

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.	
2. Name of Operator		9. API Well No. 30-043-21524	
3a. Address		3b. Phone No. (include area code)	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory 11. Sec., T. R. M. or Blk. and Survey or Area	
14. Distance in miles and direction from nearest town or post office*		12. County or Parish	
13. State			
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		16. No of acres in lease	
17. Spacing Unit dedicated to this well			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		19. Proposed Depth	
20. BLM/BIA Bond No. in file			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		22. Approximate date work will start*	
23. Estimated duration			
24. Attachments			
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)			
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)	
Title		Date	
Approved by (Signature)		Name (Printed/Typed)	
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)



Approval Date: 03/20/2025

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 921 FNL / 1435 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.200876 / LONG: -107.433739 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 2257 FNL / 1897 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.19721 / LONG: -107.43531 (TVD: 5481 feet, MD: 5954 feet)

PPP: SWSW / 1139 FSL / 1 FWL / TWSP: 23N / RANGE: 6W / SECTION: 25 / LAT: 36.191696 / LONG: -107.428893 (TVD: 5485 feet, MD: 9771 feet)

BHL: SWSW / 391 FSL / 753 FEL / TWSP: 23N / RANGE: 6W / SECTION: 25 / LAT: 36.189889 / LONG: -107.426346 (TVD: 5485 feet, MD: 9771 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 30-043-21524	Pool Code 13379	Pool Name COUNSELORS GALLUP - DAKOTA POOL
Property Code 325207	Property Name GALLO CANYON UNIT	Well Number 311H
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		921' NORTH	1435' EAST	36.200876° N	107.433739° W	SANDOVAL

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
M	25	23N	6W		391' SOUTH	753' WEST	36.189889° N	107.426346° W	SANDOVAL

Dedicated Acres SEC 26: SW/NE, SE/NE, NW/SE, NE/SE & SE/SE (200 AC.); SEC 25: NW/SW & SW/SW (80 AC.) = 280 ACRES	PENETRATED SPACING UNIT: 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
G	26	23N	6W		2257' NORTH	1897' EAST	36.197210° N	107.435310° W	SANDOVAL

Fist Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
G	26	23N	6W		2257' NORTH	1897' EAST	36.197210° N	107.435310° W	SANDOVAL

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
M	25	23N	6W		391' SOUTH	753' WEST	36.189889° N	107.426346° W	SANDOVAL

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

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

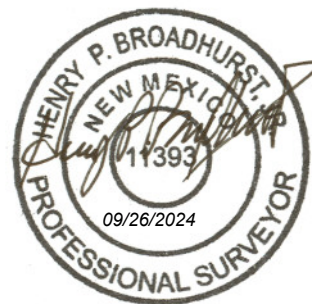
9/26/2024
Date

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:

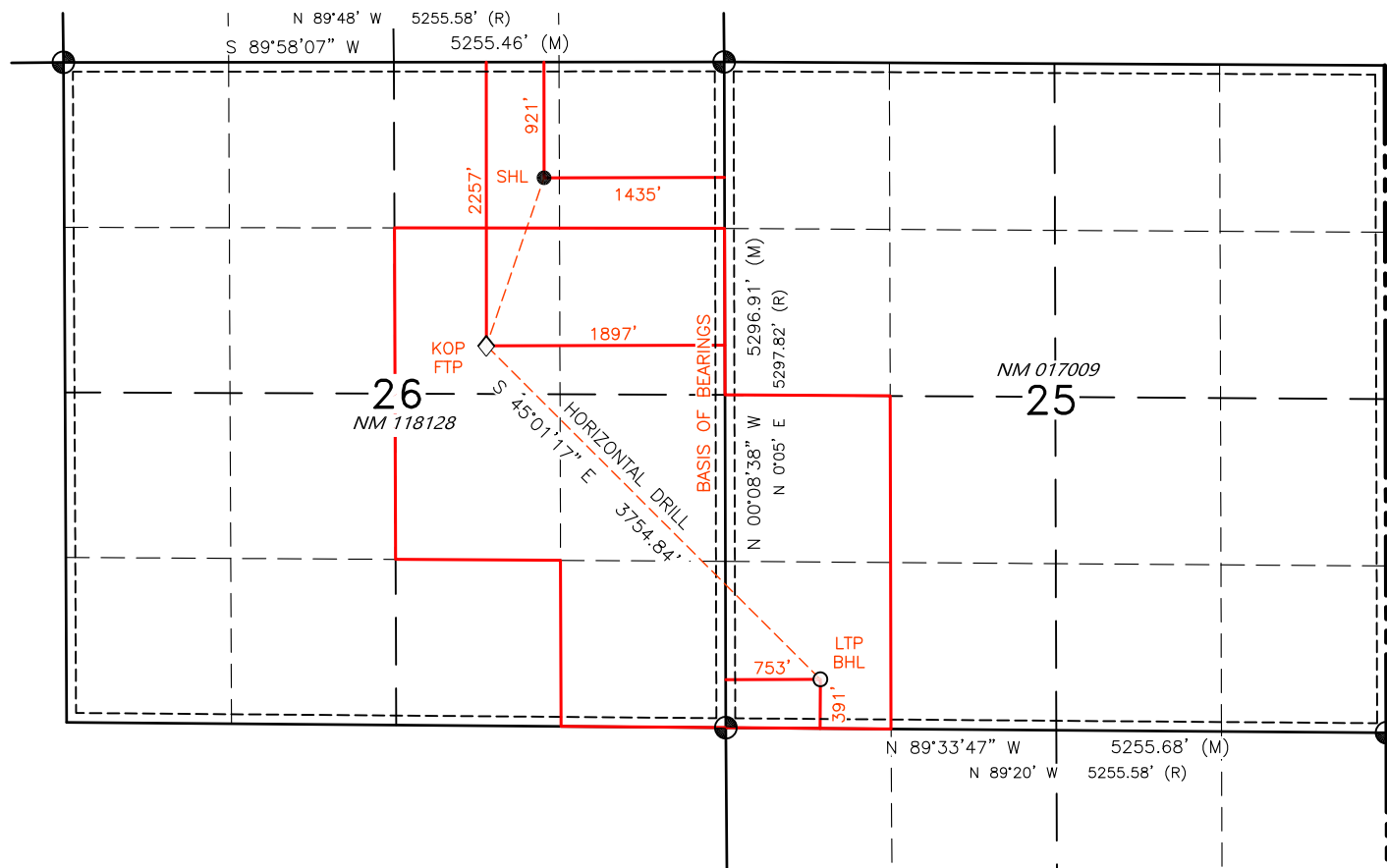
Certificate Number

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.

FND 3 1/4 BC
BLM 1964SURFACE LOCATION (SHL)

921' FNL 1435' FEL
SEC. 26, T23N, R6W
LAT. 36.200876° N (NAD83)
LONG. 107.433739° W (NAD83)

FIRST TAKE POINT (FTP)

2257' FNL 1897' FEL
SEC. 26, T23N, R6W
LAT. 36.197210° N (NAD83)
LONG. 107.435310° W (NAD83)

BOTTOM HOLE LOCATION (BHL)

391' FSL 453' FWL
SEC. 25, T23N, R6W
LAT. 36.189889° N (NAD83)
LONG. 107.426346° W (NAD83)

KICK OFF POINT (KOP)

2257' FNL 1897' FEL
SEC. 26, T23N, R6W
LAT. 36.197210° N (NAD83)
LONG. 107.435310° W (NAD83)

LAST TAKE POINT (LTP)

391' FSL 453' FWL
SEC. 25, T23N, R6W
LAT. 36.189889° N (NAD83)
LONG. 107.426346° W (NAD83)

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: _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.



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

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



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

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.



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

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 311H

Sandoval County, New Mexico

Surface Location

1435-ft FEL & 921-ft FNL
 Sec 26 T23N R06W
 Graded Elevation 6930' MSL
 RKB Elevation 6944' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2008760° N
 Longitude 107.4337390° W

Kick Off Point for Horizontal Build Curve

5009-ft MD
 4866-ft TVD

Local Coordinates (from SHL)

761-ft South
 794-ft West

Heel Location (Pay zone entry)

1897-ft FEL & 2257-ft FNL
 Sec 26 T23N R06W

Heel Geographical Coordinates (NAD-83)

Latitude 36.19720991° N
 Longitude 107.43530976° W

Bottom Hole Location (TD)

753-ft FWL & 391-ft FSL
 Sec 25 T23N R06W

BHL Geographical Coordinates (NAD-83)

Latitude 36.1898888° N
 Longitude 107.4263456° W

Well objectives

This well is planned as a 3750-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 144°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	1445	1428	Sd	W	8.3	8.4 – 8.8
Kirtland	1558	1537	Sh	-	8.3	8.4 – 8.8
Fruitland	1759	1731	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1973	1937	Sd	W	8.3	9.0 - 9.5
Lewis	2093	2053	Sh	-		9.0 - 9.5
Chacra	2855	2788	Sd	-	8.3	9.0 - 9.5
Menefee	3588	3495	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4287	4170	Sd	-	8.3	9.0 - 9.5
Mancos	4486	4362	Sh	-		9.0 - 9.5
Mancos Silt	4896	4757	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5433	5246	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5473	5276	Sd	O/G	6.6	8.8 -9.0
Gallup C	5628	5375	Sd	O/G	6.6	8.8 -9.0
Target	6016	5485	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	5954	surf	5481	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5665	9771	5394	5460	5665

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	4509-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	439	231
Volume (bbls)	183	62
Volume (cu.ft.)	1028	346
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5665-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	344
Volume (bbls)	96
Volume (cu.ft)	537
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 – 5954	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5954 – 9771	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.

