

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

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

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. 9. API Well No. 30-043-21523
2. Name of Operator		10. Field and Pool, or Exploratory
3a. Address	3b. Phone No. (include area code)	11. Sec., T. R. M. or Blk. and Survey or Area
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		12. County or Parish
14. Distance in miles and direction from nearest town or post office*		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

- | | |
|---|---|
| 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
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		

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

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

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: NWNE / 914 FNL / 1454 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.200894 / LONG: -107.433803 (TVD: 0 feet, MD: 0 feet)
PPP: NENW / 1230 FNL / 2326 FWL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.200042 / LONG: -107.438794 (TVD: 5489 feet, MD: 5965 feet)
PPP: SESE / 1102 FSL / 1 FEL / TWSP: 23N / RANGE: 6W / SECTION: 22 / LAT: 36.20647 / LONG: -107.446712 (TVD: 5544 feet, MD: 14610 feet)
PPP: SWSW / 1 FSL / 1096 FWL / TWSP: 23N / RANGE: 6W / SECTION: 23 / LAT: 36.203432 / LONG: -107.44297 (TVD: 5544 feet, MD: 14610 feet)
BHL: NENW / 347 FNL / 1566 FWL / TWSP: 23N / RANGE: 6W / SECTION: 22 / LAT: 36.216742 / LONG: -107.459371 (TVD: 5544 feet, MD: 14610 feet)

BLM Point of Contact

Name: JEFFREY J TAFOYA
Title: Assistant Field Manager
Phone: (505) 564-7672
Email: JTAFOYA@BLM.GOV

CONFIDENTIAL

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

WELL LOCATION INFORMATION

API Number 30-043-21523	Pool Code 13379	Pool Name COUNSELORS GALLUP - DAKOTA POOL
Property Code 325207	Property Name GALLO CANYON UNIT	Well Number 310H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6930'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
B	26	23N	6W		914' NORTH	1454' EAST	36.200894° N	107.433803° W	SANDOVAL

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	22	23N	6W		347' NORTH	1566' WEST	36.216742° N	107.459371° W	SANDOVAL

Dedicated Acres PENETRATED SPACING UNIT: SEC 26: SE/NW, NE/NW & NW/NW (120 AC.); SEC 23: SE/SW, SW/SW & NW/SW (120 AC.); SEC 22: SE/SE, NE/SE, NW/SE, SE/NE, SW/NE, NW/NE, SE/NW, NE/NW & NW/NW (360 AC.) = 600 ACRES	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code UNIT
Order Numbers: R-13718A	Well Setbacks are under Common Ownership: ☒ Yes ☐ No			

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	26	23N	6W		1230' NORTH	2326' WEST	36.200042° N	107.438794° W	SANDOVAL

Fist Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	26	23N	6W		1230' NORTH	2326' WEST	36.200042° N	107.438794° W	SANDOVAL

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	22	23N	6W		347' NORTH	1566' WEST	36.216742° N	107.459371° W	SANDOVAL

Unitized Area or Area of Uniform Interest GALLO CANYON	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation
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OPERATOR CERTIFICATIONS

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.

Shaw-Marie Ford
Signature

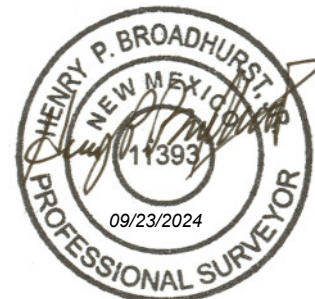
9/23/2024
Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
E-mail Address

SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor:

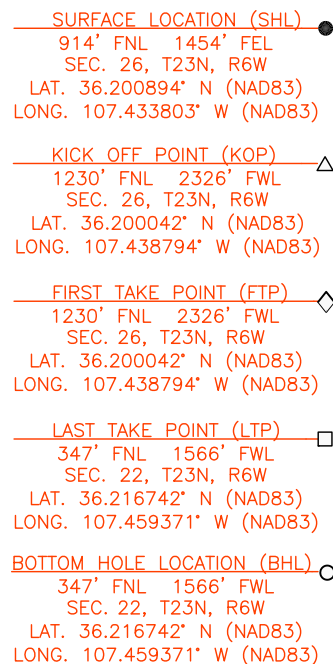
Certificate Number

11393

Date of Survey

JULY 6, 2021

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



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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: _DJR Operating, LLC_ **OGRID:** _371838_ **Date:** _04 / 25 / 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
Gallo Canyon Unit 310H	TBD	B-26-23N-6W	914 FNL x 1454 FEL	313	947	125
Gallo Canyon Unit 311H	TBD	B-26-23N-6W	921 FNL x 1435 FEL	349	1056	139
Gallo Canyon Unit 315H	TBD	B-26-23N-6W	908 FNL x 1473 FEL	255	773	102
Gallo Canyon Unit 316H	TBD	B-26-23N-6W	901 FNL x 1492 FEL	234	708	94
Gallo Canyon Unit 401H	TBD	B-26-23N-6W	934 FNL x 1397 FEL	302	915	121
Gallo Canyon Unit 402H	TBD	B-26-23N-6W	927 FNL x 1416 FEL	272	824	109
				3-year Decline	3-year Decline	3-year Decline
Gallo Canyon Unit 310H	TBD	B-26-23N-6W	914 FNL x 1454 FEL	72	429	29
Gallo Canyon Unit 311H	TBD	B-26-23N-6W	921 FNL x 1435 FEL	80	478	32
Gallo Canyon Unit 315H	TBD	B-26-23N-6W	908 FNL x 1473 FEL	59	350	24
Gallo Canyon Unit 316H	TBD	B-26-23N-6W	901 FNL x 1492 FEL	54	321	22
Gallo Canyon Unit 401H	TBD	B-26-23N-6W	934 FNL x 1397 FEL	70	414	28
Gallo Canyon Unit 402H	TBD	B-26-23N-6W	927 FNL x 1416 FEL	63	373	25

IV. Central Delivery Point Name: ___Chaco Processing Plant___ [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
Gallo Canyon Unit 310H	TBD	7/5/2025	8/15/2025	9/1/2025	9/15/2025	9/17/2025
Gallo Canyon Unit 311H	TBD	7/6/2025	8/16/2025	9/1/2025	9/15/2025	9/17/2025
Gallo Canyon Unit 315H	TBD	7/7/2025	8/17/2025	9/1/2025	9/15/2025	9/17/2025
Gallo Canyon Unit 316H	TBD	7/8/2025	8/18/2025	9/1/2025	9/20/2025	9/22/2025
Gallo Canyon Unit 401H	TBD	7/9/2025	8/19/2025	9/1/2025	9/20/2025	9/22/2025
Gallo Canyon Unit 402H	TBD	7/10/2025	8/20/2025	9/1/2025	9/20/2025	9/22/2025

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: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 4/25/2025
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Gallo Canyon Unit B26-2306 Pad
Nos. 310H, 311H, 315H, 316H, 401H and 402H Oil and Natural Gas Wells Project
NWNE B-26-23N-06W

SEPARATION EQUIPMENT

DJR Operating, LLC (DJR) has pulled representative pressurized samples from wells in the same producing formation. DJR has utilized these samples in process simulations to determine the amount of gas anticipated in each stage of the process and utilized this information with a safety factor to size the equipment listed below:

Separation equipment will be set as follows:

- Individual 3-phase separator will be set for the individual well.
- The separator will be sized based on the anticipated volume of the well and the pressure of the lines utilized for oil, gas, and water takeaway.
- The 3-phase production separator will be equipped with a 0.75 MMBtu/hr indirect fired heater.

Heater treaters will be set as follows:

- Individual heater treaters will be set for the individual well.
- The heater treaters are sized based on the anticipated combined volume of oil and produced water predicted to come from the initial 3-phase separator.
- Oil will be separated from the produced water and the oil/produced water will be sent to its respective tanks.
- The combined oil and natural gas stream is routed to the Vapor Recovery Tower.

Vapor Recovery Equipment will be set as follows:

- The Vapor Recovery Tower has been sized, based on the anticipated volume of gas from the heater treater and oil and water tanks.
- The Vapor Recovery Unit has been sized, based on the anticipated volume of gas from the heater treater and oil and water tanks. The Vapor Recovery Unit is utilized to push the recovered gas into the sales pipeline.

Production storage tanks will be set as follows:

- The oil and produced water tanks utilize a closed vent capture system to ensure all breathing, working, and flashing losses are routed to the Vapor Recovery Tower and Vapor Recovery Unit.
- Each of the production storage tanks will be equipped with a 0.5 MMBtu/hr indirect heater.



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NWNE B-26-23N-06W

VENTING and FLARING

DJR Operating, LLC (DJR) has a natural gas system available prior to startup of completion operations. DJR utilizes a Vapor Recovery Unit System and sells all natural gas except during periods of startup, shutdown, maintenance, or malfunction for the gas capturing equipment, including the vapor recovery tower, vapor recovery unit, storage tanks, and pipelines.

Currently, DJR utilizes the following from list A-I of Section 3 for its operations to minimize flaring:

- a) DJR utilizes natural gas-powered generators to power its leases where grid power isn't available.
- b) When electrical grid power is unavailable, natural gas generators will be used for major equipment onsite.
- c) DJR's in service compression will be natural gas powered.
- d) Should liquids removal, such as dehydration be required, units will be powered by natural gas.

DJR will only flare gas during the following times:

- Scheduled maintenance for gas capturing equipment including:
 - Vapor Recovery Tower
 - Vapor Recovery Unit
 - Storage tanks
 - Pipelines
 - Emergency flaring



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OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

DJR Operating, LLC (DJR) understands the requirements of NMAC 19.15.27.8 which states that the venting and flaring of natural gas during drilling, completion or production that constitutes waste as defined in 19.15.2 are prohibited.

19.15.27.8 B. Venting and flaring during drilling operations

- DJR shall capture or combust natural gas if technically feasible during drilling operations using best industry practices.
- A flare stack with a 100% capacity for expected volumes will be set on location of the facility at least 100 feet from the nearest surface hole location, well heads, and storage tanks.
- In the event of an emergency, DJR will vent natural gas in order to avoid substantial impact. DJR shall report the vented or flared gas to the NMOCD.

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

- DJR facilities are built and ready from day 1 of Flowback.
- Individual well test separators will be set to properly separate gas and liquids. Temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline. See Separation Equipment for details.
- Should the facility not yet be capable of processing gas, or the gas does not meet quality standards, then storage tanks will be set that are tied into gas busters or temporary flare to manage natural gas. This flare would meet the following requirements:
 - 1) An appropriately sized flare stack with an automatic igniter.
 - 2) DJR analyzes the natural gas samples twice per week.
 - 3) DJR routes the natural gas into a gathering pipeline as soon as the pipeline specifications are met.
 - 4) DJR provides the NMOCD with pipeline specifications and natural gas data.



19.15.27.8 D. Venting and flaring during production operations

During Production Operations DJR will not vent or flare natural gas except under the following circumstances:

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided:
 - a. DJR does not vent after the well achieves a stabilized rate and pressure.
 - b. DJR will remain present on-site during liquids unloading by manual purging and take all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time.
 - c. DJR will optimize the system to minimize natural gas venting on any well equipped with a plunger lift or auto control system.
 - d. Best Management Practices will be used during downhole well maintenance.
3. During the first year of production from an exploratory well provided:
 - a. DJR receives approval from the NMOCD.
 - b. DJR remains in compliance with the NM gas capture requirements.
 - c. DJR submits an updated C-129 form to the NMOCD.
4. 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 operation of 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 dehydration units.
 - g. Normal operations of compressors, compressor engines, turbines, valves, flanges, and connectors.
 - h. During a bradenhead, packer leakage test, or production test lasting less than 24-hours.
 - i. When natural gas does not meet the gathering pipeline specifications.
 - j. Commissioning of pipelines, equipment, or facilities only for as long as necessary to purge introduced impurities.

19.15.27.8 E. Performance standards

1. DJR has utilized process simulations with a safety factor to design all separation and storage equipment. The equipment is routed to a Vapor Recovery System and utilizes a flare as back up for periods of startup, shutdown, maintenance, or malfunction of the VRU System.
2. DJR will install a flare that designed to handle the full volume of vapors from the facility in case of the VRU failure and it is designed with an auto ignition system.
3. Flare stacks will 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. Previously installed flare stacks will be retrofitted with an automatic ignitor, continuous pilot, or technology that alerts DJR of flare malfunction within 18 months after May 25, 2021.
 - c. Flare stacks replaced after May 25, 2021, will be equipped with an automatic ignitor or continuous pilot if located at a well or facility with average daily production of 60,000 cubic feet of natural gas or less.
 - d. Flare stacks will be located at least 100 feet from the well and storage tanks and securely anchored.
4. DJR will conduct an AVO inspection on all components for leaks and defects on a weekly basis.
 5. DJR will make and keep records of AVO inspections which will be available to the NMOCD for at least 5 years.
 6. DJR 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. DJR will resolve emergencies as promptly as possible.

19.15.27.8 F. Measurement or estimation of vented and flared natural gas

1. DJR will have meters on both the low- and high-pressure sides of the flares and the volumes will be recorded in DJR's SCADA system.
2. DJR will install equipment to measure the volume of flared natural gas that has an average daily production of 60,000 cubic feet or greater of natural gas.
3. DJR's measuring equipment will conform to the industry standards.
4. The measurement system is designed such that it cannot be bypassed except for inspections and servicing meters.
5. DJR will estimate the volume of vented or flared natural gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
6. DJR will estimate the volume of flared and vented natural gas based on the results of an annual GOR test for wells that do not require measuring equipment reported on Form C-116.
7. DJR will install measuring equipment whenever the NMOCD determines that metering is necessary.



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NWNE B-26-23N-06W

BEST MANAGEMENT PRACTICES

DJR Operating, LLC (DJR) utilizes the following Best Management Practices to minimize venting during active and planned maintenance.

DJR has a closed vent capture system to route emissions from the heater treater, tanks, and vapor recovery to the vapor recovery unit with an enclosed combustion device (ECD) for backup. The system is designed such that if the vapor recovery unit is taken out of service for any reason, the vapors will be routed to the ECD for combustion.

