

Form 3160-3
(October 2024)FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2027UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER		5. Lease Serial No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-045-38523
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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 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)



Approval Date: 09/26/2025

Additional Operator Remarks

Location of Well

0. SHL: SWNW / 1602 FNL / 957 FWL / TWSP: 25N / RANGE: 12W / SECTION: 21 / LAT: 36.3894882 / LONG: -108.1225224 (TVD: 0 feet, MD: 0 feet)
PPP: SENW / 1582 FNL / 2625 FWL / TWSP: 25N / RANGE: 12W / SECTION: 21 / LAT: 36.3895565 / LONG: -108.1168555 (TVD: 4795 feet, MD: 5307 feet)
PPP: NENW / 1169 FSL / 1 FWL / TWSP: 25N / RANGE: 12W / SECTION: 27 / LAT: 36.3826299 / LONG: -108.1078403 (TVD: 4798 feet, MD: 14070 feet)
PPP: SENW / 1320 FNL / 2618 FWL / TWSP: 25N / RANGE: 12W / SECTION: 27 / LAT: 36.3757969 / LONG: -108.0989493 (TVD: 4798 feet, MD: 14070 feet)
PPP: SWSW / 1169 FSL / 1 FWL / TWSP: 25N / RANGE: 12W / SECTION: 22 / LAT: 36.3826299 / LONG: -108.1078403 (TVD: 4798 feet, MD: 14070 feet)
PPP: SESE / 1582 FNL / 2625 FWL / TWSP: 25N / RANGE: 12W / SECTION: 21 / LAT: 36.3895565 / LONG: -108.1168555 (TVD: 4798 feet, MD: 14070 feet)
BHL: SWNE / 2303 FNL / 1628 FEL / TWSP: 25N / RANGE: 12W / SECTION: 27 / LAT: 36.3730981 / LONG: -108.0954383 (TVD: 4798 feet, MD: 14070 feet)

BLM Point of Contact

Name: CHRISTOPHER P WENMAN

Title: Natural Resource Specialist

Phone: (505) 564-7727

Email: cwenman@blm.gov

CONFIDENTIAL

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

WELL LOCATION INFORMATION

API Number 30-045-38523	Pool Code 5890	Pool Name BISTI LOWER-GALLUP (O)
Property Code 320279	Property Name CARSON UNIT	Well Number 578H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6296'
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
E	21	25N	12W		1602' NORTH	957' WEST	36.389488° N	108.122522° 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
G	27	25N	12W		2303' NORTH	1628' EAST	36.373098° N	108.095438° W	SAN JUAN

Dedicated Acres PENETRATED SPACING UNIT; BASIN MANCOS: SEC 21: SE/4; SEC 22: S/2 SW/4; SEC 27: S/2 NW/4 & S/2 NE/4 = 400 ACRES BISTI LOWER-GALLUP (O): SEC 21: NW/4 & NE/4; SEC 22: N/2 SW/4; SEC 27 N/2 NW/4, NW/4, & N/2 NE/4 = 560 ACRES	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code UNIT
Order Numbers: R828 R828A		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
E	21	25N	12W		1602' NORTH	957' WEST	36.389488° N	108.122522° 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
F	21	25N	12W		1582' NORTH	2625' WEST	36.389557° N	108.116856° 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
G	27	25N	12W		2303' NORTH	1628' EAST	36.373098° N	108.095438° W	SAN JUAN

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

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

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

Shaw-Marie Valadez
Signature

12/11/2024
Date

Shaw-Marie Valadez
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:

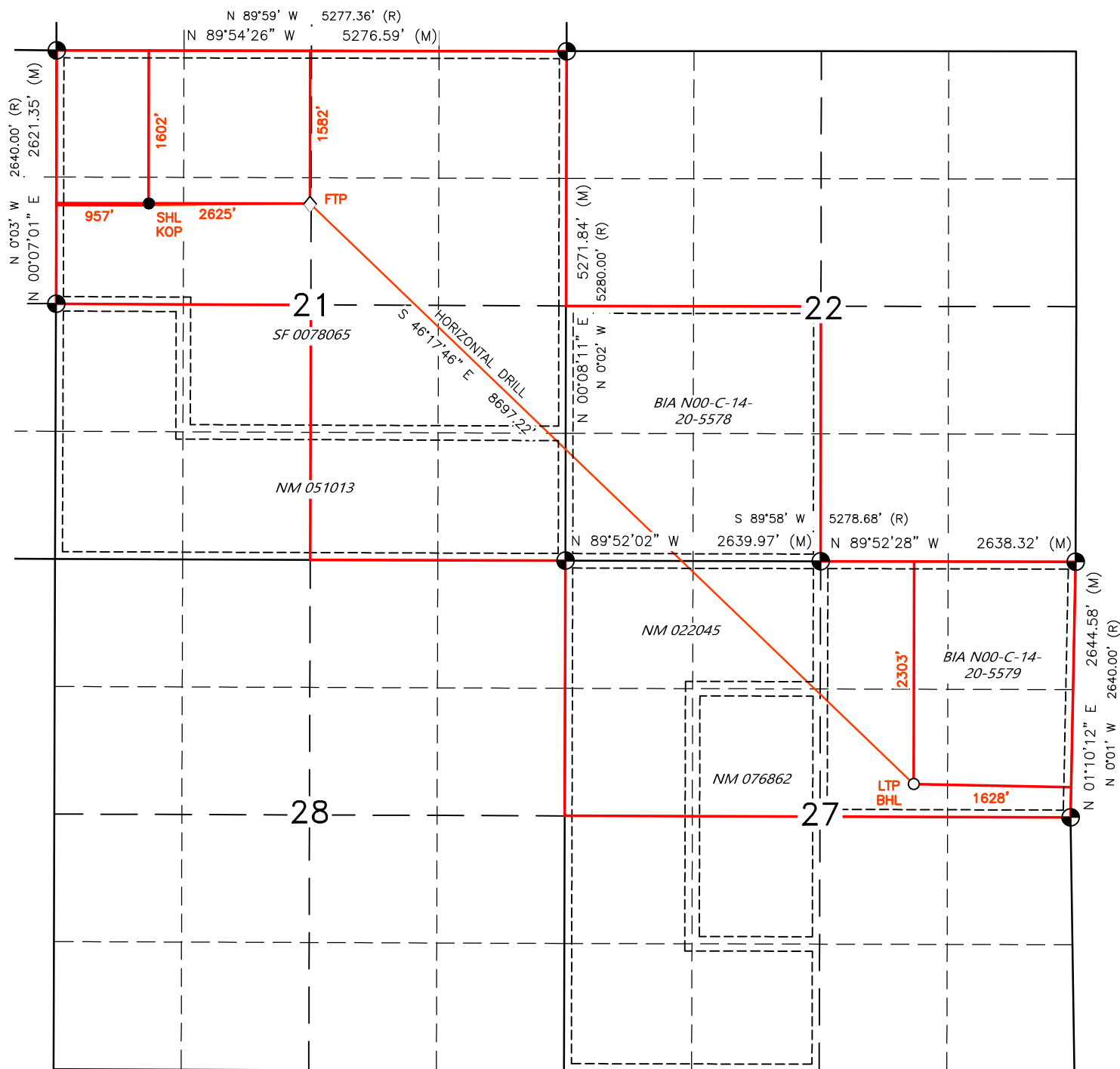
Certificate Number

11393

Date of Survey

DECEMBER 2, 2025

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.

SURFACE LOCATION (SHL)

1602' FNL 957' FWL
 SEC. 21, T25N, R12W
 LAT. 36.389488° N (NAD83)
 LONG. 108.122524° W (NAD83)

KICK OFF POINT (KOP)

1602' FNL 957' FWL
 SEC. 21, T25N, R12W
 LAT. 36.389488° N (NAD83)
 LONG. 108.122524° W (NAD83)

FIRST TAKE POINT (FTP)

1582' FNL 2625' FWL
 SEC. 21, T25N, R12W
 LAT. 36.389557° N (NAD83)
 LONG. 108.116856° W (NAD83)

LAST TAKE POINT (LTP)

2303' FNL 1628' FEL
 SEC. 27, T25N, R12W
 LAT. 36.373098° N (NAD83)
 LONG. 108.095438° W (NAD83)

BOTTOM HOLE LOCATION (BHL)

2303' FNL 1628' FEL
 SEC. 27, T25N, R12W
 LAT. 36.373098° N (NAD83)
 LONG. 108.095438° W (NAD83)

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: DJR Operating, LLC **OGRID:** 371838 **Date:** 12 / 12 / 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
Carson Unit 578H	TBD	E-21-25N-12W	1602 FNL 957 FWL	850	1701	166
Carson Unit 582H	TBD	E-21-25N-12W	1622 FNL 657 FWL	850	1701	166
Carson Unit 605H	TBD	E-21-25N-12W	1582 FNL 957 FWL	850	1701	166
Carson Unit 609H	TBD	E-21-25N-12W	1562 FNL 657 FWL	850	1701	166
				3-year Decline	3-year Decline	3-year Decline
Carson Unit 578H	TBD	E-21-25N-12W	1602 FNL 957 FWL	192	384	38
Carson Unit 582H	TBD	E-21-25N-12W	1622 FNL 657 FWL	192	384	38
Carson Unit 605H	TBD	E-21-25N-12W	1582 FNL 957 FWL	192	384	38
Carson Unit 609H	TBD	E-21-25N-12W	1562 FNL 657 FWL	192	384	38

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
Carson Unit 578H	TBD	Q2 2026	Q2 2026	Q2 2026	Q2 2026	Q2 2026
Carson Unit 582H	TBD	Q2 2026	Q2 2026	Q2 2026	Q2 2026	Q2 2026
Carson Unit 605H	TBD	Q2 2026	Q2 2026	Q2 2026	Q2 2026	Q2 2026
Carson Unit 609H	TBD	Q2 2026	Q2 2026	Q2 2026	Q2 2026	Q2 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 Valadez</i>
Printed Name: Shaw-Marie Valadez
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 12/12/2025
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
CARSON UNIT 578H 582H 605H and 609H

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
CARSON UNIT 578H 582H 605H and 609H

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
CARSON UNIT 578H 582H 605H and 609H

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
CARSON UNIT 578H 582H 605H and 609H

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 3



DRILLING PLAN

Carson Unit #578H

San Juan County, New Mexico

Surface Location

957-ft FWL & 1602-ft FNL
 Sec 21 T25N R12W
 Graded Elevation 6296' MSL
 RKB Elevation 6310' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.3894882° N
 Longitude 108.1225224° W

Kick Off Point for Horizontal Build Curve

4464-ft MD
 4282-ft TVD

Local Coordinates (from SHL)

351-ft North
 1101-ft East

Heel Location (Pay zone entry)

2625-ft FWL & 1582-ft FNL
 Sec 21 T25N R12W

Heel Geographical Coordinates (NAD-83)

Latitude 36.38955646° N
 Longitude 108.11685550° W

Bottom Hole Location (TD)

1628-ft FEL & 2303-ft FNL
 Sec 27 T25N R12W

BHL Geographical Coordinates (NAD-83)

Latitude 36.3730981° N
 Longitude 108.0954383° W

Well objectives

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

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 133°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	193	193	Sd	W	8.3	8.4 – 8.8
Kirtland	342	342	Sh	-	8.3	8.4 – 8.8
Fruitland	926	923	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1178	1168	Sd	W	8.3	9.0 - 9.5
Lewis	1275	1261	Sh	-		9.0 - 9.5
Chacra	1960	1910	Sd	-	8.3	9.0 - 9.5
Menefee	2575	2493	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3702	3560	Sd	-	8.3	9.0 - 9.5
Mancos	3867	3717	Sh	-		9.0 - 9.5
Mancos Silt	4210	4042	Slt	O/G	6.6	9.0 - 9.5
Gallup A	4796	4570	Slt	O/G	6.6	9.0 - 9.5
Gallup B	4889	4635	Sd	O/G	6.6	8.8 -9.0
Gallup C	5059	4729	Sd	O/G	6.6	8.8 -9.0
Target	5372	4798	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	5307	surf	4795	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5015	14070	4708	4703	5015

Note: all casing will be new

Rev 3

**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	3964-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	385	215
Volume (bbls)	160	57
Volume (cu.ft.)	901	322
Excess %	55	55



Rev 3

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5015-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	761
Volume (bbls)	212
Volume (cu.ft)	1190
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 – 5307	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5307 – 14070	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