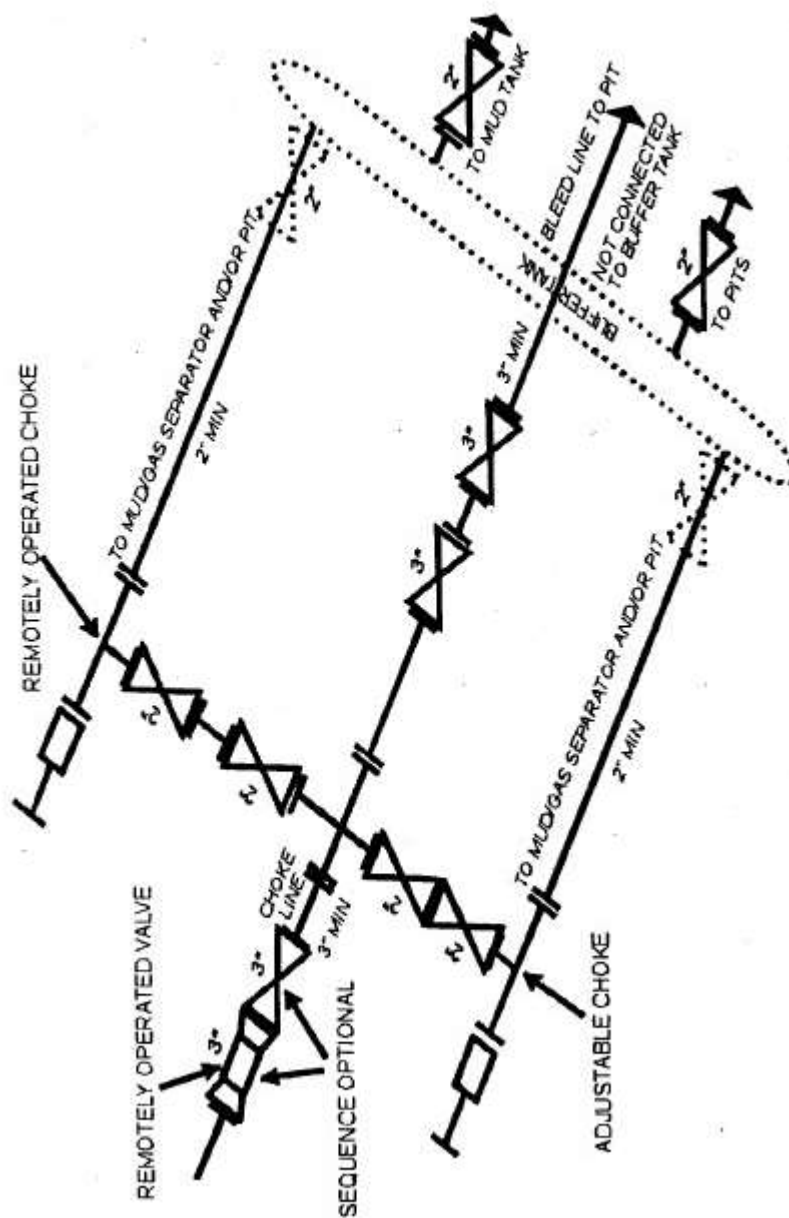
Completion

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.



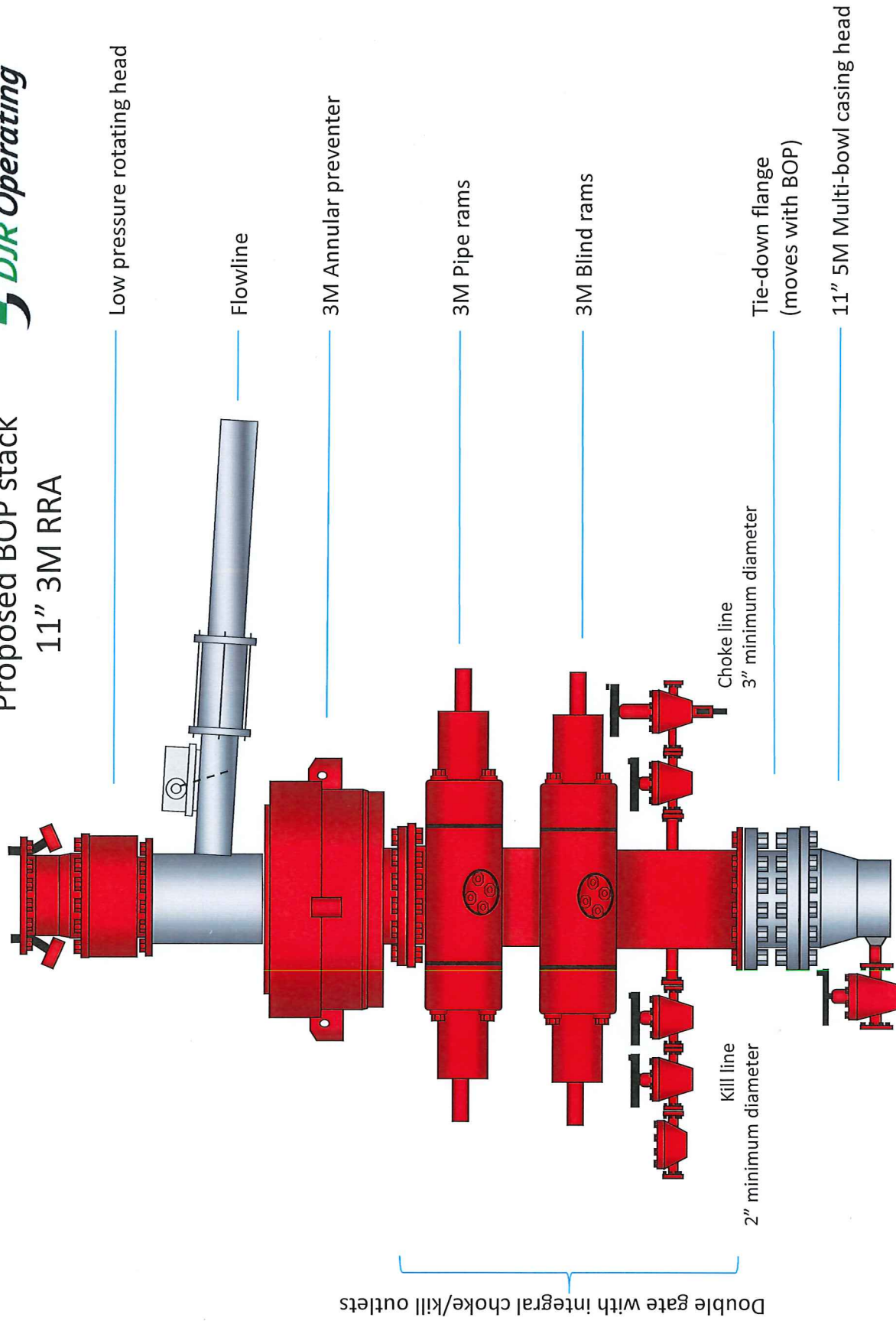
Choke Manifold

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: # 311H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 311H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1892659.14	2840986.45	36.20087600	-107.43373900
GL 6930' & RKB 14' @ 6944ft					
3					

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

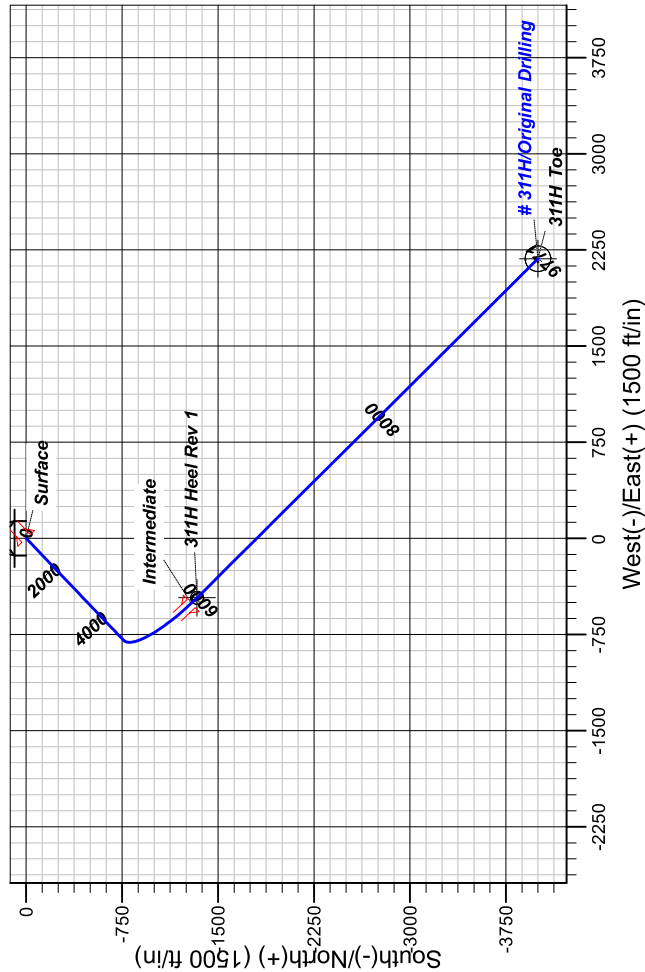
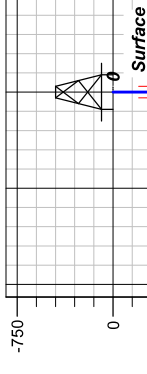
Plan: APD (# 311H/Original Drilling)
Created By: Janie Collins Date: 11:32, July 23 2021

DESIGN TARGET DETAILS

Well	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
311H Heel Rev 1	0	0.00	0.00	450	0	0	0.00	0.00	0
311H Toe	1213	15.26	226.24	1204	-70	-73	2.00	226.24	26
	5009	93.26	126.24	5483	-1335	-463	9.00	-90.90	557
	6008	90.35	135.21	5460	-4000	2182	9.00	-90.90	557
	9771	90.35	135.21	5460	-4000	2182	9.00	-90.90	4556

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0	0.00	0.00	450	0	0	0.00	0.00	0
1213	15.26	226.24	1204	-70	-73	2.00	226.24	26
5009	93.26	126.24	5483	-1335	-463	9.00	-90.90	557
6008	90.35	135.21	5460	-4000	2182	9.00	-90.90	557
9771	90.35	135.21	5460	-4000	2182	9.00	-90.90	4556



