

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. 30-039-31453	
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)



DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II

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

DISTRICT III

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

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31453	² Pool Code 22619	³ Pool Name ESCRITO GALLUP
⁴ Property Code 335219	⁵ Property Name ESCRITO C17-2407	⁶ Well Number 01H
⁷ OGRID No. 371838	⁸ Operator Name DJR OPERATING, LLC	⁹ Elevation 7284'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	17	24N	7W		974'	NORTH	1687'	WEST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	7	24N	7W	1	189'	NORTH	354'	WEST	RIO ARriba

¹² Dedicated Acres PENETRATED SPACING UNIT;
SEC 17: NE/NW, SW/NW & NW/NW (120 AC.); SEC
8: SW/SW (40 AC.); SEC 18: NE/NE (40 AC.); SEC
7: SE/4, NE/SW, SW/NE & NW/4 (401.14 AC.);
SEC 6: SW/SW (40.34 AC.) = 641.48 ACRES

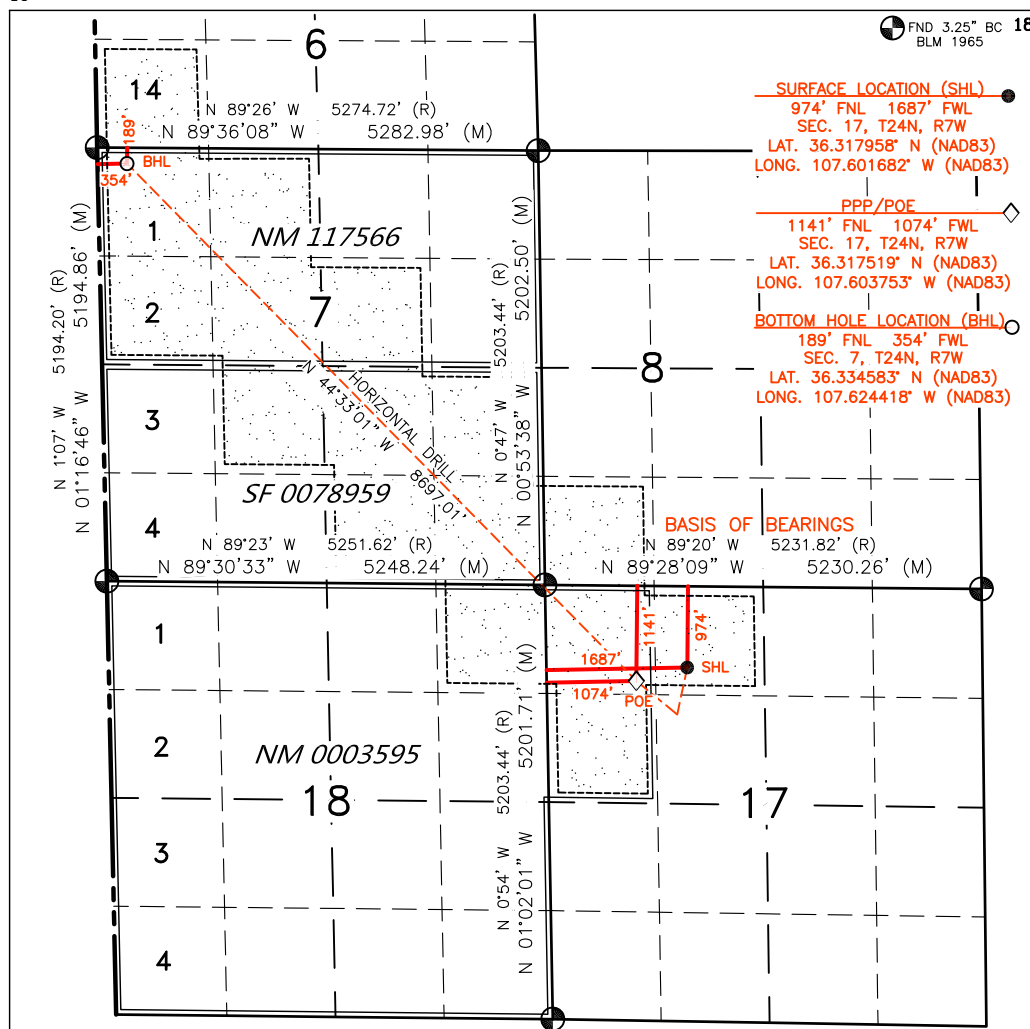
¹³ Joint or Infill

¹⁴ Consolidation Code

¹⁵ Order No.

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

16



END 3.25" BC
BLM 1965

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shaw-Marie Ford 02/24/22
Signature Date

Shaw-Marie Ford

Printed Name

sford@djrlc.com

E-mail Address

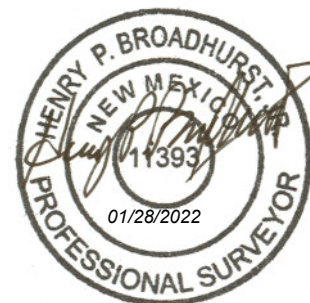
SURVEYOR CERTIFICATION

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

AUGUST 31, 2020

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393

State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil 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:** 1 / 3 / 2024**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Escrito C17-2407 01H	TBD	C-17-24N-07W	974 FNL x 1687 FWL	410	610	145
Escrito Gallup Unit 02H	TBD	C-17-24N-07W	950 FNL x 1719 FWL	205	305	75
Escrito C17-2407 03H	TBD	C-17-24N-07W	962 FNL x 1703 FWL	355	530	130
Escrito Gallup Unit 04H	TBD	C-17-24N-07W	938 FNL x 1736 FWL	220	325	80
Escrito C17-2407 05H	TBD	C-17-24N-07W	926 FNL x 1753 FWL	300	450	110

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
Escrito C17-2407 01H	TBD	4/9/2024	4/19/2024	7/15/2024	7/25/2024	7/27/2024
Escrito Gallup Unit 02H	TBD	4/10/2024	4/20/2024	7/15/2024	7/27/2024	7/29/2024
Escrito C17-2407 03H	TBD	4/11/2024	4/21/2024	7/15/2024	7/28/2024	7/30/2024
Escrito Gallup Unit 04H	TBD	4/12/2024	4/22/2024	7/15/2024	7/29/2024	8/1/2024
Escrito C17-2407 05H	TBD	4/13/2024	4/23/2024	7/15/2024	7/30/2024	8/2/2024

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@djrlc.com
Date: 1/3/2024
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
Escrito C17-2407 01H, 03H, 05H, and
Escrito Gallup Unit 02H and 04H
NENW C-17-24N-07W

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
Escrito C17-2407 01H, 03H, 05H, and
Escrito Gallup Unit 02H and 04H
NENW C-17-24N-07W

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.
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Escrito C17-2407 01H, 03H, 05H, and
Escrito Gallup Unit 02H and 04H
NENW C-17-24N-07W

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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

19.15.27.8 B. Venting and flaring during drilling operations

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

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

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

19.15.27.8 E. Performance standards

1. DJR has utilized process simulations with a safety factor to design all separation and storage equipment. The equipment is routed to a Vapor Recovery System and utilizes a flare as back up for periods of startup, shutdown, maintenance, or malfunction of the VRU System.
2. DJR will install a flare that designed to handle the full volume of vapors from the facility in case of the VRU failure and it is designed with an auto ignition system.
3. Flare stacks will appropriately sized and designed to ensure proper combustion efficiency.



- a. Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.
 - b. Previously installed flare stacks will be retrofitted with an automatic ignitor, continuous pilot, or technology that alerts DJR of flare malfunction within 18 months after May 25, 2021.
 - c. Flare stacks replaced after May 25, 2021, will be equipped with an automatic ignitor or continuous pilot if located at a well or facility with average daily production of 60,000 cubic feet of natural gas or less.
 - d. Flare stacks will be located at least 100 feet from the well and storage tanks and securely anchored.
4. DJR will conduct an AVO inspection on all components for leaks and defects on a weekly basis.
 5. DJR will make and keep records of AVO inspections which will be available to the NMOCD for at least 5 years.
 6. DJR may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
 7. Facilities will be designed to minimize waste.
 8. DJR will resolve emergencies as promptly as possible.

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

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



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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 1



DRILLING PLAN

Escrito C17-2407 #001H

Rio Arriba County, New Mexico

Surface Location

1687-ft FWL & 974-ft FNL
 Sec 17 T24N R07W
 Graded Elevation 7284' MSL
 RKB Elevation 7298' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.3179580° N
 Longitude 107.6016820° W

Kick Off Point for Horizontal Build Curve

5387-ft MD
 5353-ft TVD

Local Coordinates (from SHL)

563-ft South
 120-ft West

Heel Location (Pay zone entry)

1074-ft FWL & 1141-ft FNL
 Sec 17 T24N R07W

Heel Geographical Coordinates (NAD-83)

Latitude 36.3175193° N
 Longitude 107.60375300° W

Bottom Hole Location (TD)

354-ft FWL & 189-ft FNL
 Sec 7 T24N R07W

BHL Geographical Coordinates (NAD-83)

Latitude 36.33458282° N
 Longitude 107.6244179° W

Well objectives

This well is planned as a 8700-ft lateral in the Gallup B sand.

Bottom Hole temperature and pressure

The temperature in the Gallup B horizontal objective is 152°F. Bottom hole pressure in the Gallup B 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	1909	1900	Sd	W	8.3	8.4 – 8.8
Kirtland	2064	2054	Sh	-	8.3	8.4 – 8.8
Fruitland	2323	2311	C	G	8.3	9.0 - 9.5
Pictured Cliffs	2618	2604	Sd	W	8.3	9.0 - 9.5
Lewis	3423	3403	Sh	-		9.0 - 9.5
Chacra	4147	4122	Sd	-	8.3	9.0 - 9.5
Menefee	4165	4140	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4914	4883	Sd	-	8.3	9.0 - 9.5
Mancos	5151	5118	Sh	-		9.0 - 9.5
Mancos Silt	5583	5546	Slt	O/G	6.6	9.0 - 9.5
Gallup A	6094	5942	Slt	O/G	6.6	9.0 - 9.5
Gallup B	6269	6008	Sd	O/G	6.6	8.8 -9.0
Gallup C	NP	NP	Sd	O/G	6.6	8.8 -9.0
Target	6425	6028	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	6373	surf	6026	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	6094	15122	5942	6088	6094

Note: all casing will be new

Rev 1



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	4887-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	477	238
Volume (bbls)	199	63
Volume (cu.ft.)	1116	355
Excess %	55	55



Rev 1

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	6094-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	759
Volume (bbls)	211
Volume (cu.ft)	1186
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 – 6373	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	6373 – 15122	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.



Company: DJR Operating
Project: Escrito Area
Site: C17 2407 Pad
Well: # 1H
Wellbore: Original Drilling
Design: APD Rev 1

WELL DETAILS: # 1H

GL 7284' & RKB 14' @ 7298ft		Latitude	Longitude
+N/-S	+E/-W	Northing Easting	
0	0	1935118.63 2791335.16	36.31795800 -107.60168200

DESIGN TARGET DETAILS

True Vertical Depth (1800 ft/in)	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
15122	0	0.00	0.00	0	0	0	0.00	0.00	0
6088	425	0.00	0.00	425	0	0	0.00	0.00	0
6088	770	6.90	192.06	770	-20	4	2.00	192.06	-10
	539	6.90	192.06	539	-563	-120	9.00	123.99	-208
	645	89.80	315.59	645	6053	-6697	0.00	0.00	309
	15122	89.80	315.59	6088	6053	-6697	0.00	0.00	9027

SECTION DETAILS

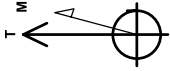
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0	0.00	0.00	0	0	0	0.00	0.00	0
425	0.00	0.00	425	0	0	0.00	0.00	0
770	6.90	192.06	770	-20	4	2.00	192.06	-10
539	6.90	192.06	539	-563	-120	9.00	123.99	-208
645	89.80	315.59	645	6053	-6697	0.00	0.00	309
15122	89.80	315.59	6088	6053	-6697	0.00	0.00	9027

PROJECT DETAILS: Escrito Area

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 Rev 1 (# 1H/Original Drilling)

Created By: Janie Collins Date: 10:23, January 29 2022



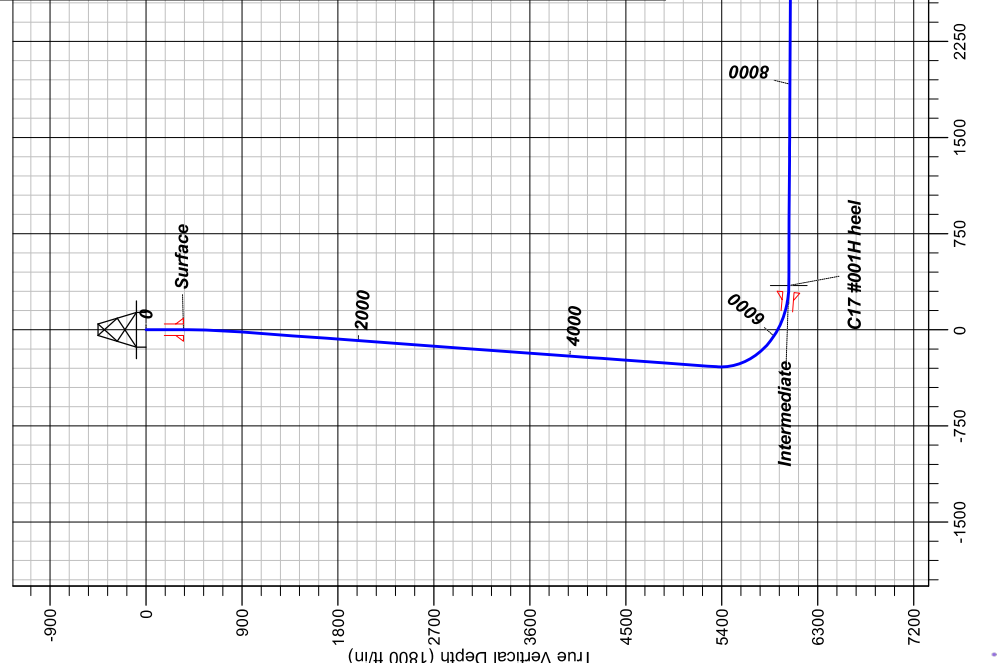
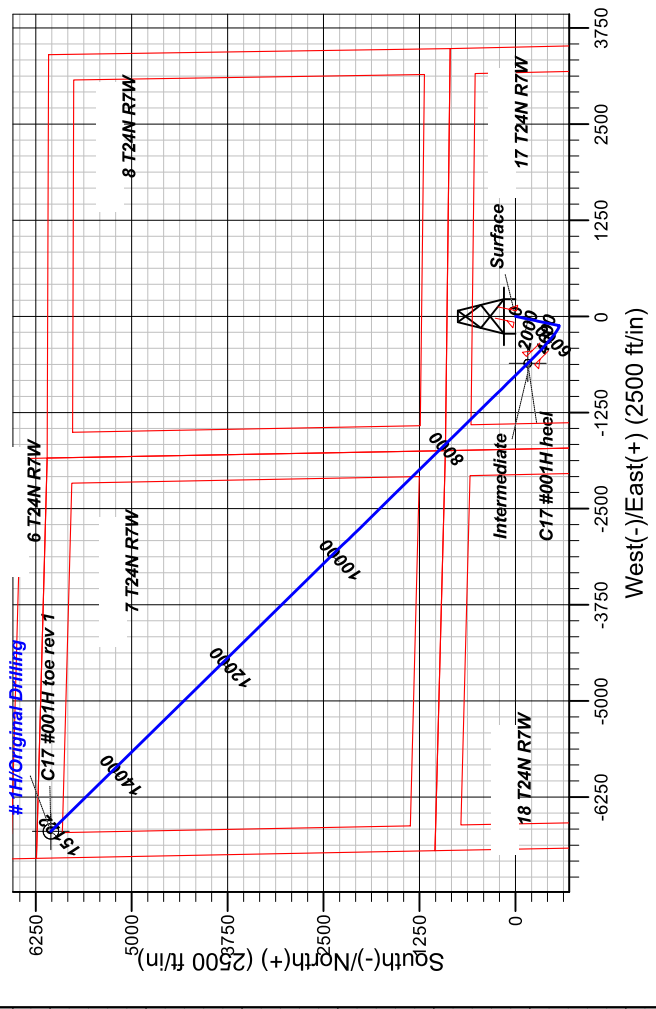
Azimuths to True North
Magnetic North: 8.23°
Magnetic Field
Strength: 49364.341 T
Dip Angle: 62.31°
Date: 8/12/2020
Model: HDGM_F3

