N 32.2007614
LONG.: W 104.2556840
NAD 1927
X=524173 Y=436722
LAT.: N 32.2006424
LONG.: W 104.2551847
1899' FSL 100' FEL

BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST
NAD 1983
X=565440 Y=436780
LAT.: N 32.2007606
LONG.: W 104.2554092
NAD 1927
X=524258 Y=436722
LAT.: N 32.2006416
LONG.: W 104.2549099
1900' FSL 15' FEL



DETAIL VIEW A
SCALE: 1" = 1000'

DETAIL VIEW B
SCALE: 1" = 1000'

SURVEYORS CERTIFICATION

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

10/29/2024
Date of Survey
Signature and Seal of Professional Surveyor:

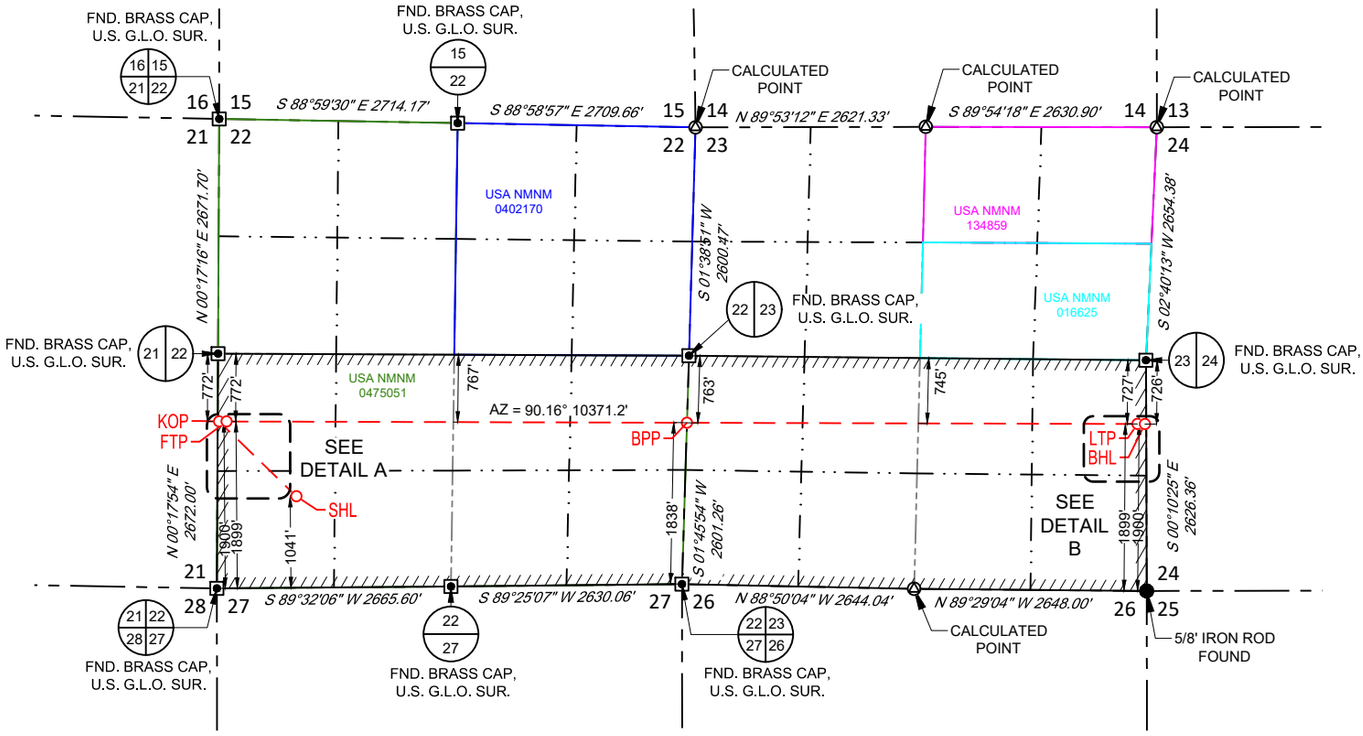
RAMON DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

11/20/2025 9:42:55 AM

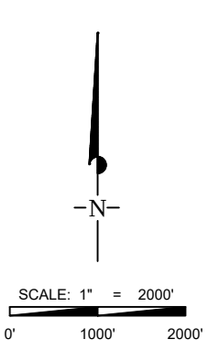
S:\SURVEY\FLAT_CREEK_RESOURCES_LLC\JURNEGAN_23-24\E-PAD_PRODUCTS\LO_JURNEGAN_BS_FED_COM_3H_REV3.dwg MATTHEW.HUGHES 11/20/2025 9:42 AM

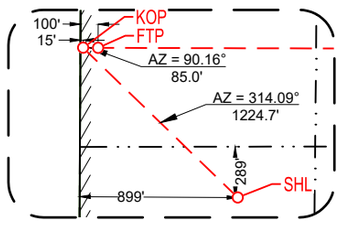
FLAT CREEK RESOURCES

SECTION 22, TOWNSHIP 24-S, RANGE 26-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

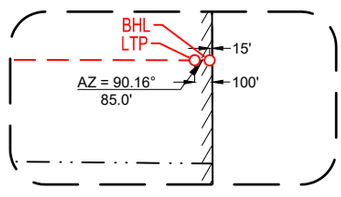


SURFACE LOCATION (SHL)	KICK OFF POINT (KOP)	FIRST TAKE POINT (FTP)
NEW MEXICO EAST NAD 1983 X=555779 Y=435957 LAT.: N 32.1985142 LONG.: W 104.2866461 1041' FSL 899' FWL	NEW MEXICO EAST NAD 1983 X=554899 Y=436809 LAT.: N 32.2008575 LONG.: W 104.2894887 1900' FSL 15' FWL	NEW MEXICO EAST NAD 1983 X=554984 Y=436809 LAT.: N 32.2008568 LONG.: W 104.2892139 1899' FSL 100' FWL
BLM PERF. POINT (BPP)	**LAST TAKE POINT (LTP)**	**BOTTOM HOLE LOCATION (BHL)**
NEW MEXICO EAST NAD 1983 X=560226 Y=436794 LAT.: N 32.2008097 LONG.: W 104.2722661 1838' FSL 0' FWL	NEW MEXICO EAST NAD 1983 X=565355 Y=436780 LAT.: N 32.2007614 LONG.: W 104.2556840 1899' FSL 100' FEL	NEW MEXICO EAST NAD 1983 X=565440 Y=436780 LAT.: N 32.2007606 LONG.: W 104.2554092 1900' FSL 15' FEL





DETAIL VIEW A
SCALE: 1" = 1000'



DETAIL VIEW B
SCALE: 1" = 1000'

LEASE NAME & WELL NO.: JURNEGAN BS FED COM 3H

SECTION 22 TWP 24-S RGE 26-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 1041' FSL & 899' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-529, & US-82W, GO WEST ON US-82W ±18.9 MILES, THENCE LEFT ON ILLINOIS CAMP RD ±9.4 MILES, THENCE RIGHT ON NETHERLIN RD. ±0.2 MILES, THENCE SOUTHWEST (LEFT) ON A LEASE RD. ±7489 FEET, THENCE NORTH (RIGHT) ON A PROPOSED ROAD ±32 FEET TO A POINT ±437 FEET SOUTHEAST OF THE LOCATION.

RAMON DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

11/20/2025 9:42:56 AM

Ramon A. Dominguez, P.S. No. 24508

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY FLAT CREEK RESOURCES, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

S:\SURVEY\FLAT_CREEK_RESOURCES_LLC\JURNEGAN_22-24S-26E\FINAL_PRODUCTS\LO_JURNEGAN_BS_FED_COM_3H_REV3.DWG 11/20/2025 9:42:55 AM russell.waterman

FLAT CREEK RESOURCES

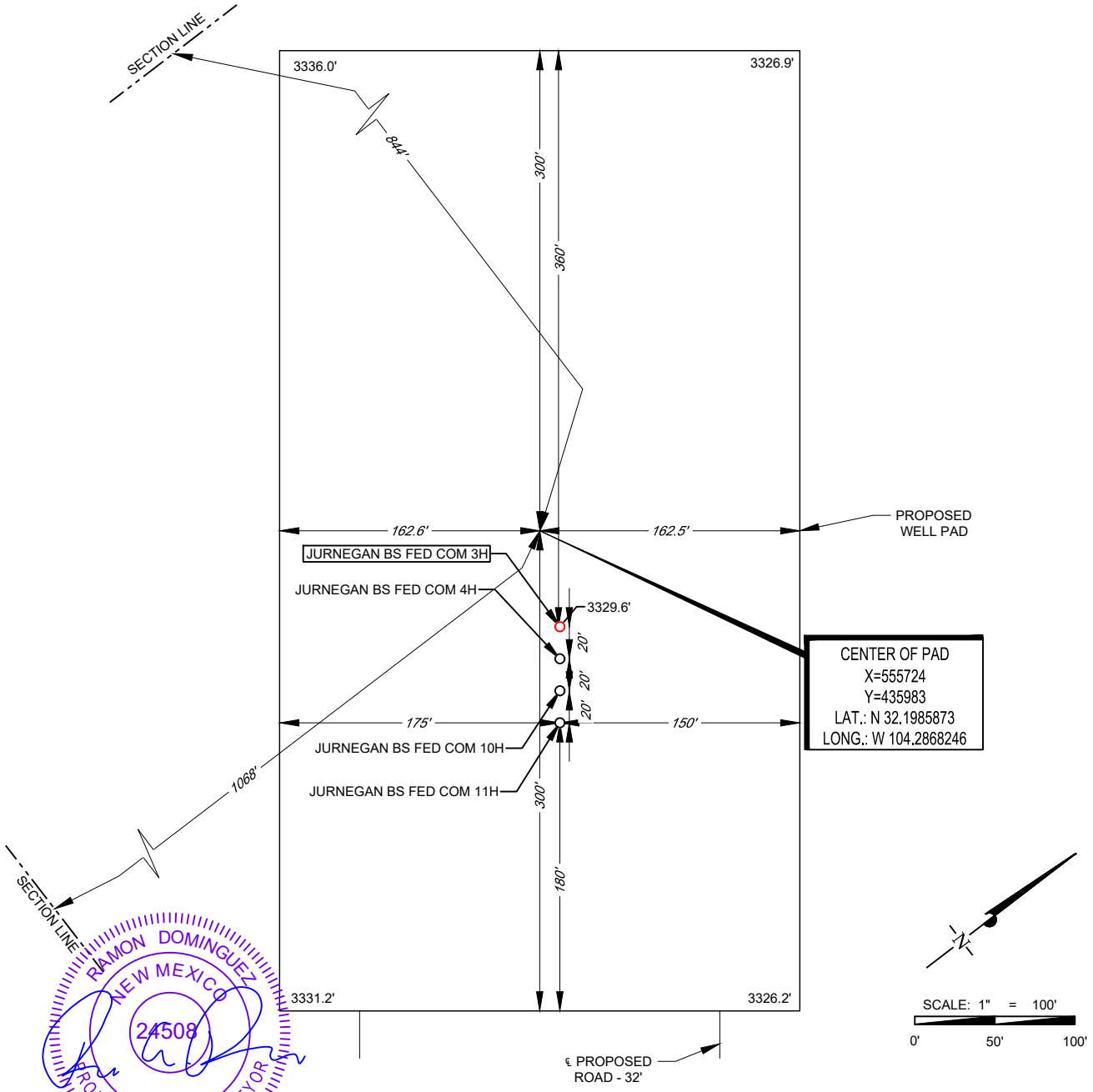
LEGEND

SECTION LINE

PROPOSED ROAD

DETAIL VIEW
SCALE: 1" = 100'

SECTION 22, TOWNSHIP 24-S, RANGE 26-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



RAMON DOMINGUEZ
NEW MEXICO
24508
PROFESSIONAL SURVEYOR

11/20/2025 9:42:57 AM

Ramon A. Dominguez, P.S. No. 24508

LEASE NAME & WELL NO.: JURNEGAN BS FED COM 3H

3H LATITUDE N 32.1985142 3H LONGITUDE W 104.2866461

CENTER OF PAD IS 1068' FSL & 844' FWL

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY FLAT CREEK RESOURCES, LLC. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO, ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
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Flat Creek Resources, LLC DRILL PLAN PAGE 1
Jurnegan BS Fed Com 3H
SHL 1041' FSL & 899' FWL 22-24S-26E
BHL 1900' FSL & 15' FEL 23-24S-26E
Eddy County, NM

Drilling Program

1. ESTIMATED TOPS

Formation	TVD	MD	Bearing
Alluvium	26'	26'	water
Top Salt	1101'	1200'	N/A
Base Salt	1456'	1500'	N/A
Lamar/Delaware Mountain Group	1756'	1756'	N/A
Bell Canyon	1861'	1861'	N/A
Cherry Canyon	2676'	2696'	N/A
Brushy Canyon	3566'	3638'	N/A
Bone Spring Lime	5256'	5426'	Hydrocarbons
1st Bone Spring Sand	6161'	6349'	Hydrocarbons
KOP	6358'	6546'	
2nd Bone Spring Shale	6366'	6554'	Hydrocarbons
2nd Bone Spring Sand	6571'	6767'	Hydrocarbons
2nd Bone Spring Sand Target	6826'	7199'	Hydrocarbons
TD	7096'	17364'	Hydrocarbons

2. NOTABLE ZONES

Second Bone Spring Sand is the goal. All perforations will be ≥100' from the dedication perimeter.

3. PRESSURE CONTROL

A 20,000', 10,000 psi BOP stack will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer, and an annular preventer (5000-psi WP). Both units will be hydraulically operated, and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with 43 CFR 3172. See BOP & Choke diagrams for additional information.

Flat Creek Resources, LLC DRILL PLAN PAGE 2
Jurnegan BS Fed Com 3H
SHL 1041' FSL & 899' FWL 22-24S-26E
BHL 1900' FSL & 15' FEL 23-24S-26E
Eddy County, NM

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

BOP Testing Procedure

1. Use water to test BOP's.

2. Make up test assembly (test plug) and set in the wellhead profile. Ensure the casing valve is left open. Monitor the casing valve outlet while testing for potential leak past the test plug.

3. Circulate through the choke/kill lines, choke manifold, standpipe manifold, and valves to ensure that all lines are full of water. This will prevent pressure drop (compression) while testing.

4. Line up test unit and test rams, valves and lines as per the chart below.

5. Pressure tests must be low and high, respectively, and the pressure should stabilize with minimum bleed off within 10 minutes. If a test plug is utilized, no bleed-off of pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Pressure should be recorded on a chart recorder (add scale to be use)

6. Any equipment that does not pass the pressure test must be reported to the drilling supervisor. Equipment must be repaired and retested.

7. Continue with pressure testing until all equipment has been tested as per the specific rig requirements.

8. Rig down test assembly.

9. All tests and drills to be recorded in the drilling log.

Flat Creek Resources, LLC
Jurnegan BS Fed Com 3H
SHL 1041' FSL & 899' FWL 22-24S-26E
BHL 1900' FSL & 15' FEL 23-24S-26E
Eddy County, NM

Surface Casing & BOP Equipment Test			
Component	**High Test**	**Low Test**	**Duration**
Wellhead Test	5000 psi	250 psi	10 min
BOP Rams	5000 psi	250 psi	10 min
Annular	3500 psi	250 psi	10 min
HCR	5000 psi	250 psi	10 min
Manifold	5000 psi	250 psi	10 min
Upper/Lower Kelly valves	5000 psi	250 psi	10 min
TIW safety valves/dart	5000 psi	250 psi	10 min
Standpipe/mudlines	5000 psi	250 psi	10 min
Orbit valve/rotating head	300 psi	-	10 min
Surface casing	1500 psi	-	30 min

4. CASING & CEMENT

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

Name	Hole OD	Casing OD	Tapered	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension	Coupling
Surface	14.75"	10.75"	No	0	400	0	400	J-55	45.5	STC	11.2	19.1	44.1	Standard
1st Intermediate	9.875"	7.625"	No	0	1780	0	1778	P-110 HC	29.7	BTC	7.7	7.4	12.9	Standard
Production	6.75"	5.5"	No	0	17364	0	7096	P-110 HC	20	TCBC-HT	3.4	3.5	4.6	Special Clearance 5.9" OD

Flat Creek Resources, LLC DRILL PLAN PAGE 4
Jurnegan BS Fed Com 3H
SHL 1041' FSL & 899' FWL 22-24S-26E
BHL 1900' FSL & 15' FEL 23-24S-26E
Eddy County, NM

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	135	1.68	227	12.8	100%	35/65 Poz-Premium C	5% bwow Sodium chloride + 6% bentonite gel + 0.4% CPT-503P + 0.125 lbs/sk Dura fiber
	Tail	200	170	1.34	228	14.8	100%	C	1% Calcium chloride + 0.25 lb/sk cellophane flake
Intermediate	Lead	0	250	1.68	420	12.8	50%	35/65 Poz-Premium C	5% bwow Sodium chloride + 6% bentonite gel + 0.4% CPT-503P + 0.125 lbs/sk Dura fiber
	Tail	1280	85	1.74	148	13.5	50%	C	1% calcium chloride + 4% bentonite gel + 0.4% CPT-503P + 0.125 lbs/sk Dura fiber
Production	Lead	0	225	2.82	635	10.4	15%	H	10% bwoc light weight bead + 5% silica fume alternative + 0.2% suspension aid + 0.3% fluid loss additive + 0.3% dispersant + 0.2% cement retarder
	Tail	6500	735	1.42	1044	13.2	15%	35/65 Poz-Premium H	0.2% CPT-23

5. MUD PROGRAM

A closed loop system will be used. An electronic pit volume totalizer (PVT) mud system will monitor pit volumes for gains or losses, flow rate, pump pressures, and stroke rate. Sufficient mud materials (e. g., barite, bentonite, LCM) to maintain mud properties and meet minimum lost circulation and weight increase requirements will always be kept on site.

Name	Top	Bottom	Type	Mud Weight (ppg)	Visc	Fluid Loss
Surface	0	400	FW Spud Mud	8.8	45-60	NC
Intermediate 1	400	1780	Cut Brine	10	29 - 30	NC
Production	1780	17364	Cut Brine	9.4	34-38	6-8

6. CORES, TESTS, & LOGS

Production tests include Gama Ray log and resistivity log. No open and cased hole logs are planned at this time. No coring operation is planned.

Flat Creek Resources, LLC DRILL PLAN PAGE 5
Jurnegan BS Fed Com 3H
SHL 1041' FSL & 899' FWL 22-24S-26E
BHL 1900' FSL & 15' FEL 23-24S-26E
Eddy County, NM

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈3181 psi. Expected bottom hole temperature is ≈153˚ F.

An H2S plan is attached. H2S monitoring equipment will be used from surface casing setting point to TD.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take ≈2 months to drill and complete the well.

Flat Creek Resources

BOP Break Testing Variance

Flat Creek Resources respectfully requests a variance from the minimum standards for well control equipment testing of 43 CFR 3172 to allow a testing schedule of the blowout preventer and blowout prevention equipment along with Batch Drilling operations to include the following:

Procedures:

1. Flat Creek Resources will use this document for our break testing plan for New Mexico Delaware Basin.
2. Flat Creek will perform BOP break testing on multi-well pads where multiple intermediate sections will be drilled.
    a. Full BOPE test at first installation on the pad.
    b. The first intermediate hole section on the pad will be the deepest. All the remaining intermediate hole sections will be the same depth or shallower.
3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased. After the well section is cemented and secured with a pack off, the BOP will be disconnected from the wellhead, and the choke line will be disconnected.
4. The BOP is then lifted and removed from the wellhead by a hydraulic lift system.
5. TA cap will be installed according to manufacturer recommendations and pressure inside the casing will be monitored via the valve on the TA cap.
6. After skidding to the next well, the BOP is moved onto the wellhead by the hydraulic lift system and installed.
7. The BOP and choke line will then be reconnected.
8. Install a test plug into the wellhead.
9. A shell test is performed against the upper pipe ram and the valves on the choke manifold (valves to be rotated each test)
10. The shell test will consist of a 250-psi low test and a high test to 5000 psi. A function test will be performed on the following components: lower pipe rams, blind rams, and annular.
11. This process will be repeated for subsequent wells on the pad.

Standard Procedures:

1. Full BOPE test every 21 days
2. Annular preventer shall be tested to 70% or higher than the MASP of the deepest hole section.
3. Function test BOP elements per 43 CFR 3172.
4. Contact BLM if a well control event occurs.
5. If a well control event occurs, go back to full BOP test.
6. If the upcoming well section cannot be completed within 21 days, then a full BOPE test will always be completed.
7. Break test not to be used for production hole section (full BOP test)
8. The drill sections shall be higher than the Wolfcamp formation.
9. This Break Test Variance only to depths above a TVD of 12,000'

Barriers

Before nipple down:

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or fluted mandrel with pack off

After nipple down

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or fluted mandrel with pack off
- Capping flange

Well Control Response:

1. Primary barrier remains fluid
2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing the BOP is as follows:
    a. Annular first

b. If annular were not to hold, upper pipe rams second (which were tested on the break test)
c. If the upper pipe rams were not to hold, the lower pipe rams would be third

Summary

A variance is requested to test broken pressure seals on the BOPE when moving between wells on a multi-well pad, subject to the following conditions:

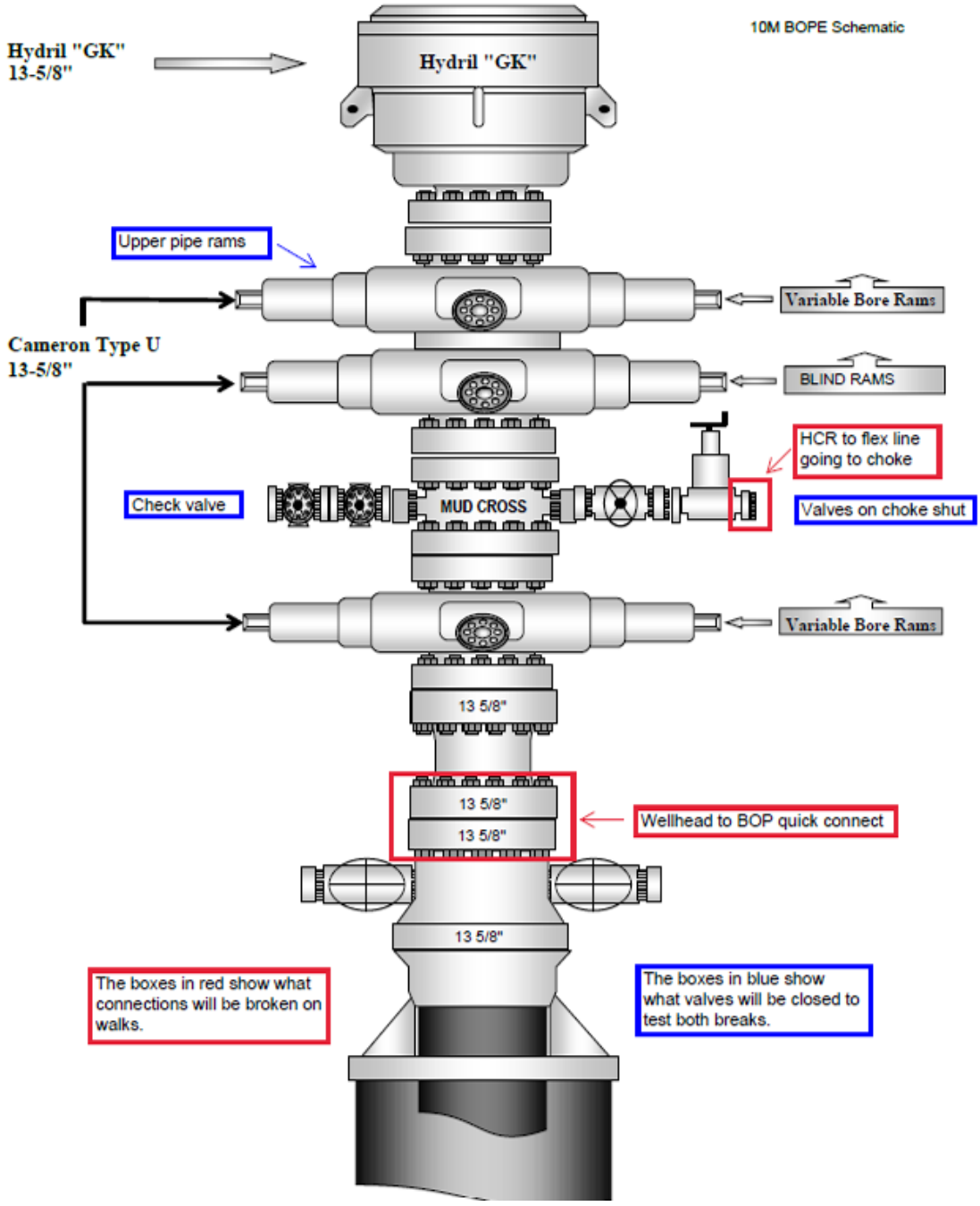
- A full BOPE test conducted on the first well of the pad. API Standard 53 requires testing annular BOP to 70% of working pressure or 100% of MASP, whichever is greater.
- If the first well on the pad does not have the deepest section, a full BOPE test will be performed prior to the deeper well.
- The hole section to be drilled has a MASP under 5000 psi.
- If a well control event occurs, BLM will be contacted for permission to continue break testing.