311H/Original Drilling/APD

311H Toe

8000

Intermediate

0009

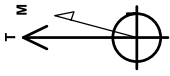
311H Heel Rev 1

0009

311H Toe

MDPath	Formation
1428	Ojo Alamo
1537	Kirland
1731	Fruitland
1937	Pictured Cliffs
2053	Lewis
2788	Chacra
2855	Menefee
3495	Point Lookout
4170	Mancos
4287	Mancos Silt
4362	Gallup A
4757	Gallup B
4896	Gallup C
5246	
5276	
5433	
5473	
5628	

FORMATION DETAILS



Azimuths to True North
Magnetic North: 10.2°
Magnetic Field
Strength: 51255.5
Dip Angle: 63.3°
Date: 12/31/2004
Model: IGRF2000

CASING DETAILS

TVD	MD	Name
350	350	Surface
5481	5954	Intermediate



DJR Operating

Gallo Canyon Unit

B26 2306 Pad

311H - Slot 3

Original Drilling

Plan: APD

Standard Planning Report

23 July, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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	Latitude:	36.2008390
From:	Lat/Long	Easting:	2,841,024.27 usft	Longitude:	-107.4336110
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	0.24

Well	# 311H - Slot 3					
Well Position	+N/-S	13 ft	Northing:	1,892,659.14 usft	Latitude:	36.2008760
	+E/-W	-38 ft	Easting:	2,840,986.45 usft	Longitude:	-107.4337390
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	6930

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	10.72	63.27	51,255.12656117

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	151.39

Plan Survey Tool Program	Date	7/15/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	9771 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	
1213	15.26	226.24	1204	-70	-73	2.00	2.00	0.00	226.24	
5009	15.26	226.24	4866	-761	-794	0.00	0.00	0.00	0.00	
6016	90.35	135.21	5483	-1335	-463	9.00	7.46	-9.04	-90.90	311H Heel Rev 1
9771	90.35	135.21	5460	-4000	2182	0.00	0.00	0.00	0.00	311H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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	226.24	500	0	0	0	2.00	2.00	0.00
600	3.00	226.24	600	-3	-3	1	2.00	2.00	0.00
700	5.00	226.24	700	-8	-8	3	2.00	2.00	0.00
800	7.00	226.24	799	-15	-15	6	2.00	2.00	0.00
900	9.00	226.24	898	-24	-25	9	2.00	2.00	0.00
1000	11.00	226.24	997	-36	-38	14	2.00	2.00	0.00
1100	13.00	226.24	1094	-51	-53	19	2.00	2.00	0.00
1200	15.00	226.24	1191	-68	-71	26	2.00	2.00	0.00
1213	15.26	226.24	1204	-70	-73	26	2.00	2.00	0.00
1300	15.26	226.24	1288	-86	-89	32	0.00	0.00	0.00
1400	15.26	226.24	1384	-104	-108	39	0.00	0.00	0.00
1500	15.26	226.24	1481	-122	-127	46	0.00	0.00	0.00
1600	15.26	226.24	1577	-140	-147	53	0.00	0.00	0.00
1700	15.26	226.24	1674	-158	-166	60	0.00	0.00	0.00
1800	15.26	226.24	1770	-177	-185	67	0.00	0.00	0.00
1900	15.26	226.24	1867	-195	-204	74	0.00	0.00	0.00
2000	15.26	226.24	1963	-213	-223	81	0.00	0.00	0.00
2100	15.26	226.24	2060	-231	-242	87	0.00	0.00	0.00
2200	15.26	226.24	2156	-249	-261	94	0.00	0.00	0.00
2300	15.26	226.24	2253	-268	-280	101	0.00	0.00	0.00
2400	15.26	226.24	2349	-286	-299	108	0.00	0.00	0.00
2500	15.26	226.24	2446	-304	-318	115	0.00	0.00	0.00
2600	15.26	226.24	2542	-322	-337	122	0.00	0.00	0.00
2700	15.26	226.24	2639	-340	-356	129	0.00	0.00	0.00
2800	15.26	226.24	2735	-359	-375	136	0.00	0.00	0.00
2900	15.26	226.24	2832	-377	-394	142	0.00	0.00	0.00
3000	15.26	226.24	2928	-395	-413	149	0.00	0.00	0.00
3100	15.26	226.24	3025	-413	-432	156	0.00	0.00	0.00
3200	15.26	226.24	3121	-432	-451	163	0.00	0.00	0.00
3300	15.26	226.24	3217	-450	-470	170	0.00	0.00	0.00
3400	15.26	226.24	3314	-468	-489	177	0.00	0.00	0.00
3500	15.26	226.24	3410	-486	-508	184	0.00	0.00	0.00
3600	15.26	226.24	3507	-504	-527	191	0.00	0.00	0.00
3700	15.26	226.24	3603	-523	-546	197	0.00	0.00	0.00
3800	15.26	226.24	3700	-541	-565	204	0.00	0.00	0.00
3900	15.26	226.24	3796	-559	-584	211	0.00	0.00	0.00
4000	15.26	226.24	3893	-577	-603	218	0.00	0.00	0.00
4100	15.26	226.24	3989	-595	-622	225	0.00	0.00	0.00
4200	15.26	226.24	4086	-614	-641	232	0.00	0.00	0.00
4300	15.26	226.24	4182	-632	-660	239	0.00	0.00	0.00
4400	15.26	226.24	4279	-650	-679	246	0.00	0.00	0.00
4500	15.26	226.24	4375	-668	-698	252	0.00	0.00	0.00
4600	15.26	226.24	4472	-686	-717	259	0.00	0.00	0.00
4700	15.26	226.24	4568	-705	-736	266	0.00	0.00	0.00
4800	15.26	226.24	4665	-723	-755	273	0.00	0.00	0.00
4900	15.26	226.24	4761	-741	-774	280	0.00	0.00	0.00
5000	15.26	226.24	4858	-759	-793	287	0.00	0.00	0.00
5009	15.26	226.24	4866	-761	-794	287	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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	17.15	197.40	4954	-782	-807	300	9.00	2.08	-31.74
5200	22.64	176.14	5048	-815	-810	328	9.00	5.49	-21.26
5300	29.82	163.73	5138	-858	-802	370	9.00	7.18	-12.42
5400	37.73	155.95	5221	-910	-782	424	9.00	7.91	-7.77
5500	45.99	150.59	5295	-970	-752	491	9.00	8.26	-5.37
5600	54.44	146.55	5359	-1035	-712	568	9.00	8.45	-4.03
5700	63.01	143.30	5411	-1105	-663	652	9.00	8.56	-3.26
5800	71.63	140.51	5449	-1177	-606	743	9.00	8.63	-2.79
5900	80.29	137.99	5474	-1251	-543	838	9.00	8.66	-2.52
6000	88.97	135.59	5483	-1323	-475	934	9.00	8.68	-2.39
6016	90.35	135.21	5483	-1335	-463	950	9.00	8.68	-2.37
6100	90.35	135.21	5483	-1394	-404	1030	0.00	0.00	0.00
6200	90.35	135.21	5482	-1465	-334	1126	0.00	0.00	0.00
6300	90.35	135.21	5481	-1536	-263	1222	0.00	0.00	0.00
6400	90.35	135.21	5481	-1607	-193	1319	0.00	0.00	0.00
6500	90.35	135.21	5480	-1678	-122	1415	0.00	0.00	0.00
6600	90.35	135.21	5480	-1749	-52	1511	0.00	0.00	0.00
6700	90.35	135.21	5479	-1820	18	1607	0.00	0.00	0.00
6800	90.35	135.21	5478	-1891	89	1703	0.00	0.00	0.00
6900	90.35	135.21	5478	-1962	159	1799	0.00	0.00	0.00
7000	90.35	135.21	5477	-2033	230	1895	0.00	0.00	0.00
7100	90.35	135.21	5476	-2104	300	1991	0.00	0.00	0.00
7200	90.35	135.21	5476	-2175	371	2087	0.00	0.00	0.00
7300	90.35	135.21	5475	-2246	441	2183	0.00	0.00	0.00
7400	90.35	135.21	5475	-2317	512	2279	0.00	0.00	0.00
7500	90.35	135.21	5474	-2388	582	2375	0.00	0.00	0.00
7600	90.35	135.21	5473	-2459	652	2471	0.00	0.00	0.00
7700	90.35	135.21	5473	-2530	723	2567	0.00	0.00	0.00
7800	90.35	135.21	5472	-2601	793	2663	0.00	0.00	0.00
7900	90.35	135.21	5472	-2672	864	2759	0.00	0.00	0.00
8000	90.35	135.21	5471	-2743	934	2855	0.00	0.00	0.00
8100	90.35	135.21	5470	-2814	1005	2951	0.00	0.00	0.00
8200	90.35	135.21	5470	-2885	1075	3047	0.00	0.00	0.00
8300	90.35	135.21	5469	-2956	1146	3143	0.00	0.00	0.00
8400	90.35	135.21	5468	-3027	1216	3239	0.00	0.00	0.00
8500	90.35	135.21	5468	-3098	1286	3335	0.00	0.00	0.00
8600	90.35	135.21	5467	-3169	1357	3431	0.00	0.00	0.00
8700	90.35	135.21	5467	-3240	1427	3527	0.00	0.00	0.00
8800	90.35	135.21	5466	-3311	1498	3623	0.00	0.00	0.00
8900	90.35	135.21	5465	-3381	1568	3720	0.00	0.00	0.00
9000	90.35	135.21	5465	-3452	1639	3816	0.00	0.00	0.00
9100	90.35	135.21	5464	-3523	1709	3912	0.00	0.00	0.00
9200	90.35	135.21	5464	-3594	1780	4008	0.00	0.00	0.00
9300	90.35	135.21	5463	-3665	1850	4104	0.00	0.00	0.00
9400	90.35	135.21	5462	-3736	1920	4200	0.00	0.00	0.00
9500	90.35	135.21	5462	-3807	1991	4296	0.00	0.00	0.00
9600	90.35	135.21	5461	-3878	2061	4392	0.00	0.00	0.00
9700	90.35	135.21	5460	-3949	2132	4488	0.00	0.00	0.00
9771	90.35	135.21	5460	-4000	2182	4556	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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									
311H Toe	0.00	0.00	5460	-4000	2182	1,888,668.62	2,843,184.56	36.18988880	-107.42634560
- plan hits target center									
- Circle (radius 100)									
311H Heel Rev 1	0.00	0.00	5483	-1335	-463	1,891,322.70	2,840,528.49	36.19720991	-107.43530976
- plan hits target center									
- Circle (radius 50)									