CASING DETAILS

TVD	MD	Name
350	350	Surface
6026	6373	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
1900	1909	Ojo Alamo
2054	2064	Kirtland
2311	2323	Fruitland
2604	2618	Pictured Cliffs
3403	3423	Lewis
4122	4147	Chacra
4140	4165	Menefee
4883	4914	Point Lookout
5118	5151	Mancos
5546	5583	Mancos Silt
5842	6094	Gallup A
6008	6269	Gallup B





DJR Operating

**Escrito Area
C17 2407 Pad
1H - Slot 5**

Original Drilling

Plan: APD Rev 1

Standard Planning Report

29 January, 2022





Database:	Grand Junction	Local Co-ordinate Reference	Well # 1H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Project:	Escrito Area	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site:	C17 2407 Pad	North Reference:	True
Well:	# 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

Project	Escrito Area		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	C17 2407 Pad		
Site Position:		Northing:	1,935,165.75 usft
From:	Lat/Long	Easting:	2,791,399.86 usft
Position Uncertainty:	0 ft	Slot Radius:	13.20 in
		Latitude:	36.31808700
		Longitude:	-107.60146200
		Grid Convergence:	0.14 °

Well	# 1H - Slot 5		
Well Position	+N/-S	-47 ft	Northing:
	+E/-W	-65 ft	Easting:
Position Uncertainty		0 ft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM_FILE	8/12/2020	8.58	62.87	49,364.50000000

Design	APD Rev 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0	0	0	312.11

Plan Survey Tool Program	Date	1/29/2022		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0	15,122	APD Rev 1 (Original Drilling)	MWD+HDGM
				OWSG MWD + HDGM

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100usft)	(°/100usft)	(°/100usft)		
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
425	0.00	0.00	425	0	0	0.00	0.00	0.00	0.00	
770	6.90	192.06	769	-20	-4	2.00	2.00	0.00	192.06	
5387	6.90	192.06	5353	-563	-120	0.00	0.00	0.00	0.00	
6425	89.60	315.59	6028	-160	-610	9.00	7.97	11.90	123.38	C17 #001H heel
15,122	89.60	315.59	6088	6053	-6697	0.00	0.00	0.00	0.00	C17 #001H toe rev 1



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference	Well # 1H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Project:	Escrito Area	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site:	C17 2407 Pad	North Reference:	True
Well:	# 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

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	
425	0.00	0.00	425	0	0	0	0.00	0.00	0.00	
500	1.50	192.06	500	-1	0	0	2.00	2.00	0.00	
600	3.50	192.06	600	-5	-1	-3	2.00	2.00	0.00	
700	5.50	192.06	700	-13	-3	-7	2.00	2.00	0.00	
770	6.90	192.06	769	-20	-4	-10	2.00	2.00	0.00	
800	6.90	192.06	799	-24	-5	-12	0.00	0.00	0.00	
900	6.90	192.06	898	-36	-8	-18	0.00	0.00	0.00	
1000	6.90	192.06	997	-47	-10	-24	0.00	0.00	0.00	
1100	6.90	192.06	1097	-59	-13	-30	0.00	0.00	0.00	
1200	6.90	192.06	1196	-71	-15	-36	0.00	0.00	0.00	
1300	6.90	192.06	1295	-83	-18	-42	0.00	0.00	0.00	
1400	6.90	192.06	1395	-94	-20	-48	0.00	0.00	0.00	
1500	6.90	192.06	1494	-106	-23	-54	0.00	0.00	0.00	
1600	6.90	192.06	1593	-118	-25	-60	0.00	0.00	0.00	
1700	6.90	192.06	1692	-130	-28	-66	0.00	0.00	0.00	
1800	6.90	192.06	1792	-141	-30	-72	0.00	0.00	0.00	
1900	6.90	192.06	1891	-153	-33	-78	0.00	0.00	0.00	
2000	6.90	192.06	1990	-165	-35	-84	0.00	0.00	0.00	
2100	6.90	192.06	2090	-177	-38	-90	0.00	0.00	0.00	
2200	6.90	192.06	2189	-188	-40	-96	0.00	0.00	0.00	
2300	6.90	192.06	2288	-200	-43	-102	0.00	0.00	0.00	
2400	6.90	192.06	2387	-212	-45	-108	0.00	0.00	0.00	
2500	6.90	192.06	2487	-224	-48	-115	0.00	0.00	0.00	
2600	6.90	192.06	2586	-235	-50	-121	0.00	0.00	0.00	
2700	6.90	192.06	2685	-247	-53	-127	0.00	0.00	0.00	
2800	6.90	192.06	2784	-259	-55	-133	0.00	0.00	0.00	
2900	6.90	192.06	2884	-271	-58	-139	0.00	0.00	0.00	
3000	6.90	192.06	2983	-282	-60	-145	0.00	0.00	0.00	
3100	6.90	192.06	3082	-294	-63	-151	0.00	0.00	0.00	
3200	6.90	192.06	3182	-306	-65	-157	0.00	0.00	0.00	
3300	6.90	192.06	3281	-318	-68	-163	0.00	0.00	0.00	
3400	6.90	192.06	3380	-329	-70	-169	0.00	0.00	0.00	
3500	6.90	192.06	3479	-341	-73	-175	0.00	0.00	0.00	
3600	6.90	192.06	3579	-353	-75	-181	0.00	0.00	0.00	
3700	6.90	192.06	3678	-365	-78	-187	0.00	0.00	0.00	
3800	6.90	192.06	3777	-376	-80	-193	0.00	0.00	0.00	
3900	6.90	192.06	3876	-388	-83	-199	0.00	0.00	0.00	
4000	6.90	192.06	3976	-400	-85	-205	0.00	0.00	0.00	
4100	6.90	192.06	4075	-412	-88	-211	0.00	0.00	0.00	
4200	6.90	192.06	4174	-423	-90	-217	0.00	0.00	0.00	
4300	6.90	192.06	4274	-435	-93	-223	0.00	0.00	0.00	
4400	6.90	192.06	4373	-447	-95	-229	0.00	0.00	0.00	
4500	6.90	192.06	4472	-459	-98	-235	0.00	0.00	0.00	
4600	6.90	192.06	4571	-470	-101	-241	0.00	0.00	0.00	
4700	6.90	192.06	4671	-482	-103	-247	0.00	0.00	0.00	
4800	6.90	192.06	4770	-494	-106	-253	0.00	0.00	0.00	
4900	6.90	192.06	4869	-506	-108	-259	0.00	0.00	0.00	
5000	6.90	192.06	4969	-517	-111	-265	0.00	0.00	0.00	



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference	Well # 1H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Project:	Escrito Area	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site:	C17 2407 Pad	North Reference:	True
Well:	# 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

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	6.90	192.06	5068	-529	-113	-271	0.00	0.00	0.00	
5200	6.90	192.06	5167	-541	-116	-277	0.00	0.00	0.00	
5300	6.90	192.06	5266	-553	-118	-283	0.00	0.00	0.00	
5387	6.90	192.06	5353	-563	-120	-288	0.00	0.00	0.00	
5400	6.33	201.08	5366	-564	-121	-289	9.00	-4.36	68.46	
5500	8.58	273.69	5465	-569	-130	-285	9.00	2.26	72.62	
5600	16.39	295.57	5563	-562	-150	-266	9.00	7.81	21.88	
5700	25.01	303.14	5656	-545	-181	-231	9.00	8.61	7.56	
5800	33.81	306.96	5743	-516	-221	-182	9.00	8.81	3.83	
5900	42.69	309.35	5822	-478	-269	-121	9.00	8.88	2.38	
6000	51.61	311.04	5889	-431	-325	-48	9.00	8.91	1.69	
6100	60.54	312.36	5945	-376	-387	35	9.00	8.93	1.32	
6200	69.48	313.46	5987	-314	-453	126	9.00	8.94	1.10	
6300	78.43	314.44	6015	-247	-523	222	9.00	8.95	0.98	
6400	87.39	315.36	6027	-177	-593	321	9.00	8.95	0.92	
6425	89.60	315.59	6028	-160	-610	346	9.00	8.95	0.90	
6500	89.60	315.59	6029	-106	-663	421	0.00	0.00	0.00	
6600	89.60	315.59	6029	-35	-733	520	0.00	0.00	0.00	
6700	89.60	315.59	6030	37	-803	620	0.00	0.00	0.00	
6800	89.60	315.59	6031	108	-873	720	0.00	0.00	0.00	
6900	89.60	315.59	6031	180	-943	820	0.00	0.00	0.00	
7000	89.60	315.59	6032	251	-1013	920	0.00	0.00	0.00	
7100	89.60	315.59	6033	323	-1083	1020	0.00	0.00	0.00	
7200	89.60	315.59	6033	394	-1153	1119	0.00	0.00	0.00	
7300	89.60	315.59	6034	465	-1223	1219	0.00	0.00	0.00	
7400	89.60	315.59	6035	537	-1293	1319	0.00	0.00	0.00	
7500	89.60	315.59	6035	608	-1363	1419	0.00	0.00	0.00	
7600	89.60	315.59	6036	680	-1433	1519	0.00	0.00	0.00	
7700	89.60	315.59	6037	751	-1503	1618	0.00	0.00	0.00	
7800	89.60	315.59	6037	823	-1573	1718	0.00	0.00	0.00	
7900	89.60	315.59	6038	894	-1643	1818	0.00	0.00	0.00	
8000	89.60	315.59	6039	966	-1712	1918	0.00	0.00	0.00	
8100	89.60	315.59	6040	1037	-1782	2018	0.00	0.00	0.00	
8200	89.60	315.59	6040	1108	-1852	2117	0.00	0.00	0.00	
8300	89.60	315.59	6041	1180	-1922	2217	0.00	0.00	0.00	
8400	89.60	315.59	6042	1251	-1992	2317	0.00	0.00	0.00	
8500	89.60	315.59	6042	1323	-2062	2417	0.00	0.00	0.00	
8600	89.60	315.59	6043	1394	-2132	2517	0.00	0.00	0.00	
8700	89.60	315.59	6044	1466	-2202	2617	0.00	0.00	0.00	
8800	89.60	315.59	6044	1537	-2272	2716	0.00	0.00	0.00	
8900	89.60	315.59	6045	1608	-2342	2816	0.00	0.00	0.00	
9000	89.60	315.59	6046	1680	-2412	2916	0.00	0.00	0.00	
9100	89.60	315.59	6046	1751	-2482	3016	0.00	0.00	0.00	
9200	89.60	315.59	6047	1823	-2552	3116	0.00	0.00	0.00	
9300	89.60	315.59	6048	1894	-2622	3215	0.00	0.00	0.00	
9400	89.60	315.59	6049	1966	-2692	3315	0.00	0.00	0.00	
9500	89.60	315.59	6049	2037	-2762	3415	0.00	0.00	0.00	
9600	89.60	315.59	6050	2108	-2832	3515	0.00	0.00	0.00	
9700	89.60	315.59	6051	2180	-2902	3615	0.00	0.00	0.00	
9800	89.60	315.59	6051	2251	-2972	3714	0.00	0.00	0.00	
9900	89.60	315.59	6052	2323	-3042	3814	0.00	0.00	0.00	
10,000	89.60	315.59	6053	2394	-3112	3914	0.00	0.00	0.00	
10,100	89.60	315.59	6053	2466	-3182	4014	0.00	0.00	0.00	



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference	Well # 1H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Project:	Escrito Area	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site:	C17 2407 Pad	North Reference:	True
Well:	# 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200	89.60	315.59	6054	2537	-3252	4114	0.00	0.00	0.00
10,300	89.60	315.59	6055	2608	-3322	4214	0.00	0.00	0.00
10,400	89.60	315.59	6055	2680	-3392	4313	0.00	0.00	0.00
10,500	89.60	315.59	6056	2751	-3462	4413	0.00	0.00	0.00
10,600	89.60	315.59	6057	2823	-3532	4513	0.00	0.00	0.00
10,700	89.60	315.59	6058	2894	-3602	4613	0.00	0.00	0.00
10,800	89.60	315.59	6058	2966	-3672	4713	0.00	0.00	0.00
10,900	89.60	315.59	6059	3037	-3742	4812	0.00	0.00	0.00
11,000	89.60	315.59	6060	3108	-3812	4912	0.00	0.00	0.00
11,100	89.60	315.59	6060	3180	-3882	5012	0.00	0.00	0.00
11,200	89.60	315.59	6061	3251	-3952	5112	0.00	0.00	0.00
11,300	89.60	315.59	6062	3323	-4022	5212	0.00	0.00	0.00
11,400	89.60	315.59	6062	3394	-4092	5312	0.00	0.00	0.00
11,500	89.60	315.59	6063	3466	-4162	5411	0.00	0.00	0.00
11,600	89.60	315.59	6064	3537	-4232	5511	0.00	0.00	0.00
11,700	89.60	315.59	6064	3608	-4302	5611	0.00	0.00	0.00
11,800	89.60	315.59	6065	3680	-4372	5711	0.00	0.00	0.00
11,900	89.60	315.59	6066	3751	-4442	5811	0.00	0.00	0.00
12,000	89.60	315.59	6066	3823	-4512	5910	0.00	0.00	0.00
12,100	89.60	315.59	6067	3894	-4582	6010	0.00	0.00	0.00
12,200	89.60	315.59	6068	3966	-4652	6110	0.00	0.00	0.00
12,300	89.60	315.59	6069	4037	-4722	6210	0.00	0.00	0.00
12,400	89.60	315.59	6069	4108	-4792	6310	0.00	0.00	0.00
12,500	89.60	315.59	6070	4180	-4862	6409	0.00	0.00	0.00
12,600	89.60	315.59	6071	4251	-4932	6509	0.00	0.00	0.00
12,700	89.60	315.59	6071	4323	-5002	6609	0.00	0.00	0.00
12,800	89.60	315.59	6072	4394	-5072	6709	0.00	0.00	0.00
12,900	89.60	315.59	6073	4466	-5142	6809	0.00	0.00	0.00
13,000	89.60	315.59	6073	4537	-5212	6909	0.00	0.00	0.00
13,100	89.60	315.59	6074	4608	-5282	7008	0.00	0.00	0.00
13,200	89.60	315.59	6075	4680	-5351	7108	0.00	0.00	0.00
13,300	89.60	315.59	6075	4751	-5421	7208	0.00	0.00	0.00
13,400	89.60	315.59	6076	4823	-5491	7308	0.00	0.00	0.00
13,500	89.60	315.59	6077	4894	-5561	7408	0.00	0.00	0.00
13,600	89.60	315.59	6078	4966	-5631	7507	0.00	0.00	0.00
13,700	89.60	315.59	6078	5037	-5701	7607	0.00	0.00	0.00
13,800	89.60	315.59	6079	5108	-5771	7707	0.00	0.00	0.00
13,900	89.60	315.59	6080	5180	-5841	7807	0.00	0.00	0.00
14,000	89.60	315.59	6080	5251	-5911	7907	0.00	0.00	0.00
14,100	89.60	315.59	6081	5323	-5981	8006	0.00	0.00	0.00
14,200	89.60	315.59	6082	5394	-6051	8106	0.00	0.00	0.00
14,300	89.60	315.59	6082	5466	-6121	8206	0.00	0.00	0.00
14,400	89.60	315.59	6083	5537	-6191	8306	0.00	0.00	0.00
14,500	89.60	315.59	6084	5608	-6261	8406	0.00	0.00	0.00
14,600	89.60	315.59	6084	5680	-6331	8506	0.00	0.00	0.00
14,700	89.60	315.59	6085	5751	-6401	8605	0.00	0.00	0.00
14,800	89.60	315.59	6086	5823	-6471	8705	0.00	0.00	0.00
14,900	89.60	315.59	6086	5894	-6541	8805	0.00	0.00	0.00
15,000	89.60	315.59	6087	5966	-6611	8905	0.00	0.00	0.00
15,100	89.60	315.59	6088	6037	-6681	9005	0.00	0.00	0.00
15,122	89.60	315.59	6088	6053	-6697	9027	0.00	0.00	0.00