DJR will isolate and attempt to route all vapors to the vapor recovery unit or ECD prior to opening any lines for maintenance to minimize venting from the equipment.

DJR shall notify the NMOCD of venting or flaring that exceeds 50 MCF but less than 500 MCF in volume that either resulted from an emergency or malfunction, or an event lasting over eight hours or more cumulatively within any 24-hour period from a single event by filing a form C-129 no later than 15 days following the discovery or commencement of venting or flaring.

DJR shall notify the NMOCD verbally or by e-mail within 24-hours following discovery or commencement of venting or flaring that exceeds 500 MCF in volume or otherwise qualifies as a major release as defined in 19.15.29.7 NMAC from a single event and provide the information required in form C-129 to the NMOCD no later than 15 days that verifies, updates, or corrects the verbal or e-mail notification.

DJR will install measuring equipment to conform to industry standards such as American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.10 Measurement of Flow to Flares.

DJR's measuring equipment shall not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

DJR shall report the volume of vented and flared natural gas for each well or facility at which venting or flaring occurred on a monthly basis.

Rev 0



DRILLING PLAN

Gallo Canyon Unit 310H

Sandoval County, New Mexico

Surface Location

1454-ft FEL & 914-ft FNL
 Sec 26 T23N R06W
 Graded Elevation 6930' MSL
 RKB Elevation 6944' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2008940° N
 Longitude 107.4338030° W

Kick Off Point for Horizontal Build Curve

5051-ft MD
 4905-ft TVD

Local Coordinates (from SHL)

646-ft South
 914-ft West

Heel Location (Pay zone entry)

2326-ft FWL & 1230-ft FNL
 Sec 26 T23N R06W

Heel Geographical Coordinates (NAD-83)

Latitude 36.20004244° N
 Longitude 107.43879421° W

Bottom Hole Location (TD)

1566-ft FWL & 347-ft FNL
 Sec 22 T23N R06W

BHL Geographical Coordinates (NAD-83)

Latitude 36.216742° N
 Longitude 107.4593712° W

Well objectives

This well is planned as a 8590-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 145°F. Bottom hole pressure in the Gallup C is forecast to be 1985 psi.

Formation Tops (Sd = Sand; Sh = Shale; Siltstone = Slt, Coal = C; W = water; O = oil; G = gas; NP = no penetration)

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	1450	1433	Sd	W	8.3	8.4 – 8.8
Kirtland	1564	1542	Sh	-	8.3	8.4 – 8.8
Fruitland	1765	1736	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1978	1942	Sd	W	8.3	9.0 - 9.5
Lewis	2099	2058	Sh	-		9.0 - 9.5
Chacra	2861	2793	Sd	-	8.3	9.0 - 9.5
Menefee	3594	3500	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4294	4175	Sd	-	8.3	9.0 - 9.5
Mancos	4493	4367	Sh	-		9.0 - 9.5
Mancos Silt	4903	4762	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5439	5251	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5479	5281	Sd	O/G	6.6	8.8 -9.0
Gallup C	5633	5380	Sd	O/G	6.6	8.8 -9.0
Target	6019	5490	Sd	O/G	6.6	8.8 -9.0

Casing Program

Casing OD	Hole Size	Weight (#/ft)	Grade	Coupling	MD Top	MD Bottom	TVD Top	TVD Bottom	Top of Cement
9-5/8"	12-1/4"	36	K-55	STC	surf	350	surf	350	surface
7"	8-3/4"	26	K-55	LTC	surf	5965	surf	5489	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5676	14610	5403	5544	5676

Note: all casing will be new

Rev 0



Casing Design Load Cases

Description		Casing String		
		9-5/8" Surface	7" Intermediate	4-1/2" Production Liner
Collapse	Full internal evacuation ¹	✓	✓	✓
	Cementing	✓	✓	✓
Burst	Pressure test	✓ ²	✓ ²	✓
	Gas kick		✓ ³	
	Fracture at shoe, 1/3 BHP at surface		✓ ⁴	
	Injection down casing			✓ ⁵
Axial	Dynamic load on casing coupling ⁶	✓	✓	✓
Axial	Overpull ⁷	✓	✓	✓

Note

- 1 Fluid level at shoe, air column to surface, pore pressure outside
- 2 Tested to 80% of minimum internal yield with freshwater inside, pore pressure outside
- 3 50 bbl kick at TD, 0.50 ppg intensity, 4" drill pipe, 9.0 ppg mud, fracture gradient at shoe
- 4 2060 psi BHP, 687 psi surface pressure, 12.5 ppg EMW shoe integrity
- 5 Surface stimulation pressure of 8000 psi on 8.3 ppg fluid column. Stimulation will be down frac string, so load does not apply to 7" intermediate casing.
- 6 Shock load from abrupt pipe deceleration, evaluated against coupling rating
- 7 Overpull values as follows: Surface casing 20,000 lbs, Intermediate & Production 100,000 lbs

Casing Design Factors

Casing string		Design Factors			
		Burst	Collapse	Axial	Triaxial
Surface	9-5/8"	1.25	13.38	8.16	1.56
Intermediate	7"	1.25	1.50	1.68	1.34
Production liner	4-1/2"	1.37	3.68	1.88	1.69

Cement Design

9-5/8" Surface Casing

	Lead
Name	Redi-Mix
Type	I-II
Planned top	Surface
Density (ppg)	14.50
Yield (cf/sx)	1.61
Mix water (gal/sx)	7.41
Volume (sx)	114
Volume (bbls)	33
Volume (cu. ft.)	185
Excess %	50

7" Intermediate Casing

	Lead	Tail
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	4551-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	443	227
Volume (bbls)	185	60
Volume (cu.ft.)	1037	339
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5676-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	751
Volume (bbls)	209
Volume (cu.ft)	1174
Excess %	40

Wellhead & Pressure Control

The well head will be an 11" 5M multi-bowl system. A 3M BOPE conforming to Onshore Order #2 will be installed on the surface casing. The BOP and accumulator will meet API 16D and 16E respectively.

A PVT mud monitoring system and a trip tank will be rigged up and operational for all hole intervals. An electronic geolograph will be employed to monitor and record drilling data (ROP, WOB, SPM, Pressure, RPM and torque).

Mud Program

Surface hole will be drilled with a fresh water, native mud system. In intermediate hole, a low weight 7% KCl LSND drilling fluid will be used, with KCl providing chemical stability for the young shales and clays present in the interval. In production hole a LSND system with polymer and lubricant additives is programmed. Sufficient drill water and mud additives will be on hand to maintain adequate pit volumes and maintain well control.

Hole Section	Fluid type	Interval (MD)	Density (ppg)	Funnel Viscosity	Yield Point	Fluid Loss (cc/30 min)
Surface	Fresh water spud mud	0 – 350	8.4 – 8.8	32 – 44	2 – 12	NC
Intermediate	7% KCl Low solids, non-dispersed	350 – 5965	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5965 – 14610	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

Wellbore surveying: Drift (inclination only) surveys will be obtained in surface hole. MWD directional surveys will be taken in intermediate and production hole.

Logging while drilling: None in surface hole. MWD GR in intermediate and production hole.

Mud logging: a two-person mud logging unit with C1 – C4 gas analysis will be operational in intermediate and production hole.

Electric logging: No open hole electric logs are programmed. A cased hole GR/CCL will be run during completions for perforating depth control.

Cuttings and drilling fluids management

A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports with a bucket loader. Drying agents will be used if necessary. The solids will be taken to a licensed commercial disposal facility. Whole mud will be dewatered back to drill water and used as make up for subsequent wells or hauled off for disposal. A diagram of the closed loop system is included.

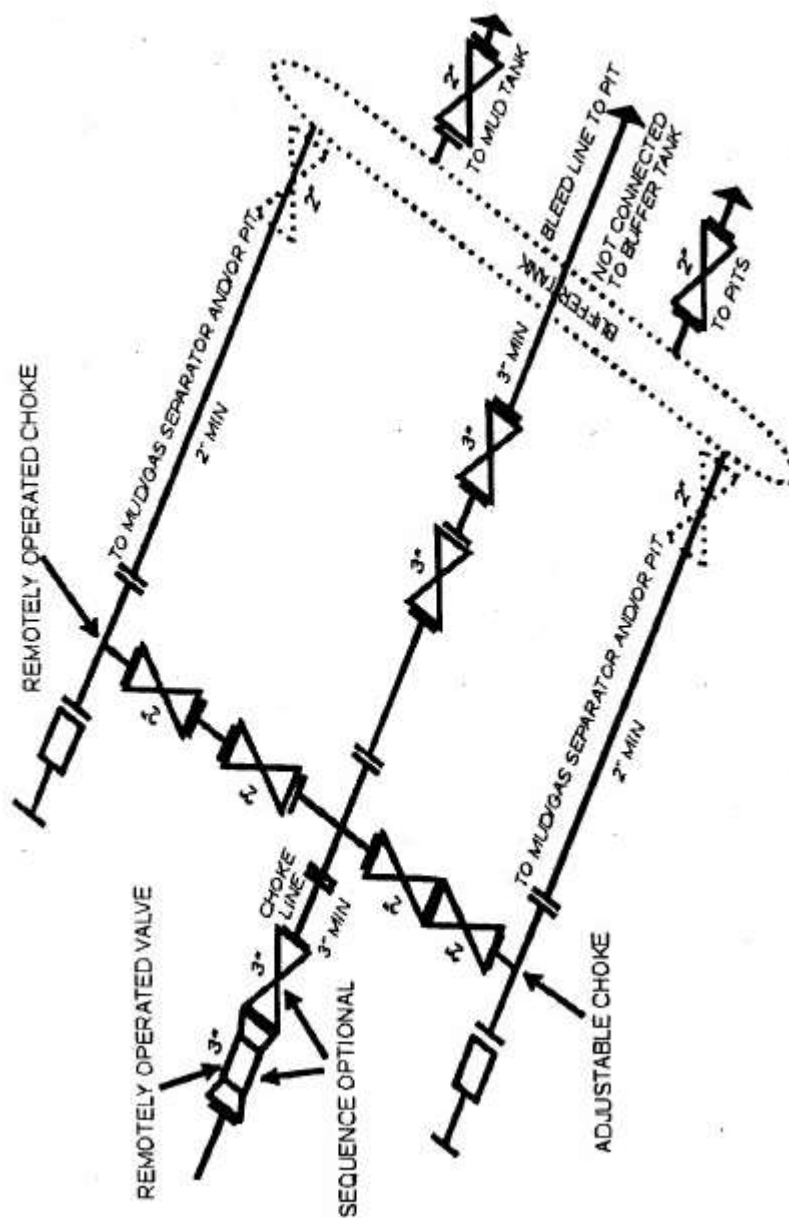
Completion

It is envisioned that this well will be completed with a multi-stage sand frac, using the plug and perf technique. After drilling out the plugs, the current plan is to install a 2-7/8" plunger-assisted gas lift tubing string. The stimulation and completion plan will be sundried at a later date.



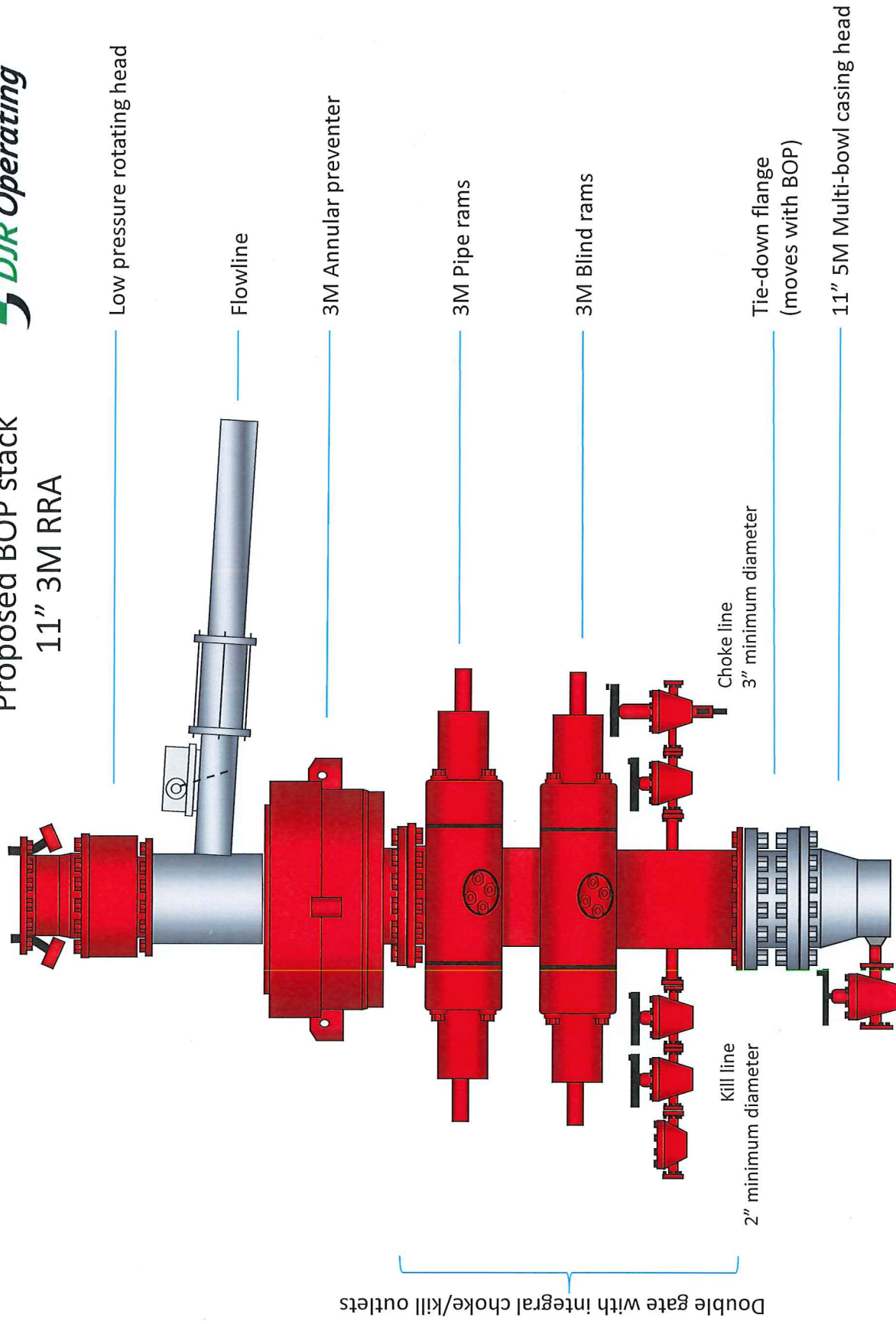
Choke Manifold

Actual system to conform with Onshore Order 2





Proposed BOP stack 11" 3M RRA





Company: DJR Operating
Project: Gallo Canyon Unit
Site: B26 2306 Pad
Well: # 310H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 310H

