

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. 30-045-38460
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		

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

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

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: NWSW / 2416 FSL / 110 FWL / TWSP: 24N / RANGE: 8W / SECTION: 16 / LAT: 36.313576 / LONG: -107.695654 (TVD: 0 feet, MD: 0 feet)
PPP: NESE / 1465 FSL / 508 FEL / TWSP: 24N / RANGE: 8W / SECTION: 17 / LAT: 36.310994 / LONG: -107.69775 (TVD: 5520 feet, MD: 5974 feet)
PPP: SWSW / 971 FSL / 1 FWL / TWSP: 24N / RANGE: 8W / SECTION: 16 / LAT: 36.309603 / LONG: -107.696063 (TVD: 5523 feet, MD: 13780 feet)
PPP: NWSE / 2626 FNL / 1707 FEL / TWSP: 24N / RANGE: 8W / SECTION: 21 / LAT: 36.299791 / LONG: -107.683991 (TVD: 5523 feet, MD: 13780 feet)
PPP: NWNW / 1 FNL / 967 FWL / TWSP: 24N / RANGE: 8W / SECTION: 21 / LAT: 36.309956 / LONG: -107.692806 (TVD: 5523 feet, MD: 13780 feet)
PPP: NENW / 346 FNL / 1307 FWL / TWSP: 24N / RANGE: 8W / SECTION: 21 / LAT: 36.306012 / LONG: -107.691645 (TVD: 5523 feet, MD: 13780 feet)
PPP: SWNE / 1684 FNL / 2621 FWL / TWSP: 24N / RANGE: 8W / SECTION: 21 / LAT: 36.302363 / LONG: -107.687155 (TVD: 5523 feet, MD: 13780 feet)
BHL: SESE / 1216 FSL / 330 FEL / TWSP: 24N / RANGE: 8W / SECTION: 21 / LAT: 36.295921 / LONG: -107.67923 (TVD: 5523 feet, MD: 13780 feet)

BLM Point of Contact

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

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

WELL LOCATION INFORMATION

API Number 30-045-38460	Pool Code 98194	Pool Name CROW CANYON MANCOS OIL POOL
Property Code 325183	Property Name CROW CANYON UNIT	Well Number 131H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6794'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
L	16	24N	8W		2416' SOUTH	110' WEST	36.313576° N	107.695654° W	SAN JUAN

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
P	21	24N	8W		1216' SOUTH	330' EAST	36.295921° N	107.679230° W	SAN JUAN

Dedicated Acres SEC 17: NE/SE & SE/SE (80 AC.); SEC 16: NW/SW, SW/SW & SE/SW (120 AC.); SEC 21: NW/NW, NE/NW, SE/NW, NW/NE, SW/NE, SE/NE, NW/SE, NE/SE & SE/SE (360 AC.) = 560 ACRES	PENETRATED SPACING UNIT: Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code UNIT
Order Numbers: R-14090 R-14090A		Well Setbacks are under Common Ownership: ☐ Yes ☐ No		

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
L	16	24N	8W		2416' SOUTH	110' WEST	36.313576° N	107.695654° W	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
I	17	24N	8W		1465' SOUTH	508' EAST	36.310994° N	107.697775° W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
P	21	24N	8W		1216' SOUTH	330' EAST	36.295921° N	107.679230° W	SAN JUAN

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

OPERATOR CERTIFICATIONS

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

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Shaw-Marie Ford
Signature

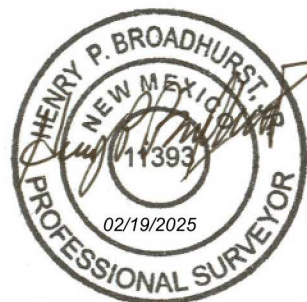
2/19/2025
Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
E-mail Address

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor:

Certificate Number

11393

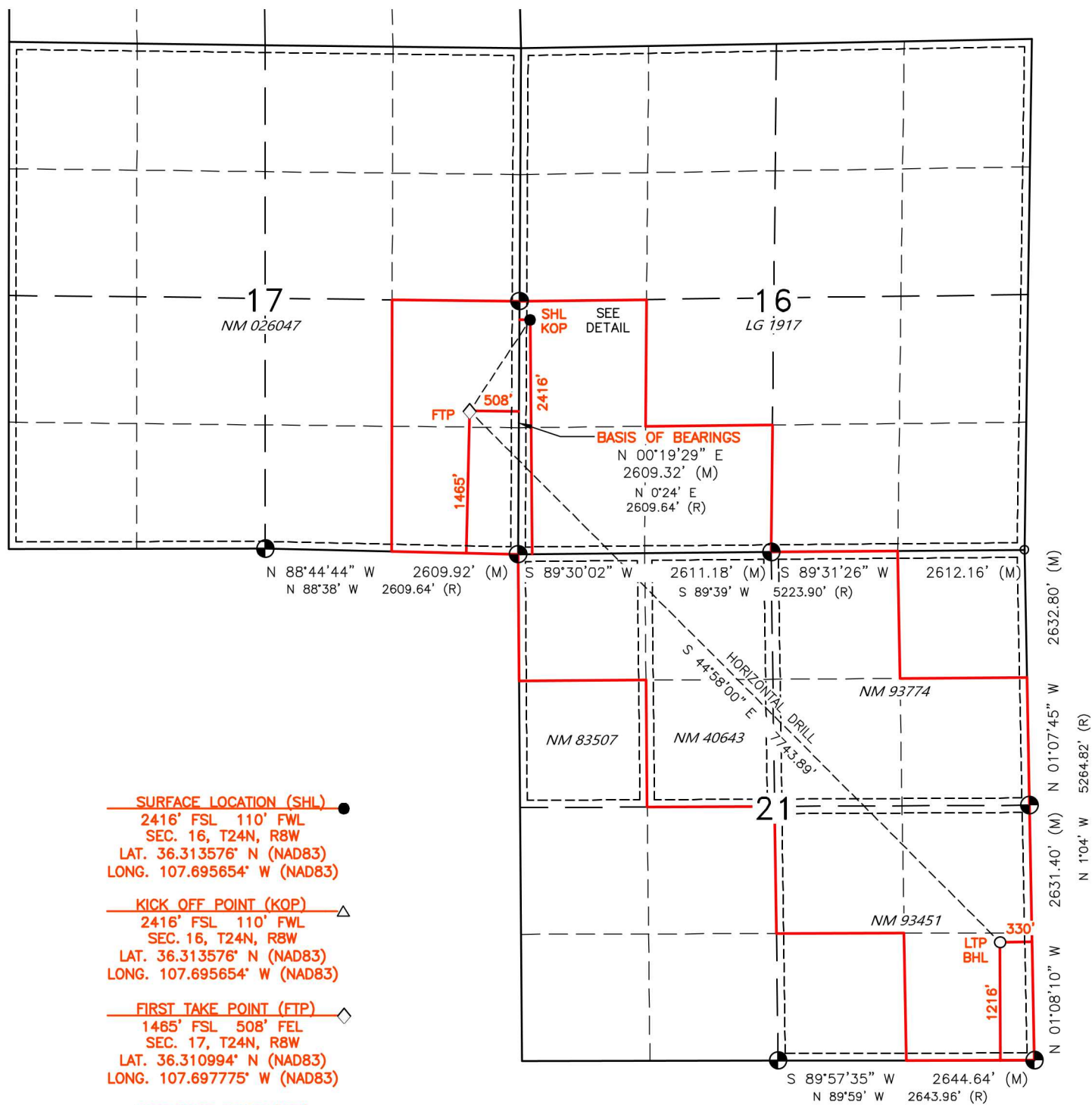
Date of Survey

JUNE 18, 2021

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

FND 2 1/2" BC
GLO 1947

O CALC



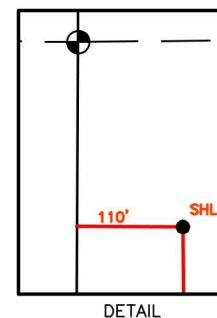
SURFACE LOCATION (SHL) ●
2416' FSL 110' FWL
SEC. 16, T24N, R8W
LAT. 36.313576° N (NAD83)
LONG. 107.695654° W (NAD83)

KICK OFF POINT (KOP) ▲
2416' FSL 110' FWL
SEC. 16, T24N, R8W
LAT. 36.313576° N (NAD83)
LONG. 107.695654° W (NAD83)

FIRST TAKE POINT (FTP) ◆
1465' FSL 508' FEL
SEC. 17, T24N, R8W
LAT. 36.310994° N (NAD83)
LONG. 107.697775° W (NAD83)

LAST TAKE POINT (LTP) □
1216' FSL 330' FEL
SEC. 21, T24N, R8W
LAT. 36.295921° N (NAD83)
LONG. 107.679230° W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○
1216' FSL 330' FEL
SEC. 21, T24N, R8W
LAT. 36.295921° N (NAD83)
LONG. 107.679230° W (NAD83)



DETAIL

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 - Plan Description

Effective May 25, 2021

I. Operator: DJR Operating, LLC **OGRID:** 371838 **Date:** 2/14/2025

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

If Other, please describe:

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Crow Canyon Unit 130H	TBD	L-16-24N-8W	2413 FSL x 51 FWL	561	1273	196
Crow Canyon Unit 131H	TBD	L-16-24N-8W	2416 FSL x 110 FWL	850	1929	298
Crow Canyon Unit 134H	TBD	L-16-24N-8W	2415 FSL x 91 FWL	489	1109	171
Crow Canyon Unit 135H	TBD	L-16-24N-8W	2417 FSL x 130 FWL	302	685	106
Crow Canyon Unit 136H	TBD	L-16-24N-8W	2412 FSL x 31 FWL	651	1476	228
Crow Canyon Unit 137H	TBD	L-16-24N-8W	2414 FSL x 70 FWL	549	1244	192
				3-year Decline	3-year Decline	3-year Decline
Crow Canyon Unit 130H	TBD	L-16-24N-8W	2413 FSL x 51 FWL	127	507	44
Crow Canyon Unit 131H	TBD	L-16-24N-8W	2416 FSL x 110 FWL	192	768	67
Crow Canyon Unit 134H	TBD	L-16-24N-8W	2415 FSL x 91 FWL	110	442	39
Crow Canyon Unit 135H	TBD	L-16-24N-8W	2417 FSL x 130 FWL	68	273	24
Crow Canyon Unit 136H	TBD	L-16-24N-8W	2412 FSL x 31 FWL	147	588	51
Crow Canyon Unit 137H	TBD	L-16-24N-8W	2414 FSL x 70 FWL	124	496	43

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
Crow Canyon Unit 130H	TBD	7/18/2026	7/26/2026	8/2/2026	8/9/2026	8/11/2026
Crow Canyon Unit 131H	TBD	7/19/2026	7/27/2026	8/3/2026	8/10/2026	8/12/2026
Crow Canyon Unit 134H	TBD	7/20/2026	7/28/2026	8/4/2026	8/11/2026	8/13/2026
Crow Canyon Unit 135H	TBD	7/21/2026	7/29/2026	8/5/2026	8/12/2026	8/14/2026
Crow Canyon Unit 136H	TBD	7/22/2026	7/30/2026	8/6/2026	8/13/2026	8/15/2026
Crow Canyon Unit 137H	TBD	7/23/2026	7/31/2026	8/7/2026	8/14/2026	8/16/2026

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications
Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 2/14/2025
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

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
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

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:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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

19.15.27.8 B. Venting and flaring during drilling operations

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

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

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

19.15.27.8 E. Performance standards

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



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

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

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

BEST MANAGEMENT PRACTICES

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

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

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

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

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

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

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

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

Rev 0



DRILLING PLAN

Crow Canyon Unit 131H

San Juan County, New Mexico

Surface Location

110-ft FWL & 2416-ft FSL
 Sec 16 T24N R08W
 Graded Elevation 6794' MSL
 RKB Elevation 6808' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.3135760° N
 Longitude 107.6956540° W

Kick Off Point for Horizontal Build Curve

4968-ft MD
 4842-ft TVD

Local Coordinates (from SHL)

374-ft South
 961-ft West

Heel Location (Pay zone entry)

508-ft FEL & 1465-ft FSL
 Sec 17 T24N R08W

Heel Geographical Coordinates (NAD-83)

Latitude 36.31099415° N
 Longitude 107.69777513° W

Bottom Hole Location (TD)

330-ft FEL & 1216-ft FSL
 Sec 21 T24N R08W

BHL Geographical Coordinates (NAD-83)

Latitude 36.295921° N
 Longitude 107.6792300° W

Well objectives

This well is planned as a 7740-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 144°F. Bottom hole pressure in the Gallup C is forecast to be 1985 psi.

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

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	1156	1149	Sd	W	8.3	8.4 – 8.8
Kirtland	1289	1278	Sh	-	8.3	8.4 – 8.8
Fruitland	1691	1667	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1917	1886	Sd	W	8.3	9.0 - 9.5
Lewis	1994	1961	Sh	-		9.0 - 9.5
Chacra	2765	2708	Sd	-	8.3	9.0 - 9.5
Menefee	3452	3373	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4359	4252	Sd	-	8.3	9.0 - 9.5
Mancos	4576	4462	Sh	-		9.0 - 9.5
Mancos Silt	4953	4827	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5422	5260	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5473	5300	Sd	O/G	6.6	8.8 -9.0
Gallup C	5646	5413	Sd	O/G	6.6	8.8 -9.0
Target	6036	5523	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	5974	surf	5520	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5688	13780	5435	5468	5688

Note: all casing will be new

Rev 0

**Casing Design Load Cases**

		Casing String		
Description		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

		Design Factors			
Casing string	Casing OD	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 Design9-5/8" Surface Casing

	<u>Lead</u>
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

	<u>Lead</u>	<u>Tail</u>
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	4468-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	435	241
Volume (bbls)	181	64
Volume (cu.ft.)	1018	360
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5688-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	680
Volume (bbls)	189
Volume (cu.ft)	1063
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 – 5974	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5974 – 13780	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