Database:	Grand Junction	Local Co-ordinate Reference	Well # 1H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Project:	Escrito Area	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site:	C17 2407 Pad	North Reference:	True
Well:	# 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

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									
C17 #001H heel	0.00	0.00	6028	-160	-610	1,934,957.48	2,790,725.43	36.31751930	-107.60375300
- plan hits target center									
- Circle (radius 50)									
C17 #001H toe rev 1	0.00	0.00	6088	6053	-6697	1,941,155.28	2,784,624.19	36.33458282	-107.62441787
- plan hits target center									
- Circle (radius 100)									

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(in)	(in)	
350	350	Surface	9.62	12.25	
6373	6026	Intermediate	7.00	8.75	

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1909	1900	Ojo Alamo		0.00	0.00	
2064	2054	Kirtland		0.00	0.00	
2323	2311	Fruitland		0.00	0.00	
2618	2604	Pictured Cliffs		0.00	0.00	
3423	3403	Lewis		0.00	0.00	
4147	4122	Chacara		0.00	0.00	
4165	4140	Menefee		0.00	0.00	
4914	4883	Point Lookout		0.00	0.00	
5151	5118	Mancos		0.00	0.00	
5583	5546	Mancos Silt		0.00	0.00	
6094	5942	Gallup A		0.00	0.00	
6269	6008	Gallup B		0.00	0.00	



DJR Operating

**Escrito Area
C17 2407 Pad
1H**

**Original Drilling
APD Rev 1**

Anticollision Report

29 January, 2022





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Reference	APD Rev 1		
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 10,000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	1/29/2022		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0	15,122	APD Rev 1 (Original Drilling)	MWD+HDGM	OWSG MWD + HDGM

Summary						
Site Name	Reference Measure	Offset Measure	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation	Warning
Offset Well - Wellbore - Design						
C17 2407 Pad						
# 2H - Original Drilling - APD	400	400	40	38	16.317 CC, ES	
# 2H - Original Drilling - APD	600	599	46	42	11.806 SF	
# 3H - Original Drilling - APD Rev 1	400	400	20	17	8.115 CC, ES	
# 3H - Original Drilling - APD Rev 1	15,122	14,711	710	252	1.549 SF	
# 4H - Original Drilling - APD	400	400	60	58	24.432 CC, ES	
# 4H - Original Drilling - APD	700	695	79	75	17.374 SF	
# 5H - Original Drilling - APD Rev 1	400	400	80	78	32.547 CC, ES	
# 5H - Original Drilling - APD Rev 1	15,122	14,247	1387	932	3.045 SF	

Offset Design	C17 2407 Pad - # 2H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program:	0-MWD+HDGM											Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Tooface (")	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0	0	0	0	0	0	53.86	24	32	40				
100	100	100	100	0	0	53.86	24	32	40	40	0.31	130.155	
200	200	200	200	1	1	53.86	24	32	40	39	1.03	39.138	
300	300	300	300	1	1	53.86	24	32	40	38	1.74	23.032	
400	400	400	400	1	1	53.86	24	32	40	38	2.46	16.317 CC, ES	
500	500	500	500	2	2	-140.46	25	32	41	38	3.16	12.961	
600	600	599	599	2	2	-149.31	28	30	46	42	3.85	11.806 SF	
700	700	697	697	2	2	-160.96	35	26	56	51	4.56	12.213	
800	799	794	793	3	3	-171.37	44	20	73	68	5.27	13.810	
900	898	891	889	3	3	-178.80	55	14	94	88	5.97	15.724	
1000	997	988	985	3	3	176.47	67	7	116	109	6.67	17.376	
1100	1097	1085	1082	4	4	173.26	78	0	139	131	7.38	18.774	
1200	1196	1182	1178	4	4	170.96	89	-6	161	153	8.09	19.955	
1300	1295	1280	1274	5	5	169.22	101	-13	184	176	8.80	20.960	
1400	1395	1377	1370	5	5	167.88	112	-19	208	198	9.52	21.822	
1500	1494	1474	1467	5	5	166.80	123	-26	231	221	10.24	22.568	
1600	1593	1571	1563	6	6	165.92	135	-33	254	243	10.95	23.219	
1700	1692	1668	1659	6	6	165.19	146	-39	278	266	11.67	23.791	
1800	1792	1765	1756	6	6	164.57	157	-46	301	289	12.40	24.298	

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 2H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (ft)		Minimum Separation (ft)	Separation Factor	Warning
+N/-S (ft)	+E/-W (ft)												
1900	1891	1863	1852	7	7	164.04	169	-53	325	312	13.12	24.749	
2000	1990	1960	1948	7	7	163.58	180	-59	348	334	13.84	25.154	
2100	2090	2057	2044	8	8	163.18	191	-66	372	357	14.56	25.518	
2200	2189	2154	2141	8	8	162.83	202	-73	395	380	15.29	25.848	
2300	2288	2251	2237	8	8	162.52	214	-79	419	403	16.01	26.148	
2400	2387	2348	2333	9	9	162.24	225	-86	442	425	16.74	26.422	
2500	2487	2446	2429	9	9	161.99	236	-93	466	448	17.46	26.674	
2600	2586	2543	2526	10	10	161.76	248	-99	489	471	18.19	26.905	
2700	2685	2640	2622	10	10	161.56	259	-106	513	494	18.91	27.118	
2800	2784	2737	2718	10	10	161.37	270	-113	536	517	19.64	27.316	
2900	2884	2834	2815	11	11	161.19	282	-119	560	540	20.37	27.499	
3000	2983	2931	2911	11	11	161.04	293	-126	584	563	21.09	27.669	
3100	3082	3029	3007	12	12	160.89	304	-133	607	585	21.82	27.829	
3200	3182	3126	3103	12	12	160.76	316	-139	631	608	22.55	27.977	
3300	3281	3223	3200	12	12	160.63	327	-146	654	631	23.27	28.117	
3400	3380	3320	3296	13	13	160.51	338	-152	678	654	24.00	28.248	
3500	3479	3417	3392	13	13	160.40	350	-159	702	677	24.73	28.371	
3600	3579	3514	3488	14	13	160.30	361	-166	725	700	25.46	28.487	
3700	3678	3612	3585	14	14	160.21	372	-172	749	723	26.18	28.596	
3800	3777	3709	3681	14	14	160.12	384	-179	772	745	26.91	28.699	
3900	3876	3806	3777	15	15	160.03	395	-186	796	768	27.64	28.797	
4000	3976	3903	3874	15	15	159.95	406	-192	820	791	28.37	28.890	
4100	4075	4000	3970	16	15	159.88	418	-199	843	814	29.10	28.978	
4200	4174	4097	4066	16	16	159.81	429	-206	867	837	29.83	29.062	
4300	4274	4195	4162	16	16	159.74	440	-212	890	860	30.55	29.142	
4400	4373	4292	4259	17	17	159.68	451	-219	914	883	31.28	29.218	
4500	4472	4389	4355	17	17	159.62	463	-226	938	906	32.01	29.290	
4600	4571	4486	4451	18	17	159.56	474	-232	961	929	32.74	29.359	
4700	4671	4583	4548	18	18	159.51	485	-239	985	951	33.47	29.425	
4800	4770	4680	4644	18	18	159.45	497	-246	1008	974	34.20	29.488	
4900	4869	4778	4740	19	19	159.40	508	-252	1032	997	34.93	29.549	
5000	4969	4875	4836	19	19	159.36	519	-259	1056	1020	35.66	29.607	
5100	5068	4972	4933	20	19	159.31	531	-266	1079	1043	36.39	29.662	
5200	5167	5069	5029	20	20	159.27	542	-272	1103	1066	37.12	29.716	
5300	5266	5166	5125	20	20	159.23	553	-279	1127	1089	37.85	29.767	
5400	5366	5267	5225	21	31	-156.87	-88	389	1062	1025	36.83	28.829	
5500	5465	5366	5324	21	31	138.45	-85	386	996	957	39.15	25.443	
5600	5563	5464	5422	21	30	122.00	-70	371	938	896	41.34	22.682	
5700	5662	5563	5521	22	30	117.55	-45	347	889	845	43.26	20.539	
5800	5761	5662	5620	22	29	114.91	-9	313	850	805	44.76	18.985	
5900	5860	5761	5719	22	28	112.24	36	269	821	775	45.80	17.931	
6000	5959	5860	5818	22	27	109.31	89	218	802	756	46.41	17.284	
6100	6058	5959	5917	22	26	106.30	149	159	791	744	46.72	16.922	
6200	6157	6058	6016	23	25	101.70	244	67	782	735	46.70	16.743	
6300	6256	6157	6115	24	24	97.56	323	-11	774	727	47.24	16.386	
6400	6355	6256	6214	25	23	93.82	388	-76	768	720	48.08	15.968	
6500	6454	6355	6313	26	23	90.00	439	-128	764	715	49.08	15.560	
6538	6493	6394	6352	27	23	88.55	455	-144	763	714	49.50	15.421	
6600	6592	6493	6451	28	23	86.28	477	-167	765	714	50.15	15.245	
6700	6691	6592	6550	29	23	82.96	504	-195	772	721	51.15	15.100	
6800	6790	6691	6649	31	23	80.10	524	-216	789	737	52.01	15.162	

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 2H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
6900	6031	5925	5864	33	22	77.68	539	-232	814	761	52.69	15.445	
7000	6032	5900	5842	35	22	76.10	547	-241	848	795	53.26	15.924	
7100	6033	5865	5811	37	22	73.91	558	-253	891	837	53.50	16.647	
7200	6033	5850	5797	39	22	72.93	563	-258	941	887	53.74	17.505	
7300	6034	5823	5772	41	22	71.18	570	-266	997	944	53.71	18.572	
7400	6035	5800	5751	44	22	69.75	575	-272	1060	1006	53.62	19.771	
7500	6035	5800	5751	46	22	69.75	575	-272	1128	1074	53.67	21.012	
7600	6036	5777	5730	48	22	68.32	580	-277	1199	1146	53.45	22.438	
7700	6037	5766	5719	50	22	67.59	582	-280	1274	1221	53.29	23.914	
7800	6037	5750	5703	53	22	66.59	585	-283	1353	1300	53.08	25.482	
7900	6038	5750	5703	55	22	66.59	585	-283	1433	1380	52.99	27.050	
8000	6039	5750	5703	58	22	66.59	585	-283	1516	1463	52.88	28.675	
8100	6040	5731	5685	60	22	65.38	588	-287	1601	1548	52.63	30.418	
8200	6040	5724	5678	62	22	64.96	589	-289	1687	1635	52.48	32.153	
8300	6041	5700	5655	65	22	63.50	592	-293	1775	1723	52.21	33.999	
8400	6042	5700	5655	67	22	63.50	592	-293	1864	1812	52.12	35.763	
8500	6042	5700	5655	70	22	63.50	592	-293	1954	1902	52.02	37.554	
8600	6043	5700	5655	72	22	63.50	592	-293	2044	1992	51.93	39.369	
8700	6044	5700	5655	75	22	63.50	592	-293	2136	2084	51.84	41.202	
8800	6044	5700	5655	77	22	63.50	592	-293	2228	2176	51.75	43.053	
8900	6045	5700	5655	79	22	63.50	592	-293	2321	2269	51.67	44.918	
9000	6046	5700	5655	82	22	63.50	592	-293	2414	2363	51.60	46.796	
9100	6046	5700	5655	84	22	63.50	592	-293	2508	2457	51.52	48.685	
9200	6047	5679	5634	87	22	62.24	594	-295	2602	2551	51.37	50.666	
9300	6048	5676	5631	89	22	62.06	594	-296	2697	2646	51.29	52.583	
9400	6049	5673	5629	92	22	61.90	595	-296	2792	2741	51.23	54.506	
9500	6049	5671	5626	94	22	61.74	595	-297	2888	2836	51.17	56.434	
9600	6050	5650	5605	97	22	60.52	596	-299	2984	2933	51.04	58.460	
9700	6051	5650	5605	99	22	60.52	596	-299	3079	3028	51.00	60.384	
9800	6051	5650	5605	102	22	60.52	596	-299	3176	3125	50.96	62.311	
9900	6052	5650	5605	105	22	60.52	596	-299	3272	3221	50.93	64.242	
10,000	6053	5650	5605	107	22	60.52	596	-299	3368	3318	50.90	66.176	
10,100	6053	5650	5605	110	22	60.52	596	-299	3465	3414	50.88	68.111	
10,200	6054	5650	5605	112	22	60.52	596	-299	3562	3511	50.85	70.048	
10,300	6055	5650	5605	115	22	60.52	596	-299	3659	3608	50.83	71.985	
10,400	6055	5650	5605	117	22	60.52	596	-299	3757	3706	50.82	73.923	
10,500	6056	5650	5605	120	22	60.52	596	-299	3854	3803	50.80	75.862	
10,600	6057	5650	5605	122	22	60.52	596	-299	3951	3901	50.79	77.800	
10,700	6058	5650	5605	125	22	60.52	596	-299	4049	3998	50.78	79.738	
10,800	6058	5650	5605	127	22	60.52	596	-299	4147	4096	50.77	81.674	
10,900	6059	5650	5605	130	22	60.52	596	-299	4245	4194	50.77	83.610	
11,000	6060	5650	5605	132	22	60.52	596	-299	4343	4292	50.77	85.544	
11,100	6060	5650	5605	135	22	60.52	596	-299	4441	4390	50.76	87.476	
11,200	6061	5650	5605	137	22	60.52	596	-299	4539	4488	50.77	89.407	
11,300	6062	5650	5605	140	22	60.52	596	-299	4637	4586	50.77	91.336	
11,400	6062	5650	5605	143	22	60.52	596	-299	4735	4685	50.77	93.262	
11,500	6063	5650	5605	145	22	60.52	596	-299	4834	4783	50.78	95.185	
11,600	6064	5650	5605	148	22	60.52	596	-299	4932	4881	50.79	97.106	
11,700	6064	5650	5605	150	22	60.52	596	-299	5031	4980	50.80	99.025	
11,800	6065	5650	5605	153	22	60.52	596	-299	5129	5078	50.81	100.940	
11,900	6066	5650	5605	155	22	60.52	596	-299	5228	5177	50.83	102.852	