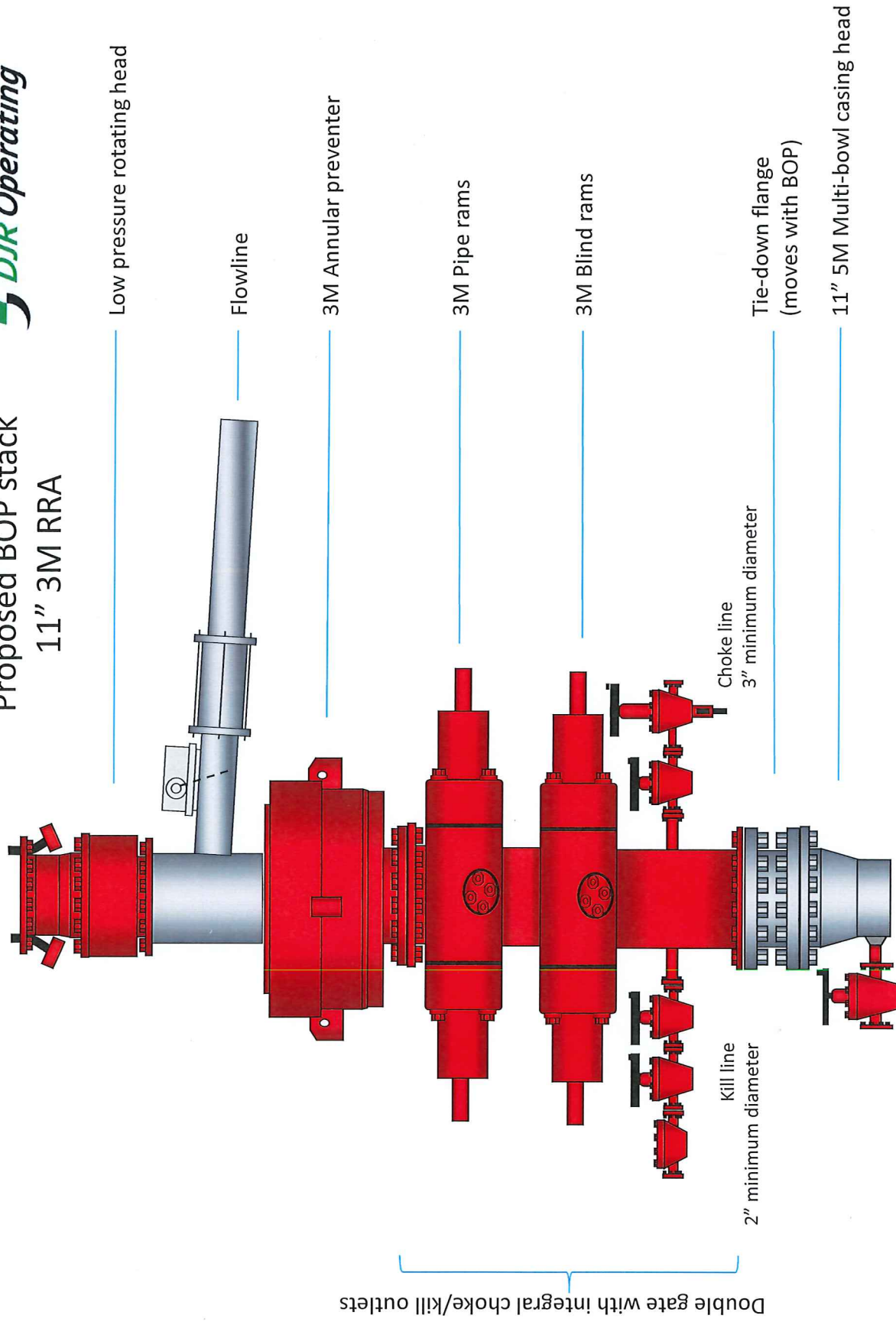
A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports 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.



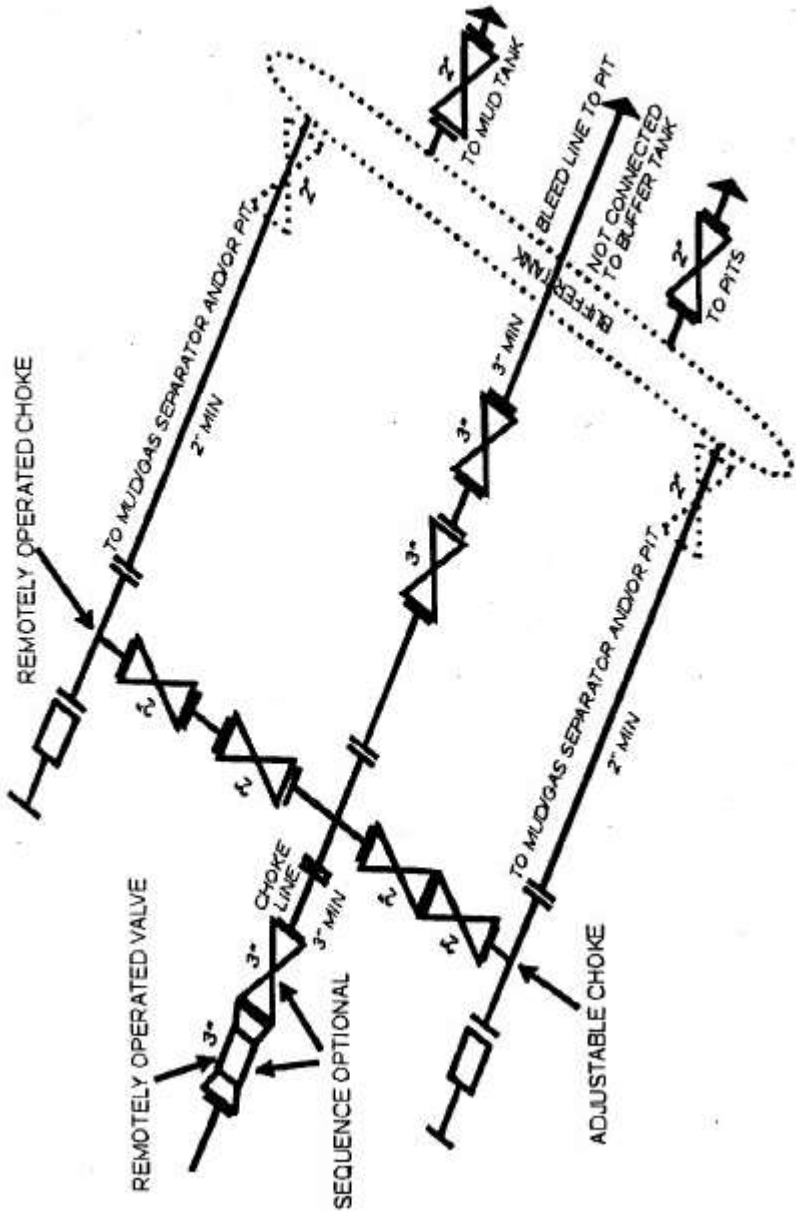
Proposed BOP stack 11" 3M RRA





Choke Manifold

Actual system to conform with Onshore Order 2





Company: DJR Operating
Project: Proposed Carson Unit
Site: WC 21-1 Pad
Well: Carson #578H
Wellbore: Original Drilling
Design: APD rev 2

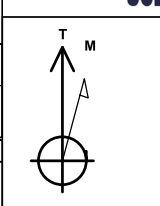
PROJECT DETAILS: Proposed Carson Unit

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



WELL DETAILS: Carson #578H						
GL 6269' & RKB 14' @ 6310.00ft						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1961223.47	2637975.67	36.390	-108.123	3

Plan: APD rev 2 (Carson #578H/Original Drilling)	
Created By: Janie Collins Date: 10:32, March 16 2021	



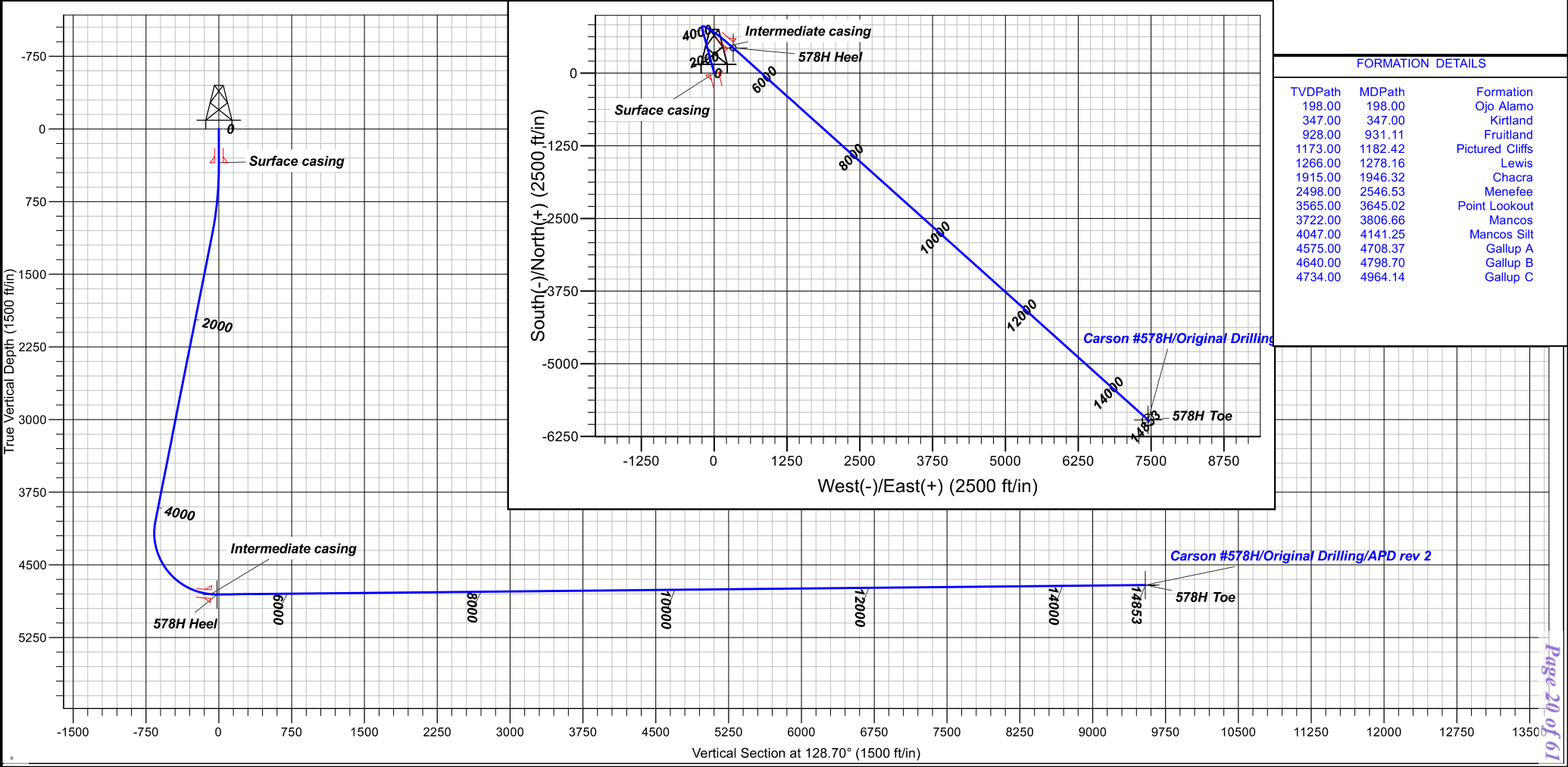
Azimuths to True North
Magnetic North: 8.3°

Magnetic Field
Strength: 49500.00
Dip Angle: 62.83°
Date: 7/3/2020
Model: HDGM_FILE

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
578H Heel	4806.00	436.08	326.03	1961658.56	2638303.00	36.391
578H Toe	4709.00	-5965.69	7446.47	1955235.51	2645404.23	-108.097

SECTION DETAILS											
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	Target		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
396.00	0.00	0.00	396.00	0.00	0.00	0.00	0.00	0.00			
1083.67	13.75	344.91	1077.08	79.31	-21.38	2.00	344.91	-66.27			
4143.55	13.75	344.91	4049.24	781.70	-210.70	0.00	0.00	-653.19			
5277.80	90.58	131.96	4806.00	436.08	326.03	8.00	146.20	-18.21			
14853.43	90.58	131.96	4709.00	-5965.69	7446.47	0.00	0.00	9541.46	578H Heel		
									578H Toe		

CASING DETAILS		
TVD	MD	Name
350.00	350.00	Surface casing
4803.59	5215.23	Intermediate casing





DJR Operating

Proposed Carson Unit

WC 21-1 Pad

Carson #578H - Slot 2

Original Drilling

Plan: APD Rev 3

Standard Planning Report

03 June, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Project:	Proposed Carson Unit	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site:	WC 21-1 Pad	North Reference:	True
Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 3		