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

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

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

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

Cuttings and drilling fluids management

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

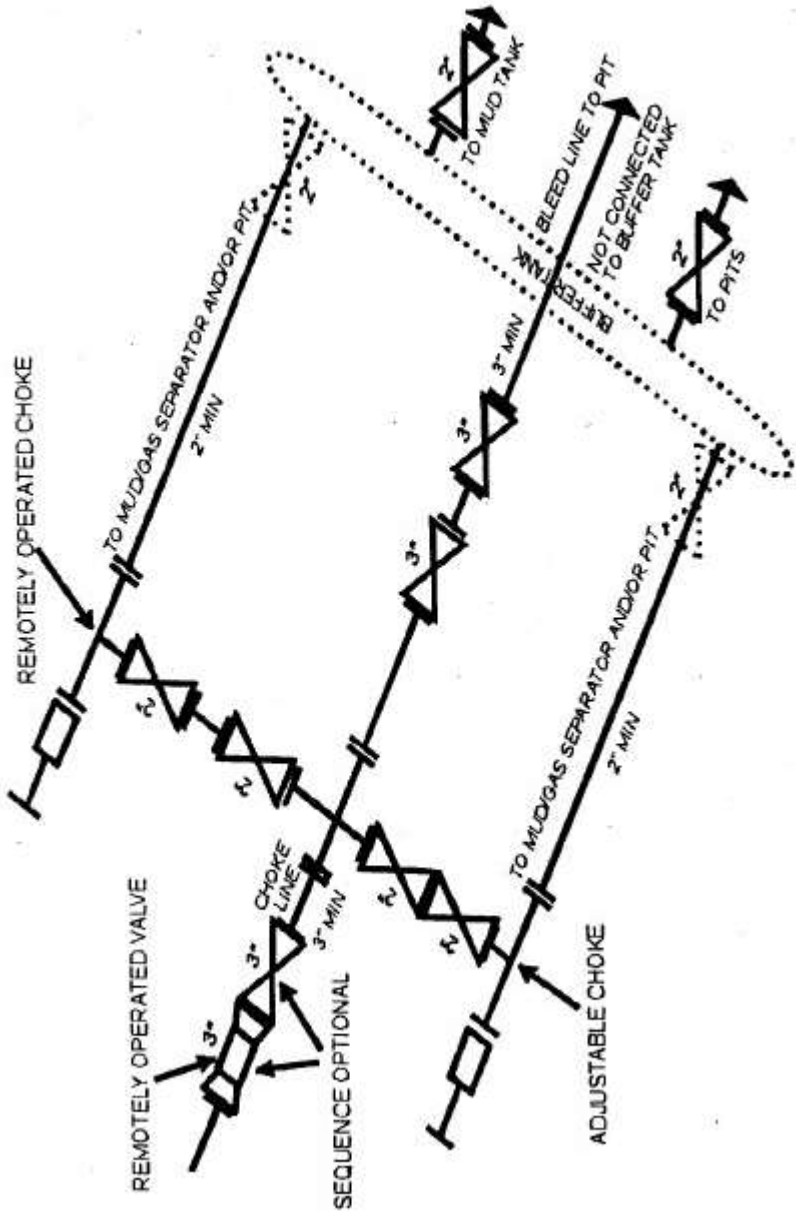
Completion

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



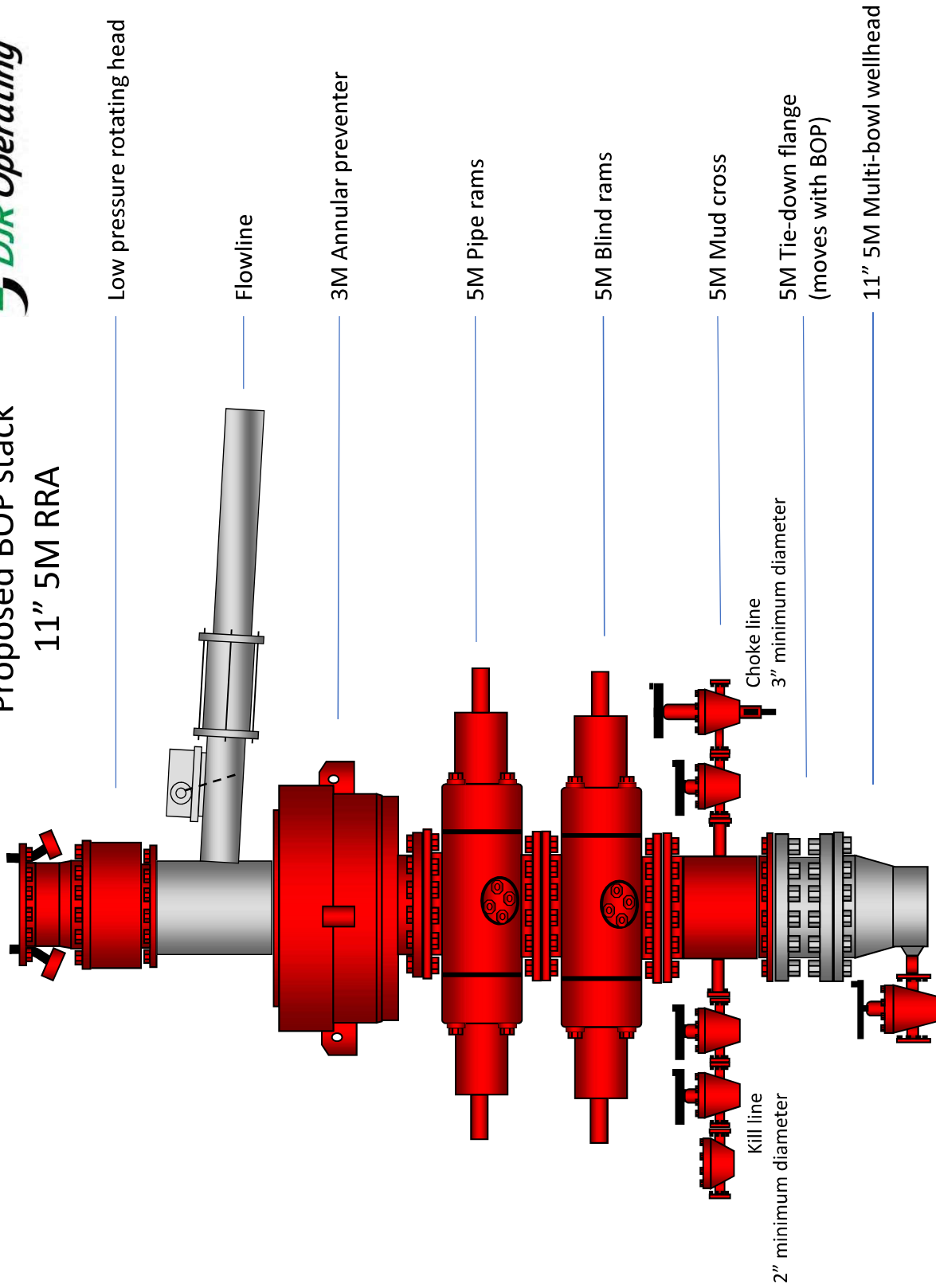
Choke Manifold

Actual system to conform with Onshore Order 2





Proposed BOP stack
11" 5M RRA





Company: DJR Operating
Project: Crow Canyon Unit
Site: L16 2408 Pad
Well: # 131H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 131H

+N/-S		+E/-W	North	East	Long
0	0	0	1933470.60	2763653.66	-107.69565400

GL 6794' & RKB 14' @ 6808ft

Latitude

Longitude

5

PROJECT DETAILS: Crow Canyon Unit

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

Plan: APD (# 131H/Original Drilling)

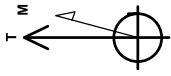
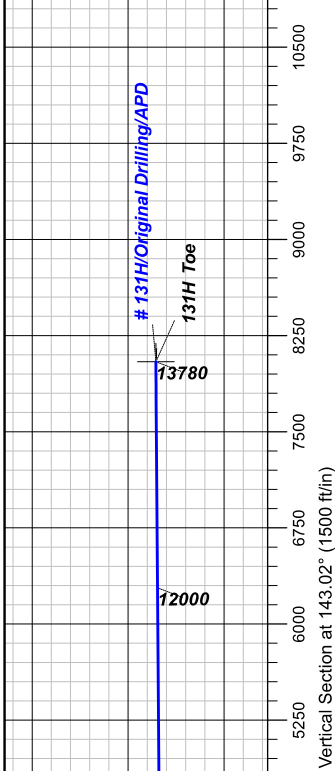
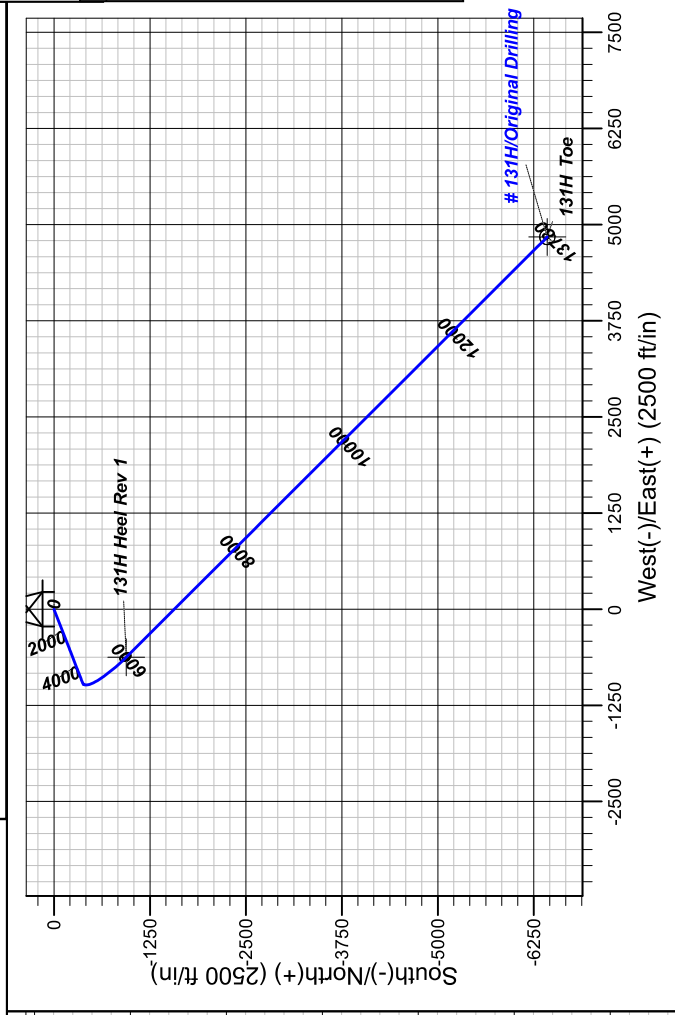
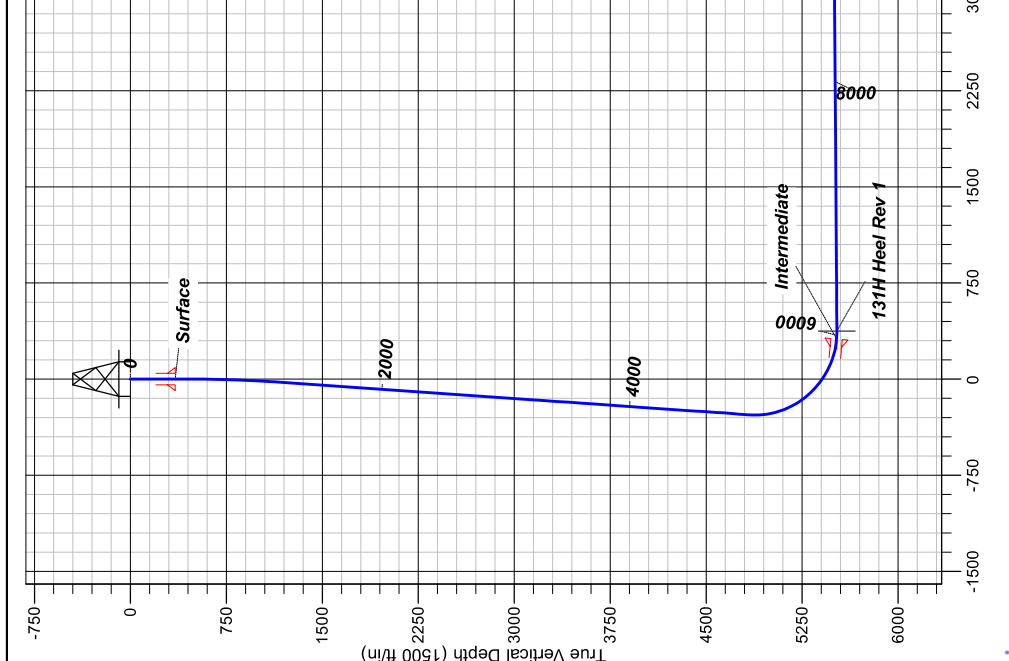
Created By: Janie Collins Date: 9:45, June 24 2021

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude
131H Heel Rev 1	5523	-940	-625	1932529.87	2763030.06	36.31099415	-107.69777513
131H Toe	5468	-6426	4840	1927051.02	2768502.60	36.29592100	-107.67923000

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
450	0.00	0.00	450	0	0	0.00	0.00	0	
1168	14.35	248.72	1160	-32	-83	2.00	248.72	-24	
4968	14.35	248.72	4842	-374	-961	0.00	0.00	-279	
6036	90.41	135.11	5523	-940	-625	9.00	-112.85	375	131H Heel Rev 1
13780	90.41	135.11	5468	-6426	4840	0.00	0.00	8045	131H Toe



Azimuths to True North
Magnetic North: 8.2°

Magnetic Field
Strength: 49374.911
Dip Angle: 62.57°
Date: 6/11/2021
Model: IGRF2015

CASING DETAILS

TVD	MD	Name
350	350	Surface
5520	5974	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
1149	1156	Ojo Alamo
1278	1289	Kirtland
1667	1691	Fruitland
1886	1917	Pictured Cliffs
1961	1994	Lewis
2708	2765	Chacra
3373	3452	Menerree
4252	4359	Point Lookout
4462	4576	Mancos Silt
4827	4953	Mancos Silt
5260	5422	Gallup A
5300	5473	Gallup B
5413	5646	Gallup C



DJR Operating

Crow Canyon Unit

L16 2408 Pad

131H - Slot 5

Original Drilling

Plan: APD

Standard Planning Report

24 June, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 131H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Project	Crow Canyon Unit		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	L16 2408 Pad				
Site Position:		Northing:	1,933,466.49 usft	Latitude:	36.3135649
From:	Lat/Long	Easting:	2,763,573.83 usft	Longitude:	-107.6959250
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	0.08

Well	# 131H - Slot 5					
Well Position	+N/-S	4 ft	Northing:	1,933,470.61 usft	Latitude:	36.3135759
	+E/-W	80 ft	Easting:	2,763,653.66 usft	Longitude:	-107.6956540
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	6794

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/11/2021	8.78	62.94	49,374.60210345

Design	APD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0	0	0	143.02

Plan Survey Tool Program	Date	6/23/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	13,780	APD (Original Drilling)	MWD+IGRF
				OWSG MWD + IGRF or WMM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
450	0.00	0.00	450	0	0	0.00	0.00	0.00	0.00	
1168	14.35	248.72	1160	-32	-83	2.00	2.00	0.00	248.72	
4968	14.35	248.72	4842	-374	-961	0.00	0.00	0.00	0.00	
6036	90.41	135.11	5523	-940	-625	9.00	7.12	-10.64	-112.85	131H Heel Rev 1
13,780	90.41	135.11	5468	-6426	4840	0.00	0.00	0.00	0.00	131H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 131H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
450	0.00	0.00	450	0	0	0	0.00	0.00	0.00
500	1.00	248.72	500	0	0	0	2.00	2.00	0.00
600	3.00	248.72	600	-1	-4	-1	2.00	2.00	0.00
700	5.00	248.72	700	-4	-10	-3	2.00	2.00	0.00
800	7.00	248.72	799	-8	-20	-6	2.00	2.00	0.00
900	9.00	248.72	898	-13	-33	-10	2.00	2.00	0.00
1000	11.00	248.72	997	-19	-49	-14	2.00	2.00	0.00
1100	13.00	248.72	1094	-27	-68	-20	2.00	2.00	0.00
1168	14.35	248.72	1160	-32	-83	-24	2.00	2.00	0.00
1200	14.35	248.72	1192	-35	-91	-26	0.00	0.00	0.00
1300	14.35	248.72	1288	-44	-114	-33	0.00	0.00	0.00
1400	14.35	248.72	1385	-53	-137	-40	0.00	0.00	0.00
1500	14.35	248.72	1482	-62	-160	-46	0.00	0.00	0.00
1600	14.35	248.72	1579	-71	-183	-53	0.00	0.00	0.00
1700	14.35	248.72	1676	-80	-206	-60	0.00	0.00	0.00
1800	14.35	248.72	1773	-89	-229	-67	0.00	0.00	0.00
1900	14.35	248.72	1870	-98	-252	-73	0.00	0.00	0.00
2000	14.35	248.72	1967	-107	-276	-80	0.00	0.00	0.00
2100	14.35	248.72	2063	-116	-299	-87	0.00	0.00	0.00
2200	14.35	248.72	2160	-125	-322	-93	0.00	0.00	0.00
2300	14.35	248.72	2257	-134	-345	-100	0.00	0.00	0.00
2400	14.35	248.72	2354	-143	-368	-107	0.00	0.00	0.00
2500	14.35	248.72	2451	-152	-391	-114	0.00	0.00	0.00
2600	14.35	248.72	2548	-161	-414	-120	0.00	0.00	0.00
2700	14.35	248.72	2645	-170	-437	-127	0.00	0.00	0.00
2800	14.35	248.72	2742	-179	-460	-134	0.00	0.00	0.00
2900	14.35	248.72	2838	-188	-483	-140	0.00	0.00	0.00
3000	14.35	248.72	2935	-197	-507	-147	0.00	0.00	0.00
3100	14.35	248.72	3032	-206	-530	-154	0.00	0.00	0.00
3200	14.35	248.72	3129	-215	-553	-161	0.00	0.00	0.00
3300	14.35	248.72	3226	-224	-576	-167	0.00	0.00	0.00
3400	14.35	248.72	3323	-233	-599	-174	0.00	0.00	0.00
3500	14.35	248.72	3420	-242	-622	-181	0.00	0.00	0.00
3600	14.35	248.72	3517	-251	-645	-187	0.00	0.00	0.00
3700	14.35	248.72	3613	-260	-668	-194	0.00	0.00	0.00
3800	14.35	248.72	3710	-269	-691	-201	0.00	0.00	0.00
3900	14.35	248.72	3807	-278	-714	-207	0.00	0.00	0.00
4000	14.35	248.72	3904	-287	-738	-214	0.00	0.00	0.00
4100	14.35	248.72	4001	-296	-761	-221	0.00	0.00	0.00
4200	14.35	248.72	4098	-305	-784	-228	0.00	0.00	0.00
4300	14.35	248.72	4195	-314	-807	-234	0.00	0.00	0.00
4400	14.35	248.72	4292	-323	-830	-241	0.00	0.00	0.00
4500	14.35	248.72	4389	-332	-853	-248	0.00	0.00	0.00
4600	14.35	248.72	4485	-341	-876	-254	0.00	0.00	0.00
4700	14.35	248.72	4582	-350	-899	-261	0.00	0.00	0.00
4800	14.35	248.72	4679	-359	-922	-268	0.00	0.00	0.00
4900	14.35	248.72	4776	-368	-945	-275	0.00	0.00	0.00
4968	14.35	248.72	4842	-374	-961	-279	0.00	0.00	0.00
5000	13.49	237.23	4873	-378	-968	-280	9.00	-2.69	-35.78