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 2H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Reference Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (ft)		Minimum Separation (ft)	Separation Factor	Warning
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
12,000	6066	5650	5605	158	22	60.52	596	-299	5326	5276	50.84	104.760	
12,100	6067	5650	5605	160	22	60.52	596	-299	5425	5374	50.86	106.665	
12,200	6068	5650	5605	163	22	60.52	596	-299	5524	5473	50.88	108.567	
12,300	6069	5650	5605	166	22	60.52	596	-299	5623	5572	50.90	110.465	
12,400	6069	5650	5605	168	22	60.52	596	-299	5721	5671	50.92	112.359	
12,500	6070	5650	5605	171	22	60.52	596	-299	5820	5769	50.94	114.249	
12,600	6071	5650	5605	173	22	60.52	596	-299	5919	5868	50.97	116.135	
12,700	6071	5650	5605	176	22	60.52	596	-299	6018	5967	50.99	118.016	
12,800	6072	5650	5605	178	22	60.52	596	-299	6117	6066	51.02	119.894	
12,900	6073	5627	5583	181	22	59.20	597	-301	6216	6165	50.99	121.911	
13,000	6073	5627	5582	183	22	59.16	597	-301	6315	6264	51.01	123.784	
13,100	6074	5626	5581	186	22	59.13	597	-301	6414	6363	51.04	125.654	
13,200	6075	5625	5581	189	22	59.09	597	-301	6513	6462	51.07	127.518	
13,300	6075	5625	5580	191	22	59.06	597	-301	6612	6561	51.11	129.378	
13,400	6076	5624	5580	194	22	59.03	597	-301	6711	6660	51.14	131.233	
13,500	6077	5624	5579	196	22	59.00	597	-301	6810	6759	51.17	133.083	
13,600	6078	5623	5579	199	22	58.96	597	-301	6910	6858	51.21	134.927	
13,700	6078	5600	5556	201	22	57.66	598	-303	7009	6958	51.18	136.940	
13,800	6079	5600	5556	204	22	57.66	598	-303	7108	7057	51.22	138.772	
13,900	6080	5600	5556	206	22	57.66	598	-303	7208	7156	51.26	140.599	
14,000	6080	5600	5556	209	22	57.66	598	-303	7307	7256	51.30	142.421	
14,100	6081	5600	5556	212	22	57.66	598	-303	7406	7355	51.35	144.237	
14,200	6082	5600	5556	214	22	57.66	598	-303	7505	7454	51.39	146.048	
14,300	6082	5600	5556	217	22	57.66	598	-303	7605	7553	51.43	147.853	
14,400	6083	5600	5556	219	22	57.66	598	-303	7704	7653	51.48	149.654	
14,500	6084	5600	5556	222	22	57.66	598	-303	7803	7752	51.53	151.448	
14,600	6084	5600	5556	224	22	57.66	598	-303	7903	7851	51.57	153.237	
14,700	6085	5600	5556	227	22	57.66	598	-303	8002	7950	51.62	155.020	
14,800	6086	5600	5556	230	22	57.66	598	-303	8102	8050	51.67	156.798	
14,900	6086	5600	5556	232	22	57.66	598	-303	8201	8149	51.72	158.570	
15,000	6087	5600	5556	235	22	57.66	598	-303	8300	8249	51.77	160.336	
15,100	6088	5600	5556	237	22	57.66	598	-303	8400	8348	51.82	162.097	
15,122	6088	5600	5556	238	22	57.66	598	-303	8422	8370	51.83	162.483	

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Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 3H - Original Drilling - APD Rev 1													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference	Vertical	Offset	Vertical	Semi Major	Offset	Highside	Offset Wellbore Centre		Rule Assigned:		Minimum	Separation	Warning	
Measured Depth (ft)	Depth (ft)	Measured Depth (ft)	Depth (ft)	Reference (ft)	Offset (ft)	Toothface (")	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)	Factor		
0	0	0	0	0	0	54.29	12	16	20					
100	100	100	100	0	0	54.29	12	16	20	20	0.31	64.731		
200	200	200	200	1	1	54.29	12	16	20	19	1.03	19.465		
300	300	300	300	1	1	54.29	12	16	20	18	1.74	11.455		
400	400	400	400	1	1	54.29	12	16	20	17	2.46	8.115 CC, ES		
500	500	500	500	2	2	-142.31	12	16	21	18	3.16	6.547		
600	600	600	600	2	2	-156.86	15	13	25	21	3.85	6.510		
700	700	699	699	2	2	-168.35	18	11	34	30	4.56	7.481		
800	799	798	798	3	3	-175.26	21	9	47	42	5.27	8.960		
900	898	897	897	3	3	-179.17	24	6	62	56	5.97	10.307		
1000	997	996	996	3	3	178.41	27	4	76	69	6.68	11.390		
1100	1097	1095	1094	4	4	176.76	30	1	91	83	7.39	12.274		
1200	1196	1194	1193	4	4	175.57	34	-1	105	97	8.10	13.005		
1300	1295	1293	1292	5	4	174.67	37	-3	120	111	8.81	13.619		
1400	1395	1392	1391	5	5	173.97	40	-6	135	125	9.53	14.142		
1500	1494	1490	1490	5	5	173.41	43	-8	149	139	10.25	14.591		
1600	1593	1589	1588	6	6	172.94	46	-11	164	153	10.96	14.982		
1700	1692	1688	1687	6	6	172.56	49	-13	179	167	11.68	15.324		
1800	1792	1787	1786	6	6	172.23	52	-15	194	181	12.40	15.627		
1900	1891	1886	1885	7	7	171.95	55	-18	209	195	13.12	15.896		
2000	1990	1985	1984	7	7	171.70	58	-20	223	209	13.84	16.137		
2100	2090	2084	2083	8	7	171.49	61	-23	238	224	14.56	16.354		
2200	2189	2183	2181	8	8	171.30	64	-25	253	238	15.28	16.551		
2300	2288	2282	2280	8	8	171.13	67	-27	268	252	16.00	16.729		
2400	2387	2381	2379	9	8	170.98	70	-30	282	266	16.72	16.892		
2500	2487	2479	2478	9	9	170.85	73	-32	297	280	17.44	17.042		
2600	2586	2578	2577	10	9	170.72	76	-35	312	294	18.16	17.179		
2700	2685	2677	2676	10	9	170.61	79	-37	327	308	18.88	17.306		
2800	2784	2776	2774	10	10	170.51	82	-39	342	322	19.60	17.423		
2900	2884	2875	2873	11	10	170.42	85	-42	356	336	20.32	17.532		
3000	2983	2974	2972	11	11	170.33	88	-44	371	350	21.05	17.634		
3100	3082	3073	3071	12	11	170.25	91	-47	386	364	21.77	17.729		
3200	3182	3172	3170	12	11	170.18	94	-49	401	378	22.49	17.817		
3300	3281	3271	3268	12	12	170.11	97	-51	415	392	23.21	17.900		
3400	3380	3369	3367	13	12	170.05	100	-54	430	406	23.93	17.978		
3500	3479	3468	3466	13	12	169.99	103	-56	445	420	24.65	18.052		
3600	3579	3567	3565	14	13	169.93	106	-59	460	434	25.38	18.121		
3700	3678	3666	3664	14	13	169.88	109	-61	475	449	26.10	18.186		
3800	3777	3765	3763	14	13	169.83	112	-63	489	463	26.82	18.248		
3900	3876	3864	3861	15	14	169.78	116	-66	504	477	27.54	18.306		
4000	3976	3963	3960	15	14	169.74	119	-68	519	491	28.27	18.362		
4100	4075	4062	4059	16	14	169.70	122	-71	534	505	28.99	18.414		
4200	4174	4161	4158	16	15	169.66	125	-73	549	519	29.71	18.465		
4300	4274	4260	4257	16	15	169.62	128	-75	563	533	30.43	18.512		
4400	4373	4358	4356	17	16	169.59	131	-78	578	547	31.16	18.558		
4500	4472	4457	4454	17	16	169.56	134	-80	593	561	31.88	18.601		
4600	4571	4556	4553	18	16	169.52	137	-83	608	575	32.60	18.642		
4700	4671	4655	4652	18	17	169.49	140	-85	623	589	33.33	18.682		
4800	4770	4754	4751	18	17	169.47	143	-87	637	603	34.05	18.720		
4900	4869	4853	4850	19	17	169.44	146	-90	652	617	34.77	18.756		
5000	4969	4952	4948	19	18	169.41	149	-92	667	631	35.49	18.791		

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Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 3H - Original Drilling - APD Rev 1												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Reference	Vertical	Offset	Semi Major Axis	Offset	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Measured Depth (ft)	Reference Depth (ft)	Measured Depth (ft)	Reference Depth (ft)	(ft)	(ft)	Toolface (")	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)		
5100	5068	5051	5047	20	18	169.39	152	-95	682	646	36.22	18.824	
5200	5167	5150	5146	20	18	169.36	155	-97	697	660	36.94	18.856	
5300	5266	5249	5245	20	19	169.34	158	-99	711	674	37.66	18.887	
5400	5366	5347	5344	21	19	160.25	161	-102	726	688	38.39	18.914	
5500	5465	5447	5443	21	19	88.11	164	-104	734	695	39.09	18.775	
5600	5563	5545	5541	21	20	68.24	167	-106	731	691	39.77	18.389	
5700	5656	5600	5596	22	20	63.04	170	-108	720	680	40.08	17.976	
5800	5743	5663	5658	22	20	62.40	176	-114	706	665	40.42	17.465	
5900	5822	5717	5711	22	20	63.59	185	-123	688	648	40.69	16.921	
6000	5889	5773	5764	22	21	66.07	198	-135	669	628	41.09	16.286	
6100	5945	5829	5815	22	21	69.49	214	-150	649	607	41.75	15.547	
6200	5987	5885	5865	23	21	73.62	234	-169	630	587	42.80	14.711	
6300	6015	5943	5913	24	21	78.25	258	-191	613	568	44.30	13.828	
6400	6027	6000	5957	25	22	82.98	283	-215	600	553	46.13	12.998	
6500	6029	6067	6005	26	22	87.74	317	-248	593	545	48.22	12.306	
6526	6029	6086	6018	27	22	88.95	328	-257	593	544	48.77	12.161	
6600	6029	6146	6055	28	23	92.47	362	-290	595	545	50.32	11.821	
6700	6030	6241	6104	29	23	97.10	420	-345	601	549	52.53	11.446	
6800	6031	6352	6145	31	25	100.91	495	-417	609	554	55.05	11.059	
6900	6031	6476	6170	33	26	103.05	583	-500	614	556	58.18	10.556	
7000	6032	6590	6173	35	28	103.26	665	-579	616	554	61.70	9.981	
7100	6033	6690	6173	37	29	103.20	737	-648	617	552	65.26	9.455	
7200	6033	6790	6174	39	31	103.14	810	-717	618	549	69.00	8.958	
7300	6034	6890	6174	41	33	103.08	882	-786	619	546	72.91	8.494	
7400	6035	6990	6174	44	35	103.02	954	-855	620	543	76.95	8.063	
7500	6035	7090	6175	46	37	102.96	1026	-924	622	540	81.11	7.664	
7600	6036	7190	6175	48	39	102.90	1099	-993	623	537	85.36	7.295	
7700	6037	7290	6175	50	41	102.84	1171	-1062	624	534	89.70	6.955	
7800	6037	7390	6176	53	43	102.78	1243	-1132	625	531	94.11	6.641	
7900	6038	7490	6176	55	45	102.72	1316	-1201	626	528	98.59	6.351	
8000	6039	7590	6176	58	48	102.67	1388	-1270	627	524	103.12	6.083	
8100	6040	7690	6177	60	50	102.61	1460	-1339	628	521	107.70	5.835	
8200	6040	7790	6177	62	52	102.55	1533	-1408	630	517	112.33	5.605	
8300	6041	7890	6177	65	55	102.49	1605	-1477	631	514	116.99	5.391	
8400	6042	7990	6178	67	57	102.43	1677	-1546	632	510	121.68	5.193	
8500	6042	8090	6178	70	59	102.38	1749	-1615	633	507	126.40	5.008	
8600	6043	8190	6178	72	62	102.32	1822	-1684	634	503	131.15	4.835	
8700	6044	8290	6179	75	64	102.26	1894	-1753	635	499	135.93	4.674	
8800	6044	8390	6179	77	66	102.21	1966	-1822	636	496	140.72	4.523	
8900	6045	8490	6179	79	69	102.15	2039	-1891	638	492	145.54	4.381	
9000	6046	8590	6180	82	71	102.09	2111	-1960	639	488	150.37	4.248	
9100	6046	8689	6180	84	74	102.04	2183	-2030	640	485	155.22	4.122	
9200	6047	8789	6180	87	76	101.98	2256	-2099	641	481	160.08	4.004	
9300	6048	8889	6180	89	79	101.93	2328	-2168	642	477	164.96	3.893	
9400	6049	8989	6181	92	81	101.87	2400	-2237	643	473	169.85	3.787	
9500	6049	9089	6181	94	84	101.81	2472	-2306	644	470	174.76	3.688	
9600	6050	9189	6181	97	86	101.76	2545	-2375	646	466	179.67	3.593	
9700	6051	9289	6182	99	88	101.70	2617	-2444	647	462	184.59	3.504	
9800	6051	9389	6182	102	91	101.65	2689	-2513	648	458	189.53	3.419	
9900	6052	9489	6182	105	93	101.60	2762	-2582	649	455	194.47	3.338	
10,000	6053	9589	6183	107	96	101.54	2834	-2651	650	451	199.42	3.261	

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Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design		C17 2407 Pad - # 3H - Original Drilling - APD Rev 1												Offset Site Error:		0 ft
Survey Program: Reference		0-MWD+HDGM		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:		0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
10,100	6053	9689	6183	110	98	101.49	2906	-2720	651	447	204.38	3.187				
10,200	6054	9789	6183	112	101	101.43	2979	-2789	653	443	209.34	3.117				
10,300	6055	9889	6184	115	103	101.38	3051	-2858	654	439	214.31	3.050				
10,400	6055	9989	6184	117	106	101.33	3123	-2927	655	436	219.29	2.986				
10,500	6056	10,089	6184	120	108	101.27	3195	-2997	656	432	224.27	2.925				
10,600	6057	10,189	6185	122	111	101.22	3268	-3066	657	428	229.27	2.866				
10,700	6058	10,289	6185	125	113	101.17	3340	-3135	658	424	234.26	2.810				
10,800	6058	10,389	6185	127	116	101.11	3412	-3204	659	420	239.26	2.756				
10,900	6059	10,489	6186	130	118	101.06	3485	-3273	661	416	244.27	2.705				
11,000	6060	10,589	6186	132	121	101.01	3557	-3342	662	413	249.28	2.655				
11,100	6060	10,689	6186	135	124	100.96	3629	-3411	663	409	254.29	2.607				
11,200	6061	10,789	6187	137	126	100.90	3701	-3480	664	405	259.31	2.561				
11,300	6062	10,889	6187	140	129	100.85	3774	-3549	665	401	264.34	2.517				
11,400	6062	10,989	6187	143	131	100.80	3846	-3618	666	397	269.36	2.474				
11,500	6063	11,089	6187	145	134	100.75	3918	-3687	668	393	274.40	2.433				
11,600	6064	11,189	6188	148	136	100.70	3991	-3756	669	389	279.43	2.393				
11,700	6064	11,289	6188	150	139	100.65	4063	-3825	670	385	284.47	2.355				
11,800	6065	11,389	6188	153	141	100.59	4135	-3895	671	382	289.51	2.318				
11,900	6066	11,489	6189	155	144	100.54	4208	-3964	672	378	294.56	2.282				
12,000	6066	11,589	6189	158	146	100.49	4280	-4033	673	374	299.60	2.248				
12,100	6067	11,689	6189	160	149	100.44	4352	-4102	675	370	304.65	2.214				
12,200	6068	11,789	6190	163	151	100.39	4424	-4171	676	366	309.71	2.182				
12,300	6069	11,889	6190	166	154	100.34	4497	-4240	677	362	314.76	2.151				
12,400	6069	11,989	6190	168	156	100.29	4569	-4309	678	358	319.82	2.120				
12,500	6070	12,089	6191	171	159	100.24	4641	-4378	679	354	324.89	2.091				
12,600	6071	12,189	6191	173	161	100.19	4714	-4447	680	350	329.95	2.062				
12,700	6071	12,289	6191	176	164	100.14	4786	-4516	682	347	335.02	2.035				
12,800	6072	12,389	6192	178	167	100.09	4858	-4585	683	343	340.09	2.008				
12,900	6073	12,489	6192	181	169	100.04	4931	-4654	684	339	345.16	1.982				
13,000	6073	12,589	6192	183	172	100.00	5003	-4723	685	335	350.23	1.956				
13,100	6074	12,689	6193	186	174	99.95	5075	-4792	686	331	355.31	1.932				
13,200	6075	12,789	6193	189	177	99.90	5147	-4862	687	327	360.39	1.908				
13,300	6075	12,889	6193	191	179	99.85	5220	-4931	689	323	365.47	1.884				
13,400	6076	12,989	6193	194	182	99.80	5292	-5000	690	319	370.55	1.862				
13,500	6077	13,089	6194	196	184	99.75	5364	-5069	691	315	375.63	1.839				
13,600	6078	13,189	6194	199	187	99.71	5437	-5138	692	311	380.72	1.818				
13,700	6078	13,289	6194	201	189	99.66	5509	-5207	693	308	385.81	1.797				
13,800	6079	13,389	6195	204	192	99.61	5581	-5276	694	304	390.90	1.777				
13,900	6080	13,489	6195	206	195	99.56	5653	-5345	696	300	395.99	1.757				
14,000	6080	13,589	6195	209	197	99.52	5726	-5414	697	296	401.08	1.737				
14,100	6081	13,689	6196	212	200	99.47	5798	-5483	698	292	406.17	1.719				
14,200	6082	13,789	6196	214	202	99.42	5870	-5552	699	288	411.27	1.700				
14,300	6082	13,889	6196	217	205	99.37	5943	-5621	700	284	416.37	1.682				
14,400	6083	13,989	6197	219	207	99.33	6015	-5690	702	280	421.47	1.665				
14,500	6084	14,089	6197	222	210	99.28	6087	-5760	703	276	426.57	1.647				
14,600	6084	14,189	6197	224	212	99.23	6160	-5829	704	272	431.67	1.631				
14,700	6085	14,289	6198	227	215	99.19	6232	-5898	705	268	436.77	1.614				
14,800	6086	14,389	6198	230	217	99.14	6304	-5967	706	264	441.88	1.598				
14,900	6086	14,489	6198	232	220	99.10	6376	-6036	707	260	446.99	1.583				
15,000	6087	14,589	6199	235	223	99.05	6449	-6105	709	257	452.09	1.567				
15,100	6088	14,689	6199	237	225	99.01	6521	-6174	710	253	457.20	1.552				