Casing Points					
Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter	
(ft)	(ft)	Name	(in)	(in)	
350	350	Surface	9.63	12.25	
5954	5481	Intermediate	7.00	8.75	

Formations						
Measured Depth	Vertical Depth			Dip	Dip Direction	
(ft)	(ft)	Name	Lithology	(°)	(°)	
1445	1428	Ojo Alamo		0.00	0.00	
1558	1537	Kirtland		0.00	0.00	
1759	1731	Fruitland		0.00	0.00	
1973	1937	Pictured Cliffs		0.00	0.00	
2093	2053	Lewis		0.00	0.00	
2855	2788	Chacra		0.00	0.00	
3588	3495	Menefee		0.00	0.00	
4287	4170	Point Lookout		0.00	0.00	
4486	4362	Mancos		0.00	0.00	
4896	4757	Mancos Silt		0.00	0.00	
5433	5246	Gallup A		0.00	0.00	
5473	5276	Gallup B		0.00	0.00	
5628	5375	Gallup C		0.00	0.00	



DJR Operating

Gallo Canyon Unit

B26 2306 Pad

311H

Original Drilling

APD

Anticollision Report

23 July, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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	7/15/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	9771	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						
# 310H - Original Drilling - APD	483	483	20	17	6.518	CC
# 310H - Original Drilling - APD	600	599	20	17	5.342	ES
# 310H - Original Drilling - APD	5000	4994	182	127	3.308	SF
# 315H - Original Drilling - APD	304	304	40	38	22.614	CC
# 315H - Original Drilling - APD	400	399	40	38	16.433	ES
# 315H - Original Drilling - APD	9771	9617	798	584	3.735	SF
# 316H - Original Drilling - APD	469	469	60	57	20.238	CC, ES
# 316H - Original Drilling - APD	1200	1192	84	75	9.788	SF
# 401H - Original Drilling - APD	400	400	40	38	16.305	CC
# 401H - Original Drilling - APD	500	500	40	37	12.729	ES
# 401H - Original Drilling - APD	9771	9000	475	342	3.580	SF
# 402H - Original Drilling - APD	400	400	20	18	8.128	CC
# 402H - Original Drilling - APD	600	600	21	17	5.408	ES
# 402H - Original Drilling - APD	1000	1001	30	23	4.369	SF