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 131H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5100	14.57	199.72	4970	-396	-982	-274	9.00	1.08	-37.51
5200	20.04	175.24	5066	-425	-985	-253	9.00	5.47	-24.49
5300	27.39	162.14	5157	-464	-976	-217	9.00	7.35	-13.10
5400	35.46	154.44	5243	-512	-957	-166	9.00	8.07	-7.69
5500	43.86	149.34	5320	-568	-927	-103	9.00	8.40	-5.10
5600	52.42	145.61	5386	-631	-886	-29	9.00	8.56	-3.73
5700	61.08	142.66	5441	-699	-837	54	9.00	8.66	-2.95
5800	69.79	140.17	5483	-770	-781	145	9.00	8.71	-2.49
5900	78.53	137.94	5510	-842	-718	241	9.00	8.74	-2.23
6000	87.29	135.85	5522	-914	-650	340	9.00	8.76	-2.09
6036	90.41	135.11	5523	-940	-625	375	9.00	8.76	-2.06
6100	90.41	135.11	5522	-985	-579	439	0.00	0.00	0.00
6200	90.41	135.11	5522	-1056	-509	538	0.00	0.00	0.00
6300	90.41	135.11	5521	-1127	-438	637	0.00	0.00	0.00
6400	90.41	135.11	5520	-1198	-368	736	0.00	0.00	0.00
6500	90.41	135.11	5520	-1269	-297	835	0.00	0.00	0.00
6600	90.41	135.11	5519	-1340	-227	934	0.00	0.00	0.00
6700	90.41	135.11	5518	-1411	-156	1033	0.00	0.00	0.00
6800	90.41	135.11	5517	-1481	-86	1132	0.00	0.00	0.00
6900	90.41	135.11	5517	-1552	-15	1231	0.00	0.00	0.00
7000	90.41	135.11	5516	-1623	56	1330	0.00	0.00	0.00
7100	90.41	135.11	5515	-1694	126	1429	0.00	0.00	0.00
7200	90.41	135.11	5515	-1765	197	1528	0.00	0.00	0.00
7300	90.41	135.11	5514	-1836	267	1627	0.00	0.00	0.00
7400	90.41	135.11	5513	-1907	338	1726	0.00	0.00	0.00
7500	90.41	135.11	5512	-1977	408	1825	0.00	0.00	0.00
7600	90.41	135.11	5512	-2048	479	1924	0.00	0.00	0.00
7700	90.41	135.11	5511	-2119	550	2023	0.00	0.00	0.00
7800	90.41	135.11	5510	-2190	620	2122	0.00	0.00	0.00
7900	90.41	135.11	5510	-2261	691	2221	0.00	0.00	0.00
8000	90.41	135.11	5509	-2332	761	2321	0.00	0.00	0.00
8100	90.41	135.11	5508	-2402	832	2420	0.00	0.00	0.00
8200	90.41	135.11	5508	-2473	902	2519	0.00	0.00	0.00
8300	90.41	135.11	5507	-2544	973	2618	0.00	0.00	0.00
8400	90.41	135.11	5506	-2615	1044	2717	0.00	0.00	0.00
8500	90.41	135.11	5505	-2686	1114	2816	0.00	0.00	0.00
8600	90.41	135.11	5505	-2757	1185	2915	0.00	0.00	0.00
8700	90.41	135.11	5504	-2828	1255	3014	0.00	0.00	0.00
8800	90.41	135.11	5503	-2898	1326	3113	0.00	0.00	0.00
8900	90.41	135.11	5503	-2969	1396	3212	0.00	0.00	0.00
9000	90.41	135.11	5502	-3040	1467	3311	0.00	0.00	0.00
9100	90.41	135.11	5501	-3111	1538	3410	0.00	0.00	0.00
9200	90.41	135.11	5500	-3182	1608	3509	0.00	0.00	0.00
9300	90.41	135.11	5500	-3253	1679	3608	0.00	0.00	0.00
9400	90.41	135.11	5499	-3324	1749	3707	0.00	0.00	0.00
9500	90.41	135.11	5498	-3394	1820	3806	0.00	0.00	0.00
9600	90.41	135.11	5498	-3465	1890	3905	0.00	0.00	0.00
9700	90.41	135.11	5497	-3536	1961	4004	0.00	0.00	0.00
9800	90.41	135.11	5496	-3607	2032	4103	0.00	0.00	0.00
9900	90.41	135.11	5495	-3678	2102	4202	0.00	0.00	0.00
10,000	90.41	135.11	5495	-3749	2173	4301	0.00	0.00	0.00
10,100	90.41	135.11	5494	-3819	2243	4401	0.00	0.00	0.00
10,200	90.41	135.11	5493	-3890	2314	4500	0.00	0.00	0.00
10,300	90.41	135.11	5493	-3961	2384	4599	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 131H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	90.41	135.11	5492	-4032	2455	4698	0.00	0.00	0.00	
10,500	90.41	135.11	5491	-4103	2525	4797	0.00	0.00	0.00	
10,600	90.41	135.11	5491	-4174	2596	4896	0.00	0.00	0.00	
10,700	90.41	135.11	5490	-4245	2667	4995	0.00	0.00	0.00	
10,800	90.41	135.11	5489	-4315	2737	5094	0.00	0.00	0.00	
10,900	90.41	135.11	5488	-4386	2808	5193	0.00	0.00	0.00	
11,000	90.41	135.11	5488	-4457	2878	5292	0.00	0.00	0.00	
11,100	90.41	135.11	5487	-4528	2949	5391	0.00	0.00	0.00	
11,200	90.41	135.11	5486	-4599	3019	5490	0.00	0.00	0.00	
11,300	90.41	135.11	5486	-4670	3090	5589	0.00	0.00	0.00	
11,400	90.41	135.11	5485	-4741	3161	5688	0.00	0.00	0.00	
11,500	90.41	135.11	5484	-4811	3231	5787	0.00	0.00	0.00	
11,600	90.41	135.11	5483	-4882	3302	5886	0.00	0.00	0.00	
11,700	90.41	135.11	5483	-4953	3372	5985	0.00	0.00	0.00	
11,800	90.41	135.11	5482	-5024	3443	6084	0.00	0.00	0.00	
11,900	90.41	135.11	5481	-5095	3513	6183	0.00	0.00	0.00	
12,000	90.41	135.11	5481	-5166	3584	6282	0.00	0.00	0.00	
12,100	90.41	135.11	5480	-5236	3655	6381	0.00	0.00	0.00	
12,200	90.41	135.11	5479	-5307	3725	6481	0.00	0.00	0.00	
12,300	90.41	135.11	5478	-5378	3796	6580	0.00	0.00	0.00	
12,400	90.41	135.11	5478	-5449	3866	6679	0.00	0.00	0.00	
12,500	90.41	135.11	5477	-5520	3937	6778	0.00	0.00	0.00	
12,600	90.41	135.11	5476	-5591	4007	6877	0.00	0.00	0.00	
12,700	90.41	135.11	5476	-5662	4078	6976	0.00	0.00	0.00	
12,800	90.41	135.11	5475	-5732	4149	7075	0.00	0.00	0.00	
12,900	90.41	135.11	5474	-5803	4219	7174	0.00	0.00	0.00	
13,000	90.41	135.11	5474	-5874	4290	7273	0.00	0.00	0.00	
13,100	90.41	135.11	5473	-5945	4360	7372	0.00	0.00	0.00	
13,200	90.41	135.11	5472	-6016	4431	7471	0.00	0.00	0.00	
13,300	90.41	135.11	5471	-6087	4501	7570	0.00	0.00	0.00	
13,400	90.41	135.11	5471	-6158	4572	7669	0.00	0.00	0.00	
13,500	90.41	135.11	5470	-6228	4643	7768	0.00	0.00	0.00	
13,600	90.41	135.11	5469	-6299	4713	7867	0.00	0.00	0.00	
13,700	90.41	135.11	5469	-6370	4784	7966	0.00	0.00	0.00	
13,780	90.41	135.11	5468	-6426	4840	8045	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
131H Toe	0.00	0.00	5468	-6426	4840	1,927,051.02	2,768,502.61	36.29592100	-107.67923000	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 100)										
131H Heel Rev 1	0.00	0.00	5523	-940	-625	1,932,529.87	2,763,030.07	36.31099415	-107.69777513	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 50)										



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 131H - Slot 5
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface	9.63	12.25	
5974	5520	Intermediate	7.00	8.75	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1156	1149	Ojo Alamo		0.00	0.00	
1289	1278	Kirtland		0.00	0.00	
1691	1667	Fruitland		0.00	0.00	
1917	1886	Pictured Cliffs		0.00	0.00	
1994	1961	Lewis		0.00	0.00	
2765	2708	Chacra		0.00	0.00	
3452	3373	Menefee		0.00	0.00	
4359	4252	Point Lookout		0.00	0.00	
4576	4462	Mancos		0.00	0.00	
4953	4827	Mancos Silt		0.00	0.00	
5422	5260	Gallup A		0.00	0.00	
5473	5300	Gallup B		0.00	0.00	
5646	5413	Gallup C		0.00	0.00	



DJR Operating

Crow Canyon Unit

L16 2408 Pad

131H

Original Drilling

APD

Anticollision Report

24 June, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	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	6/24/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	13,780	APD (Original Drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
L16 2408 Pad						
# 130H - Original Drilling - APD	1444	1430	59	49	5.856	CC
# 130H - Original Drilling - APD	4968	4954	74	24	1.474	Level 3, ES, SF
# 134H - Original Drilling - APD	630	629	18	14	4.533	CC, ES
# 134H - Original Drilling - APD	700	698	20	15	4.292	SF
# 135H - Original Drilling - APD	450	450	20	17	7.115	CC
# 135H - Original Drilling - APD	500	500	20	17	6.383	ES
# 135H - Original Drilling - APD	12,500	12,791	1305	958	3.755	SF
# 136H - Original Drilling - APD	1345	1331	66	56	6.724	CC
# 136H - Original Drilling - APD	1400	1386	67	56	6.388	ES
# 136H - Original Drilling - APD	13,115	12,835	668	307	1.851	SF
# 137H - Original Drilling - APD	450	450	40	37	14.137	CC
# 137H - Original Drilling - APD	700	697	40	36	8.907	ES
# 137H - Original Drilling - APD	1200	1191	54	45	6.212	SF
Mesa #4 SWD - OH - OH	9222	4650	3306	3082	14.745	CC
Mesa #4 SWD - OH - OH	9300	4650	3307	3082	14.648	ES
Mesa #4 SWD - OH - OH	9900	4650	3375	3139	14.289	SF