+N/-S		+E/-W	Northing	Easting	Latitude	Longitude
0		0	1892665.61	2840967.54	36.20089400	-107.43380300
GL 6930' & RKB 14' @ 6944ft						

DESIGN TARGET DETAILS

310H Heel Rev 1	310H Toe	310H Toe
TVD	5492	5544
+N/-S	-310	5770
+E/-W	-1473	-7542
Northing	1892349.60	1898404.57
Easting	2839496.20	2833401.72
Latitude	36.20004244	36.21674200
Longitude	-107.43879421	-107.45937120

PROJECT DETAILS: Gallo Canyon Unit

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

Plan: APD (# 310H/Original Drilling)
Created By: Janie Collins Date: 11:21, July 23 2021

SECTION DETAILS

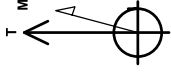
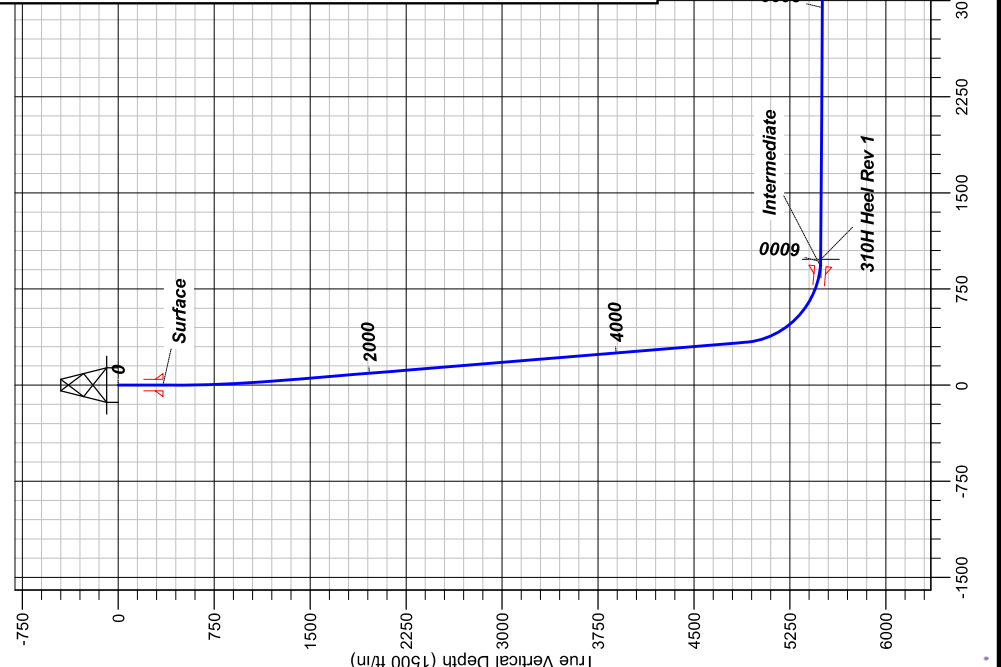
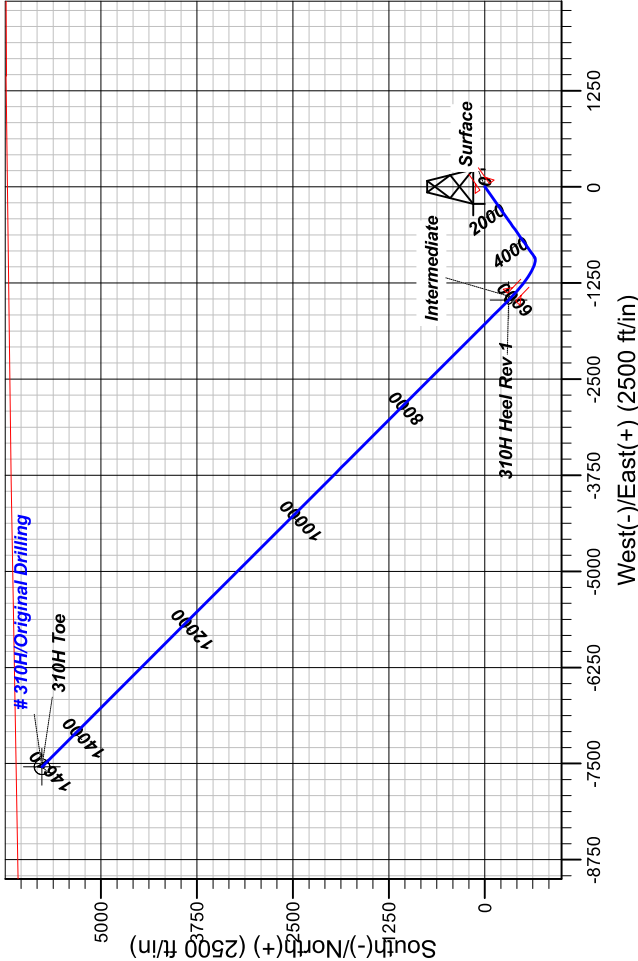
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
450	0.00	0.00	0	0	0	0.00	0.00	0
1219	15.38	234.76	450	0	0	0.00	0.00	0
1219	15.38	234.76	1210	-59	-84	2.00	234.76	31
609	89.85	315.06	450	-94	-147	0.00	0.00	31
609	89.85	315.06	5492	-310	-7542	0.00	89.85	984
14810	89.85	315.06	5544	5770	-7542	0.00	89.85	9496

CASING DETAILS

TVD	MD	Name
350	350	Surface
5489	5965	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
1433	1450	Ojo Alamo
1542	1564	Kirtland
1736	1765	Fruitland
1942	1978	Pictured Cliffs
2058	2099	Lewis
2793	2861	Chacra
3500	3594	Menefee
4175	4294	Point Lookout
4367	4493	Mancos
4762	4903	Mancos Silt
5251	5439	Gallup A
5281	5479	Gallup B
5380	5633	Gallup C



Azimuths to True North
Magnetic North: 10.2°

Magnetic Field
Strength: 51255.5
Dip Angle: 63.1°
Date: 12/31/2004
Model: IGRF2000





DJR Operating

Gallo Canyon Unit

B26 2306 Pad

310H - Slot 4

Original Drilling

Plan: APD

Standard Planning Report

23 July, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 310H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Project	Gallo Canyon Unit, Sandoval County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	B26 2306 Pad		
Site Position:		Northing:	1,892,645.83 usft
From:	Lat/Long	Easting:	2,841,024.27 usft
Position Uncertainty:	0 ft	Slot Radius:	13.20 in
		Latitude:	36.20083900
		Longitude:	-107.43361100
		Grid Convergence:	0.24 °

Well	# 310H - Slot 4		
Well Position	+N/-S	20 ft	Northing:
	+E/-W	-57 ft	Easting:
Position Uncertainty	0 ft	Wellhead Elevation:	
		Latitude:	36.20089400
		Longitude:	-107.43380300
		Ground Level:	6930 ft

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	10.72	63.27	51,255.12543973

Design	APD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0	0	0	307.42

Plan Survey Tool Program	Date	7/15/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	14,610	APD (Original Drilling)	MWD+IGRF
				OWSG MWD + IGRF or WMM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
450	0.00	0.00	450	0	0	0.00	0.00	0.00	0.00	
1219	15.38	234.76	1210	-59	-84	2.00	2.00	0.00	234.76	
5051	15.38	234.76	4905	-646	-914	0.00	0.00	0.00	0.00	
6019	89.65	315.05	5492	-310	-1473	9.00	7.67	8.30	80.72	310H Heel Rev 1
14,610	89.65	315.05	5544	5770	-7542	0.00	0.00	0.00	0.00	310H Toe



Lonestar Consulting, LLC

Planning Report



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Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
450	0.00	0.00	450	0	0	0	0.00	0.00	0.00
500	1.00	234.76	500	0	0	0	2.00	2.00	0.00
600	3.00	234.76	600	-2	-3	1	2.00	2.00	0.00
700	5.00	234.76	700	-6	-9	3	2.00	2.00	0.00
800	7.00	234.76	799	-12	-17	6	2.00	2.00	0.00
900	9.00	234.76	898	-20	-29	11	2.00	2.00	0.00
1000	11.00	234.76	997	-30	-43	16	2.00	2.00	0.00
1100	13.00	234.76	1094	-42	-60	22	2.00	2.00	0.00
1200	15.00	234.76	1191	-56	-80	29	2.00	2.00	0.00
1219	15.38	234.76	1210	-59	-84	31	2.00	2.00	0.00
1300	15.38	234.76	1288	-72	-101	37	0.00	0.00	0.00
1400	15.38	234.76	1384	-87	-123	45	0.00	0.00	0.00
1500	15.38	234.76	1481	-102	-145	53	0.00	0.00	0.00
1600	15.38	234.76	1577	-117	-166	61	0.00	0.00	0.00
1700	15.38	234.76	1674	-133	-188	69	0.00	0.00	0.00
1800	15.38	234.76	1770	-148	-210	77	0.00	0.00	0.00
1900	15.38	234.76	1866	-163	-231	84	0.00	0.00	0.00
2000	15.38	234.76	1963	-179	-253	92	0.00	0.00	0.00
2100	15.38	234.76	2059	-194	-275	100	0.00	0.00	0.00
2200	15.38	234.76	2156	-209	-296	108	0.00	0.00	0.00
2300	15.38	234.76	2252	-225	-318	116	0.00	0.00	0.00
2400	15.38	234.76	2348	-240	-340	124	0.00	0.00	0.00
2500	15.38	234.76	2445	-255	-361	132	0.00	0.00	0.00
2600	15.38	234.76	2541	-271	-383	140	0.00	0.00	0.00
2700	15.38	234.76	2638	-286	-405	148	0.00	0.00	0.00
2800	15.38	234.76	2734	-301	-426	156	0.00	0.00	0.00
2900	15.38	234.76	2831	-316	-448	164	0.00	0.00	0.00
3000	15.38	234.76	2927	-332	-470	171	0.00	0.00	0.00
3100	15.38	234.76	3023	-347	-491	179	0.00	0.00	0.00
3200	15.38	234.76	3120	-362	-513	187	0.00	0.00	0.00
3300	15.38	234.76	3216	-378	-535	195	0.00	0.00	0.00
3400	15.38	234.76	3313	-393	-556	203	0.00	0.00	0.00
3500	15.38	234.76	3409	-408	-578	211	0.00	0.00	0.00
3600	15.38	234.76	3506	-424	-600	219	0.00	0.00	0.00
3700	15.38	234.76	3602	-439	-621	227	0.00	0.00	0.00
3800	15.38	234.76	3698	-454	-643	235	0.00	0.00	0.00
3900	15.38	234.76	3795	-469	-665	243	0.00	0.00	0.00
4000	15.38	234.76	3891	-485	-686	250	0.00	0.00	0.00
4100	15.38	234.76	3988	-500	-708	258	0.00	0.00	0.00
4200	15.38	234.76	4084	-515	-730	266	0.00	0.00	0.00
4300	15.38	234.76	4180	-531	-751	274	0.00	0.00	0.00
4400	15.38	234.76	4277	-546	-773	282	0.00	0.00	0.00
4500	15.38	234.76	4373	-561	-795	290	0.00	0.00	0.00
4600	15.38	234.76	4470	-577	-816	298	0.00	0.00	0.00
4700	15.38	234.76	4566	-592	-838	306	0.00	0.00	0.00
4800	15.38	234.76	4663	-607	-860	314	0.00	0.00	0.00
4900	15.38	234.76	4759	-623	-881	322	0.00	0.00	0.00
5000	15.38	234.76	4855	-638	-903	330	0.00	0.00	0.00
5051	15.38	234.76	4905	-646	-914	334	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