Offset Design: B26 2306 Pad - # 310H - 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 Wellbore Centre			Distance		Minimum Separation		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)	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		
400	400	400	400	1	1	-70.86	7	-19	20	18	2.46	8.128		
483	483	483	483	2	2	64.00	6	-19	20	17	3.04	6.518 CC		
500	500	500	500	2	2	63.00	6	-19	20	17	3.16	6.340		
600	600	599	599	2	2	63.77	4	-22	20	17	3.83	5.342 ES		
700	700	699	699	2	2	65.22	0	-28	21	17	4.53	4.717		
800	799	799	798	3	3	67.18	-6	-36	23	17	5.26	4.321		
900	898	898	896	3	3	69.45	-14	-47	25	19	6.03	4.073		
1000	997	998	994	3	3	71.84	-24	-62	27	20	6.86	3.919		
1100	1094	1097	1092	4	4	74.19	-35	-78	30	22	7.76	3.829		
1200	1191	1197	1188	4	4	76.41	-49	-98	33	24	8.76	3.778		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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 - # 310H - 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	1297	1285	5	5	78.02	-65	-119	37	27	9.83	3.752		
1400	1384	1396	1381	6	6	79.26	-80	-141	41	30	10.94	3.721		
1500	1481	1496	1477	6	6	80.28	-95	-163	45	32	12.08	3.690		
1600	1577	1596	1574	7	7	81.15	-110	-184	48	35	13.24	3.660		
1700	1674	1696	1670	7	7	81.88	-126	-206	52	38	14.41	3.631		
1800	1770	1796	1766	8	8	82.51	-141	-228	56	41	15.59	3.605		
1900	1867	1896	1863	8	8	83.06	-156	-249	60	43	16.79	3.580		
2000	1963	1996	1959	9	9	83.55	-172	-271	64	46	17.98	3.558		
2100	2060	2096	2055	10	10	83.97	-187	-293	68	49	19.19	3.538		
2200	2156	2196	2152	10	10	84.36	-202	-314	72	51	20.40	3.519		
2300	2253	2296	2248	11	11	84.70	-217	-336	76	54	21.61	3.503		
2400	2349	2396	2344	11	12	85.01	-233	-358	80	57	22.83	3.487		
2500	2446	2496	2441	12	12	85.29	-248	-379	84	59	24.05	3.473		
2600	2542	2596	2537	13	13	85.54	-263	-401	87	62	25.27	3.460		
2700	2639	2695	2633	13	13	85.77	-279	-423	91	65	26.50	3.448		
2800	2735	2795	2730	14	14	85.99	-294	-444	95	68	27.72	3.436		
2900	2832	2895	2826	15	15	86.18	-309	-466	99	70	28.95	3.426		
3000	2928	2995	2922	15	15	86.37	-324	-487	103	73	30.18	3.416		
3100	3024	3095	3019	16	16	86.53	-340	-509	107	76	31.41	3.407		
3200	3121	3195	3115	16	16	86.69	-355	-531	111	78	32.64	3.399		
3300	3217	3295	3211	17	17	86.84	-370	-552	115	81	33.87	3.391		
3400	3314	3395	3308	18	18	86.97	-386	-574	119	84	35.11	3.384		
3500	3410	3495	3404	18	18	87.10	-401	-596	123	86	36.34	3.377		
3600	3507	3595	3500	19	19	87.22	-416	-617	127	89	37.57	3.370		
3700	3603	3695	3597	19	20	87.33	-432	-639	131	92	38.81	3.364		
3800	3700	3795	3693	20	20	87.44	-447	-661	134	94	40.04	3.358		
3900	3796	3895	3790	21	21	87.54	-462	-682	138	97	41.28	3.353		
4000	3893	3994	3886	21	21	87.63	-477	-704	142	100	42.51	3.348		
4100	3989	4094	3982	22	22	87.72	-493	-726	146	102	43.75	3.343		
4200	4086	4194	4079	23	23	87.81	-508	-747	150	105	44.99	3.338		
4300	4182	4294	4175	23	23	87.89	-523	-769	154	108	46.23	3.334		
4400	4279	4394	4271	24	24	87.96	-539	-791	158	111	47.46	3.329		
4500	4375	4494	4368	24	25	88.04	-554	-812	162	113	48.70	3.325		
4600	4472	4594	4464	25	25	88.11	-569	-834	166	116	49.94	3.322		
4700	4568	4694	4560	26	26	88.17	-584	-855	170	119	51.18	3.318		
4800	4665	4794	4657	26	26	88.24	-600	-877	174	121	52.42	3.315		
4900	4761	4894	4753	27	27	88.30	-615	-899	178	124	53.65	3.311		
5000	4858	4994	4849	27	28	88.35	-630	-920	182	127	54.89	3.308 SF		
5100	4954	5083	4936	28	28	116.15	-643	-940	193	137	55.94	3.451		
5200	5048	5150	4999	29	29	136.25	-649	-960	229	173	56.03	4.085		
5300	5138	5211	5056	29	29	147.46	-649	-981	287	231	55.93	5.136		
5400	5221	5250	5092	30	29	153.92	-647	-997	363	308	55.20	6.577		
5500	5295	5283	5122	30	30	157.84	-644	-1011	451	396	54.99	8.198		
5600	5359	5300	5136	31	30	160.07	-642	-1019	546	491	54.69	9.987		
5700	5411	5300	5136	31	30	157.33	-642	-1019	645	591	54.28	11.888		
5800	5449	5300	5136	32	30	-14.69	-642	-1019	745	691	54.44	13.688		
5900	5474	5300	5136	32	30	-14.90	-642	-1019	843	788	54.94	15.349		
6000	5483	5284	5122	33	30	-14.92	-644	-1011	938	883	55.15	17.009		
6100	5483	5269	5109	34	29	-14.94	-645	-1005	1030	975	55.49	18.563		
6200	5482	5250	5092	35	29	-14.96	-647	-997	1123	1067	55.66	20.176		
6300	5481	5250	5092	36	29	-14.96	-647	-997	1217	1160	56.20	21.650		
6400	5481	5231	5075	37	29	-14.97	-648	-989	1311	1255	56.22	23.314		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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 - # 310H - 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		Rule Assigned:				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)	Minimum Separation (ft)	Separation Factor		
6500	5480	5221	5065	38	29	-14.97	-649	-985	1406	1349	56.39	24.924		
6600	5480	5200	5046	40	29	-14.98	-649	-977	1501	1445	56.32	26.650		
6700	5479	5200	5046	41	29	-14.98	-649	-977	1596	1540	56.61	28.201		
6800	5478	5200	5046	43	29	-14.98	-649	-977	1693	1636	56.85	29.770		
6900	5478	5200	5046	45	29	-14.98	-649	-977	1789	1732	57.06	31.354		
7000	5477	5200	5046	47	29	-14.98	-649	-977	1886	1829	57.23	32.949		
7100	5476	5175	5023	49	29	-15.00	-649	-968	1982	1925	57.03	34.759		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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
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	
0	0	0	0	0	0	-70.86	13	-38	40					
100	100	100	100	0	0	-70.86	13	-38	40	40	0.31	129.667		
200	200	200	200	1	1	-70.86	13	-38	40	39	1.03	38.991		
300	300	300	300	1	1	-70.86	13	-38	40	38	1.74	22.945		
304	304	304	304	1	1	-70.86	13	-38	40	38	1.77	22.614 CC		
400	400	399	399	1	1	-71.28	13	-38	40	38	2.45	16.433 ES		
500	500	498	498	2	2	59.82	12	-41	43	40	3.14	13.577		
600	600	597	597	2	2	57.95	9	-47	46	42	3.82	12.075		
700	700	696	695	2	2	57.36	4	-57	50	46	4.52	11.143		
800	799	796	795	3	3	59.42	0	-67	54	48	5.26	10.174		
900	898	896	894	3	3	64.46	-5	-77	55	49	6.03	9.130		
1000	997	996	993	3	3	72.52	-9	-87	56	49	6.86	8.148		
1100	1094	1095	1092	4	4	83.57	-14	-97	57	50	7.75	7.391		
1200	1191	1194	1190	4	4	96.86	-18	-107	61	52	8.68	7.032		
1300	1288	1293	1288	5	5	109.82	-23	-117	68	59	9.58	7.144		
1400	1384	1391	1386	6	5	119.93	-27	-126	79	68	10.41	7.552		
1500	1481	1490	1484	6	5	127.58	-32	-136	91	79	11.20	8.096		
1600	1577	1588	1582	7	6	133.37	-36	-146	104	92	11.97	8.685		
1700	1674	1687	1680	7	6	137.82	-41	-156	118	105	12.73	9.274		
1800	1770	1786	1778	8	7	141.31	-45	-166	133	119	13.49	9.839		
1900	1867	1884	1876	8	7	144.11	-50	-176	148	134	14.25	10.370		
2000	1963	1983	1974	9	8	146.38	-55	-186	163	148	15.01	10.866		
2100	2060	2082	2072	10	8	148.26	-59	-196	179	163	15.78	11.326		
2200	2156	2180	2170	10	8	149.85	-64	-206	194	178	16.54	11.752		
2300	2253	2279	2268	11	9	151.19	-68	-216	210	193	17.31	12.146		
2400	2349	2378	2366	11	9	152.35	-73	-226	226	208	18.07	12.510		
2500	2446	2476	2464	12	10	153.35	-77	-235	242	223	18.84	12.848		
2600	2542	2575	2562	13	10	154.23	-82	-245	258	239	19.61	13.162		
2700	2639	2673	2660	13	10	155.01	-86	-255	274	254	20.39	13.454		
2800	2735	2772	2758	14	11	155.70	-91	-265	290	269	21.16	13.726		
2900	2832	2871	2857	15	11	156.32	-95	-275	307	285	21.93	13.979		
3000	2928	2969	2955	15	12	156.87	-100	-285	323	300	22.71	14.217		
3100	3024	3068	3053	16	12	157.37	-104	-295	339	316	23.48	14.439		
3200	3121	3167	3151	16	12	157.83	-109	-305	355	331	24.26	14.647		
3300	3217	3265	3249	17	13	158.25	-113	-315	372	347	25.04	14.843		
3400	3314	3364	3347	18	13	158.63	-118	-325	388	362	25.82	15.028		
3500	3410	3462	3445	18	14	158.98	-122	-335	404	378	26.59	15.202		
3600	3507	3561	3543	19	14	159.30	-127	-345	421	393	27.37	15.366		
3700	3603	3660	3641	19	14	159.60	-131	-354	437	409	28.15	15.522		
3800	3700	3758	3739	20	15	159.88	-136	-364	453	424	28.93	15.669		
3900	3796	3857	3837	21	15	160.14	-140	-374	470	440	29.71	15.809		
4000	3893	3956	3935	21	16	160.38	-145	-384	486	456	30.49	15.941		
4100	3989	4054	4033	22	16	160.61	-149	-394	502	471	31.27	16.067		
4200	4086	4153	4131	23	17	160.82	-154	-404	519	487	32.05	16.187		
4300	4182	4251	4229	23	17	161.02	-159	-414	535	502	32.83	16.302		
4400	4279	4350	4327	24	17	161.20	-163	-424	552	518	33.62	16.411		
4500	4375	4449	4425	24	18	161.38	-168	-434	568	534	34.40	16.515		
4600	4472	4547	4523	25	18	161.54	-172	-444	584	549	35.18	16.615		
4700	4568	4646	4621	26	19	161.70	-177	-454	601	565	35.96	16.710		