Offset Design: L16 2408 Pad - # 130H - Original Drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF		Offset						Rule Assigned:				Offset Well Error: 0 ft		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Semi Major Axis Offset	Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	(ft)			
0	0	0	0	0	0	-93.14	-3	-60	60					
100	100	100	100	0	0	-93.14	-3	-60	60	60	0.31	194.287		
200	200	200	200	1	1	-93.14	-3	-60	60	59	1.03	58.422		
300	300	300	300	1	1	-93.14	-3	-60	60	58	1.74	34.380		
400	400	400	400	1	1	-93.14	-3	-60	60	57	2.46	24.357		
450	450	450	450	1	1	-93.14	-3	-60	60	57	2.82	21.258		
500	500	499	499	2	2	18.17	-3	-60	60	57	3.16	18.948		
600	600	597	597	2	2	18.33	-4	-63	60	56	3.83	15.617		
700	700	695	695	2	2	18.65	-7	-70	60	55	4.52	13.248		
800	799	793	792	3	3	19.13	-10	-79	60	55	5.21	11.482		
900	898	891	889	3	3	19.78	-14	-92	60	54	5.91	10.112		
1000	997	989	986	3	3	20.58	-19	-108	60	53	6.62	9.014		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 130H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
1100	1094	1087	1082	4	4	21.55	-26	-127	60	52	7.35	8.110		
1168	1160	1154	1147	4	4	22.29	-31	-141	60	52	7.85	7.583		
1200	1192	1186	1178	4	4	22.67	-33	-149	60	51	8.11	7.338		
1300	1288	1286	1275	5	5	23.86	-41	-172	59	51	8.93	6.659		
1400	1385	1386	1372	6	5	25.04	-49	-195	59	50	9.77	6.083		
1444	1428	1430	1415	6	6	25.57	-52	-205	59	49	10.15	5.856 CC		
1500	1482	1486	1469	6	6	26.23	-57	-218	59	49	10.63	5.590		
1600	1579	1586	1566	7	7	27.41	-64	-241	59	48	11.52	5.163		
1700	1676	1686	1663	7	7	28.60	-72	-264	60	47	12.42	4.792		
1800	1773	1786	1760	8	8	29.78	-80	-287	60	46	13.35	4.466		
1900	1870	1886	1857	8	8	30.96	-88	-310	60	45	14.29	4.178		
2000	1967	1986	1954	9	9	32.13	-96	-333	60	45	15.25	3.923		
2100	2063	2086	2051	10	9	33.30	-103	-356	60	44	16.23	3.696		
2200	2160	2186	2148	10	10	34.46	-111	-379	60	43	17.23	3.492		
2300	2257	2286	2245	11	11	35.61	-119	-402	60	42	18.25	3.308		
2400	2354	2386	2342	11	11	36.76	-127	-425	61	41	19.28	3.142		
2500	2451	2486	2439	12	12	37.89	-134	-448	61	41	20.33	2.992		
2600	2548	2586	2536	13	12	39.02	-142	-471	61	40	21.40	2.856		
2700	2645	2686	2633	13	13	40.14	-150	-494	61	39	22.49	2.731		
2800	2742	2786	2730	14	14	41.24	-158	-517	62	38	23.59	2.618		
2900	2838	2886	2827	14	14	42.33	-165	-540	62	37	24.70	2.513		
3000	2935	2986	2924	15	15	43.41	-173	-563	62	37	25.83	2.418		
3100	3032	3086	3021	16	15	44.48	-181	-586	63	36	26.97	2.330		
3200	3129	3186	3118	16	16	45.54	-189	-609	63	35	28.12	2.249		
3300	3226	3286	3215	17	16	46.58	-197	-632	64	34	29.29	2.174		
3400	3323	3386	3312	17	17	47.60	-204	-655	64	34	30.47	2.105		
3500	3420	3486	3409	18	18	48.62	-212	-678	65	33	31.66	2.040		
3600	3517	3586	3506	18	18	49.61	-220	-701	65	32	32.86	1.981		
3700	3613	3686	3603	19	19	50.59	-228	-724	66	32	34.07	1.926		
3800	3710	3786	3700	20	19	51.56	-235	-747	66	31	35.28	1.874		
3900	3807	3886	3797	20	20	52.51	-243	-770	67	30	36.51	1.826		
4000	3904	3986	3894	21	21	53.44	-251	-793	67	30	37.74	1.782		
4100	4001	4086	3991	21	21	54.36	-259	-816	68	29	38.98	1.740		
4200	4098	4186	4088	22	22	55.27	-267	-839	68	28	40.22	1.701		
4300	4195	4286	4185	23	22	56.15	-274	-862	69	28	41.47	1.665		
4400	4292	4386	4282	23	23	57.02	-282	-885	70	27	42.73	1.631		
4500	4389	4486	4379	24	24	57.88	-290	-908	70	26	43.99	1.599		
4600	4485	4586	4476	24	24	58.72	-298	-931	71	26	45.25	1.569		
4700	4582	4686	4573	25	25	59.54	-305	-954	72	25	46.52	1.541		
4800	4679	4786	4670	26	25	60.35	-313	-977	72	25	47.79	1.515		
4900	4776	4886	4767	26	26	61.14	-321	-1000	73	24	49.06	1.490 Level 3		
4968	4842	4954	4833	27	26	61.67	-326	-1016	74	24	49.92	1.474 Level 3, ES, SF		
5000	4873	4986	4864	27	27	73.11	-329	-1023	75	24	50.34	1.482 Level 3		
5050	4922	5035	4912	27	27	92.69	-333	-1035	79	28	51.03	1.557		
5100	4970	5085	4960	27	27	110.89	-336	-1046	88	36	51.72	1.704		
5150	5018	5129	5003	28	27	125.15	-340	-1057	101	49	52.31	1.935		
5200	5066	5168	5041	28	28	135.51	-341	-1068	121	68	52.66	2.293		
5250	5112	5200	5071	28	28	142.87	-340	-1077	146	94	52.53	2.788		
5300	5157	5235	5103	28	28	148.29	-339	-1090	177	125	52.76	3.362		
5350	5201	5262	5128	28	28	152.24	-336	-1100	213	160	52.64	4.047		
5400	5243	5284	5149	28	28	155.20	-334	-1109	253	200	52.46	4.814		
5450	5282	5300	5163	28	29	157.40	-332	-1115	295	243	52.10	5.665		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 130H - Original Drilling - APD													Offset Site Error: 0 ft		
Survey Program: 0-MWD+IGRF		Reference		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		
5500	5320	5317	5178	28	29	159.11	-329	-1123	340	288	52.08	6.533			
5550	5354	5328	5187	29	29	160.30	-327	-1127	387	335	51.93	7.457			
5600	5386	5335	5194	29	29	160.97	-326	-1131	436	384	51.82	8.407			
5650	5415	5350	5207	29	29	161.27	-323	-1138	485	433	52.21	9.293			
5700	5441	5350	5207	29	29	158.09	-323	-1138	535	483	52.06	10.275			
5750	5463	5350	5207	29	29	-1.37	-323	-1138	585	533	52.05	11.236			
5800	5483	5350	5207	29	29	-10.92	-323	-1138	635	583	52.16	12.169			
5850	5498	5337	5195	29	29	-12.12	-326	-1132	684	632	51.90	13.180			
5900	5510	5332	5191	29	29	-12.36	-327	-1129	733	681	52.02	14.087			
5950	5518	5325	5185	29	29	-12.46	-328	-1126	781	729	52.16	14.967			
6000	5522	5317	5178	29	29	-12.54	-329	-1123	828	775	52.32	15.815			
6036	5523	5300	5163	29	29	-12.61	-332	-1115	860	808	52.14	16.499			
6100	5522	5300	5163	29	29	-12.61	-332	-1115	919	866	52.67	17.443			
6200	5522	5284	5148	29	28	-12.61	-334	-1109	1010	958	52.95	19.082			
6300	5521	5270	5136	30	28	-12.61	-335	-1103	1103	1050	53.19	20.740			
6400	5520	5250	5117	31	28	-12.62	-337	-1095	1197	1143	53.25	22.474			
6500	5520	5250	5117	33	28	-12.62	-337	-1095	1291	1237	53.61	24.079			
6600	5519	5250	5117	34	28	-12.62	-337	-1095	1386	1332	53.89	25.713			
6700	5518	5226	5095	36	28	-12.62	-339	-1086	1481	1427	53.79	27.527			
6800	5517	5200	5071	38	28	-12.62	-340	-1077	1577	1523	53.65	29.387			
6900	5517	5200	5071	40	28	-12.62	-340	-1077	1672	1619	53.84	31.060			
7000	5516	5200	5071	41	28	-12.62	-340	-1077	1769	1715	54.00	32.749			
7100	5515	5200	5071	44	28	-12.62	-340	-1077	1865	1811	54.14	34.452			
7200	5515	5200	5071	46	28	-12.62	-340	-1077	1962	1908	54.25	36.166			
7300	5514	5200	5071	48	28	-12.62	-340	-1077	2059	2005	54.35	37.889			
7400	5513	5178	5050	50	28	-12.62	-341	-1071	2156	2102	54.23	39.764			
7500	5512	5173	5045	52	28	-12.63	-341	-1069	2254	2200	54.27	41.534			
7600	5512	5150	5023	54	28	-12.63	-340	-1062	2352	2298	54.13	43.451			
7700	5511	5150	5023	57	28	-12.63	-340	-1062	2449	2395	54.20	45.194			
7800	5510	5150	5023	59	28	-12.63	-340	-1062	2547	2493	54.27	46.941			
7900	5510	5150	5023	61	28	-12.63	-340	-1062	2645	2591	54.33	48.693			
8000	5509	5150	5023	63	28	-12.63	-340	-1062	2743	2689	54.38	50.449			
8100	5508	5150	5023	66	28	-12.63	-340	-1062	2842	2787	54.43	52.208			
8200	5508	5150	5023	68	28	-12.63	-340	-1062	2940	2886	54.48	53.969			
8300	5507	5150	5023	70	28	-12.63	-340	-1062	3039	2984	54.52	55.732			
8400	5506	5150	5023	73	28	-12.63	-340	-1062	3137	3083	54.56	57.497			
8500	5505	5150	5023	75	28	-12.63	-340	-1062	3236	3181	54.60	59.263			
8600	5505	5150	5023	77	28	-12.63	-340	-1062	3335	3280	54.64	61.030			
8700	5504	5150	5023	80	28	-12.63	-340	-1062	3433	3379	54.68	62.797			
8800	5503	5130	5003	82	27	-12.63	-340	-1057	3532	3477	54.57	64.727			
8900	5503	5127	5001	85	27	-12.63	-340	-1056	3631	3576	54.59	66.515			
9000	5502	5125	4999	87	27	-12.63	-339	-1056	3730	3675	54.61	68.302			
9100	5501	5105	4980	89	27	-12.63	-338	-1051	3829	3774	54.50	70.252			
9200	5500	5105	4980	92	27	-12.63	-338	-1051	3928	3873	54.54	72.021			
9300	5500	5105	4980	94	27	-12.63	-338	-1051	4027	3972	54.57	73.789			
9400	5499	5105	4980	97	27	-12.63	-338	-1051	4126	4071	54.61	75.557			
9500	5498	5105	4980	99	27	-12.63	-338	-1051	4225	4170	54.64	77.324			
9600	5498	5105	4980	101	27	-12.63	-338	-1051	4324	4270	54.67	79.090			
9700	5497	5105	4980	104	27	-12.63	-338	-1051	4423	4369	54.71	80.855			
9800	5496	5105	4980	106	27	-12.63	-338	-1051	4523	4468	54.74	82.618			
9900	5495	5105	4980	109	27	-12.63	-338	-1051	4622	4567	54.77	84.380			
10,000	5495	5105	4980	111	27	-12.63	-338	-1051	4721	4666	54.81	86.140			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 130H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
10,100	5494	5105	4980	114	27	-12.63	-338	-1051	4820	4766	54.84	87.898		
10,200	5493	5105	4980	116	27	-12.63	-338	-1051	4920	4865	54.87	89.657		
10,300	5493	5094	4969	119	27	-12.63	-337	-1048	5019	4964	54.84	91.530		
10,400	5492	5082	4957	121	27	-12.63	-336	-1046	5118	5064	54.80	93.403		
10,500	5491	5071	4946	123	27	-12.63	-335	-1043	5218	5163	54.76	95.278		
10,600	5491	5059	4935	126	27	-12.63	-335	-1040	5317	5262	54.73	97.153		
10,700	5490	5048	4924	128	27	-12.63	-334	-1038	5416	5362	54.70	99.029		
10,800	5489	5037	4913	131	27	-12.64	-333	-1035	5516	5461	54.66	100.904		
10,900	5488	5025	4902	133	27	-12.64	-332	-1032	5615	5561	54.63	102.781		
11,000	5488	5014	4891	136	27	-12.64	-331	-1030	5714	5660	54.60	104.657		
11,100	5487	5002	4880	138	27	-12.64	-330	-1027	5814	5759	54.57	106.534		
11,200	5486	4991	4869	141	27	-12.64	-329	-1025	5913	5859	54.54	108.410		
11,300	5486	4979	4858	143	27	-12.64	-328	-1022	6013	5958	54.52	110.287		
11,400	5485	4968	4847	146	26	-12.64	-327	-1019	6112	6057	54.49	112.163		
11,500	5484	4957	4836	148	26	-12.64	-327	-1017	6211	6157	54.47	114.039		
11,600	5483	4945	4825	150	26	-12.64	-326	-1014	6311	6256	54.44	115.915		
11,700	5483	4934	4813	153	26	-12.64	-325	-1011	6410	6355	54.42	117.790		
11,800	5482	4922	4802	155	26	-12.64	-324	-1009	6509	6455	54.40	119.665		
11,900	5481	4911	4791	158	26	-12.64	-323	-1006	6609	6554	54.37	121.539		
12,000	5481	4900	4780	160	26	-12.64	-322	-1004	6708	6654	54.35	123.412		
12,100	5480	4888	4769	163	26	-12.64	-321	-1001	6807	6753	54.33	125.285		
12,200	5479	4877	4758	165	26	-12.64	-320	-998	6907	6852	54.32	127.156		
12,300	5478	4865	4747	168	26	-12.64	-319	-996	7006	6952	54.30	129.026		
12,400	5478	4854	4736	170	26	-12.64	-319	-993	7105	7051	54.28	130.896		
12,500	5477	4842	4725	173	26	-12.64	-318	-990	7205	7150	54.27	132.764		
12,600	5476	4831	4714	175	26	-12.65	-317	-988	7304	7250	54.25	134.631		
12,700	5476	4820	4703	178	26	-12.65	-316	-985	7403	7349	54.24	136.497		
12,800	5475	4808	4692	180	25	-12.65	-315	-983	7503	7448	54.23	138.361		
12,900	5474	4797	4680	183	25	-12.65	-314	-980	7602	7548	54.21	140.223		
13,000	5474	4785	4669	185	25	-12.65	-313	-977	7701	7647	54.20	142.084		
13,100	5473	4774	4658	187	25	-12.65	-312	-975	7801	7747	54.19	143.943		
13,200	5472	4762	4647	190	25	-12.65	-311	-972	7900	7846	54.18	145.801		
13,300	5471	4751	4636	192	25	-12.65	-311	-969	7999	7945	54.18	147.656		
13,400	5471	4740	4625	195	25	-12.65	-310	-967	8099	8045	54.17	149.510		
13,500	5470	4728	4614	197	25	-12.65	-309	-964	8198	8144	54.16	151.362		
13,600	5469	4717	4603	200	25	-12.65	-308	-961	8297	8243	54.16	153.211		
13,700	5469	4705	4592	202	25	-12.65	-307	-959	8397	8343	54.15	155.058		
13,780	5468	4696	4583	204	25	-12.65	-306	-957	8476	8422	54.15	156.527		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 134H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-93.17	-1	-20	20					
100	100	100	100	0	0	-93.17	-1	-20	20	19	0.31	64.126		
200	200	200	200	1	1	-93.17	-1	-20	20	19	1.03	19.283		
300	300	300	300	1	1	-93.17	-1	-20	20	18	1.74	11.347		
400	400	400	400	1	1	-93.17	-1	-20	20	17	2.46	8.039		
450	450	450	450	1	1	-93.17	-1	-20	20	17	2.82	7.016		
500	500	500	500	2	2	19.61	-1	-20	20	16	3.17	6.180		
600	600	599	599	2	2	32.35	2	-22	19	15	3.86	4.813		
630	630	629	629	2	2	38.97	4	-23	18	14	4.07	4.533 CC, ES		
700	700	698	698	2	2	58.32	8	-26	20	15	4.57	4.292 SF		
800	799	797	796	3	3	85.11	16	-31	27	22	5.29	5.084		
900	898	894	892	3	3	101.59	28	-39	41	35	6.04	6.815		
1000	997	990	987	3	3	110.44	41	-48	61	54	6.82	8.958		
1100	1094	1085	1080	4	4	115.38	57	-59	86	78	7.63	11.240		
1168	1160	1149	1143	4	4	117.69	69	-67	105	96	8.21	12.745		
1200	1192	1180	1173	4	4	118.82	75	-70	114	106	8.50	13.412		
1300	1288	1276	1266	5	5	121.38	93	-82	143	134	9.40	15.214		
1400	1385	1371	1359	6	5	123.08	111	-94	172	162	10.31	16.695		
1500	1482	1467	1452	6	6	124.29	129	-106	201	190	11.23	17.924		
1600	1579	1563	1545	7	6	125.19	147	-118	231	218	12.17	18.956		
1700	1676	1658	1638	7	7	125.89	165	-130	260	247	13.11	19.832		
1800	1773	1754	1731	8	7	126.45	183	-142	289	275	14.05	20.583		
1900	1870	1849	1824	8	8	126.90	201	-154	319	304	15.01	21.233		
2000	1967	1945	1917	9	8	127.28	219	-166	348	332	15.97	21.800		
2100	2063	2040	2010	10	9	127.60	237	-178	377	361	16.93	22.299		
2200	2160	2136	2104	10	9	127.87	255	-190	407	389	17.89	22.741		
2300	2257	2232	2197	11	10	128.10	273	-202	436	417	18.86	23.136		
2400	2354	2327	2290	11	10	128.31	291	-214	466	446	19.83	23.489		
2500	2451	2423	2383	12	11	128.49	309	-226	495	474	20.80	23.807		
2600	2548	2518	2476	13	12	128.65	327	-238	525	503	21.77	24.096		
2700	2645	2614	2569	13	12	128.80	345	-250	554	531	22.74	24.358		
2800	2742	2709	2662	14	13	128.93	364	-262	583	560	23.72	24.598		
2900	2838	2805	2755	14	13	129.05	382	-274	613	588	24.70	24.817		
3000	2935	2900	2848	15	14	129.15	400	-286	642	617	25.67	25.019		
3100	3032	2996	2941	16	14	129.25	418	-298	672	645	26.65	25.206		
3200	3129	3092	3034	16	15	129.34	436	-310	701	674	27.63	25.378		
3300	3226	3187	3127	17	15	129.42	454	-322	731	702	28.61	25.538		
3400	3323	3283	3220	17	16	129.49	472	-334	760	731	29.59	25.687		
3500	3420	3378	3314	18	16	129.56	490	-346	790	759	30.57	25.826		
3600	3517	3474	3407	18	17	129.63	508	-358	819	787	31.55	25.956		
3700	3613	3569	3500	19	17	129.69	526	-370	848	816	32.54	26.077		
3800	3710	3665	3593	20	18	129.75	544	-382	878	844	33.52	26.191		
3900	3807	3761	3686	20	18	129.80	562	-393	907	873	34.50	26.299		
4000	3904	3856	3779	21	19	129.85	580	-405	937	901	35.49	26.400		
4100	4001	3952	3872	21	19	129.89	598	-417	966	930	36.47	26.495		
4200	4098	4047	3965	22	20	129.94	616	-429	996	958	37.46	26.585		
4300	4195	4143	4058	23	20	129.98	634	-441	1025	987	38.44	26.670		
4400	4292	4238	4151	23	21	130.02	652	-453	1055	1015	39.43	26.751		
4500	4389	4334	4244	24	22	130.05	670	-465	1084	1044	40.41	26.828		
4600	4485	4429	4337	24	22	130.09	688	-477	1114	1072	41.40	26.901		
4700	4582	4525	4431	25	23	130.12	706	-489	1143	1101	42.38	26.970		
4800	4679	4621	4524	26	23	130.15	724	-501	1172	1129	43.37	27.036		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 134H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4900	4776	4716	4617	26	24	130.18	742	-513	1202	1158	44.35	27.099	
4968	4842	4781	4680	27	24	130.20	754	-521	1222	1177	45.02	27.140	
5000	4873	4812	4710	27	24	142.15	760	-525	1232	1186	45.33	27.171	
5050	4922	4859	4755	27	24	162.37	769	-531	1248	1203	45.78	27.270	
5100	4970	4905	4800	27	25	-178.87	777	-537	1267	1220	46.18	27.426	
5150	5018	4949	4844	28	25	-163.96	786	-542	1286	1240	46.54	27.640	
5200	5066	4993	4886	28	25	-152.82	794	-548	1307	1261	46.85	27.907	
5250	5112	5034	4926	28	25	-144.45	802	-553	1330	1283	47.12	28.228	
5300	5157	5073	4965	28	26	-137.91	809	-558	1354	1307	47.35	28.600	
5350	5201	5110	5001	28	26	-132.55	816	-562	1380	1332	47.53	29.023	
5400	5243	5145	5034	28	26	-127.93	823	-567	1406	1359	47.68	29.495	
5450	5282	5176	5064	28	26	-123.73	829	-571	1434	1387	47.77	30.022	
5500	5320	5189	5077	28	26	-119.25	831	-572	1464	1416	47.69	30.690	
5550	5354	5200	5088	29	26	-114.79	833	-574	1495	1447	47.58	31.412	
5600	5386	5200	5088	29	26	-109.91	833	-574	1527	1479	47.35	32.243	
5650	5415	5216	5103	29	26	-105.73	837	-577	1560	1512	47.31	32.972	
5700	5441	5221	5108	29	27	-101.09	838	-577	1594	1547	47.15	33.800	
5750	5463	5224	5111	29	27	-96.39	839	-578	1628	1581	46.99	34.650	
5800	5483	5226	5113	29	27	-91.69	839	-578	1663	1616	46.83	35.513	
5850	5498	5226	5113	29	27	-87.06	839	-578	1698	1652	46.68	36.381	
5900	5510	5225	5112	29	27	-82.56	839	-578	1733	1687	46.54	37.245	
5950	5518	5222	5109	29	27	-78.28	838	-578	1768	1722	46.41	38.099	
6000	5522	5219	5106	29	27	-74.27	838	-577	1802	1756	46.29	38.935	
6036	5523	5200	5088	29	26	-70.99	833	-574	1827	1780	46.06	39.659	
6100	5522	5200	5088	29	26	-70.99	833	-574	1870	1824	46.02	40.640	
6200	5522	5200	5088	29	26	-70.99	833	-574	1940	1894	46.00	42.178	
6300	5521	5200	5088	30	26	-70.99	833	-574	2012	1966	46.01	43.737	
6400	5520	5186	5074	31	26	-70.44	831	-572	2087	2041	45.95	45.422	
6500	5520	5176	5064	33	26	-70.04	829	-571	2164	2118	45.94	47.092	
6600	5519	5167	5055	34	26	-69.69	827	-570	2242	2196	45.97	48.765	
6700	5518	5144	5033	36	26	-68.80	822	-567	2322	2276	45.93	50.552	
6800	5517	5121	5011	38	26	-67.93	818	-564	2403	2357	45.90	52.347	
6900	5517	5098	4989	40	26	-67.07	814	-561	2485	2439	45.89	54.149	
7000	5516	5075	4966	41	26	-66.21	810	-558	2568	2523	45.90	55.959	
7100	5515	5052	4944	44	26	-65.37	805	-555	2653	2607	45.91	57.776	
7200	5515	5029	4922	46	25	-64.53	801	-552	2738	2692	45.94	59.600	
7300	5514	5006	4899	48	25	-63.71	797	-549	2824	2778	45.97	61.430	
7400	5513	4983	4877	50	25	-62.89	792	-547	2910	2864	46.00	63.267	
7500	5512	4961	4855	52	25	-62.09	788	-544	2998	2952	46.04	65.111	
7600	5512	4938	4833	54	25	-61.30	784	-541	3086	3040	46.08	66.960	
7700	5511	4915	4810	57	25	-60.51	779	-538	3174	3128	46.13	68.815	
7800	5510	4892	4788	59	25	-59.74	775	-535	3263	3217	46.17	70.675	
7900	5510	4869	4766	61	25	-58.98	771	-532	3353	3306	46.22	72.541	
8000	5509	4846	4743	63	24	-58.23	766	-529	3442	3396	46.26	74.411	
8100	5508	4823	4721	66	24	-57.49	762	-527	3533	3486	46.31	76.286	
8200	5508	4800	4699	68	24	-56.76	758	-524	3623	3577	46.35	78.166	
8300	5507	4777	4676	70	24	-56.04	753	-521	3714	3668	46.40	80.049	
8400	5506	4755	4654	73	24	-55.34	749	-518	3805	3759	46.44	81.936	
8500	5505	4732	4632	75	24	-54.64	745	-515	3897	3851	46.49	83.827	
8600	5505	4709	4610	77	24	-53.95	741	-512	3989	3942	46.53	85.721	
8700	5504	4686	4587	80	24	-53.28	736	-509	4081	4034	46.58	87.618	
8800	5503	4663	4565	82	23	-52.61	732	-506	4173	4127	46.62	89.518	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 134H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8900	5503	4640	4543	85	23	-51.96	728	-504	4266	4219	46.66	91.420	
9000	5502	4617	4520	87	23	-51.32	723	-501	4359	4312	46.70	93.325	
9100	5501	4594	4498	89	23	-50.68	719	-498	4452	4405	46.75	95.231	
9200	5500	4572	4476	92	23	-50.06	715	-495	4545	4498	46.79	97.139	
9300	5500	4549	4454	94	23	-49.45	710	-492	4638	4591	46.83	99.049	
9400	5499	4526	4431	97	23	-48.85	706	-489	4732	4685	46.87	100.960	
9500	5498	4503	4409	99	22	-48.25	702	-486	4825	4778	46.91	102.872	
9600	5498	4480	4387	101	22	-47.67	697	-484	4919	4872	46.94	104.785	
9700	5497	4457	4364	104	22	-47.10	693	-481	5013	4966	46.98	106.698	
9800	5496	4434	4342	106	22	-46.53	689	-478	5107	5060	47.02	108.612	
9900	5495	4411	4320	109	22	-45.98	684	-475	5201	5154	47.06	110.526	
10,000	5495	4388	4298	111	22	-45.43	680	-472	5295	5248	47.10	112.440	
10,100	5494	4366	4275	114	22	-44.90	676	-469	5390	5343	47.13	114.353	
10,200	5493	4343	4253	116	22	-44.37	671	-466	5484	5437	47.17	116.267	
10,300	5493	4320	4231	119	21	-43.85	667	-464	5579	5532	47.21	118.180	
10,400	5492	4297	4208	121	21	-43.34	663	-461	5674	5626	47.24	120.092	
10,500	5491	4274	4186	123	21	-42.84	659	-458	5768	5721	47.28	122.003	
10,600	5491	4251	4164	126	21	-42.35	654	-455	5863	5816	47.32	123.913	
10,700	5490	4228	4141	128	21	-41.87	650	-452	5958	5911	47.35	125.821	
10,800	5489	4205	4119	131	21	-41.39	646	-449	6053	6006	47.39	127.728	
10,900	5488	4182	4097	133	21	-40.92	641	-446	6148	6101	47.43	129.634	
11,000	5488	4160	4075	136	21	-40.46	637	-443	6243	6196	47.47	131.538	
11,100	5487	4137	4052	138	20	-40.01	633	-441	6339	6291	47.50	133.439	
11,200	5486	4114	4030	141	20	-39.57	628	-438	6434	6386	47.54	135.339	
11,300	5486	4091	4008	143	20	-39.13	624	-435	6529	6482	47.58	137.237	
11,400	5485	4068	3985	146	20	-38.70	620	-432	6625	6577	47.61	139.132	
11,500	5484	4045	3963	148	20	-38.28	615	-429	6720	6673	47.65	141.024	
11,600	5483	4022	3941	150	20	-37.86	611	-426	6816	6768	47.69	142.914	
11,700	5483	3999	3919	153	20	-37.46	607	-423	6911	6864	47.73	144.801	
11,800	5482	3977	3896	155	20	-37.06	602	-421	7007	6959	47.77	146.685	
11,900	5481	3954	3874	158	19	-36.66	598	-418	7103	7055	47.81	148.566	
12,000	5481	3931	3852	160	19	-36.27	594	-415	7198	7150	47.85	150.444	
12,100	5480	3908	3829	163	19	-35.89	589	-412	7294	7246	47.89	152.318	
12,200	5479	3885	3807	165	19	-35.51	585	-409	7390	7342	47.93	154.189	
12,300	5478	3862	3785	168	19	-35.15	581	-406	7486	7438	47.97	156.057	
12,400	5478	3839	3763	170	19	-34.78	577	-403	7581	7533	48.01	157.921	
12,500	5477	3816	3740	173	19	-34.42	572	-400	7677	7629	48.05	159.781	
12,600	5476	3793	3718	175	19	-34.07	568	-398	7773	7725	48.09	161.637	
12,700	5476	3771	3696	178	18	-33.73	564	-395	7869	7821	48.13	163.489	
12,800	5475	3748	3673	180	18	-33.39	559	-392	7965	7917	48.18	165.337	
12,900	5474	3725	3651	183	18	-33.05	555	-389	8061	8013	48.22	167.181	
13,000	5474	3702	3629	185	18	-32.72	551	-386	8157	8109	48.26	169.020	
13,100	5473	3679	3607	187	18	-32.40	546	-383	8254	8205	48.31	170.855	
13,200	5472	3656	3584	190	18	-32.08	542	-380	8350	8301	48.35	172.686	
13,300	5471	3633	3562	192	18	-31.77	538	-378	8446	8397	48.40	174.512	
13,400	5471	3610	3540	195	18	-31.46	533	-375	8542	8494	48.44	176.333	
13,500	5470	3587	3517	197	17	-31.15	529	-372	8638	8590	48.49	178.150	
13,600	5469	3565	3495	200	17	-30.85	525	-369	8735	8686	48.54	179.961	
13,700	5469	3542	3473	202	17	-30.56	520	-366	8831	8782	48.58	181.768	
13,780	5468	3523	3455	204	17	-30.33	517	-364	8907	8859	48.62	183.202	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 135H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	87.92	1	20	20					
100	100	100	100	0	0	87.92	1	20	20	20	0.31	65.027		
200	200	200	200	1	1	87.92	1	20	20	19	1.03	19.554		
300	300	300	300	1	1	87.92	1	20	20	18	1.74	11.507		
400	400	400	400	1	1	87.92	1	20	20	18	2.46	8.152		
450	450	450	450	1	1	87.92	1	20	20	17	2.82	7.115 CC		
500	500	500	500	2	2	-162.26	1	20	20	17	3.17	6.383 ES		
600	600	600	600	2	2	-172.89	4	18	22	18	3.87	5.730		
700	700	700	700	2	2	171.56	10	14	28	23	4.58	6.053		
800	799	799	798	3	3	158.13	18	8	38	33	5.32	7.211		
900	898	897	896	3	3	148.97	30	1	54	48	6.07	8.905		
1000	997	994	991	3	3	143.05	43	-9	75	68	6.86	10.884		
1100	1094	1091	1085	4	4	139.40	59	-19	99	92	7.68	12.948		
1168	1160	1156	1149	4	4	138.28	70	-27	118	110	8.25	14.271		
1200	1192	1187	1180	4	4	138.08	76	-30	127	118	8.53	14.868		
1300	1288	1283	1274	5	5	137.59	92	-41	155	146	9.40	16.478		
1400	1385	1379	1368	6	5	137.26	108	-52	183	173	10.29	17.788		
1500	1482	1475	1462	6	6	137.01	124	-63	211	200	11.18	18.870		
1600	1579	1571	1556	7	6	136.82	140	-74	239	227	12.09	19.775		
1700	1676	1667	1650	7	7	136.68	156	-84	267	254	13.00	20.541		
1800	1773	1763	1744	8	7	136.56	172	-95	295	281	13.93	21.198		
1900	1870	1859	1838	8	8	136.46	188	-106	323	308	14.85	21.765		
2000	1967	1955	1932	9	8	136.37	204	-117	351	336	15.78	22.260		
2100	2063	2051	2026	10	9	136.30	220	-128	379	363	16.72	22.695		
2200	2160	2146	2120	10	9	136.24	236	-139	407	390	17.65	23.080		
2300	2257	2242	2214	11	10	136.19	252	-149	436	417	18.59	23.424		
2400	2354	2338	2308	11	10	136.14	268	-160	464	444	19.53	23.731		
2500	2451	2434	2402	12	11	136.10	285	-171	492	471	20.48	24.009		
2600	2548	2530	2496	13	11	136.06	301	-182	520	498	21.42	24.260		
2700	2645	2626	2590	13	12	136.03	317	-193	548	525	22.37	24.488		
2800	2742	2722	2684	14	12	136.00	333	-204	576	553	23.32	24.696		
2900	2838	2818	2778	14	13	135.97	349	-214	604	580	24.27	24.887		
3000	2935	2914	2872	15	13	135.94	365	-225	632	607	25.22	25.063		
3100	3032	3010	2966	16	14	135.92	381	-236	660	634	26.17	25.225		
3200	3129	3106	3060	16	14	135.90	397	-247	688	661	27.12	25.375		
3300	3226	3202	3154	17	15	135.88	413	-258	716	688	28.07	25.514		
3400	3323	3298	3248	17	15	135.86	429	-268	744	715	29.02	25.644		
3500	3420	3394	3342	18	16	135.85	445	-279	772	742	29.98	25.764		
3600	3517	3490	3436	18	16	135.83	461	-290	800	769	30.93	25.877		
3700	3613	3586	3530	19	17	135.82	477	-301	828	797	31.88	25.983		
3800	3710	3682	3624	20	17	135.80	494	-312	856	824	32.84	26.082		
3900	3807	3778	3718	20	18	135.79	510	-323	885	851	33.79	26.175		
4000	3904	3874	3812	21	18	135.78	526	-333	913	878	34.75	26.263		
4100	4001	3970	3906	21	19	135.77	542	-344	941	905	35.71	26.346		
4200	4098	4066	4000	22	19	135.76	558	-355	969	932	36.66	26.424		
4300	4195	4162	4094	23	20	135.75	574	-366	997	959	37.62	26.498		
4400	4292	4258	4188	23	20	135.74	590	-377	1025	986	38.58	26.568		
4500	4389	4354	4282	24	21	135.73	606	-388	1053	1013	39.53	26.635		
4600	4485	4450	4376	24	21	135.72	622	-398	1081	1041	40.49	26.698		
4700	4582	4546	4470	25	22	135.71	638	-409	1109	1068	41.45	26.759		
4800	4679	4642	4564	26	22	135.71	654	-420	1137	1095	42.41	26.816		
4900	4776	4738	4658	26	23	135.70	670	-431	1165	1122	43.36	26.870		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 135H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4968	4842	4803	4721	27	23	135.70	681	-438	1184	1140	44.02	26.906	
5000	4873	4834	4752	27	23	147.62	687	-442	1194	1149	44.32	26.933	
5050	4922	4899	4816	27	23	167.68	697	-449	1209	1164	44.92	26.918	
5100	4970	5030	4946	27	24	-173.70	705	-450	1224	1178	45.71	26.768	
5150	5018	5139	5053	28	24	-158.53	698	-436	1236	1190	45.96	26.891	
5200	5066	5293	5199	28	24	-146.41	665	-396	1246	1201	45.72	27.258	
5250	5112	5417	5303	28	24	-136.93	622	-347	1255	1209	45.24	27.731	
5300	5157	5529	5385	28	23	-129.22	570	-291	1261	1217	44.73	28.198	
5350	5201	5631	5447	28	23	-122.82	514	-232	1267	1223	44.35	28.568	
5400	5243	5722	5491	28	23	-117.41	459	-175	1272	1227	44.16	28.796	
5450	5282	5803	5520	28	23	-112.78	406	-121	1276	1231	44.16	28.887	
5500	5320	5876	5538	28	23	-108.76	357	-70	1279	1235	44.34	28.852	
5550	5354	5942	5547	29	24	-105.24	310	-24	1283	1238	44.64	28.737	
5600	5386	6003	5550	29	24	-102.14	267	19	1286	1241	45.03	28.561	
5650	5415	6043	5549	29	24	-99.87	239	47	1289	1244	45.44	28.374	
5700	5441	6085	5549	29	25	-97.82	209	77	1293	1247	45.89	28.178	
5750	5463	6129	5549	29	25	-96.01	178	108	1297	1250	46.44	27.923	
5800	5483	6175	5548	29	25	-94.46	146	140	1300	1253	47.07	27.618	
5850	5498	6222	5548	29	26	-93.17	112	174	1303	1255	47.81	27.253	
5900	5510	6271	5548	29	26	-92.18	78	208	1305	1257	48.67	26.822	
5950	5518	6320	5547	29	27	-91.49	43	243	1307	1257	49.63	26.337	
6000	5522	6370	5547	29	28	-91.12	8	278	1308	1257	50.71	25.795	
6036	5523	6405	5547	29	28	-91.05	-18	303	1308	1257	51.53	25.390	
6100	5522	6470	5546	29	29	-91.04	-63	348	1308	1255	53.16	24.610	
6200	5522	6570	5546	29	31	-91.04	-134	419	1308	1252	55.95	23.380	
6300	5521	6670	5545	30	32	-91.04	-205	489	1308	1249	59.04	22.156	
6400	5520	6770	5544	31	34	-91.04	-276	560	1308	1246	62.38	20.969	
6500	5520	6870	5543	33	36	-91.04	-347	630	1308	1242	65.93	19.838	
6600	5519	6970	5543	34	38	-91.04	-418	701	1308	1238	69.66	18.774	
6700	5518	7070	5542	36	40	-91.03	-489	771	1308	1234	73.54	17.782	
6800	5517	7170	5541	38	42	-91.03	-560	842	1308	1230	77.55	16.861	
6900	5517	7270	5540	40	44	-91.03	-631	912	1307	1226	81.67	16.010	
7000	5516	7370	5540	41	46	-91.03	-702	983	1307	1222	85.88	15.223	
7100	5515	7470	5539	44	48	-91.03	-772	1053	1307	1217	90.18	14.497	
7200	5515	7570	5538	46	50	-91.03	-843	1124	1307	1213	94.54	13.827	
7300	5514	7670	5537	48	53	-91.03	-914	1194	1307	1208	98.97	13.208	
7400	5513	7770	5537	50	55	-91.02	-985	1265	1307	1204	103.44	12.636	
7500	5512	7870	5536	52	57	-91.02	-1056	1335	1307	1199	107.96	12.106	
7600	5512	7970	5535	54	59	-91.02	-1127	1406	1307	1194	112.52	11.614	
7700	5511	8070	5534	57	62	-91.02	-1198	1476	1307	1190	117.12	11.158	
7800	5510	8170	5534	59	64	-91.02	-1269	1547	1307	1185	121.75	10.733	
7900	5510	8270	5533	61	66	-91.02	-1340	1617	1307	1180	126.41	10.337	
8000	5509	8370	5532	63	69	-91.01	-1411	1688	1307	1175	131.09	9.967	
8100	5508	8470	5531	66	71	-91.01	-1482	1758	1306	1171	135.79	9.621	
8200	5508	8570	5531	68	74	-91.01	-1552	1829	1306	1166	140.51	9.297	
8300	5507	8670	5530	70	76	-91.01	-1623	1899	1306	1161	145.25	8.993	
8400	5506	8770	5529	73	78	-91.01	-1694	1970	1306	1156	150.01	8.707	
8500	5505	8870	5528	75	81	-91.01	-1765	2040	1306	1151	154.78	8.438	
8600	5505	8970	5528	77	83	-91.00	-1836	2111	1306	1146	159.57	8.185	
8700	5504	9070	5527	80	85	-91.00	-1907	2181	1306	1142	164.37	7.945	
8800	5503	9170	5526	82	88	-91.00	-1978	2252	1306	1137	169.18	7.719	
8900	5503	9270	5525	85	90	-91.00	-2049	2322	1306	1132	174.00	7.505	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 135H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF											Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance			Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
9000	5502	9370	5525	87	93	-91.00	-2120	2393	1306	1127	178.83	7.302
9100	5501	9470	5524	89	95	-91.00	-2191	2463	1306	1122	183.67	7.109
9200	5500	9570	5523	92	98	-90.99	-2262	2534	1306	1117	188.51	6.926
9300	5500	9670	5522	94	100	-90.99	-2332	2604	1305	1112	193.37	6.751
9400	5499	9770	5522	97	102	-90.99	-2403	2675	1305	1107	198.23	6.585
9500	5498	9870	5521	99	105	-90.99	-2474	2745	1305	1102	203.09	6.427
9600	5498	9970	5520	101	107	-90.99	-2545	2816	1305	1097	207.97	6.276
9700	5497	10,070	5519	104	110	-90.99	-2616	2886	1305	1092	212.85	6.132
9800	5496	10,170	5519	106	112	-90.98	-2687	2957	1305	1087	217.73	5.994
9900	5495	10,270	5518	109	115	-90.98	-2758	3027	1305	1082	222.62	5.862
10,000	5495	10,370	5517	111	117	-90.98	-2829	3098	1305	1077	227.51	5.735
10,100	5494	10,470	5516	114	119	-90.98	-2900	3168	1305	1072	232.41	5.614
10,200	5493	10,570	5516	116	122	-90.98	-2971	3239	1305	1067	237.31	5.498
10,300	5493	10,670	5515	119	124	-90.98	-3042	3309	1305	1062	242.22	5.386
10,400	5492	10,770	5514	121	127	-90.97	-3112	3380	1305	1057	247.13	5.279
10,500	5491	10,870	5513	123	129	-90.97	-3183	3450	1304	1052	252.04	5.176
10,600	5491	10,970	5513	126	132	-90.97	-3254	3521	1304	1047	256.95	5.076
10,700	5490	11,070	5512	128	134	-90.97	-3325	3591	1304	1042	261.87	4.981
10,800	5489	11,170	5511	131	137	-90.97	-3396	3662	1304	1037	266.79	4.888
10,900	5488	11,270	5510	133	139	-90.97	-3467	3733	1304	1032	271.72	4.800
11,000	5488	11,370	5510	136	142	-90.96	-3538	3803	1304	1027	276.64	4.714
11,100	5487	11,470	5509	138	144	-90.96	-3609	3874	1304	1022	281.57	4.631
11,200	5486	11,570	5508	141	146	-90.96	-3680	3944	1304	1017	286.50	4.551
11,300	5486	11,670	5507	143	149	-90.96	-3751	4015	1304	1012	291.43	4.474
11,400	5485	11,770	5507	146	151	-90.96	-3822	4085	1304	1007	296.37	4.399
11,500	5484	11,870	5506	148	154	-90.96	-3892	4156	1304	1002	301.31	4.327
11,600	5483	11,970	5505	150	156	-90.95	-3963	4226	1304	997	306.24	4.256
11,700	5483	12,070	5504	153	159	-90.95	-4034	4297	1303	992	311.18	4.189
11,800	5482	12,170	5504	155	161	-90.95	-4105	4367	1303	987	316.13	4.123
11,900	5481	12,270	5503	158	164	-90.95	-4176	4438	1303	982	321.07	4.059
12,000	5481	12,370	5502	160	166	-90.95	-4247	4508	1303	977	326.01	3.997
12,100	5480	12,470	5501	163	169	-90.95	-4318	4579	1303	972	330.96	3.937
12,200	5479	12,570	5501	165	171	-90.94	-4389	4649	1303	967	335.91	3.879
12,300	5478	12,670	5500	168	174	-90.94	-4460	4720	1303	962	340.86	3.822
12,400	5478	12,770	5499	170	176	-90.94	-4531	4790	1303	957	345.81	3.767
12,423	5478	12,791	5499	171	177	-90.94	-4546	4805	1303	956	346.89	3.756
12,500	5477	12,791	5499	173	177	-90.94	-4546	4805	1305	958	347.59	3.755 SF
12,600	5476	12,791	5499	175	177	-90.94	-4546	4805	1315	968	346.73	3.792
12,700	5476	12,791	5499	178	177	-90.94	-4546	4805	1332	988	343.98	3.872
12,800	5475	12,791	5499	180	177	-90.94	-4546	4805	1356	1017	339.54	3.995
12,900	5474	12,791	5499	183	177	-90.94	-4546	4805	1388	1054	333.65	4.159
13,000	5474	12,791	5499	185	177	-90.94	-4546	4805	1425	1098	326.59	4.363
13,100	5473	12,791	5499	187	177	-90.94	-4546	4805	1468	1150	318.65	4.608
13,200	5472	12,791	5499	190	177	-90.94	-4546	4805	1517	1207	310.10	4.892
13,300	5471	12,791	5499	192	177	-90.94	-4546	4805	1571	1270	301.17	5.215
13,400	5471	12,791	5499	195	177	-90.94	-4546	4805	1629	1337	292.08	5.576
13,500	5470	12,791	5499	197	177	-90.94	-4546	4805	1691	1408	282.98	5.974
13,600	5469	12,791	5499	200	177	-90.94	-4546	4805	1756	1482	274.00	6.409
13,700	5469	12,791	5499	202	177	-90.94	-4546	4805	1825	1559	265.24	6.879
13,780	5468	12,791	5499	204	177	-90.94	-4546	4805	1881	1623	258.46	7.278