While skidding the rig, the BOP stack will be secured via a hydraulic handling system. A full BOPE test will be performed at least every 21 days.

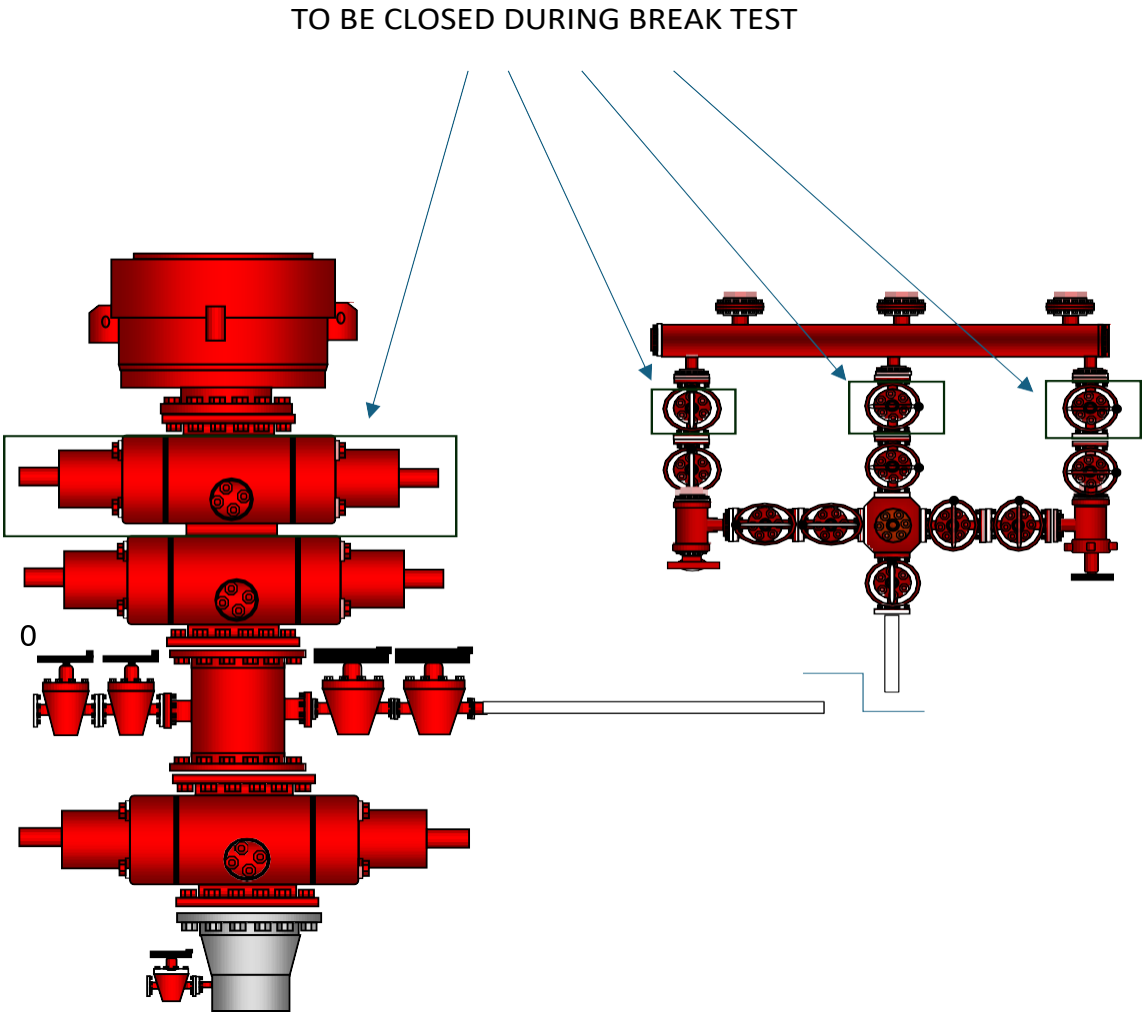
BOP Quick Connect Adapter

Wellhead Body

Surface Casing


10M BOPE Schematic
Hydril "GK"
13-5/8"
Hydril "GK"
Upper pipe rams
Variable Bore Rams
Cameron Type U
13-5/8"
BLIND RAMS
HCR to flex line going to choke
Check valve
MUD CROSS
Valves on choke shut
Variable Bore Rams
13 5/8"
13 5/8"
13 5/8"
Wellhead to BOP quick connect
13 5/8"
The boxes in red show what connections will be broken on walks.
The boxes in blue show what valves will be closed to test both breaks.

Break Testing



Stack Handler back view

Stack Handler side view

Freedom Energy

Field: Eddy County, NM NAD83
Location: Jurnegan
Well: Jurnegan BS Fed Com 3H OH
Plan: Plan 4
3330'GL + 26.5'KB @ 3356.50usft

Azimuths to Grid North
True North: -0.02°
Magnetic North: 6.51°

Magnetic Field
Strength: 46866.6nT
Dip Angle: 59.61°
Date: 1/16/2026
Model: IGRF2025

To convert a Magnetic Direction to a Grid Direction, Add 6.51°

Rig:

PROJECT DETAILS: Eddy County, NM NAD83

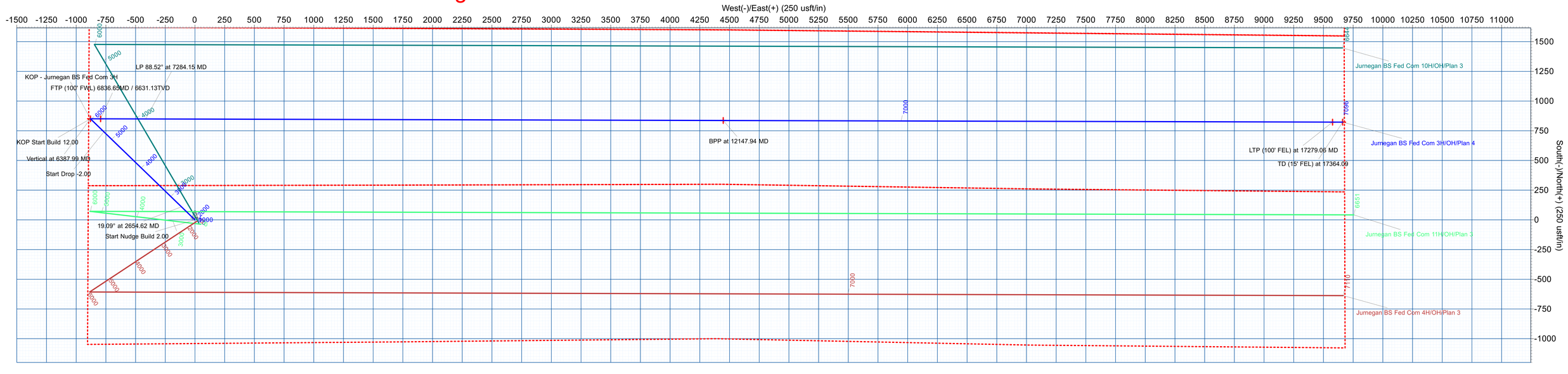
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

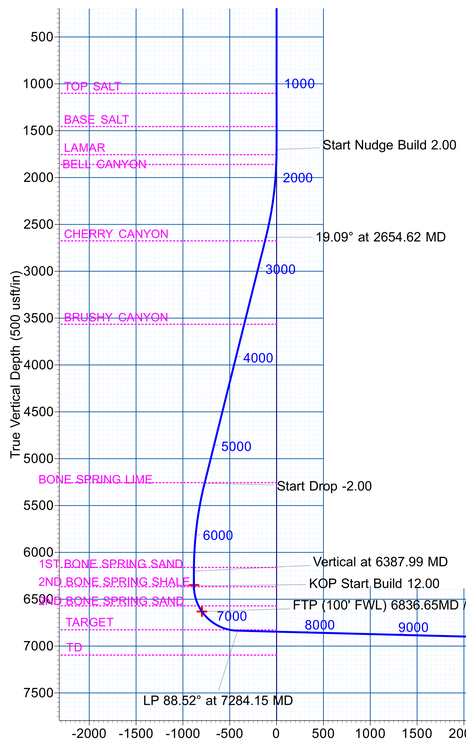
LEGACY DIRECTIONAL

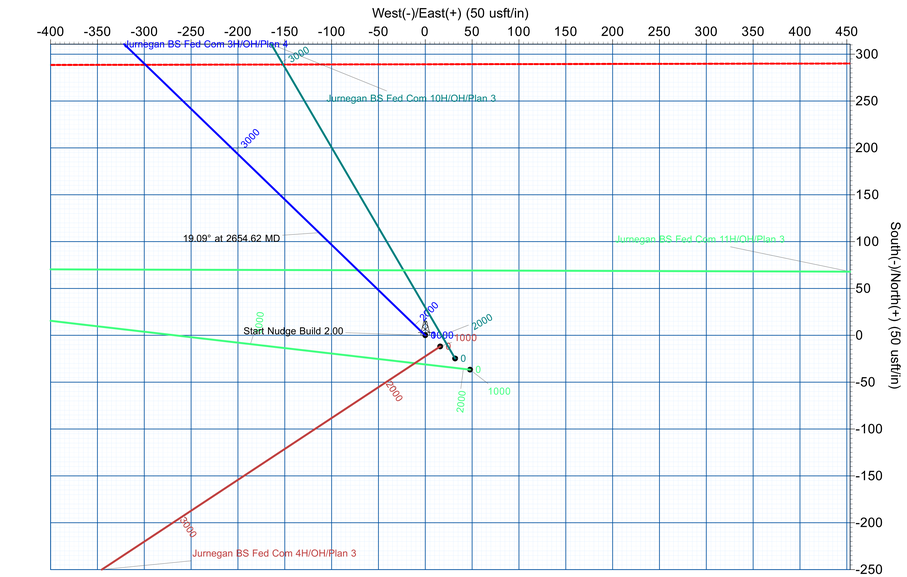
WELL DETAILS: Jurnegan BS Fed Com 3H

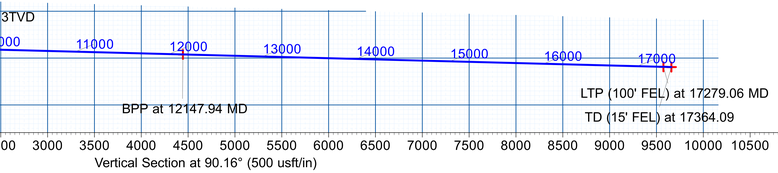
3330'GL + 26.5'KB @ 3356.50usft 3330.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	435958.23	555779.08	32.198518	-104.286645









DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Jurnegan BS Fed Com 3H	6348.55	850.77	-880.08	436809.00	554899.00	32.200857	-104.289489
FTP (100' FWL) - Jurnegan BS Fed Com 3H	6631.13	850.54	-794.59	436808.77	554984.49	32.200857	-104.289213
BPP - Jurnegan BS Fed Com 3H	6961.35	836.54	4447.20	436794.77	560226.28	32.200811	-104.272266
LTP (100' FEL) - Jurnegan BS Fed Com 3H	7093.81	822.37	9576.60	436780.60	565355.68	32.200763	-104.255683
BHL (15' FEL)- Jurnegan BS Fed Com 3H	7096.00	822.61	9661.60	436780.83	565440.68	32.200764	-104.255408

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00
3	2654.62	19.09	314.03	2637.05	109.53	-113.30	2.00	314.03	-113.61
4	5433.37	19.09	314.03	5262.95	741.25	-766.78	0.00	0.00	-768.85
5	6387.99	0.00	0.08	6200.00	850.77	-880.08	2.00	180.00	-882.46
6	6546.48	0.00	0.08	6358.49	850.77	-880.08	0.00	0.08	-882.46
7	7284.15	88.52	90.15	6835.80	849.53	-414.95	12.00	90.15	-417.32
8	12147.94	88.52	90.15	6961.35	836.54	4447.20	0.00	0.00	4444.85
9	17279.06	88.52	90.15	7093.81	822.83	9576.60	0.00	0.00	9574.26
10	17364.09	88.52	90.15	7096.00	822.61	9661.60	0.00	0.00	9659.26

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
26.00	26.00	SALADO
1101.00	1101.00	TOP SALT
1456.00	1456.00	BASE SALT
1756.00	1756.00	LAMAR
1861.00	1861.08	BELL CANYON
2676.00	2695.84	CHERRY CANYON
3566.00	3637.64	BRUSHY CANYON
5256.00	5426.02	BONE SPRING LIME
6161.00	6348.99	1ST BONE SPRING SAND
6366.00	6553.99	2ND BONE SPRING SHALE
6571.00	6766.72	2ND BONE SPRING SAND
6826.00	7198.81	TARGET

Plan: Plan 4 (Jurnegan BS Fed Com 3H/OH)
Created By: Jenise Kirkpatrick Date: 13:46, January 16 2026

Freedom Energy

Eddy County, NM NAD83
Jurnegan
Jurnegan BS Fed Com 3H

OH

Plan: Plan 4

Standard Planning Report

16 January, 2026

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Project Eddy County, NM NAD83

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

Site Jurnegan

Site Position:		**Northing:**	439,291.00 usft	**Latitude:**	32.207680
From:	Map	**Easting:**	555,610.00 usft	**Longitude:**	-104.287187
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well Jurnegan BS Fed Com 3H

Well Position	**+N/-S**	0.00 usft	**Northing:**	435,958.23 usft	**Latitude:**	32.198518
	+E/-W	0.00 usft	**Easting:**	555,779.09 usft	**Longitude:**	-104.286645
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,330.00 usft
Grid Convergence:		0.02 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2025	1/16/2026	6.53	59.61	46,866.61818919

Design Plan 4

Audit Notes:

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.16

Plan Survey Tool Program **Date** 1/16/2026

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,364.09	Plan 4 (OH)	MWD	
				OWSG MWD - Standard	

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (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	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,654.62	19.09	314.03	2,637.05	109.53	-113.30	2.00	2.00	0.00	314.03	
5,433.37	19.09	314.03	5,262.95	741.25	-766.78	0.00	0.00	0.00	0.00	
6,387.99	0.00	0.08	6,200.00	850.77	-880.08	2.00	-2.00	0.00	180.00	
6,546.48	0.00	0.08	6,358.49	850.77	-880.08	0.00	0.00	0.00	0.08	
7,284.15	88.52	90.15	6,835.80	849.53	-414.95	12.00	12.00	0.00	90.15	
12,147.94	88.52	90.15	6,961.35	836.54	4,447.20	0.00	0.00	0.00	0.00	BPP - Jurnegan BS F
17,279.06	88.52	90.15	7,093.81	822.83	9,576.60	0.00	0.00	0.00	0.00	LTP (100' FEL) - Jurn
17,364.09	88.52	90.15	7,096.00	822.61	9,661.60	0.00	0.00	0.00	0.00	BHL (15' FEL)- Jurneg

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.00	0.00	0.00	26.00	0.00	0.00	0.00	0.00	0.00	0.00
SALADO									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,101.00	0.00	0.00	1,101.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP SALT									
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,456.00	0.00	0.00	1,456.00	0.00	0.00	0.00	0.00	0.00	0.00
BASE SALT									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Nudge Build 2.00									
1,756.00	1.12	314.03	1,756.00	0.38	-0.39	-0.39	2.00	2.00	0.00
LAMAR									
1,800.00	2.00	314.03	1,799.98	1.21	-1.25	-1.26	2.00	2.00	0.00
1,861.08	3.22	314.03	1,861.00	3.15	-3.26	-3.26	2.00	2.00	0.00
BELL CANYON									
1,900.00	4.00	314.03	1,899.84	4.85	-5.02	-5.03	2.00	2.00	0.00
2,000.00	6.00	314.03	1,999.45	10.91	-11.28	-11.31	2.00	2.00	0.00
2,100.00	8.00	314.03	2,098.70	19.38	-20.05	-20.10	2.00	2.00	0.00
2,200.00	10.00	314.03	2,197.47	30.25	-31.29	-31.38	2.00	2.00	0.00
2,300.00	12.00	314.03	2,295.62	43.51	-45.01	-45.13	2.00	2.00	0.00
2,400.00	14.00	314.03	2,393.06	59.14	-61.18	-61.35	2.00	2.00	0.00
2,500.00	16.00	314.03	2,489.64	77.13	-79.79	-80.01	2.00	2.00	0.00
2,600.00	18.00	314.03	2,585.27	97.45	-100.81	-101.08	2.00	2.00	0.00
2,654.62	19.09	314.03	2,637.05	109.53	-113.30	-113.61	2.00	2.00	0.00
19.09° at 2654.62 MD									
2,695.84	19.09	314.03	2,676.00	118.90	-122.99	-123.32	0.00	0.00	0.00
CHERRY CANYON									
2,700.00	19.09	314.03	2,679.93	119.84	-123.97	-124.31	0.00	0.00	0.00
2,800.00	19.09	314.03	2,774.43	142.58	-147.49	-147.89	0.00	0.00	0.00
2,900.00	19.09	314.03	2,868.93	165.31	-171.01	-171.47	0.00	0.00	0.00
3,000.00	19.09	314.03	2,963.43	188.05	-194.52	-195.05	0.00	0.00	0.00
3,100.00	19.09	314.03	3,057.93	210.78	-218.04	-218.63	0.00	0.00	0.00
3,200.00	19.09	314.03	3,152.43	233.51	-241.56	-242.21	0.00	0.00	0.00
3,300.00	19.09	314.03	3,246.93	256.25	-265.08	-265.79	0.00	0.00	0.00
3,400.00	19.09	314.03	3,341.43	278.98	-288.59	-289.37	0.00	0.00	0.00
3,500.00	19.09	314.03	3,435.93	301.72	-312.11	-312.95	0.00	0.00	0.00
3,600.00	19.09	314.03	3,530.43	324.45	-335.63	-336.53	0.00	0.00	0.00
3,637.64	19.09	314.03	3,566.00	333.01	-344.48	-345.41	0.00	0.00	0.00

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
BRUSHY CANYON									
3,700.00	19.09	314.03	3,624.93	347.18	-359.14	-360.11	0.00	0.00	0.00
3,800.00	19.09	314.03	3,719.43	369.92	-382.66	-383.69	0.00	0.00	0.00
3,900.00	19.09	314.03	3,813.93	392.65	-406.18	-407.27	0.00	0.00	0.00
4,000.00	19.09	314.03	3,908.43	415.38	-429.70	-430.85	0.00	0.00	0.00
4,100.00	19.09	314.03	4,002.92	438.12	-453.21	-454.43	0.00	0.00	0.00
4,200.00	19.09	314.03	4,097.42	460.85	-476.73	-478.02	0.00	0.00	0.00
4,300.00	19.09	314.03	4,191.92	483.59	-500.25	-501.60	0.00	0.00	0.00
4,400.00	19.09	314.03	4,286.42	506.32	-523.76	-525.18	0.00	0.00	0.00
4,500.00	19.09	314.03	4,380.92	529.05	-547.28	-548.76	0.00	0.00	0.00
4,600.00	19.09	314.03	4,475.42	551.79	-570.80	-572.34	0.00	0.00	0.00
4,700.00	19.09	314.03	4,569.92	574.52	-594.32	-595.92	0.00	0.00	0.00
4,800.00	19.09	314.03	4,664.42	597.26	-617.83	-619.50	0.00	0.00	0.00
4,900.00	19.09	314.03	4,758.92	619.99	-641.35	-643.08	0.00	0.00	0.00
5,000.00	19.09	314.03	4,853.42	642.72	-664.87	-666.66	0.00	0.00	0.00
5,100.00	19.09	314.03	4,947.92	665.46	-688.38	-690.24	0.00	0.00	0.00
5,200.00	19.09	314.03	5,042.42	688.19	-711.90	-713.82	0.00	0.00	0.00
5,300.00	19.09	314.03	5,136.92	710.93	-735.42	-737.40	0.00	0.00	0.00
5,400.00	19.09	314.03	5,231.42	733.66	-758.94	-760.98	0.00	0.00	0.00
5,426.02	19.09	314.03	5,256.00	739.57	-765.05	-767.12	0.00	0.00	0.00
BONE SPRING LIME									
5,433.37	19.09	314.03	5,262.95	741.25	-766.78	-768.85	0.00	0.00	0.00
Start Drop -2.00									
5,500.00	17.76	314.03	5,326.16	755.88	-781.93	-784.03	2.00	-2.00	0.00
5,600.00	15.76	314.03	5,421.91	775.92	-802.66	-804.82	2.00	-2.00	0.00
5,700.00	13.76	314.03	5,518.60	793.63	-820.97	-823.19	2.00	-2.00	0.00
5,800.00	11.76	314.03	5,616.13	808.98	-836.85	-839.11	2.00	-2.00	0.00
5,900.00	9.76	314.03	5,714.37	821.96	-850.27	-852.57	2.00	-2.00	0.00
6,000.00	7.76	314.03	5,813.20	832.54	-861.22	-863.54	2.00	-2.00	0.00
6,100.00	5.76	314.03	5,912.50	840.72	-869.69	-872.03	2.00	-2.00	0.00
6,200.00	3.76	314.03	6,012.15	846.49	-875.65	-878.01	2.00	-2.00	0.00
6,300.00	1.76	314.03	6,112.02	849.83	-879.11	-881.48	2.00	-2.00	0.00
6,348.99	0.78	314.03	6,161.00	850.59	-879.89	-882.26	2.00	-2.00	0.00
1ST BONE SPRING SAND									
6,387.99	0.00	0.08	6,200.00	850.77	-880.08	-882.46	2.00	-2.00	0.00
Vertical at 6387.99 MD									
6,400.00	0.00	0.00	6,212.01	850.77	-880.08	-882.46	0.00	0.00	0.00
6,500.00	0.00	0.00	6,312.01	850.77	-880.08	-882.46	0.00	0.00	0.00
6,546.48	0.00	0.00	6,358.49	850.77	-880.08	-882.46	0.00	0.00	0.00
KOP Start Build 12.00									
6,550.00	0.42	90.15	6,362.01	850.77	-880.07	-882.44	12.00	12.00	0.00
6,553.99	0.90	90.15	6,366.00	850.77	-880.02	-882.40	12.00	12.00	0.00
2ND BONE SPRING SHALE									
6,575.00	3.42	90.15	6,386.99	850.77	-879.23	-881.60	12.00	12.00	0.00
6,600.00	6.42	90.15	6,411.90	850.76	-877.09	-879.46	12.00	12.00	0.00
6,625.00	9.42	90.15	6,436.66	850.76	-873.64	-876.01	12.00	12.00	0.00
6,650.00	12.42	90.15	6,461.20	850.74	-868.91	-871.28	12.00	12.00	0.00
6,675.00	15.42	90.15	6,485.46	850.73	-862.89	-865.26	12.00	12.00	0.00
6,700.00	18.42	90.15	6,509.38	850.71	-855.62	-857.99	12.00	12.00	0.00
6,725.00	21.42	90.15	6,532.88	850.68	-847.10	-849.47	12.00	12.00	0.00
6,750.00	24.42	90.15	6,555.90	850.66	-837.36	-839.73	12.00	12.00	0.00
6,766.72	26.43	90.15	6,571.00	850.64	-830.18	-832.56	12.00	12.00	0.00
2ND BONE SPRING SAND									