4800	4665	4775	4749	26	19	162.77	-189	-460	615	579	36.76	16.741		
4900	4761	4902	4872	27	19	165.98	-220	-447	625	588	37.13	16.832		
5000	4858	5014	4973	27	20	170.44	-259	-422	633	595	37.37	16.928		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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		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	
5100	4954	5111	5053	28	20	-156.45	-303	-390	642	605	37.74	17.022	
5200	5048	5201	5119	29	20	-131.16	-351	-352	656	618	38.28	17.139	
5300	5138	5286	5173	29	20	-114.98	-401	-310	673	634	38.93	17.280	
5400	5221	5366	5216	30	21	-103.84	-451	-266	691	651	39.61	17.445	
5500	5295	5443	5249	30	21	-95.57	-503	-219	710	670	40.31	17.619	
5600	5359	5517	5273	31	22	-89.18	-554	-171	729	688	41.08	17.746	
5700	5411	5590	5288	31	22	-84.19	-606	-122	747	705	41.80	17.857	
5800	5449	5661	5295	32	23	-80.33	-656	-72	762	719	42.71	17.840	
5900	5474	5747	5295	32	24	-77.36	-717	-12	774	730	44.26	17.489	
6000	5483	5846	5295	33	26	-76.06	-787	59	780	733	46.73	16.684	
6100	5483	5946	5295	34	27	-76.05	-857	130	780	730	49.70	15.697	
6200	5482	6046	5294	35	29	-76.08	-928	201	781	728	52.96	14.742	
6300	5481	6146	5294	36	31	-76.10	-998	271	781	725	56.44	13.841	
6400	5481	6246	5293	37	33	-76.12	-1069	342	782	722	60.11	13.003	
6500	5480	6346	5293	38	35	-76.15	-1140	413	782	718	63.94	12.232	
6600	5480	6446	5292	40	37	-76.17	-1210	484	783	715	67.90	11.526	
6700	5479	6546	5292	41	39	-76.19	-1281	555	783	711	71.97	10.881	
6800	5478	6646	5292	43	41	-76.21	-1351	626	784	707	76.13	10.293	
6900	5478	6746	5291	45	43	-76.24	-1422	696	784	704	80.37	9.756	
7000	5477	6846	5291	47	45	-76.26	-1493	767	785	700	84.67	9.266	
7100	5476	6946	5290	49	48	-76.28	-1563	838	785	696	89.03	8.818	
7200	5476	7046	5290	51	50	-76.31	-1634	909	786	692	93.44	8.407	
7300	5475	7146	5289	53	52	-76.33	-1704	980	786	688	97.89	8.030	
7400	5475	7246	5289	55	55	-76.35	-1775	1051	787	684	102.38	7.682	
7500	5474	7346	5289	57	57	-76.37	-1845	1121	787	680	106.90	7.362	
7600	5473	7446	5288	59	59	-76.40	-1916	1192	788	676	111.45	7.066	
7700	5473	7546	5288	62	62	-76.42	-1987	1263	788	672	116.03	6.791	
7800	5472	7646	5287	64	64	-76.44	-2057	1334	788	668	120.63	6.537	
7900	5472	7746	5287	66	66	-76.46	-2128	1405	789	664	125.25	6.299	
8000	5471	7846	5286	68	69	-76.49	-2198	1475	789	660	129.88	6.078	
8100	5470	7946	5286	71	71	-76.51	-2269	1546	790	655	134.53	5.872	
8200	5470	8046	5286	73	73	-76.53	-2340	1617	790	651	139.20	5.679	
8300	5469	8146	5285	75	76	-76.56	-2410	1688	791	647	143.88	5.497	
8400	5468	8246	5285	78	78	-76.58	-2481	1759	791	643	148.57	5.327	
8500	5468	8346	5284	80	81	-76.60	-2551	1830	792	639	153.28	5.167	
8600	5467	8446	5284	82	83	-76.62	-2622	1900	792	634	157.99	5.016	
8700	5467	8546	5283	85	85	-76.64	-2693	1971	793	630	162.71	4.873	
8800	5466	8646	5283	87	88	-76.67	-2763	2042	793	626	167.44	4.738	
8900	5465	8746	5283	89	90	-76.69	-2834	2113	794	622	172.18	4.611	
9000	5465	8846	5282	92	93	-76.71	-2904	2184	794	617	176.93	4.490	
9100	5464	8946	5282	94	95	-76.73	-2975	2255	795	613	181.68	4.375	
9200	5464	9046	5281	96	98	-76.76	-3045	2325	795	609	186.44	4.266	
9300	5463	9146	5281	99	100	-76.78	-3116	2396	796	605	191.21	4.162	
9400	5462	9246	5280	101	102	-76.80	-3187	2467	796	600	195.98	4.063	
9500	5462	9346	5280	103	105	-76.82	-3257	2538	797	596	200.76	3.969	
9600	5461	9446	5280	106	107	-76.85	-3328	2609	797	592	205.54	3.879	
9700	5460	9546	5279	108	110	-76.87	-3398	2680	798	587	210.33	3.793	
9771	5460	9617	5279	110	111	-76.88	-3448	2730	798	584	213.72	3.735 SF	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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			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	-70.44	20	-56	60					
100	100	100	100	0	0	-70.44	20	-56	60	59	0.31	193.988		
200	200	200	200	1	1	-70.44	20	-56	60	59	1.03	58.332		
300	300	300	300	1	1	-70.44	20	-56	60	58	1.74	34.327		
400	400	400	400	1	1	-70.44	20	-56	60	57	2.46	24.319		
469	469	469	469	1	1	63.64	20	-56	60	57	2.95	20.238 CC, ES		
500	500	499	499	2	2	63.45	20	-57	60	57	3.16	18.972		
600	600	597	597	2	2	64.45	19	-60	61	57	3.83	15.967		
700	700	696	695	2	2	66.32	17	-66	64	59	4.52	14.084		
800	799	794	794	3	3	68.99	14	-76	67	62	5.24	12.865		
900	898	894	893	3	3	73.65	11	-86	71	65	6.01	11.786		
1000	997	994	992	3	3	80.48	8	-97	74	67	6.82	10.841		
1100	1094	1093	1090	4	4	89.17	5	-107	78	70	7.68	10.141		
1200	1191	1192	1189	4	4	99.10	2	-117	84	75	8.59	9.788 SF		
1300	1288	1290	1287	5	5	108.79	-1	-128	93	84	9.49	9.813		
1400	1384	1389	1384	6	5	116.65	-4	-138	104	94	10.36	10.077		
1500	1481	1487	1482	6	5	122.91	-7	-148	117	106	11.20	10.467		
1600	1577	1586	1580	7	6	127.90	-10	-158	131	119	12.02	10.913		
1700	1674	1684	1678	7	6	131.92	-13	-168	146	133	12.83	11.375		
1800	1770	1782	1776	8	7	135.19	-16	-179	161	148	13.63	11.832		
1900	1867	1881	1874	8	7	137.89	-19	-189	177	163	14.43	12.271		
2000	1963	1979	1972	9	7	140.15	-22	-199	193	178	15.22	12.688		
2100	2060	2078	2069	10	8	142.06	-25	-209	209	193	16.01	13.081		
2200	2156	2176	2167	10	8	143.69	-28	-220	226	209	16.80	13.449		
2300	2253	2275	2265	11	9	145.10	-30	-230	243	225	17.60	13.793		
2400	2349	2373	2363	11	9	146.33	-33	-240	259	241	18.39	14.113		
2500	2446	2471	2461	12	9	147.41	-36	-250	276	257	19.18	14.413		
2600	2542	2570	2559	13	10	148.36	-39	-260	293	273	19.97	14.693		
2700	2639	2668	2657	13	10	149.21	-42	-271	310	290	20.76	14.955		
2800	2735	2767	2754	14	11	149.97	-45	-281	328	306	21.55	15.200		
2900	2832	2865	2852	15	11	150.66	-48	-291	345	322	22.35	15.429		
3000	2928	2964	2950	15	11	151.28	-51	-301	362	339	23.14	15.644		
3100	3024	3062	3048	16	12	151.85	-54	-312	379	355	23.93	15.847		
3200	3121	3161	3146	16	12	152.36	-57	-322	397	372	24.72	16.037		
3300	3217	3259	3244	17	13	152.83	-60	-332	414	388	25.52	16.217		
3400	3314	3357	3342	18	13	153.27	-63	-342	431	405	26.31	16.387		
3500	3410	3456	3439	18	13	153.67	-66	-352	449	421	27.11	16.547		
3600	3507	3554	3537	19	14	154.04	-69	-363	466	438	27.90	16.698		
3700	3603	3653	3635	19	14	154.38	-72	-373	483	455	28.70	16.842		
3800	3700	3751	3733	20	15	154.70	-75	-383	501	471	29.49	16.978		
3900	3796	3850	3831	21	15	155.00	-78	-393	518	488	30.29	17.108		
4000	3893	3948	3929	21	15	155.28	-81	-404	536	505	31.09	17.231		
4100	3989	4046	4027	22	16	155.54	-84	-414	553	521	31.88	17.348		
4200	4086	4145	4124	23	16	155.79	-87	-424	571	538	32.68	17.459		
4300	4182	4243	4222	23	17	156.02	-90	-434	588	555	33.48	17.566		
4400	4279	4342	4320	24	17	156.24	-93	-444	606	571	34.27	17.668		
4500	4375	4440	4418	24	18	156.44	-96	-455	623	588	35.07	17.765		
4600	4472	4539	4516	25	18	156.64	-99	-465	641	605	35.87	17.858		
4700	4568	4637	4614	26	18	156.82	-102	-475	658	621	36.66	17.947		
4800	4665	4733	4709	26	19	156.99	-105	-485	676	638	37.45	18.041		
4900	4761	4800	4775	27	19	156.78	-104	-495	695	657	38.04	18.281		
5000	4858	4871	4844	27	19	155.99	-98	-511	719	681	38.74	18.567		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
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)	Minimum Separation (ft)	Separation Factor
5100	4954	4933	4902	28	20	-175.23	-87	-528	750	711	39.39	19.038
5200	5048	4984	4949	29	20	-153.43	-76	-546	791	751	39.94	19.810
5300	5138	5023	4983	29	20	-139.20	-65	-561	843	803	40.29	20.922
5400	5221	5050	5007	30	20	-127.75	-57	-573	904	864	40.44	22.360
5500	5295	5065	5019	30	20	-116.32	-52	-579	974	933	40.42	24.087
5600	5359	5071	5024	31	20	-104.11	-50	-582	1048	1008	40.34	25.990
5700	5411	5070	5023	31	20	-91.32	-51	-581	1126	1086	40.26	27.977
5800	5449	5050	5007	32	20	-78.17	-57	-573	1205	1165	39.94	30.176
5900	5474	5050	5007	32	20	-68.40	-57	-573	1282	1242	40.29	31.826
6000	5483	5034	4993	33	20	-59.96	-62	-566	1356	1316	40.44	33.531
6100	5483	5000	4963	34	20	-57.54	-72	-552	1428	1388	40.35	35.399
6200	5482	5000	4963	35	20	-57.54	-72	-552	1503	1462	40.92	36.721
6300	5481	5000	4963	36	20	-57.54	-72	-552	1580	1539	41.44	38.129
6400	5481	4972	4938	37	20	-56.40	-79	-542	1659	1617	41.45	40.020
6500	5480	4950	4918	38	20	-55.52	-84	-534	1740	1698	41.56	41.859
6600	5480	4950	4918	40	20	-55.52	-84	-534	1822	1780	41.97	43.412
6700	5479	4950	4918	41	20	-55.52	-84	-534	1906	1864	42.34	45.020
6800	5478	4928	4898	43	20	-54.64	-88	-527	1991	1949	42.40	46.966