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 136H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-92.87	-4	-80	80					
100	100	100	100	0	0	-92.87	-4	-80	80	80	0.31	259.306		
200	200	200	200	1	1	-92.87	-4	-80	80	79	1.03	77.973		
300	300	300	300	1	1	-92.87	-4	-80	80	78	1.74	45.886		
400	400	400	400	1	1	-92.87	-4	-80	80	77	2.46	32.508		
450	450	450	450	1	1	-92.87	-4	-80	80	77	2.82	28.372		
500	500	499	499	2	2	18.54	-4	-80	80	77	3.16	25.290		
600	600	596	596	2	2	19.55	-4	-84	80	76	3.84	20.860		
700	700	693	693	2	2	21.56	-3	-90	80	76	4.52	17.763		
800	799	790	790	3	3	24.54	-3	-100	81	76	5.21	15.520		
900	898	890	888	3	3	28.57	-2	-112	81	75	5.93	13.658		
1000	997	989	987	3	3	33.96	-2	-125	79	72	6.68	11.774		
1100	1094	1089	1085	4	4	41.34	-1	-138	74	67	7.48	9.945		
1168	1160	1156	1152	4	4	47.91	0	-146	71	63	8.07	8.788		
1200	1192	1188	1184	4	4	51.47	0	-150	69	61	8.38	8.287		
1300	1288	1287	1282	5	5	63.26	0	-163	67	57	9.38	7.095		
1345	1332	1331	1326	5	5	68.73	1	-168	66	56	9.85	6.724 CC		
1400	1385	1386	1380	6	5	75.52	1	-175	67	56	10.44	6.388 ES		
1500	1482	1485	1478	6	5	87.20	2	-188	70	58	11.50	6.077		
1600	1579	1584	1576	7	6	97.49	2	-200	76	63	12.50	6.057		
1700	1676	1682	1675	7	6	106.10	3	-213	84	70	13.43	6.228		
1800	1773	1781	1773	8	7	113.11	4	-225	93	79	14.31	6.509		
1900	1870	1880	1871	8	7	118.78	4	-238	104	89	15.15	6.850		
2000	1967	1979	1969	9	8	123.36	5	-250	115	99	15.97	7.216		
2100	2063	2078	2067	10	8	127.10	6	-263	127	110	16.77	7.587		
2200	2160	2177	2165	10	8	130.19	6	-275	140	122	17.57	7.952		
2300	2257	2276	2263	11	9	132.76	7	-288	153	134	18.37	8.304		
2400	2354	2375	2362	11	9	134.94	8	-300	166	146	19.17	8.641		
2500	2451	2474	2460	12	10	136.80	8	-313	179	159	19.96	8.961		
2600	2548	2573	2558	13	10	138.39	9	-325	192	172	20.76	9.264		
2700	2645	2672	2656	13	11	139.78	10	-338	206	184	21.56	9.549		
2800	2742	2771	2754	14	11	141.00	10	-351	220	197	22.36	9.818		
2900	2838	2870	2852	14	11	142.08	11	-363	233	210	23.16	10.072		
3000	2935	2969	2951	15	12	143.03	12	-376	247	223	23.97	10.311		
3100	3032	3068	3049	16	12	143.89	12	-388	261	236	24.77	10.536		
3200	3129	3167	3147	16	13	144.65	13	-401	275	249	25.58	10.749		
3300	3226	3266	3245	17	13	145.35	14	-413	289	263	26.39	10.950		
3400	3323	3365	3343	17	14	145.98	14	-426	303	276	27.20	11.140		
3500	3420	3464	3441	18	14	146.55	15	-438	317	289	28.00	11.320		
3600	3517	3563	3540	18	14	147.07	16	-451	331	302	28.81	11.490		
3700	3613	3662	3638	19	15	147.56	16	-463	345	316	29.63	11.652		
3800	3710	3761	3736	20	15	148.00	17	-476	359	329	30.44	11.806		
3900	3807	3860	3834	20	16	148.41	18	-488	373	342	31.25	11.952		
4000	3904	3959	3932	21	16	148.79	18	-501	388	356	32.06	12.090		
4100	4001	4058	4030	21	17	149.15	19	-513	402	369	32.87	12.223		
4200	4098	4156	4129	22	17	149.48	20	-526	416	382	33.69	12.349		
4300	4195	4255	4227	23	17	149.78	20	-538	430	396	34.50	12.469		
4400	4292	4354	4325	23	18	150.07	21	-551	444	409	35.32	12.584		
4500	4389	4453	4423	24	18	150.34	22	-563	459	423	36.13	12.694		
4600	4485	4552	4521	24	19	150.60	22	-576	473	436	36.95	12.799		
4700	4582	4651	4619	25	19	150.84	23	-588	487	449	37.76	12.900		
4800	4679	4756	4723	26	19	151.69	20	-598	501	462	38.47	13.021		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 136H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4900	4776	4857	4824	26	20	154.25	5	-596	514	475	38.76	13.263		
4968	4842	4921	4885	27	20	156.69	-9	-588	523	485	38.77	13.503		
5000	4873	4950	4913	27	20	169.48	-17	-584	528	490	38.74	13.637		
5050	4922	4994	4954	27	20	-169.03	-31	-575	536	498	38.69	13.865		
5100	4970	5037	4992	27	20	-149.10	-47	-564	545	506	38.63	14.111		
5150	5018	5079	5029	28	20	-133.14	-64	-552	554	516	38.56	14.372		
5200	5066	5121	5064	28	20	-121.10	-82	-538	563	525	38.49	14.642		
5250	5112	5162	5096	28	20	-112.00	-101	-523	573	535	38.41	14.917		
5300	5157	5200	5125	28	20	-105.00	-120	-507	583	544	38.34	15.197		
5350	5201	5241	5155	28	20	-99.34	-142	-489	592	554	38.28	15.465		
5400	5243	5280	5181	28	20	-94.75	-164	-470	601	563	38.24	15.727		
5450	5282	5319	5205	28	20	-90.92	-187	-450	610	572	38.21	15.974		
5500	5320	5357	5227	28	20	-87.70	-210	-430	619	581	38.21	16.200		
5550	5354	5400	5250	29	20	-84.87	-238	-405	627	589	38.30	16.377		
5600	5386	5432	5265	29	20	-82.62	-259	-386	635	597	38.34	16.557		
5650	5415	5469	5281	29	20	-80.62	-284	-364	642	603	38.50	16.674		
5700	5441	5507	5295	29	20	-78.92	-309	-340	648	610	38.68	16.761		
5750	5463	5543	5307	29	20	-77.50	-334	-316	654	615	38.94	16.791		
5800	5483	5580	5317	29	20	-76.32	-360	-292	659	619	39.32	16.755		
5850	5498	5617	5324	29	21	-75.37	-386	-267	663	623	39.76	16.670		
5900	5510	5650	5329	29	21	-74.65	-409	-244	666	626	40.25	16.548		
5950	5518	5689	5333	29	21	-74.11	-437	-217	668	627	40.90	16.340		
6000	5522	5725	5335	29	22	-73.79	-463	-192	670	628	41.60	16.101		
6036	5523	5756	5335	29	22	-73.69	-485	-170	670	628	42.23	15.871		
6100	5522	5821	5334	29	23	-73.69	-531	-124	670	627	43.65	15.353		
6200	5522	5921	5333	29	25	-73.68	-602	-54	670	624	46.19	14.510		
6300	5521	6021	5333	30	26	-73.68	-673	17	670	621	49.06	13.659		
6400	5520	6121	5332	31	28	-73.67	-743	87	670	618	52.22	12.832		
6500	5520	6221	5331	33	30	-73.67	-814	158	670	614	55.62	12.047		
6600	5519	6321	5330	34	32	-73.67	-885	228	670	611	59.22	11.315		
6700	5518	6421	5330	36	34	-73.66	-956	299	670	607	62.98	10.639		
6800	5517	6521	5329	38	36	-73.66	-1027	369	670	603	66.87	10.019		
6900	5517	6621	5328	40	38	-73.65	-1098	440	670	599	70.87	9.452		
7000	5516	6721	5327	41	40	-73.65	-1169	510	670	595	74.98	8.935		
7100	5515	6821	5327	44	42	-73.65	-1240	581	670	591	79.16	8.462		
7200	5515	6921	5326	46	44	-73.64	-1311	651	670	586	83.41	8.031		
7300	5514	7021	5325	48	46	-73.64	-1381	722	670	582	87.71	7.636		
7400	5513	7121	5324	50	49	-73.63	-1452	792	670	578	92.07	7.274		
7500	5512	7221	5324	52	51	-73.63	-1523	863	670	573	96.47	6.942		
7600	5512	7321	5323	54	53	-73.62	-1594	933	670	569	100.91	6.636		
7700	5511	7421	5322	57	56	-73.62	-1665	1004	670	564	105.38	6.354		
7800	5510	7521	5322	59	58	-73.62	-1736	1075	670	560	109.88	6.094		
7900	5510	7621	5321	61	60	-73.61	-1807	1145	670	555	114.40	5.852		
8000	5509	7721	5320	63	63	-73.61	-1878	1216	669	551	118.95	5.628		
8100	5508	7821	5319	66	65	-73.60	-1949	1286	669	546	123.52	5.420		
8200	5508	7921	5319	68	67	-73.60	-2019	1357	669	541	128.10	5.226		
8300	5507	8021	5318	70	70	-73.60	-2090	1427	669	537	132.70	5.044		
8400	5506	8121	5317	73	72	-73.59	-2161	1498	669	532	137.32	4.874		
8500	5505	8221	5316	75	75	-73.59	-2232	1568	669	527	141.95	4.715		
8600	5505	8321	5316	77	77	-73.58	-2303	1639	669	523	146.59	4.566		
8700	5504	8421	5315	80	79	-73.58	-2374	1709	669	518	151.23	4.425		
8800	5503	8521	5314	82	82	-73.58	-2445	1780	669	513	155.89	4.293		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 136H - Original Drilling - APD												Offset Site Error: 0 ft		
Survey Program: 0-MWD+IGRF								Rule Assigned:				Offset Well Error: 0 ft		
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance					
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	
8900	5503	8621	5313	85	84	-73.57	-2516	1850	669	509	160.56	4.168		
9000	5502	8721	5313	87	87	-73.57	-2586	1921	669	504	165.24	4.049		
9100	5501	8821	5312	89	89	-73.56	-2657	1991	669	499	169.92	3.938		
9200	5500	8921	5311	92	92	-73.56	-2728	2062	669	494	174.61	3.832		
9300	5500	9021	5310	94	94	-73.56	-2799	2133	669	490	179.31	3.731		
9400	5499	9121	5310	97	96	-73.55	-2870	2203	669	485	184.01	3.635		
9500	5498	9221	5309	99	99	-73.55	-2941	2274	669	480	188.72	3.545		
9600	5498	9321	5308	101	101	-73.54	-3012	2344	669	475	193.43	3.458		
9700	5497	9421	5307	104	104	-73.54	-3083	2415	669	471	198.15	3.375		
9800	5496	9521	5307	106	106	-73.53	-3154	2485	669	466	202.87	3.297		
9900	5495	9621	5306	109	109	-73.53	-3224	2556	669	461	207.59	3.222		
10,000	5495	9721	5305	111	111	-73.53	-3295	2626	669	456	212.32	3.150		
10,100	5494	9821	5304	114	114	-73.52	-3366	2697	669	452	217.05	3.081		
10,200	5493	9921	5304	116	116	-73.52	-3437	2767	669	447	221.78	3.015		
10,300	5493	10,021	5303	119	118	-73.51	-3508	2838	669	442	226.52	2.952		
10,400	5492	10,121	5302	121	121	-73.51	-3579	2908	669	437	231.26	2.891		
10,500	5491	10,221	5301	123	123	-73.51	-3650	2979	669	433	236.00	2.833		
10,600	5491	10,321	5301	126	126	-73.50	-3721	3049	668	428	240.75	2.777		
10,700	5490	10,421	5300	128	128	-73.50	-3792	3120	668	423	245.50	2.723		
10,800	5489	10,521	5299	131	131	-73.49	-3862	3190	668	418	250.24	2.671		
10,900	5488	10,621	5298	133	133	-73.49	-3933	3261	668	413	255.00	2.621		
11,000	5488	10,721	5298	136	136	-73.49	-4004	3332	668	409	259.75	2.573		
11,100	5487	10,821	5297	138	138	-73.48	-4075	3402	668	404	264.50	2.527		
11,200	5486	10,921	5296	141	141	-73.48	-4146	3473	668	399	269.26	2.482		
11,300	5486	11,021	5295	143	143	-73.47	-4217	3543	668	394	274.02	2.439		
11,400	5485	11,121	5295	146	146	-73.47	-4288	3614	668	389	278.78	2.397		
11,500	5484	11,221	5294	148	148	-73.46	-4359	3684	668	385	283.54	2.356		
11,600	5483	11,321	5293	150	151	-73.46	-4429	3755	668	380	288.30	2.317		
11,700	5483	11,421	5293	153	153	-73.46	-4500	3825	668	375	293.06	2.280		
11,800	5482	11,521	5292	155	156	-73.45	-4571	3896	668	370	297.83	2.243		
11,900	5481	11,621	5291	158	158	-73.45	-4642	3966	668	365	302.59	2.208		
12,000	5481	11,721	5290	160	160	-73.44	-4713	4037	668	361	307.36	2.173		
12,100	5480	11,821	5290	163	163	-73.44	-4784	4107	668	356	312.13	2.140		
12,200	5479	11,921	5289	165	165	-73.44	-4855	4178	668	351	316.90	2.108		
12,300	5478	12,021	5288	168	168	-73.43	-4926	4248	668	346	321.67	2.076		
12,400	5478	12,121	5287	170	170	-73.43	-4997	4319	668	341	326.44	2.046		
12,500	5477	12,221	5287	173	173	-73.42	-5067	4390	668	337	331.21	2.016		
12,600	5476	12,321	5286	175	175	-73.42	-5138	4460	668	332	335.98	1.987		
12,700	5476	12,421	5285	178	178	-73.42	-5209	4531	668	327	340.75	1.959		
12,800	5475	12,521	5284	180	180	-73.41	-5280	4601	668	322	345.52	1.932		
12,900	5474	12,621	5284	183	183	-73.41	-5351	4672	668	317	350.30	1.906		
13,000	5474	12,721	5283	185	185	-73.40	-5422	4742	668	312	355.07	1.880		
13,100	5473	12,821	5282	187	188	-73.40	-5493	4813	668	308	359.84	1.855		
13,115	5473	12,835	5282	188	188	-73.40	-5503	4823	668	307	360.53	1.851 SF		
13,200	5472	12,835	5282	190	188	-73.40	-5503	4823	673	315	357.54	1.882		
13,300	5471	12,835	5282	192	188	-73.40	-5503	4823	693	345	347.37	1.994		
13,400	5471	12,835	5282	195	188	-73.40	-5503	4823	726	394	331.68	2.189		
13,500	5470	12,835	5282	197	188	-73.40	-5503	4823	771	458	312.72	2.465		
13,600	5469	12,835	5282	200	188	-73.40	-5503	4823	825	533	292.47	2.822		
13,700	5469	12,835	5282	202	188	-73.40	-5503	4823	888	615	272.40	3.259		
13,780	5468	12,835	5282	204	188	-73.40	-5503	4823	942	685	257.15	3.664		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 137H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis			Offset Wellbore Centre		Distance			Rule Assigned:		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-93.14	-2	-40	40					
100	100	100	100	0	0	-93.14	-2	-40	40	40	0.31	129.207		
200	200	200	200	1	1	-93.14	-2	-40	40	39	1.03	38.852		
300	300	300	300	1	1	-93.14	-2	-40	40	38	1.74	22.864		
400	400	400	400	1	1	-93.14	-2	-40	40	37	2.46	16.198		
450	450	450	450	1	1	-93.14	-2	-40	40	37	2.82	14.137 CC		
500	500	499	499	2	2	18.46	-2	-40	40	37	3.16	12.591		
600	600	598	598	2	2	20.99	-2	-44	40	36	3.85	10.387		
700	700	697	696	2	2	25.99	-1	-50	40	36	4.53	8.907 ES		
800	799	795	794	3	3	33.17	1	-60	42	36	5.23	7.954		
900	898	893	892	3	3	41.90	3	-74	44	38	5.95	7.426		
1000	997	993	990	3	3	52.11	5	-89	47	40	6.75	6.980		
1100	1094	1092	1088	4	4	64.35	8	-104	50	42	7.64	6.511		
1168	1160	1159	1154	4	4	73.72	9	-114	52	44	8.30	6.276		
1200	1192	1191	1186	4	4	78.27	10	-119	54	45	8.63	6.212 SF		
1300	1288	1290	1284	5	5	90.54	12	-134	60	51	9.66	6.238		
1400	1385	1389	1382	6	5	100.07	15	-149	69	58	10.65	6.482		
1500	1482	1489	1480	6	6	107.31	17	-164	79	68	11.62	6.829		
1600	1579	1588	1577	7	6	112.84	19	-179	91	78	12.56	7.213		
1700	1676	1687	1675	7	7	117.12	21	-194	102	89	13.48	7.602		
1800	1773	1786	1773	8	7	120.50	24	-209	115	100	14.40	7.977		
1900	1870	1885	1871	8	7	123.22	26	-225	127	112	15.30	8.331		
2000	1967	1984	1969	9	8	125.45	28	-240	140	124	16.21	8.663		
2100	2063	2083	2067	10	8	127.30	31	-255	153	136	17.11	8.970		
2200	2160	2182	2165	10	9	128.86	33	-270	167	149	18.01	9.254		
2300	2257	2281	2262	11	9	130.19	35	-285	180	161	18.91	9.518		
2400	2354	2380	2360	11	10	131.33	38	-300	193	174	19.81	9.761		
2500	2451	2479	2458	12	10	132.33	40	-315	207	186	20.71	9.987		
2600	2548	2578	2556	13	11	133.21	42	-330	220	199	21.61	10.197		
2700	2645	2677	2654	13	11	133.98	44	-345	234	211	22.51	10.391		
2800	2742	2776	2752	14	12	134.67	47	-360	247	224	23.41	10.572		
2900	2838	2875	2850	14	12	135.29	49	-375	261	237	24.31	10.741		
3000	2935	2974	2947	15	12	135.84	51	-390	275	250	25.21	10.899		
3100	3032	3073	3045	16	13	136.35	54	-406	288	262	26.11	11.047		
3200	3129	3172	3143	16	13	136.81	56	-421	302	275	27.01	11.185		
3300	3226	3271	3241	17	14	137.22	58	-436	316	288	27.91	11.315		
3400	3323	3370	3339	17	14	137.61	61	-451	330	301	28.81	11.438		
3500	3420	3469	3437	18	15	137.96	63	-466	343	314	29.71	11.553		
3600	3517	3568	3534	18	15	138.29	65	-481	357	326	30.61	11.662		
3700	3613	3667	3632	19	16	138.59	68	-496	371	339	31.52	11.765		
3800	3710	3766	3730	20	16	138.87	70	-511	385	352	32.42	11.862		
3900	3807	3865	3828	20	17	139.13	72	-526	398	365	33.32	11.955		
4000	3904	3964	3926	21	17	139.37	74	-541	412	378	34.22	12.042		
4100	4001	4063	4024	21	17	139.60	77	-556	426	391	35.12	12.126		
4200	4098	4162	4122	22	18	139.81	79	-571	440	404	36.03	12.205		
4300	4195	4261	4219	23	18	140.01	81	-586	454	417	36.93	12.280		
4400	4292	4360	4317	23	19	140.20	84	-602	467	429	37.83	12.352		
4500	4389	4459	4415	24	19	140.38	86	-617	481	442	38.74	12.421		
4600	4485	4558	4513	24	20	140.55	88	-632	495	455	39.64	12.486		
4700	4582	4657	4611	25	20	140.70	91	-647	509	468	40.54	12.549		
4800	4679	4757	4709	26	21	140.85	93	-662	523	481	41.45	12.609		
4900	4776	4850	4801	26	21	140.98	95	-676	536	494	42.30	12.682		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 137H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
4968	4842	4907	4857	27	21	140.70	99	-687	547	504	42.92	12.745	
5000	4873	4933	4882	27	22	152.00	102	-693	553	509	43.23	12.785	
5050	4922	4971	4918	27	22	170.96	107	-704	563	520	43.76	12.874	
5100	4970	5006	4951	27	22	-171.70	114	-714	576	532	44.29	13.010	
5150	5018	5038	4980	28	22	-158.23	121	-725	592	547	44.80	13.207	
5200	5066	5066	5005	28	22	-148.38	128	-736	610	565	45.24	13.480	
5250	5112	5090	5026	28	23	-141.01	135	-745	631	585	45.57	13.843	
5300	5157	5111	5044	28	23	-135.09	141	-754	655	609	45.80	14.300	
5350	5201	5128	5058	28	23	-129.90	147	-761	682	636	45.92	14.851	
5400	5243	5150	5076	28	23	-125.79	154	-771	712	666	46.21	15.400	
5450	5282	5150	5076	28	23	-119.89	154	-771	744	698	45.84	16.227	
5500	5320	5150	5076	28	23	-113.91	154	-771	778	733	45.49	17.109	
5550	5354	5162	5086	29	23	-109.04	159	-777	814	769	45.57	17.871	
5600	5386	5164	5088	29	23	-103.01	160	-778	852	807	45.38	18.771	
5650	5415	5164	5088	29	23	-96.67	160	-778	891	845	45.20	19.704	
5700	5441	5150	5076	29	23	-88.93	154	-771	930	885	44.65	20.828	
5750	5463	5150	5076	29	23	-82.82	154	-771	970	925	44.61	21.737	
5800	5483	5150	5076	29	23	-77.01	154	-771	1009	965	44.63	22.618	
5850	5498	5150	5076	29	23	-71.61	154	-771	1049	1004	44.70	23.466	
5900	5510	5150	5076	29	23	-66.69	154	-771	1088	1043	44.82	24.277	
5950	5518	5132	5061	29	23	-61.22	148	-763	1126	1082	44.54	25.289	
6000	5522	5122	5054	29	23	-57.00	145	-759	1164	1119	44.53	26.131	
6036	5523	5100	5034	29	23	-53.68	138	-749	1190	1146	44.19	26.923	
6100	5522	5100	5034	29	23	-53.68	138	-749	1237	1192	44.54	27.763	
6200	5522	5100	5034	29	23	-53.68	138	-749	1312	1267	45.00	29.155	
6300	5521	5067	5006	30	22	-52.25	129	-736	1390	1345	44.81	31.008	
6400	5520	5050	4991	31	22	-51.50	124	-730	1469	1425	44.90	32.731	
6500	5520	5050	4991	33	22	-51.50	124	-730	1551	1506	45.23	34.305	
6600	5519	5026	4969	34	22	-50.47	118	-721	1635	1590	45.17	36.194	
6700	5518	5000	4945	36	22	-49.40	113	-713	1720	1675	45.10	38.138	
6800	5517	5000	4945	38	22	-49.40	113	-713	1806	1761	45.34	39.832	
6900	5517	5000	4945	40	22	-49.40	113	-713	1894	1848	45.55	41.570	
7000	5516	5000	4945	41	22	-49.40	113	-713	1982	1936	45.73	43.346	