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,775.00	27.42	90.15	6,578.39	850.63	-826.43	-828.81	12.00	12.00	0.00
6,800.00	30.42	90.15	6,600.27	850.60	-814.34	-816.72	12.00	12.00	0.00
6,825.00	33.42	90.15	6,621.48	850.56	-801.13	-803.50	12.00	12.00	0.00
6,836.65	34.82	90.15	6,631.13	850.54	-794.59	-796.96	12.00	12.00	0.00
FTP (100' FWL) 6836.65MD / 6631.13TVD									
6,850.00	36.42	90.15	6,641.98	850.52	-786.82	-789.19	12.00	12.00	0.00
6,875.00	39.42	90.15	6,661.70	850.48	-771.45	-773.83	12.00	12.00	0.00
6,900.00	42.42	90.15	6,680.58	850.44	-755.08	-757.45	12.00	12.00	0.00
6,925.00	45.42	90.15	6,698.59	850.39	-737.74	-740.11	12.00	12.00	0.00
6,950.00	48.42	90.15	6,715.66	850.34	-719.48	-721.85	12.00	12.00	0.00
6,975.00	51.42	90.15	6,731.76	850.29	-700.35	-702.73	12.00	12.00	0.00
7,000.00	54.42	90.15	6,746.83	850.24	-680.41	-682.78	12.00	12.00	0.00
7,025.00	57.42	90.15	6,760.83	850.18	-659.71	-662.08	12.00	12.00	0.00
7,050.00	60.42	90.15	6,773.74	850.13	-638.30	-640.67	12.00	12.00	0.00
7,075.00	63.42	90.15	6,785.50	850.07	-616.24	-618.61	12.00	12.00	0.00
7,100.00	66.42	90.15	6,796.10	850.01	-593.60	-595.97	12.00	12.00	0.00
7,125.00	69.42	90.15	6,805.49	849.95	-570.44	-572.81	12.00	12.00	0.00
7,150.00	72.42	90.15	6,813.66	849.88	-546.81	-549.18	12.00	12.00	0.00
7,175.00	75.42	90.15	6,820.58	849.82	-522.79	-525.16	12.00	12.00	0.00
7,198.81	78.28	90.15	6,826.00	849.76	-499.61	-501.98	12.00	12.00	0.00
TARGET									
7,200.00	78.42	90.15	6,826.24	849.75	-498.44	-500.82	12.00	12.00	0.00
7,225.00	81.42	90.15	6,830.61	849.69	-473.83	-476.20	12.00	12.00	0.00
7,250.00	84.42	90.15	6,833.69	849.62	-449.03	-451.40	12.00	12.00	0.00
7,275.00	87.42	90.15	6,835.47	849.55	-424.09	-426.46	12.00	12.00	0.00
7,284.15	88.52	90.15	6,835.80	849.53	-414.95	-417.32	12.00	12.00	0.00
LP 88.52° at 7284.15 MD									
7,300.00	88.52	90.15	6,836.21	849.49	-399.10	-401.47	0.00	0.00	0.00
7,400.00	88.52	90.15	6,838.79	849.22	-299.14	-301.51	0.00	0.00	0.00
7,500.00	88.52	90.15	6,841.37	848.95	-199.17	-201.54	0.00	0.00	0.00
7,600.00	88.52	90.15	6,843.95	848.69	-99.21	-101.57	0.00	0.00	0.00
7,700.00	88.52	90.15	6,846.53	848.42	0.76	-1.61	0.00	0.00	0.00
7,800.00	88.52	90.15	6,849.11	848.15	100.73	98.36	0.00	0.00	0.00
7,900.00	88.52	90.15	6,851.69	847.88	200.69	198.33	0.00	0.00	0.00
8,000.00	88.52	90.15	6,854.28	847.62	300.66	298.29	0.00	0.00	0.00
8,100.00	88.52	90.15	6,856.86	847.35	400.63	398.26	0.00	0.00	0.00
8,200.00	88.52	90.15	6,859.44	847.08	500.59	498.23	0.00	0.00	0.00
8,300.00	88.52	90.15	6,862.02	846.82	600.56	598.19	0.00	0.00	0.00
8,400.00	88.52	90.15	6,864.60	846.55	700.53	698.16	0.00	0.00	0.00
8,500.00	88.52	90.15	6,867.18	846.28	800.49	798.13	0.00	0.00	0.00
8,600.00	88.52	90.15	6,869.76	846.02	900.46	898.09	0.00	0.00	0.00
8,700.00	88.52	90.15	6,872.34	845.75	1,000.42	998.06	0.00	0.00	0.00
8,800.00	88.52	90.15	6,874.93	845.48	1,100.39	1,098.03	0.00	0.00	0.00
8,900.00	88.52	90.15	6,877.51	845.21	1,200.36	1,197.99	0.00	0.00	0.00
9,000.00	88.52	90.15	6,880.09	844.95	1,300.32	1,297.96	0.00	0.00	0.00
9,100.00	88.52	90.15	6,882.67	844.68	1,400.29	1,397.93	0.00	0.00	0.00
9,200.00	88.52	90.15	6,885.25	844.41	1,500.26	1,497.89	0.00	0.00	0.00
9,300.00	88.52	90.15	6,887.83	844.15	1,600.22	1,597.86	0.00	0.00	0.00
9,400.00	88.52	90.15	6,890.41	843.88	1,700.19	1,697.83	0.00	0.00	0.00
9,500.00	88.52	90.15	6,893.00	843.61	1,800.15	1,797.79	0.00	0.00	0.00
9,600.00	88.52	90.15	6,895.58	843.34	1,900.12	1,897.76	0.00	0.00	0.00
9,700.00	88.52	90.15	6,898.16	843.08	2,000.09	1,997.73	0.00	0.00	0.00
9,800.00	88.52	90.15	6,900.74	842.81	2,100.05	2,097.69	0.00	0.00	0.00

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,900.00	88.52	90.15	6,903.32	842.54	2,200.02	2,197.66	0.00	0.00	0.00
10,000.00	88.52	90.15	6,905.90	842.28	2,299.99	2,297.63	0.00	0.00	0.00
10,100.00	88.52	90.15	6,908.48	842.01	2,399.95	2,397.59	0.00	0.00	0.00
10,200.00	88.52	90.15	6,911.07	841.74	2,499.92	2,497.56	0.00	0.00	0.00
10,300.00	88.52	90.15	6,913.65	841.47	2,599.89	2,597.53	0.00	0.00	0.00
10,400.00	88.52	90.15	6,916.23	841.21	2,699.85	2,697.49	0.00	0.00	0.00
10,500.00	88.52	90.15	6,918.81	840.94	2,799.82	2,797.46	0.00	0.00	0.00
10,600.00	88.52	90.15	6,921.39	840.67	2,899.78	2,897.43	0.00	0.00	0.00
10,700.00	88.52	90.15	6,923.97	840.41	2,999.75	2,997.39	0.00	0.00	0.00
10,800.00	88.52	90.15	6,926.55	840.14	3,099.72	3,097.36	0.00	0.00	0.00
10,900.00	88.52	90.15	6,929.14	839.87	3,199.68	3,197.33	0.00	0.00	0.00
11,000.00	88.52	90.15	6,931.72	839.60	3,299.65	3,297.29	0.00	0.00	0.00
11,100.00	88.52	90.15	6,934.30	839.34	3,399.62	3,397.26	0.00	0.00	0.00
11,200.00	88.52	90.15	6,936.88	839.07	3,499.58	3,497.23	0.00	0.00	0.00
11,300.00	88.52	90.15	6,939.46	838.80	3,599.55	3,597.19	0.00	0.00	0.00
11,400.00	88.52	90.15	6,942.04	838.54	3,699.51	3,697.16	0.00	0.00	0.00
11,500.00	88.52	90.15	6,944.62	838.27	3,799.48	3,797.13	0.00	0.00	0.00
11,600.00	88.52	90.15	6,947.21	838.00	3,899.45	3,897.09	0.00	0.00	0.00
11,700.00	88.52	90.15	6,949.79	837.74	3,999.41	3,997.06	0.00	0.00	0.00
11,800.00	88.52	90.15	6,952.37	837.47	4,099.38	4,097.03	0.00	0.00	0.00
11,900.00	88.52	90.15	6,954.95	837.20	4,199.35	4,196.99	0.00	0.00	0.00
12,000.00	88.52	90.15	6,957.53	836.93	4,299.31	4,296.96	0.00	0.00	0.00
12,100.00	88.52	90.15	6,960.11	836.67	4,399.28	4,396.93	0.00	0.00	0.00
12,147.94	88.52	90.15	6,961.35	836.54	4,447.20	4,444.85	0.00	0.00	0.00
BPP at 12147.94 MD									
12,200.00	88.52	90.15	6,962.69	836.40	4,499.25	4,496.89	0.00	0.00	0.00
12,300.00	88.52	90.15	6,965.28	836.13	4,599.21	4,596.86	0.00	0.00	0.00
12,400.00	88.52	90.15	6,967.86	835.87	4,699.18	4,696.83	0.00	0.00	0.00
12,500.00	88.52	90.15	6,970.44	835.60	4,799.14	4,796.79	0.00	0.00	0.00
12,600.00	88.52	90.15	6,973.02	835.33	4,899.11	4,896.76	0.00	0.00	0.00
12,700.00	88.52	90.15	6,975.60	835.06	4,999.08	4,996.73	0.00	0.00	0.00
12,800.00	88.52	90.15	6,978.18	834.80	5,099.04	5,096.69	0.00	0.00	0.00
12,900.00	88.52	90.15	6,980.76	834.53	5,199.01	5,196.66	0.00	0.00	0.00
13,000.00	88.52	90.15	6,983.35	834.26	5,298.98	5,296.63	0.00	0.00	0.00
13,100.00	88.52	90.15	6,985.93	834.00	5,398.94	5,396.59	0.00	0.00	0.00
13,200.00	88.52	90.15	6,988.51	833.73	5,498.91	5,496.56	0.00	0.00	0.00
13,300.00	88.52	90.15	6,991.09	833.46	5,598.88	5,596.53	0.00	0.00	0.00
13,400.00	88.52	90.15	6,993.67	833.19	5,698.84	5,696.49	0.00	0.00	0.00
13,500.00	88.52	90.15	6,996.25	832.93	5,798.81	5,796.46	0.00	0.00	0.00
13,600.00	88.52	90.15	6,998.83	832.66	5,898.77	5,896.43	0.00	0.00	0.00
13,700.00	88.52	90.15	7,001.42	832.39	5,998.74	5,996.39	0.00	0.00	0.00
13,800.00	88.52	90.15	7,004.00	832.13	6,098.71	6,096.36	0.00	0.00	0.00
13,900.00	88.52	90.15	7,006.58	831.86	6,198.67	6,196.33	0.00	0.00	0.00
14,000.00	88.52	90.15	7,009.16	831.59	6,298.64	6,296.29	0.00	0.00	0.00
14,100.00	88.52	90.15	7,011.74	831.32	6,398.61	6,396.26	0.00	0.00	0.00
14,200.00	88.52	90.15	7,014.32	831.06	6,498.57	6,496.23	0.00	0.00	0.00
14,300.00	88.52	90.15	7,016.90	830.79	6,598.54	6,596.19	0.00	0.00	0.00
14,400.00	88.52	90.15	7,019.48	830.52	6,698.50	6,696.16	0.00	0.00	0.00
14,500.00	88.52	90.15	7,022.07	830.26	6,798.47	6,796.13	0.00	0.00	0.00
14,600.00	88.52	90.15	7,024.65	829.99	6,898.44	6,896.09	0.00	0.00	0.00
14,700.00	88.52	90.15	7,027.23	829.72	6,998.40	6,996.06	0.00	0.00	0.00
14,800.00	88.52	90.15	7,029.81	829.46	7,098.37	7,096.03	0.00	0.00	0.00
14,900.00	88.52	90.15	7,032.39	829.19	7,198.34	7,195.99	0.00	0.00	0.00
15,000.00	88.52	90.15	7,034.97	828.92	7,298.30	7,295.96	0.00	0.00	0.00

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,100.00	88.52	90.15	7,037.55	828.65	7,398.27	7,395.93	0.00	0.00	0.00
15,200.00	88.52	90.15	7,040.14	828.39	7,498.24	7,495.89	0.00	0.00	0.00
15,300.00	88.52	90.15	7,042.72	828.12	7,598.20	7,595.86	0.00	0.00	0.00
15,400.00	88.52	90.15	7,045.30	827.85	7,698.17	7,695.83	0.00	0.00	0.00
15,500.00	88.52	90.15	7,047.88	827.59	7,798.13	7,795.79	0.00	0.00	0.00
15,600.00	88.52	90.15	7,050.46	827.32	7,898.10	7,895.76	0.00	0.00	0.00
15,700.00	88.52	90.15	7,053.04	827.05	7,998.07	7,995.73	0.00	0.00	0.00
15,800.00	88.52	90.15	7,055.62	826.78	8,098.03	8,095.69	0.00	0.00	0.00
15,900.00	88.52	90.15	7,058.21	826.52	8,198.00	8,195.66	0.00	0.00	0.00
16,000.00	88.52	90.15	7,060.79	826.25	8,297.97	8,295.63	0.00	0.00	0.00
16,100.00	88.52	90.15	7,063.37	825.98	8,397.93	8,395.59	0.00	0.00	0.00
16,200.00	88.52	90.15	7,065.95	825.72	8,497.90	8,495.56	0.00	0.00	0.00
16,300.00	88.52	90.15	7,068.53	825.45	8,597.86	8,595.53	0.00	0.00	0.00
16,400.00	88.52	90.15	7,071.11	825.18	8,697.83	8,695.49	0.00	0.00	0.00
16,500.00	88.52	90.15	7,073.69	824.91	8,797.80	8,795.46	0.00	0.00	0.00
16,600.00	88.52	90.15	7,076.28	824.65	8,897.76	8,895.43	0.00	0.00	0.00
16,700.00	88.52	90.15	7,078.86	824.38	8,997.73	8,995.39	0.00	0.00	0.00
16,800.00	88.52	90.15	7,081.44	824.11	9,097.70	9,095.36	0.00	0.00	0.00
16,900.00	88.52	90.15	7,084.02	823.85	9,197.66	9,195.33	0.00	0.00	0.00
17,000.00	88.52	90.15	7,086.60	823.58	9,297.63	9,295.29	0.00	0.00	0.00
17,100.00	88.52	90.15	7,089.18	823.31	9,397.60	9,395.26	0.00	0.00	0.00
17,200.00	88.52	90.15	7,091.76	823.04	9,497.56	9,495.23	0.00	0.00	0.00
17,279.06	88.52	90.15	7,093.81	822.83	9,576.60	9,574.26	0.00	0.00	0.00
LTP at 17279.06 MD									
17,300.00	88.52	90.15	7,094.35	822.78	9,597.53	9,595.19	0.00	0.00	0.00
17,364.09	88.52	90.15	7,096.00	822.61	9,661.60	9,659.26	0.00	0.00	0.00
TD (15' FEL) at 17364.09									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP - Jurnegan BS Fed - plan hits target center - Point	0.00	0.08	6,348.55	850.77	-880.08	436,809.00	554,899.00	32.200858	-104.289489
FTP (100' FWL) - Jurneg - plan hits target center - Point	0.00	0.08	6,631.13	850.54	-794.59	436,808.77	554,984.49	32.200857	-104.289213
BPP - Jurnegan BS Fed - plan hits target center - Point	0.00	0.08	6,961.35	836.54	4,447.20	436,794.77	560,226.29	32.200811	-104.272266
LTP (100' FEL) - Jurnega - plan misses target center by 0.46usft at 17279.06usft MD (7093.81 TVD, 822.83 N, 9576.60 E) - Point	0.00	0.08	7,093.81	822.37	9,576.60	436,780.60	565,355.68	32.200763	-104.255683
BHL (15' FEL)- Jurnegar - plan hits target center - Point	0.00	0.08	7,096.00	822.61	9,661.60	436,780.83	565,440.68	32.200764	-104.255408

Legacy Directional Drilling

Planning Report

Database:	EDM_WA	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Company:	Freedom Energy	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Project:	Eddy County, NM NAD83	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site:	Jurnegan	**North Reference:**	Grid
Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 4		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
26.00	26.00	SALADO			
1,101.00	1,101.00	TOP SALT			
1,456.00	1,456.00	BASE SALT			
1,756.00	1,756.00	LAMAR			
1,861.08	1,861.00	BELL CANYON			
2,695.84	2,676.00	CHERRY CANYON			
3,637.64	3,566.00	BRUSHY CANYON			
5,426.02	5,256.00	BONE SPRING LIME			
6,348.99	6,161.00	1ST BONE SPRING SAND			
6,553.99	6,366.00	2ND BONE SPRING SHALE			
6,766.72	6,571.00	2ND BONE SPRING SAND			
7,198.81	6,826.00	TARGET			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,700.00	1,700.00	0.00	0.00	Start Nudge Build 2.00
2,654.62	2,637.05	109.53	-113.30	19.09° at 2654.62 MD
5,433.37	5,262.95	741.25	-766.78	Start Drop -2.00
6,387.99	6,200.00	850.77	-880.08	Vertical at 6387.99 MD
6,546.48	6,358.49	850.77	-880.08	KOP Start Build 12.00
6,836.65	6,631.13	850.54	-794.59	FTP (100' FWL) 6836.65MD / 6631.13TVD
7,284.15	6,835.80	849.53	-414.95	LP 88.52° at 7284.15 MD
12,147.94	6,961.35	836.54	4,447.20	BPP at 12147.94 MD
17,279.06	7,093.81	822.83	9,576.60	LTP at 17279.06 MD
17,364.09	7,096.00	822.61	9,661.60	TD (15' FEL) at 17364.09

Freedom Energy

Eddy County, NM NAD83
Jurnegan
Jurnegan BS Fed Com 3H

OH
Plan 4

Anticollision Report

16 January, 2026

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Reference Plan 4

Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,936.41usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 1/16/2026

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,364.09	Plan 4 (OH)	MWD	OWSG MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Jurnegan						
Jurnegan BS Fed Com 10H - OH - Plan 3	2,099.59	2,106.43	30.05	15.26	2.032	CC
Jurnegan BS Fed Com 10H - OH - Plan 3	2,100.00	2,106.84	30.05	15.26	2.032	ES
Jurnegan BS Fed Com 10H - OH - Plan 3	17,364.09	17,143.46	771.27	343.43	1.803	Collision Risk Procedures Re
Jurnegan BS Fed Com 11H - OH - Plan 3	1,700.00	1,703.00	60.22	48.21	5.015	CC, ES
Jurnegan BS Fed Com 11H - OH - Plan 3	17,364.09	16,898.40	899.45	452.23	2.011	SF
Jurnegan BS Fed Com 2H - OH - Plan 3	17,364.09	17,249.05	1,506.70	999.74	2.972	CC, ES, SF
Jurnegan BS Fed Com 4H - OH - Plan 3	1,595.88	1,597.04	18.68	7.46	1.665	Collision Risk Procedures Re
Jurnegan BS Fed Com 4H - OH - Plan 3	1,600.00	1,601.15	18.69	7.44	1.661	Collision Risk Procedures Re
Jurnegan BS Fed Com 6H - OH - Plan 1	6,790.12	6,757.18	1,390.38	1,335.82	25.482	CC
Jurnegan BS Fed Com 6H - OH - Plan 1	17,364.09	18,097.16	1,620.06	1,166.91	3.575	ES, SF

Offset Design: Jurnegan - Jurnegan BS Fed Com 10H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.00	0.00	0.00	0.01	127.82	-24.74	31.87	40.35				
100.00	100.00	102.00	100.00	0.26	0.27	127.82	-24.74	31.87	40.35	39.81	0.53	75.541	
200.00	200.00	202.00	200.00	0.62	0.63	127.82	-24.74	31.87	40.35	39.10	1.25	32.251	
300.00	300.00	302.00	300.00	0.98	0.99	127.82	-24.74	31.87	40.35	38.38	1.97	20.502	
400.00	400.00	402.00	400.00	1.34	1.35	127.82	-24.74	31.87	40.35	37.66	2.68	15.027	
500.00	500.00	502.00	500.00	1.70	1.70	127.82	-24.74	31.87	40.35	36.95	3.40	11.860	
600.00	600.00	602.00	600.00	2.06	2.06	127.82	-24.74	31.87	40.35	36.23	4.12	9.796	
700.00	700.00	702.00	700.00	2.41	2.42	127.82	-24.74	31.87	40.35	35.51	4.84	8.344	
800.00	800.00	802.00	800.00	2.77	2.78	127.82	-24.74	31.87	40.35	34.80	5.55	7.266	
900.00	900.00	902.00	900.00	3.13	3.14	127.82	-24.74	31.87	40.35	34.08	6.27	6.435	
1,000.00	1,000.00	1,002.00	1,000.00	3.49	3.50	127.82	-24.74	31.87	40.35	33.36	6.99	5.775	
1,100.00	1,100.00	1,102.00	1,100.00	3.85	3.86	127.82	-24.74	31.87	40.35	32.64	7.70	5.238	
1,200.00	1,200.00	1,202.00	1,200.00	4.21	4.21	127.82	-24.74	31.87	40.35	31.93	8.42	4.792	
1,300.00	1,300.00	1,302.00	1,300.00	4.57	4.57	127.82	-24.74	31.87	40.35	31.21	9.14	4.416	
1,400.00	1,400.00	1,402.00	1,400.00	4.92	4.93	127.82	-24.74	31.87	40.35	30.49	9.85	4.094	
1,500.00	1,500.00	1,502.00	1,500.00	5.28	5.29	127.82	-24.74	31.87	40.35	29.78	10.57	3.817	
1,600.00	1,600.00	1,602.03	1,600.03	5.64	5.65	127.82	-24.74	31.87	40.35	29.06	11.29	3.574	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 10H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,700.00	1,700.00	1,703.31	1,701.28	6.00	6.01	126.79	-23.13	30.93	38.65	26.64	12.00	3.220	
1,800.00	1,799.98	1,804.43	1,802.26	6.36	6.37	169.72	-18.45	28.19	35.48	22.78	12.70	2.793	
1,900.00	1,899.84	1,905.40	1,902.82	6.71	6.73	164.51	-10.71	23.66	32.76	19.37	13.39	2.446	
2,000.00	1,999.45	2,006.21	2,002.85	7.07	7.10	156.85	0.07	17.35	30.80	16.72	14.08	2.188	
2,099.59	2,098.29	2,106.43	2,101.80	7.43	7.47	146.94	13.79	9.32	30.05	15.26	14.79	2.032	CC
2,100.00	2,098.70	2,106.84	2,102.20	7.43	7.47	146.89	13.85	9.28	30.05	15.26	14.79	2.032	ES
2,200.00	2,197.47	2,207.28	2,200.75	7.80	7.85	135.62	30.60	-0.52	30.95	15.40	15.55	1.991	Collision Risk Procedures Req.
2,300.00	2,295.62	2,307.52	2,298.35	8.18	8.25	124.58	50.28	-12.03	33.77	17.42	16.35	2.066	
2,400.00	2,393.06	2,407.54	2,394.89	8.57	8.67	115.06	72.84	-25.24	38.51	21.31	17.19	2.240	
2,500.00	2,489.64	2,507.34	2,490.24	8.99	9.11	107.52	98.23	-40.10	44.95	26.88	18.07	2.487	
2,600.00	2,585.27	2,606.90	2,584.29	9.43	9.58	101.83	126.41	-56.59	52.87	33.88	18.99	2.784	
2,700.00	2,679.93	2,706.20	2,676.92	9.90	10.08	97.36	157.30	-74.67	61.99	42.05	19.95	3.108	
2,800.00	2,774.43	2,805.07	2,767.84	10.39	10.62	91.86	190.80	-94.27	72.12	51.19	20.92	3.447	
2,900.00	2,868.93	2,903.26	2,856.77	10.90	11.19	85.54	226.72	-115.30	83.80	61.93	21.87	3.832	
3,000.00	2,963.43	3,000.00	2,942.94	11.42	11.80	79.07	264.67	-137.51	97.68	74.96	22.73	4.298	
3,100.00	3,057.93	3,096.76	3,027.59	11.95	12.45	72.79	305.11	-161.18	114.25	90.72	23.53	4.856	
3,200.00	3,152.43	3,191.67	3,109.03	12.50	13.14	67.08	347.15	-185.78	133.82	109.61	24.21	5.526	
3,300.00	3,246.93	3,285.09	3,187.59	13.05	13.86	62.01	390.79	-211.32	156.57	131.75	24.82	6.309	
3,400.00	3,341.43	3,380.61	3,266.84	13.62	14.64	57.70	436.81	-238.25	181.68	156.16	25.53	7.117	
3,500.00	3,435.93	3,476.59	3,346.46	14.19	15.44	54.41	483.08	-265.33	207.57	181.26	26.31	7.890	
3,600.00	3,530.43	3,572.57	3,426.07	14.76	16.26	51.84	529.34	-292.40	233.96	206.83	27.13	8.624	
3,700.00	3,624.93	3,668.55	3,505.69	15.34	17.10	49.80	575.60	-319.48	260.70	232.72	27.98	9.316	
3,800.00	3,719.43	3,764.53	3,585.31	15.93	17.95	48.14	621.86	-346.55	287.70	258.83	28.87	9.967	
3,900.00	3,813.93	3,860.51	3,664.93	16.52	18.82	46.76	668.13	-373.63	314.88	285.11	29.77	10.578	
4,000.00	3,908.43	3,956.49	3,744.54	17.12	19.69	45.59	714.39	-400.71	342.20	311.52	30.69	11.152	
4,100.00	4,002.92	4,052.47	3,824.16	17.72	20.58	44.61	760.65	-427.78	369.64	338.02	31.62	11.690	
4,200.00	4,097.42	4,148.45	3,903.78	18.32	21.47	43.75	806.92	-454.86	397.16	364.60	32.56	12.196	
4,300.00	4,191.92	4,244.44	3,983.39	18.93	22.37	43.01	853.18	-481.93	424.76	391.24	33.52	12.671	
4,400.00	4,286.42	4,340.42	4,063.01	19.54	23.28	42.36	899.44	-509.01	452.41	417.92	34.49	13.119	
4,500.00	4,380.92	4,436.40	4,142.63	20.15	24.19	41.78	945.70	-536.08	480.11	444.65	35.46	13.540	
4,600.00	4,475.42	4,532.38	4,222.25	20.76	25.11	41.27	991.97	-563.16	507.85	471.41	36.44	13.937	
4,700.00	4,569.92	4,628.36	4,301.86	21.38	26.03	40.80	1,038.23	-590.23	535.63	498.20	37.42	14.312	
4,800.00	4,664.42	4,737.30	4,392.75	21.99	27.06	40.38	1,090.07	-620.57	562.73	524.04	38.70	14.542	
4,900.00	4,758.92	4,855.80	4,494.00	22.61	28.14	40.16	1,143.19	-651.66	586.54	546.39	40.15	14.609	
5,000.00	4,853.42	4,976.36	4,599.53	23.23	29.18	40.16	1,193.49	-681.10	606.68	565.07	41.60	14.582	
5,100.00	4,947.92	5,098.60	4,708.94	23.85	30.16	40.38	1,240.52	-708.62	623.07	580.02	43.05	14.472	
5,200.00	5,042.42	5,222.10	4,821.73	24.48	31.09	40.80	1,283.91	-734.02	635.66	591.18	44.48	14.290	
5,300.00	5,136.92	5,346.42	4,937.35	25.10	31.94	41.41	1,323.31	-757.07	644.44	598.55	45.89	14.043	
5,400.00	5,231.42	5,471.08	5,055.18	25.73	32.73	42.22	1,358.43	-777.63	649.42	602.14	47.27	13.737	
5,500.00	5,326.16	5,595.70	5,174.62	26.35	33.45	43.20	1,389.08	-795.57	651.22	602.61	48.62	13.395	
5,600.00	5,421.91	5,720.18	5,295.36	26.93	34.09	44.15	1,415.20	-810.85	651.73	601.88	49.86	13.072	
5,700.00	5,518.60	5,844.48	5,417.11	27.47	34.66	45.04	1,436.74	-823.46	651.07	600.08	50.99	12.770	
5,800.00	5,616.13	5,968.51	5,539.57	27.97	35.16	45.88	1,453.67	-833.37	649.22	597.22	52.01	12.483	
5,900.00	5,714.37	6,092.20	5,662.43	28.43	35.59	46.68	1,465.98	-840.57	646.18	593.27	52.92	12.211	
6,000.00	5,813.20	6,215.50	5,785.39	28.86	35.95	47.43	1,473.68	-845.08	641.95	588.23	53.72	11.951	
6,100.00	5,912.50	6,338.32	5,908.15	29.24	36.24	48.14	1,476.81	-846.91	636.51	582.11	54.40	11.700	
6,200.00	6,012.15	6,437.35	6,006.86	29.59	36.41	49.16	1,476.87	-840.94	631.36	576.03	55.33	11.410	
6,275.37	6,087.41	6,504.02	6,071.74	29.82	36.48	50.74	1,476.83	-825.83	630.00	573.70	56.30	11.191	
6,300.00	6,112.02	6,525.00	6,091.65	29.90	36.49	51.40	1,476.81	-819.22	630.16	573.51	56.65	11.125	
6,400.00	6,212.01	6,600.00	6,160.03	30.17	36.52	8.31	1,476.73	-788.60	634.73	576.67	58.07	10.931	
6,500.00	6,312.01	6,668.16	6,217.33	30.43	36.51	11.58	1,476.62	-751.80	645.84	586.48	59.37	10.879	
6,600.00	6,411.90	6,725.00	6,260.71	30.67	36.48	-74.28	1,476.52	-715.12	663.82	603.71	60.12	11.042	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 10H - OH - Plan 3