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Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5100	16.65	250.09	4952	-652	-926	339	9.00	2.60	31.34
5200	21.87	272.64	5046	-656	-958	362	9.00	5.22	22.55
5300	28.94	285.77	5137	-648	-1000	400	9.00	7.07	13.13
5400	36.81	293.89	5220	-630	-1051	452	9.00	7.86	8.12
5500	45.05	299.43	5296	-600	-1109	516	9.00	8.24	5.54
5600	53.49	303.56	5361	-560	-1174	592	9.00	8.44	4.13
5700	62.05	306.87	5414	-512	-1242	676	9.00	8.56	3.31
5800	70.67	309.68	5455	-455	-1314	768	9.00	8.62	2.82
5900	79.33	312.22	5480	-391	-1387	864	9.00	8.66	2.53
6000	88.01	314.61	5491	-323	-1459	963	9.00	8.68	2.39
6019	89.65	315.05	5492	-310	-1473	981	9.00	8.69	2.36
6100	89.65	315.05	5492	-253	-1530	1062	0.00	0.00	0.00
6200	89.65	315.05	5493	-182	-1601	1161	0.00	0.00	0.00
6300	89.65	315.05	5494	-111	-1671	1260	0.00	0.00	0.00
6400	89.65	315.05	5494	-40	-1742	1359	0.00	0.00	0.00
6500	89.65	315.05	5495	31	-1813	1458	0.00	0.00	0.00
6600	89.65	315.05	5495	101	-1883	1557	0.00	0.00	0.00
6700	89.65	315.05	5496	172	-1954	1656	0.00	0.00	0.00
6800	89.65	315.05	5497	243	-2024	1755	0.00	0.00	0.00
6900	89.65	315.05	5497	314	-2095	1855	0.00	0.00	0.00
7000	89.65	315.05	5498	384	-2166	1954	0.00	0.00	0.00
7100	89.65	315.05	5498	455	-2236	2053	0.00	0.00	0.00
7200	89.65	315.05	5499	526	-2307	2152	0.00	0.00	0.00
7300	89.65	315.05	5500	597	-2378	2251	0.00	0.00	0.00
7400	89.65	315.05	5500	667	-2448	2350	0.00	0.00	0.00
7500	89.65	315.05	5501	738	-2519	2449	0.00	0.00	0.00
7600	89.65	315.05	5501	809	-2590	2548	0.00	0.00	0.00
7700	89.65	315.05	5502	880	-2660	2647	0.00	0.00	0.00
7800	89.65	315.05	5503	951	-2731	2747	0.00	0.00	0.00
7900	89.65	315.05	5503	1021	-2802	2846	0.00	0.00	0.00
8000	89.65	315.05	5504	1092	-2872	2945	0.00	0.00	0.00
8100	89.65	315.05	5504	1163	-2943	3044	0.00	0.00	0.00
8200	89.65	315.05	5505	1234	-3014	3143	0.00	0.00	0.00
8300	89.65	315.05	5506	1304	-3084	3242	0.00	0.00	0.00
8400	89.65	315.05	5506	1375	-3155	3341	0.00	0.00	0.00
8500	89.65	315.05	5507	1446	-3226	3440	0.00	0.00	0.00
8600	89.65	315.05	5507	1517	-3296	3539	0.00	0.00	0.00
8700	89.65	315.05	5508	1588	-3367	3639	0.00	0.00	0.00
8800	89.65	315.05	5509	1658	-3437	3738	0.00	0.00	0.00
8900	89.65	315.05	5509	1729	-3508	3837	0.00	0.00	0.00
9000	89.65	315.05	5510	1800	-3579	3936	0.00	0.00	0.00
9100	89.65	315.05	5511	1871	-3649	4035	0.00	0.00	0.00
9200	89.65	315.05	5511	1941	-3720	4134	0.00	0.00	0.00
9300	89.65	315.05	5512	2012	-3791	4233	0.00	0.00	0.00
9400	89.65	315.05	5512	2083	-3861	4332	0.00	0.00	0.00
9500	89.65	315.05	5513	2154	-3932	4432	0.00	0.00	0.00
9600	89.65	315.05	5514	2224	-4003	4531	0.00	0.00	0.00
9700	89.65	315.05	5514	2295	-4073	4630	0.00	0.00	0.00
9800	89.65	315.05	5515	2366	-4144	4729	0.00	0.00	0.00
9900	89.65	315.05	5515	2437	-4215	4828	0.00	0.00	0.00
10,000	89.65	315.05	5516	2508	-4285	4927	0.00	0.00	0.00
10,100	89.65	315.05	5517	2578	-4356	5026	0.00	0.00	0.00
10,200	89.65	315.05	5517	2649	-4427	5125	0.00	0.00	0.00
10,300	89.65	315.05	5518	2720	-4497	5224	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 310H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,400	89.65	315.05	5518	2791	-4568	5324	0.00	0.00	0.00
10,500	89.65	315.05	5519	2861	-4638	5423	0.00	0.00	0.00
10,600	89.65	315.05	5520	2932	-4709	5522	0.00	0.00	0.00
10,700	89.65	315.05	5520	3003	-4780	5621	0.00	0.00	0.00
10,800	89.65	315.05	5521	3074	-4850	5720	0.00	0.00	0.00
10,900	89.65	315.05	5521	3144	-4921	5819	0.00	0.00	0.00
11,000	89.65	315.05	5522	3215	-4992	5918	0.00	0.00	0.00
11,100	89.65	315.05	5523	3286	-5062	6017	0.00	0.00	0.00
11,200	89.65	315.05	5523	3357	-5133	6116	0.00	0.00	0.00
11,300	89.65	315.05	5524	3428	-5204	6216	0.00	0.00	0.00
11,400	89.65	315.05	5524	3498	-5274	6315	0.00	0.00	0.00
11,500	89.65	315.05	5525	3569	-5345	6414	0.00	0.00	0.00
11,600	89.65	315.05	5526	3640	-5416	6513	0.00	0.00	0.00
11,700	89.65	315.05	5526	3711	-5486	6612	0.00	0.00	0.00
11,800	89.65	315.05	5527	3781	-5557	6711	0.00	0.00	0.00
11,900	89.65	315.05	5528	3852	-5628	6810	0.00	0.00	0.00
12,000	89.65	315.05	5528	3923	-5698	6909	0.00	0.00	0.00
12,100	89.65	315.05	5529	3994	-5769	7008	0.00	0.00	0.00
12,200	89.65	315.05	5529	4064	-5839	7108	0.00	0.00	0.00
12,300	89.65	315.05	5530	4135	-5910	7207	0.00	0.00	0.00
12,400	89.65	315.05	5531	4206	-5981	7306	0.00	0.00	0.00
12,500	89.65	315.05	5531	4277	-6051	7405	0.00	0.00	0.00
12,600	89.65	315.05	5532	4348	-6122	7504	0.00	0.00	0.00
12,700	89.65	315.05	5532	4418	-6193	7603	0.00	0.00	0.00
12,800	89.65	315.05	5533	4489	-6263	7702	0.00	0.00	0.00
12,900	89.65	315.05	5534	4560	-6334	7801	0.00	0.00	0.00
13,000	89.65	315.05	5534	4631	-6405	7900	0.00	0.00	0.00
13,100	89.65	315.05	5535	4701	-6475	8000	0.00	0.00	0.00
13,200	89.65	315.05	5535	4772	-6546	8099	0.00	0.00	0.00
13,300	89.65	315.05	5536	4843	-6617	8198	0.00	0.00	0.00
13,400	89.65	315.05	5537	4914	-6687	8297	0.00	0.00	0.00
13,500	89.65	315.05	5537	4985	-6758	8396	0.00	0.00	0.00
13,600	89.65	315.05	5538	5055	-6829	8495	0.00	0.00	0.00
13,700	89.65	315.05	5538	5126	-6899	8594	0.00	0.00	0.00
13,800	89.65	315.05	5539	5197	-6970	8693	0.00	0.00	0.00
13,900	89.65	315.05	5540	5268	-7040	8792	0.00	0.00	0.00
14,000	89.65	315.05	5540	5338	-7111	8892	0.00	0.00	0.00
14,100	89.65	315.05	5541	5409	-7182	8991	0.00	0.00	0.00
14,200	89.65	315.05	5541	5480	-7252	9090	0.00	0.00	0.00
14,300	89.65	315.05	5542	5551	-7323	9189	0.00	0.00	0.00
14,400	89.65	315.05	5543	5621	-7394	9288	0.00	0.00	0.00
14,500	89.65	315.05	5543	5692	-7464	9387	0.00	0.00	0.00
14,600	89.65	315.05	5544	5763	-7535	9486	0.00	0.00	0.00
14,610	89.65	315.05	5544	5770	-7542	9496	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 310H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
310H Heel Rev 1	0.00	0.00	5492	-310	-1473	1,892,349.60	2,839,496.21	36.20004244	-107.43879421
- plan hits target center									
- Circle (radius 50)									
310H Toe	0.00	0.00	5544	5770	-7542	1,898,404.57	2,833,401.72	36.21674200	-107.45937120
- plan hits target center									
- Circle (radius 100)									

Casing Points					
Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter	
(ft)	(ft)	Name	(in)	(in)	
350	350	Surface	9.63	12.25	
5965	5489	Intermediate	7.00	8.75	

Formations						
Measured Depth	Vertical Depth			Dip	Dip Direction	
(ft)	(ft)	Name	Lithology	(°)	(°)	
1450	1433	Ojo Alamo		0.00	0.00	
1564	1542	Kirtland		0.00	0.00	
1765	1736	Fruitland		0.00	0.00	
1978	1942	Pictured Cliffs		0.00	0.00	
2099	2058	Lewis		0.00	0.00	
2861	2793	Chacra		0.00	0.00	
3594	3500	Menefee		0.00	0.00	
4294	4175	Point Lookout		0.00	0.00	
4493	4367	Mancos		0.00	0.00	
4903	4762	Mancos Silt		0.00	0.00	
5439	5251	Gallup A		0.00	0.00	
5479	5281	Gallup B		0.00	0.00	
5633	5380	Gallup C		0.00	0.00	



DJR Operating

Gallo Canyon Unit

B26 2306 Pad

310H

Original Drilling

APD

Anticollision Report

23 July, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	7/23/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	14,610	APD (Original Drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
B26 2306 Pad						
# 311H - Original Drilling - APD	400	400	20	18	8.128	CC
# 311H - Original Drilling - APD	600	600	20	17	5.338	ES
# 311H - Original Drilling - APD	5000	4999	182	127	3.308	SF
# 315H - Original Drilling - APD	304	304	20	18	11.297	CC
# 315H - Original Drilling - APD	400	400	20	18	8.279	ES
# 315H - Original Drilling - APD	1100	1097	28	21	3.647	SF
# 316H - Original Drilling - APD	478	477	40	37	13.181	CC, ES
# 316H - Original Drilling - APD	13,800	13,410	841	430	2.046	SF
# 401H - Original Drilling - APD	400	400	60	58	24.432	CC
# 401H - Original Drilling - APD	500	500	60	57	19.066	ES
# 401H - Original Drilling - APD	4600	4574	518	470	10.928	SF
# 402H - Original Drilling - APD	400	400	40	38	16.256	CC
# 402H - Original Drilling - APD	500	500	40	37	12.687	ES
# 402H - Original Drilling - APD	14,383	14,316	456	194	1.738	SF