Project	Proposed Carson 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	WC 21-1 Pad			
Site Position:		Northing:	1,961,183.47 usft	Latitude: 36.389
From:	Lat/Long	Easting:	2,637,975.67 usft	Longitude: -108.123
Position Uncertainty:	0.00 ft	Slot Radius:	16.000 in	Grid Convergence: -0.17 °

Well	Carson #578H - Slot 2			
Well Position	+N/-S	20.00 ft	Northing:	1,961,203.47 usft
	+E/-W	-0.06 ft	Easting:	2,637,975.67 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 6,295.99 ft

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/31/2019	9.12	62.94	49,519.18861491

Design	APD Rev 3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	126.80

Plan Survey Tool Program	Date	6/2/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	14,069.53	APD Rev 3 (Original Drilling)	MWD+HDGM
				OWSG MWD + HDGM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
395.98	0.00	0.00	395.98	0.00	0.00	0.00	0.00	0.00	0.00	
1,330.44	18.69	72.33	1,313.95	45.85	143.93	2.00	2.00	0.00	72.33	
4,463.80	18.69	72.33	4,282.10	350.57	1,100.61	0.00	0.00	0.00	0.00	
5,371.78	90.62	133.53	4,797.73	24.87	1,667.94	9.00	7.92	6.74	62.31	578H Heel Rev 3
14,069.53	90.62	133.53	4,703.00	-5,965.46	7,973.32	0.00	0.00	0.00	0.00	578H Toe Rev 3



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Project:	Proposed Carson Unit	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site:	WC 21-1 Pad	North Reference:	True
Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
395.98	0.00	0.00	395.98	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.08	72.33	400.00	0.00	0.00	0.00	2.00	2.00	0.00
500.00	2.08	72.33	499.98	0.57	1.80	1.10	2.00	2.00	0.00
600.00	4.08	72.33	599.83	2.20	6.92	4.22	2.00	2.00	0.00
700.00	6.08	72.33	699.43	4.89	15.36	9.37	2.00	2.00	0.00
800.00	8.08	72.33	798.66	8.63	27.10	16.53	2.00	2.00	0.00
900.00	10.08	72.33	897.40	13.42	42.14	25.70	2.00	2.00	0.00
1,000.00	12.08	72.33	995.53	19.25	60.45	36.87	2.00	2.00	0.00
1,100.00	14.08	72.33	1,092.94	26.12	82.01	50.02	2.00	2.00	0.00
1,200.00	16.08	72.33	1,189.49	34.02	106.80	65.14	2.00	2.00	0.00
1,300.00	18.08	72.33	1,285.07	42.93	134.79	82.20	2.00	2.00	0.00
1,330.44	18.69	72.33	1,313.95	45.85	143.93	87.78	2.00	2.00	0.00
1,400.00	18.69	72.33	1,379.85	52.61	165.17	100.74	0.00	0.00	0.00
1,500.00	18.69	72.33	1,474.58	62.34	195.70	119.36	0.00	0.00	0.00
1,600.00	18.69	72.33	1,569.30	72.06	226.24	137.98	0.00	0.00	0.00
1,700.00	18.69	72.33	1,664.03	81.79	256.77	156.60	0.00	0.00	0.00
1,800.00	18.69	72.33	1,758.76	91.51	287.30	175.22	0.00	0.00	0.00
1,900.00	18.69	72.33	1,853.48	101.24	317.83	193.84	0.00	0.00	0.00
2,000.00	18.69	72.33	1,948.21	110.96	348.36	212.46	0.00	0.00	0.00
2,100.00	18.69	72.33	2,042.94	120.69	378.90	231.08	0.00	0.00	0.00
2,200.00	18.69	72.33	2,137.67	130.41	409.43	249.70	0.00	0.00	0.00
2,300.00	18.69	72.33	2,232.39	140.14	439.96	268.32	0.00	0.00	0.00
2,400.00	18.69	72.33	2,327.12	149.86	470.49	286.94	0.00	0.00	0.00
2,500.00	18.69	72.33	2,421.85	159.59	501.02	305.56	0.00	0.00	0.00
2,600.00	18.69	72.33	2,516.57	169.31	531.56	324.19	0.00	0.00	0.00
2,700.00	18.69	72.33	2,611.30	179.04	562.09	342.81	0.00	0.00	0.00
2,800.00	18.69	72.33	2,706.03	188.77	592.62	361.43	0.00	0.00	0.00
2,900.00	18.69	72.33	2,800.76	198.49	623.15	380.05	0.00	0.00	0.00
3,000.00	18.69	72.33	2,895.48	208.22	653.68	398.67	0.00	0.00	0.00
3,100.00	18.69	72.33	2,990.21	217.94	684.22	417.29	0.00	0.00	0.00
3,200.00	18.69	72.33	3,084.94	227.67	714.75	435.91	0.00	0.00	0.00
3,300.00	18.69	72.33	3,179.66	237.39	745.28	454.53	0.00	0.00	0.00
3,400.00	18.69	72.33	3,274.39	247.12	775.81	473.15	0.00	0.00	0.00
3,500.00	18.69	72.33	3,369.12	256.84	806.34	491.77	0.00	0.00	0.00
3,600.00	18.69	72.33	3,463.84	266.57	836.87	510.39	0.00	0.00	0.00
3,700.00	18.69	72.33	3,558.57	276.29	867.41	529.02	0.00	0.00	0.00
3,800.00	18.69	72.33	3,653.30	286.02	897.94	547.64	0.00	0.00	0.00
3,900.00	18.69	72.33	3,748.03	295.74	928.47	566.26	0.00	0.00	0.00
4,000.00	18.69	72.33	3,842.75	305.47	959.00	584.88	0.00	0.00	0.00
4,100.00	18.69	72.33	3,937.48	315.19	989.53	603.50	0.00	0.00	0.00
4,200.00	18.69	72.33	4,032.21	324.92	1,020.07	622.12	0.00	0.00	0.00
4,300.00	18.69	72.33	4,126.93	334.64	1,050.60	640.74	0.00	0.00	0.00
4,400.00	18.69	72.33	4,221.66	344.37	1,081.13	659.36	0.00	0.00	0.00
4,463.80	18.69	72.33	4,282.10	350.57	1,100.61	671.24	0.00	0.00	0.00
4,500.00	20.40	80.63	4,316.22	353.36	1,112.36	678.98	9.00	4.73	22.93
4,600.00	26.61	97.15	4,407.97	353.41	1,151.87	710.58	9.00	6.21	16.52
4,700.00	34.02	107.35	4,494.30	342.26	1,200.89	756.52	9.00	7.41	10.20
4,800.00	42.00	114.16	4,573.06	320.18	1,258.24	815.66	9.00	7.97	6.81
4,900.00	50.26	119.11	4,642.32	287.72	1,322.49	886.55	9.00	8.27	4.95
5,000.00	58.70	122.98	4,700.38	245.67	1,392.06	967.45	9.00	8.43	3.87