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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	Rule Assigned:											Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	109.63	-13	38	40					
100	100	100	100	0	0	109.63	-13	38	40	40	0.31	130.059		
200	200	200	200	1	1	109.63	-13	38	40	39	1.03	39.109		
300	300	300	300	1	1	109.63	-13	38	40	38	1.74	23.015		
400	400	400	400	1	1	109.63	-13	38	40	38	2.46	16.305 CC		
400	400	400	400	1	1	109.63	-13	38	40	38	2.46	16.303		
500	500	500	500	2	2	-116.55	-14	38	40	37	3.16	12.729 ES		
600	600	600	600	2	2	-116.05	-17	36	41	37	3.83	10.785		
700	700	700	700	2	2	-115.14	-23	33	44	39	4.53	9.605		
800	799	801	800	3	3	-113.92	-32	28	47	42	5.26	8.891		
900	898	901	899	3	3	-112.54	-45	21	51	45	6.04	8.471		
1000	997	1001	997	3	3	-111.10	-60	13	57	50	6.88	8.238		
1100	1094	1100	1095	4	4	-109.70	-79	4	63	56	7.80	8.125		
1200	1191	1200	1192	4	4	-108.89	-100	-7	71	62	8.79	8.094		
1300	1288	1300	1288	5	5	-109.62	-121	-18	80	70	9.83	8.103		
1400	1384	1399	1385	6	5	-110.24	-142	-29	88	77	10.89	8.092		
1500	1481	1499	1482	6	6	-110.75	-163	-40	97	85	11.97	8.072		
1600	1577	1599	1579	7	7	-111.17	-184	-51	105	92	13.07	8.046		
1700	1674	1698	1675	7	7	-111.54	-205	-62	114	99	14.17	8.019		
1800	1770	1798	1772	8	8	-111.85	-226	-73	122	107	15.29	7.992		
1900	1867	1897	1869	8	8	-112.12	-247	-84	131	114	16.41	7.965		
2000	1963	1997	1966	9	9	-112.36	-268	-95	139	122	17.54	7.940		
2100	2060	2097	2062	10	9	-112.57	-289	-106	148	129	18.67	7.915		
2200	2156	2196	2159	10	10	-112.76	-311	-117	156	136	19.80	7.893		
2300	2253	2296	2256	11	10	-112.93	-332	-128	165	144	20.94	7.872		
2400	2349	2396	2353	11	11	-113.08	-353	-139	173	151	22.08	7.852		
2500	2446	2495	2449	12	12	-113.22	-374	-150	182	159	23.22	7.833		
2600	2542	2595	2546	13	12	-113.35	-395	-161	190	166	24.37	7.816		
2700	2639	2695	2643	13	13	-113.46	-416	-172	199	173	25.51	7.800		
2800	2735	2794	2740	14	13	-113.57	-437	-183	208	181	26.66	7.785		
2900	2832	2894	2836	15	14	-113.66	-458	-194	216	188	27.81	7.770		
3000	2928	2993	2933	15	14	-113.75	-479	-204	225	196	28.95	7.757		
3100	3024	3093	3030	16	15	-113.84	-500	-215	233	203	30.10	7.744		
3200	3121	3193	3127	16	16	-113.91	-522	-226	242	210	31.25	7.733		
3300	3217	3292	3223	17	16	-113.98	-543	-237	250	218	32.41	7.721		
3400	3314	3392	3320	18	17	-114.05	-564	-248	259	225	33.56	7.711		
3500	3410	3492	3417	18	17	-114.11	-585	-259	267	233	34.71	7.701		
3600	3507	3591	3514	19	18	-114.17	-606	-270	276	240	35.86	7.692		
3700	3603	3691	3611	19	18	-114.23	-627	-281	284	247	37.02	7.683		
3800	3700	3791	3707	20	19	-114.28	-648	-292	293	255	38.17	7.674		
3900	3796	3890	3804	21	20	-114.33	-669	-303	301	262	39.33	7.666		
4000	3893	3990	3901	21	20	-114.38	-690	-314	310	270	40.48	7.659		
4100	3989	4089	3998	22	21	-114.42	-712	-325	319	277	41.64	7.651		
4200	4086	4189	4094	23	21	-114.46	-733	-336	327	284	42.79	7.644		
4300	4182	4289	4191	23	22	-114.50	-754	-347	336	292	43.95	7.638		
4400	4279	4388	4288	24	22	-114.54	-775	-358	344	299	45.10	7.632		
4500	4375	4488	4385	24	23	-114.58	-796	-369	353	306	46.26	7.626		
4600	4472	4588	4481	25	24	-114.61	-817	-380	361	314	47.41	7.620		
4700	4568	4665	4556	26	24	-114.55	-834	-387	372	324	48.27	7.704		
4800	4665	4728	4616	26	24	-114.12	-853	-389	391	342	48.68	8.032		
4900	4761	4788	4673	27	25	-113.41	-874	-386	419	370	48.75	8.593		
5000	4858	4850	4729	27	25	-112.46	-900	-380	455	406	48.74	9.339		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error: 0 ft		
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside			Distance				Warning	
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5100	4954	4900	4772	28	26	-82.84	-923	-371	493	445	48.01	10.276		
5200	5048	4950	4813	29	26	-61.35	-948	-359	525	478	46.95	11.189		
5300	5138	5000	4853	29	26	-49.17	-976	-345	551	505	45.60	12.080		
5400	5221	5050	4890	30	27	-42.03	-1005	-329	570	526	43.99	12.948		
5500	5295	5113	4933	30	27	-37.67	-1044	-304	581	538	43.01	13.510		
5600	5359	5166	4965	31	28	-35.02	-1078	-281	586	544	41.30	14.182		
5700	5411	5219	4995	31	28	-33.54	-1115	-255	583	544	39.51	14.760		
5800	5449	5273	5020	32	28	-32.96	-1152	-226	574	536	37.72	15.203		
5900	5474	5326	5042	32	29	-33.17	-1190	-196	557	521	36.05	15.449		
6000	5483	5380	5060	33	30	-34.15	-1228	-163	534	499	34.62	15.413		
6100	5483	5434	5074	34	30	-34.88	-1268	-129	509	475	33.46	15.204		
6200	5482	5500	5085	35	31	-35.38	-1316	-85	492	459	33.17	14.830		
6300	5481	5550	5089	36	31	-35.57	-1352	-51	483	451	31.66	15.260		
6400	5481	5629	5089	37	32	-35.61	-1408	5	482	450	32.38	14.882		
6500	5480	5729	5089	38	34	-35.61	-1479	76	482	447	34.76	13.857		
6600	5480	5829	5088	40	35	-35.62	-1550	146	482	444	37.24	12.929		
6700	5479	5929	5088	41	37	-35.63	-1621	216	481	441	39.82	12.087		
6800	5478	6029	5087	43	39	-35.64	-1693	287	481	439	42.48	11.326		
6900	5478	6129	5087	45	40	-35.65	-1764	357	481	436	45.21	10.638		
7000	5477	6229	5086	47	42	-35.66	-1835	428	481	433	47.99	10.017		
7100	5476	6329	5086	49	44	-35.67	-1906	498	481	430	50.82	9.456		
7200	5476	6429	5086	51	46	-35.68	-1977	568	480	427	53.69	8.946		
7300	5475	6529	5085	53	48	-35.69	-2048	639	480	424	56.59	8.484		
7400	5475	6629	5085	55	50	-35.70	-2119	709	480	420	59.52	8.063		
7500	5474	6729	5084	57	53	-35.71	-2190	780	480	417	62.48	7.678		
7600	5473	6829	5084	59	55	-35.71	-2261	850	480	414	65.46	7.325		
7700	5473	6929	5084	62	57	-35.72	-2332	920	479	411	68.46	7.001		
7800	5472	7029	5083	64	59	-35.73	-2403	991	479	408	71.48	6.703		
7900	5472	7129	5083	66	61	-35.74	-2474	1061	479	404	74.51	6.428		
8000	5471	7229	5082	68	64	-35.75	-2545	1132	479	401	77.55	6.173		
8100	5470	7329	5082	71	66	-35.76	-2616	1202	479	398	80.61	5.936		
8200	5470	7429	5082	73	68	-35.77	-2687	1273	478	395	83.68	5.716		
8300	5469	7529	5081	75	70	-35.78	-2758	1343	478	391	86.75	5.511		
8400	5468	7629	5081	78	73	-35.79	-2829	1413	478	388	89.84	5.320		
8500	5468	7729	5080	80	75	-35.80	-2900	1484	478	385	92.93	5.141		
8600	5467	7829	5080	82	77	-35.81	-2971	1554	478	381	96.03	4.973		
8700	5467	7929	5080	85	80	-35.82	-3042	1625	477	378	99.14	4.815		
8800	5466	8029	5079	87	82	-35.82	-3113	1695	477	375	102.25	4.666		
8900	5465	8129	5079	89	85	-35.83	-3184	1765	477	372	105.37	4.526		
9000	5465	8229	5078	92	87	-35.84	-3255	1836	477	368	108.50	4.394		
9100	5464	8329	5078	94	89	-35.85	-3326	1906	477	365	111.63	4.269		
9200	5464	8429	5077	96	92	-35.86	-3397	1977	476	362	114.76	4.151		
9300	5463	8529	5077	99	94	-35.87	-3468	2047	476	358	117.90	4.038		
9400	5462	8629	5077	101	96	-35.88	-3539	2117	476	355	121.05	3.932		
9500	5462	8729	5076	103	99	-35.89	-3610	2188	476	352	124.20	3.831		
9600	5461	8829	5076	106	101	-35.90	-3681	2258	476	348	127.35	3.734		
9700	5460	8929	5075	108	104	-35.91	-3752	2329	475	345	130.50	3.642		
9771	5460	9000	5075	110	105	-35.92	-3802	2378	475	342	132.74	3.580 SF		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	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	8.127		
500	500	500	500	2	2	-117.01	-7	19	20	17	3.16	6.349		
600	600	600	600	2	2	-116.27	-10	17	21	17	3.83	5.408 ES		
700	700	700	700	2	2	-114.94	-16	13	22	18	4.53	4.865		
800	799	801	800	3	3	-113.21	-24	7	24	19	5.26	4.566		
900	898	901	899	3	3	-111.30	-36	-1	27	21	6.05	4.420		
1000	997	1001	997	3	3	-109.40	-50	-11	30	23	6.89	4.369 SF		
1100	1094	1101	1095	4	4	-107.61	-67	-23	34	26	7.81	4.377		
1200	1191	1201	1193	4	4	-108.27	-86	-36	39	30	8.79	4.451		
1300	1288	1301	1290	5	5	-111.46	-104	-49	45	35	9.79	4.575		
1400	1384	1400	1387	6	5	-113.97	-123	-62	51	40	10.81	4.681		
1500	1481	1500	1484	6	6	-115.96	-142	-75	57	45	11.84	4.772		
1600	1577	1600	1581	7	6	-117.57	-160	-87	62	50	12.88	4.850		
1700	1674	1700	1679	7	7	-118.91	-179	-100	68	55	13.91	4.918		
1800	1770	1800	1776	8	8	-120.02	-198	-113	74	59	14.96	4.977		
1900	1867	1899	1873	8	8	-120.97	-216	-126	80	64	16.00	5.030		
2000	1963	1999	1970	9	9	-121.79	-235	-139	87	69	17.05	5.076		
2100	2060	2099	2067	10	9	-122.50	-253	-152	93	75	18.09	5.118		
2200	2156	2199	2165	10	10	-123.12	-272	-165	99	80	19.14	5.156		
2300	2253	2299	2262	11	10	-123.67	-291	-178	105	85	20.19	5.189		
2400	2349	2398	2359	11	11	-124.16	-309	-191	111	90	21.24	5.220		
2500	2446	2498	2456	12	11	-124.60	-328	-204	117	95	22.29	5.248		
2600	2542	2598	2553	13	12	-125.00	-347	-216	123	100	23.34	5.273		
2700	2639	2698	2651	13	13	-125.35	-365	-229	129	105	24.40	5.297		
2800	2735	2798	2748	14	13	-125.68	-384	-242	135	110	25.45	5.319		
2900	2832	2898	2845	15	14	-125.98	-403	-255	141	115	26.50	5.338		
3000	2928	2997	2942	15	14	-126.25	-421	-268	148	120	27.56	5.357		
3100	3024	3097	3039	16	15	-126.50	-440	-281	154	125	28.61	5.374		
3200	3121	3197	3137	16	15	-126.73	-458	-294	160	130	29.66	5.390		
3300	3217	3297	3234	17	16	-126.94	-477	-307	166	135	30.72	5.405		
3400	3314	3397	3331	18	16	-127.14	-496	-320	172	140	31.77	5.419		
3500	3410	3496	3428	18	17	-127.33	-514	-332	178	145	32.83	5.432		
3600	3507	3596	3525	19	18	-127.50	-533	-345	184	151	33.88	5.444		
3700	3603	3696	3623	19	18	-127.66	-552	-358	191	156	34.94	5.456		
3800	3700	3796	3720	20	19	-127.82	-570	-371	197	161	35.99	5.467		
3900	3796	3896	3817	21	19	-127.96	-589	-384	203	166	37.05	5.477		
4000	3893	3995	3914	21	20	-128.09	-607	-397	209	171	38.10	5.487		
4100	3989	4095	4011	22	20	-128.22	-626	-410	215	176	39.16	5.496		
4200	4086	4195	4109	23	21	-128.34	-645	-423	221	181	40.21	5.505		
4300	4182	4295	4206	23	21	-128.45	-663	-436	228	186	41.27	5.513		
4400	4279	4395	4303	24	22	-128.56	-682	-448	234	191	42.33	5.521		
4500	4375	4494	4400	24	23	-128.66	-701	-461	240	196	43.38	5.529		
4600	4472	4614	4517	25	23	-129.27	-721	-479	244	200	44.35	5.504		
4700	4568	4753	4650	26	24	-133.88	-725	-518	234	190	43.50	5.374		
4800	4665	4877	4762	26	24	-143.52	-711	-569	211	170	41.01	5.135		
4900	4761	4981	4848	27	25	-158.17	-687	-621	184	145	38.51	4.768		
5000	4858	5065	4910	27	25	-175.79	-658	-670	167	129	37.97	4.404		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
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)	Minimum Separation (ft)	Separation Factor
5019	4876	5078	4919	28	25	-173.51	-653	-678	167	129	38.12	4.373
5100	4954	5127	4951	28	25	-163.16	-633	-709	178	140	38.72	4.602
5200	5048	5165	4974	29	26	-149.20	-616	-734	226	188	37.89	5.957
5300	5138	5184	4985	29	26	-134.26	-607	-747	299	263	36.33	8.236
5400	5221	5190	4988	30	26	-113.99	-604	-750	386	350	35.25	10.941
5500	5295	5185	4986	30	26	-88.56	-607	-747	477	442	34.82	13.702
5600	5359	5172	4979	31	26	-65.51	-613	-739	569	534	34.92	16.298
5700	5411	5150	4965	31	25	-49.41	-623	-724	659	624	35.15	18.749
5800	5449	5132	4954	32	25	-40.07	-631	-712	745	709	36.20	20.576
5900	5474	5100	4934	32	25	-33.89	-645	-692	825	788	36.88	22.376
6000	5483	5078	4919	33	25	-30.33	-654	-678	899	861	38.31	23.463
6100	5483	5050	4900	34	25	-29.49	-664	-661	969	930	39.51	24.529
6200	5482	5023	4880	35	25	-29.03	-673	-645	1042	1002	40.53	25.715
6300	5481	5000	4863	36	25	-28.65	-681	-632	1118	1077	41.52	26.931
6400	5481	4977	4845	37	25	-28.27	-688	-619	1196	1154	42.34	28.257
6500	5480	4950	4823	38	25	-27.83	-695	-605	1277	1234	42.89	29.764
6600	5480	4950	4823	40	25	-27.83	-695	-605	1359	1315	44.08	30.832
6700	5479	4922	4800	41	25	-27.39	-702	-590	1442	1398	44.39	32.495
6800	5478	4900	4782	43	25	-27.06	-707	-579	1528	1483	44.79	34.107
6900	5478	4900	4782	45	25	-27.06	-707	-579	1614	1568	45.59	35.403
7000	5477	4879	4764	47	24	-26.74	-711	-569	1701	1656	45.86	37.097
7100	5476	4850	4738	49	24	-26.33	-716	-556	1790	1744	45.95	38.957
7200	5476	4850	4738	51	24	-26.33	-716	-556	1879	1833	46.53	40.389
7300	5475	4850	4738	53	24	-26.33	-716	-556	1969	1922	47.03	41.873