Offset Design: B26 2306 Pad - # 311H - Original Drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error: 0 ft	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	109.14	-7	19	20					
100	100	100	100	0	0	109.14	-7	19	20	20	0.31	64.833		
200	200	200	200	1	1	109.14	-7	19	20	19	1.03	19.495		
300	300	300	300	1	1	109.14	-7	19	20	18	1.74	11.473		
400	400	400	400	1	1	109.14	-7	19	20	18	2.46	8.128 CC		
400	400	400	400	1	1	109.14	-7	19	20	18	2.46	8.126		
500	500	500	500	2	2	-125.52	-7	19	20	17	3.16	6.338		
600	600	600	600	2	2	-124.73	-9	16	20	17	3.84	5.338 ES		
700	700	701	700	2	2	-123.25	-14	11	21	17	4.54	4.712		
800	799	801	800	3	3	-121.25	-21	3	23	17	5.27	4.315		
900	898	901	900	3	3	-118.93	-31	-7	25	19	6.04	4.066		
1000	997	1002	998	3	3	-116.48	-43	-19	27	20	6.88	3.913		
1100	1094	1102	1096	4	4	-114.06	-58	-34	30	22	7.79	3.823		
1200	1191	1202	1193	4	4	-111.76	-74	-52	33	24	8.79	3.772		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 311H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1300	1288	1302	1290	5	5	-110.16	-93	-71	37	27	9.87	3.747		
1400	1384	1402	1386	6	6	-108.93	-111	-90	41	30	10.98	3.717		
1500	1481	1502	1483	6	6	-107.91	-129	-109	45	33	12.12	3.686		
1600	1577	1602	1579	7	7	-107.05	-147	-128	49	35	13.28	3.656		
1700	1674	1702	1676	7	7	-106.32	-165	-147	52	38	14.45	3.628		
1800	1770	1802	1772	8	8	-105.69	-184	-166	56	41	15.63	3.602		
1900	1866	1902	1868	8	8	-105.14	-202	-185	60	43	16.82	3.578		
2000	1963	2001	1965	9	9	-104.66	-220	-204	64	46	18.02	3.556		
2100	2059	2101	2061	10	10	-104.24	-238	-223	68	49	19.23	3.536		
2200	2156	2201	2158	10	10	-103.86	-256	-242	72	51	20.44	3.518		
2300	2252	2301	2254	11	11	-103.51	-274	-261	76	54	21.65	3.501		
2400	2348	2401	2350	12	11	-103.21	-293	-280	80	57	22.87	3.486		
2500	2445	2501	2447	12	12	-102.93	-311	-299	84	60	24.09	3.472		
2600	2541	2601	2543	13	13	-102.67	-329	-318	88	62	25.31	3.459		
2700	2638	2701	2640	13	13	-102.44	-347	-337	91	65	26.54	3.447		
2800	2734	2801	2736	14	14	-102.23	-365	-356	95	68	27.76	3.436		
2900	2831	2901	2832	15	15	-102.03	-384	-375	99	70	28.99	3.425		
3000	2927	3001	2929	15	15	-101.85	-402	-394	103	73	30.22	3.416		
3100	3023	3101	3025	16	16	-101.68	-420	-413	107	76	31.45	3.407		
3200	3120	3201	3122	16	16	-101.53	-438	-432	111	78	32.68	3.398		
3300	3216	3300	3218	17	17	-101.38	-456	-451	115	81	33.91	3.390		
3400	3313	3400	3314	18	18	-101.24	-475	-470	119	84	35.14	3.383		
3500	3409	3500	3411	18	18	-101.12	-493	-489	123	86	36.38	3.376		
3600	3506	3600	3507	19	19	-101.00	-511	-508	127	89	37.61	3.370		
3700	3602	3700	3604	20	19	-100.88	-529	-527	131	92	38.84	3.364		
3800	3698	3800	3700	20	20	-100.78	-547	-546	135	95	40.08	3.358		
3900	3795	3900	3796	21	21	-100.68	-565	-565	139	97	41.32	3.352		
4000	3891	4000	3893	21	21	-100.58	-584	-584	142	100	42.55	3.347		
4100	3988	4100	3989	22	22	-100.50	-602	-603	146	103	43.79	3.342		
4200	4084	4200	4086	23	23	-100.41	-620	-622	150	105	45.02	3.338		
4300	4180	4300	4182	23	23	-100.33	-638	-641	154	108	46.26	3.333		
4400	4277	4400	4278	24	24	-100.25	-656	-660	158	111	47.50	3.329		
4500	4373	4500	4375	25	24	-100.18	-675	-679	162	113	48.74	3.325		
4600	4470	4599	4471	25	25	-100.11	-693	-698	166	116	49.97	3.321		
4700	4566	4699	4568	26	26	-100.05	-711	-717	170	119	51.21	3.318		
4800	4663	4799	4664	26	26	-99.98	-729	-736	174	121	52.45	3.314		
4900	4759	4899	4760	27	27	-99.92	-747	-755	178	124	53.69	3.311		
5000	4855	4999	4857	28	27	-99.87	-766	-774	182	127	54.93	3.308 SF		
5100	4952	5078	4933	28	28	-114.55	-783	-786	192	137	55.62	3.459		
5200	5046	5150	5001	29	28	-135.82	-804	-791	227	172	55.66	4.087		
5300	5136	5200	5048	30	29	-147.67	-822	-791	285	231	54.60	5.227		
5400	5220	5250	5093	30	29	-154.48	-842	-789	361	306	54.39	6.630		
5500	5296	5280	5120	31	29	-158.72	-855	-786	448	394	53.84	8.324		
5600	5361	5300	5138	32	29	-161.60	-865	-783	543	490	53.64	10.130		
5700	5414	5300	5138	33	29	-165.36	-865	-783	642	589	53.15	12.086		
5800	5455	5300	5138	33	29	17.01	-865	-783	742	689	53.29	13.928		
5900	5480	5300	5138	34	29	15.81	-865	-783	841	787	53.83	15.617		
6000	5491	5281	5121	35	29	15.40	-856	-785	935	881	53.97	17.331		
6100	5492	5266	5108	37	29	15.37	-849	-787	1027	973	54.37	18.897		
6200	5493	5250	5093	38	29	15.37	-842	-789	1120	1066	54.65	20.500		
6300	5494	5250	5093	39	29	15.37	-842	-789	1214	1159	55.26	21.967		
6400	5494	5229	5074	41	29	15.37	-833	-790	1308	1253	55.25	23.677		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 311H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Distance		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6500	5495	5218	5065	42	29	15.37	-829	-791	1403	1347	55.46	25.295		
6600	5495	5200	5048	44	29	15.36	-822	-791	1498	1443	55.45	27.016		
6700	5496	5200	5048	46	29	15.36	-822	-791	1594	1538	55.79	28.564		
6800	5497	5200	5048	48	29	15.36	-822	-791	1690	1634	56.08	30.131		
6900	5497	5200	5048	49	29	15.36	-822	-791	1786	1730	56.33	31.712		
7000	5498	5179	5028	51	29	15.36	-814	-792	1883	1827	56.18	33.512		
7100	5498	5173	5023	53	29	15.36	-812	-792	1980	1923	56.28	35.174		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 315H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis			Offset Wellbore Centre		Distance			Rule Assigned:		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-70.86	7	-19	20					
100	100	100	100	0	0	-70.86	7	-19	20	20	0.31	64.833		
200	200	200	200	1	1	-70.86	7	-19	20	19	1.03	19.495		
300	300	300	300	1	1	-70.86	7	-19	20	18	1.74	11.473		
304	304	304	304	1	1	-70.86	7	-19	20	18	1.77	11.297 CC		
400	400	400	400	1	1	-71.70	6	-19	20	18	2.45	8.279 ES		
500	500	499	499	2	2	48.46	5	-22	23	20	3.14	7.213		
600	600	598	598	2	2	44.82	2	-29	26	22	3.83	6.767		
700	700	698	697	2	2	43.18	-2	-38	29	25	4.53	6.502		
800	799	798	796	3	3	45.40	-7	-48	31	26	5.26	5.929		
900	898	898	896	3	3	52.22	-11	-58	31	25	6.02	5.091		
1000	997	997	995	3	3	65.07	-16	-68	29	22	6.87	4.223		
1073	1068	1070	1067	4	4	79.29	-19	-75	28	21	7.54	3.749		
1100	1094	1097	1094	4	4	85.52	-20	-78	28	21	7.79	3.647 SF		
1200	1191	1196	1192	4	4	110.12	-25	-88	32	24	8.66	3.743		
1300	1288	1295	1290	5	5	129.54	-29	-98	42	33	9.37	4.512		
1400	1384	1393	1388	6	5	140.96	-34	-108	55	45	10.05	5.487		
1500	1481	1492	1486	6	5	147.92	-39	-118	69	59	10.75	6.453		
1600	1577	1591	1584	7	6	152.48	-43	-128	84	73	11.46	7.349		
1700	1674	1689	1683	7	6	155.66	-48	-138	99	87	12.18	8.162		
1800	1770	1788	1781	8	7	157.99	-52	-147	115	102	12.91	8.894		
1900	1866	1887	1879	8	7	159.77	-57	-157	130	117	13.65	9.553		
2000	1963	1986	1977	9	8	161.17	-61	-167	146	132	14.40	10.148		
2100	2059	2084	2075	10	8	162.30	-66	-177	162	147	15.15	10.686		
2200	2156	2183	2173	10	8	163.23	-70	-187	178	162	15.90	11.175		
2300	2252	2282	2271	11	9	164.00	-75	-197	194	177	16.65	11.620		
2400	2348	2380	2369	12	9	164.66	-79	-207	209	192	17.41	12.026		
2500	2445	2479	2467	12	10	165.23	-84	-217	225	207	18.17	12.400		
2600	2541	2578	2566	13	10	165.72	-88	-227	241	222	18.93	12.743		
2700	2638	2677	2664	13	10	166.15	-93	-237	257	237	19.69	13.060		
2800	2734	2775	2762	14	11	166.53	-97	-247	273	253	20.45	13.353		
2900	2831	2874	2860	15	11	166.87	-102	-257	289	268	21.21	13.626		
3000	2927	2973	2958	15	12	167.17	-106	-267	305	283	21.97	13.879		
3100	3023	3071	3056	16	12	167.45	-111	-276	321	298	22.73	14.115		
3200	3120	3170	3154	16	12	167.69	-115	-286	337	313	23.50	14.336		
3300	3216	3269	3252	17	13	167.92	-120	-296	353	329	24.26	14.543		
3400	3313	3368	3350	18	13	168.12	-125	-306	369	344	25.03	14.738		
3500	3409	3466	3448	18	14	168.31	-129	-316	385	359	25.79	14.920		
3600	3506	3565	3547	19	14	168.48	-134	-326	401	374	26.56	15.092		
3700	3602	3664	3645	20	14	168.64	-138	-336	417	389	27.32	15.255		
3800	3698	3762	3743	20	15	168.79	-143	-346	433	405	28.09	15.408		
3900	3795	3861	3841	21	15	168.93	-147	-356	449	420	28.85	15.553		
4000	3891	3960	3939	21	16	169.06	-152	-366	465	435	29.62	15.691		
4100	3988	4058	4037	22	16	169.18	-156	-376	481	450	30.39	15.822		
4200	4084	4157	4135	23	17	169.29	-161	-386	497	466	31.15	15.946		
4300	4180	4256	4233	23	17	169.39	-165	-395	513	481	31.92	16.064		
4400	4277	4355	4331	24	17	169.49	-170	-405	529	496	32.69	16.177		
4500	4373	4453	4429	25	18	169.58	-174	-415	545	511	33.45	16.284		
4600	4470	4552	4528	25	18	169.67	-179	-425	561	527	34.22	16.387		
4700	4566	4651	4626	26	19	169.75	-183	-435	577	542	34.99	16.485		
4800	4663	4749	4724	26	19	170.40	-192	-441	593	557	35.69	16.610		
4900	4759	4844	4816	27	19	172.33	-210	-436	609	573	36.22	16.820		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 315H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5000	4855	4930	4898	28	20	175.12	-235	-423	628	591	36.65	17.124	
5100	4952	5007	4967	28	20	162.59	-263	-405	650	613	37.01	17.556	
5200	5046	5066	5017	29	20	141.96	-289	-387	679	642	37.22	18.251	
5300	5136	5100	5044	30	20	128.61	-305	-375	719	682	37.10	19.380	
5400	5220	5131	5069	30	20	119.04	-320	-363	769	732	36.98	20.794	
5500	5296	5150	5083	31	20	109.88	-330	-356	828	791	36.79	22.516	
5600	5361	5150	5083	32	20	99.34	-330	-356	894	858	36.38	24.575	
5700	5414	5137	5073	33	20	87.96	-323	-361	964	928	35.92	26.832	
5800	5455	5124	5063	33	20	77.56	-316	-366	1035	999	35.75	28.948	
5900	5480	5100	5044	34	20	68.01	-305	-375	1105	1070	35.60	31.046	
6000	5491	5085	5033	35	20	60.86	-297	-381	1172	1136	35.91	32.651	
6100	5492	5050	5004	37	20	58.35	-281	-393	1238	1202	35.92	34.468	
6200	5493	5050	5004	38	20	58.35	-281	-393	1307	1270	36.69	35.631	
6300	5494	5024	4982	39	20	57.27	-270	-401	1379	1342	36.89	37.381	
6400	5494	5000	4961	41	20	56.28	-260	-407	1454	1417	37.13	39.158	
6500	5495	5000	4961	42	20	56.28	-260	-407	1531	1493	37.76	40.555	
6600	5495	4978	4941	44	20	55.37	-252	-413	1610	1572	37.97	42.410	
6700	5496	4950	4916	46	20	54.24	-242	-419	1692	1654	38.08	44.424	
6800	5497	4950	4916	48	20	54.24	-242	-419	1774	1736	38.58	45.991	
6900	5497	4950	4916	49	20	54.24	-242	-419	1859	1819	39.03	47.623	
7000	5498	4950	4916	51	20	54.24	-242	-419	1944	1905	39.43	49.310	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 316H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-70.23	13	-37	40					
100	100	100	100	0	0	-70.23	13	-37	40	40	0.31	129.158		
200	200	200	200	1	1	-70.23	13	-37	40	39	1.03	38.838		
300	300	300	300	1	1	-70.23	13	-37	40	38	1.74	22.855		
400	400	400	400	1	1	-70.23	13	-37	40	37	2.46	16.192		
478	478	477	477	2	2	55.52	13	-38	40	37	3.01	13.181 CC, ES		
500	500	499	499	2	2	55.15	13	-38	40	37	3.16	12.625		
600	600	598	598	2	2	56.29	12	-41	41	37	3.84	10.612		
700	700	697	697	2	2	58.44	10	-48	42	38	4.53	9.352		
800	799	796	796	3	3	61.55	8	-57	45	40	5.25	8.527		
900	898	896	895	3	3	67.63	5	-68	46	40	6.02	7.705		
1000	997	996	994	3	3	77.24	2	-78	48	41	6.84	6.954		
1100	1094	1095	1093	4	4	90.06	-1	-88	50	42	7.72	6.468		
1200	1191	1194	1191	4	4	104.62	-4	-99	55	47	8.61	6.426		
1300	1288	1293	1289	5	5	117.91	-7	-109	65	55	9.45	6.850		
1400	1384	1391	1387	6	5	127.56	-10	-119	77	66	10.23	7.497		
1500	1481	1490	1485	6	5	134.48	-13	-129	90	79	11.00	8.212		
1600	1577	1588	1583	7	6	139.56	-16	-140	105	93	11.75	8.923		
1700	1674	1687	1681	7	6	143.38	-19	-150	120	107	12.50	9.598		
1800	1770	1786	1779	8	7	146.35	-22	-160	136	122	13.26	10.226		
1900	1866	1884	1877	8	7	148.70	-25	-170	151	137	14.01	10.804		
2000	1963	1983	1975	9	7	150.60	-28	-181	167	153	14.77	11.335		
2100	2059	2081	2073	10	8	152.17	-31	-191	184	168	15.53	11.822		
2200	2156	2180	2171	10	8	153.48	-34	-201	200	184	16.30	12.268		
2300	2252	2278	2269	11	9	154.60	-37	-211	216	199	17.06	12.679		
2400	2348	2377	2367	12	9	155.56	-40	-222	233	215	17.83	13.056		
2500	2445	2476	2465	12	9	156.39	-43	-232	249	231	18.60	13.405		
2600	2541	2574	2563	13	10	157.12	-46	-242	266	247	19.37	13.727		
2700	2638	2673	2661	13	10	157.76	-49	-252	283	262	20.14	14.026		
2800	2734	2771	2759	14	11	158.33	-52	-262	299	278	20.91	14.303		
2900	2831	2870	2857	15	11	158.84	-55	-273	316	294	21.69	14.561		
3000	2927	2968	2955	15	11	159.31	-58	-283	332	310	22.46	14.802		