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,700.00	6,509.38	6,775.00	6,295.04	30.81	36.45	-69.52	1,476.42	-678.79	684.63	624.79	59.85	11.440	
6,800.00	6,600.27	6,832.14	6,329.36	30.86	36.40	-65.00	1,476.29	-633.16	705.49	646.39	59.10	11.938	
6,900.00	6,680.58	6,885.42	6,356.25	30.85	36.35	-61.39	1,476.16	-587.18	724.51	666.61	57.90	12.513	
7,000.00	6,746.83	6,938.45	6,377.76	30.81	36.29	-58.64	1,476.03	-538.75	740.20	683.55	56.65	13.067	
7,100.00	6,796.10	6,991.30	6,393.72	30.76	36.23	-56.77	1,475.89	-488.39	751.47	695.85	55.61	13.513	
7,200.00	6,826.24	7,044.05	6,404.01	30.75	36.17	-55.79	1,475.74	-436.68	757.60	702.60	55.00	13.775	
7,300.00	6,836.21	7,100.27	6,408.63	30.80	36.10	-55.65	1,475.59	-380.68	758.39	703.41	54.99	13.793	
7,305.70	6,836.35	7,100.27	6,408.63	30.81	36.10	-55.65	1,475.59	-380.68	758.37	703.43	54.94	13.803	
7,400.00	6,838.79	7,193.63	6,410.82	30.97	36.01	-55.64	1,475.33	-287.36	758.49	702.45	56.04	13.536	
7,500.00	6,841.37	7,293.63	6,413.16	31.34	35.95	-55.62	1,475.05	-187.39	758.61	701.13	57.48	13.197	
7,600.00	6,843.95	7,393.63	6,415.51	31.93	35.95	-55.61	1,474.77	-87.41	758.74	699.55	59.18	12.820	
7,700.00	6,846.53	7,493.63	6,417.85	32.77	36.03	-55.59	1,474.49	12.56	758.86	697.74	61.12	12.416	
7,800.00	6,849.11	7,593.63	6,420.19	33.83	36.24	-55.58	1,474.21	112.53	758.98	695.72	63.27	11.997	
7,900.00	6,851.69	7,693.63	6,422.54	35.09	36.64	-55.56	1,473.93	212.50	759.11	693.51	65.60	11.571	
8,000.00	6,854.28	7,793.63	6,424.88	36.50	37.34	-55.55	1,473.65	312.47	759.23	691.12	68.11	11.147	
8,100.00	6,856.86	7,893.62	6,427.22	38.04	38.40	-55.53	1,473.37	412.45	759.36	688.58	70.78	10.729	
8,200.00	6,859.44	7,993.62	6,429.57	39.69	39.75	-55.52	1,473.09	512.42	759.48	685.91	73.57	10.323	
8,300.00	6,862.02	8,093.62	6,431.91	41.42	41.33	-55.50	1,472.81	612.39	759.61	683.11	76.49	9.930	
8,400.00	6,864.60	8,193.62	6,434.26	43.23	43.06	-55.49	1,472.53	712.36	759.73	680.21	79.52	9.554	
8,500.00	6,867.18	8,293.62	6,436.60	45.11	44.89	-55.47	1,472.25	812.33	759.86	677.22	82.64	9.195	
8,600.00	6,869.76	8,393.62	6,438.94	47.04	46.80	-55.46	1,471.98	912.31	759.98	674.13	85.85	8.853	
8,700.00	6,872.34	8,493.62	6,441.29	49.01	48.77	-55.44	1,471.70	1,012.28	760.11	670.98	89.13	8.528	
8,800.00	6,874.93	8,593.62	6,443.63	51.03	50.79	-55.43	1,471.42	1,112.25	760.23	667.75	92.48	8.221	
8,900.00	6,877.51	8,693.62	6,445.97	53.09	52.85	-55.41	1,471.14	1,212.22	760.36	664.47	95.89	7.930	
9,000.00	6,880.09	8,793.62	6,448.32	55.18	54.94	-55.39	1,470.86	1,312.19	760.48	661.13	99.35	7.655	
9,100.00	6,882.67	8,893.62	6,450.66	57.30	57.07	-55.38	1,470.58	1,412.16	760.61	657.75	102.86	7.394	
9,200.00	6,885.25	8,993.62	6,453.00	59.44	59.22	-55.36	1,470.30	1,512.14	760.73	654.32	106.42	7.149	
9,300.00	6,887.83	9,093.62	6,455.35	61.61	61.40	-55.35	1,470.02	1,612.11	760.86	650.85	110.01	6.916	
9,400.00	6,890.41	9,193.62	6,457.69	63.80	63.59	-55.33	1,469.74	1,712.08	760.98	647.35	113.64	6.697	
9,500.00	6,893.00	9,293.62	6,460.03	66.01	65.81	-55.32	1,469.46	1,812.05	761.11	643.81	117.29	6.489	
9,600.00	6,895.58	9,393.62	6,462.38	68.23	68.04	-55.30	1,469.18	1,912.02	761.23	640.25	120.98	6.292	
9,700.00	6,898.16	9,493.62	6,464.72	70.47	70.28	-55.29	1,468.90	2,012.00	761.36	636.66	124.70	6.106	
9,800.00	6,900.74	9,593.62	6,467.07	72.72	72.54	-55.27	1,468.63	2,111.97	761.49	633.05	128.43	5.929	
9,900.00	6,903.32	9,693.62	6,469.41	74.98	74.81	-55.26	1,468.35	2,211.94	761.61	629.42	132.19	5.761	
10,000.00	6,905.90	9,793.62	6,471.75	77.26	77.09	-55.24	1,468.07	2,311.91	761.74	625.77	135.97	5.602	
10,100.00	6,908.48	9,893.62	6,474.10	79.55	79.38	-55.23	1,467.79	2,411.88	761.86	622.10	139.77	5.451	
10,200.00	6,911.07	9,993.62	6,476.44	81.84	81.69	-55.21	1,467.51	2,511.86	761.99	618.41	143.58	5.307	
10,300.00	6,913.65	10,093.62	6,478.78	84.15	83.99	-55.20	1,467.23	2,611.83	762.11	614.71	147.41	5.170	
10,400.00	6,916.23	10,193.62	6,481.13	86.46	86.31	-55.18	1,466.95	2,711.80	762.24	610.99	151.25	5.040	
10,500.00	6,918.81	10,293.62	6,483.47	88.78	88.64	-55.17	1,466.67	2,811.77	762.37	607.26	155.10	4.915	
10,600.00	6,921.39	10,393.62	6,485.81	91.10	90.97	-55.15	1,466.39	2,911.74	762.49	603.53	158.97	4.797	
10,700.00	6,923.97	10,493.62	6,488.16	93.44	93.30	-55.14	1,466.11	3,011.71	762.62	599.78	162.84	4.683	
10,800.00	6,926.55	10,593.62	6,490.50	95.78	95.65	-55.12	1,465.83	3,111.69	762.74	596.02	166.73	4.575	
10,900.00	6,929.14	10,693.62	6,492.84	98.12	97.99	-55.11	1,465.55	3,211.66	762.87	592.25	170.62	4.471	
11,000.00	6,931.72	10,793.62	6,495.19	100.47	100.35	-55.09	1,465.28	3,311.63	763.00	588.47	174.53	4.372	
11,100.00	6,934.30	10,893.62	6,497.53	102.82	102.70	-55.08	1,465.00	3,411.60	763.12	584.69	178.44	4.277	
11,200.00	6,936.88	10,993.62	6,499.88	105.18	105.06	-55.06	1,464.72	3,511.57	763.25	580.89	182.36	4.186	
11,300.00	6,939.46	11,093.62	6,502.22	107.55	107.43	-55.04	1,464.44	3,611.55	763.38	577.10	186.28	4.098	
11,400.00	6,942.04	11,193.62	6,504.56	109.91	109.80	-55.03	1,464.16	3,711.52	763.50	573.29	190.21	4.014	
11,500.00	6,944.62	11,293.62	6,506.91	112.28	112.17	-55.01	1,463.88	3,811.49	763.63	569.48	194.15	3.933	
11,600.00	6,947.21	11,393.62	6,509.25	114.66	114.55	-55.00	1,463.60	3,911.46	763.76	565.67	198.09	3.856	
11,700.00	6,949.79	11,493.61	6,511.59	117.03	116.92	-54.98	1,463.32	4,011.43	763.88	561.85	202.03	3.781	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 10H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,800.00	6,952.37	11,593.61	6,513.94	119.41	119.31	-54.97	1,463.04	4,111.41	764.01	558.02	205.99	3.709	
11,900.00	6,954.95	11,693.61	6,516.28	121.80	121.69	-54.95	1,462.76	4,211.38	764.14	554.20	209.94	3.640	
12,000.00	6,957.53	11,793.61	6,518.62	124.18	124.08	-54.94	1,462.48	4,311.35	764.26	550.36	213.90	3.573	
12,100.00	6,960.11	11,893.61	6,520.97	126.57	126.47	-54.92	1,462.20	4,411.32	764.39	546.53	217.86	3.509	
12,200.00	6,962.69	11,993.61	6,523.31	128.96	128.86	-54.91	1,461.93	4,511.29	764.52	542.69	221.83	3.446	
12,300.00	6,965.28	12,093.61	6,525.66	131.35	131.25	-54.89	1,461.65	4,611.26	764.64	538.85	225.80	3.386	
12,400.00	6,967.86	12,193.61	6,528.00	133.75	133.65	-54.88	1,461.37	4,711.24	764.77	535.00	229.77	3.328	
12,500.00	6,970.44	12,293.61	6,530.34	136.14	136.04	-54.86	1,461.09	4,811.21	764.90	531.16	233.74	3.272	
12,600.00	6,973.02	12,393.61	6,532.69	138.54	138.44	-54.85	1,460.81	4,911.18	765.02	527.31	237.72	3.218	
12,700.00	6,975.60	12,493.61	6,535.03	140.94	140.84	-54.83	1,460.53	5,011.15	765.15	523.45	241.70	3.166	
12,800.00	6,978.18	12,593.61	6,537.37	143.34	143.25	-54.82	1,460.25	5,111.12	765.28	519.60	245.68	3.115	
12,900.00	6,980.76	12,693.61	6,539.72	145.75	145.65	-54.80	1,459.97	5,211.10	765.41	515.74	249.66	3.066	
13,000.00	6,983.35	12,793.61	6,542.06	148.15	148.06	-54.79	1,459.69	5,311.07	765.53	511.89	253.65	3.018	
13,100.00	6,985.93	12,893.61	6,544.40	150.56	150.46	-54.77	1,459.41	5,411.04	765.66	508.03	257.63	2.972	
13,200.00	6,988.51	12,993.61	6,546.75	152.97	152.87	-54.76	1,459.13	5,511.01	765.79	504.17	261.62	2.927	
13,300.00	6,991.09	13,093.61	6,549.09	155.38	155.28	-54.74	1,458.85	5,610.98	765.92	500.31	265.61	2.884	
13,400.00	6,993.67	13,193.61	6,551.43	157.79	157.69	-54.73	1,458.58	5,710.95	766.04	496.44	269.60	2.841	
13,500.00	6,996.25	13,293.61	6,553.78	160.20	160.11	-54.71	1,458.30	5,810.93	766.17	492.58	273.59	2.800	
13,600.00	6,998.83	13,393.61	6,556.12	162.61	162.52	-54.70	1,458.02	5,910.90	766.30	488.72	277.58	2.761	
13,700.00	7,001.42	13,493.61	6,558.47	165.03	164.94	-54.68	1,457.74	6,010.87	766.43	484.85	281.58	2.722	
13,800.00	7,004.00	13,593.61	6,560.81	167.44	167.35	-54.67	1,457.46	6,110.84	766.55	480.98	285.57	2.684	
13,900.00	7,006.58	13,693.61	6,563.15	169.86	169.77	-54.65	1,457.18	6,210.81	766.68	477.12	289.56	2.648	
14,000.00	7,009.16	13,793.61	6,565.50	172.28	172.19	-54.64	1,456.90	6,310.79	766.81	473.25	293.56	2.612	
14,100.00	7,011.74	13,893.61	6,567.84	174.70	174.60	-54.62	1,456.62	6,410.76	766.94	469.38	297.56	2.577	
14,200.00	7,014.32	13,993.61	6,570.18	177.12	177.02	-54.61	1,456.34	6,510.73	767.06	465.51	301.55	2.544	
14,300.00	7,016.90	14,093.61	6,572.53	179.54	179.44	-54.59	1,456.06	6,610.70	767.19	461.64	305.55	2.511	
14,400.00	7,019.48	14,193.61	6,574.87	181.96	181.87	-54.58	1,455.78	6,710.67	767.32	457.77	309.55	2.479	
14,500.00	7,022.07	14,293.61	6,577.21	184.38	184.29	-54.56	1,455.50	6,810.65	767.45	453.90	313.54	2.448	
14,600.00	7,024.65	14,393.61	6,579.56	186.80	186.71	-54.55	1,455.23	6,910.62	767.58	450.03	317.54	2.417	
14,700.00	7,027.23	14,493.61	6,581.90	189.23	189.13	-54.53	1,454.95	7,010.59	767.70	446.16	321.54	2.388	
14,800.00	7,029.81	14,593.61	6,584.24	191.65	191.56	-54.52	1,454.67	7,110.56	767.83	442.29	325.54	2.359	
14,900.00	7,032.39	14,693.61	6,586.59	194.08	193.98	-54.50	1,454.39	7,210.53	767.96	438.42	329.54	2.330	
15,000.00	7,034.97	14,793.61	6,588.93	196.50	196.41	-54.49	1,454.11	7,310.50	768.09	434.55	333.54	2.303	
15,100.00	7,037.55	14,893.61	6,591.28	198.93	198.83	-54.47	1,453.83	7,410.48	768.22	430.68	337.53	2.276	
15,200.00	7,040.14	14,993.60	6,593.62	201.35	201.26	-54.46	1,453.55	7,510.45	768.35	426.81	341.53	2.250	
15,300.00	7,042.72	15,093.60	6,595.96	203.78	203.69	-54.44	1,453.27	7,610.42	768.48	422.95	345.53	2.224	
15,400.00	7,045.30	15,193.60	6,598.31	206.21	206.12	-54.43	1,452.99	7,710.39	768.60	419.08	349.53	2.199	
15,500.00	7,047.88	15,293.60	6,600.65	208.64	208.54	-54.41	1,452.71	7,810.36	768.73	415.21	353.53	2.174	
15,600.00	7,050.46	15,393.60	6,602.99	211.07	210.97	-54.40	1,452.43	7,910.34	768.86	411.34	357.52	2.151	
15,700.00	7,053.04	15,493.60	6,605.34	213.50	213.40	-54.38	1,452.15	8,010.31	768.99	407.47	361.52	2.127	
15,800.00	7,055.62	15,593.60	6,607.68	215.93	215.83	-54.37	1,451.88	8,110.28	769.12	403.60	365.52	2.104	
15,900.00	7,058.21	15,693.60	6,610.02	218.36	218.26	-54.35	1,451.60	8,210.25	769.25	399.73	369.51	2.082	
16,000.00	7,060.79	15,793.60	6,612.37	220.79	220.69	-54.34	1,451.32	8,310.22	769.38	395.87	373.51	2.060	
16,100.00	7,063.37	15,893.60	6,614.71	223.22	223.13	-54.32	1,451.04	8,410.20	769.50	392.00	377.50	2.038	
16,200.00	7,065.95	15,993.60	6,617.05	225.65	225.56	-54.31	1,450.76	8,510.17	769.63	388.13	381.50	2.017	
16,300.00	7,068.53	16,093.60	6,619.40	228.08	227.99	-54.29	1,450.48	8,610.14	769.76	384.27	385.49	1.997	Collision Risk Procedures Req.
16,400.00	7,071.11	16,193.60	6,621.74	230.52	230.42	-54.28	1,450.20	8,710.11	769.89	380.40	389.49	1.977	Collision Risk Procedures Req.
16,500.00	7,073.69	16,293.60	6,624.09	232.95	232.85	-54.26	1,449.92	8,810.08	770.02	376.54	393.48	1.957	Collision Risk Procedures Req.
16,600.00	7,076.28	16,393.60	6,626.43	235.38	235.29	-54.25	1,449.64	8,910.05	770.15	372.67	397.48	1.938	Collision Risk Procedures Req.
16,700.00	7,078.86	16,493.60	6,628.77	237.82	237.72	-54.23	1,449.36	9,010.03	770.28	368.81	401.47	1.919	Collision Risk Procedures Req.
16,800.00	7,081.44	16,593.60	6,631.12	240.25	240.16	-54.22	1,449.08	9,110.00	770.41	364.95	405.46	1.900	Collision Risk Procedures Req.
16,900.00	7,084.02	16,693.60	6,633.46	242.69	242.59	-54.20	1,448.80	9,209.97	770.54	361.09	409.45	1.882	Collision Risk Procedures Req.

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 10H - OH - Plan 3

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,000.00	7,086.60	16,793.60	6,635.80	245.12	245.02	-54.19	1,448.53	9,309.94	770.67	357.22	413.44	1.864	Collision Risk Procedures Req.
17,100.00	7,089.18	16,893.60	6,638.15	247.56	247.46	-54.17	1,448.25	9,409.91	770.80	353.36	417.43	1.847	Collision Risk Procedures Req.
17,200.00	7,091.76	16,993.60	6,640.49	249.99	249.89	-54.16	1,447.97	9,509.89	770.93	349.50	421.42	1.829	Collision Risk Procedures Req.
17,300.00	7,094.35	17,093.60	6,642.83	252.43	252.33	-54.14	1,447.69	9,609.86	771.06	345.64	425.41	1.812	Collision Risk Procedures Req.
17,300.32	7,094.35	17,093.92	6,642.84	252.44	252.34	-54.14	1,447.69	9,610.18	771.06	345.63	425.42	1.812	Collision Risk Procedures Req.
17,364.09	7,096.00	17,143.46	6,644.00	253.99	253.54	-54.14	1,447.55	9,659.70	771.27	343.43	427.84	1.803	Collision Risk Procedures Req., SF

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 11H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	3.00	0.00	0.00	0.01	127.45	-36.61	47.81	60.22				
100.00	100.00	103.00	100.00	0.26	0.27	127.45	-36.61	47.81	60.22	59.68	0.54	111.992	
200.00	200.00	203.00	200.00	0.62	0.63	127.45	-36.61	47.81	60.22	58.96	1.25	47.996	
300.00	300.00	303.00	300.00	0.98	0.99	127.45	-36.61	47.81	60.22	58.25	1.97	30.543	
400.00	400.00	403.00	400.00	1.34	1.35	127.45	-36.61	47.81	60.22	57.53	2.69	22.398	
500.00	500.00	503.00	500.00	1.70	1.71	127.45	-36.61	47.81	60.22	56.81	3.41	17.683	
600.00	600.00	603.00	600.00	2.06	2.07	127.45	-36.61	47.81	60.22	56.10	4.12	14.608	
700.00	700.00	703.00	700.00	2.41	2.43	127.45	-36.61	47.81	60.22	55.38	4.84	12.444	
800.00	800.00	803.00	800.00	2.77	2.78	127.45	-36.61	47.81	60.22	54.66	5.56	10.838	
900.00	900.00	903.00	900.00	3.13	3.14	127.45	-36.61	47.81	60.22	53.95	6.27	9.599	
1,000.00	1,000.00	1,003.00	1,000.00	3.49	3.50	127.45	-36.61	47.81	60.22	53.23	6.99	8.615	
1,100.00	1,100.00	1,103.00	1,100.00	3.85	3.86	127.45	-36.61	47.81	60.22	52.51	7.71	7.813	
1,200.00	1,200.00	1,203.00	1,200.00	4.21	4.22	127.45	-36.61	47.81	60.22	51.79	8.42	7.148	
1,300.00	1,300.00	1,303.00	1,300.00	4.57	4.58	127.45	-36.61	47.81	60.22	51.08	9.14	6.588	
1,400.00	1,400.00	1,403.00	1,400.00	4.92	4.93	127.45	-36.61	47.81	60.22	50.36	9.86	6.109	
1,500.00	1,500.00	1,503.00	1,500.00	5.28	5.29	127.45	-36.61	47.81	60.22	49.64	10.57	5.694	
1,600.00	1,600.00	1,603.00	1,600.00	5.64	5.65	127.45	-36.61	47.81	60.22	48.93	11.29	5.333	
1,700.00	1,700.00	1,703.00	1,700.00	6.00	6.01	127.45	-36.61	47.81	60.22	48.21	12.01	5.015	CC, ES
1,800.00	1,799.98	1,803.04	1,800.04	6.36	6.37	173.60	-36.61	47.81	61.95	49.23	12.72	4.869	
1,900.00	1,899.84	1,904.89	1,901.86	6.71	6.73	174.97	-36.39	45.90	65.56	52.13	13.43	4.882	
2,000.00	1,999.45	2,006.73	2,003.55	7.07	7.08	178.04	-35.75	40.40	69.75	55.63	14.12	4.941	
2,100.00	2,098.70	2,108.49	2,104.89	7.43	7.43	-177.57	-34.70	31.33	74.84	60.04	14.81	5.055	
2,200.00	2,197.47	2,210.08	2,205.68	7.80	7.80	-172.28	-33.23	18.71	81.22	65.72	15.50	5.240	
2,300.00	2,295.62	2,311.43	2,305.71	8.18	8.17	-166.51	-31.35	2.59	89.29	73.07	16.21	5.507	
2,400.00	2,393.06	2,412.46	2,404.80	8.57	8.55	-160.66	-29.08	-16.97	99.38	82.43	16.95	5.862	
2,500.00	2,489.64	2,513.10	2,502.76	8.99	8.95	-155.04	-26.41	-39.89	111.74	94.01	17.73	6.302	
2,600.00	2,585.27	2,613.28	2,599.40	9.43	9.37	-149.84	-23.37	-66.09	126.50	107.95	18.55	6.819	
2,700.00	2,679.93	2,711.84	2,693.76	9.90	9.81	-145.53	-20.08	-94.36	143.69	124.26	19.43	7.397	
2,800.00	2,774.43	2,809.82	2,787.52	10.39	10.26	-142.29	-16.79	-122.61	161.83	141.51	20.33	7.962	
2,900.00	2,868.93	2,907.79	2,881.27	10.90	10.73	-139.72	-13.51	-150.87	180.37	159.12	21.25	8.488	
3,000.00	2,963.43	3,005.76	2,975.02	11.42	11.20	-137.62	-10.22	-179.12	199.20	177.00	22.20	8.973	
3,100.00	3,057.93	3,103.74	3,068.78	11.95	11.69	-135.88	-6.94	-207.37	218.25	195.08	23.17	9.420	
3,200.00	3,152.43	3,201.71	3,162.53	12.50	12.19	-134.43	-3.65	-235.63	237.45	213.29	24.16	9.829	
3,300.00	3,246.93	3,299.68	3,256.28	13.05	12.70	-133.19	-0.36	-263.88	256.79	231.62	25.16	10.205	
3,400.00	3,341.43	3,397.66	3,350.04	13.62	13.21	-132.12	2.92	-292.14	276.22	250.03	26.18	10.549	
3,500.00	3,435.93	3,495.63	3,443.79	14.19	13.73	-131.20	6.21	-320.39	295.73	268.51	27.22	10.865	
3,600.00	3,530.43	3,593.60	3,537.54	14.76	14.26	-130.39	9.49	-348.64	315.31	287.04	28.26	11.155	
3,700.00	3,624.93	3,691.58	3,631.30	15.34	14.79	-129.67	12.78	-376.90	334.94	305.61	29.32	11.423	
3,800.00	3,719.43	3,789.55	3,725.05	15.93	15.32	-129.04	16.06	-405.15	354.61	324.22	30.39	11.669	
3,900.00	3,813.93	3,887.52	3,818.80	16.52	15.86	-128.47	19.35	-433.41	374.32	342.86	31.46	11.897	
4,000.00	3,908.43	3,985.50	3,912.56	17.12	16.41	-127.96	22.64	-461.66	394.07	361.52	32.55	12.108	
4,100.00	4,002.92	4,083.47	4,006.31	17.72	16.95	-127.49	25.92	-489.92	413.84	380.21	33.64	12.303	
4,200.00	4,097.42	4,181.44	4,100.06	18.32	17.50	-127.07	29.21	-518.17	433.64	398.90	34.73	12.485	
4,300.00	4,191.92	4,279.42	4,193.82	18.93	18.06	-126.69	32.49	-546.42	453.45	417.62	35.84	12.654	
4,400.00	4,286.42	4,377.39	4,287.57	19.54	18.61	-126.33	35.78	-574.68	473.29	436.35	36.94	12.811	
4,500.00	4,380.92	4,475.36	4,381.32	20.15	19.17	-126.01	39.06	-602.93	493.14	455.08	38.06	12.958	
4,600.00	4,475.42	4,573.34	4,475.08	20.76	19.73	-125.71	42.35	-631.19	513.00	473.83	39.17	13.096	
4,700.00	4,569.92	4,671.31	4,568.83	21.38	20.29	-125.43	45.64	-659.44	532.88	492.59	40.29	13.225	
4,800.00	4,664.42	4,769.28	4,662.58	21.99	20.86	-125.18	48.92	-687.69	552.77	511.35	41.42	13.346	
4,900.00	4,758.92	4,867.26	4,756.34	22.61	21.42	-124.94	52.21	-715.95	572.67	530.12	42.55	13.459	
5,000.00	4,853.42	4,965.23	4,850.09	23.23	21.99	-124.71	55.49	-744.20	592.57	548.90	43.68	13.566	
5,100.00	4,947.92	5,063.39	4,944.09	23.85	22.55	-124.53	58.76	-772.27	612.48	567.68	44.81	13.669	