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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

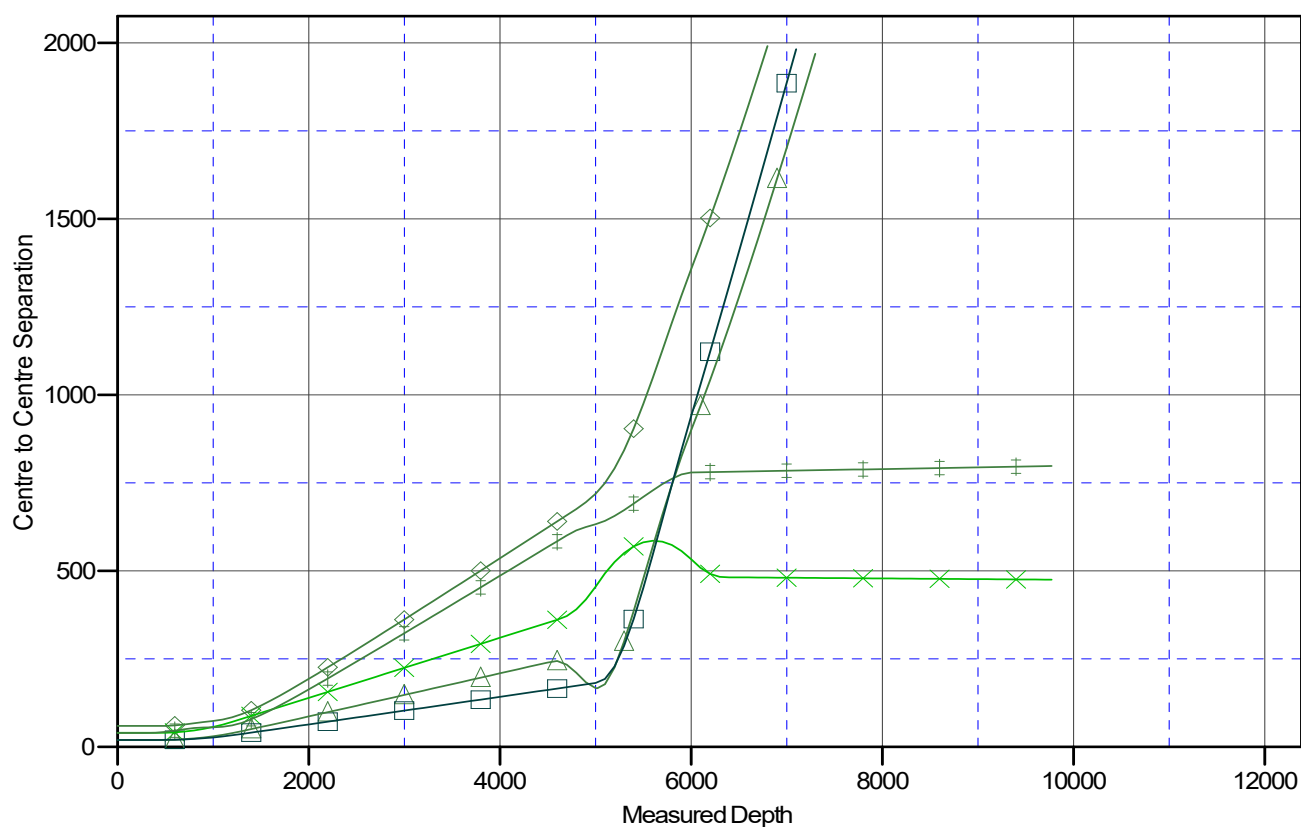
Central Meridian is -107.8333333

Coordinates are relative to: # 311H - Slot 3

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

Grid Convergence at Surface is: 0.24°

Ladder Plot



LEGEND

◆ #316H Original Drilling, APDVO
 ■ #310H Original Drilling, APDVO
 × #401H Original Drilling, APDVO



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 311H - Slot 3
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:	# 311H	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

Coordinates are relative to: # 311H - Slot 3

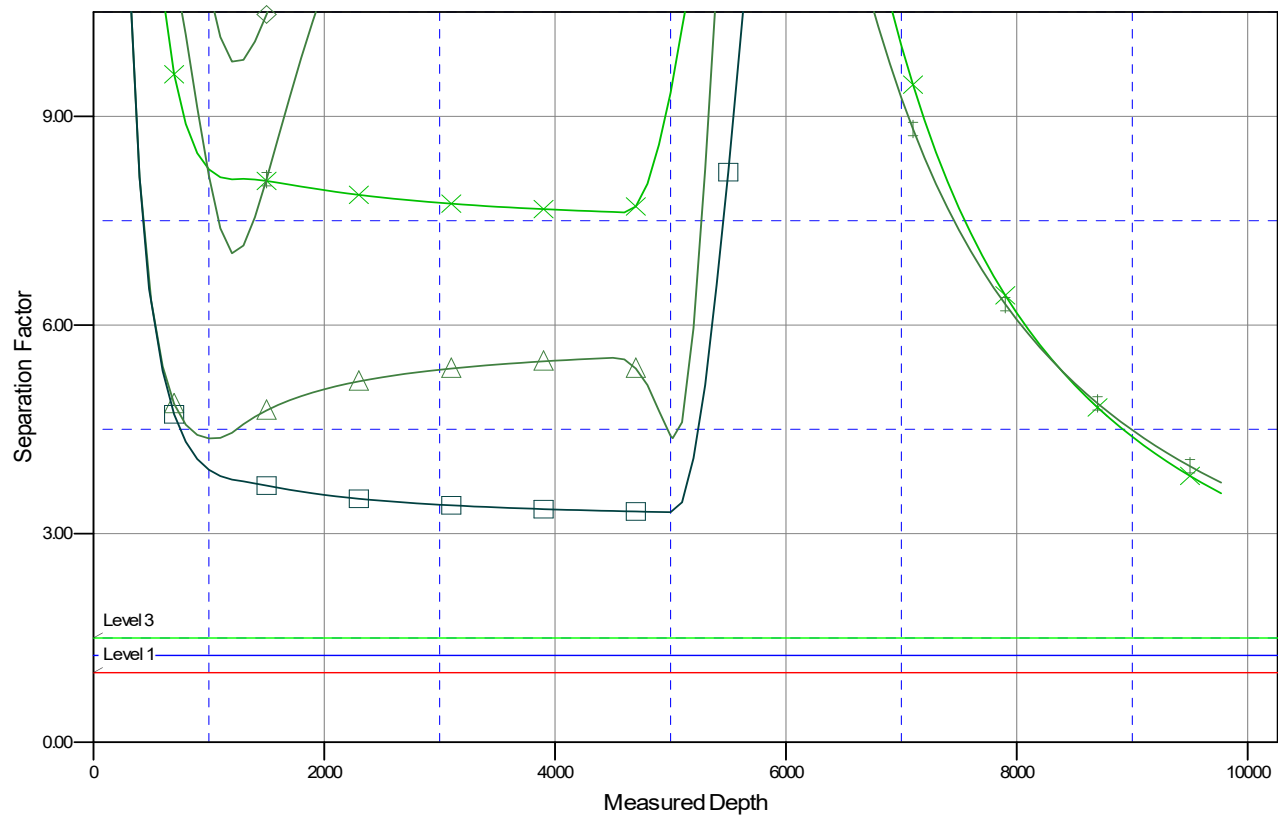
Offset Depths are relative to Offset Datum

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

Central Meridian is -107.8333333

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

#316HOriginalDrilling.g.APOV0
 #402HOriginalDrilling.g.APOV0
 #310HOriginalDrilling.g.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
#311H 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: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 25, 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
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 456437

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 456437
	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