3100	3023	3067	3053	16	12	159.72	-61	-293	349	326	23.24	15.027		
3200	3120	3166	3151	16	12	160.10	-64	-303	366	342	24.01	15.238		
3300	3216	3264	3249	17	13	160.45	-67	-314	383	358	24.79	15.437		
3400	3313	3363	3347	18	13	160.76	-70	-324	399	374	25.56	15.623		
3500	3409	3461	3445	18	13	161.05	-73	-334	416	390	26.34	15.798		
3600	3506	3560	3543	19	14	161.32	-76	-344	433	406	27.12	15.964		
3700	3602	3658	3641	20	14	161.57	-79	-355	450	422	27.89	16.120		
3800	3698	3757	3739	20	15	161.80	-82	-365	466	438	28.67	16.268		
3900	3795	3855	3837	21	15	162.01	-85	-375	483	454	29.45	16.408		
4000	3891	3954	3935	21	16	162.21	-88	-385	500	470	30.23	16.541		
4100	3988	4053	4033	22	16	162.40	-91	-396	517	486	31.01	16.667		
4200	4084	4151	4131	23	16	162.58	-94	-406	534	502	31.79	16.787		
4300	4180	4250	4229	23	17	162.74	-97	-416	550	518	32.56	16.902		
4400	4277	4348	4327	24	17	162.90	-100	-426	567	534	33.34	17.011		
4500	4373	4447	4425	25	18	163.04	-103	-437	584	550	34.12	17.115		
4600	4470	4545	4523	25	18	163.18	-106	-447	601	566	34.90	17.215		
4700	4566	4644	4621	26	18	163.31	-109	-457	618	582	35.68	17.310		
4800	4663	4741	4717	26	19	163.42	-112	-467	635	598	36.45	17.406		
4900	4759	4828	4803	27	19	162.83	-109	-482	652	615	37.26	17.508		
5000	4855	4911	4883	28	20	161.34	-98	-503	672	634	38.19	17.607		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 316H - Original Drilling - APD													Offset Site Error:	0 ft	
Survey Program:		0-MWD+IGRF						Rule Assigned:						Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Offset		Highside		Offset Wellbore Centre		Distance		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Factor			
5100	4952	4989	4954	28	20	143.58	-81	-529	695	656	39.17	17.742			
5200	5046	5064	5019	29	20	118.47	-59	-560	718	678	40.13	17.888			
5300	5136	5138	5077	30	21	103.27	-32	-595	740	699	41.08	18.016			
5400	5220	5210	5130	30	21	93.64	0	-633	761	719	42.07	18.084			
5500	5296	5282	5176	31	22	87.15	35	-675	779	736	43.03	18.103			
5600	5361	5350	5214	32	23	82.68	73	-717	794	750	44.07	18.026			
5700	5414	5423	5248	33	23	79.61	116	-765	806	761	45.42	17.756			
5800	5455	5500	5275	33	24	77.67	166	-817	815	768	47.15	17.285			
5900	5480	5563	5291	34	25	76.70	208	-861	820	771	48.55	16.879			
6000	5491	5633	5302	35	26	76.59	256	-911	820	770	50.45	16.260			
6091	5493	5701	5305	36	27	76.69	304	-958	820	768	52.41	15.647			
6100	5492	5709	5305	37	27	76.77	310	-965	819	767	52.70	15.549			
6200	5493	5809	5305	38	29	76.77	381	-1035	820	764	56.08	14.617			
6300	5494	5909	5306	39	31	76.77	452	-1105	820	760	59.66	13.744			
6400	5494	6009	5306	41	33	76.77	523	-1176	820	757	63.42	12.935			
6500	5495	6109	5307	42	35	76.78	594	-1246	821	753	67.31	12.192			
6600	5495	6209	5308	44	37	76.78	665	-1317	821	750	71.32	11.510			
6700	5496	6309	5308	46	39	76.78	736	-1387	821	746	75.42	10.887			
6800	5497	6409	5309	48	41	76.79	807	-1458	821	742	79.61	10.317			
6900	5497	6509	5309	49	43	76.79	878	-1528	822	738	83.88	9.797			
7000	5498	6609	5310	51	45	76.79	949	-1599	822	734	88.20	9.320			
7100	5498	6709	5311	53	47	76.80	1020	-1669	822	730	92.57	8.882			
7200	5499	6809	5311	55	50	76.80	1091	-1740	823	726	96.99	8.480			
7300	5500	6909	5312	58	52	76.80	1162	-1810	823	721	101.45	8.110			
7400	5500	7009	5312	60	54	76.81	1233	-1880	823	717	105.94	7.769			
7500	5501	7109	5313	62	56	76.81	1304	-1951	823	713	110.47	7.453			
7600	5501	7209	5313	64	59	76.81	1375	-2021	824	709	115.02	7.161			
7700	5502	7309	5314	66	61	76.81	1446	-2092	824	704	119.59	6.889			
7800	5503	7409	5315	68	63	76.82	1517	-2162	824	700	124.19	6.637			
7900	5503	7509	5315	71	66	76.82	1588	-2233	824	696	128.80	6.401			
8000	5504	7609	5316	73	68	76.82	1659	-2303	825	691	133.43	6.181			
8100	5504	7709	5316	75	70	76.83	1730	-2374	825	687	138.08	5.975			
8200	5505	7809	5317	77	73	76.83	1801	-2444	825	683	142.73	5.782			
8300	5506	7909	5318	80	75	76.83	1872	-2514	826	678	147.41	5.601			
8400	5506	8009	5318	82	78	76.84	1942	-2585	826	674	152.09	5.430			
8500	5507	8109	5319	84	80	76.84	2013	-2655	826	669	156.78	5.269			
8600	5507	8209	5319	87	82	76.84	2084	-2726	826	665	161.48	5.117			
8700	5508	8309	5320	89	85	76.84	2155	-2796	827	660	166.20	4.974			
8800	5509	8409	5321	91	87	76.85	2226	-2867	827	656	170.91	4.838			
8900	5509	8509	5321	94	90	76.85	2297	-2937	827	652	175.64	4.710			
9000	5510	8609	5322	96	92	76.85	2368	-3008	827	647	180.37	4.588			
9100	5511	8709	5322	98	94	76.86	2439	-3078	828	643	185.11	4.472			
9200	5511	8809	5323	101	97	76.86	2510	-3149	828	638	189.86	4.361			
9300	5512	8909	5323	103	99	76.86	2581	-3219	828	634	194.61	4.256			
9400	5512	9009	5324	106	102	76.87	2652	-3289	829	629	199.36	4.156			
9500	5513	9109	5325	108	104	76.87	2723	-3360	829	625	204.12	4.061			
9600	5514	9209	5325	110	107	76.87	2794	-3430	829	620	208.88	3.969			
9700	5514	9309	5326	113	109	76.87	2865	-3501	829	616	213.65	3.882			
9800	5515	9409	5326	115	112	76.88	2936	-3571	830	611	218.42	3.799			
9900	5515	9509	5327	117	114	76.88	3007	-3642	830	607	223.20	3.719			
10,000	5516	9609	5328	120	116	76.88	3078	-3712	830	602	227.98	3.642			
10,100	5517	9709	5328	122	119	76.89	3149	-3783	831	598	232.76	3.568			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 316H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,200	5517	9809	5329	125	121	76.89	3220	-3853	831	593	237.54	3.497		
10,300	5518	9909	5329	127	124	76.89	3291	-3923	831	589	242.33	3.430		
10,400	5518	10,009	5330	130	126	76.89	3362	-3994	831	584	247.12	3.364		
10,500	5519	10,109	5330	132	129	76.90	3433	-4064	832	580	251.91	3.301		
10,600	5520	10,209	5331	134	131	76.90	3504	-4135	832	575	256.71	3.241		
10,700	5520	10,309	5332	137	134	76.90	3575	-4205	832	571	261.51	3.182		
10,800	5521	10,409	5332	139	136	76.91	3646	-4276	832	566	266.30	3.126		
10,900	5521	10,509	5333	142	138	76.91	3717	-4346	833	562	271.11	3.072		
11,000	5522	10,609	5333	144	141	76.91	3788	-4417	833	557	275.91	3.019		
11,100	5523	10,709	5334	147	143	76.92	3859	-4487	833	553	280.71	2.968		
11,200	5523	10,809	5335	149	146	76.92	3930	-4558	834	548	285.52	2.919		
11,300	5524	10,909	5335	151	148	76.92	4001	-4628	834	544	290.33	2.872		
11,400	5524	11,009	5336	154	151	76.92	4072	-4698	834	539	295.14	2.826		
11,500	5525	11,109	5336	156	153	76.93	4142	-4769	834	534	299.95	2.782		
11,600	5526	11,209	5337	159	156	76.93	4213	-4839	835	530	304.76	2.739		
11,700	5526	11,309	5338	161	158	76.93	4284	-4910	835	525	309.57	2.697		
11,800	5527	11,409	5338	164	161	76.94	4355	-4980	835	521	314.39	2.657		
11,900	5528	11,509	5339	166	163	76.94	4426	-5051	836	516	319.21	2.617		
12,000	5528	11,609	5339	168	165	76.94	4497	-5121	836	512	324.02	2.579		
12,100	5529	11,709	5340	171	168	76.94	4568	-5192	836	507	328.84	2.542		
12,200	5529	11,809	5340	173	170	76.95	4639	-5262	836	503	333.66	2.507		
12,300	5530	11,909	5341	176	173	76.95	4710	-5332	837	498	338.48	2.472		
12,400	5531	12,009	5342	178	175	76.95	4781	-5403	837	494	343.31	2.438		
12,500	5531	12,109	5342	181	178	76.96	4852	-5473	837	489	348.13	2.405		
12,600	5532	12,209	5343	183	180	76.96	4923	-5544	837	484	352.95	2.373		
12,700	5532	12,309	5343	186	183	76.96	4994	-5614	838	480	357.78	2.341		
12,800	5533	12,409	5344	188	185	76.97	5065	-5685	838	475	362.60	2.311		
12,900	5534	12,509	5345	191	188	76.97	5136	-5755	838	471	367.43	2.281		
13,000	5534	12,609	5345	193	190	76.97	5207	-5826	839	466	372.26	2.253		
13,100	5535	12,709	5346	195	193	76.97	5278	-5896	839	462	377.08	2.224		
13,200	5535	12,809	5346	198	195	76.98	5349	-5967	839	457	381.91	2.197		
13,300	5536	12,909	5347	200	197	76.98	5420	-6037	839	453	386.74	2.170		
13,400	5537	13,009	5348	203	200	76.98	5491	-6107	840	448	391.57	2.144		
13,500	5537	13,109	5348	205	202	76.99	5562	-6178	840	444	396.40	2.119		
13,600	5538	13,209	5349	208	205	76.99	5633	-6248	840	439	401.24	2.094		
13,700	5538	13,309	5349	210	207	76.99	5704	-6319	840	434	406.07	2.070		
13,800	5539	13,410	5350	213	210	76.99	5775	-6389	841	430	410.91	2.046 SF		
13,900	5540	13,434	5350	215	210	76.99	5792	-6407	844	434	409.90	2.060		
14,000	5540	13,434	5350	218	210	76.99	5792	-6407	859	457	402.24	2.136		
14,100	5541	13,434	5350	220	210	76.99	5792	-6407	885	495	389.98	2.271		
14,200	5541	13,434	5350	222	210	76.99	5792	-6407	922	547	374.32	2.462		
14,300	5542	13,434	5350	225	210	76.99	5792	-6407	967	610	356.58	2.712		
14,400	5543	13,434	5350	227	210	76.99	5792	-6407	1020	682	337.89	3.019		
14,500	5543	13,434	5350	230	210	76.99	5792	-6407	1080	761	319.15	3.384		
14,600	5544	13,434	5350	232	210	76.99	5792	-6407	1145	844	300.95	3.806		
14,610	5544	13,434	5350	233	210	76.99	5792	-6407	1152	853	299.17	3.851		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 401H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	109.47	-20	57	60					
100	100	100	100	0	0	109.47	-20	57	60	60	0.31	194.891		
200	200	200	200	1	1	109.47	-20	57	60	59	1.03	58.603		
300	300	300	300	1	1	109.47	-20	57	60	58	1.74	34.487		
400	400	400	400	1	1	109.47	-20	57	60	58	2.46	24.432 CC		
400	400	400	400	1	1	109.47	-20	57	60	58	2.46	24.429		
500	500	500	500	2	2	-125.22	-20	56	60	57	3.16	19.066 ES		
600	600	600	600	2	2	-124.62	-24	55	62	58	3.83	16.121		
700	700	701	700	2	2	-123.51	-30	52	65	60	4.53	14.314		
800	799	801	800	3	3	-122.03	-39	47	70	64	5.27	13.206		
900	898	901	899	3	3	-120.33	-51	40	76	70	6.04	12.541		
1000	997	1000	997	3	3	-118.55	-67	32	84	77	6.88	12.162		
1100	1094	1100	1094	4	4	-116.81	-85	23	93	85	7.78	11.967		
1200	1191	1199	1191	4	4	-115.49	-106	12	104	96	8.76	11.897		
1300	1288	1299	1287	5	5	-115.46	-127	1	116	107	9.79	11.888		
1400	1384	1398	1384	6	5	-115.50	-148	-10	129	118	10.85	11.853		
1500	1481	1497	1480	6	6	-115.53	-169	-21	141	129	11.92	11.804		
1600	1577	1596	1577	7	7	-115.55	-190	-32	153	140	13.01	11.750		
1700	1674	1696	1673	7	7	-115.58	-211	-43	165	151	14.12	11.694		
1800	1770	1795	1769	8	8	-115.60	-232	-54	177	162	15.23	11.639		
1900	1866	1894	1866	8	8	-115.61	-253	-65	189	173	16.35	11.586		
2000	1963	1993	1962	9	9	-115.63	-274	-75	202	184	17.47	11.537		
2100	2059	2093	2059	10	9	-115.64	-295	-86	214	195	18.60	11.490		
2200	2156	2192	2155	10	10	-115.65	-316	-97	226	206	19.73	11.447		
2300	2252	2291	2251	11	10	-115.66	-337	-108	238	217	20.87	11.406		
2400	2348	2390	2348	12	11	-115.67	-358	-119	250	228	22.01	11.368		
2500	2445	2490	2444	12	12	-115.68	-379	-130	262	239	23.15	11.332		
2600	2541	2589	2540	13	12	-115.69	-400	-141	275	250	24.30	11.299		
2700	2638	2688	2637	13	13	-115.69	-421	-152	287	261	25.44	11.268		
2800	2734	2788	2733	14	13	-115.70	-442	-163	299	272	26.59	11.240		
2900	2831	2887	2830	15	14	-115.71	-463	-174	311	283	27.74	11.213		
3000	2927	2986	2926	15	14	-115.71	-484	-185	323	294	28.89	11.187		
3100	3023	3085	3022	16	15	-115.72	-505	-196	335	305	30.04	11.163		
3200	3120	3185	3119	16	16	-115.72	-526	-207	347	316	31.19	11.141		
3300	3216	3284	3215	17	16	-115.72	-547	-218	360	327	32.34	11.120		
3400	3313	3383	3312	18	17	-115.73	-568	-228	372	338	33.50	11.100		
3500	3409	3482	3408	18	17	-115.73	-589	-239	384	349	34.65	11.081		
3600	3506	3582	3504	19	18	-115.74	-611	-250	396	360	35.81	11.063		
3700	3602	3681	3601	20	18	-115.74	-632	-261	408	371	36.96	11.047		
3800	3698	3780	3697	20	19	-115.74	-653	-272	420	382	38.12	11.031		
3900	3795	3879	3794	21	20	-115.75	-674	-283	433	393	39.28	11.016		
4000	3891	3979	3890	21	20	-115.75	-695	-294	445	404	40.43	11.001		
4100	3988	4078	3986	22	21	-115.75	-716	-305	457	415	41.59	10.987		
4200	4084	4177	4083	23	21	-115.75	-737	-316	469	426	42.75	10.974		
4300	4180	4276	4179	23	22	-115.76	-758	-327	481	437	43.91	10.962		
4400	4277	4376	4275	24	22	-115.76	-779	-338	493	448	45.06	10.950		
4500	4373	4475	4372	25	23	-115.76	-800	-349	506	459	46.22	10.939		
4600	4470	4574	4468	25	24	-115.76	-821	-360	518	470	47.38	10.928 SF		
4700	4566	4650	4542	26	24	-115.75	-837	-368	531	483	48.25	11.006		
4800	4663	4700	4590	26	24	-115.62	-851	-370	552	503	48.55	11.359		
4900	4759	4750	4637	27	25	-115.38	-867	-370	580	531	48.60	11.929		