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Project:	Proposed Carson Unit	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site:	WC 21-1 Pad	North Reference:	True
Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,100.00	67.23	126.21	4,745.81	195.08	1,465.24	1,056.35	9.00	8.53	3.23
5,200.00	75.81	129.06	4,777.49	137.18	1,540.24	1,151.09	9.00	8.59	2.85
5,300.00	84.43	131.69	4,794.63	73.40	1,615.19	1,249.31	9.00	8.62	2.64
5,371.78	90.62	133.53	4,797.73	24.87	1,667.94	1,320.62	9.00	8.63	2.56
5,400.00	90.62	133.53	4,797.42	5.44	1,688.39	1,348.64	0.00	0.00	0.00
5,500.00	90.62	133.53	4,796.33	-63.43	1,760.89	1,447.94	0.00	0.00	0.00
5,600.00	90.62	133.53	4,795.24	-132.31	1,833.38	1,547.25	0.00	0.00	0.00
5,700.00	90.62	133.53	4,794.15	-201.18	1,905.88	1,646.55	0.00	0.00	0.00
5,800.00	90.62	133.53	4,793.06	-270.05	1,978.37	1,745.86	0.00	0.00	0.00
5,900.00	90.62	133.53	4,791.97	-338.92	2,050.87	1,845.17	0.00	0.00	0.00
6,000.00	90.62	133.53	4,790.88	-407.79	2,123.36	1,944.47	0.00	0.00	0.00
6,100.00	90.62	133.53	4,789.79	-476.67	2,195.86	2,043.78	0.00	0.00	0.00
6,200.00	90.62	133.53	4,788.71	-545.54	2,268.35	2,143.08	0.00	0.00	0.00
6,300.00	90.62	133.53	4,787.62	-614.41	2,340.84	2,242.39	0.00	0.00	0.00
6,400.00	90.62	133.53	4,786.53	-683.28	2,413.34	2,341.69	0.00	0.00	0.00
6,500.00	90.62	133.53	4,785.44	-752.16	2,485.83	2,441.00	0.00	0.00	0.00
6,600.00	90.62	133.53	4,784.35	-821.03	2,558.33	2,540.30	0.00	0.00	0.00
6,700.00	90.62	133.53	4,783.26	-889.90	2,630.82	2,639.61	0.00	0.00	0.00
6,800.00	90.62	133.53	4,782.17	-958.77	2,703.32	2,738.91	0.00	0.00	0.00
6,900.00	90.62	133.53	4,781.08	-1,027.64	2,775.81	2,838.22	0.00	0.00	0.00
7,000.00	90.62	133.53	4,779.99	-1,096.52	2,848.30	2,937.52	0.00	0.00	0.00
7,100.00	90.62	133.53	4,778.90	-1,165.39	2,920.80	3,036.83	0.00	0.00	0.00
7,200.00	90.62	133.53	4,777.81	-1,234.26	2,993.29	3,136.13	0.00	0.00	0.00
7,300.00	90.62	133.53	4,776.72	-1,303.13	3,065.79	3,235.44	0.00	0.00	0.00
7,400.00	90.62	133.53	4,775.64	-1,372.01	3,138.28	3,334.74	0.00	0.00	0.00
7,500.00	90.62	133.53	4,774.55	-1,440.88	3,210.78	3,434.05	0.00	0.00	0.00
7,600.00	90.62	133.53	4,773.46	-1,509.75	3,283.27	3,533.35	0.00	0.00	0.00
7,700.00	90.62	133.53	4,772.37	-1,578.62	3,355.77	3,632.66	0.00	0.00	0.00
7,800.00	90.62	133.53	4,771.28	-1,647.49	3,428.26	3,731.96	0.00	0.00	0.00
7,900.00	90.62	133.53	4,770.19	-1,716.37	3,500.75	3,831.27	0.00	0.00	0.00
8,000.00	90.62	133.53	4,769.10	-1,785.24	3,573.25	3,930.57	0.00	0.00	0.00
8,100.00	90.62	133.53	4,768.01	-1,854.11	3,645.74	4,029.88	0.00	0.00	0.00
8,200.00	90.62	133.53	4,766.92	-1,922.98	3,718.24	4,129.19	0.00	0.00	0.00
8,300.00	90.62	133.53	4,765.83	-1,991.86	3,790.73	4,228.49	0.00	0.00	0.00
8,400.00	90.62	133.53	4,764.74	-2,060.73	3,863.23	4,327.80	0.00	0.00	0.00
8,500.00	90.62	133.53	4,763.65	-2,129.60	3,935.72	4,427.10	0.00	0.00	0.00
8,600.00	90.62	133.53	4,762.57	-2,198.47	4,008.21	4,526.41	0.00	0.00	0.00
8,700.00	90.62	133.53	4,761.48	-2,267.34	4,080.71	4,625.71	0.00	0.00	0.00
8,800.00	90.62	133.53	4,760.39	-2,336.22	4,153.20	4,725.02	0.00	0.00	0.00
8,900.00	90.62	133.53	4,759.30	-2,405.09	4,225.70	4,824.32	0.00	0.00	0.00
9,000.00	90.62	133.53	4,758.21	-2,473.96	4,298.19	4,923.63	0.00	0.00	0.00
9,100.00	90.62	133.53	4,757.12	-2,542.83	4,370.69	5,022.93	0.00	0.00	0.00
9,200.00	90.62	133.53	4,756.03	-2,611.71	4,443.18	5,122.24	0.00	0.00	0.00
9,300.00	90.62	133.53	4,754.94	-2,680.58	4,515.67	5,221.54	0.00	0.00	0.00
9,400.00	90.62	133.53	4,753.85	-2,749.45	4,588.17	5,320.85	0.00	0.00	0.00
9,500.00	90.62	133.53	4,752.76	-2,818.32	4,660.66	5,420.15	0.00	0.00	0.00
9,600.00	90.62	133.53	4,751.67	-2,887.19	4,733.16	5,519.46	0.00	0.00	0.00
9,700.00	90.62	133.53	4,750.58	-2,956.07	4,805.65	5,618.76	0.00	0.00	0.00
9,800.00	90.62	133.53	4,749.49	-3,024.94	4,878.15	5,718.07	0.00	0.00	0.00
9,900.00	90.62	133.53	4,748.41	-3,093.81	4,950.64	5,817.37	0.00	0.00	0.00
10,000.00	90.62	133.53	4,747.32	-3,162.68	5,023.14	5,916.68	0.00	0.00	0.00
10,100.00	90.62	133.53	4,746.23	-3,231.56	5,095.63	6,015.98	0.00	0.00	0.00
10,200.00	90.62	133.53	4,745.14	-3,300.43	5,168.12	6,115.29	0.00	0.00	0.00
10,300.00	90.62	133.53	4,744.05	-3,369.30	5,240.62	6,214.59	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Project:	Proposed Carson Unit	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site:	WC 21-1 Pad	North Reference:	True
Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,400.00	90.62	133.53	4,742.96	-3,438.17	5,313.11	6,313.90	0.00	0.00	0.00
10,500.00	90.62	133.53	4,741.87	-3,507.04	5,385.61	6,413.21	0.00	0.00	0.00
10,600.00	90.62	133.53	4,740.78	-3,575.92	5,458.10	6,512.51	0.00	0.00	0.00
10,700.00	90.62	133.53	4,739.69	-3,644.79	5,530.60	6,611.82	0.00	0.00	0.00
10,800.00	90.62	133.53	4,738.60	-3,713.66	5,603.09	6,711.12	0.00	0.00	0.00
10,900.00	90.62	133.53	4,737.51	-3,782.53	5,675.58	6,810.43	0.00	0.00	0.00
11,000.00	90.62	133.53	4,736.42	-3,851.41	5,748.08	6,909.73	0.00	0.00	0.00
11,100.00	90.62	133.53	4,735.34	-3,920.28	5,820.57	7,009.04	0.00	0.00	0.00
11,200.00	90.62	133.53	4,734.25	-3,989.15	5,893.07	7,108.34	0.00	0.00	0.00
11,300.00	90.62	133.53	4,733.16	-4,058.02	5,965.56	7,207.65	0.00	0.00	0.00
11,400.00	90.62	133.53	4,732.07	-4,126.89	6,038.06	7,306.95	0.00	0.00	0.00
11,500.00	90.62	133.53	4,730.98	-4,195.77	6,110.55	7,406.26	0.00	0.00	0.00
11,600.00	90.62	133.53	4,729.89	-4,264.64	6,183.05	7,505.56	0.00	0.00	0.00
11,700.00	90.62	133.53	4,728.80	-4,333.51	6,255.54	7,604.87	0.00	0.00	0.00
11,800.00	90.62	133.53	4,727.71	-4,402.38	6,328.03	7,704.17	0.00	0.00	0.00
11,900.00	90.62	133.53	4,726.62	-4,471.26	6,400.53	7,803.48	0.00	0.00	0.00
12,000.00	90.62	133.53	4,725.53	-4,540.13	6,473.02	7,902.78	0.00	0.00	0.00
12,100.00	90.62	133.53	4,724.44	-4,609.00	6,545.52	8,002.09	0.00	0.00	0.00
12,200.00	90.62	133.53	4,723.35	-4,677.87	6,618.01	8,101.39	0.00	0.00	0.00
12,300.00	90.62	133.53	4,722.27	-4,746.74	6,690.51	8,200.70	0.00	0.00	0.00
12,400.00	90.62	133.53	4,721.18	-4,815.62	6,763.00	8,300.00	0.00	0.00	0.00
12,500.00	90.62	133.53	4,720.09	-4,884.49	6,835.49	8,399.31	0.00	0.00	0.00
12,600.00	90.62	133.53	4,719.00	-4,953.36	6,907.99	8,498.61	0.00	0.00	0.00
12,700.00	90.62	133.53	4,717.91	-5,022.23	6,980.48	8,597.92	0.00	0.00	0.00
12,800.00	90.62	133.53	4,716.82	-5,091.11	7,052.98	8,697.22	0.00	0.00	0.00
12,900.00	90.62	133.53	4,715.73	-5,159.98	7,125.47	8,796.53	0.00	0.00	0.00
13,000.00	90.62	133.53	4,714.64	-5,228.85	7,197.97	8,895.84	0.00	0.00	0.00
13,100.00	90.62	133.53	4,713.55	-5,297.72	7,270.46	8,995.14	0.00	0.00	0.00
13,200.00	90.62	133.53	4,712.46	-5,366.59	7,342.95	9,094.45	0.00	0.00	0.00
13,300.00	90.62	133.53	4,711.37	-5,435.47	7,415.45	9,193.75	0.00	0.00	0.00
13,400.00	90.62	133.53	4,710.28	-5,504.34	7,487.94	9,293.06	0.00	0.00	0.00
13,500.00	90.62	133.53	4,709.20	-5,573.21	7,560.44	9,392.36	0.00	0.00	0.00
13,600.00	90.62	133.53	4,708.11	-5,642.08	7,632.93	9,491.67	0.00	0.00	0.00
13,700.00	90.62	133.53	4,707.02	-5,710.96	7,705.43	9,590.97	0.00	0.00	0.00
13,800.00	90.62	133.53	4,705.93	-5,779.83	7,777.92	9,690.28	0.00	0.00	0.00
13,900.00	90.62	133.53	4,704.84	-5,848.70	7,850.42	9,789.58	0.00	0.00	0.00
14,000.00	90.62	133.53	4,703.75	-5,917.57	7,922.91	9,888.89	0.00	0.00	0.00
14,069.53	90.62	133.53	4,703.00	-5,965.46	7,973.32	9,957.94	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
578H Toe Rev 3 - hit/miss target - Shape	0.00	0.00	4,703.00	-5,965.46	7,973.32	1,955,214.17	2,645,931.07	36.373	-108.095
578H Heel Rev 3 - plan hits target center - Circle (radius 100.00)	0.00	0.00	4,797.73	24.87	1,667.94	1,961,223.35	2,639,643.67	36.390	-108.117



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Project:	Proposed Carson Unit	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site:	WC 21-1 Pad	North Reference:	True
Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 3		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
345.98	345.98	Surface	9.625	12.250	
5,306.99	4,795.27	Intermediate	7.000	8.750	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
193.00	193.00	Ojo Alamo		0.00	0.00	
342.00	342.00	Kirtland		0.00	0.00	
926.02	923.00	Fruitland		0.00	0.00	
1,177.66	1,168.00	Pictured Cliffs		0.00	0.00	
1,274.71	1,261.00	Lewis		0.00	0.00	
1,959.66	1,910.00	Chacra		0.00	0.00	
2,575.11	2,493.00	Menefee		0.00	0.00	
3,701.50	3,559.99	Point Lookout		0.00	0.00	
3,867.24	3,716.99	Mancos		0.00	0.00	
4,210.33	4,041.99	Mancos Silt		0.00	0.00	
4,795.89	4,569.99	Gallup A		0.00	0.00	
4,888.64	4,634.99	Gallup B		0.00	0.00	
5,059.45	4,728.99	Gallup C		0.00	0.00	



DJR Operating

Proposed Carson Unit

WC 21-1 Pad

Carson #578H

Original Drilling

APD Rev 3

Anticollision Report

03 June, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Reference	APD Rev 3		
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 10,000.02ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 6/3/2021	
From (ft)	To (ft)	Survey (Wellbore)
0.00	14,069.53	APD Rev 3 (Original Drilling)
		Tool Name
		MWD+HDGM
		Description
		OWSG MWD + HDGM

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						
WC 21-1 Pad						
Bisti South 21H-2 - OH - OH	6,168.53	4,768.17	221.00	28.63	1.149	Level 3, CC
Bisti South 21H-2 - OH - OH	6,200.00	4,767.91	223.23	28.40	1.146	Level 3, ES, SF
Carson #582H - Original Drilling - APD Rev 3	395.98	395.98	20.00	17.57	8.230	CC
Carson #582H - Original Drilling - APD Rev 3	400.00	400.00	20.00	17.54	8.134	ES
Carson #582H - Original Drilling - APD Rev 3	12,800.00	13,107.09	1,231.23	788.72	2.782	SF
Carson #605H - Original Drilling - APD Rev 3	541.77	541.52	19.64	16.18	5.678	CC
Carson #605H - Original Drilling - APD Rev 3	700.00	699.48	20.31	15.72	4.427	ES
Carson #605H - Original Drilling - APD Rev 3	4,200.00	4,197.52	144.74	103.21	3.486	SF
Carson #609H - Original Drilling - APD Rev 3	615.75	615.75	37.27	33.31	9.415	CC, ES
Carson #609H - Original Drilling - APD Rev 3	700.00	699.37	38.73	34.17	8.499	SF
Renate Hixon 1 - OH - OH	7,140.72	4,596.99	707.54	505.25	3.498	CC, ES, SF
South Bisti 21-C - OH - OH	4,466.51	4,258.13	287.80	140.01	1.947	CC
South Bisti 21-C - OH - OH	4,500.00	4,289.69	288.79	139.85	1.939	ES, SF
Whee Whitney 1 - OH - OH	11,480.20	4,751.71	136.01	-192.27	0.414	Level 3, CC, ES, SF

Offset Design:	WC 21-1 Pad - Bisti South 21H-2 - OH - OH										Offset Site Error:	0.00 ft
Survey Program:	244-INCLINOMETER										Offset Well Error:	0.00 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
0.00	0.00	0.00	0.00	0.00	0.00	98.62	-363.67	2,397.76	2,425.28			
100.00	100.00	78.00	78.00	0.15	2.37	98.62	-363.67	2,397.76	2,425.18	2,422.66	2.52	961.214
200.00	200.00	178.00	178.00	0.51	5.41	98.62	-363.67	2,397.76	2,425.18	2,419.26	5.92	409.776
300.00	300.00	278.01	278.00	0.87	8.44	98.62	-363.67	2,397.76	2,425.18	2,415.87	9.31	260.386
395.98	395.98	373.99	373.98	1.22	11.36	98.62	-363.67	2,397.76	2,425.18	2,412.61	12.57	192.893
400.00	400.00	378.01	378.00	1.23	11.48	26.29	-363.67	2,397.76	2,425.18	2,412.47	12.71	190.824
500.00	499.98	477.99	477.98	1.58	14.52	26.33	-363.67	2,397.76	2,423.49	2,407.39	16.09	150.580
600.00	599.83	577.84	577.83	1.94	17.55	26.43	-363.67	2,397.76	2,418.67	2,399.19	19.48	124.147
700.00	699.43	677.36	677.35	2.30	20.57	26.58	-363.36	2,397.76	2,410.70	2,387.83	22.86	105.435
800.00	798.66	776.31	776.30	2.67	23.58	26.82	-363.42	2,397.76	2,399.68	2,373.44	26.23	91.478
900.00	897.40	874.76	874.74	3.06	26.57	27.12	-363.56	2,397.76	2,385.60	2,356.01	29.59	80.621
1,000.00	995.53	973.55	973.53	3.47	29.57	27.49	-363.67	2,397.76	2,368.47	2,335.51	32.96	71.849
1,100.00	1,092.94	1,070.95	1,070.94	3.90	32.52	27.94	-363.67	2,397.76	2,348.32	2,312.02	36.30	64.684
1,200.00	1,189.49	1,167.00	1,166.98	4.37	35.44	28.46	-363.56	2,397.76	2,325.20	2,285.59	39.61	58.698