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

Legacy Directional Drilling

Anticollision Report

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Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 11H - OH - Plan 3

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,042.42	5,161.86	5,039.15	24.48	23.09	-124.61	61.73	-797.81	632.34	586.44	45.90	13.777	
5,300.00	5,136.92	5,260.20	5,134.89	25.10	23.59	-124.99	64.31	-820.05	652.13	605.20	46.93	13.895	
5,400.00	5,231.42	5,358.15	5,230.98	25.73	24.06	-125.63	66.51	-838.96	671.93	624.02	47.90	14.027	
5,500.00	5,326.16	5,455.67	5,327.23	26.35	24.49	-126.68	68.32	-854.52	691.38	642.58	48.81	14.166	
5,600.00	5,421.91	5,553.13	5,423.89	26.93	24.88	-127.81	69.75	-866.82	709.08	659.44	49.64	14.285	
5,700.00	5,518.60	5,650.50	5,520.82	27.47	25.24	-128.90	70.80	-875.84	724.91	674.52	50.39	14.385	
5,800.00	5,616.13	5,747.71	5,617.86	27.97	25.57	-129.98	71.47	-881.57	738.87	687.79	51.08	14.465	
5,900.00	5,714.37	5,844.71	5,714.82	28.43	25.86	-131.04	71.75	-884.03	750.96	699.27	51.69	14.528	
6,000.00	5,813.20	5,943.08	5,813.20	28.86	26.13	-132.04	71.77	-884.13	761.12	708.86	52.26	14.565	
6,100.00	5,912.50	6,042.38	5,912.50	29.24	26.45	-132.81	71.77	-884.13	769.09	716.21	52.88	14.545	
6,200.00	6,012.15	6,142.43	6,012.26	29.59	26.72	-133.75	71.75	-878.55	774.74	721.36	53.38	14.514	
6,300.00	6,112.02	6,235.84	6,102.60	29.90	26.83	-135.75	71.69	-855.39	778.57	725.05	53.52	14.547	
6,400.00	6,212.01	6,317.80	6,176.85	30.17	26.88	175.66	71.59	-820.93	782.22	728.86	53.35	14.661	
6,500.00	6,312.01	6,386.60	6,233.88	30.43	26.90	172.87	71.48	-782.54	789.25	736.36	52.89	14.924	
6,600.00	6,411.90	6,444.25	6,277.00	30.67	26.92	79.17	71.37	-744.34	802.04	749.95	52.09	15.397	
6,700.00	6,509.38	6,500.00	6,314.04	30.81	26.95	75.00	71.26	-702.71	817.97	766.86	51.12	16.003	
6,800.00	6,600.27	6,550.00	6,342.94	30.86	27.00	71.31	71.14	-661.94	834.86	784.77	50.09	16.667	
6,900.00	6,680.58	6,608.35	6,371.05	30.85	27.09	67.87	71.00	-610.84	850.97	801.76	49.21	17.293	
7,000.00	6,746.83	6,662.08	6,391.24	30.81	27.22	65.21	70.86	-561.08	864.94	816.35	48.58	17.804	
7,100.00	6,796.10	6,715.58	6,405.68	30.76	27.39	63.27	70.71	-509.60	875.66	827.30	48.36	18.108	
7,200.00	6,826.24	6,768.92	6,414.24	30.75	27.59	62.11	70.56	-456.98	882.38	833.74	48.64	18.142	
7,300.00	6,836.21	6,834.35	6,417.37	30.80	27.91	61.73	70.38	-391.65	884.58	835.17	49.41	17.904	
7,400.00	6,838.79	6,934.35	6,419.68	30.97	28.55	61.72	70.10	-291.68	884.72	834.26	50.46	17.533	
7,500.00	6,841.37	7,034.35	6,421.98	31.34	29.37	61.70	69.82	-191.70	884.87	833.01	51.86	17.063	
7,600.00	6,843.95	7,134.35	6,424.28	31.93	30.36	61.69	69.54	-91.73	885.01	831.43	53.58	16.518	
7,700.00	6,846.53	7,234.35	6,426.59	32.77	31.52	61.67	69.26	8.24	885.16	829.57	55.59	15.923	
7,800.00	6,849.11	7,334.35	6,428.89	33.83	32.82	61.65	68.97	108.21	885.30	827.44	57.86	15.300	
7,900.00	6,851.69	7,434.35	6,431.19	35.09	34.24	61.64	68.69	208.19	885.45	825.08	60.36	14.668	
8,000.00	6,854.28	7,534.35	6,433.49	36.50	35.78	61.62	68.41	308.16	885.59	822.52	63.07	14.041	
8,100.00	6,856.86	7,634.35	6,435.80	38.04	37.41	61.61	68.13	408.13	885.74	819.78	65.95	13.430	
8,200.00	6,859.44	7,734.35	6,438.10	39.69	39.14	61.59	67.85	508.10	885.88	816.89	68.99	12.840	
8,300.00	6,862.02	7,834.34	6,440.40	41.42	40.93	61.58	67.57	608.08	886.03	813.86	72.17	12.277	
8,400.00	6,864.60	7,934.34	6,442.71	43.23	42.79	61.56	67.29	708.05	886.17	810.71	75.46	11.743	
8,500.00	6,867.18	8,034.34	6,445.01	45.11	44.71	61.55	67.00	808.02	886.32	807.46	78.86	11.239	
8,600.00	6,869.76	8,134.34	6,447.31	47.04	46.68	61.53	66.72	908.00	886.46	804.12	82.35	10.765	
8,700.00	6,872.34	8,234.34	6,449.61	49.01	48.69	61.52	66.44	1,007.97	886.61	800.70	85.91	10.320	
8,800.00	6,874.93	8,334.34	6,451.92	51.03	50.74	61.50	66.16	1,107.94	886.76	797.21	89.55	9.903	
8,900.00	6,877.51	8,434.34	6,454.22	53.09	52.82	61.49	65.88	1,207.91	886.90	793.66	93.24	9.512	
9,000.00	6,880.09	8,534.34	6,456.52	55.18	54.94	61.47	65.60	1,307.89	887.05	790.05	96.99	9.145	
9,100.00	6,882.67	8,634.34	6,458.82	57.30	57.08	61.45	65.32	1,407.86	887.19	786.40	100.79	8.802	
9,200.00	6,885.25	8,734.34	6,461.13	59.44	59.25	61.44	65.03	1,507.83	887.34	782.70	104.64	8.480	
9,300.00	6,887.83	8,834.34	6,463.43	61.61	61.43	61.42	64.75	1,607.80	887.48	778.97	108.51	8.178	
9,400.00	6,890.41	8,934.34	6,465.73	63.80	63.64	61.41	64.47	1,707.78	887.63	775.20	112.43	7.895	
9,500.00	6,893.00	9,034.34	6,468.04	66.01	65.86	61.39	64.19	1,807.75	887.78	771.40	116.37	7.629	
9,600.00	6,895.58	9,134.34	6,470.34	68.23	68.10	61.38	63.91	1,907.72	887.92	767.58	120.34	7.378	
9,700.00	6,898.16	9,234.34	6,472.64	70.47	70.36	61.36	63.63	2,007.70	888.07	763.73	124.34	7.142	
9,800.00	6,900.74	9,334.34	6,474.94	72.72	72.62	61.35	63.35	2,107.67	888.21	759.86	128.35	6.920	
9,900.00	6,903.32	9,434.34	6,477.25	74.98	74.90	61.33	63.07	2,207.64	888.36	755.97	132.39	6.710	
10,000.00	6,905.90	9,534.34	6,479.55	77.26	77.19	61.32	62.78	2,307.61	888.51	752.06	136.45	6.512	
10,100.00	6,908.48	9,634.34	6,481.85	79.55	79.49	61.30	62.50	2,407.59	888.65	748.13	140.52	6.324	
10,200.00	6,911.07	9,734.34	6,484.16	81.84	81.80	61.29	62.22	2,507.56	888.80	744.19	144.60	6.146	
10,300.00	6,913.65	9,834.34	6,486.46	84.15	84.11	61.27	61.94	2,607.53	888.95	740.24	148.70	5.978	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 11H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,400.00	6,916.23	9,934.34	6,488.76	86.46	86.43	61.25	61.66	2,707.50	889.09	736.27	152.82	5.818	
10,500.00	6,918.81	10,034.34	6,491.06	88.78	88.76	61.24	61.38	2,807.48	889.24	732.30	156.94	5.666	
10,600.00	6,921.39	10,134.34	6,493.37	91.10	91.10	61.22	61.10	2,907.45	889.38	728.31	161.08	5.522	
10,700.00	6,923.97	10,234.34	6,495.67	93.44	93.44	61.21	60.81	3,007.42	889.53	724.31	165.22	5.384	
10,800.00	6,926.55	10,334.34	6,497.97	95.78	95.79	61.19	60.53	3,107.39	889.68	720.31	169.37	5.253	
10,900.00	6,929.14	10,434.33	6,500.28	98.12	98.14	61.18	60.25	3,207.37	889.83	716.29	173.53	5.128	
11,000.00	6,931.72	10,534.33	6,502.58	100.47	100.50	61.16	59.97	3,307.34	889.97	712.27	177.70	5.008	
11,100.00	6,934.30	10,634.33	6,504.88	102.82	102.86	61.15	59.69	3,407.31	890.12	708.24	181.87	4.894	
11,200.00	6,936.88	10,734.33	6,507.18	105.18	105.23	61.13	59.41	3,507.29	890.27	704.21	186.05	4.785	
11,300.00	6,939.46	10,834.33	6,509.49	107.55	107.60	61.12	59.13	3,607.26	890.41	700.17	190.24	4.680	
11,400.00	6,942.04	10,934.33	6,511.79	109.91	109.97	61.10	58.84	3,707.23	890.56	696.13	194.43	4.580	
11,500.00	6,944.62	11,034.33	6,514.09	112.28	112.35	61.09	58.56	3,807.20	890.71	692.08	198.63	4.484	
11,600.00	6,947.21	11,134.33	6,516.39	114.66	114.73	61.07	58.28	3,907.18	890.85	688.02	202.83	4.392	
11,700.00	6,949.79	11,234.33	6,518.70	117.03	117.11	61.06	58.00	4,007.15	891.00	683.97	207.04	4.304	
11,800.00	6,952.37	11,334.33	6,521.00	119.41	119.50	61.04	57.72	4,107.12	891.15	679.90	211.25	4.219	
11,900.00	6,954.95	11,434.33	6,523.30	121.80	121.89	61.03	57.44	4,207.09	891.30	675.84	215.46	4.137	
12,000.00	6,957.53	11,534.33	6,525.61	124.18	124.28	61.01	57.16	4,307.07	891.44	671.77	219.67	4.058	
12,100.00	6,960.11	11,634.33	6,527.91	126.57	126.67	61.00	56.87	4,407.04	891.59	667.70	223.89	3.982	
12,200.00	6,962.69	11,734.33	6,530.21	128.96	129.06	60.98	56.59	4,507.01	891.74	663.62	228.11	3.909	
12,300.00	6,965.28	11,834.33	6,532.51	131.35	131.46	60.97	56.31	4,606.99	891.89	659.55	232.34	3.839	
12,400.00	6,967.86	11,934.33	6,534.82	133.75	133.86	60.95	56.03	4,706.96	892.03	655.47	236.57	3.771	
12,500.00	6,970.44	12,034.33	6,537.12	136.14	136.26	60.93	55.75	4,806.93	892.18	651.39	240.80	3.705	
12,600.00	6,973.02	12,134.33	6,539.42	138.54	138.66	60.92	55.47	4,906.90	892.33	647.30	245.03	3.642	
12,700.00	6,975.60	12,234.33	6,541.73	140.94	141.07	60.90	55.19	5,006.88	892.48	643.22	249.26	3.581	
12,800.00	6,978.18	12,334.33	6,544.03	143.34	143.47	60.89	54.91	5,106.85	892.63	639.13	253.49	3.521	
12,900.00	6,980.76	12,434.33	6,546.33	145.75	145.88	60.87	54.62	5,206.82	892.77	635.04	257.73	3.464	
13,000.00	6,983.35	12,534.33	6,548.63	148.15	148.29	60.86	54.34	5,306.79	892.92	630.95	261.97	3.409	
13,100.00	6,985.93	12,634.33	6,550.94	150.56	150.70	60.84	54.06	5,406.77	893.07	626.86	266.21	3.355	
13,200.00	6,988.51	12,734.33	6,553.24	152.97	153.11	60.83	53.78	5,506.74	893.22	622.77	270.45	3.303	
13,300.00	6,991.09	12,834.33	6,555.54	155.38	155.53	60.81	53.50	5,606.71	893.37	618.68	274.69	3.252	
13,400.00	6,993.67	12,934.33	6,557.85	157.79	157.94	60.80	53.22	5,706.68	893.52	614.58	278.93	3.203	
13,500.00	6,996.25	13,034.32	6,560.15	160.20	160.36	60.78	52.94	5,806.66	893.66	610.49	283.18	3.156	
13,600.00	6,998.83	13,134.32	6,562.45	162.61	162.77	60.77	52.65	5,906.63	893.81	606.39	287.42	3.110	
13,700.00	7,001.42	13,234.32	6,564.75	165.03	165.19	60.75	52.37	6,006.60	893.96	602.30	291.66	3.065	
13,800.00	7,004.00	13,334.32	6,567.06	167.44	167.61	60.74	52.09	6,106.58	894.11	598.20	295.91	3.022	
13,900.00	7,006.58	13,434.32	6,569.36	169.86	170.03	60.72	51.81	6,206.55	894.26	594.10	300.16	2.979	
14,000.00	7,009.16	13,534.32	6,571.66	172.28	172.45	60.71	51.53	6,306.52	894.41	590.01	304.40	2.938	
14,100.00	7,011.74	13,634.32	6,573.96	174.70	174.87	60.69	51.25	6,406.49	894.56	585.91	308.65	2.898	
14,200.00	7,014.32	13,734.32	6,576.27	177.12	177.29	60.68	50.97	6,506.47	894.71	581.81	312.90	2.859	
14,300.00	7,016.90	13,834.32	6,578.57	179.54	179.71	60.66	50.68	6,606.44	894.85	577.71	317.14	2.822	
14,400.00	7,019.48	13,934.32	6,580.87	181.96	182.14	60.65	50.40	6,706.41	895.00	573.61	321.39	2.785	
14,500.00	7,022.07	14,034.32	6,583.18	184.38	184.56	60.63	50.12	6,806.38	895.15	569.51	325.64	2.749	
14,600.00	7,024.65	14,134.32	6,585.48	186.80	186.99	60.62	49.84	6,906.36	895.30	565.41	329.89	2.714	
14,700.00	7,027.23	14,234.32	6,587.78	189.23	189.41	60.60	49.56	7,006.33	895.45	561.31	334.14	2.680	
14,800.00	7,029.81	14,334.32	6,590.08	191.65	191.84	60.59	49.28	7,106.30	895.60	557.22	338.38	2.647	
14,900.00	7,032.39	14,434.32	6,592.39	194.08	194.27	60.57	49.00	7,206.28	895.75	553.12	342.63	2.614	
15,000.00	7,034.97	14,534.32	6,594.69	196.50	196.69	60.56	48.71	7,306.25	895.90	549.02	346.88	2.583	
15,100.00	7,037.55	14,634.32	6,596.99	198.93	199.12	60.54	48.43	7,406.22	896.05	544.92	351.13	2.552	
15,200.00	7,040.14	14,734.32	6,599.30	201.35	201.55	60.53	48.15	7,506.19	896.20	540.82	355.38	2.522	
15,300.00	7,042.72	14,834.32	6,601.60	203.78	203.98	60.51	47.87	7,606.17	896.35	536.72	359.63	2.492	
15,400.00	7,045.30	14,934.32	6,603.90	206.21	206.41	60.50	47.59	7,706.14	896.50	532.62	363.87	2.464	
15,500.00	7,047.88	15,034.32	6,606.20	208.64	208.84	60.48	47.31	7,806.11	896.65	528.53	368.12	2.436	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 11H - OH - Plan 3

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,600.00	7,050.46	15,134.32	6,608.51	211.07	211.27	60.47	47.03	7,906.08	896.80	524.43	372.37	2.408	
15,700.00	7,053.04	15,234.32	6,610.81	213.50	213.70	60.45	46.75	8,006.06	896.95	520.33	376.61	2.382	
15,800.00	7,055.62	15,334.32	6,613.11	215.93	216.13	60.44	46.46	8,106.03	897.10	516.23	380.86	2.355	
15,900.00	7,058.21	15,434.32	6,615.42	218.36	218.56	60.42	46.18	8,206.00	897.25	512.14	385.11	2.330	
16,000.00	7,060.79	15,534.32	6,617.72	220.79	221.00	60.41	45.90	8,305.98	897.40	508.04	389.35	2.305	
16,100.00	7,063.37	15,634.31	6,620.02	223.22	223.43	60.39	45.62	8,405.95	897.55	503.95	393.60	2.280	
16,200.00	7,065.95	15,734.31	6,622.32	225.65	225.86	60.38	45.34	8,505.92	897.70	499.85	397.84	2.256	
16,300.00	7,068.53	15,834.31	6,624.63	228.08	228.30	60.36	45.06	8,605.89	897.85	495.76	402.09	2.233	
16,400.00	7,071.11	15,934.31	6,626.93	230.52	230.73	60.35	44.78	8,705.87	898.00	491.66	406.33	2.210	
16,500.00	7,073.69	16,034.31	6,629.23	232.95	233.17	60.33	44.49	8,805.84	898.15	487.57	410.58	2.188	
16,600.00	7,076.28	16,134.31	6,631.53	235.38	235.60	60.32	44.21	8,905.81	898.30	483.48	414.82	2.166	
16,700.00	7,078.86	16,234.31	6,633.84	237.82	238.04	60.30	43.93	9,005.78	898.45	479.39	419.06	2.144	
16,800.00	7,081.44	16,334.31	6,636.14	240.25	240.47	60.29	43.65	9,105.76	898.60	475.29	423.30	2.123	
16,900.00	7,084.02	16,434.31	6,638.44	242.69	242.91	60.27	43.37	9,205.73	898.75	471.20	427.55	2.102	
17,000.00	7,086.60	16,534.31	6,640.75	245.12	245.34	60.26	43.09	9,305.70	898.90	467.11	431.79	2.082	
17,100.00	7,089.18	16,634.31	6,643.05	247.56	247.78	60.24	42.81	9,405.67	899.05	463.02	436.03	2.062	
17,200.00	7,091.76	16,734.31	6,645.35	249.99	250.22	60.23	42.52	9,505.65	899.20	458.93	440.27	2.042	
17,300.00	7,094.35	16,834.31	6,647.65	252.43	252.65	60.21	42.24	9,605.62	899.35	454.85	444.51	2.023	
17,364.09	7,096.00	16,898.40	6,649.13	253.99	254.22	60.20	42.06	9,669.69	899.45	452.23	447.22	2.011 SF	