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



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design		C17 2407 Pad - # 3H - Original Drilling - APD Rev 1										Offset Site Error:		0 ft
Survey Program:		0-MWD+HDGM										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	
15,122	6088	14,711	6199	238	226	99.00	6537	-6189	710	252	458.33	1.549 SF		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 4H - Original Drilling - APD														Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM														Offset Well Error:	0 ft
Reference	Vertical	Offset	Vertical	Semi Major Axis	Offset	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning		
Measured Depth (ft)	Reference Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)	Factor			
0	0	0	0	0	0	54.00	35	49	60						
100	100	100	100	0	0	54.00	35	49	60	60	0.31	194.885			
200	200	200	200	1	1	54.00	35	49	60	59	1.03	58.602			
300	300	300	300	1	1	54.00	35	49	60	58	1.74	34.486			
400	400	400	400	1	1	54.00	35	49	60	58	2.46	24.432 CC, ES			
500	500	499	499	2	2	-139.41	36	49	61	58	3.16	19.402			
600	600	598	597	2	2	-144.79	40	48	67	63	3.85	17.461			
700	700	695	694	2	2	-152.22	48	48	79	75	4.55	17.374 SF			
800	799	790	789	3	3	-159.54	58	47	98	92	5.25	18.583			
900	898	884	882	3	3	-165.44	72	45	121	115	5.93	20.378			
1000	997	976	972	3	3	-169.96	88	44	148	141	6.60	22.404			
1100	1097	1066	1060	4	4	-173.46	106	42	178	171	7.25	24.577			
1200	1196	1154	1146	4	4	-176.21	127	41	212	204	7.88	26.857			
1300	1295	1242	1231	5	4	-178.44	150	39	248	240	8.52	29.137			
1400	1395	1334	1320	5	5	179.75	176	36	286	277	9.21	31.041			
1500	1494	1426	1408	5	5	178.36	201	34	324	314	9.90	32.683			
1600	1593	1519	1497	6	6	177.26	226	32	361	351	10.60	34.110			
1700	1692	1611	1586	6	6	176.37	251	30	399	388	11.30	35.359			
1800	1792	1703	1675	6	7	175.64	276	28	437	425	12.00	36.460			
1900	1891	1796	1764	7	7	175.02	301	25	476	463	12.70	37.437			
2000	1990	1888	1852	7	8	174.49	327	23	514	500	13.41	38.308			
2100	2090	1980	1941	8	8	174.03	352	21	552	538	14.12	39.090			
2200	2189	2073	2030	8	9	173.64	377	19	590	575	14.83	39.795			
2300	2288	2165	2119	8	9	173.29	402	17	628	613	15.54	40.434			
2400	2387	2258	2208	9	9	172.98	427	14	666	650	16.25	41.015			
2500	2487	2350	2297	9	10	172.71	452	12	705	688	16.96	41.545			
2600	2586	2442	2385	10	10	172.46	478	10	743	725	17.68	42.032			
2700	2685	2535	2474	10	11	172.24	503	8	781	763	18.39	42.480			
2800	2784	2627	2563	10	11	172.04	528	6	820	800	19.11	42.893			
2900	2884	2719	2652	11	12	171.85	553	3	858	838	19.82	43.275			
3000	2983	2812	2741	11	12	171.69	578	1	896	876	20.54	43.630			
3100	3082	2904	2830	12	13	171.53	603	-1	934	913	21.26	43.960			
3200	3182	2996	2918	12	13	171.39	629	-3	973	951	21.97	44.267			
3300	3281	3089	3007	12	14	171.26	654	-5	1011	988	22.69	44.555			
3400	3380	3181	3096	13	14	171.14	679	-8	1049	1026	23.41	44.824			
3500	3479	3273	3185	13	15	171.02	704	-10	1088	1064	24.13	45.076			
3600	3579	3366	3274	14	15	170.92	729	-12	1126	1101	24.85	45.314			
3700	3678	3458	3363	14	16	170.82	754	-14	1164	1139	25.57	45.537			
3800	3777	3550	3451	14	16	170.73	779	-16	1203	1176	26.29	45.748			
3900	3876	3643	3540	15	17	170.64	805	-19	1241	1214	27.01	45.947			
4000	3976	3735	3629	15	17	170.56	830	-21	1279	1252	27.73	46.136			
4100	4075	3827	3718	16	17	170.48	855	-23	1318	1289	28.45	46.314			
4200	4174	3920	3807	16	18	170.41	880	-25	1356	1327	29.17	46.483			
4300	4274	4012	3895	16	18	170.34	905	-27	1394	1364	29.89	46.644			
4400	4373	4104	3984	17	19	170.28	930	-30	1433	1402	30.62	46.796			
4500	4472	4197	4073	17	19	170.22	956	-32	1471	1440	31.34	46.942			
4600	4571	4289	4162	18	20	170.16	981	-34	1509	1477	32.06	47.080			
4700	4671	4381	4251	18	20	170.10	1006	-36	1548	1515	32.78	47.212			
4800	4770	4474	4340	18	21	170.05	1031	-38	1586	1553	33.50	47.338			
4900	4869	4566	4428	19	21	170.00	1056	-41	1624	1590	34.23	47.459			
5000	4969	4659	4517	19	22	169.95	1081	-43	1663	1628	34.95	47.574			

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 4H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Offset Well Error:	0 ft
Reference	Vertical	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Depth (ft)	Measured Depth (ft)	Reference	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5100	5068	4751	4606	20	22	169.91	1107	-45	1701	1665	35.67	47.684
5200	5167	7276	6052	20	38	-148.02	474	937	1709	1661	48.82	35.017
5300	5266	7282	6052	20	38	-147.81	470	942	1669	1618	50.62	32.972
5400	5366	7288	6052	21	38	-156.14	466	945	1634	1581	52.38	31.187
5500	5465	7284	6052	21	38	134.36	469	943	1604	1550	53.87	29.771
5600	5563	7264	6052	21	38	114.41	483	929	1580	1525	54.91	28.780
5700	5656	7229	6053	22	37	107.68	507	905	1563	1508	55.46	28.185
5800	5743	7180	6053	22	36	103.76	543	870	1552	1496	55.55	27.940
5900	5822	7118	6054	22	35	100.60	587	827	1546	1491	55.26	27.980
6000	5889	7045	6054	22	34	97.76	640	776	1545	1490	54.75	28.214
6006	5893	7040	6054	22	34	97.60	643	773	1545	1490	54.72	28.227
6100	5945	6962	6055	22	32	95.23	699	718	1546	1491	54.15	28.541
6200	5987	6871	6056	23	31	93.18	764	655	1548	1494	53.64	28.849
6300	6015	6775	6057	24	30	91.77	833	587	1550	1496	53.36	29.042
6400	6027	6676	6057	25	29	91.13	904	518	1551	1497	53.37	29.059
6500	6029	6542	6055	26	28	90.96	999	425	1551	1497	53.38	29.051
6600	6029	6363	6013	28	27	89.36	1118	298	1546	1493	53.58	28.864
6700	6030	6218	5944	29	27	86.77	1201	200	1539	1484	54.58	28.193
6800	6031	6107	5875	31	27	84.11	1252	132	1531	1475	56.03	27.318
6900	6031	6026	5814	33	27	81.80	1283	87	1525	1467	57.70	26.423
7000	6032	5964	5765	35	27	79.90	1302	56	1522	1463	59.47	25.599
7001	6032	5964	5764	35	27	79.88	1302	56	1522	1463	59.49	25.589
7100	6033	5918	5725	37	27	78.37	1314	35	1525	1464	61.27	24.888
7200	6033	5881	5693	39	27	77.14	1321	19	1532	1469	63.04	24.310
7300	6034	5850	5665	41	27	76.07	1327	7	1546	1481	64.73	23.879
7400	6035	5828	5645	44	27	75.30	1330	-1	1565	1498	66.35	23.581
7500	6035	5800	5619	46	27	74.30	1333	-11	1589	1521	67.75	23.458
7600	6036	5800	5619	48	27	74.30	1333	-11	1619	1550	69.24	23.385
7700	6037	5778	5598	50	27	73.52	1334	-18	1654	1584	70.34	23.520
7800	6037	5766	5587	53	27	73.09	1335	-21	1695	1623	71.37	23.746
7900	6038	5750	5571	55	27	72.50	1336	-26	1740	1667	72.19	24.100
8000	6039	5750	5571	58	27	72.50	1336	-26	1789	1716	73.02	24.500
8100	6040	5750	5571	60	27	72.50	1336	-26	1842	1769	73.70	24.995
8200	6040	5731	5553	62	27	71.83	1337	-31	1899	1825	74.07	25.638
8300	6041	5725	5547	65	27	71.60	1337	-33	1959	1885	74.46	26.316
8400	6042	5719	5542	67	27	71.39	1337	-34	2023	1948	74.76	27.060
8500	6042	5700	5523	70	27	70.69	1337	-39	2089	2015	74.83	27.923
8600	6043	5700	5523	72	27	70.69	1337	-39	2158	2083	75.03	28.763
8700	6044	5700	5523	75	27	70.69	1337	-39	2229	2154	75.17	29.654
8800	6044	5700	5523	77	27	70.69	1337	-39	2302	2227	75.26	30.592
8900	6045	5700	5523	79	27	70.69	1337	-39	2378	2302	75.31	31.571
9000	6046	5700	5523	82	27	70.69	1337	-39	2455	2379	75.32	32.588
9100	6046	5700	5523	84	27	70.69	1337	-39	2533	2458	75.30	33.640
9200	6047	5700	5523	87	27	70.69	1337	-39	2613	2538	75.26	34.723
9300	6048	5700	5523	89	27	70.69	1337	-39	2695	2619	75.20	35.834
9400	6049	5700	5523	92	27	70.69	1337	-39	2777	2702	75.12	36.970
9500	6049	5700	5523	94	27	70.69	1337	-39	2861	2786	75.03	38.130
9600	6050	5678	5502	97	27	69.90	1336	-43	2945	2871	74.73	39.412
9700	6051	5676	5500	99	27	69.83	1336	-44	3031	2956	74.61	40.624
9800	6051	5674	5498	102	27	69.76	1336	-44	3117	3043	74.48	41.854
9900	6052	5672	5496	105	27	69.69	1336	-45	3204	3130	74.35	43.100

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 4H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,000	6053	5671	5494	107	27	69.63	1336	-45	3292	3218	74.22	44.361		
10,100	6053	5650	5474	110	27	68.88	1334	-49	3381	3307	73.91	45.750		
10,200	6054	5650	5474	112	27	68.88	1334	-49	3470	3397	73.79	47.029		
10,300	6055	5650	5474	115	27	68.88	1334	-49	3560	3487	73.68	48.320		
10,400	6055	5650	5474	117	27	68.88	1334	-49	3651	3577	73.57	49.622		
10,500	6056	5650	5474	120	27	68.88	1334	-49	3741	3668	73.45	50.934		
10,600	6057	5650	5474	122	27	68.88	1334	-49	3833	3759	73.34	52.255		
10,700	6058	5650	5474	125	27	68.88	1334	-49	3924	3851	73.23	53.584		
10,800	6058	5650	5474	127	27	68.88	1334	-49	4016	3943	73.13	54.922		
10,900	6059	5650	5474	130	27	68.88	1334	-49	4109	4036	73.02	56.266		
11,000	6060	5650	5474	132	27	68.88	1334	-49	4201	4129	72.92	57.617		
11,100	6060	5650	5474	135	27	68.88	1334	-49	4295	4222	72.82	58.974		
11,200	6061	5650	5474	137	27	68.88	1334	-49	4388	4315	72.72	60.336		
11,300	6062	5650	5474	140	27	68.88	1334	-49	4482	4409	72.63	61.704		
11,400	6062	5650	5474	143	27	68.88	1334	-49	4576	4503	72.54	63.076		
11,500	6063	5650	5474	145	27	68.88	1334	-49	4670	4597	72.45	64.453		
11,600	6064	5650	5474	148	27	68.88	1334	-49	4764	4692	72.37	65.833		
11,700	6064	5650	5474	150	27	68.88	1334	-49	4859	4787	72.29	67.217		
11,800	6065	5650	5474	153	27	68.88	1334	-49	4954	4882	72.21	68.604		
11,900	6066	5650	5474	155	27	68.88	1334	-49	5049	4977	72.13	69.995		
12,000	6066	5650	5474	158	27	68.88	1334	-49	5144	5072	72.06	71.388		
12,100	6067	5650	5474	160	27	68.88	1334	-49	5240	5168	71.99	72.783		
12,200	6068	5650	5474	163	27	68.88	1334	-49	5335	5263	71.92	74.181		
12,300	6069	5650	5474	166	27	68.88	1334	-49	5431	5359	71.86	75.580		
12,400	6069	5650	5474	168	27	68.88	1334	-49	5527	5455	71.79	76.981		
12,500	6070	5650	5474	171	27	68.88	1334	-49	5623	5551	71.73	78.384		
12,600	6071	5650	5474	173	27	68.88	1334	-49	5719	5647	71.68	79.788		
12,700	6071	5650	5474	176	27	68.88	1334	-49	5815	5744	71.62	81.193		
12,800	6072	5650	5474	178	27	68.88	1334	-49	5912	5840	71.57	82.599		
12,900	6073	5650	5474	181	27	68.88	1334	-49	6008	5937	71.52	84.006		
13,000	6073	5650	5474	183	27	68.88	1334	-49	6105	6034	71.48	85.414		
13,100	6074	5650	5474	186	27	68.88	1334	-49	6202	6130	71.43	86.822		
13,200	6075	5650	5474	189	27	68.88	1334	-49	6299	6227	71.39	88.230		
13,300	6075	5650	5474	191	27	68.88	1334	-49	6396	6324	71.35	89.639		
13,400	6076	5650	5474	194	27	68.88	1334	-49	6493	6421	71.31	91.047		
13,500	6077	5650	5474	196	27	68.88	1334	-49	6590	6519	71.28	92.456		
13,600	6078	5650	5474	199	27	68.88	1334	-49	6687	6616	71.24	93.864		
13,700	6078	5650	5474	201	27	68.88	1334	-49	6784	6713	71.21	95.273		
13,800	6079	5650	5474	204	27	68.88	1334	-49	6882	6811	71.18	96.680		
13,900	6080	5650	5474	206	27	68.88	1334	-49	6979	6908	71.15	98.088		
14,000	6080	5650	5474	209	27	68.88	1334	-49	7077	7006	71.13	99.494		
14,100	6081	5650	5474	212	27	68.88	1334	-49	7174	7103	71.10	100.901		
14,200	6082	5650	5474	214	27	68.88	1334	-49	7272	7201	71.08	102.306		
14,300	6082	5650	5474	217	27	68.88	1334	-49	7370	7299	71.06	103.710		
14,400	6083	5650	5474	219	27	68.88	1334	-49	7468	7397	71.04	105.114		
14,500	6084	5650	5474	222	27	68.88	1334	-49	7565	7494	71.03	106.516		
14,600	6084	5650	5474	224	27	68.88	1334	-49	7663	7592	71.01	107.918		
14,700	6085	5650	5474	227	27	68.88	1334	-49	7761	7690	71.00	109.318		
14,800	6086	5650	5474	230	27	68.88	1334	-49	7859	7788	70.99	110.717		
14,900	6086	5650	5474	232	27	68.88	1334	-49	7957	7886	70.98	112.114		
15,000	6087	5650	5474	235	27	68.88	1334	-49	8055	7985	70.97	113.511		