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Bisti South 21H-2 - OH - OH													Offset Site Error:	0.00 ft	
Survey Program:		244-INCLINOMETER						Rule Assigned:						Offset Well Error:	0.00 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)		
1,300.00	1,285.07	1,263.09	1,263.07	4.87	38.36	29.07	-363.67	2,397.76	2,299.21	2,256.28	42.93	53.552			
1,330.44	1,313.95	1,291.98	1,291.95	5.03	39.24	29.27	-363.67	2,397.76	2,290.73	2,246.79	43.94	52.133			
1,400.00	1,379.85	1,357.87	1,357.85	5.41	41.24	29.54	-363.67	2,397.76	2,271.06	2,224.84	46.23	49.128			
1,500.00	1,474.58	1,451.63	1,451.60	5.97	44.08	29.93	-363.44	2,397.76	2,242.84	2,193.35	49.49	45.317			
1,600.00	1,569.30	1,547.34	1,547.30	6.53	46.99	30.35	-363.67	2,397.76	2,214.81	2,161.98	52.83	41.926			
1,700.00	1,664.03	1,641.77	1,641.73	7.11	49.86	30.76	-363.31	2,397.76	2,186.77	2,130.64	56.13	38.960			
1,800.00	1,758.76	1,734.00	1,733.95	7.70	52.66	31.18	-363.63	2,397.76	2,158.98	2,099.61	59.37	36.364			
1,900.00	1,853.48	1,831.56	1,831.48	8.29	55.62	31.64	-363.67	2,397.76	2,131.25	2,068.47	62.78	33.947			
2,000.00	1,948.21	1,925.08	1,925.00	8.88	58.46	32.06	-362.89	2,397.76	2,103.47	2,037.39	66.08	31.834			
2,100.00	2,042.94	2,016.60	2,016.50	9.48	61.24	32.52	-363.43	2,397.76	2,076.10	2,006.78	69.32	29.950			
2,200.00	2,137.67	2,115.80	2,115.67	10.08	64.25	33.03	-363.67	2,397.76	2,048.80	1,976.00	72.80	28.145			
2,300.00	2,232.39	2,209.88	2,209.74	10.69	67.11	33.49	-363.04	2,397.76	2,021.43	1,945.30	76.12	26.554			
2,400.00	2,327.12	2,301.83	2,301.69	11.29	69.90	33.99	-363.40	2,397.76	1,994.45	1,915.05	79.40	25.120			
2,500.00	2,421.85	2,400.05	2,399.85	11.90	72.88	34.53	-363.67	2,397.76	1,967.59	1,884.73	82.86	23.746			
2,600.00	2,516.57	2,494.83	2,494.57	12.51	75.76	35.05	-363.67	2,397.76	1,940.82	1,854.59	86.23	22.508			
2,700.00	2,611.30	2,589.57	2,589.30	13.12	78.64	35.59	-363.67	2,397.76	1,914.22	1,824.62	89.60	21.364			
2,800.00	2,706.03	2,684.33	2,684.03	13.73	81.52	36.15	-363.67	2,397.76	1,887.78	1,794.80	92.98	20.304			
2,900.00	2,800.76	2,775.96	2,775.66	14.35	84.30	36.69	-363.35	2,397.76	1,861.43	1,765.16	96.27	19.336			
3,000.00	2,895.48	2,873.81	2,873.48	14.96	87.27	37.31	-363.67	2,397.76	1,835.44	1,735.69	99.75	18.400			
3,100.00	2,990.21	2,967.10	2,966.78	15.57	90.10	37.89	-363.36	2,397.76	1,809.46	1,706.36	103.10	17.550			
3,200.00	3,084.94	3,063.29	3,062.94	16.19	93.03	38.53	-363.67	2,397.76	1,783.87	1,677.32	106.55	16.742			
3,300.00	3,179.66	3,158.04	3,157.66	16.81	95.90	39.17	-363.67	2,397.76	1,758.40	1,648.44	109.96	15.991			
3,400.00	3,274.39	3,248.19	3,247.81	17.42	98.64	39.79	-363.60	2,397.76	1,733.12	1,619.88	113.24	15.305			
3,500.00	3,369.12	3,347.51	3,347.12	18.04	101.66	40.49	-363.67	2,397.76	1,708.11	1,591.31	116.80	14.624			
3,600.00	3,463.84	3,441.69	3,441.30	18.66	104.52	41.17	-363.34	2,397.76	1,683.20	1,562.98	120.21	14.002			
3,700.00	3,558.57	3,534.72	3,534.33	19.27	107.34	41.88	-363.55	2,397.76	1,658.73	1,535.13	123.60	13.420			
3,800.00	3,653.30	3,631.70	3,631.30	19.89	110.29	42.63	-363.67	2,397.76	1,634.49	1,507.38	127.11	12.859			
3,900.00	3,748.03	3,726.13	3,725.73	20.51	113.15	43.37	-363.35	2,397.76	1,610.35	1,479.79	130.56	12.334			
4,000.00	3,842.75	3,819.00	3,818.60	21.13	115.98	44.14	-363.52	2,397.76	1,586.69	1,452.72	133.97	11.844			
4,100.00	3,937.48	3,915.90	3,915.48	21.75	118.92	44.96	-363.67	2,397.76	1,563.31	1,425.81	137.50	11.370			
4,200.00	4,032.21	4,010.27	4,009.85	22.37	121.78	45.76	-363.21	2,397.76	1,539.98	1,399.02	140.97	10.924			
4,300.00	4,126.93	4,102.05	4,101.62	22.99	124.57	46.58	-363.45	2,397.76	1,517.30	1,372.92	144.37	10.510			
4,400.00	4,221.66	4,200.10	4,199.66	23.60	127.55	47.49	-363.67	2,397.76	1,494.93	1,346.97	147.97	10.103			
4,463.80	4,282.10	4,260.53	4,260.10	24.00	129.38	48.05	-363.67	2,397.76	1,480.79	1,330.59	150.20	9.859			
4,500.00	4,316.22	4,294.65	4,294.22	24.23	130.42	40.34	-363.67	2,397.76	1,471.86	1,320.39	151.47	9.717			
4,550.00	4,362.64	4,341.07	4,340.64	24.58	131.83	31.77	-363.67	2,397.76	1,456.44	1,303.25	153.19	9.507			
4,600.00	4,407.97	4,386.07	4,385.63	24.96	133.20	25.13	-363.19	2,397.76	1,437.28	1,282.42	154.86	9.281			
4,650.00	4,451.95	4,429.44	4,429.00	25.37	134.51	19.95	-363.23	2,397.76	1,414.96	1,258.49	156.46	9.043			
4,700.00	4,494.30	4,471.21	4,470.77	25.80	135.78	15.75	-363.30	2,397.76	1,389.36	1,231.35	158.01	8.793			
4,750.00	4,534.75	4,511.14	4,510.70	26.27	136.99	12.23	-363.40	2,397.76	1,360.62	1,201.15	159.47	8.532			
4,800.00	4,573.06	4,548.98	4,548.54	26.77	138.14	9.11	-363.53	2,397.76	1,328.90	1,168.05	160.85	8.262			
4,850.00	4,608.99	4,587.44	4,586.99	27.30	139.31	6.20	-363.67	2,397.76	1,294.38	1,132.17	162.21	7.980			
4,900.00	4,642.32	4,620.77	4,620.32	27.86	140.32	3.28	-363.67	2,397.76	1,257.19	1,093.80	163.39	7.694			
4,950.00	4,672.85	4,651.30	4,650.85	28.46	141.25	0.16	-363.67	2,397.76	1,217.61	1,053.16	164.45	7.404			
5,000.00	4,700.38	4,678.81	4,678.36	29.09	142.09	-3.42	-363.46	2,397.76	1,175.79	1,010.41	165.37	7.110			
5,050.00	4,724.76	4,702.55	4,702.10	29.75	142.81	-7.77	-363.47	2,397.76	1,132.20	966.05	166.14	6.815			
5,100.00	4,745.81	4,723.11	4,722.65	30.45	143.43	-13.42	-363.51	2,397.76	1,087.02	920.25	166.77	6.518			
5,150.00	4,763.43	4,740.36	4,739.91	31.17	143.96	-21.13	-363.55	2,397.76	1,040.53	873.28	167.25	6.222			
5,200.00	4,777.49	4,754.19	4,753.74	31.93	144.38	-32.02	-363.59	2,397.76	993.04	825.48	167.56	5.926			
5,250.00	4,787.91	4,764.50	4,764.05	32.71	144.69	-47.14	-363.63	2,397.76	944.87	777.15	167.71	5.634			
5,300.00	4,794.63	4,773.09	4,772.63	33.50	144.95	-66.37	-363.67	2,397.76	896.35	728.61	167.74	5.344			
5,350.00	4,797.61	4,776.06	4,775.61	34.31	145.04	-85.18	-363.67	2,397.76	847.84	680.29	167.55	5.060			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Bisti South 21H-2 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 244-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Rule Assigned:		
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
5,371.78	4,797.73	4,776.18	4,775.73	34.66	145.04	-92.25	-363.67	2,397.76	826.80	659.39	167.41	4.939	
5,400.00	4,797.42	4,775.88	4,775.42	35.12	145.03	-92.17	-363.67	2,397.76	799.65	632.44	167.21	4.782	
5,500.00	4,796.33	4,774.79	4,774.33	36.83	145.00	-91.89	-363.67	2,397.76	704.09	537.64	166.45	4.230	
5,600.00	4,795.24	4,773.70	4,773.24	38.64	144.97	-91.61	-363.67	2,397.76	609.96	444.28	165.68	3.682	
5,700.00	4,794.15	4,771.91	4,771.45	40.54	144.91	-91.14	-363.66	2,397.76	518.02	352.95	165.08	3.138	
5,800.00	4,793.06	4,771.12	4,770.67	42.52	144.89	-90.94	-363.66	2,397.76	429.71	264.48	165.22	2.601	
5,900.00	4,791.97	4,770.33	4,769.87	44.58	144.87	-90.73	-363.66	2,397.76	347.77	180.36	167.41	2.077	
6,000.00	4,790.88	4,769.53	4,769.07	46.69	144.84	-90.52	-363.65	2,397.76	277.93	104.17	173.76	1.599	
6,100.00	4,789.79	4,768.72	4,768.27	48.86	144.82	-90.32	-363.65	2,397.76	231.38	46.56	184.82	1.252 Level 3	
6,168.53	4,789.05	4,768.17	4,767.72	50.37	144.80	-90.17	-363.65	2,397.76	221.00	28.63	192.37	1.149 Level 3, CC	
6,200.00	4,788.71	4,767.91	4,767.46	51.07	144.79	-90.11	-363.65	2,397.76	223.23	28.40	194.83	1.146 Level 3, ES, SF	
6,300.00	4,787.62	4,767.10	4,766.65	53.33	144.77	-89.90	-363.64	2,397.76	257.15	59.93	197.22	1.304 Level 3	
6,400.00	4,786.53	4,766.28	4,765.83	55.61	144.74	-89.68	-363.64	2,397.76	320.03	125.18	194.85	1.642	
6,500.00	4,785.44	4,765.46	4,765.00	57.93	144.72	-89.47	-363.64	2,397.76	398.38	206.67	191.71	2.078	
6,600.00	4,784.35	4,764.63	4,764.17	60.28	144.69	-89.25	-363.63	2,397.76	484.76	295.73	189.04	2.564	
6,700.00	4,783.26	4,763.79	4,763.34	62.65	144.67	-89.04	-363.63	2,397.76	575.57	388.63	186.94	3.079	
6,800.00	4,782.17	4,762.95	4,762.50	65.04	144.64	-88.82	-363.63	2,397.76	669.01	483.70	185.31	3.610	
6,900.00	4,781.08	4,762.10	4,761.65	67.45	144.62	-88.60	-363.62	2,397.76	764.10	580.08	184.02	4.152	
7,000.00	4,779.99	4,761.25	4,760.80	69.88	144.59	-88.38	-363.62	2,397.76	860.31	677.32	182.99	4.701	
7,100.00	4,778.90	4,760.39	4,759.94	72.32	144.56	-88.16	-363.62	2,397.76	957.30	775.14	182.15	5.255	
7,200.00	4,777.81	4,759.53	4,759.08	74.77	144.54	-87.93	-363.61	2,397.76	1,054.85	873.38	181.46	5.813	
7,300.00	4,776.72	4,758.66	4,758.21	77.24	144.51	-87.71	-363.61	2,397.76	1,152.81	971.93	180.88	6.373	
7,400.00	4,775.64	4,757.79	4,757.33	79.72	144.48	-87.48	-363.61	2,397.76	1,251.10	1,070.72	180.38	6.936	
7,500.00	4,774.55	4,756.91	4,756.45	82.21	144.46	-87.26	-363.60	2,397.76	1,349.64	1,169.68	179.96	7.500	
7,600.00	4,773.46	4,756.02	4,755.57	84.71	144.43	-87.03	-363.60	2,397.76	1,448.38	1,268.79	179.59	8.065	
7,700.00	4,772.37	4,755.13	4,754.68	87.21	144.40	-86.80	-363.60	2,397.76	1,547.28	1,368.02	179.26	8.631	
7,800.00	4,771.28	4,754.23	4,753.78	89.73	144.38	-86.56	-363.59	2,397.76	1,646.31	1,467.34	178.97	9.199	
7,900.00	4,770.19	4,753.33	4,752.87	92.25	144.35	-86.33	-363.59	2,397.76	1,745.46	1,566.74	178.72	9.766	
8,000.00	4,769.10	4,752.42	4,751.96	94.77	144.32	-86.10	-363.59	2,397.76	1,844.69	1,666.20	178.49	10.335	
8,100.00	4,768.01	4,751.50	4,751.05	97.31	144.29	-85.86	-363.58	2,397.76	1,944.01	1,765.72	178.28	10.904	
8,200.00	4,766.92	4,750.58	4,750.12	99.85	144.27	-85.62	-363.58	2,397.76	2,043.39	1,865.29	178.10	11.473	
8,300.00	4,765.83	4,749.65	4,749.19	102.39	144.24	-85.38	-363.58	2,397.76	2,142.82	1,964.89	177.93	12.043	
8,400.00	4,764.74	4,748.71	4,748.26	104.94	144.21	-85.14	-363.58	2,397.76	2,242.31	2,064.54	177.77	12.613	
8,500.00	4,763.65	4,747.77	4,747.32	107.49	144.18	-84.90	-363.57	2,397.76	2,341.84	2,164.21	177.63	13.184	
8,600.00	4,762.57	4,746.82	4,746.37	110.05	144.15	-84.66	-363.57	2,397.76	2,441.41	2,263.91	177.50	13.754	
8,700.00	4,761.48	4,745.87	4,745.41	112.61	144.12	-84.41	-363.57	2,397.76	2,541.01	2,363.63	177.38	14.325	
8,800.00	4,760.39	4,744.90	4,744.45	115.17	144.09	-84.16	-363.56	2,397.76	2,640.64	2,463.37	177.27	14.896	
8,900.00	4,759.30	4,743.94	4,743.48	117.74	144.06	-83.92	-363.56	2,397.76	2,740.30	2,563.13	177.17	15.467	
9,000.00	4,758.21	4,742.96	4,742.51	120.31	144.03	-83.67	-363.56	2,397.76	2,839.98	2,662.91	177.07	16.039	
9,100.00	4,757.12	4,741.98	4,741.53	122.88	144.00	-83.41	-363.55	2,397.76	2,939.68	2,762.70	176.98	16.610	
9,200.00	4,756.03	4,740.99	4,740.54	125.45	143.97	-83.16	-363.55	2,397.76	3,039.41	2,862.51	176.90	17.182	
9,300.00	4,754.94	4,739.99	4,739.54	128.03	143.94	-82.91	-363.55	2,397.76	3,139.15	2,962.32	176.82	17.753	
9,400.00	4,753.85	4,738.99	4,738.54	130.61	143.91	-82.65	-363.55	2,397.76	3,238.90	3,062.15	176.75	18.325	
9,500.00	4,752.76	4,737.98	4,737.53	133.19	143.88	-82.39	-363.54	2,397.76	3,338.67	3,161.99	176.68	18.897	
9,600.00	4,751.67	4,736.96	4,736.51	135.78	143.85	-82.14	-363.54	2,397.76	3,438.45	3,261.84	176.62	19.468	