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 2H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,947.92	5,366.15	5,257.59	23.85	24.69	47.25	2,543.31	-776.11	1,905.24	1,862.39	42.85	44.468	
5,200.00	5,042.42	5,458.04	5,346.93	24.48	25.16	47.48	2,527.88	-791.01	1,866.40	1,822.63	43.77	42.646	
5,300.00	5,136.92	5,534.65	5,421.47	25.10	25.55	47.68	2,515.16	-803.30	1,827.80	1,783.13	44.67	40.920	
5,400.00	5,231.42	5,600.00	5,485.36	25.73	25.88	47.90	2,505.25	-812.86	1,790.51	1,744.96	45.56	39.304	
5,500.00	5,326.16	5,663.32	5,547.54	26.35	26.17	47.76	2,496.66	-821.16	1,755.23	1,708.81	46.43	37.808	
5,600.00	5,421.91	5,729.26	5,612.56	26.93	26.47	47.49	2,488.76	-828.79	1,723.61	1,676.34	47.27	36.463	
5,700.00	5,518.60	5,800.00	5,682.57	27.47	26.77	47.29	2,481.49	-835.81	1,695.87	1,647.78	48.09	35.264	
5,800.00	5,616.13	5,864.43	5,746.53	27.97	27.03	47.11	2,475.95	-841.16	1,672.06	1,623.21	48.86	34.224	
5,900.00	5,714.37	5,933.37	5,815.15	28.43	27.29	46.98	2,471.17	-845.78	1,652.29	1,602.71	49.59	33.320	
6,000.00	5,813.20	6,000.00	5,881.60	28.86	27.52	46.89	2,467.67	-849.15	1,636.61	1,586.34	50.27	32.556	
6,100.00	5,912.50	6,073.19	5,954.70	29.24	27.76	46.86	2,465.12	-851.62	1,625.05	1,574.14	50.91	31.918	
6,200.00	6,012.15	6,143.74	6,025.23	29.59	27.97	46.86	2,463.93	-852.76	1,617.66	1,566.16	51.50	31.412	
6,300.00	6,112.02	6,230.53	6,112.02	29.90	28.19	46.91	2,463.81	-852.89	1,614.19	1,562.11	52.08	30.996	
6,400.00	6,212.01	6,330.52	6,212.01	30.17	28.45	0.97	2,463.81	-852.89	1,613.14	1,560.48	52.66	30.634	
6,400.00	6,212.01	6,330.52	6,212.01	30.17	28.45	0.97	2,463.81	-852.89	1,613.26	1,560.61	52.66	30.636	
6,500.00	6,312.01	6,430.52	6,312.01	30.43	28.70	0.97	2,463.81	-852.89	1,613.26	1,560.03	53.23	30.305	
6,600.00	6,411.90	6,552.09	6,432.62	30.67	28.96	-88.94	2,462.83	-840.34	1,612.62	1,558.84	53.78	29.984	
6,700.00	6,509.38	6,672.29	6,544.98	30.81	29.10	-88.62	2,459.59	-798.69	1,610.28	1,556.19	54.09	29.771	
6,800.00	6,600.27	6,787.08	6,639.36	30.86	29.13	-88.37	2,454.56	-734.03	1,606.45	1,552.20	54.24	29.616	
6,900.00	6,680.58	6,896.19	6,712.32	30.85	29.08	-88.19	2,448.29	-653.45	1,601.39	1,547.02	54.37	29.452	
7,000.00	6,746.83	6,999.88	6,762.96	30.81	28.98	-88.11	2,441.29	-563.49	1,595.42	1,540.82	54.60	29.219	
7,100.00	6,796.10	7,098.68	6,792.05	30.76	28.87	-88.13	2,433.97	-469.53	1,588.82	1,533.80	55.03	28.873	
7,200.00	6,826.24	7,189.62	6,801.30	30.75	28.76	-88.28	2,426.98	-379.46	1,581.90	1,526.24	55.66	28.421	
7,300.00	6,836.21	7,259.95	6,803.26	30.80	28.71	-88.72	2,422.37	-309.31	1,575.79	1,519.36	56.43	27.925	
7,400.00	6,838.79	7,330.71	6,805.24	30.97	28.70	-88.72	2,419.03	-238.66	1,571.33	1,513.88	57.45	27.350	
7,500.00	6,841.37	7,400.00	6,807.18	31.34	28.82	-88.73	2,417.04	-169.43	1,568.74	1,510.01	58.73	26.712	
7,600.00	6,843.95	7,485.17	6,809.56	31.93	29.33	-88.73	2,416.05	-84.29	1,567.81	1,507.33	60.48	25.922	
7,700.00	6,846.53	7,585.17	6,812.36	32.77	30.38	-88.74	2,415.16	15.66	1,567.19	1,504.47	62.72	24.988	
7,800.00	6,849.11	7,685.17	6,815.16	33.83	31.67	-88.75	2,414.27	115.62	1,566.56	1,501.32	65.24	24.013	
7,900.00	6,851.69	7,785.17	6,817.96	35.09	33.12	-88.76	2,413.38	215.57	1,565.93	1,497.91	68.02	23.021	
8,000.00	6,854.28	7,885.16	6,820.75	36.50	34.69	-88.76	2,412.49	315.53	1,565.31	1,494.27	71.03	22.036	
8,100.00	6,856.86	7,985.16	6,823.55	38.04	36.35	-88.77	2,411.60	415.48	1,564.68	1,490.43	74.25	21.074	
8,200.00	6,859.44	8,085.16	6,826.35	39.69	38.10	-88.78	2,410.72	515.44	1,564.05	1,486.41	77.64	20.146	
8,300.00	6,862.02	8,185.16	6,829.15	41.42	39.91	-88.79	2,409.83	615.39	1,563.42	1,482.24	81.18	19.259	
8,400.00	6,864.60	8,285.15	6,831.94	43.23	41.79	-88.79	2,408.94	715.34	1,562.80	1,477.94	84.86	18.416	
8,500.00	6,867.18	8,385.15	6,834.74	45.11	43.73	-88.80	2,408.05	815.30	1,562.17	1,473.51	88.66	17.621	
8,600.00	6,869.76	8,485.15	6,837.54	47.04	45.71	-88.81	2,407.16	915.25	1,561.54	1,468.99	92.56	16.871	
8,700.00	6,872.34	8,585.15	6,840.34	49.01	47.74	-88.82	2,406.27	1,015.21	1,560.92	1,464.37	96.55	16.167	
8,800.00	6,874.93	8,685.15	6,843.13	51.03	49.80	-88.82	2,405.38	1,115.16	1,560.29	1,459.67	100.62	15.507	
8,900.00	6,877.51	8,785.14	6,845.93	53.09	51.89	-88.83	2,404.49	1,215.12	1,559.66	1,454.90	104.76	14.888	
9,000.00	6,880.09	8,885.14	6,848.73	55.18	54.01	-88.84	2,403.60	1,315.07	1,559.04	1,450.07	108.97	14.307	
9,100.00	6,882.67	8,985.14	6,851.53	57.30	56.16	-88.85	2,402.71	1,415.03	1,558.41	1,445.18	113.23	13.763	
9,200.00	6,885.25	9,085.14	6,854.32	59.44	58.33	-88.85	2,401.82	1,514.98	1,557.78	1,440.24	117.54	13.253	
9,300.00	6,887.83	9,185.13	6,857.12	61.61	60.52	-88.86	2,400.93	1,614.94	1,557.16	1,435.26	121.90	12.775	
9,400.00	6,890.41	9,285.13	6,859.92	63.80	62.74	-88.87	2,400.04	1,714.89	1,556.53	1,430.24	126.29	12.325	
9,500.00	6,893.00	9,385.13	6,862.72	66.01	64.96	-88.88	2,399.15	1,814.85	1,555.90	1,425.18	130.72	11.903	
9,600.00	6,895.58	9,485.13	6,865.51	68.23	67.20	-88.88	2,398.26	1,914.80	1,555.28	1,420.09	135.18	11.505	
9,700.00	6,898.16	9,585.13	6,868.31	70.47	69.46	-88.89	2,397.37	2,014.76	1,554.65	1,414.97	139.68	11.130	
9,800.00	6,900.74	9,685.12	6,871.11	72.72	71.73	-88.90	2,396.48	2,114.71	1,554.02	1,409.83	144.20	10.777	
9,900.00	6,903.32	9,785.12	6,873.91	74.98	74.01	-88.91	2,395.59	2,214.67	1,553.40	1,404.66	148.74	10.444	
10,000.00	6,905.90	9,885.12	6,876.70	77.26	76.30	-88.91	2,394.70	2,314.62	1,552.77	1,399.47	153.30	10.129	
10,100.00	6,908.48	9,985.12	6,879.50	79.55	78.60	-88.92	2,393.81	2,414.58	1,552.14	1,394.25	157.89	9.831	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 2H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	6,911.07	10,085.12	6,882.30	81.84	80.90	-88.93	2,392.92	2,514.53	1,551.52	1,389.02	162.49	9.548	
10,300.00	6,913.65	10,185.11	6,885.10	84.15	83.22	-88.94	2,392.03	2,614.48	1,550.89	1,383.78	167.11	9.280	
10,400.00	6,916.23	10,285.11	6,887.89	86.46	85.54	-88.94	2,391.14	2,714.44	1,550.26	1,378.51	171.75	9.026	
10,500.00	6,918.81	10,385.11	6,890.69	88.78	87.87	-88.95	2,390.25	2,814.39	1,549.64	1,373.24	176.40	8.785	
10,600.00	6,921.39	10,485.11	6,893.49	91.10	90.21	-88.96	2,389.36	2,914.35	1,549.01	1,367.95	181.06	8.555	
10,700.00	6,923.97	10,585.10	6,896.29	93.44	92.55	-88.97	2,388.47	3,014.30	1,548.38	1,362.65	185.74	8.336	
10,800.00	6,926.55	10,685.10	6,899.08	95.78	94.89	-88.97	2,387.59	3,114.26	1,547.76	1,357.33	190.43	8.128	
10,900.00	6,929.14	10,785.10	6,901.88	98.12	97.25	-88.98	2,386.70	3,214.21	1,547.13	1,352.01	195.12	7.929	
11,000.00	6,931.72	10,885.10	6,904.68	100.47	99.60	-88.99	2,385.81	3,314.17	1,546.51	1,346.68	199.83	7.739	
11,100.00	6,934.30	10,985.10	6,907.48	102.82	101.96	-89.00	2,384.92	3,414.12	1,545.88	1,341.33	204.55	7.558	
11,200.00	6,936.88	11,085.09	6,910.27	105.18	104.33	-89.00	2,384.03	3,514.08	1,545.25	1,335.98	209.27	7.384	
11,300.00	6,939.46	11,185.09	6,913.07	107.55	106.69	-89.01	2,383.14	3,614.03	1,544.63	1,330.62	214.00	7.218	
11,400.00	6,942.04	11,285.09	6,915.87	109.91	109.06	-89.02	2,382.25	3,713.99	1,544.00	1,325.26	218.74	7.059	
11,500.00	6,944.62	11,385.09	6,918.67	112.28	111.44	-89.03	2,381.36	3,813.94	1,543.37	1,319.89	223.49	6.906	
11,600.00	6,947.21	11,485.08	6,921.46	114.66	113.82	-89.03	2,380.47	3,913.90	1,542.75	1,314.51	228.24	6.759	
11,700.00	6,949.79	11,585.08	6,924.26	117.03	116.20	-89.04	2,379.58	4,013.85	1,542.12	1,309.12	233.00	6.619	
11,800.00	6,952.37	11,685.08	6,927.06	119.41	118.58	-89.05	2,378.69	4,113.81	1,541.50	1,303.73	237.77	6.483	
11,900.00	6,954.95	11,785.08	6,929.86	121.80	120.97	-89.06	2,377.80	4,213.76	1,540.87	1,298.33	242.54	6.353	
12,000.00	6,957.53	11,885.08	6,932.65	124.18	123.36	-89.06	2,376.91	4,313.72	1,540.24	1,292.93	247.31	6.228	
12,100.00	6,960.11	11,985.07	6,935.45	126.57	125.75	-89.07	2,376.02	4,413.67	1,539.62	1,287.53	252.09	6.107	
12,200.00	6,962.69	12,085.07	6,938.25	128.96	128.14	-89.08	2,375.13	4,513.62	1,538.99	1,282.12	256.88	5.991	
12,300.00	6,965.28	12,185.07	6,941.05	131.35	130.53	-89.09	2,374.24	4,613.58	1,538.37	1,276.70	261.66	5.879	
12,400.00	6,967.86	12,285.07	6,943.85	133.75	132.93	-89.10	2,373.35	4,713.53	1,537.74	1,271.28	266.46	5.771	
12,500.00	6,970.44	12,385.07	6,946.64	136.14	135.33	-89.10	2,372.46	4,813.49	1,537.11	1,265.86	271.25	5.667	
12,600.00	6,973.02	12,485.06	6,949.44	138.54	137.73	-89.11	2,371.57	4,913.44	1,536.49	1,260.43	276.05	5.566	
12,700.00	6,975.60	12,585.06	6,952.24	140.94	140.13	-89.12	2,370.68	5,013.40	1,535.86	1,255.00	280.86	5.468	
12,800.00	6,978.18	12,685.06	6,955.04	143.34	142.53	-89.13	2,369.79	5,113.35	1,535.24	1,249.57	285.67	5.374	
12,900.00	6,980.76	12,785.06	6,957.83	145.75	144.94	-89.13	2,368.90	5,213.31	1,534.61	1,244.14	290.48	5.283	
13,000.00	6,983.35	12,885.05	6,960.63	148.15	147.34	-89.14	2,368.01	5,313.26	1,533.99	1,238.70	295.29	5.195	
13,100.00	6,985.93	12,985.05	6,963.43	150.56	149.75	-89.15	2,367.12	5,413.22	1,533.36	1,233.25	300.11	5.109	
13,200.00	6,988.51	13,085.05	6,966.23	152.97	152.16	-89.16	2,366.23	5,513.17	1,532.73	1,227.81	304.92	5.027	
13,300.00	6,991.09	13,185.05	6,969.02	155.38	154.57	-89.17	2,365.34	5,613.13	1,532.11	1,222.36	309.75	4.946	
13,400.00	6,993.67	13,285.05	6,971.82	157.79	156.98	-89.17	2,364.46	5,713.08	1,531.48	1,216.91	314.57	4.869	
13,500.00	6,996.25	13,385.04	6,974.62	160.20	159.39	-89.18	2,363.57	5,813.04	1,530.86	1,211.46	319.39	4.793	
13,600.00	6,998.83	13,485.04	6,977.42	162.61	161.81	-89.19	2,362.68	5,912.99	1,530.23	1,206.01	324.22	4.720	
13,700.00	7,001.42	13,585.04	6,980.21	165.03	164.22	-89.20	2,361.79	6,012.95	1,529.61	1,200.55	329.05	4.649	
13,800.00	7,004.00	13,685.04	6,983.01	167.44	166.64	-89.20	2,360.90	6,112.90	1,528.98	1,195.09	333.89	4.579	
13,900.00	7,006.58	13,785.04	6,985.81	169.86	169.05	-89.21	2,360.01	6,212.86	1,528.36	1,189.63	338.72	4.512	
14,000.00	7,009.16	13,885.03	6,988.61	172.28	171.47	-89.22	2,359.12	6,312.81	1,527.73	1,184.17	343.56	4.447	
14,100.00	7,011.74	13,985.03	6,991.40	174.70	173.89	-89.23	2,358.23	6,412.76	1,527.10	1,178.71	348.39	4.383	
14,200.00	7,014.32	14,085.03	6,994.20	177.12	176.31	-89.24	2,357.34	6,512.72	1,526.48	1,173.24	353.23	4.321	
14,300.00	7,016.90	14,185.03	6,997.00	179.54	178.73	-89.24	2,356.45	6,612.67	1,525.85	1,167.78	358.08	4.261	
14,400.00	7,019.48	14,285.02	6,999.80	181.96	181.15	-89.25	2,355.56	6,712.63	1,525.23	1,162.31	362.92	4.203	
14,500.00	7,022.07	14,385.02	7,002.59	184.38	183.57	-89.26	2,354.67	6,812.58	1,524.60	1,156.84	367.76	4.146	
14,600.00	7,024.65	14,485.02	7,005.39	186.80	185.99	-89.27	2,353.78	6,912.54	1,523.98	1,151.37	372.61	4.090	
14,700.00	7,027.23	14,585.02	7,008.19	189.23	188.41	-89.27	2,352.89	7,012.49	1,523.35	1,145.90	377.46	4.036	
14,800.00	7,029.81	14,685.02	7,010.99	191.65	190.84	-89.28	2,352.00	7,112.45	1,522.73	1,140.42	382.31	3.983	
14,900.00	7,032.39	14,785.01	7,013.78	194.08	193.26	-89.29	2,351.11	7,212.40	1,522.10	1,134.95	387.16	3.932	
15,000.00	7,034.97	14,885.01	7,016.58	196.50	195.68	-89.30	2,350.22	7,312.36	1,521.48	1,129.47	392.01	3.881	
15,100.00	7,037.55	14,985.01	7,019.38	198.93	198.11	-89.31	2,349.33	7,412.31	1,520.85	1,123.99	396.86	3.832	
15,200.00	7,040.14	15,085.01	7,022.18	201.35	200.53	-89.31	2,348.44	7,512.27	1,520.23	1,118.51	401.71	3.784	
15,300.00	7,042.72	15,185.01	7,024.98	203.78	202.96	-89.32	2,347.55	7,612.22	1,519.60	1,113.03	406.57	3.738	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 2H - OH - Plan 3

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,400.00	7,045.30	15,285.00	7,027.78	206.21	205.39	-89.33	2,346.66	7,712.18	1,518.98	1,107.55	411.42	3.692	
15,500.00	7,047.88	15,385.00	7,030.58	208.64	207.81	-89.34	2,345.77	7,812.13	1,518.35	1,102.07	416.28	3.647	
15,600.00	7,050.46	15,485.00	7,033.38	211.07	210.24	-89.35	2,344.88	7,912.09	1,517.73	1,096.59	421.14	3.604	
15,700.00	7,053.04	15,585.00	7,036.18	213.50	212.67	-89.35	2,343.99	8,012.04	1,517.10	1,091.10	426.00	3.561	
15,800.00	7,055.62	15,684.99	7,038.98	215.93	215.10	-89.36	2,343.10	8,112.00	1,516.48	1,085.62	430.86	3.520	
15,900.00	7,058.21	15,784.99	7,041.78	218.36	217.53	-89.37	2,342.21	8,211.95	1,515.85	1,080.13	435.72	3.479	
16,000.00	7,060.79	15,884.99	7,044.58	220.79	219.96	-89.38	2,341.33	8,311.90	1,515.23	1,074.65	440.58	3.439	
16,100.00	7,063.37	15,984.99	7,047.39	223.22	222.39	-89.39	2,340.44	8,411.86	1,514.60	1,069.16	445.44	3.400	
16,200.00	7,065.95	16,084.99	7,050.19	225.65	224.82	-89.39	2,339.55	8,511.81	1,513.98	1,063.67	450.30	3.362	
16,300.00	7,068.53	16,184.98	7,052.99	228.08	227.25	-89.40	2,338.66	8,611.77	1,513.35	1,058.18	455.17	3.325	
16,400.00	7,071.11	16,284.98	7,055.79	230.52	229.68	-89.41	2,337.77	8,711.72	1,512.73	1,052.69	460.03	3.288	
16,500.00	7,073.69	16,384.98	7,058.60	232.95	232.11	-89.42	2,336.88	8,811.68	1,512.10	1,047.20	464.90	3.253	
16,600.00	7,076.28	16,484.98	7,061.40	235.38	234.54	-89.43	2,335.99	8,911.63	1,511.48	1,041.71	469.77	3.218	
16,700.00	7,078.86	16,584.98	7,064.21	237.82	236.97	-89.43	2,335.10	9,011.59	1,510.85	1,036.22	474.63	3.183	
16,800.00	7,081.44	16,684.97	7,067.01	240.25	239.40	-89.44	2,334.21	9,111.54	1,510.23	1,030.73	479.50	3.150	
16,900.00	7,084.02	16,784.97	7,069.82	242.69	241.84	-89.45	2,333.32	9,211.50	1,509.60	1,025.23	484.37	3.117	
17,000.00	7,086.60	16,884.97	7,072.62	245.12	244.27	-89.46	2,332.43	9,311.45	1,508.98	1,019.74	489.24	3.084	
17,100.00	7,089.18	16,984.97	7,075.43	247.56	246.70	-89.47	2,331.54	9,411.40	1,508.35	1,014.25	494.11	3.053	
17,200.00	7,091.76	17,084.96	7,078.23	249.99	249.14	-89.48	2,330.65	9,511.36	1,507.73	1,008.75	498.98	3.022	
17,300.00	7,094.35	17,184.96	7,081.04	252.43	251.57	-89.48	2,329.76	9,611.31	1,507.10	1,003.26	503.85	2.991	
17,364.09	7,096.00	17,249.05	7,082.84	253.99	253.13	-89.49	2,329.19	9,675.38	1,506.70	999.74	506.97	2.972	CC, ES, SF