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design													C17 2407 Pad - # 4H - Original Drilling - APD		Offset Site Error:		0 ft	
Survey Program:				0-MWD+HDGM				Rule Assigned:				Offset Well Error:		0 ft				
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance				Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor						
15,100	6088	5650	5474	237	27	68.88	1334	-49	8154	8083	70.96	114.905						
15,122	6088	5650	5474	238	27	68.88	1334	-49	8175	8104	70.96	115.212						



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 5H - Original Drilling - APD Rev 1													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference	Vertical	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Measured Depth (ft)	Reference Depth (ft)	Measured Depth (ft)	Offset Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)	Factor		
0	0	0	0	0	0	54.07	47	65	80					
100	100	100	100	0	0	54.07	47	65	80	80	0.31	259.616		
200	200	200	200	1	1	54.07	47	65	80	79	1.03	78.066		
300	300	300	300	1	1	54.07	47	65	80	78	1.74	45.940		
400	400	400	400	1	1	54.07	47	65	80	78	2.46	32.547 CC, ES		
500	500	499	499	2	2	-138.98	48	65	81	78	3.16	25.736		
600	600	597	597	2	2	-143.01	52	65	87	83	3.85	22.683		
700	700	693	693	2	2	-148.91	60	64	99	94	4.55	21.767		
800	799	788	787	3	3	-155.21	70	64	117	112	5.25	22.310		
900	898	881	880	3	3	-160.68	83	64	140	134	5.93	23.587		
1000	997	976	972	3	3	-165.13	99	63	166	159	6.61	25.080		
1100	1097	1071	1067	4	4	-168.49	116	63	193	185	7.30	26.374		
1200	1196	1167	1161	4	4	-171.02	132	62	220	212	8.00	27.511		
1300	1295	1263	1255	5	5	-172.99	149	61	248	239	8.70	28.476		
1400	1395	1359	1350	5	5	-174.57	165	61	276	266	9.40	29.317		
1500	1494	1454	1444	5	5	-175.85	182	60	304	294	10.11	30.050		
1600	1593	1550	1538	6	6	-176.92	198	60	332	321	10.81	30.694		
1700	1692	1646	1633	6	6	-177.83	215	59	360	349	11.52	31.264		
1800	1792	1742	1727	6	6	-178.60	231	59	389	376	12.23	31.770		
1900	1891	1838	1821	7	7	-179.26	248	58	417	404	12.94	32.222		
2000	1990	1933	1916	7	7	-179.85	264	58	445	432	13.65	32.628		
2100	2090	2029	2010	8	8	179.64	281	57	474	460	14.36	32.996		
2200	2189	2125	2104	8	8	179.19	297	57	502	487	15.08	33.329		
2300	2288	2221	2199	8	8	178.78	314	56	531	515	15.79	33.632		
2400	2387	2316	2293	9	9	178.42	330	55	560	543	16.50	33.909		
2500	2487	2412	2387	9	9	178.09	347	55	588	571	17.22	34.164		
2600	2586	2508	2482	10	10	177.79	363	54	617	599	17.93	34.398		
2700	2685	2604	2576	10	10	177.52	380	54	645	627	18.65	34.615		
2800	2784	2699	2670	10	11	177.27	396	53	674	655	19.36	34.815		
2900	2884	2795	2765	11	11	177.05	413	53	703	683	20.08	35.001		
3000	2983	2891	2859	11	11	176.84	430	52	731	711	20.79	35.174		
3100	3082	2987	2953	12	12	176.64	446	52	760	738	21.51	35.336		
3200	3182	3083	3048	12	12	176.46	463	51	789	766	22.22	35.487		
3300	3281	3178	3142	12	13	176.29	479	51	817	794	22.94	35.629		
3400	3380	3274	3236	13	13	176.14	496	50	846	822	23.66	35.762		
3500	3479	3370	3331	13	13	175.99	512	50	875	850	24.37	35.887		
3600	3579	3466	3425	14	14	175.85	529	49	903	878	25.09	36.005		
3700	3678	3561	3519	14	14	175.73	545	48	932	906	25.81	36.116		
3800	3777	3657	3614	14	15	175.60	562	48	961	934	26.53	36.222		
3900	3876	3753	3708	15	15	175.49	578	47	990	962	27.24	36.321		
4000	3976	3849	3802	15	15	175.38	595	47	1018	990	27.96	36.415		
4100	4075	3945	3897	16	16	175.28	611	46	1047	1018	28.68	36.505		
4200	4174	4040	3991	16	16	175.19	628	46	1076	1046	29.40	36.590		
4300	4274	4136	4085	16	17	175.10	644	45	1104	1074	30.12	36.671		
4400	4373	4232	4180	17	17	175.01	661	45	1133	1102	30.83	36.748		
4500	4472	4328	4274	17	17	174.93	677	44	1162	1130	31.55	36.821		
4600	4571	4423	4368	18	18	174.85	694	44	1191	1158	32.27	36.891		
4700	4671	4519	4463	18	18	174.77	710	43	1219	1186	32.99	36.958		
4800	4770	4615	4557	18	19	174.70	727	42	1248	1214	33.71	37.022		
4900	4869	4711	4651	19	19	174.64	743	42	1277	1242	34.43	37.084		
5000	4969	4807	4746	19	19	174.57	760	41	1305	1270	35.15	37.142		

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 5H - Original Drilling - APD Rev 1													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5100	5068	4902	4840	20	20	174.51	776	41	1334	1298	35.87	37.198		
5200	5167	4998	4934	20	20	174.45	793	40	1363	1326	36.59	37.252		
5300	5266	5094	5029	20	21	174.39	809	40	1392	1354	37.31	37.304		
5400	5366	5190	5123	21	21	165.12	826	39	1420	1382	38.03	37.352		
5500	5465	5287	5219	21	22	91.61	843	39	1443	1404	38.74	37.249		
5600	5563	5384	5315	21	22	70.03	859	38	1456	1416	39.43	36.917		
5700	5656	5479	5409	22	22	63.85	876	38	1458	1418	40.10	36.369		
5800	5743	5570	5498	22	23	62.42	892	37	1452	1411	40.77	35.623		
5900	5822	5600	5527	22	23	62.08	897	37	1439	1398	41.03	35.077		
6000	5889	5650	5576	22	23	63.42	908	34	1421	1380	41.55	34.200		
6100	5945	5685	5610	22	23	65.30	917	31	1399	1357	42.14	33.209		
6200	5987	5719	5642	23	23	67.84	927	26	1375	1332	42.98	31.988		
6300	6015	5750	5670	24	24	70.83	938	21	1349	1304	44.13	30.560		
6400	6027	5780	5697	25	24	74.17	949	15	1321	1276	45.60	28.974		
6500	6029	5800	5715	26	24	75.56	957	10	1296	1249	47.27	27.421		
6600	6029	5841	5751	28	24	77.19	974	-1	1277	1227	49.37	25.862		
6700	6030	5881	5785	29	24	78.72	992	-13	1264	1212	51.62	24.482		
6800	6031	5931	5824	31	25	80.52	1017	-30	1256	1202	54.06	23.240		
6897	6031	5990	5868	33	25	82.52	1049	-53	1254	1198	56.61	22.157		
6900	6031	5992	5869	33	25	82.59	1050	-54	1254	1198	56.69	22.125		
7000	6032	6067	5920	35	26	84.89	1094	-88	1256	1197	59.51	21.108		
7100	6033	6160	5972	37	27	87.28	1154	-136	1261	1198	62.59	20.146		
7200	6033	6272	6020	39	28	89.42	1231	-202	1266	1200	66.02	19.184		
7300	6034	6400	6052	41	29	90.84	1323	-285	1271	1201	69.88	18.189		
7400	6035	6526	6060	44	31	91.15	1414	-370	1273	1199	73.97	17.214		
7500	6035	6626	6061	46	33	91.14	1487	-439	1275	1197	77.87	16.370		
7600	6036	6726	6061	48	35	91.13	1559	-508	1276	1194	81.91	15.580		
7700	6037	6826	6062	50	36	91.12	1631	-577	1278	1192	86.08	14.842		
7800	6037	6926	6062	53	38	91.11	1704	-646	1279	1189	90.36	14.156		
7900	6038	7026	6063	55	40	91.10	1776	-715	1281	1186	94.73	13.518		
8000	6039	7126	6063	58	42	91.10	1849	-784	1282	1183	99.18	12.927		
8100	6040	7226	6064	60	44	91.09	1921	-853	1284	1180	103.69	12.378		
8200	6040	7326	6064	62	46	91.08	1994	-921	1285	1177	108.27	11.869		
8300	6041	7426	6065	65	49	91.07	2066	-990	1286	1174	112.90	11.395		
8400	6042	7526	6065	67	51	91.06	2139	-1059	1288	1170	117.57	10.955		
8500	6042	7626	6066	70	53	91.05	2211	-1128	1289	1167	122.28	10.545		
8600	6043	7726	6066	72	55	91.04	2284	-1197	1291	1164	127.03	10.163		
8700	6044	7826	6067	75	58	91.03	2356	-1266	1292	1161	131.80	9.805		
8800	6044	7926	6067	77	60	91.02	2428	-1335	1294	1157	136.61	9.471		
8900	6045	8026	6068	79	62	91.01	2501	-1404	1295	1154	141.44	9.158		
9000	6046	8126	6068	82	65	91.00	2573	-1473	1297	1151	146.29	8.865		
9100	6046	8226	6069	84	67	91.00	2646	-1542	1298	1147	151.16	8.589		
9200	6047	8326	6069	87	69	90.99	2718	-1611	1300	1144	156.05	8.329		
9300	6048	8426	6070	89	72	90.98	2791	-1679	1301	1140	160.95	8.085		
9400	6049	8526	6070	92	74	90.97	2863	-1748	1303	1137	165.87	7.854		
9500	6049	8626	6071	94	77	90.96	2936	-1817	1304	1133	170.81	7.636		
9600	6050	8725	6071	97	79	90.95	3008	-1886	1306	1130	175.75	7.429		
9700	6051	8825	6072	99	82	90.94	3080	-1955	1307	1126	180.71	7.234		
9800	6051	8925	6072	102	84	90.93	3153	-2024	1309	1123	185.67	7.048		
9900	6052	9025	6073	105	86	90.93	3225	-2093	1310	1119	190.65	6.872		
10,000	6053	9125	6074	107	89	90.92	3298	-2162	1312	1116	195.63	6.704		

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design C17 2407 Pad - # 5H - Original Drilling - APD Rev 1													Offset Site Error: 0 ft	
Survey Program: 0-MWD+HDGM		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error: 0 ft	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100	6053	9225	6074	110	91	90.91	3370	-2231	1313	1112	200.63	6.545		
10,200	6054	9325	6075	112	94	90.90	3443	-2300	1315	1109	205.63	6.393		
10,300	6055	9425	6075	115	96	90.89	3515	-2369	1316	1105	210.63	6.248		
10,400	6055	9525	6076	117	99	90.88	3588	-2437	1317	1102	215.64	6.110		
10,500	6056	9625	6076	120	101	90.87	3660	-2506	1319	1098	220.66	5.977		
10,600	6057	9725	6077	122	104	90.86	3733	-2575	1320	1095	225.69	5.851		
10,700	6058	9825	6077	125	106	90.86	3805	-2644	1322	1091	230.72	5.730		
10,800	6058	9925	6078	127	109	90.85	3877	-2713	1323	1088	235.75	5.614		
10,900	6059	10,025	6078	130	111	90.84	3950	-2782	1325	1084	240.79	5.502		
11,000	6060	10,125	6079	132	114	90.83	4022	-2851	1326	1081	245.83	5.395		
11,100	6060	10,225	6079	135	116	90.82	4095	-2920	1328	1077	250.88	5.293		
11,200	6061	10,325	6080	137	119	90.81	4167	-2989	1329	1073	255.93	5.194		
11,300	6062	10,425	6080	140	121	90.81	4240	-3058	1331	1070	260.98	5.099		
11,400	6062	10,525	6081	143	124	90.80	4312	-3127	1332	1066	266.04	5.008		
11,500	6063	10,625	6081	145	126	90.79	4385	-3195	1334	1063	271.10	4.920		
11,600	6064	10,725	6082	148	129	90.78	4457	-3264	1335	1059	276.16	4.835		
11,700	6064	10,825	6082	150	131	90.77	4529	-3333	1337	1055	281.23	4.753		
11,800	6065	10,925	6083	153	134	90.76	4602	-3402	1338	1052	286.30	4.674		
11,900	6066	11,025	6083	155	136	90.75	4674	-3471	1340	1048	291.37	4.598		
12,000	6066	11,125	6084	158	139	90.75	4747	-3540	1341	1045	296.44	4.524		
12,100	6067	11,225	6084	160	141	90.74	4819	-3609	1343	1041	301.52	4.453		
12,200	6068	11,325	6085	163	144	90.73	4892	-3678	1344	1037	306.59	4.384		
12,300	6069	11,425	6085	166	146	90.72	4964	-3747	1346	1034	311.67	4.317		
12,400	6069	11,525	6086	168	149	90.71	5037	-3816	1347	1030	316.75	4.253		
12,500	6070	11,625	6086	171	151	90.70	5109	-3885	1348	1027	321.84	4.190		
12,600	6071	11,725	6087	173	154	90.70	5182	-3953	1350	1023	326.92	4.129		
12,700	6071	11,825	6087	176	156	90.69	5254	-4022	1351	1019	332.01	4.071		
12,800	6072	11,925	6088	178	159	90.68	5326	-4091	1353	1016	337.10	4.013		
12,900	6073	12,025	6088	181	162	90.67	5399	-4160	1354	1012	342.19	3.958		
13,000	6073	12,125	6089	183	164	90.66	5471	-4229	1356	1009	347.28	3.904		
13,100	6074	12,225	6089	186	167	90.66	5544	-4298	1357	1005	352.37	3.852		
13,200	6075	12,325	6090	189	169	90.65	5616	-4367	1359	1001	357.46	3.801		
13,300	6075	12,425	6090	191	172	90.64	5689	-4436	1360	998	362.56	3.752		
13,400	6076	12,525	6091	194	174	90.63	5761	-4505	1362	994	367.66	3.704		
13,500	6077	12,625	6092	196	177	90.62	5834	-4574	1363	991	372.75	3.657		
13,600	6078	12,725	6092	199	179	90.62	5906	-4643	1365	987	377.85	3.612		
13,700	6078	12,825	6093	201	182	90.61	5978	-4711	1366	983	382.95	3.568		
13,800	6079	12,925	6093	204	184	90.60	6051	-4780	1368	980	388.05	3.525		
13,900	6080	13,025	6094	206	187	90.59	6123	-4849	1369	976	393.15	3.483		
14,000	6080	13,125	6094	209	189	90.58	6196	-4918	1371	972	398.26	3.442		
14,100	6081	13,225	6095	212	192	90.58	6268	-4987	1372	969	403.36	3.402		
14,200	6082	13,325	6095	214	194	90.57	6341	-5056	1374	965	408.46	3.363		
14,300	6082	13,425	6096	217	197	90.56	6413	-5125	1375	962	413.57	3.325		
14,400	6083	13,525	6096	219	200	90.55	6486	-5194	1377	958	418.68	3.288		
14,500	6084	13,625	6097	222	202	90.54	6558	-5263	1378	954	423.78	3.252		
14,600	6084	13,725	6097	224	205	90.54	6631	-5332	1380	951	428.89	3.216		
14,700	6085	13,825	6098	227	207	90.53	6703	-5401	1381	947	434.00	3.182		
14,800	6086	13,925	6098	230	210	90.52	6775	-5469	1382	943	439.11	3.148		
14,900	6086	14,025	6099	232	212	90.51	6848	-5538	1384	940	444.22	3.115		
15,000	6087	14,125	6099	235	215	90.50	6920	-5607	1385	936	449.33	3.083		
15,100	6088	14,225	6100	237	217	90.50	6993	-5676	1387	932	454.44	3.052		