9,700.00	4,750.58	4,735.94	4,735.49	138.36	143.82	-81.88	-363.54	2,397.76	3,538.25	3,361.69	176.56	20.040	
9,800.00	4,749.49	4,734.91	4,734.45	140.95	143.79	-81.61	-363.53	2,397.76	3,638.05	3,461.56	176.50	20.612	
9,900.00	4,748.41	4,733.87	4,733.41	143.54	143.76	-81.35	-363.53	2,397.76	3,737.87	3,561.43	176.45	21.184	
10,000.00	4,747.32	4,732.82	4,732.37	146.13	143.73	-81.09	-363.53	2,397.76	3,837.70	3,661.30	176.40	21.756	
10,100.00	4,746.23	4,731.77	4,731.31	148.73	143.69	-80.82	-363.53	2,397.76	3,937.53	3,761.18	176.35	22.328	
10,200.00	4,745.14	4,730.70	4,730.25	151.32	143.66	-80.55	-363.52	2,397.76	4,037.37	3,861.07	176.30	22.900	
10,300.00	4,744.05	4,729.63	4,729.18	153.92	143.63	-80.28	-363.52	2,397.76	4,137.22	3,960.96	176.26	23.472	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Bisti South 21H-2 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 244-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)			
10,400.00	4,742.96	4,728.56	4,728.10	156.51	143.60	-80.01	-363.52	2,397.76	4,237.08	4,060.86	176.22	24.044	
10,500.00	4,741.87	4,727.47	4,727.02	159.11	143.56	-79.74	-363.52	2,397.76	4,336.94	4,160.76	176.18	24.616	
10,600.00	4,740.78	4,726.37	4,725.92	161.71	143.53	-79.46	-363.51	2,397.76	4,436.81	4,260.66	176.15	25.188	
10,700.00	4,739.69	4,725.27	4,724.82	164.31	143.50	-79.19	-363.51	2,397.76	4,536.68	4,360.57	176.11	25.760	
10,800.00	4,738.60	4,724.16	4,723.71	166.91	143.46	-78.91	-363.51	2,397.76	4,636.56	4,460.48	176.08	26.332	
10,900.00	4,737.51	4,723.04	4,722.59	169.52	143.43	-78.63	-363.51	2,397.76	4,736.45	4,560.40	176.05	26.904	
11,000.00	4,736.42	4,721.92	4,721.46	172.12	143.40	-78.35	-363.50	2,397.76	4,836.34	4,660.32	176.02	27.476	
11,100.00	4,735.34	4,720.78	4,720.33	174.72	143.36	-78.07	-363.50	2,397.76	4,936.23	4,760.24	175.99	28.048	
11,200.00	4,734.25	4,719.64	4,719.18	177.33	143.33	-77.79	-363.50	2,397.76	5,036.13	4,860.16	175.97	28.620	
11,300.00	4,733.16	4,718.48	4,718.03	179.94	143.29	-77.50	-363.50	2,397.76	5,136.03	4,960.09	175.94	29.192	
11,400.00	4,732.07	4,717.32	4,716.87	182.54	143.26	-77.21	-363.50	2,397.76	5,235.93	5,060.01	175.92	29.763	
11,500.00	4,730.98	4,716.15	4,715.70	185.15	143.22	-76.93	-363.49	2,397.76	5,335.84	5,159.94	175.90	30.335	
11,600.00	4,729.89	4,714.97	4,714.52	187.76	143.18	-76.64	-363.49	2,397.76	5,435.75	5,259.88	175.87	30.907	
11,700.00	4,728.80	4,713.78	4,713.33	190.37	143.15	-76.34	-363.49	2,397.76	5,535.66	5,359.81	175.85	31.479	
11,800.00	4,727.71	4,712.58	4,712.13	192.98	143.11	-76.05	-363.49	2,397.76	5,635.58	5,459.75	175.84	32.050	
11,900.00	4,726.62	4,711.37	4,710.92	195.59	143.08	-75.76	-363.49	2,397.76	5,735.50	5,559.68	175.82	32.622	
12,000.00	4,725.53	4,710.16	4,709.70	198.20	143.04	-75.46	-363.48	2,397.76	5,835.42	5,659.62	175.80	33.193	
12,100.00	4,724.44	4,708.93	4,708.48	200.81	143.00	-75.16	-363.48	2,397.76	5,935.35	5,759.56	175.78	33.765	
12,200.00	4,723.35	4,707.69	4,707.24	203.43	142.96	-74.87	-363.48	2,397.76	6,035.27	5,859.50	175.77	34.336	
12,300.00	4,722.27	4,706.45	4,706.00	206.04	142.93	-74.57	-363.48	2,397.76	6,135.20	5,959.45	175.76	34.908	
12,400.00	4,721.18	4,705.19	4,704.74	208.65	142.89	-74.26	-363.48	2,397.76	6,235.13	6,059.39	175.74	35.479	
12,500.00	4,720.09	4,703.93	4,703.47	211.27	142.85	-73.96	-363.48	2,397.76	6,335.07	6,159.34	175.73	36.050	
12,600.00	4,719.00	4,702.65	4,702.20	213.88	142.81	-73.66	-363.47	2,397.76	6,435.00	6,259.29	175.72	36.621	
12,700.00	4,717.91	4,701.36	4,700.91	216.50	142.77	-73.35	-363.47	2,397.76	6,534.94	6,359.23	175.71	37.193	
12,800.00	4,716.82	4,700.07	4,699.61	219.11	142.73	-73.04	-363.47	2,397.76	6,634.88	6,459.18	175.69	37.764	
12,900.00	4,715.73	4,698.76	4,698.31	221.73	142.69	-72.73	-363.47	2,397.76	6,734.82	6,559.13	175.68	38.335	
13,000.00	4,714.64	4,697.44	4,696.99	224.35	142.65	-72.42	-363.47	2,397.76	6,834.76	6,659.08	175.68	38.906	
13,100.00	4,713.55	4,696.11	4,695.66	226.96	142.61	-72.11	-363.47	2,397.76	6,934.70	6,759.04	175.67	39.477	
13,200.00	4,712.46	4,694.77	4,694.32	229.58	142.57	-71.80	-363.47	2,397.76	7,034.65	6,858.99	175.66	40.047	
13,300.00	4,711.37	4,693.42	4,692.97	232.20	142.53	-71.48	-363.47	2,397.76	7,134.59	6,958.94	175.65	40.618	
13,400.00	4,710.28	4,692.06	4,691.61	234.82	142.49	-71.16	-363.46	2,397.76	7,234.54	7,058.90	175.64	41.189	
13,500.00	4,709.20	4,690.69	4,690.23	237.44	142.45	-70.85	-363.46	2,397.76	7,334.49	7,158.85	175.64	41.760	
13,600.00	4,708.11	4,689.30	4,688.85	240.06	142.41	-70.53	-363.46	2,397.76	7,434.44	7,258.81	175.63	42.330	
13,700.00	4,707.02	4,687.90	4,687.45	242.67	142.36	-70.20	-363.46	2,397.76	7,534.39	7,358.77	175.62	42.901	
13,800.00	4,705.93	4,686.50	4,686.04	245.29	142.32	-69.88	-363.46	2,397.76	7,634.34	7,458.72	175.62	43.471	
13,900.00	4,704.84	4,685.08	4,684.62	247.91	142.28	-69.56	-363.46	2,397.76	7,734.29	7,558.68	175.61	44.042	
14,000.00	4,703.75	4,683.64	4,683.19	250.53	142.23	-69.23	-363.46	2,397.76	7,834.25	7,658.64	175.61	44.612	
14,069.53	4,703.00	4,682.65	4,682.20	252.36	142.20	-69.01	-363.46	2,397.76	7,903.75	7,728.14	175.61	45.008	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 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	
0.00	0.00	0.00	0.00	0.00	0.00	179.83	-20.00	0.06	20.00					
100.00	100.00	100.00	100.00	0.15	0.15	179.83	-20.00	0.06	20.00	19.69	0.31	64.875		
200.00	200.00	200.00	200.00	0.51	0.51	179.83	-20.00	0.06	20.00	18.97	1.03	19.508		
300.00	300.00	300.00	300.00	0.87	0.87	179.83	-20.00	0.06	20.00	18.26	1.74	11.480		
395.98	395.98	395.98	395.98	1.22	1.22	179.83	-20.00	0.06	20.00	17.57	2.43	8.230 CC		
400.00	400.00	400.00	400.00	1.23	1.23	107.51	-20.00	0.06	20.00	17.54	2.46	8.134 ES		
500.00	499.98	499.69	499.69	1.58	1.58	113.42	-20.33	-0.32	21.01	17.85	3.16	6.653		
600.00	599.83	599.42	599.40	1.94	1.92	127.62	-21.58	-1.77	25.33	21.48	3.85	6.577		
700.00	699.43	698.85	698.81	2.30	2.26	141.27	-22.83	-3.22	33.38	28.82	4.56	7.326		
800.00	798.66	797.85	797.79	2.67	2.60	151.52	-24.07	-4.66	45.60	40.33	5.27	8.659		
900.00	897.40	896.29	896.22	3.06	2.95	158.53	-25.31	-6.09	61.87	55.89	5.98	10.349		
1,000.00	995.53	994.06	993.97	3.47	3.29	163.28	-26.54	-7.52	81.97	75.28	6.69	12.249		
1,100.00	1,092.94	1,091.05	1,090.93	3.90	3.64	166.57	-27.76	-8.93	105.72	98.32	7.41	14.275		
1,200.00	1,189.49	1,187.12	1,186.99	4.37	3.98	168.92	-28.96	-10.33	133.01	124.89	8.12	16.380		
1,300.00	1,285.07	1,282.17	1,282.02	4.87	4.31	170.64	-30.16	-11.71	163.75	154.91	8.83	18.534		
1,330.44	1,313.95	1,310.88	1,310.72	5.03	4.42	171.08	-30.52	-12.13	173.77	164.72	9.06	19.188		
1,400.00	1,379.85	1,376.36	1,376.20	5.41	4.65	171.98	-31.34	-13.08	197.07	187.52	9.55	20.640		
1,500.00	1,474.58	1,470.51	1,470.33	5.97	4.99	172.97	-32.52	-14.45	230.61	220.36	10.26	22.487		
1,600.00	1,569.30	1,564.65	1,564.45	6.53	5.32	173.70	-33.71	-15.82	264.20	253.23	10.97	24.090		
1,700.00	1,664.03	1,658.79	1,658.58	7.11	5.66	174.27	-34.89	-17.19	297.82	286.14	11.68	25.493		
1,800.00	1,758.76	1,752.94	1,752.70	7.70	6.00	174.72	-36.07	-18.56	331.46	319.06	12.40	26.729		
1,900.00	1,853.48	1,847.08	1,846.83	8.29	6.33	175.09	-37.25	-19.93	365.11	351.99	13.12	27.825		
2,000.00	1,948.21	1,941.22	1,940.95	8.88	6.67	175.39	-38.44	-21.30	398.78	384.94	13.84	28.804		
2,100.00	2,042.94	2,035.37	2,035.08	9.48	7.01	175.65	-39.62	-22.67	432.45	417.89	14.57	29.682		
2,200.00	2,137.67	2,129.51	2,129.20	10.08	7.35	175.87	-40.80	-24.04	466.14	450.84	15.30	30.475		
2,300.00	2,232.39	2,223.65	2,223.33	10.69	7.68	176.07	-41.99	-25.41	499.82	483.80	16.02	31.193		
2,400.00	2,327.12	2,317.79	2,317.46	11.29	8.02	176.23	-43.17	-26.78	533.51	516.76	16.75	31.848		
2,500.00	2,421.85	2,411.94	2,411.58	11.90	8.36	176.38	-44.35	-28.15	567.21	549.73	17.48	32.445		
2,600.00	2,516.57	2,506.08	2,505.71	12.51	8.70	176.51	-45.53	-29.52	600.90	582.69	18.21	32.994		
2,700.00	2,611.30	2,600.22	2,599.83	13.12	9.04	176.63	-46.72	-30.89	634.60	615.66	18.94	33.499		
2,800.00	2,706.03	2,694.37	2,693.96	13.73	9.38	176.73	-47.90	-32.26	668.31	648.63	19.68	33.965		
2,900.00	2,800.76	2,788.51	2,788.08	14.35	9.71	176.83	-49.08	-33.63	702.01	681.60	20.41	34.396		
3,000.00	2,895.48	2,882.65	2,882.21	14.96	10.05	176.92	-50.26	-35.00	735.72	714.57	21.14	34.797		
3,100.00	2,990.21	2,976.80	2,976.34	15.57	10.39	176.99	-51.45	-36.37	769.42	747.55	21.88	35.170		
3,200.00	3,084.94	3,070.94	3,070.46	16.19	10.73	177.07	-52.63	-37.74	803.13	780.52	22.61	35.519		
3,300.00	3,179.66	3,165.08	3,164.59	16.81	11.07	177.13	-53.81	-39.11	836.84	813.49	23.35	35.844		
3,400.00	3,274.39	3,259.23	3,258.71	17.42	11.41	177.19	-54.99	-40.48	870.55	846.47	24.08	36.150		
3,500.00	3,369.12	3,353.37	3,352.84	18.04	11.74	177.25	-56.18	-41.85	904.26	879.44	24.82	36.436		
3,600.00	3,463.84	3,447.51	3,446.96	18.66	12.08	177.30	-57.36	-43.22	937.97	912.42	25.55	36.706		
3,700.00	3,558.57	3,541.65	3,541.09	19.27	12.42	177.35	-58.54	-44.59	971.68	945.39	26.29	36.960		
3,800.00	3,653.30	3,635.80	3,635.21	19.89	12.76	177.40	-59.72	-45.97	1,005.40	978.37	27.03	37.199		
3,900.00	3,748.03	3,729.94	3,729.34	20.51	13.10	177.44	-60.91	-47.34	1,039.11	1,011.34	27.76	37.426		
4,000.00	3,842.75	3,824.08	3,823.47	21.13	13.44	177.48	-62.09	-48.71	1,072.82	1,044.32	28.50	37.641		
4,100.00	3,937.48	3,918.23	3,917.59	21.75	13.77	177.52	-63.27	-50.08	1,106.54	1,077.30	29.24	37.844		
4,200.00	4,032.21	4,012.37	4,011.72	22.37	14.11	177.55	-64.45	-51.45	1,140.25	1,110.27	29.98	38.037		
4,300.00	4,126.93	4,106.51	4,105.84	22.99	14.45	177.59	-65.64	-52.82	1,173.97	1,143.25	30.72	38.221		
4,400.00	4,221.66	4,448.23	4,437.32	23.60	15.62	174.83	-115.47	-9.22	1,202.84	1,170.15	32.69	36.799		
4,463.80	4,282.10	4,733.06	4,656.36	24.00	16.90	167.31	-240.84	117.61	1,206.71	1,172.55	34.15	35.331		
4,500.00	4,316.22	4,837.89	4,713.88	24.23	17.72	155.79	-301.67	180.50	1,206.47	1,171.25	35.23	34.250		
4,550.00	4,362.64	4,945.32	4,757.14	24.58	18.85	143.14	-369.65	251.37	1,205.79	1,168.90	36.90	32.681		
4,598.62	4,406.74	5,024.42	4,778.10	24.95	19.89	133.63	-422.23	306.55	1,205.48	1,166.90	38.57	31.251		
4,600.00	4,407.97	5,026.41	4,778.50	24.96	19.92	133.39	-423.57	307.96	1,205.48	1,166.86	38.62	31.213		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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	
4,650.00	4,451.95	5,091.74	4,788.38	25.37	20.89	125.72	-468.00	354.79	1,205.91	1,165.61	40.30	29.924	
4,700.00	4,494.30	5,147.11	4,791.54	25.80	21.78	119.51	-505.96	394.95	1,207.22	1,165.31	41.91	28.807	
4,750.00	4,534.75	5,181.29	4,791.36	26.27	22.36	114.92	-529.41	419.82	1,209.54	1,166.42	43.12	28.051	
4,800.00	4,573.06	5,210.92	4,791.04	26.77	22.88	111.10	-549.73	441.38	1,213.06	1,168.83	44.24	27.423	