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 4H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	0.00	0.00	0.00	126.68	-11.87	15.94	19.87				
100.00	100.00	101.00	100.00	0.26	0.27	126.68	-11.87	15.94	19.87	19.34	0.53	37.459	
200.00	200.00	201.00	200.00	0.62	0.63	126.68	-11.87	15.94	19.87	18.63	1.25	15.931	
300.00	300.00	301.00	300.00	0.98	0.98	126.68	-11.87	15.94	19.87	17.91	1.96	10.117	
400.00	400.00	401.00	400.00	1.34	1.34	126.68	-11.87	15.94	19.87	17.19	2.68	7.412	
500.00	500.00	501.00	500.00	1.70	1.70	126.68	-11.87	15.94	19.87	16.48	3.40	5.848	
600.00	600.00	601.00	600.00	2.06	2.06	126.68	-11.87	15.94	19.87	15.76	4.12	4.829	
700.00	700.00	701.00	700.00	2.41	2.42	126.68	-11.87	15.94	19.87	15.04	4.83	4.113	
800.00	800.00	801.00	800.00	2.77	2.78	126.68	-11.87	15.94	19.87	14.32	5.55	3.581	
900.00	900.00	901.00	900.00	3.13	3.13	126.68	-11.87	15.94	19.87	13.61	6.27	3.172	
1,000.00	1,000.00	1,001.00	1,000.00	3.49	3.49	126.68	-11.87	15.94	19.87	12.89	6.98	2.846	
1,100.00	1,100.00	1,101.00	1,100.00	3.85	3.85	126.68	-11.87	15.94	19.87	12.17	7.70	2.581	
1,200.00	1,200.00	1,201.00	1,200.00	4.21	4.21	126.68	-11.87	15.94	19.87	11.46	8.42	2.361	
1,300.00	1,300.00	1,301.00	1,300.00	4.57	4.57	126.68	-11.87	15.94	19.87	10.74	9.13	2.176	
1,400.00	1,400.00	1,401.00	1,400.00	4.92	4.93	126.68	-11.87	15.94	19.87	10.02	9.85	2.017	
1,500.00	1,500.00	1,501.20	1,500.18	5.28	5.27	131.66	-12.85	14.45	19.34	8.78	10.55	1.832	Collision Risk Procedures Req.
1,595.88	1,595.88	1,597.04	1,595.88	5.63	5.59	146.61	-15.60	10.28	18.68	7.46	11.22	1.665	Collision Risk Procedures Req., CC
1,600.00	1,600.00	1,601.15	1,599.98	5.64	5.61	147.48	-15.76	10.05	18.69	7.44	11.25	1.661	Collision Risk Procedures Req., ES, SF
1,700.00	1,700.00	1,700.61	1,699.05	6.00	5.95	172.29	-20.54	2.78	20.75	8.82	11.93	1.739	Collision Risk Procedures Req.
1,800.00	1,799.98	1,799.38	1,797.08	6.36	6.29	-121.89	-27.17	-7.27	29.15	16.56	12.59	2.315	
1,900.00	1,899.84	1,897.24	1,893.74	6.71	6.64	-113.12	-35.56	-20.00	43.53	30.29	13.24	3.289	
2,000.00	1,999.45	1,993.94	1,988.69	7.07	7.01	-109.94	-45.64	-35.28	62.36	48.49	13.87	4.495	
2,100.00	2,098.70	2,089.24	2,081.61	7.43	7.38	-109.07	-57.29	-52.95	85.16	70.65	14.51	5.867	
2,200.00	2,197.47	2,184.06	2,173.37	7.80	7.78	-109.19	-70.44	-72.90	111.58	96.39	15.19	7.346	
2,300.00	2,295.62	2,279.97	2,266.02	8.18	8.20	-110.30	-84.07	-93.58	139.68	123.74	15.94	8.765	
2,400.00	2,393.06	2,375.36	2,358.18	8.57	8.62	-111.98	-97.62	-114.14	169.10	152.39	16.71	10.119	
2,500.00	2,489.64	2,470.13	2,449.74	8.99	9.06	-113.92	-111.09	-134.57	200.05	182.54	17.51	11.424	
2,600.00	2,585.27	2,564.15	2,540.58	9.43	9.50	-115.95	-124.45	-154.84	232.72	214.38	18.34	12.690	
2,700.00	2,679.93	2,657.42	2,630.68	9.90	9.95	-118.23	-137.70	-174.94	267.12	247.93	19.19	13.920	
2,800.00	2,774.43	2,750.56	2,720.66	10.39	10.40	-120.35	-150.94	-195.02	302.16	282.11	20.05	15.070	
2,900.00	2,868.93	2,843.69	2,810.63	10.90	10.86	-122.03	-164.17	-215.09	337.49	316.57	20.92	16.131	
3,000.00	2,963.43	2,936.83	2,900.61	11.42	11.32	-123.40	-177.41	-235.17	373.03	351.23	21.80	17.109	
3,100.00	3,057.93	3,029.96	2,990.59	11.95	11.79	-124.53	-190.64	-255.24	408.73	386.03	22.69	18.011	
3,200.00	3,152.43	3,123.09	3,080.56	12.50	12.26	-125.48	-203.87	-275.32	444.54	420.94	23.59	18.843	
3,300.00	3,246.93	3,216.23	3,170.54	13.05	12.74	-126.28	-217.11	-295.40	480.44	455.94	24.50	19.612	
3,400.00	3,341.43	3,309.36	3,260.52	13.62	13.22	-126.98	-230.34	-315.47	516.41	491.00	25.41	20.324	
3,500.00	3,435.93	3,402.50	3,350.49	14.19	13.70	-127.58	-243.58	-335.55	552.44	526.11	26.33	20.983	
3,600.00	3,530.43	3,495.63	3,440.47	14.76	14.18	-128.11	-256.81	-355.62	588.52	561.27	27.25	21.596	
3,700.00	3,624.93	3,588.76	3,530.45	15.34	14.67	-128.58	-270.05	-375.70	624.64	596.46	28.18	22.165	
3,800.00	3,719.43	3,681.90	3,620.42	15.93	15.16	-129.00	-283.28	-395.77	660.79	631.67	29.11	22.696	
3,900.00	3,813.93	3,775.03	3,710.40	16.52	15.65	-129.38	-296.51	-415.85	696.97	666.91	30.05	23.192	
4,000.00	3,908.43	3,868.17	3,800.38	17.12	16.14	-129.72	-309.75	-435.93	733.17	702.17	30.99	23.655	
4,100.00	4,002.92	3,961.30	3,890.35	17.72	16.64	-130.02	-322.98	-456.00	769.39	737.45	31.94	24.089	
4,200.00	4,097.42	4,054.44	3,980.33	18.32	17.13	-130.30	-336.22	-476.08	805.63	772.74	32.89	24.496	
4,300.00	4,191.92	4,147.57	4,070.31	18.93	17.63	-130.56	-349.45	-496.15	841.88	808.04	33.84	24.878	
4,400.00	4,286.42	4,240.70	4,160.28	19.54	18.13	-130.79	-362.69	-516.23	878.15	843.35	34.79	25.238	
4,500.00	4,380.92	4,333.84	4,250.26	20.15	18.63	-131.01	-375.92	-536.31	914.43	878.67	35.75	25.578	
4,600.00	4,475.42	4,426.97	4,340.24	20.76	19.13	-131.21	-389.16	-556.38	950.71	914.00	36.71	25.898	
4,700.00	4,569.92	4,520.11	4,430.21	21.38	19.63	-131.39	-402.39	-576.46	987.01	949.34	37.67	26.200	
4,800.00	4,664.42	4,613.24	4,520.19	21.99	20.13	-131.56	-415.62	-596.53	1,023.32	984.68	38.64	26.487	
4,900.00	4,758.92	4,706.38	4,610.17	22.61	20.64	-131.72	-428.86	-616.61	1,059.63	1,020.03	39.60	26.758	
5,000.00	4,853.42	4,799.51	4,700.14	23.23	21.14	-131.87	-442.09	-636.68	1,095.95	1,055.39	40.57	27.015	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 4H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,947.92	4,892.64	4,790.12	23.85	21.65	-132.01	-455.33	-656.76	1,132.28	1,090.74	41.54	27.259	
5,200.00	5,042.42	4,985.78	4,880.10	24.48	22.15	-132.14	-468.56	-676.84	1,168.61	1,126.11	42.51	27.492	
5,300.00	5,136.92	5,078.91	4,970.07	25.10	22.66	-132.26	-481.80	-696.91	1,204.95	1,161.47	43.48	27.713	
5,400.00	5,231.42	5,172.05	5,060.05	25.73	23.16	-132.38	-495.03	-716.99	1,241.29	1,196.84	44.45	27.923	
5,500.00	5,326.16	5,265.38	5,150.22	26.35	23.67	-132.83	-508.29	-737.11	1,277.15	1,231.72	45.42	28.116	
5,600.00	5,421.91	5,359.50	5,241.15	26.93	24.18	-133.32	-521.67	-757.39	1,310.90	1,264.52	46.38	28.264	
5,700.00	5,518.60	5,454.35	5,332.78	27.47	24.70	-133.66	-535.15	-777.84	1,342.40	1,295.08	47.32	28.367	
5,800.00	5,616.13	5,549.81	5,425.01	27.97	25.22	-133.85	-548.71	-798.42	1,371.62	1,323.37	48.25	28.429	
5,900.00	5,714.37	5,667.62	5,539.11	28.43	25.85	-133.85	-564.82	-822.86	1,398.08	1,348.71	49.36	28.323	
6,000.00	5,813.20	5,800.75	5,669.33	28.86	26.51	-133.82	-580.04	-845.94	1,419.97	1,369.43	50.54	28.096	
6,100.00	5,912.50	5,936.30	5,803.09	29.24	27.11	-133.79	-592.09	-864.22	1,436.99	1,385.38	51.62	27.840	
6,200.00	6,012.15	6,073.72	5,939.59	29.59	27.64	-133.76	-600.74	-877.35	1,449.05	1,396.45	52.60	27.550	
6,300.00	6,112.02	6,212.37	6,077.93	29.90	28.13	-133.75	-605.81	-885.04	1,456.06	1,402.59	53.47	27.231	
6,400.00	6,212.01	6,346.49	6,212.01	30.17	28.51	-179.72	-607.22	-887.18	1,458.01	1,403.81	54.20	26.899	
6,500.00	6,312.01	6,446.49	6,312.01	30.43	28.78	-179.72	-607.22	-887.18	1,458.01	1,403.24	54.77	26.620	
6,600.00	6,411.90	6,546.81	6,412.26	30.67	29.03	90.16	-607.23	-884.98	1,458.01	1,402.72	55.30	26.367	
6,700.00	6,509.38	6,647.75	6,510.97	30.81	29.17	90.22	-607.29	-864.81	1,458.02	1,402.42	55.60	26.222	
6,800.00	6,600.27	6,749.00	6,603.52	30.86	29.22	90.27	-607.40	-824.21	1,458.04	1,402.30	55.73	26.162	
6,900.00	6,680.58	6,850.51	6,685.64	30.85	29.21	90.31	-607.57	-764.88	1,458.05	1,402.28	55.77	26.144	
7,000.00	6,746.83	6,952.19	6,753.50	30.81	29.16	90.33	-607.79	-689.41	1,458.07	1,402.23	55.84	26.112	
7,100.00	6,796.10	7,053.99	6,803.92	30.76	29.13	90.34	-608.04	-601.20	1,458.09	1,402.03	56.06	26.008	
7,200.00	6,826.24	7,155.81	6,834.54	30.75	29.17	90.34	-608.32	-504.30	1,458.11	1,401.57	56.54	25.790	
7,300.00	6,836.21	7,257.25	6,844.34	30.80	29.29	90.32	-608.61	-403.49	1,458.12	1,400.83	57.29	25.450	
7,400.00	6,838.79	7,357.25	6,846.97	30.97	29.59	90.32	-608.89	-303.53	1,458.14	1,399.73	58.41	24.963	
7,500.00	6,841.37	7,457.25	6,849.61	31.34	30.09	90.32	-609.18	-203.56	1,458.16	1,398.27	59.90	24.345	
7,600.00	6,843.95	7,557.25	6,852.25	31.93	30.82	90.33	-609.47	-103.60	1,458.18	1,396.45	61.73	23.620	
7,700.00	6,846.53	7,657.25	6,854.88	32.77	31.76	90.33	-609.75	-3.63	1,458.20	1,394.30	63.90	22.821	
7,800.00	6,849.11	7,757.25	6,857.52	33.83	32.90	90.33	-610.04	96.33	1,458.22	1,391.87	66.35	21.977	
7,900.00	6,851.69	7,857.25	6,860.16	35.09	34.20	90.33	-610.32	196.30	1,458.24	1,389.17	69.07	21.113	
8,000.00	6,854.28	7,957.25	6,862.80	36.50	35.63	90.34	-610.61	296.26	1,458.26	1,386.24	72.02	20.249	
8,100.00	6,856.86	8,057.25	6,865.43	38.04	37.18	90.34	-610.90	396.23	1,458.28	1,383.11	75.17	19.400	
8,200.00	6,859.44	8,157.25	6,868.07	39.69	38.84	90.34	-611.18	496.19	1,458.30	1,379.80	78.50	18.577	
8,300.00	6,862.02	8,257.25	6,870.71	41.42	40.57	90.34	-611.47	596.16	1,458.32	1,376.33	81.99	17.786	
8,400.00	6,864.60	8,357.25	6,873.35	43.23	42.38	90.34	-611.75	696.12	1,458.34	1,372.72	85.62	17.032	
8,500.00	6,867.18	8,457.25	6,875.98	45.11	44.26	90.35	-612.04	796.09	1,458.36	1,368.98	89.37	16.318	
8,600.00	6,869.76	8,557.25	6,878.62	47.04	46.19	90.35	-612.33	896.05	1,458.38	1,365.14	93.23	15.643	
8,700.00	6,872.34	8,657.25	6,881.26	49.01	48.17	90.35	-612.61	996.01	1,458.39	1,361.21	97.18	15.007	
8,800.00	6,874.93	8,757.25	6,883.90	51.03	50.19	90.35	-612.90	1,095.98	1,458.41	1,357.20	101.22	14.409	
8,900.00	6,877.51	8,857.25	6,886.53	53.09	52.24	90.36	-613.18	1,195.94	1,458.43	1,353.11	105.33	13.847	
9,000.00	6,880.09	8,957.25	6,889.17	55.18	54.34	90.36	-613.47	1,295.91	1,458.45	1,348.95	109.50	13.319	
9,100.00	6,882.67	9,057.25	6,891.81	57.30	56.45	90.36	-613.76	1,395.87	1,458.47	1,344.74	113.74	12.823	
9,200.00	6,885.25	9,157.25	6,894.45	59.44	58.60	90.36	-614.04	1,495.84	1,458.49	1,340.47	118.02	12.358	
9,300.00	6,887.83	9,257.25	6,897.08	61.61	60.77	90.36	-614.33	1,595.80	1,458.51	1,336.16	122.35	11.921	
9,400.00	6,890.41	9,357.25	6,899.72	63.80	62.96	90.37	-614.62	1,695.77	1,458.53	1,331.81	126.72	11.509	
9,500.00	6,893.00	9,457.25	6,902.36	66.01	65.17	90.37	-614.90	1,795.73	1,458.55	1,327.41	131.14	11.122	
9,600.00	6,895.58	9,557.25	6,905.00	68.23	67.39	90.37	-615.19	1,895.70	1,458.57	1,322.99	135.58	10.758	
9,700.00	6,898.16	9,657.25	6,907.63	70.47	69.63	90.37	-615.47	1,995.66	1,458.59	1,318.53	140.05	10.414	
9,800.00	6,900.74	9,757.25	6,910.27	72.72	71.88	90.37	-615.76	2,095.63	1,458.61	1,314.05	144.56	10.090	
9,900.00	6,903.32	9,857.25	6,912.91	74.98	74.15	90.38	-616.05	2,195.59	1,458.63	1,309.54	149.09	9.784	
10,000.00	6,905.90	9,957.25	6,915.55	77.26	76.43	90.38	-616.33	2,295.56	1,458.65	1,305.01	153.64	9.494	
10,100.00	6,908.48	10,057.25	6,918.18	79.55	78.72	90.38	-616.62	2,395.52	1,458.67	1,300.46	158.21	9.220	
10,200.00	6,911.07	10,157.25	6,920.82	81.84	81.01	90.38	-616.90	2,495.49	1,458.69	1,295.89	162.80	8.960	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 4H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	6,913.65	10,257.25	6,923.46	84.15	83.32	90.39	-617.19	2,595.45	1,458.71	1,291.30	167.41	8.713	
10,400.00	6,916.23	10,357.25	6,926.09	86.46	85.63	90.39	-617.48	2,695.42	1,458.72	1,286.69	172.03	8.479	
10,500.00	6,918.81	10,457.25	6,928.73	88.78	87.96	90.39	-617.76	2,795.38	1,458.74	1,282.07	176.67	8.257	
10,600.00	6,921.39	10,557.25	6,931.37	91.10	90.28	90.39	-618.05	2,895.35	1,458.76	1,277.44	181.33	8.045	
10,700.00	6,923.97	10,657.25	6,934.01	93.44	92.62	90.39	-618.34	2,995.31	1,458.78	1,272.79	185.99	7.843	
10,800.00	6,926.55	10,757.25	6,936.64	95.78	94.96	90.40	-618.62	3,095.28	1,458.80	1,268.13	190.67	7.651	
10,900.00	6,929.14	10,857.25	6,939.28	98.12	97.30	90.40	-618.91	3,195.24	1,458.82	1,263.46	195.36	7.467	
11,000.00	6,931.72	10,957.25	6,941.92	100.47	99.66	90.40	-619.19	3,295.20	1,458.84	1,258.78	200.06	7.292	
11,100.00	6,934.30	11,057.25	6,944.56	102.82	102.01	90.40	-619.48	3,395.17	1,458.86	1,254.09	204.77	7.124	
11,200.00	6,936.88	11,157.25	6,947.19	105.18	104.37	90.41	-619.77	3,495.13	1,458.88	1,249.39	209.49	6.964	
11,300.00	6,939.46	11,257.25	6,949.83	107.55	106.74	90.41	-620.05	3,595.10	1,458.90	1,244.68	214.22	6.810	
11,400.00	6,942.04	11,357.25	6,952.47	109.91	109.10	90.41	-620.34	3,695.06	1,458.92	1,239.97	218.95	6.663	
11,500.00	6,944.62	11,457.25	6,955.11	112.28	111.47	90.41	-620.62	3,795.03	1,458.94	1,235.24	223.69	6.522	
11,600.00	6,947.21	11,557.25	6,957.74	114.66	113.85	90.41	-620.91	3,894.99	1,458.96	1,230.52	228.44	6.387	
11,700.00	6,949.79	11,657.25	6,960.38	117.03	116.23	90.42	-621.20	3,994.96	1,458.98	1,225.78	233.20	6.256	
11,800.00	6,952.37	11,757.25	6,963.02	119.41	118.61	90.42	-621.48	4,094.92	1,459.00	1,221.04	237.96	6.131	
11,900.00	6,954.95	11,857.25	6,965.66	121.80	120.99	90.42	-621.77	4,194.89	1,459.02	1,216.29	242.72	6.011	
12,000.00	6,957.53	11,957.25	6,968.29	124.18	123.38	90.42	-622.06	4,294.85	1,459.04	1,211.54	247.50	5.895	
12,100.00	6,960.11	12,057.25	6,970.93	126.57	125.77	90.43	-622.34	4,394.82	1,459.05	1,206.78	252.27	5.784	
12,200.00	6,962.69	12,157.25	6,973.57	128.96	128.16	90.43	-622.63	4,494.78	1,459.07	1,202.02	257.05	5.676	
12,300.00	6,965.28	12,257.25	6,976.21	131.35	130.55	90.43	-622.91	4,594.75	1,459.09	1,197.25	261.84	5.572	
12,400.00	6,967.86	12,357.25	6,978.84	133.75	132.95	90.43	-623.20	4,694.71	1,459.11	1,192.48	266.63	5.472	
12,500.00	6,970.44	12,457.25	6,981.48	136.14	135.35	90.43	-623.49	4,794.68	1,459.13	1,187.71	271.42	5.376	
12,600.00	6,973.02	12,557.25	6,984.12	138.54	137.74	90.44	-623.77	4,894.64	1,459.15	1,182.93	276.22	5.283	
12,700.00	6,975.60	12,657.25	6,986.76	140.94	140.15	90.44	-624.06	4,994.61	1,459.17	1,178.15	281.02	5.192	
12,800.00	6,978.18	12,757.25	6,989.39	143.34	142.55	90.44	-624.34	5,094.57	1,459.19	1,173.36	285.83	5.105	
12,900.00	6,980.76	12,857.25	6,992.03	145.75	144.95	90.44	-624.63	5,194.54	1,459.21	1,168.57	290.64	5.021	
13,000.00	6,983.35	12,957.25	6,994.67	148.15	147.36	90.45	-624.92	5,294.50	1,459.23	1,163.78	295.45	4.939	
13,100.00	6,985.93	13,057.25	6,997.31	150.56	149.77	90.45	-625.20	5,394.47	1,459.25	1,158.98	300.26	4.860	
13,200.00	6,988.51	13,157.25	6,999.94	152.97	152.18	90.45	-625.49	5,494.43	1,459.27	1,154.19	305.08	4.783	
13,300.00	6,991.09	13,257.25	7,002.58	155.38	154.59	90.45	-625.77	5,594.40	1,459.29	1,149.39	309.90	4.709	
13,400.00	6,993.67	13,357.25	7,005.22	157.79	157.00	90.45	-626.06	5,694.36	1,459.31	1,144.58	314.72	4.637	
13,500.00	6,996.25	13,457.25	7,007.85	160.20	159.41	90.46	-626.35	5,794.32	1,459.33	1,139.78	319.55	4.567	
13,600.00	6,998.83	13,557.25	7,010.49	162.61	161.82	90.46	-626.63	5,894.29	1,459.35	1,134.97	324.38	4.499	
13,700.00	7,001.42	13,657.25	7,013.13	165.03	164.24	90.46	-626.92	5,994.25	1,459.37	1,130.16	329.21	4.433	
13,800.00	7,004.00	13,757.25	7,015.77	167.44	166.65	90.46	-627.21	6,094.22	1,459.39	1,125.35	334.04	4.369	
13,900.00	7,006.58	13,857.25	7,018.40	169.86	169.07	90.46	-627.49	6,194.18	1,459.41	1,120.53	338.87	4.307	
14,000.00	7,009.16	13,957.25	7,021.04	172.28	171.49	90.47	-627.78	6,294.15	1,459.42	1,115.72	343.71	4.246	
14,100.00	7,011.74	14,057.25	7,023.68	174.70	173.91	90.47	-628.06	6,394.11	1,459.44	1,110.90	348.55	4.187	
14,200.00	7,014.32	14,157.25	7,026.32	177.12	176.33	90.47	-628.35	6,494.08	1,459.46	1,106.08	353.39	4.130	
14,300.00	7,016.90	14,257.25	7,028.95	179.54	178.75	90.47	-628.64	6,594.04	1,459.48	1,101.26	358.23	4.074	
14,400.00	7,019.48	14,357.25	7,031.59	181.96	181.17	90.48	-628.92	6,694.01	1,459.50	1,096.43	363.07	4.020	
14,500.00	7,022.07	14,457.25	7,034.23	184.38	183.59	90.48	-629.21	6,793.97	1,459.52	1,091.61	367.91	3.967	
14,600.00	7,024.65	14,557.25	7,036.87	186.80	186.02	90.48	-629.49	6,893.94	1,459.54	1,086.78	372.76	3.916	
14,700.00	7,027.23	14,657.25	7,039.50	189.23	188.44	90.48	-629.78	6,993.90	1,459.56	1,081.95	377.61	3.865	
14,800.00	7,029.81	14,757.25	7,042.14	191.65	190.86	90.48	-630.07	7,093.87	1,459.58	1,077.12	382.46	3.816	
14,900.00	7,032.39	14,857.25	7,044.78	194.08	193.29	90.49	-630.35	7,193.83	1,459.60	1,072.29	387.31	3.769	
15,000.00	7,034.97	14,957.25	7,047.42	196.50	195.71	90.49	-630.64	7,293.80	1,459.62	1,067.46	392.16	3.722	
15,100.00	7,037.55	15,057.25	7,050.05	198.93	198.14	90.49	-630.93	7,393.76	1,459.64	1,062.63	397.01	3.677	
15,200.00	7,040.14	15,157.25	7,052.69	201.35	200.57	90.49	-631.21	7,493.73	1,459.66	1,057.79	401.86	3.632	
15,300.00	7,042.72	15,257.25	7,055.33	203.78	202.99	90.50	-631.50	7,593.69	1,459.68	1,052.96	406.72	3.589	
15,400.00	7,045.30	15,357.25	7,057.97	206.21	205.42	90.50	-631.78	7,693.66	1,459.70	1,048.12	411.58	3.547	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 4H - OH - Plan 3 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,500.00	7,047.88	15,457.25	7,060.60	208.64	207.85	90.50	-632.07	7,793.62	1,459.72	1,043.28	416.43	3.505	
15,600.00	7,050.46	15,557.25	7,063.24	211.07	210.28	90.50	-632.36	7,893.59	1,459.74	1,038.45	421.29	3.465	
15,700.00	7,053.04	15,657.25	7,065.88	213.50	212.71	90.50	-632.64	7,993.55	1,459.76	1,033.61	426.15	3.425	
15,800.00	7,055.62	15,757.25	7,068.52	215.93	215.14	90.51	-632.93	8,093.51	1,459.78	1,028.76	431.01	3.387	
15,900.00	7,058.21	15,857.25	7,071.15	218.36	217.57	90.51	-633.21	8,193.48	1,459.80	1,023.92	435.87	3.349	
16,000.00	7,060.79	15,957.25	7,073.79	220.79	220.00	90.51	-633.50	8,293.44	1,459.82	1,019.08	440.74	3.312	
16,100.00	7,063.37	16,057.25	7,076.43	223.22	222.43	90.51	-633.79	8,393.41	1,459.83	1,014.24	445.60	3.276	
16,200.00	7,065.95	16,157.25	7,079.06	225.65	224.87	90.52	-634.07	8,493.37	1,459.85	1,009.39	450.46	3.241	
16,300.00	7,068.53	16,257.25	7,081.70	228.08	227.30	90.52	-634.36	8,593.34	1,459.87	1,004.55	455.33	3.206	
16,400.00	7,071.11	16,357.25	7,084.34	230.52	229.73	90.52	-634.64	8,693.30	1,459.89	999.70	460.19	3.172	
16,500.00	7,073.69	16,457.25	7,086.98	232.95	232.16	90.52	-634.93	8,793.27	1,459.91	994.85	465.06	3.139	
16,600.00	7,076.28	16,557.25	7,089.61	235.38	234.60	90.52	-635.22	8,893.23	1,459.93	990.01	469.93	3.107	
16,700.00	7,078.86	16,657.25	7,092.25	237.82	237.03	90.53	-635.50	8,993.20	1,459.95	985.16	474.79	3.075	
16,800.00	7,081.44	16,757.25	7,094.89	240.25	239.47	90.53	-635.79	9,093.16	1,459.97	980.31	479.66	3.044	
16,900.00	7,084.02	16,857.25	7,097.53	242.69	241.90	90.53	-636.08	9,193.13	1,459.99	975.46	484.53	3.013	
17,000.00	7,086.60	16,957.25	7,100.16	245.12	244.33	90.53	-636.36	9,293.09	1,460.01	970.61	489.40	2.983	
17,100.00	7,089.18	17,057.25	7,102.80	247.56	246.77	90.53	-636.65	9,393.06	1,460.03	965.76	494.27	2.954	
17,200.00	7,091.76	17,157.25	7,105.44	249.99	249.21	90.54	-636.93	9,493.02	1,460.05	960.91	499.14	2.925	
17,300.00	7,094.35	17,257.25	7,108.08	252.43	251.64	90.54	-637.22	9,592.99	1,460.07	956.05	504.02	2.897	
17,364.09	7,096.00	17,321.34	7,109.77	253.99	253.20	90.54	-637.40	9,657.05	1,460.08	952.94	507.14	2.879	