5000	4855	4800	4684	28	25	-115.05	-885	-367	615	567	48.47	12.693		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 401H - Original Drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF													Offset Well Error: 0 ft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
5100	4952	4850	4729	28	25	-129.98	-906	-361	659	611	48.26	13.651		
5200	5046	4900	4772	29	26	-152.49	-930	-352	719	671	48.23	14.917		
5300	5136	4919	4788	30	26	-167.17	-939	-348	794	747	47.33	16.786		
5400	5220	4950	4813	30	26	-178.53	-955	-340	881	834	47.25	18.644		
5500	5296	4950	4813	31	26	164.92	-955	-340	974	928	46.46	20.977		
5600	5361	4950	4813	32	26	127.90	-955	-340	1072	1026	46.07	23.275		
5700	5414	4950	4813	33	26	69.97	-955	-340	1171	1125	46.03	25.441		
5800	5455	4950	4813	33	26	43.32	-955	-340	1269	1222	46.27	27.418		
5900	5480	4950	4813	34	26	32.91	-955	-340	1363	1316	46.72	29.177		
6000	5491	4928	4796	35	26	27.53	-944	-346	1452	1405	46.76	31.056		
6100	5492	4900	4772	37	26	26.51	-930	-352	1538	1491	46.76	32.890		
6200	5493	4900	4772	38	26	26.51	-930	-352	1624	1577	47.39	34.274		
6300	5494	4900	4772	39	26	26.51	-930	-352	1712	1664	47.93	35.723		
6400	5494	4874	4749	41	25	26.14	-917	-357	1801	1753	47.87	37.616		
6500	5495	4850	4729	42	25	25.81	-906	-361	1890	1842	47.84	39.510		
6600	5495	4850	4729	44	25	25.81	-906	-361	1980	1932	48.24	41.053		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 402H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:											Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	109.14	-13	38	40					
100	100	100	100	0	0	109.14	-13	38	40	40	0.31	129.667		
200	200	200	200	1	1	109.14	-13	38	40	39	1.03	38.991		
300	300	300	300	1	1	109.14	-13	38	40	38	1.74	22.945		
400	400	400	400	1	1	109.14	-13	38	40	38	2.46	16.256 CC		
400	400	400	400	1	1	109.14	-13	38	40	38	2.46	16.253		
500	500	500	500	2	2	-125.53	-13	38	40	37	3.16	12.687 ES		
600	600	601	600	2	2	-124.76	-16	36	41	37	3.84	10.745		
700	700	701	701	2	2	-123.34	-22	32	43	39	4.53	9.576		
800	799	801	800	3	3	-121.47	-31	26	47	42	5.27	8.881		
900	898	901	899	3	3	-119.36	-42	18	51	45	6.05	8.487		
1000	997	1001	998	3	3	-117.18	-57	8	57	50	6.89	8.286		
1100	1094	1101	1096	4	4	-115.08	-74	-4	64	56	7.80	8.207		
1200	1191	1201	1193	4	4	-114.38	-92	-17	72	64	8.78	8.238		
1300	1288	1301	1290	5	5	-115.43	-111	-30	82	72	9.79	8.331		
1400	1384	1400	1387	6	5	-116.32	-130	-43	91	80	10.83	8.395		
1500	1481	1500	1484	6	6	-117.04	-148	-56	100	88	11.88	8.437		
1600	1577	1599	1581	7	6	-117.65	-167	-69	110	97	12.94	8.466		
1700	1674	1699	1678	7	7	-118.15	-185	-81	119	105	14.01	8.485		
1800	1770	1798	1775	8	8	-118.59	-204	-94	128	113	15.09	8.499		
1900	1866	1898	1872	8	8	-118.96	-222	-107	138	121	16.18	8.508		
2000	1963	1998	1969	9	9	-119.29	-241	-120	147	130	17.27	8.514		
2100	2059	2097	2065	10	9	-119.58	-260	-133	156	138	18.36	8.518		
2200	2156	2197	2162	10	10	-119.83	-278	-146	166	146	19.46	8.520		
2300	2252	2296	2259	11	10	-120.06	-297	-159	175	155	20.56	8.521		
2400	2348	2396	2356	12	11	-120.26	-315	-171	185	163	21.66	8.522		
2500	2445	2495	2453	12	11	-120.45	-334	-184	194	171	22.76	8.521		
2600	2541	2595	2550	13	12	-120.62	-353	-197	203	179	23.87	8.521		
2700	2638	2694	2647	13	13	-120.77	-371	-210	213	188	24.97	8.520		
2800	2734	2794	2744	14	13	-120.91	-390	-223	222	196	26.08	8.519		
2900	2831	2894	2841	15	14	-121.04	-408	-236	232	204	27.19	8.517		
3000	2927	2993	2938	15	14	-121.16	-427	-249	241	213	28.29	8.516		
3100	3023	3093	3035	16	15	-121.27	-445	-261	250	221	29.40	8.514		
3200	3120	3192	3132	16	15	-121.37	-464	-274	260	229	30.51	8.512		
3300	3216	3292	3229	17	16	-121.46	-483	-287	269	238	31.62	8.511		
3400	3313	3391	3326	18	16	-121.55	-501	-300	279	246	32.74	8.509		
3500	3409	3491	3423	18	17	-121.63	-520	-313	288	254	33.85	8.508		
3600	3506	3590	3520	19	18	-121.71	-538	-326	297	262	34.96	8.506		
3700	3602	3690	3617	20	18	-121.78	-557	-339	307	271	36.07	8.504		
3800	3698	3790	3714	20	19	-121.85	-576	-351	316	279	37.18	8.503		
3900	3795	3889	3811	21	19	-121.92	-594	-364	326	287	38.30	8.501		
4000	3891	3989	3908	21	20	-121.98	-613	-377	335	296	39.41	8.500		
4100	3988	4088	4005	22	20	-122.03	-631	-390	344	304	40.52	8.498		
4200	4084	4188	4102	23	21	-122.09	-650	-403	354	312	41.64	8.497		
4300	4180	4287	4199	23	21	-122.14	-669	-416	363	320	42.75	8.495		
4400	4277	4387	4295	24	22	-122.19	-687	-429	373	329	43.87	8.494		
4500	4373	4486	4392	25	23	-122.23	-706	-441	382	337	44.98	8.493		
4600	4470	4635	4537	25	23	-122.64	-729	-465	389	343	46.16	8.427		
4700	4566	4851	4739	26	24	-126.86	-722	-538	370	327	43.83	8.451		
4800	4663	5021	4878	26	25	-135.81	-681	-625	327	288	38.93	8.404		
4900	4759	5142	4960	27	25	-149.20	-633	-699	272	237	35.05	7.749		
5000	4855	5227	5008	28	26	-165.42	-592	-756	216	182	34.57	6.259		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 402H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5100	4952	5289	5037	28	26	164.93	-558	-800	178	140	38.26	4.666		
5155	5004	5321	5050	29	26	143.42	-539	-823	172	132	40.42	4.268		
5200	5046	5347	5059	29	26	128.07	-524	-841	176	135	41.12	4.287		
5300	5136	5400	5075	30	27	100.49	-491	-880	207	168	38.84	5.335		
5400	5220	5458	5088	30	27	78.76	-454	-922	255	220	35.17	7.263		
5500	5296	5512	5095	31	27	63.68	-417	-961	310	278	31.40	9.857		
5600	5361	5566	5098	32	28	53.14	-380	-1000	364	335	28.36	12.823		
5700	5414	5648	5098	33	29	44.90	-322	-1058	412	384	27.87	14.794		
5800	5455	5739	5099	33	30	39.82	-258	-1123	449	421	28.49	15.778		
5900	5480	5835	5099	34	31	37.01	-190	-1191	473	444	29.54	16.027		
6000	5491	5934	5100	35	32	35.90	-120	-1262	483	452	31.40	15.385		
6100	5492	6034	5101	37	34	35.82	-50	-1333	483	449	33.66	14.351		
6200	5493	6134	5101	38	36	35.76	20	-1404	483	447	36.05	13.390		
6300	5494	6234	5102	39	38	35.71	91	-1475	482	444	38.54	12.514		
6400	5494	6334	5102	41	40	35.65	161	-1546	482	441	41.12	11.721		
6500	5495	6434	5103	42	42	35.59	231	-1617	482	438	43.77	11.005		
6600	5495	6534	5104	44	44	35.53	302	-1688	481	435	46.47	10.358		
6700	5496	6634	5104	46	46	35.48	372	-1759	481	432	49.21	9.773		
6800	5497	6734	5105	48	48	35.42	443	-1830	481	429	51.99	9.244		
6900	5497	6834	5106	49	50	35.36	513	-1901	480	425	54.80	8.763		
7000	5498	6934	5106	51	52	35.30	583	-1972	480	422	57.64	8.327		
7100	5498	7034	5107	53	55	35.24	654	-2043	480	419	60.49	7.928		
7200	5499	7134	5107	55	57	35.19	724	-2114	479	416	63.36	7.564		
7300	5500	7234	5108	58	59	35.13	794	-2186	479	413	66.24	7.229		
7400	5500	7334	5109	60	61	35.07	865	-2257	479	409	69.14	6.922		
7500	5501	7434	5109	62	64	35.01	935	-2328	478	406	72.04	6.638		
7600	5501	7534	5110	64	66	34.95	1005	-2399	478	403	74.94	6.376		
7700	5502	7634	5110	66	68	34.90	1076	-2470	478	400	77.86	6.134		
7800	5503	7734	5111	68	71	34.84	1146	-2541	477	396	80.77	5.908		
7900	5503	7834	5112	71	73	34.78	1216	-2612	477	393	83.69	5.698		
8000	5504	7934	5112	73	75	34.72	1287	-2683	477	390	86.61	5.502		
8100	5504	8034	5113	75	78	34.66	1357	-2754	476	387	89.53	5.319		
8200	5505	8134	5113	77	80	34.60	1427	-2825	476	383	92.44	5.147		
8300	5506	8234	5114	80	82	34.54	1498	-2896	476	380	95.36	4.986		
8400	5506	8334	5115	82	85	34.48	1568	-2967	475	377	98.28	4.835		
8500	5507	8434	5115	84	87	34.43	1638	-3038	475	374	101.19	4.692		
8600	5507	8534	5116	87	90	34.37	1709	-3109	474	370	104.10	4.558		
8700	5508	8634	5116	89	92	34.31	1779	-3180	474	367	107.01	4.431		
8800	5509	8734	5117	91	94	34.25	1849	-3252	474	364	109.92	4.311		
8900	5509	8834	5118	94	97	34.19	1920	-3323	473	361	112.82	4.197		
9000	5510	8934	5118	96	99	34.13	1990	-3394	473	357	115.72	4.089		
9100	5511	9034	5119	98	102	34.07	2061	-3465	473	354	118.61	3.986		
9200	5511	9134	5119	101	104	34.01	2131	-3536	472	351	121.50	3.889		
9300	5512	9234	5120	103	107	33.95	2201	-3607	472	348	124.38	3.796		
9400	5512	9334	5121	106	109	33.89	2272	-3678	472	345	127.26	3.708		
9500	5513	9434	5121	108	111	33.83	2342	-3749	471	341	130.14	3.623		
9600	5514	9534	5122	110	114	33.77	2412	-3820	471	338	133.00	3.542		
9700	5514	9634	5123	113	116	33.71	2483	-3891	471	335	135.87	3.465		
9800	5515	9734	5123	115	119	33.65	2553	-3962	471	332	138.73	3.392		
9900	5515	9834	5124	117	121	33.59	2623	-4033	470	329	141.58	3.321		
10,000	5516	9934	5124	120	124	33.53	2694	-4104	470	325	144.43	3.253		
10,100	5517	10,034	5125	122	126	33.47	2764	-4175	470	322	147.27	3.188		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B26 2306 Pad - # 402H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200	5517	10,134	5126	125	128	33.41	2834	-4246	469	319	150.10	3.126		
10,300	5518	10,234	5126	127	131	33.35	2905	-4318	469	316	152.93	3.066		
10,400	5518	10,334	5127	130	133	33.29	2975	-4389	469	313	155.75	3.008		
10,500	5519	10,434	5127	132	136	33.23	3045	-4460	468	310	158.57	2.953		
10,600	5520	10,534	5128	134	138	33.17	3116	-4531	468	307	161.38	2.899		
10,700	5520	10,634	5129	137	141	33.11	3186	-4602	468	303	164.18	2.848		
10,800	5521	10,734	5129	139	143	33.04	3256	-4673	467	300	166.98	2.798		
10,900	5521	10,834	5130	142	146	32.98	3327	-4744	467	297	169.77	2.750		
11,000	5522	10,934	5130	144	148	32.92	3397	-4815	467	294	172.56	2.704		
11,100	5523	11,034	5131	147	150	32.86	3467	-4886	466	291	175.33	2.659		
11,200	5523	11,134	5132	149	153	32.80	3538	-4957	466	288	178.10	2.616		
11,300	5524	11,234	5132	151	155	32.74	3608	-5028	466	285	180.87	2.574		
11,400	5524	11,334	5133	154	158	32.68	3679	-5099	465	282	183.63	2.534		
11,500	5525	11,434	5133	156	160	32.62	3749	-5170	465	279	186.38	2.495		
11,600	5526	11,534	5134	159	163	32.55	3819	-5241	465	276	189.12	2.457		
11,700	5526	11,634	5135	161	165	32.49	3890	-5312	464	272	191.85	2.420		
11,800	5527	11,734	5135	164	168	32.43	3960	-5383	464	269	194.58	2.385		
11,900	5528	11,834	5136	166	170	32.37	4030	-5455	464	266	197.31	2.350		
12,000	5528	11,934	5137	168	173	32.31	4101	-5526	463	263	200.02	2.317		
12,100	5529	12,034	5137	171	175	32.24	4171	-5597	463	260	202.73	2.284		
12,200	5529	12,134	5138	173	178	32.18	4241	-5668	463	257	205.43	2.253		
12,300	5530	12,234	5138	176	180	32.12	4312	-5739	462	254	208.12	2.222		
12,400	5531	12,334	5139	178	182	32.06	4382	-5810	462	251	210.81	2.192		
12,500	5531	12,434	5140	181	185	32.00	4452	-5881	462	248	213.49	2.163		
12,600	5532	12,534	5140	183	187	31.93	4523	-5952	461	245	216.16	2.135		
12,700	5532	12,634	5141	186	190	31.87	4593	-6023	461	242	218.82	2.107		
12,800	5533	12,734	5141	188	192	31.81	4663	-6094	461	239	221.48	2.081		
12,900	5534	12,834	5142	191	195	31.74	4734	-6165	461	236	224.13	2.055		
13,000	5534	12,934	5143	193	197	31.68	4804	-6236	460	233	226.77	2.029		
13,100	5535	13,034	5143	195	200	31.62	4874	-6307	460	231	229.40	2.005		
13,200	5535	13,134	5144	198	202	31.56	4945	-6378	460	228	232.03	1.981		
13,300	5536	13,234	5144	200	205	31.49	5015	-6449	459	225	234.65	1.957		
13,400	5537	13,334	5145	203	207	31.43	5085	-6521	459	222	237.26	1.935		
13,500	5537	13,434	5146	205	210	31.37	5156	-6592	459	219	239.86	1.912		
13,600	5538	13,534	5146	208	212	31.30	5226	-6663	458	216	242.46	1.890		
13,700	5538	13,634	5147	210	215	31.24	5297	-6734	458	213	245.05	1.869		
13,800	5539	13,734	5147	213	217	31.18	5367	-6805	458	210	247.63	1.849		
13,900	5540	13,834	5148	215	220	31.11	5437	-6876	457	207	250.20	1.828		
14,000	5540	13,934	5149	218	222	31.05	5508	-6947	457	204	252.76	1.809		
14,100	5541	14,034	5149	220	224	30.98	5578	-7018	457	201	255.32	1.789		
14,200	5541	14,134	5150	222	227	30.92	5648	-7089	457	199	257.87	1.770		
14,300	5542	14,234	5150	225	229	30.86	5719	-7160	456	196	260.41	1.752		
14,383	5543	14,316	5151	227	231	30.80	5776	-7218	456	194	262.41	1.738 SF		
14,400	5543	14,316	5151	227	231	30.80	5776	-7218	456	195	261.30	1.746		
14,500	5543	14,316	5151	230	231	30.80	5776	-7218	471	222	248.23	1.896		
14,600	5544	14,316	5151	232	231	30.80	5776	-7218	505	278	227.22	2.222		
14,610	5544	14,316	5151	233	231	30.81	5776	-7218	509	284	224.88	2.264		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6930' & RKB 14' @ 6944ft