7100	5515	4976	4922	44	22	-48.40	108	-705	2071	2026	45.65	45.371	
7200	5515	4950	4898	46	22	-47.38	104	-698	2162	2116	45.57	47.437	
7300	5514	4950	4898	48	22	-47.38	104	-698	2252	2207	45.71	49.272	
7400	5513	4950	4898	50	22	-47.38	104	-698	2344	2298	45.84	51.131	
7500	5512	4950	4898	52	22	-47.38	104	-698	2436	2390	45.95	53.011	
7600	5512	4950	4898	54	22	-47.38	104	-698	2529	2483	46.05	54.910	
7700	5511	4950	4898	57	22	-47.38	104	-698	2622	2576	46.14	56.825	
7800	5510	4930	4879	59	22	-46.59	101	-693	2715	2669	46.09	58.910	
7900	5510	4925	4874	61	22	-46.39	101	-691	2809	2763	46.14	60.885	
8000	5509	4900	4850	63	21	-45.47	98	-686	2904	2858	46.07	63.033	
8100	5508	4900	4850	66	21	-45.47	98	-686	2998	2952	46.14	64.981	
8200	5508	4900	4850	68	21	-45.47	98	-686	3093	3047	46.21	66.938	
8300	5507	4900	4850	70	21	-45.47	98	-686	3188	3142	46.27	68.904	
8400	5506	4900	4850	73	21	-45.47	98	-686	3284	3237	46.33	70.878	
8500	5505	4900	4850	75	21	-45.47	98	-686	3379	3333	46.38	72.857	
8600	5505	4900	4850	77	21	-45.47	98	-686	3475	3429	46.43	74.842	
8700	5504	4900	4850	80	21	-45.47	98	-686	3571	3525	46.48	76.832	
8800	5503	4900	4850	82	21	-45.47	98	-686	3668	3621	46.53	78.827	
8900	5503	4900	4850	85	21	-45.47	98	-686	3764	3718	46.57	80.824	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 137H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9000	5502	4900	4850	87	21	-45.47	98	-686	3861	3814	46.62	82.825	
9100	5501	4900	4850	89	21	-45.47	98	-686	3958	3911	46.66	84.827	
9200	5500	4878	4828	92	21	-44.66	96	-681	4055	4008	46.62	86.977	
9300	5500	4875	4826	94	21	-44.56	96	-681	4152	4105	46.65	88.998	
9400	5499	4873	4824	97	21	-44.48	96	-680	4249	4202	46.68	91.019	
9500	5498	4850	4801	99	21	-43.66	95	-676	4347	4300	46.64	93.193	
9600	5498	4850	4801	101	21	-43.66	95	-676	4444	4397	46.68	95.196	
9700	5497	4850	4801	104	21	-43.66	95	-676	4541	4495	46.72	97.199	
9800	5496	4850	4801	106	21	-43.66	95	-676	4639	4592	46.76	99.203	
9900	5495	4850	4801	109	21	-43.66	95	-676	4737	4690	46.80	101.206	
10,000	5495	4850	4801	111	21	-43.66	95	-676	4834	4788	46.84	103.208	
10,100	5494	4850	4801	114	21	-43.66	95	-676	4932	4885	46.88	105.209	
10,200	5493	4850	4801	116	21	-43.66	95	-676	5030	4983	46.92	107.210	
10,300	5493	4850	4801	119	21	-43.66	95	-676	5128	5081	46.96	109.208	
10,400	5492	4850	4801	121	21	-43.66	95	-676	5226	5179	47.00	111.206	
10,500	5491	4850	4801	123	21	-43.66	95	-676	5324	5277	47.04	113.201	
10,600	5491	4850	4801	126	21	-43.66	95	-676	5423	5376	47.07	115.194	
10,700	5490	4850	4801	128	21	-43.66	95	-676	5521	5474	47.11	117.185	
10,800	5489	4850	4801	131	21	-43.66	95	-676	5619	5572	47.15	119.173	
10,900	5488	4845	4797	133	21	-43.50	95	-675	5718	5671	47.18	121.190	
11,000	5488	4840	4791	136	21	-43.31	95	-675	5816	5769	47.21	123.211	
11,100	5487	4840	4791	138	21	-43.31	95	-675	5915	5867	47.25	125.191	
11,200	5486	4840	4791	141	21	-43.31	95	-675	6013	5966	47.29	127.167	
11,300	5486	4840	4791	143	21	-43.31	95	-675	6112	6065	47.33	129.141	
11,400	5485	4829	4780	146	21	-42.93	95	-673	6210	6163	47.34	131.187	
11,500	5484	4816	4767	148	21	-42.49	94	-671	6309	6262	47.35	133.243	
11,600	5483	4803	4754	150	21	-42.06	94	-669	6408	6360	47.36	135.296	
11,700	5483	4790	4741	153	21	-41.64	94	-667	6506	6459	47.37	137.345	
11,800	5482	4777	4728	155	21	-41.23	93	-665	6605	6558	47.39	139.389	
11,900	5481	4764	4716	158	21	-40.82	93	-663	6704	6656	47.40	141.430	
12,000	5481	4750	4703	160	21	-40.42	93	-661	6803	6755	47.42	143.466	
12,100	5480	4737	4690	163	21	-40.03	92	-659	6901	6854	47.43	145.498	
12,200	5479	4724	4677	165	21	-39.65	92	-657	7000	6953	47.45	147.525	
12,300	5478	4711	4664	168	20	-39.27	92	-655	7099	7051	47.47	149.548	
12,400	5478	4698	4651	170	20	-38.90	91	-653	7198	7150	47.49	151.566	
12,500	5477	4685	4638	173	20	-38.54	91	-651	7296	7249	47.51	153.579	
12,600	5476	4672	4625	175	20	-38.19	91	-649	7395	7348	47.53	155.588	
12,700	5476	4659	4612	178	20	-37.84	91	-647	7494	7446	47.55	157.591	
12,800	5475	4646	4599	180	20	-37.50	90	-645	7593	7545	47.58	159.590	
12,900	5474	4633	4586	183	20	-37.16	90	-643	7691	7644	47.60	161.583	
13,000	5474	4619	4573	185	20	-36.83	90	-641	7790	7743	47.63	163.572	
13,100	5473	4606	4560	187	20	-36.51	89	-639	7889	7841	47.65	165.555	
13,200	5472	4593	4547	190	20	-36.19	89	-637	7988	7940	47.68	167.533	
13,300	5471	4580	4534	192	20	-35.88	89	-635	8087	8039	47.71	169.505	
13,400	5471	4567	4522	195	20	-35.57	88	-633	8186	8138	47.74	171.473	
13,500	5470	4554	4509	197	20	-35.27	88	-631	8285	8237	47.77	173.434	
13,600	5469	4541	4496	200	20	-34.98	88	-629	8383	8336	47.80	175.390	
13,700	5469	4528	4483	202	20	-34.69	88	-627	8482	8434	47.83	177.341	
13,780	5468	4517	4472	204	20	-34.46	87	-625	8561	8513	47.86	178.889	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - Mesa #4 SWD - OH - OH												Offset Site Error:	0 ft
Survey Program: 190-INCLINOMETER												Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0	0	11	11	0	0	103.62	-940	3881	3993				
100	100	111	111	0	3	103.62	-940	3881	3993	3990	3.53	1,132.821	
200	200	211	211	1	6	103.62	-940	3881	3993	3986	6.92	577.029	
300	300	311	311	1	9	103.62	-940	3881	3993	3983	10.32	387.111	
349	349	360	360	1	11	103.61	-940	3881	3993	3981	11.99	333.149	
400	400	409	409	1	12	103.61	-940	3881	3993	3980	13.66	292.394	
450	450	457	457	1	14	103.61	-940	3881	3993	3978	15.30	260.968	
500	500	506	506	2	15	-145.10	-940	3881	3994	3977	16.94	235.745	
600	600	611	611	2	19	-145.09	-940	3881	3997	3976	20.48	195.171	
700	700	711	711	2	22	-145.08	-940	3881	4002	3978	23.86	167.753	
800	799	810	810	3	25	-145.07	-940	3881	4011	3984	27.24	147.247	
900	898	909	909	3	28	-145.05	-940	3881	4022	3992	30.62	131.371	
1000	997	1008	1008	3	31	-145.03	-940	3881	4037	4003	33.99	118.746	
1100	1094	1105	1105	4	34	-144.99	-940	3881	4054	4016	37.36	108.495	
1168	1160	1171	1171	4	36	-144.97	-940	3881	4067	4027	39.64	102.599	
1200	1192	1203	1203	4	37	-145.03	-940	3881	4074	4033	40.73	100.019	
1300	1288	1298	1298	5	39	-145.24	-939	3881	4094	4050	44.04	92.957	
1400	1385	1392	1392	6	42	-145.43	-940	3881	4115	4067	47.32	86.946	
1500	1482	1486	1486	6	45	-145.60	-940	3881	4135	4085	50.61	81.705	
1600	1579	1590	1590	7	48	-145.81	-940	3881	4156	4102	54.22	76.658	
1700	1676	1687	1687	7	51	-146.00	-940	3881	4177	4119	57.60	72.518	
1800	1773	1783	1783	8	54	-146.20	-939	3881	4197	4136	60.95	68.869	
1900	1870	1877	1877	8	57	-146.37	-940	3881	4218	4154	64.25	65.655	
2000	1967	1971	1971	9	60	-146.54	-940	3881	4239	4172	67.55	62.754	
2100	2063	2075	2074	10	63	-146.74	-940	3881	4260	4189	71.14	59.886	
2200	2160	2171	2171	10	66	-146.92	-940	3881	4281	4207	74.52	57.446	
2300	2257	2267	2267	11	69	-147.10	-940	3881	4302	4224	77.87	55.245	
2400	2354	2362	2361	11	72	-147.27	-940	3881	4323	4242	81.19	53.247	
2500	2451	2462	2462	12	75	-147.45	-940	3881	4344	4260	84.69	51.298	
2600	2548	2559	2559	13	78	-147.62	-940	3881	4365	4277	88.07	49.566	
2700	2645	2656	2656	13	81	-147.79	-940	3881	4386	4295	91.46	47.962	
2800	2742	2751	2751	14	84	-147.97	-939	3881	4407	4313	94.79	46.498	
2900	2838	2846	2845	14	86	-148.13	-940	3881	4429	4331	98.10	45.145	
3000	2935	2947	2946	15	89	-148.30	-940	3881	4450	4348	101.61	43.795	
3100	3032	3044	3043	16	92	-148.46	-940	3881	4471	4366	105.00	42.587	
3200	3129	3140	3140	16	95	-148.63	-940	3881	4493	4384	108.38	41.454	
3300	3226	3235	3235	17	98	-148.80	-939	3881	4514	4402	111.70	40.410	
3400	3323	3330	3330	17	101	-148.95	-940	3881	4535	4420	115.01	39.435	
3500	3420	3431	3431	18	104	-149.11	-940	3881	4557	4438	118.52	38.447	
3600	3517	3528	3528	18	107	-149.27	-940	3881	4578	4456	121.90	37.557	
3700	3613	3625	3624	19	110	-149.43	-940	3881	4600	4475	125.28	36.716	
3800	3710	3720	3719	20	113	-149.59	-939	3881	4621	4493	128.60	35.935	
3900	3807	3814	3814	20	116	-149.73	-940	3881	4643	4511	131.91	35.197	
4000	3904	3916	3915	21	119	-149.89	-940	3881	4665	4529	135.42	34.445	
4100	4001	4012	4012	21	122	-150.04	-940	3881	4686	4547	138.79	33.763	
4200	4098	4109	4109	22	125	-150.19	-940	3881	4708	4566	142.17	33.114	
4300	4195	4205	4205	23	128	-150.34	-940	3881	4729	4584	145.51	32.503	
4400	4292	4300	4300	23	131	-150.48	-940	3881	4751	4602	148.83	31.923	
4500	4389	4400	4400	24	134	-150.63	-940	3881	4773	4621	152.29	31.340	
4600	4485	4497	4496	24	137	-150.77	-940	3881	4795	4639	155.67	30.801	
4700	4582	4594	4593	25	140	-150.91	-940	3881	4817	4658	159.04	30.285	
4800	4679	4650	4649	26	141	-151.00	-940	3881	4839	4677	161.15	30.025	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - Mesa #4 SWD - OH - OH												Offset Site Error:	0 ft
Survey Program: 190-INCLINOMETER												Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
4900	4776	4650	4649	26	141	-151.00	-940	3881	4862	4701	161.47	30.113	
4968	4842	4650	4649	27	141	-151.00	-940	3881	4879	4718	161.64	30.186	
5000	4873	4650	4649	27	141	-139.40	-940	3881	4887	4725	161.72	30.220	
5050	4922	4650	4649	27	141	-119.87	-940	3881	4897	4735	161.83	30.262	
5100	4970	4650	4649	27	141	-101.96	-940	3881	4905	4743	161.93	30.289	
5150	5018	4650	4649	28	141	-88.08	-940	3881	4910	4748	162.02	30.302	
5200	5066	4650	4649	28	141	-78.15	-940	3881	4912	4750	162.09	30.302	
5250	5112	4650	4649	28	141	-71.20	-940	3881	4911	4749	162.16	30.288	
5300	5157	4650	4649	28	141	-66.31	-940	3881	4908	4746	162.21	30.259	
5350	5201	4650	4649	28	141	-62.88	-940	3881	4903	4740	162.25	30.215	
5400	5243	4650	4649	28	141	-60.50	-940	3881	4894	4732	162.30	30.156	
5450	5282	4650	4649	28	141	-58.91	-940	3881	4883	4721	162.34	30.081	
5500	5320	4650	4649	28	141	-57.95	-940	3881	4870	4707	162.38	29.989	
5550	5354	4650	4649	29	141	-57.52	-940	3881	4854	4691	162.44	29.881	
5600	5386	4650	4649	29	141	-57.55	-940	3881	4836	4673	162.51	29.755	
5650	5415	4650	4649	29	141	-58.00	-940	3881	4815	4652	162.61	29.612	
5700	5441	4650	4649	29	141	-58.84	-940	3881	4792	4630	162.72	29.450	
5750	5463	4650	4649	29	141	-60.07	-940	3881	4767	4605	162.87	29.271	
5800	5483	4650	4649	29	141	-61.69	-940	3881	4741	4578	163.06	29.073	
5850	5498	4650	4649	29	141	-63.71	-940	3881	4712	4549	163.28	28.857	
5900	5510	4650	4649	29	141	-66.14	-940	3881	4682	4518	163.55	28.624	
5950	5518	4650	4649	29	141	-68.99	-940	3881	4650	4486	163.86	28.375	
6000	5522	4650	4649	29	141	-72.28	-940	3881	4616	4452	164.22	28.111	
6036	5523	4650	4649	29	141	-74.89	-940	3881	4592	4427	164.50	27.914	
6100	5522	4650	4649	29	141	-74.89	-940	3881	4548	4382	165.06	27.551	
6200	5522	4650	4649	29	141	-74.89	-940	3881	4479	4313	165.99	26.986	
6300	5521	4650	4649	30	141	-74.89	-940	3881	4413	4246	167.03	26.417	
6400	5520	4650	4649	31	141	-74.89	-940	3881	4347	4179	168.17	25.849	
6500	5520	4650	4649	33	141	-74.89	-940	3881	4283	4113	169.41	25.281	
6600	5519	4650	4649	34	141	-74.89	-940	3881	4220	4049	170.73	24.716	
6700	5518	4650	4649	36	141	-74.89	-940	3881	4159	3986	172.15	24.156	
6800	5517	4650	4649	38	141	-74.89	-940	3881	4099	3925	173.66	23.602	
6900	5517	4650	4649	40	141	-74.89	-940	3881	4040	3865	175.25	23.056	
7000	5516	4650	4649	41	141	-74.89	-940	3881	3984	3807	176.91	22.518	
7100	5515	4650	4649	44	141	-74.89	-940	3881	3929	3750	178.66	21.991	
7200	5515	4650	4649	46	141	-74.89	-940	3881	3876	3695	180.47	21.476	
7300	5514	4650	4649	48	141	-74.89	-940	3881	3825	3642	182.36	20.973	
7400	5513	4650	4649	50	141	-74.89	-940	3881	3775	3591	184.30	20.484	
7500	5512	4650	4649	52	141	-74.89	-940	3881	3728	3542	186.31	20.010	
7600	5512	4650	4649	54	141	-74.89	-940	3881	3683	3495	188.37	19.551	
7700	5511	4650	4649	57	141	-74.89	-940	3881	3640	3449	190.49	19.109	
7800	5510	4650	4649	59	141	-74.89	-940	3881	3599	3407	192.64	18.684	
7900	5510	4650	4649	61	141	-74.89	-940	3881	3561	3366	194.84	18.276	
8000	5509	4650	4649	63	141	-74.89	-940	3881	3525	3328	197.07	17.888	
8100	5508	4650	4649	66	141	-74.89	-940	3881	3492	3292	199.32	17.518	
8200	5508	4650	4649	68	141	-74.89	-940	3881	3461	3259	201.60	17.167	
8300	5507	4650	4649	70	141	-74.89	-940	3881	3433	3229	203.89	16.836	
8400	5506	4650	4649	73	141	-74.89	-940	3881	3407	3201	206.18	16.525	
8500	5505	4650	4649	75	141	-74.89	-940	3881	3384	3176	208.47	16.234	
8600	5505	4650	4649	77	141	-74.89	-940	3881	3364	3154	210.75	15.964	
8700	5504	4650	4649	80	141	-74.89	-940	3881	3347	3134	213.02	15.714	
8800	5503	4650	4649	82	141	-74.89	-940	3881	3333	3118	215.25	15.485	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - Mesa #4 SWD - OH - OH													Offset Site Error:	0 ft	
Survey Program:		190-INCLINOMETER						Rule Assigned:						Offset Well Error:	0 ft
Reference	Offset	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				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			
8900	5503	4650	4649	85	141	-74.89	-940	3881	3322	3105	217.46	15.277			
9000	5502	4650	4649	87	141	-74.89	-940	3881	3314	3094	219.62	15.089			
9100	5501	4650	4649	89	141	-74.89	-940	3881	3309	3087	221.74	14.922			
9200	5500	4650	4649	92	141	-74.89	-940	3881	3307	3083	223.80	14.775			
9222	5500	4650	4649	92	141	-74.89	-940	3881	3306	3082	224.25	14.745 CC			
9300	5500	4650	4649	94	141	-74.89	-940	3881	3307	3082	225.80	14.648 ES			
9400	5499	4650	4649	97	141	-74.89	-940	3881	3311	3084	227.73	14.540			
9500	5498	4650	4649	99	141	-74.89	-940	3881	3318	3089	229.59	14.453			
9600	5498	4650	4649	101	141	-74.89	-940	3881	3328	3097	231.37	14.384			
9700	5497	4650	4649	104	141	-74.89	-940	3881	3341	3108	233.07	14.334			
9800	5496	4650	4649	106	141	-74.89	-940	3881	3357	3122	234.69	14.303			
9900	5495	4650	4649	109	141	-74.89	-940	3881	3375	3139	236.21	14.289 SF			
10,000	5495	4650	4649	111	141	-74.89	-940	3881	3397	3159	237.65	14.293			
10,100	5494	4650	4649	114	141	-74.89	-940	3881	3421	3182	239.01	14.314			
10,200	5493	4650	4649	116	141	-74.89	-940	3881	3448	3208	240.27	14.351			
10,300	5493	4650	4649	119	141	-74.89	-940	3881	3478	3236	241.44	14.404			
10,400	5492	4650	4649	121	141	-74.89	-940	3881	3510	3268	242.52	14.473			
10,500	5491	4650	4649	123	141	-74.89	-940	3881	3545	3301	243.52	14.557			
10,600	5491	4650	4649	126	141	-74.89	-940	3881	3582	3338	244.43	14.655			
10,700	5490	4650	4649	128	141	-74.89	-940	3881	3622	3377	245.26	14.767			
10,800	5489	4650	4649	131	141	-74.89	-940	3881	3664	3418	246.02	14.892			
10,900	5488	4650	4649	133	141	-74.89	-940	3881	3708	3461	246.69	15.031			
11,000	5488	4650	4649	136	141	-74.89	-940	3881	3754	3507	247.30	15.181			
11,100	5487	4650	4649	138	141	-74.89	-940	3881	3803	3555	247.83	15.344			
11,200	5486	4650	4649	141	141	-74.89	-940	3881	3853	3605	248.30	15.517			
11,300	5486	4650	4649	143	141	-74.89	-940	3881	3905	3657	248.71	15.702			
11,400	5485	4650	4649	146	141	-74.89	-940	3881	3959	3710	249.06	15.897			
11,500	5484	4650	4649	148	141	-74.89	-940	3881	4015	3766	249.35	16.103			
11,600	5483	4650	4649	150	141	-74.89	-940	3881	4073	3823	249.60	16.317			
11,700	5483	4650	4649	153	141	-74.89	-940	3881	4132	3882	249.80	16.541			
11,800	5482	4650	4649	155	141	-74.89	-940	3881	4193	3943	249.95	16.774			
11,900	5481	4650	4649	158	141	-74.89	-940	3881	4255	4005	250.06	17.015			
12,000	5481	4650	4649	160	141	-74.89	-940	3881	4319	4068	250.14	17.265			
12,100	5480	4650	4649	163	141	-74.89	-940	3881	4384	4133	250.18	17.522			
12,200	5479	4650	4649	165	141	-74.89	-940	3881	4450	4200	250.19	17.786			
12,300	5478	4650	4649	168	141	-74.89	-940	3881	4517	4267	250.17	18.057			
12,400	5478	4650	4649	170	141	-74.89	-940	3881	4586	4336	250.13	18.335			
12,500	5477	4650	4649	173	141	-74.89	-940	3881	4656	4406	250.06	18.620			
12,600	5476	4650	4649	175	141	-74.89	-940	3881	4727	4477	249.97	18.910			
12,700	5476	4650	4649	178	141	-74.89	-940	3881	4799	4549	249.86	19.207			
12,800	5475	4650	4649	180	141	-74.89	-940	3881	4872	4622	249.73	19.509			
12,900	5474	4650	4649	183	141	-74.89	-940	3881	4946	4696	249.58	19.816			
13,000	5474	4650	4649	185	141	-74.89	-940	3881	5021	4771	249.42	20.129			
13,100	5473	4650	4649	187	141	-74.89	-940	3881	5096	4847	249.25	20.446			
13,200	5472	4650	4649	190	141	-74.89	-940	3881	5173	4924	249.07	20.769			
13,300	5471	4650	4649	192	141	-74.89	-940	3881	5250	5001	248.87	21.095			
13,400	5471	4650	4649	195	141	-74.89	-940	3881	5328	5079	248.67	21.426			
13,500	5470	4650	4649	197	141	-74.89	-940	3881	5407	5158	248.46	21.761			
13,600	5469	4650	4649	200	141	-74.89	-940	3881	5486	5238	248.25	22.100			
13,700	5469	4650	4649	202	141	-74.89	-940	3881	5566	5318	248.02	22.443			
13,780	5468	4650	4649	204	141	-74.89	-940	3881	5631	5383	247.84	22.719			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6794' & RKB 14' @ 6808ft