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 6H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,758.92	5,235.25	5,131.86	22.61	23.91	47.75	2,491.52	-728.98	1,910.34	1,869.97	40.37	47.318	
5,000.00	4,853.42	5,325.36	5,219.58	23.23	24.37	48.14	2,473.56	-739.15	1,868.57	1,827.32	41.25	45.297	
5,100.00	4,947.92	5,415.47	5,307.30	23.85	24.84	48.54	2,455.61	-749.31	1,826.88	1,784.75	42.13	43.359	
5,200.00	5,042.42	5,505.58	5,395.01	24.48	25.30	48.96	2,437.65	-759.48	1,785.27	1,742.25	43.02	41.499	
5,300.00	5,136.92	5,595.70	5,482.73	25.10	25.76	49.40	2,419.70	-769.64	1,743.75	1,699.84	43.91	39.712	
5,400.00	5,231.42	5,685.81	5,570.45	25.73	26.22	49.87	2,401.74	-779.81	1,702.32	1,657.51	44.80	37.996	
5,500.00	5,326.16	5,776.20	5,658.44	26.35	26.69	49.88	2,383.73	-790.01	1,661.43	1,615.74	45.69	36.360	
5,600.00	5,421.91	5,867.75	5,747.56	26.93	27.16	49.62	2,365.49	-800.34	1,622.58	1,576.01	46.57	34.842	
5,700.00	5,518.60	5,960.42	5,837.76	27.47	27.64	49.33	2,347.02	-810.79	1,585.87	1,538.45	47.43	33.439	
5,800.00	5,616.13	6,054.08	5,928.94	27.97	28.12	48.99	2,328.36	-821.36	1,551.32	1,503.06	48.26	32.144	
5,900.00	5,714.37	6,148.64	6,020.98	28.43	28.60	48.60	2,309.52	-832.03	1,518.94	1,469.87	49.07	30.952	
6,000.00	5,813.20	6,221.12	6,091.64	28.86	28.97	48.17	2,295.44	-840.00	1,489.32	1,439.43	49.89	29.855	
6,100.00	5,912.50	6,300.00	6,168.94	29.24	29.35	47.75	2,281.82	-847.71	1,463.90	1,413.24	50.66	28.897	
6,200.00	6,012.15	6,355.11	6,223.20	29.59	29.60	47.37	2,273.40	-852.48	1,442.62	1,391.21	51.41	28.063	
6,300.00	6,112.02	6,423.48	6,290.75	29.90	29.90	47.01	2,264.22	-857.68	1,425.79	1,373.69	52.10	27.367	
6,400.00	6,212.01	6,500.00	6,366.62	30.17	30.22	0.72	2,255.61	-862.55	1,413.43	1,360.68	52.75	26.795	
6,500.00	6,312.01	6,561.99	6,428.26	30.43	30.45	0.59	2,249.93	-865.77	1,404.05	1,350.70	53.35	26.316	
6,600.00	6,411.90	6,631.63	6,497.67	30.67	30.70	-90.20	2,244.94	-868.59	1,396.83	1,342.92	53.91	25.910	
6,700.00	6,509.38	6,700.00	6,565.92	30.81	30.93	-91.47	2,241.46	-870.56	1,391.99	1,337.67	54.31	25.628	
6,790.12	6,591.70	6,757.18	6,623.06	30.86	31.11	-92.65	2,239.65	-871.59	1,390.38	1,335.82	54.56	25.482 CC	
6,800.00	6,600.27	6,763.20	6,629.08	30.86	31.13	-92.77	2,239.52	-871.66	1,390.40	1,335.81	54.59	25.471	
6,900.00	6,680.58	6,819.99	6,685.86	30.85	31.29	-93.82	2,238.80	-872.07	1,393.29	1,338.49	54.80	25.425	
7,000.00	6,746.83	6,880.95	6,746.83	30.81	31.45	-94.68	2,238.77	-872.08	1,401.70	1,346.64	55.06	25.459	
7,100.00	6,796.10	6,930.22	6,796.10	30.76	31.57	-94.65	2,238.77	-872.08	1,416.41	1,361.01	55.41	25.565	
7,200.00	6,826.24	6,960.37	6,826.24	30.75	31.64	-93.12	2,238.77	-872.08	1,438.40	1,382.52	55.88	25.742	
7,300.00	6,836.21	6,970.33	6,836.21	30.80	31.67	-90.51	2,238.77	-872.08	1,467.59	1,411.12	56.47	25.988	
7,400.00	6,838.79	6,972.92	6,838.79	30.97	31.67	-90.61	2,238.77	-872.08	1,503.04	1,445.81	57.23	26.265	
7,500.00	6,841.37	6,975.50	6,841.37	31.34	31.68	-90.72	2,238.77	-872.08	1,544.15	1,486.03	58.13	26.566	
7,600.00	6,843.95	6,978.08	6,843.95	31.93	31.69	-90.83	2,238.77	-872.08	1,590.50	1,531.38	59.12	26.903	
7,700.00	6,846.53	6,980.66	6,846.53	32.77	31.69	-90.93	2,238.77	-872.08	1,641.63	1,581.47	60.16	27.287	
7,800.00	6,849.11	8,516.00	7,642.51	33.83	33.63	-118.14	2,332.28	78.03	1,683.04	1,621.98	61.05	27.566	
7,900.00	6,851.69	8,633.28	7,645.26	35.09	35.14	-118.14	2,331.49	195.28	1,682.52	1,618.80	63.72	26.405	
8,000.00	6,854.28	8,733.28	7,647.60	36.50	36.58	-118.14	2,330.60	295.24	1,681.86	1,615.52	66.34	25.351	
8,100.00	6,856.86	8,833.27	7,649.95	38.04	38.14	-118.15	2,329.71	395.21	1,681.20	1,612.06	69.14	24.315	
8,200.00	6,859.44	8,933.27	7,652.29	39.69	39.80	-118.15	2,328.82	495.18	1,680.54	1,608.44	72.10	23.309	
8,300.00	6,862.02	9,033.27	7,654.64	41.42	41.53	-118.15	2,327.93	595.14	1,679.88	1,604.68	75.20	22.340	
8,400.00	6,864.60	9,133.27	7,656.99	43.23	43.33	-118.16	2,327.04	695.11	1,679.22	1,600.80	78.41	21.415	
8,500.00	6,867.18	9,233.27	7,659.33	45.11	45.19	-118.16	2,326.15	795.07	1,678.56	1,596.82	81.74	20.535	
8,600.00	6,869.76	9,333.26	7,661.68	47.04	47.11	-118.16	2,325.26	895.04	1,677.90	1,592.73	85.16	19.702	
8,700.00	6,872.34	9,433.26	7,664.02	49.01	49.07	-118.16	2,324.37	995.01	1,677.24	1,588.57	88.67	18.916	
8,800.00	6,874.93	9,533.26	7,666.37	51.03	51.07	-118.17	2,323.48	1,094.97	1,676.58	1,584.33	92.25	18.175	
8,900.00	6,877.51	9,633.26	7,668.72	53.09	53.11	-118.17	2,322.59	1,194.94	1,675.92	1,580.02	95.89	17.477	
9,000.00	6,880.09	9,733.25	7,671.06	55.18	55.19	-118.17	2,321.70	1,294.91	1,675.26	1,575.66	99.60	16.821	
9,100.00	6,882.67	9,833.25	7,673.41	57.30	57.29	-118.18	2,320.82	1,394.87	1,674.60	1,571.24	103.35	16.203	
9,200.00	6,885.25	9,933.25	7,675.75	59.44	59.42	-118.18	2,319.93	1,494.84	1,673.94	1,566.78	107.15	15.622	
9,300.00	6,887.83	10,033.25	7,678.10	61.61	61.57	-118.18	2,319.04	1,594.81	1,673.28	1,562.28	111.00	15.075	
9,400.00	6,890.41	10,133.25	7,680.45	63.80	63.74	-118.19	2,318.15	1,694.77	1,672.62	1,557.73	114.88	14.559	
9,500.00	6,893.00	10,233.24	7,682.79	66.01	65.93	-118.19	2,317.26	1,794.74	1,671.96	1,553.16	118.80	14.074	
9,600.00	6,895.58	10,333.24	7,685.14	68.23	68.14	-118.19	2,316.37	1,894.70	1,671.30	1,548.55	122.75	13.616	
9,700.00	6,898.16	10,433.24	7,687.48	70.47	70.36	-118.19	2,315.48	1,994.67	1,670.64	1,543.91	126.72	13.184	
9,800.00	6,900.74	10,533.24	7,689.83	72.72	72.60	-118.20	2,314.59	2,094.64	1,669.98	1,539.25	130.72	12.775	
9,900.00	6,903.32	10,633.23	7,692.18	74.98	74.85	-118.20	2,313.70	2,194.60	1,669.32	1,534.57	134.75	12.389	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 6H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,905.90	10,733.23	7,694.52	77.26	77.12	-118.20	2,312.81	2,294.57	1,668.66	1,529.87	138.79	12.023	
10,100.00	6,908.48	10,833.23	7,696.87	79.55	79.39	-118.21	2,311.92	2,394.54	1,668.00	1,525.14	142.85	11.676	
10,200.00	6,911.07	10,933.23	7,699.21	81.84	81.67	-118.21	2,311.03	2,494.50	1,667.34	1,520.40	146.94	11.347	
10,300.00	6,913.65	11,033.23	7,701.56	84.15	83.97	-118.21	2,310.14	2,594.47	1,666.68	1,515.64	151.03	11.035	
10,400.00	6,916.23	11,133.22	7,703.91	86.46	86.27	-118.22	2,309.25	2,694.43	1,666.02	1,510.87	155.15	10.738	
10,500.00	6,918.81	11,233.22	7,706.25	88.78	88.58	-118.22	2,308.36	2,794.40	1,665.35	1,506.08	159.27	10.456	
10,600.00	6,921.39	11,333.22	7,708.60	91.10	90.89	-118.22	2,307.47	2,894.37	1,664.69	1,501.28	163.41	10.187	
10,700.00	6,923.97	11,433.22	7,710.94	93.44	93.22	-118.22	2,306.58	2,994.33	1,664.03	1,496.47	167.56	9.931	
10,800.00	6,926.55	11,533.21	7,713.29	95.78	95.55	-118.23	2,305.69	3,094.30	1,663.37	1,491.65	171.72	9.686	
10,900.00	6,929.14	11,633.21	7,715.64	98.12	97.88	-118.23	2,304.80	3,194.27	1,662.71	1,486.82	175.89	9.453	
11,000.00	6,931.72	11,733.21	7,717.98	100.47	100.22	-118.23	2,303.91	3,294.23	1,662.05	1,481.98	180.07	9.230	
11,100.00	6,934.30	11,833.21	7,720.33	102.82	102.57	-118.24	2,303.02	3,394.20	1,661.39	1,477.13	184.26	9.016	
11,200.00	6,936.88	11,933.21	7,722.67	105.18	104.92	-118.24	2,302.13	3,494.16	1,660.73	1,472.27	188.46	8.812	
11,300.00	6,939.46	12,033.20	7,725.02	107.55	107.27	-118.24	2,301.24	3,594.13	1,660.07	1,467.41	192.66	8.616	
11,400.00	6,942.04	12,133.20	7,727.37	109.91	109.63	-118.25	2,300.35	3,694.10	1,659.41	1,462.54	196.88	8.429	
11,500.00	6,944.62	12,233.20	7,729.71	112.28	111.99	-118.25	2,299.46	3,794.06	1,658.75	1,457.66	201.09	8.249	
11,600.00	6,947.21	12,333.20	7,732.06	114.66	114.36	-118.25	2,298.57	3,894.03	1,658.09	1,452.78	205.32	8.076	
11,700.00	6,949.79	12,433.20	7,734.40	117.03	116.73	-118.25	2,297.68	3,994.00	1,657.43	1,447.89	209.55	7.910	
11,800.00	6,952.37	12,533.19	7,736.75	119.41	119.10	-118.26	2,296.79	4,093.96	1,656.77	1,442.99	213.79	7.750	
11,900.00	6,954.95	12,633.19	7,739.10	121.80	121.48	-118.26	2,295.90	4,193.93	1,656.11	1,438.09	218.03	7.596	
12,000.00	6,957.53	12,733.19	7,741.44	124.18	123.86	-118.26	2,295.01	4,293.90	1,655.45	1,433.18	222.27	7.448	
12,100.00	6,960.11	12,833.19	7,743.79	126.57	126.24	-118.27	2,294.12	4,393.86	1,654.79	1,428.27	226.52	7.305	
12,200.00	6,962.69	12,933.18	7,746.13	128.96	128.62	-118.27	2,293.23	4,493.83	1,654.13	1,423.36	230.78	7.168	
12,300.00	6,965.28	13,033.18	7,748.48	131.35	131.00	-118.27	2,292.34	4,593.79	1,653.47	1,418.44	235.03	7.035	
12,400.00	6,967.86	13,133.18	7,750.83	133.75	133.39	-118.28	2,291.45	4,693.76	1,652.81	1,413.52	239.30	6.907	
12,500.00	6,970.44	13,233.18	7,753.17	136.14	135.78	-118.28	2,290.56	4,793.73	1,652.16	1,408.59	243.56	6.783	
12,600.00	6,973.02	13,333.18	7,755.52	138.54	138.18	-118.28	2,289.67	4,893.69	1,651.50	1,403.66	247.83	6.664	
12,700.00	6,975.60	13,433.17	7,757.86	140.94	140.57	-118.28	2,288.78	4,993.66	1,650.84	1,398.73	252.10	6.548	
12,800.00	6,978.18	13,533.17	7,760.21	143.34	142.97	-118.29	2,287.89	5,093.63	1,650.18	1,393.80	256.38	6.436	
12,900.00	6,980.76	13,633.17	7,762.56	145.75	145.36	-118.29	2,287.00	5,193.59	1,649.52	1,388.86	260.66	6.328	
13,000.00	6,983.35	13,733.17	7,764.90	148.15	147.76	-118.29	2,286.11	5,293.56	1,648.86	1,383.92	264.94	6.224	
13,100.00	6,985.93	13,833.16	7,767.25	150.56	150.16	-118.30	2,285.22	5,393.52	1,648.20	1,378.97	269.22	6.122	
13,200.00	6,988.51	13,933.16	7,769.59	152.97	152.57	-118.30	2,284.33	5,493.49	1,647.54	1,374.03	273.51	6.024	
13,300.00	6,991.09	14,033.16	7,771.94	155.38	154.97	-118.30	2,283.44	5,593.46	1,646.88	1,369.08	277.79	5.928	
13,400.00	6,993.67	14,133.16	7,774.29	157.79	157.37	-118.31	2,282.55	5,693.42	1,646.22	1,364.13	282.08	5.836	
13,500.00	6,996.25	14,233.16	7,776.63	160.20	159.78	-118.31	2,281.66	5,793.39	1,645.56	1,359.18	286.38	5.746	
13,600.00	6,998.83	14,333.15	7,778.98	162.61	162.19	-118.31	2,280.77	5,893.36	1,644.90	1,354.22	290.67	5.659	
13,700.00	7,001.42	14,433.15	7,781.32	165.03	164.60	-118.32	2,279.88	5,993.32	1,644.24	1,349.27	294.97	5.574	
13,800.00	7,004.00	14,533.15	7,783.67	167.44	167.01	-118.32	2,278.99	6,093.29	1,643.58	1,344.31	299.27	5.492	
13,900.00	7,006.58	14,633.15	7,786.02	169.86	169.42	-118.32	2,278.10	6,193.25	1,642.92	1,339.35	303.57	5.412	
14,000.00	7,009.16	14,733.14	7,788.36	172.28	171.83	-118.32	2,277.21	6,293.22	1,642.26	1,334.39	307.87	5.334	
14,100.00	7,011.74	14,833.14	7,790.71	174.70	174.24	-118.33	2,276.32	6,393.19	1,641.60	1,329.43	312.17	5.259	
14,200.00	7,014.32	14,933.14	7,793.05	177.12	176.66	-118.33	2,275.43	6,493.15	1,640.94	1,324.46	316.47	5.185	
14,300.00	7,016.90	15,033.14	7,795.40	179.54	179.07	-118.33	2,274.54	6,593.12	1,640.28	1,319.50	320.78	5.113	
14,400.00	7,019.48	15,133.14	7,797.75	181.96	181.49	-118.34	2,273.65	6,693.09	1,639.62	1,314.53	325.09	5.044	
14,500.00	7,022.07	15,233.13	7,800.09	184.38	183.91	-118.34	2,272.76	6,793.05	1,638.96	1,309.56	329.40	4.976	
14,600.00	7,024.65	15,333.13	7,802.44	186.80	186.32	-118.34	2,271.87	6,893.02	1,638.30	1,304.59	333.71	4.909	
14,700.00	7,027.23	15,433.13	7,804.78	189.23	188.74	-118.35	2,270.98	6,992.99	1,637.64	1,299.62	338.02	4.845	
14,800.00	7,029.81	15,533.13	7,807.13	191.65	191.16	-118.35	2,270.09	7,092.95	1,636.98	1,294.65	342.33	4.782	
14,900.00	7,032.39	15,633.12	7,809.48	194.08	193.58	-118.35	2,269.20	7,192.92	1,636.32	1,289.68	346.64	4.720	
15,000.00	7,034.97	15,733.12	7,811.82	196.50	196.00	-118.36	2,268.31	7,292.88	1,635.66	1,284.70	350.96	4.661	
15,100.00	7,037.55	15,833.12	7,814.17	198.93	198.42	-118.36	2,267.42	7,392.85	1,635.00	1,279.73	355.27	4.602	

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

Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Offset Design: Jurnegan - Jurnegan BS Fed Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	7,040.14	15,933.12	7,816.51	201.35	200.84	-118.36	2,266.53	7,492.82	1,634.34	1,274.75	359.59	4.545	
15,300.00	7,042.72	16,033.12	7,818.86	203.78	203.27	-118.37	2,265.64	7,592.78	1,633.68	1,269.78	363.90	4.489	
15,400.00	7,045.30	16,133.11	7,821.21	206.21	205.69	-118.37	2,264.76	7,692.75	1,633.02	1,264.80	368.22	4.435	
15,500.00	7,047.88	16,233.11	7,823.55	208.64	208.11	-118.37	2,263.87	7,792.72	1,632.36	1,259.82	372.54	4.382	
15,600.00	7,050.46	16,333.11	7,825.90	211.07	210.54	-118.37	2,262.98	7,892.68	1,631.70	1,254.84	376.86	4.330	
15,700.00	7,053.04	16,433.11	7,828.24	213.50	212.96	-118.38	2,262.09	7,992.65	1,631.04	1,249.86	381.18	4.279	
15,800.00	7,055.62	16,533.10	7,830.59	215.93	215.39	-118.38	2,261.20	8,092.61	1,630.38	1,244.88	385.50	4.229	
15,900.00	7,058.21	16,633.10	7,832.94	218.36	217.81	-118.38	2,260.31	8,192.58	1,629.72	1,239.90	389.82	4.181	
16,000.00	7,060.79	16,733.10	7,835.28	220.79	220.24	-118.39	2,259.42	8,292.55	1,629.06	1,234.92	394.14	4.133	
16,100.00	7,063.37	16,833.10	7,837.63	223.22	222.67	-118.39	2,258.53	8,392.51	1,628.40	1,229.94	398.46	4.087	
16,200.00	7,065.95	16,933.10	7,839.97	225.65	225.09	-118.39	2,257.64	8,492.48	1,627.74	1,224.95	402.79	4.041	
16,300.00	7,068.53	17,033.09	7,842.32	228.08	227.52	-118.40	2,256.75	8,592.45	1,627.08	1,219.97	407.11	3.997	
16,400.00	7,071.11	17,133.09	7,844.67	230.52	229.95	-118.40	2,255.86	8,692.41	1,626.42	1,214.98	411.44	3.953	
16,500.00	7,073.69	17,233.09	7,847.01	232.95	232.38	-118.40	2,254.97	8,792.38	1,625.76	1,210.00	415.76	3.910	
16,600.00	7,076.28	17,333.09	7,849.36	235.38	234.81	-118.41	2,254.08	8,892.35	1,625.10	1,205.02	420.09	3.868	
16,700.00	7,078.86	17,433.08	7,851.70	237.82	237.24	-118.41	2,253.19	8,992.31	1,624.44	1,200.03	424.41	3.828	
16,800.00	7,081.44	17,533.08	7,854.05	240.25	239.67	-118.41	2,252.30	9,092.28	1,623.78	1,195.04	428.74	3.787	
16,900.00	7,084.02	17,633.08	7,856.40	242.69	242.10	-118.42	2,251.41	9,192.24	1,623.12	1,190.06	433.06	3.748	
17,000.00	7,086.60	17,733.08	7,858.74	245.12	244.53	-118.42	2,250.52	9,292.21	1,622.46	1,185.07	437.39	3.709	
17,100.00	7,089.18	17,833.08	7,861.09	247.56	246.96	-118.42	2,249.63	9,392.18	1,621.80	1,180.08	441.72	3.672	
17,200.00	7,091.76	17,933.07	7,863.43	249.99	249.39	-118.42	2,248.74	9,492.14	1,621.14	1,175.10	446.05	3.634	
17,300.00	7,094.35	18,033.07	7,865.78	252.43	251.82	-118.43	2,247.85	9,592.11	1,620.48	1,170.11	450.37	3.598	
17,364.09	7,096.00	18,097.16	7,867.28	253.99	253.38	-118.43	2,247.28	9,656.18	1,620.06	1,166.91	453.15	3.575 ES, SF	

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

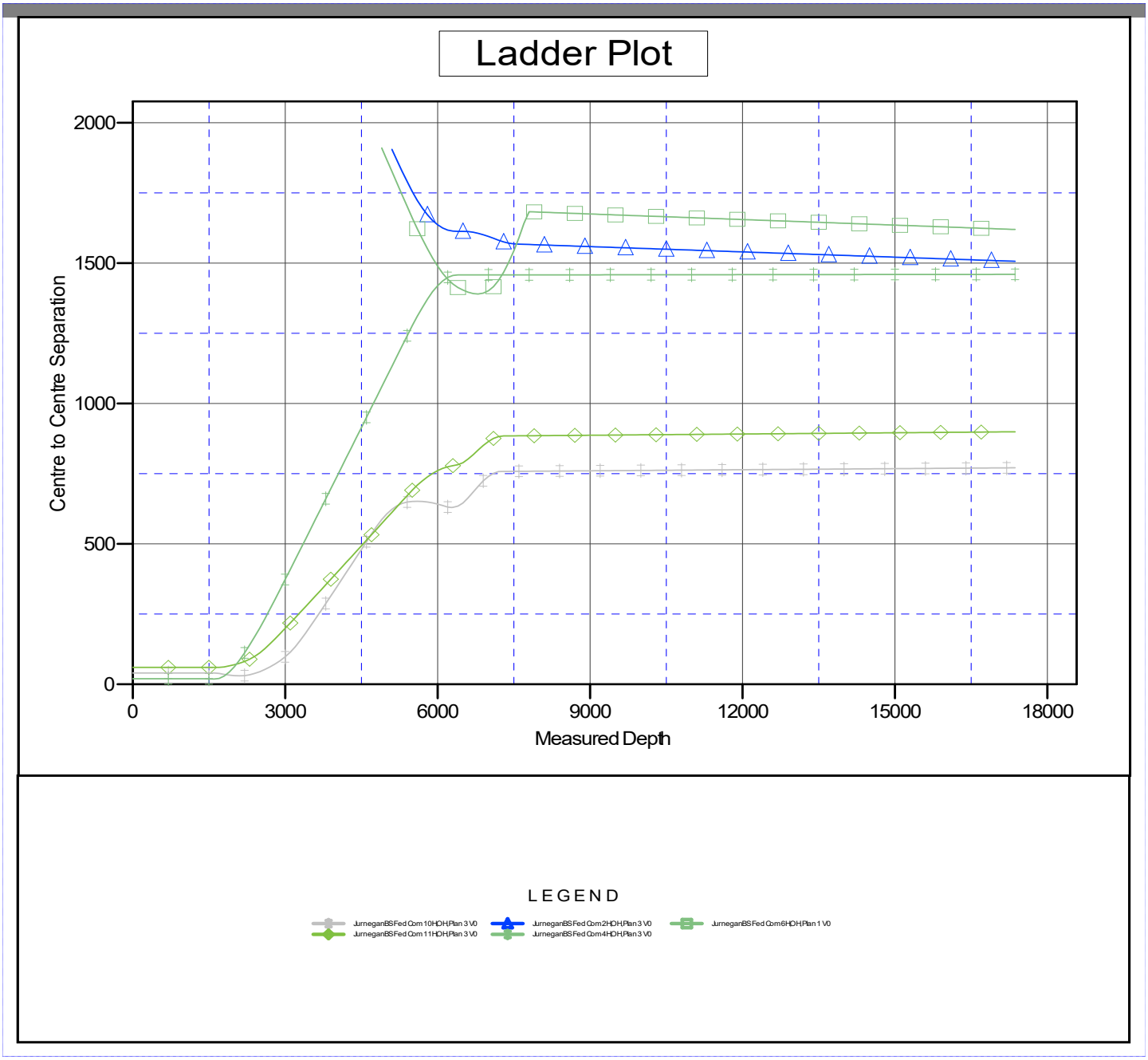
Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to 3330'GL + 26.5'KB @ 3356.50usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Jurnegan BS Fed Com 3H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.02°



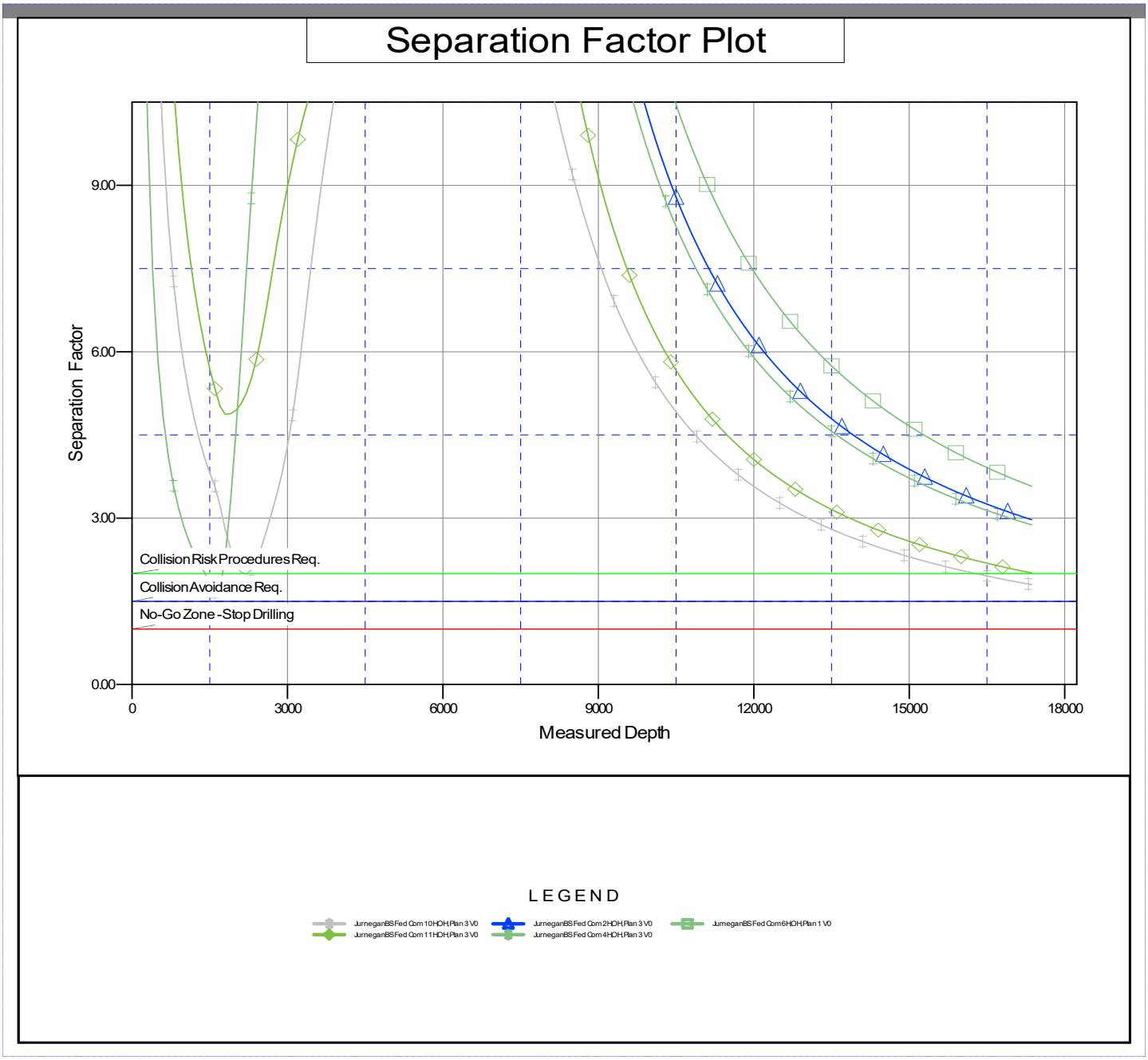
Legacy Directional Drilling

Anticollision Report

Company:	Freedom Energy	**Local Co-ordinate Reference:**	Well Jurnegan BS Fed Com 3H
Project:	Eddy County, NM NAD83	**TVD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Reference Site:	Jurnegan	**MD Reference:**	3330'GL + 26.5'KB @ 3356.50usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Jurnegan BS Fed Com 3H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM_WA
Reference Design:	Plan 4	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to 3330'GL + 26.5'KB @ 3356.50usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Jurnegan BS Fed Com 3H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.02°



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

ACKNOWLEDGMENTS

Operator: Flat Creek Resources, LLC 777 Main St. Fort Worth, TX 76102	OGRID: 374034
	Action Number: 574803
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

☑	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.

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CONDITIONS

Operator:	OGRID:
Flat Creek Resources, LLC 777 Main St. Fort Worth, TX 76102	374034
	Action Number: 574803
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
permitsw	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/13/2026
jeffrey.harrison	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.	4/14/2026
jeffrey.harrison	NSP required prior to production if not included in an existing order or not an infill to an appropriate defining well in the same pool and spacing unit.	4/14/2026
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	4/14/2026
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	4/14/2026
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.	4/14/2026
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.	4/14/2026