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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Offset Design		C17 2407 Pad - # 5H - Original Drilling - APD Rev 1											Offset Site Error:		0 ft
Survey Program:		0-MWD+HDGM							Rule Assigned:				Offset Well Error:		0 ft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Warning		
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside									
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Between	Between	Minimum	Separation			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	Centres	Ellipses	Separation	Factor			
									(ft)	(ft)	(ft)				
15,122	6088	14,247	6100	238	218	90.49	7009	-5691	1387	932	455.56	3.045 SF			

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



Lonestar Consulting, LLC

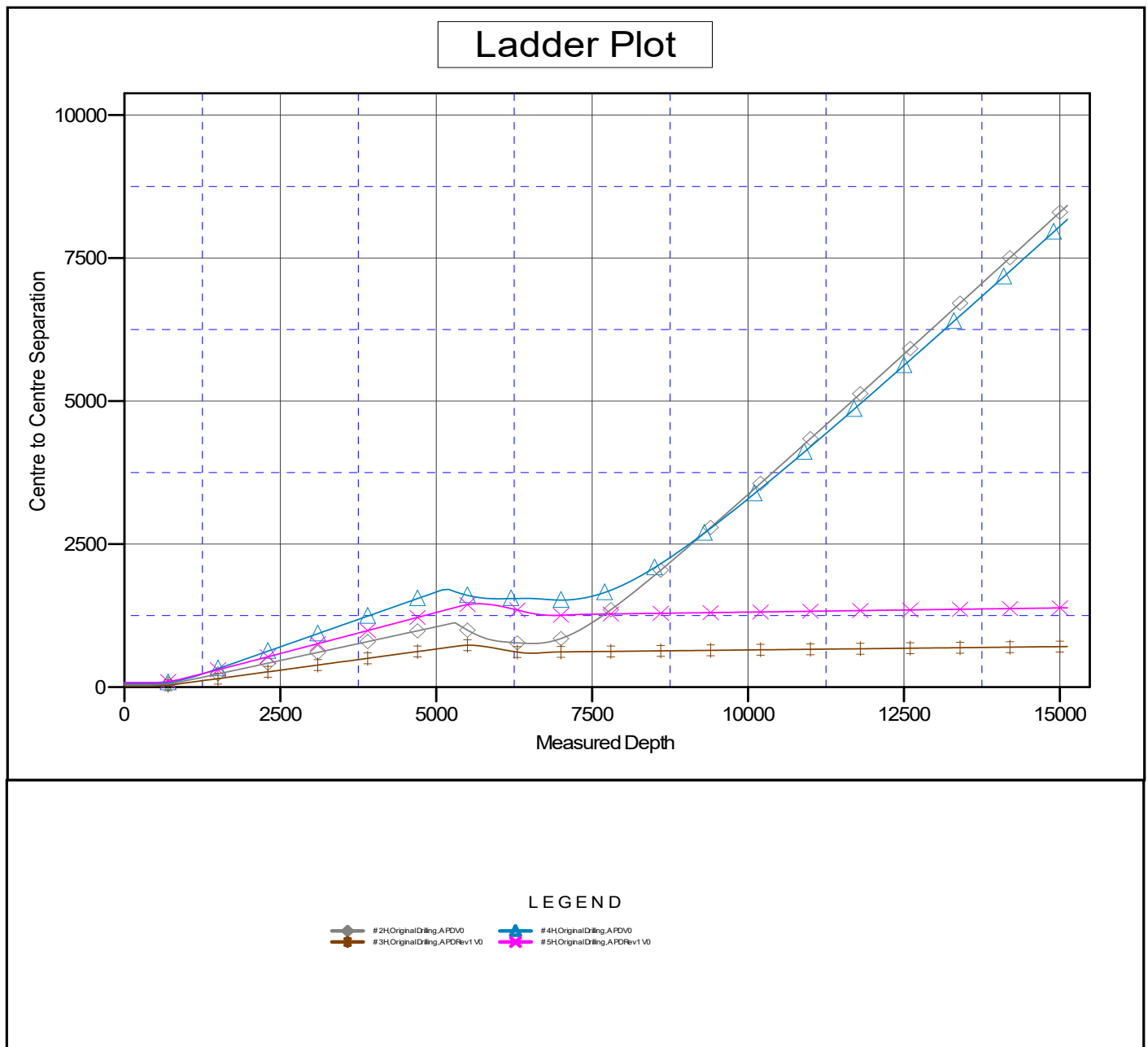
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	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 Rev 1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 7284' & RKB 14' @ 7298ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.8333333

Coordinates are relative to: # 1H - Slot 5
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.14°



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



Lonestar Consulting, LLC

Anticollision Report

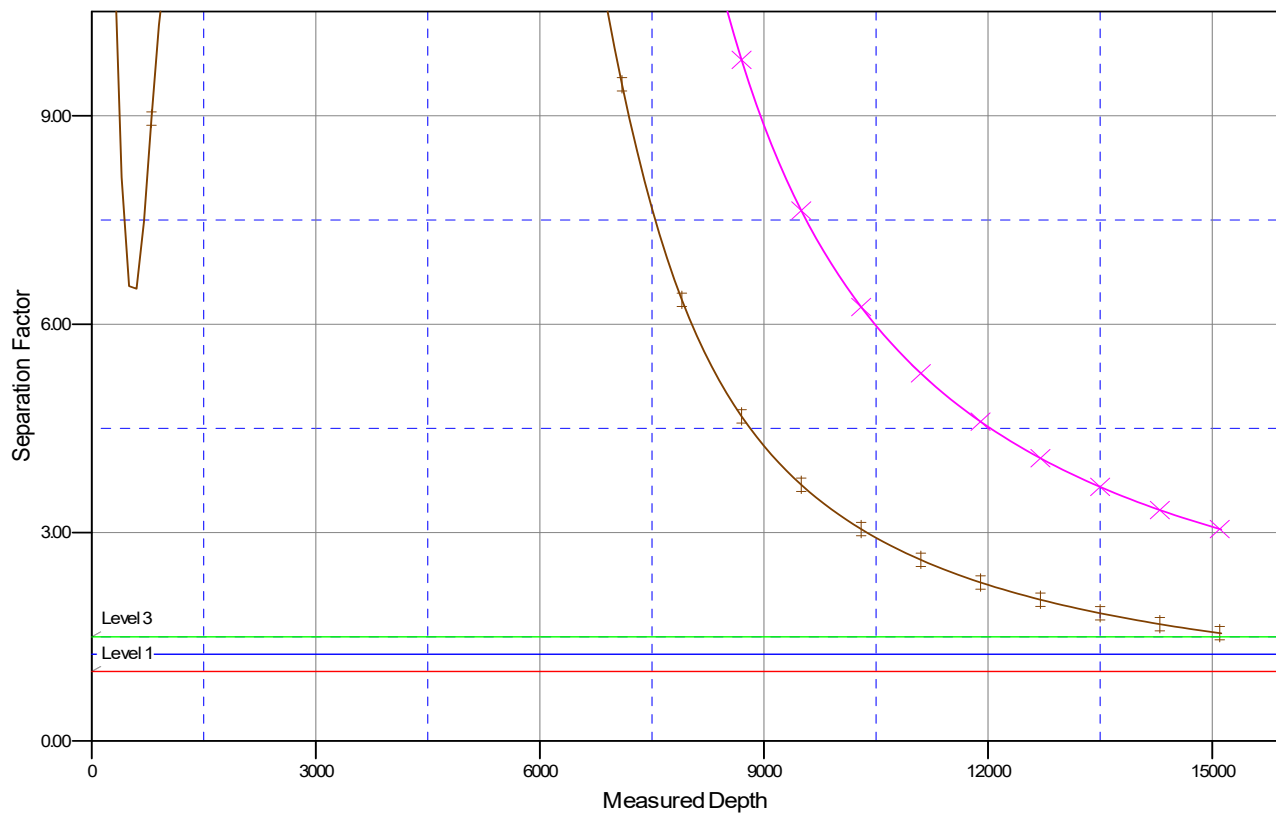


Company:	DJR Operating	Local Co-ordinate Reference	Well # 1H - Slot 5
Project:	Escrito Area	TVD Reference:	GL 7284' & RKB 14' @ 7298ft
Reference Site:	C17 2407 Pad	MD Reference:	GL 7284' & RKB 14' @ 7298ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 7284' & RKB 14' @ 7298ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.83333333

Coordinates are relative to: # 1H - Slot 5
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.14°

Separation Factor Plot



LEGEND

#2HOriginalDrilling.APDV0 #4HOriginalDrilling.APDV0
 #3HOriginalDrilling.APDRev1V0 #5HOriginalDrilling.APDRev1V0

Conditions of Approval

Operator: DJR Operating, LLC
Well Names: Escrito A12 2408 01H, 02H, 03H, 04H and 05H
Escrito C17 2407 01H, 03H, 05H and Escrito Gallup Unit 02H, 04H
Legal Location: Sec 12, T24N, R08W, San Juan County, NM and Sec 17, T24N R07W, Rio Arriba County, NM
NEPA Log Number: DOI-BLM-NM-F010-2022-0061-EA
Inspection Date: April 20, 2021
Lease Numbers: NMNM-03595 and NMNM-0557389

The following conditions of approval will apply to DJR Operating's Escrito A12-2408 and C17-2407 Cluster Oil and Natural Gas Wells Project, and other associated facilities, unless a particular Surface Managing Agency or private surface owner has supplied to Bureau of Land Management and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in an assessment or civil penalties pursuant to 43 CFR 3163.1 or 3163.2.

Disclaimers: BLM's approval of the APD does not relieve the lessee and operator from obtaining any other authorizations that may be required by the BIA, Navajo Tribe, State, or other jurisdictional entities.

Copy of Plans: A complete copy of the APD package, including Surface Use Plan of Operations, Bare Soil Reclamation Plan, Plan of Development (if required), Conditions of Approval, Cultural Resource Record of Review, Cultural Resources Compliance Form (if required), and Project Stipulations (if required) shall be at the project area at all times and available to all persons.

Review of NEPA documents: It is the responsibility of the operator to follow all the design features, best management practices, and mitigation measures as contained in the Environmental Assessment DOI-BLM-NM-F010-2022-0061-EA, which contains additional design features and best management practices that must be followed. Copies of the EA, Decision Record, and Finding of No Significant Impact may be obtained from the BLM FFO public room, or online at: [EplanningUi \(blm.gov\)](https://eplanningui.blm.gov).

Best Management Practices (BMPs): Farmington Field Office established environmental Best Management Practices (BMP's) will be followed during construction and reclamation of well site pads, access roads, pipeline ties, facility placement or any other surface disturbing activity associated with this project. Bureau wide standard BMP's are found in the Gold Book, Fourth Edition-Revised 2007 and at

http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html.

Farmington Field Office BMPs are integrated into the Environmental Assessment, Surface Use Plan of Operations, Bare Soil Reclamation Plan, and COAs.

Construction, Production, Facilities, Reclamation & Maintenance

Construction & Reclamation Notification: The operator or their contractor will contact the Bureau of Land Management, Farmington Field Office Surface and Environmental Protection Staff (505) 564-7600 or by email, at least 48 hours prior to any construction or reclamation on this project.

Production Facilities: design and layout of facilities will be deferred until an onsite with BLM-FFO surface protection staff is conducted to determine the best location. The Operator or their contractor will contact the Bureau of Land Management, Farmington Field Office, Surface and Environmental Protection Staff (505) 564-7600 to schedule a facility layout onsite.

Staking: The holder shall place slope stakes, culvert location and grade stakes, and other construction control stakes as deemed necessary by the authorized officer to ensure construction in accordance with the plan of development. If stakes are disturbed, they shall be replaced before proceeding with construction.

Weather: No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts more than 6 inches deep, the soil shall be deemed too wet.

Stockpile of Soil: The top 6 inches of soil material will be stripped and stockpiled in the construction zones around the pad [construction zones may be restricted or deleted to provide resource avoidance]. The stockpiled soil will be free of brush and tree limbs, trunks, and roots. The stockpiled soil material will be spread on the reclaimed portions of the pad [including the reserve pit, cut and fill slopes] prior to re-seeding. Spreading shall not be done when the ground or topsoil is frozen or wet.

Painting of Equipment: Within 90 days of installation, all above ground structures not subject to safety requirements shall be painted by the Holder to blend with the natural color of the landscape. A reflective material may be used to reduce hazards that may occur when such structures are near roads. Otherwise, the paint use shall be a non-glare, non-reflective, non-chalking color of: Federal 595a-34127 (Juniper Green).

Storage Tanks: All open top permanent production or storage tanks regardless of diameter made of fiberglass, steel, or other material used for the containment of oil, condensate, produced water and or other production waste shall be screened, netted, or otherwise covered to protect migratory birds and other wildlife from access.

Compressors: Compressor units on this well location not equipped with a drip pan for containment of fluids shall be lined with an impervious material at least 8 mils thick and a 12-inch berm. The compressor will be painted to match the well facilities. Any variance to this will be approved by the Authorized Officer (AO). Noise mitigation may be required at the time of compressor installation.

Culverts: Silt Traps/Bell Holes will be built upstream of all culvert locations.