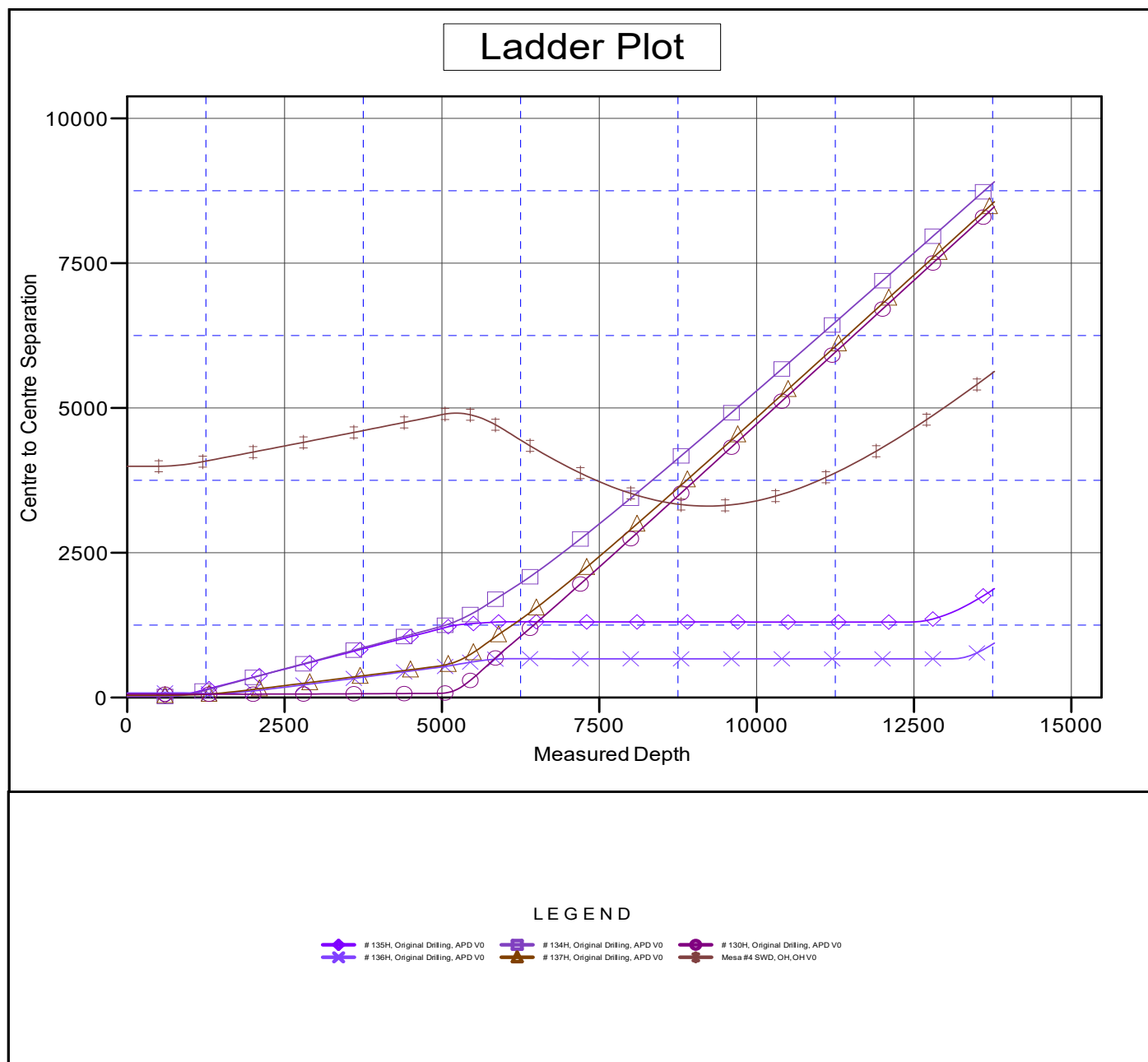
Offset Depths are relative to Offset Datum