Offset Depths are relative to Offset Datum

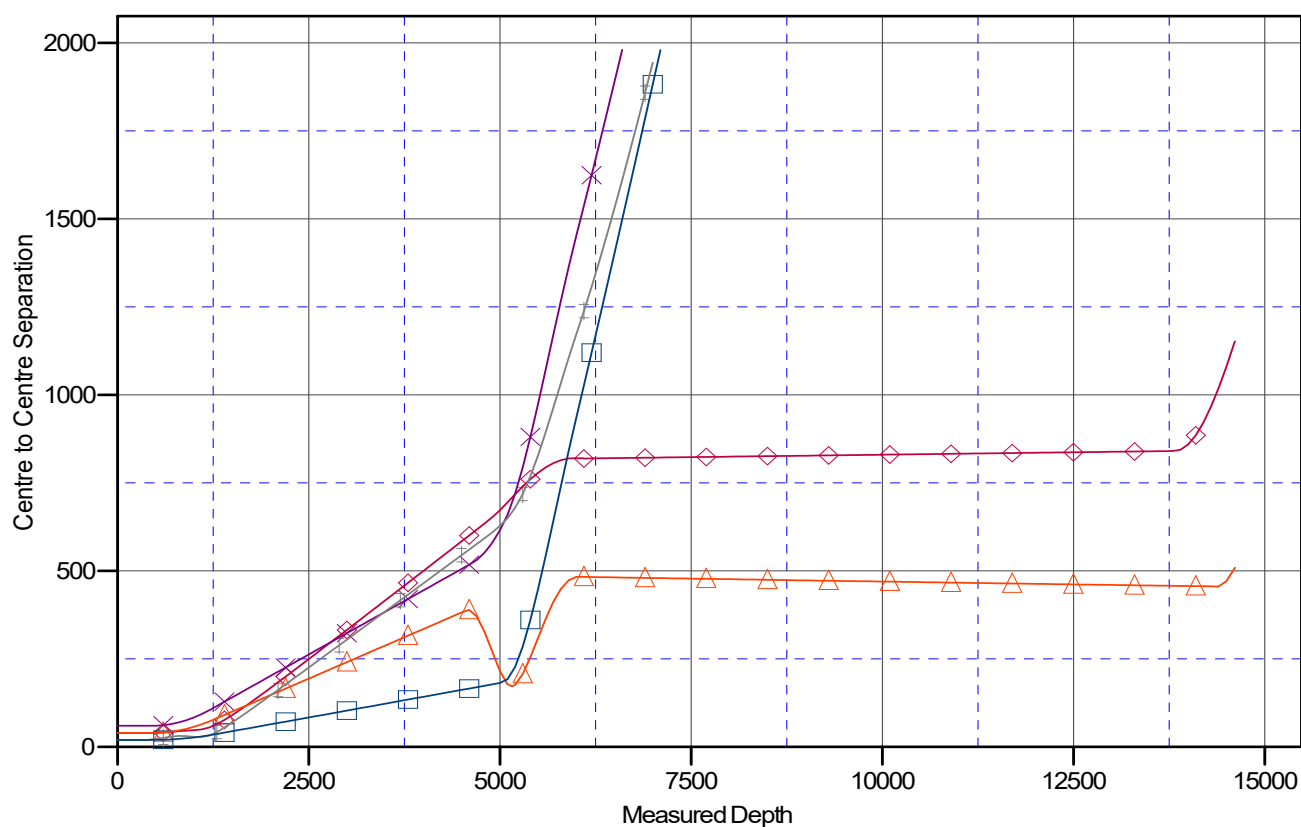
Central Meridian is -107.83333333

Coordinates are relative to: # 310H - Slot 4

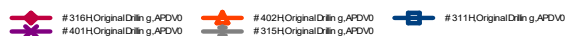
Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: 0.24°

Ladder Plot



LEGEND





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 310H - Slot 4
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 310H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6930' & RKB 14' @ 6944ft

Offset Depths are relative to Offset Datum

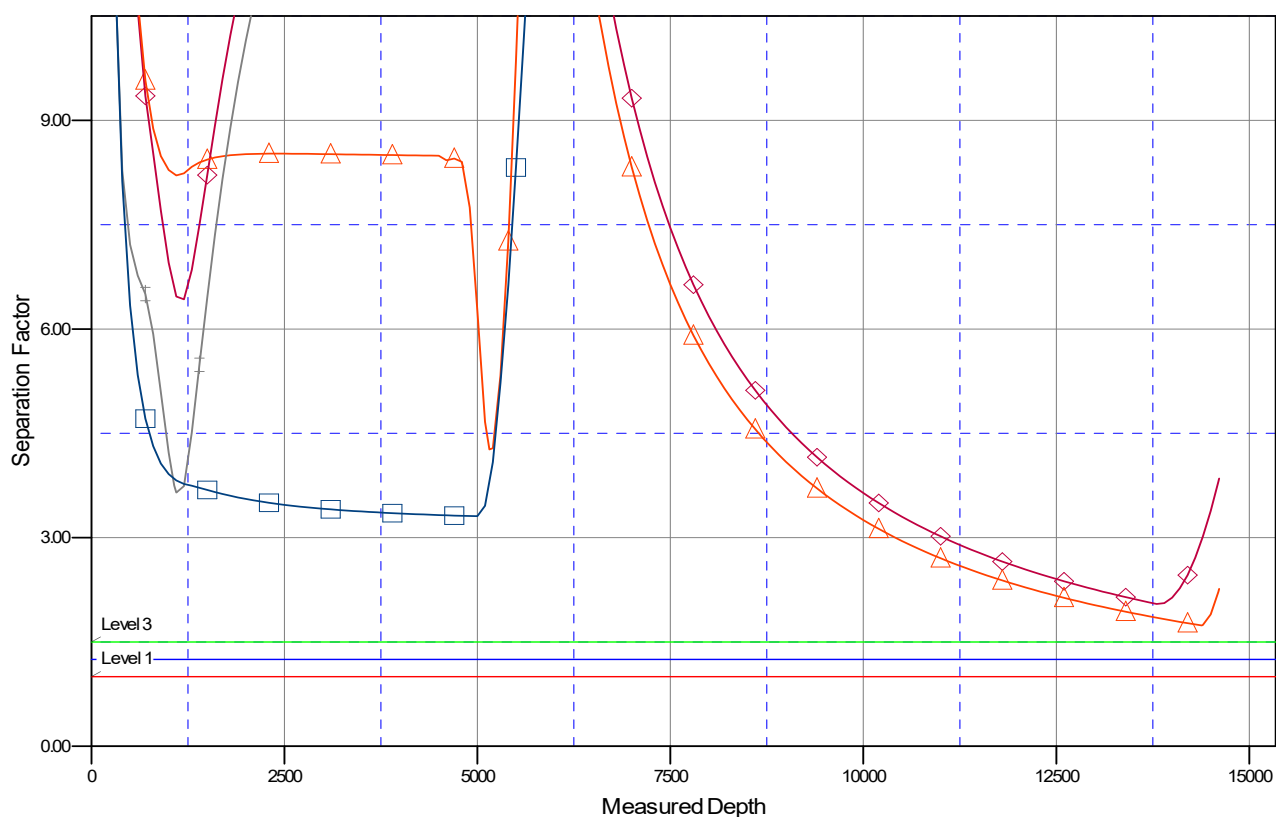
Central Meridian is -107.83333333

Coordinates are relative to: # 310H - Slot 4

Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

#316H Original Drilling, APOV0
 #402H Original Drilling, APOV0
 #311H Original Drilling, APOV0



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Blvd, Suite A
Farmington, New Mexico 87402



In Reply Refer To:
3162.3-1(NMF0110)

* DJR OPERATING LLC

#310H GALLO CANYON UNIT

Lease: NMNM118128 Agreement: NMNM131017A

SH: NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 26, T. 23 N., R. 6 W.

Sandoval County, New Mexico

BH: NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 22, T.23 N., R. 6 W.

Sandoval County, New Mexico

***Above Data Required on Well Sign**

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

The following special requirements apply and are effective when **checked**:

- A. ☒ Note all surface/drilling conditions of approval attached.
- B. ☒ The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated
- C. ☒ Test all casing strings below the conductor casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield (burst) for a minimum of 30 minutes. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- D. ☐ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.
- E. ☐ The use of co-flex hose is authorized contingent upon the following:
 1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
 2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
 3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

- A. Full compliance with all applicable laws and regulations, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.
- B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).
- C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.
- D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.
- E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).
- F. BOP equipment (except the annular preventer) shall be tested utilizing a test plug to full working pressure for 10 minutes. No bleed-off of pressure is acceptable. (See 43 CFR 3172.6(b)(9)(ii)).
- G. The operator shall have sufficient weighting materials and lost circulation materials on location in the event of a pressure kick or in the event of lost circulation. (See 43 CFR 3172.8(a)).
- H. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare. (See 43 CFR 3172.8(b)(7)).
- I. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a Notice of Intent sundry within three business days. **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to Virgil Lucero at 505-793-1836.**
- J. **The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.**
- K. Unless drilling operations are commenced within three years according to 43 CFR 3171.14, approval of the Application for Permit to Drill will expire. No extensions will be granted.

- L. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all times, unless the well is secured with blowout preventers or cement plugs.
- M. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.
- N. **Commingling:** No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office. (See 43 CFR 3173.14)

II. REPORTING REQUIREMENTS

- A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.
- B. The following reports shall be filed with the BLM-Authorized Officer online through AFMSS 2 within 30 days after the work is completed.
 - 1. Provide complete information concerning.
 - a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.
 - b. Intervals tested, perforated (include size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.
 - c. Subsequent Report of Abandonment, show the way the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.
 - 2. Well Completion Report will be submitted with 30 days after well has been completed.
 - a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.
 - 3. Submit a cement evaluation log if cement is not circulated to surface.
- C. Production Startup Notification is required no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

III. DRILLER'S LOG

The following shall be entered in the daily driller's log: 1) Blowout preventer pressures tests, including test pressures and results, 2) Blowout preventer tests for proper functioning, 3) Blowout prevention drills conducted, 4) Casing run, including size, grade, weight, and depth set, 5) How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc., 6) Waiting on cement time for each casing string, 7) Casing pressure tests after cementing, including test pressure and results, and 8) Estimated amounts of oil and gas recovered and/or produced during drill stem test.

IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of * Days, 20 MMCF following its (completion)(recompletion), or flowback has been routed to the production separator, whichever first occurs, without the prior, written approval of the authorized officer in accordance with 43 CFR 3179.81. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

**30 days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the beginning of flowback following completion or recompletion.*

V. SAFETY

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Rig safety lines are to be installed.
- C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

- A. Any changes of plans required to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.I.
- B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.I. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.
- C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

Sante Fe Main Office
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General Information
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Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 456435

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 456435
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
scrues76	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/28/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/28/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	6/12/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/12/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	6/12/2025
ward.rikala	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.	6/12/2025