Driving Surface Area: All activities associated within the construction, operation, maintenance, and abandonment of the well location is limited to areas approved in the APD or ROW permit. During the production of the well, vehicular traffic is limited to the daily driving surface area established during interim reclamation construction operations. This area typically forms a keyhole or teardrop driving surface from which all production facilities may be serviced or inspected. A v-type ditch will be constructed on the outside of the driving surface to further define the driving surface and to deter vehicular traffic from entering onto the interim reclamation areas.

Contouring of Cut and Fill Slopes: The interim cut and fill slope grade shall be as close to the original contour as possible. To obtain this ratio, pits and slopes shall be back sloped into the pad

during interim reclamation. Only subsurface soil and material shall be utilized in the contouring of the cut and fill slopes. Under no circumstances shall topsoil be utilized as substrate material for contouring of cut and fill slopes.

Maintenance: In order to perform subsequent well operations, right-of-way (ROW) operations, or install new/additional equipment, it may be necessary to drive, park, and operate on restored, interim vegetation within the previously disturbed area. This is generally acceptable provided damage is promptly repaired and reclaimed following use. Where vehicular travel has occurred as a “convenience” and interim reclamation/vegetation has been compromised, immediate remediation of the affected areas is required. Additionally, where erosion has occurred and compromised the reclamation of the well location, the affected area must be promptly remediated so that future erosion is prevented, and the landform is stabilized.

Layflat Lines: Layflat lines used for development of the wells may be on the ground for a maximum of 6 months and shall be retrieved immediately following completion operations. If the layflat lines are needed for longer than 6 months a Sundry NOI shall be submitted to the BLM FFO for review and decision that includes a rationale for the time extension.

The holder or its contractors will notify the BLM of any fires and comply with all rules and regulations administered by the BLM concerning the use, prevention and suppression of fires on federal lands, including any fire prevention orders that may be in effect at the time of the permitted activity. The holder or its contractors may be held liable for the cost of fire suppression, stabilization and rehabilitation. In the event of a fire, personal safety will be the first priority of the holder or its contractors.

“Hotwork” and Construction Affecting Fire Safety: The holder or its contractors shall:

1. Operate all internal and external combustion engines (including off-highway vehicles, chainsaws, generators, heavy equipment, etc.) with a qualified spark arrester. Qualified spark arresters are maintained and not modified, and meet the Society of Automotive Engineers (SAE) Recommended Practices J335 or J350. Refer to 43 CFR §8343.1.
 - a. *Refueling of any combustible engine equipment must be minimum of 3 meters away from any ignition source (open flame, smoking, etc.).*
2. Maintain and clean all equipment regularly to remove flammable debris buildup and prevent fluid leaks that can lead to ignitions.
3. Carry at least one shovel or wildland fire hand tool (combi, Pulaski, McLeod) per person working, minimum 5 gallons of water, and a fire extinguisher rated at a minimum as ABC - 10 pound on each piece of equipment and each vehicle.
4. When conducting “hotwork” such as, but not limited to welding, grinding, cutting, spark-producing work with metal, work that creates hot material or slag; choose an area large enough to contain all hot material that is naturally free of all flammable vegetation or remove the flammable vegetation in a manner compliant with the permitted activity. If adequate clearance cannot be made, wet an area large enough to contain all hot material prior to the activity and periodically throughout the activity to reduce the risk of wildfire ignition. Regardless of clearance, maintain readiness to respond to an ignition at all times. In addition, keep one hand tool per person and at least one fire extinguisher ready, minimum, as specified earlier (#3) during this activity.
5. Keep apprised of current and forecasted weather at <https://www.weather.gov/abq/forecasts-fireweather-links> and fire conditions at www.wfas.net and take additional fire precautions when fire danger is rated High or greater. Red Flag Warnings are issued by the National Weather Service when fire conditions are most dangerous, and ignitions escape control

quickly. Extra precautions are required during these warnings such as additional water, designate a fire watch/patrol and tools. If work is being conducted in an area that is not clear of vegetation within 50 feet of work area; then, when fire danger is rated High or greater and 1. There is a predicted Red Flag warning for your area or 2. If winds are predicted to be greater than 10 mph, stop all hotwork activities for the day at 10 am.

6. In the event of an ignition, initiate fire suppression actions in the work area to prevent fire spread to or on federally administered lands. If a fire spreads beyond the capability of workers with the stipulated tools, all will cease fire suppression action and leave the area immediately via pre-identified escape routes.
7. Call **911** or the **Taos Interagency Fire Dispatch Center (575-758-6208)** immediately of the location and status of any fire.

AND

Notify the respective BLM field office for which the permit or contract was issued immediately of the incident.

Farmington Field Office at 505-564-7600

Taos Field Office at 575-758-8851

Noxious Weeds

Inventory the proposed site for the presence of noxious and invasive weeds. Noxious weeds are those listed on the New Mexico Noxious Weed List and USDA's Federal Noxious Weed List. The New Mexico Noxious Weed List or USDA's Noxious Weed List can be updated at any time and should be regularly check for any changes. Invasive species may or may not be listed as a noxious weed but have been identified to likely cause economic or environmental harm or harm to human health. The following noxious weeds have been identified as occurring on lands within the boundaries of the Farmington Field Office (FFO). There are numerous invasive species on the FFO such as Russian thistle (*Salsola spp.*) and field bindweed (*Convolvulus arvensis*).

Russian Knapweed (<i>Centaurea repens</i>)	Musk Thistle (<i>Carduus nutans</i>)
Bull Thistle (<i>Cirsium vulgare</i>)	Canada Thistle (<i>Cirsium arvense</i>)
Scotch Thistle (<i>Onopordum acanthium</i>)	Hoary Cress (<i>Cardaria draba</i>)
Perennial Pepperweed (<i>Lepidium latifolium</i>)	Halogeton (<i>Halogeton glomeratus</i>)
Spotted Knapweed (<i>Centaurea maculosa</i>)	Dalmation Toadflax (<i>Linaria genistifolia</i>)
Yellow Toadflax (<i>Linaria vulgaris</i>)	Camelthorn (<i>Alhagi pseudalhagi</i>)
African Rue (<i>Peganum harmala</i>)	Salt Cedar (<i>Tamarix spp.</i>)
Diffuse Knapweed (<i>Centaurea diffusa</i>)	Leafy Spurge (<i>Euphorbia esula</i>)

- a. Identified weeds will be treated prior to new surface disturbance if determined by the FFO Noxious Weed Coordinator. A Pesticide Use Proposal (PUP) must be submitted to and approved by the FFO Noxious Weed Coordinator prior to application of pesticide. The FFO Noxious Weeds Coordinator (505-564-7600) can provide assistance in the development of the PUP.

- b. Vehicles and equipment should be inspected and cleaned prior to coming onto the work site. This is especially important on vehicles from out of state or if coming from a weed-infested site.
- c. Fill dirt or gravel may be needed for excavation, road construction/repair, or for spill remediation. If fill dirt or gravel will be required, the source shall be noxious weed free and approved by the FFO Noxious Weed Coordinator.
- d. The site shall be monitored for the life of the project for the presence of noxious weeds (includes maintenance and construction activities). If weeds are found the FFO Coordinator shall be notified at (505) 564-7600 and provided with a Weed Management Plan and if necessary, a Pesticide Use Proposal (PUP). The FFO Coordinator can provide assistance developing the Weed Management Plan and/or the Pesticide Use Proposal.
- e. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. DJR's weed-control contractor would contact the BLM-FFO prior to using these chemicals.
- f. Noxious/invasive weed treatments must be reported to the FFO Noxious Weed Coordinator. A Pesticide Use Report (PUR) is required to report any mechanical, chemical, biological, or cultural treatments used to eradicate, and/or control noxious or invasive species. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Coordinator.

Bare ground vegetation trim-out: If bare ground vegetation treatment (trim-out) is desired around facility structures, the operator will submit a bare ground/trim-out design included in their Surface Use Plan of Operations (SUPO). The design will address vegetation safety concerns of the operator and BLM while minimizing impacts to interim reclamation efforts. The design must include what structures to be treated and buffer distances of trim-out. Pesticide use for vegetation control around anchor structures is not approved. If pesticides are used for bare ground trim-out, the trim-out will not exceed three feet from the edge of any eligible permanent structure (i.e., well heads, fences, tanks). Additional distance/areas may be requested and must be approved by the FFO authorized officer. The additional information below must also be provided to the FFO:

- a. Pesticide use for trim out will require a Pesticide Use Proposal (PUP). A PUP is required *prior* to any treatment and must be approved by the FFO Noxious Weed Coordinator. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. Enduring's

weed-control contractor would contact the BLM-FFO prior to using these chemicals and provide Pesticide Use Reports (PURs) post treatment.

- b. A Pesticide Use Report (PUR) or a Biological Use Report (BUR) is required to report any chemical, or biological treatments used to eradicate, or control vegetation on site. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Coordinator.

Paleontology

Any paleontological resource discovered by the Operator, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant scientific values. The Holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the Holder.

Visual Resources

Dark Sky COAs need to be applied to existing lighting, which is not dark sky friendly and to any additional lights added as part of pad expansion. All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source). All permanent lighting will be pointed straight down at the ground in order to prevent light spill to the sides. All permanent lighting will be 4000° Kelvin or less with 3000° Kelvin preferred. Warmer light colors are less noticeable by humans and cause less impact to wildlife. All permanent lighting will be controlled by a switch and/or timer which allows the lights to be turned on when workers are on location during dark periods but will keep the lights off the majority of the time.

Wildlife Resources

Crow Mesa Wildlife SDA: F-4 Timing Limitation Stipulation - Important Seasonal Wildlife Habitat. No surface use for is allowed during the following time period: December 1 - March 31.

Wildlife Improvements: Two stock ponds will be constructed to BLM specifications as mitigation for the removal of the HSP project North Crow Mesa Harrow #1 (mule deer and elk habitat) by the construction of the Escrito C17-2407 well pad as stated in the EA.

Hazards: Wildlife hazards associated with the proposed project would be fenced, covered, and/or contained in storage tanks, as necessary.

Migratory Bird: The BLM FFO migratory bird policy requires a bird nest survey between May 15-July 31 for any projects that would remove 4.0 or more acres of vegetation. The proposed project will disturb more than 4.0 acres of vegetation and a survey is required if construction occurs within the specified time frame. Once drilling and completion activities are complete, any open water that could be harmful to birds and wildlife. must be covered, screened, or netted to prevent entry.

Threatened, Endangered or Sensitive Species: If, in operations the operator/holder discovers any Threatened, Endangered, or Sensitive species, work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM-FFO T&E specialist at (505) 564-7600. The BLM-FFO will then specify what action is to be taken. Failure to notify the BLM-FFO about a discovery may result in civil or criminal penalties in accordance with The Endangered Species Act (as amended).

Nesting: If a bird nest containing eggs or young is encountered in the path of construction the operator will cease construction and consult with BLM to determine appropriate actions.

Livestock Grazing: Livestock grazing operators in the vicinity of the proposed project area would be contacted by the Operator at least 10 business days prior to construction. The operator is not obligated to cease or delay construction unless directed by the AO. Any range improvement (fences, pipelines, ponds, etc.) disturbed by construction activities will be repaired immediately following construction and will be repaired to the condition the improvement was in prior to disturbance. Cattle guards will be installed to replace any livestock fencing or gates removed for road construction. No holes would be left open overnight. Open holes would be barricaded to ensure the safety of livestock. If livestock are present, providing monitors or barriers to ensure livestock do not come into contact with hazards (i.e., fencing of exposed ditch-type holes and covering smaller holes is required during each active bore hole construction during periods when personnel are not present on the site). Safety meetings or briefs to employees to increase awareness about livestock (i.e., open range and driving speeds to avoid livestock collisions). Containment of any contaminants, fluid leaks, or hazards that could cause injury to livestock (i.e antifreeze for compressors, drilling pits, equipment, pump jacks).

Soil, Air, Water

Land Farming: No excavation, remediation or closure activities will be authorized without prior approval, on any federal or Indian mineral estate, federal surface, or federal ROW. A Sundry Notice (DOI, BLM Form 3160-5) must be submitted with an explanation of the remediation or closure plan for on-lease actions.

Emission Control Standard: Compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NOx at 2 grams per horsepower hour or less to comply with the New Mexico Environmental Department, Air Quality Bureau's guidance.

Waste Disposal: All fluids (i.e., scrubber cleaners) used during washing of production equipment, including compressors, will be properly disposed of to avoid ground contamination, or hazard to livestock or wildlife.

Cultural Resources

Non-Permitted Disturbance: Construction, construction maintenance or any other activity outside the areas permitted by the APD will require additional approval and may require a new cultural survey and clearance.

Employee Education: All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles, and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

Discovery of Cultural Resources in the Absence of Monitoring: Discovery of Cultural Resources in the Absence of Monitoring: If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Field Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery in accordance with 36 CFR Section 800.13, in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property, **or in accordance with an approved program alternative.** Minor recordation, stabilization, or data recovery may be performed by BLM or a third party acting on its behalf, such as a permitted cultural resources consultant. If warranted, more extensive **archaeological or alternative mitigation**, likely implemented by a permitted cultural resources consultant, may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any **mitigations determined appropriate through the agency's Section 106 consultation are completed.** Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act (ARPA) of 1979, as amended, **the Native American Graves Protection and Repatriation Act (NAGRPA) of 1990, as amended, and other applicable laws.**

Discovery of Cultural Resources during Monitoring: If monitoring confirms the presence of previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Field Manager. BLM will then specify what action is to be taken. **If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery in accordance with 36 CFR Section 800.13, in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property, or in accordance with an approved program alternative.** Minor recordation, stabilization, or data recovery may be performed by BLM

or a third party acting on its behalf, such as a permitted cultural resources consultant. If warranted, more extensive archaeological or alternative mitigation, likely implemented by a permitted cultural resources consultant, may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any mitigations determined appropriate through the agency's Section 106 consultation are completed.

Damage to Sites: If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare a BLM approved damage assessment and/or data recovery plan. The operator/holder agrees at his/her expense to implement a **mitigation** that the agency finds appropriate given the significance of the site, which the agency determines in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property. **This mitigation may entail execution of the data recovery plan by a permitted cultural resources consultant and/or alternative mitigations.** Damage to cultural resources may result in **civil or criminal penalties in accordance with the Archeological Resources Protection Act (ARPA) of 1979, as amended, the Native American Graves Protection and Repatriation Act (NAGRPA) of 1990, as amended, and other applicable laws.**

See below additional cultural stipulations.



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
#1H ESCRITO C17 2407
Lease: NMNM3595
SH: NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 17, T.24 N., R.7 W.
Rio Arriba County, New Mexico
BH: Lot 1 Section 7, T.24 N., R.7 W.
Rio Arriba 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 the surface casing to a minimum of _____ psi for 30 minutes.
- D. ☐ Test all casing strings below the surface 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.
- E. ☒ 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.
- F. ☐ 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, regulations, and Onshore Orders, 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. 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 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 at Virgil Lucero at 505-793-1836.**
- G. **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.**
- H. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two years extension may be granted if submitted prior to expiration.
- I. 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 time, unless the well is secured with blowout preventers or cement plugs.
- J. 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.

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 within 30 days after the work is completed.
1. Original and three copies on Federal and an Original and five copies on Indian leases of Sundry Notice, giving 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 any and 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 manner in which 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.

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 or 50 MMCF** following its (completion)(recompletion), whichever first occurs, without the prior, written approval of the authorized officer. 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 first gas to surface.

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 in order to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.F.
- 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.F. 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.

VII. PHONE NUMBERS

- A. For BOPE tests, cementing, and plugging operations the phone number is 505-564-7750 and must be called 24 hours in advance in order that a BLM representative may witness the operations.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 300412

CONDITIONS

Operator: DJR OPERATING, LLC 1 Road 3263 Aztec, NM 87410	OGRID:
	371838
	Action Number:
	300412
Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	1/29/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	1/29/2024
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	1/29/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	1/29/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	1/29/2024
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	1/29/2024