Central Meridian is -107.8333333

Coordinates are relative to: # 131H - Slot 5

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

Grid Convergence at Surface is: 0.08°





Lonestar Consulting, LLC

Anticollision Report

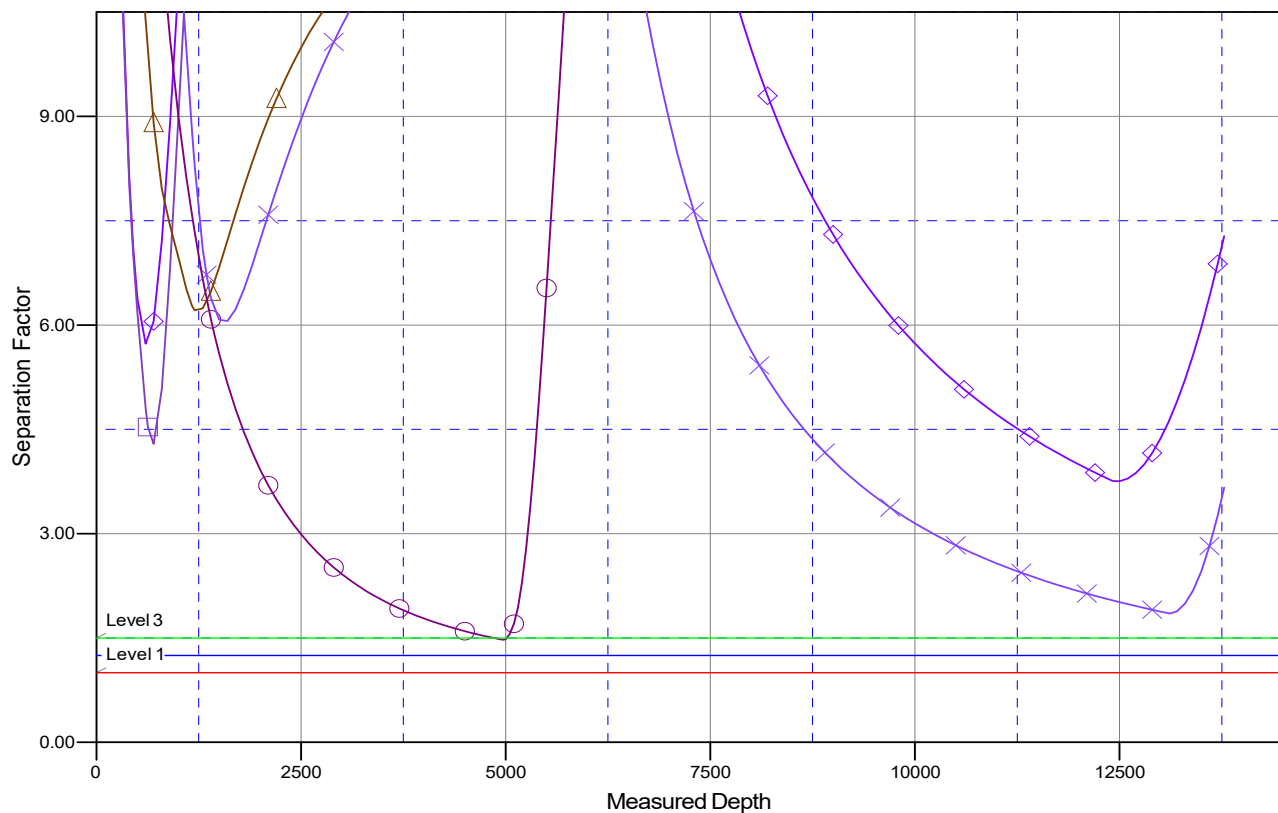


Company:	DJR Operating	Local Co-ordinate Reference:	Well # 131H - Slot 5
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 131H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6794' & RKB 14' @ 6808ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.8333333

Coordinates are relative to: # 131H - Slot 5
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.08°

Separation Factor Plot



LEGEND

- # 135H, Original Drilling, APD V0
- # 136H, Original Drilling, APD V0
- # 134H, Original Drilling, APD V0
- # 137H, Original Drilling, APD V0
- # 130H, Original Drilling, APD V0
- Mesa #4 SWD, OH, OH V0



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

#131H CROW CANYON UNIT

Lease: NMNM026047 Unit: NMNM135203A
SH: NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16, T. 24 N., R. 8 W.
San Juan County, New Mexico
BH: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 21, T.24 N., R. 8 W.
San Juan County, New Mexico

***Above Data Required on Well Sign**

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

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

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

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

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

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

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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.

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 471662

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID:
	371838
	Action Number: 471662
Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

CONDITIONS

Created By	Condition	Condition Date
scrues76	Cement is required to circulate on both surface and intermediate1 strings of casing.	6/6/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	6/6/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	7/18/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	7/18/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	7/18/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	7/18/2025