4,850.00	4,608.99	5,243.62	4,790.69	27.30	23.48	107.62	-572.16	465.17	1,217.56	1,172.13	45.43	26.800	
4,900.00	4,642.32	5,279.19	4,790.31	27.86	24.13	104.44	-596.56	491.05	1,222.76	1,176.05	46.70	26.183	
4,950.00	4,672.85	5,317.40	4,789.90	28.46	24.86	101.55	-622.77	518.85	1,228.37	1,180.30	48.06	25.556	
5,000.00	4,700.38	5,358.03	4,789.46	29.09	25.66	98.93	-650.63	548.41	1,234.12	1,184.58	49.53	24.916	
5,050.00	4,724.76	5,400.81	4,789.00	29.75	26.50	96.60	-679.98	579.54	1,239.75	1,188.66	51.08	24.269	
5,100.00	4,745.81	5,445.49	4,788.52	30.45	27.43	94.57	-710.63	612.05	1,245.02	1,192.26	52.76	23.600	
5,150.00	4,763.43	5,491.79	4,788.02	31.17	28.39	92.86	-742.39	645.74	1,249.71	1,195.20	54.51	22.927	
5,200.00	4,777.49	5,539.43	4,787.50	31.93	29.42	91.49	-775.06	680.40	1,253.64	1,197.27	56.36	22.242	
5,250.00	4,787.91	5,588.10	4,786.98	32.71	30.47	90.46	-808.45	715.81	1,256.65	1,198.36	58.29	21.558	
5,300.00	4,794.63	5,637.52	4,786.45	33.50	31.57	89.79	-842.35	751.77	1,258.63	1,198.34	60.29	20.875	
5,350.00	4,797.61	5,687.38	4,785.91	34.31	32.68	89.48	-876.54	788.05	1,259.51	1,197.16	62.35	20.202	
5,371.78	4,797.73	5,709.16	4,785.68	34.66	33.17	89.45	-891.48	803.89	1,259.53	1,196.28	63.25	19.912	
5,400.00	4,797.42	5,737.38	4,785.37	35.12	33.82	89.45	-910.84	824.42	1,259.43	1,194.98	64.45	19.542	
5,500.00	4,796.33	5,837.38	4,784.29	36.83	36.13	89.45	-979.43	897.18	1,259.04	1,190.29	68.75	18.313	
5,600.00	4,795.24	5,937.37	4,783.22	38.64	38.48	89.46	-1,048.02	969.94	1,258.65	1,185.47	73.18	17.199	
5,700.00	4,794.15	6,037.37	4,782.14	40.54	40.86	89.46	-1,116.61	1,042.70	1,258.27	1,180.55	77.72	16.190	
5,800.00	4,793.06	6,137.37	4,781.06	42.52	43.28	89.46	-1,185.20	1,115.46	1,257.88	1,175.53	82.35	15.275	
5,900.00	4,791.97	6,237.37	4,779.99	44.58	45.72	89.46	-1,253.80	1,188.22	1,257.50	1,170.45	87.05	14.446	
6,000.00	4,790.88	6,337.37	4,778.91	46.69	48.18	89.46	-1,322.39	1,260.98	1,257.11	1,165.30	91.81	13.692	
6,100.00	4,789.79	6,437.37	4,777.83	48.86	50.66	89.46	-1,390.98	1,333.74	1,256.72	1,160.09	96.63	13.005	
6,200.00	4,788.71	6,537.37	4,776.75	51.07	53.15	89.46	-1,459.57	1,406.50	1,256.34	1,154.84	101.49	12.378	
6,300.00	4,787.62	6,637.37	4,775.68	53.33	55.66	89.46	-1,528.16	1,479.26	1,255.95	1,149.55	106.40	11.804	
6,400.00	4,786.53	6,737.37	4,774.60	55.61	58.18	89.46	-1,596.75	1,552.02	1,255.57	1,144.23	111.33	11.277	
6,500.00	4,785.44	6,837.37	4,773.52	57.93	60.71	89.46	-1,665.34	1,624.78	1,255.18	1,138.88	116.30	10.792	
6,600.00	4,784.35	6,937.37	4,772.45	60.28	63.25	89.46	-1,733.94	1,697.53	1,254.79	1,133.50	121.30	10.345	
6,700.00	4,783.26	7,037.37	4,771.37	62.65	65.79	89.46	-1,802.53	1,770.29	1,254.41	1,128.10	126.31	9.931	
6,800.00	4,782.17	7,137.37	4,770.29	65.04	68.35	89.46	-1,871.12	1,843.05	1,254.02	1,122.67	131.35	9.547	
6,900.00	4,781.08	7,237.36	4,769.21	67.45	70.91	89.46	-1,939.71	1,915.81	1,253.64	1,117.23	136.40	9.191	
7,000.00	4,779.99	7,337.36	4,768.14	69.88	73.47	89.46	-2,008.30	1,988.57	1,253.25	1,111.78	141.47	8.858	
7,100.00	4,778.90	7,437.36	4,767.06	72.32	76.04	89.46	-2,076.89	2,061.33	1,252.86	1,106.30	146.56	8.548	
7,200.00	4,777.81	7,537.36	4,765.98	74.77	78.62	89.46	-2,145.49	2,134.09	1,252.48	1,100.82	151.66	8.259	
7,300.00	4,776.72	7,637.36	4,764.91	77.24	81.20	89.46	-2,214.08	2,206.85	1,252.09	1,095.32	156.77	7.987	
7,400.00	4,775.64	7,737.36	4,763.83	79.72	83.78	89.46	-2,282.67	2,279.61	1,251.71	1,089.82	161.89	7.732	
7,500.00	4,774.55	7,837.36	4,762.75	82.21	86.37	89.46	-2,351.26	2,352.37	1,251.32	1,084.30	167.02	7.492	
7,600.00	4,773.46	7,937.36	4,761.67	84.71	88.95	89.46	-2,419.85	2,425.13	1,250.93	1,078.77	172.16	7.266	
7,700.00	4,772.37	8,037.36	4,760.60	87.21	91.55	89.46	-2,488.44	2,497.88	1,250.55	1,073.24	177.31	7.053	
7,800.00	4,771.28	8,137.36	4,759.52	89.73	94.14	89.46	-2,557.03	2,570.64	1,250.16	1,067.70	182.46	6.852	
7,900.00	4,770.19	8,237.36	4,758.44	92.25	96.74	89.46	-2,625.63	2,643.40	1,249.78	1,062.15	187.62	6.661	
8,000.00	4,769.10	8,337.36	4,757.37	94.77	99.34	89.46	-2,694.22	2,716.16	1,249.39	1,056.60	192.79	6.481	
8,100.00	4,768.01	8,437.36	4,756.29	97.31	101.94	89.46	-2,762.81	2,788.92	1,249.00	1,051.04	197.96	6.309	
8,200.00	4,766.92	8,537.36	4,755.21	99.85	104.54	89.46	-2,831.40	2,861.68	1,248.62	1,045.48	203.14	6.147	
8,300.00	4,765.83	8,637.35	4,754.13	102.39	107.15	89.47	-2,899.99	2,934.44	1,248.23	1,039.91	208.32	5.992	
8,400.00	4,764.74	8,737.35	4,753.06	104.94	109.76	89.47	-2,968.58	3,007.20	1,247.85	1,034.34	213.51	5.844	
8,500.00	4,763.65	8,837.35	4,751.98	107.49	112.36	89.47	-3,037.18	3,079.96	1,247.46	1,028.76	218.70	5.704	
8,600.00	4,762.57	8,937.35	4,750.90	110.05	114.97	89.47	-3,105.77	3,152.72	1,247.07	1,023.18	223.90	5.570	
8,700.00	4,761.48	9,037.35	4,749.82	112.61	117.59	89.47	-3,174.36	3,225.48	1,246.69	1,017.59	229.10	5.442	
8,800.00	4,760.39	9,137.35	4,748.75	115.17	120.20	89.47	-3,242.95	3,298.24	1,246.30	1,012.00	234.30	5.319	
8,900.00	4,759.30	9,237.35	4,747.67	117.74	122.81	89.47	-3,311.54	3,370.99	1,245.92	1,006.41	239.50	5.202	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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)			
9,000.00	4,758.21	9,337.35	4,746.59	120.31	125.43	89.47	-3,380.13	3,443.75	1,245.53	1,000.82	244.71	5.090	
9,100.00	4,757.12	9,437.35	4,745.52	122.88	128.04	89.47	-3,448.72	3,516.51	1,245.14	995.22	249.92	4.982	
9,200.00	4,756.03	9,537.35	4,744.44	125.45	130.66	89.47	-3,517.32	3,589.27	1,244.76	989.62	255.14	4.879	
9,300.00	4,754.94	9,637.35	4,743.36	128.03	133.28	89.47	-3,585.91	3,662.03	1,244.37	984.02	260.35	4.780	
9,400.00	4,753.85	9,737.35	4,742.28	130.61	135.89	89.47	-3,654.50	3,734.79	1,243.99	978.41	265.57	4.684	
9,500.00	4,752.76	9,837.35	4,741.21	133.19	138.51	89.47	-3,723.09	3,807.55	1,243.60	972.81	270.79	4.592	
9,600.00	4,751.67	9,937.34	4,740.13	135.78	141.13	89.47	-3,791.68	3,880.31	1,243.21	967.20	276.02	4.504	
9,700.00	4,750.58	10,037.34	4,739.05	138.36	143.75	89.47	-3,860.27	3,953.07	1,242.83	961.59	281.24	4.419	
9,800.00	4,749.49	10,137.34	4,737.98	140.95	146.37	89.47	-3,928.86	4,025.83	1,242.44	955.98	286.47	4.337	
9,900.00	4,748.41	10,237.34	4,736.90	143.54	149.00	89.47	-3,997.46	4,098.59	1,242.06	950.36	291.69	4.258	
10,000.00	4,747.32	10,337.34	4,735.82	146.13	151.62	89.47	-4,066.05	4,171.35	1,241.67	944.75	296.92	4.182	
10,100.00	4,746.23	10,437.34	4,734.74	148.73	154.24	89.47	-4,134.64	4,244.10	1,241.28	939.13	302.16	4.108	
10,200.00	4,745.14	10,537.34	4,733.67	151.32	156.87	89.47	-4,203.23	4,316.86	1,240.90	933.51	307.39	4.037	
10,300.00	4,744.05	10,637.34	4,732.59	153.92	159.49	89.47	-4,271.82	4,389.62	1,240.51	927.89	312.62	3.968	
10,400.00	4,742.96	10,737.34	4,731.51	156.51	162.11	89.47	-4,340.41	4,462.38	1,240.13	922.27	317.86	3.902	
10,500.00	4,741.87	10,837.34	4,730.44	159.11	164.74	89.47	-4,409.01	4,535.14	1,239.74	916.65	323.09	3.837	
10,600.00	4,740.78	10,937.34	4,729.36	161.71	167.36	89.47	-4,477.60	4,607.90	1,239.35	911.02	328.33	3.775	
10,700.00	4,739.69	11,037.34	4,728.28	164.31	169.99	89.47	-4,546.19	4,680.66	1,238.97	905.40	333.57	3.714	
10,800.00	4,738.60	11,137.34	4,727.20	166.91	172.62	89.48	-4,614.78	4,753.42	1,238.58	899.77	338.81	3.656	
10,900.00	4,737.51	11,237.34	4,726.13	169.52	175.24	89.48	-4,683.37	4,826.18	1,238.20	894.14	344.05	3.599	
11,000.00	4,736.42	11,337.33	4,725.05	172.12	177.87	89.48	-4,751.96	4,898.94	1,237.81	888.52	349.29	3.544	
11,100.00	4,735.34	11,437.33	4,723.97	174.72	180.50	89.48	-4,820.55	4,971.70	1,237.42	882.89	354.54	3.490	
11,200.00	4,734.25	11,537.33	4,722.90	177.33	183.13	89.48	-4,889.15	5,044.46	1,237.04	877.26	359.78	3.438	
11,300.00	4,733.16	11,637.33	4,721.82	179.94	185.75	89.48	-4,957.74	5,117.21	1,236.65	871.63	365.03	3.388	
11,400.00	4,732.07	11,737.33	4,720.74	182.54	188.38	89.48	-5,026.33	5,189.97	1,236.27	866.00	370.27	3.339	
11,500.00	4,730.98	11,837.33	4,719.66	185.15	191.01	89.48	-5,094.92	5,262.73	1,235.88	860.36	375.52	3.291	
11,600.00	4,729.89	11,937.33	4,718.59	187.76	193.64	89.48	-5,163.51	5,335.49	1,235.50	854.73	380.76	3.245	
11,700.00	4,728.80	12,037.33	4,717.51	190.37	196.27	89.48	-5,232.10	5,408.25	1,235.11	849.10	386.01	3.200	
11,800.00	4,727.71	12,137.33	4,716.43	192.98	198.90	89.48	-5,300.70	5,481.01	1,234.72	843.46	391.26	3.156	
11,900.00	4,726.62	12,237.33	4,715.35	195.59	201.53	89.48	-5,369.29	5,553.77	1,234.34	837.83	396.51	3.113	
12,000.00	4,725.53	12,337.33	4,714.28	198.20	204.16	89.48	-5,437.88	5,626.53	1,233.95	832.19	401.76	3.071	
12,100.00	4,724.44	12,437.33	4,713.20	200.81	206.79	89.48	-5,506.47	5,699.29	1,233.57	826.55	407.01	3.031	
12,200.00	4,723.35	12,537.33	4,712.12	203.43	209.42	89.48	-5,575.06	5,772.05	1,233.18	820.92	412.26	2.991	
12,300.00	4,722.27	12,637.32	4,711.05	206.04	212.05	89.48	-5,643.65	5,844.81	1,232.79	815.28	417.51	2.953	
12,400.00	4,721.18	12,737.32	4,709.97	208.65	214.68	89.48	-5,712.24	5,917.56	1,232.41	809.64	422.77	2.915	
12,500.00	4,720.09	12,837.32	4,708.89	211.27	217.31	89.48	-5,780.84	5,990.32	1,232.02	804.00	428.02	2.878	
12,600.00	4,719.00	12,937.32	4,707.81	213.88	219.94	89.48	-5,849.43	6,063.08	1,231.64	798.36	433.27	2.843	
12,700.00	4,717.91	13,037.32	4,706.74	216.50	222.58	89.48	-5,918.02	6,135.84	1,231.25	792.72	438.53	2.808	
12,774.52	4,717.10	13,107.09	4,705.99	218.45	224.41	89.48	-5,965.87	6,186.60	1,230.97	788.71	442.26	2.783	
12,800.00	4,716.82	13,107.09	4,705.99	219.11	224.41	89.48	-5,965.87	6,186.60	1,231.23	788.72	442.51	2.782 SF	
12,900.00	4,715.73	13,107.09	4,705.99	221.73	224.41	89.48	-5,965.87	6,186.60	1,237.35	795.65	441.70	2.801	
13,000.00	4,714.64	13,107.09	4,705.99	224.35	224.41	89.48	-5,965.87	6,186.60	1,251.45	813.34	438.12	2.856	
13,100.00	4,713.55	13,107.09	4,705.99	226.96	224.41	89.48	-5,965.87	6,186.60	1,273.28	841.27	432.00	2.947	
13,200.00	4,712.46	13,107.09	4,705.99	229.58	224.41	89.48	-5,965.87	6,186.60	1,302.43	878.70	423.73	3.074	
13,300.00	4,711.37	13,107.09	4,705.99	232.20	224.41	89.48	-5,965.87	6,186.60	1,338.44	924.73	413.71	3.235	
13,400.00	4,710.28	13,107.09	4,705.99	234.82	224.41	89.48	-5,965.87	6,186.60	1,380.77	978.37	402.40	3.431	
13,500.00	4,709.20	13,107.09	4,705.99	237.44	224.41	89.48	-5,965.87	6,186.60	1,428.85	1,038.65	390.20	3.662	
13,600.00	4,708.11	13,107.09	4,705.99	240.06	224.41	89.48	-5,965.87	6,186.60	1,482.13	1,104.63	377.50	3.926	
13,700.00	4,707.02	13,107.09	4,705.99	242.67	224.41	89.48	-5,965.87	6,186.60	1,540.07	1,175.47	364.59	4.224	
13,800.00	4,705.93	13,107.09	4,705.99	245.29	224.41	89.48	-5,965.87	6,186.60	1,602.16	1,250.42	351.74	4.555	
13,900.00	4,704.84	13,107.09	4,705.99	247.91	224.41	89.48	-5,965.87	6,186.60	1,667.93	1,328.83	339.11	4.919	
14,000.00	4,703.75	13,107.09	4,705.99	250.53	224.41	89.48	-5,965.87	6,186.60	1,736.98	1,410.14	326.84	5.314	



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
14,069.53	4,703.00	13,107.09	4,705.99	252.36	224.41	89.48	-5,965.87	6,186.60	1,786.72	1,468.14	318.57	5.609	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #605H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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)		
0.00	0.00	0.00	0.00	0.00	0.00	-0.17	20.00	-0.06	20.00				
100.00	100.00	100.00	100.00	0.15	0.15	-0.17	20.00	-0.06	20.00	19.69	0.31	64.875	
200.00	200.00	200.00	200.00	0.51	0.51	-0.17	20.00	-0.06	20.00	18.97	1.03	19.508	
300.00	300.00	300.00	300.00	0.87	0.87	-0.17	20.00	-0.06	20.00	18.26	1.74	11.480	
395.98	395.98	395.98	395.98	1.22	1.22	-0.17	20.00	-0.06	20.00	17.57	2.43	8.230	
400.00	400.00	400.00	400.00	1.23	1.23	-72.51	20.00	-0.06	20.00	17.54	2.46	8.134	
500.00	499.98	499.86	499.85	1.58	1.59	-76.39	20.20	0.40	19.68	16.52	3.16	6.222	
541.77	541.71	541.52	541.51	1.73	1.73	-78.56	20.64	1.40	19.64	16.18	3.46	5.678 CC	
600.00	599.83	599.64	599.56	1.94	1.94	-81.67	21.67	3.71	19.73	15.86	3.87	5.099	
700.00	699.43	699.48	699.14	2.30	2.30	-87.00	24.53	10.19	20.31	15.72	4.59	4.427 ES	
800.00	798.66	799.37	798.47	2.67	2.66	-92.01	28.80	19.85	21.43	16.11	5.32	4.025	
900.00	897.40	899.32	897.43	3.06	3.04	-96.44	34.47	32.68	23.07	16.99	6.09	3.790	
1,000.00	995.53	999.32	995.88	3.47	3.43	-100.14	41.53	48.67	25.21	18.32	6.89	3.661	
1,100.00	1,092.94	1,099.36	1,093.71	3.90	3.85	-103.11	49.99	67.80	27.79	20.06	7.73	3.597	
1,200.00	1,189.49	1,199.46	1,190.80	4.37	4.29	-105.40	59.82	90.05	30.79	22.18	8.62	3.574	
1,300.00	1,285.07	1,299.60	1,287.03	4.87	4.77	-107.11	71.03	115.41	34.19	24.62	9.57	3.573	
1,330.44	1,313.95	1,330.08	1,316.12	5.03	4.92	-107.54	74.71	123.73	35.30	25.42	9.87	3.575	
1,400.00	1,379.85	1,399.59	1,382.37	5.41	5.28	-108.56	83.21	142.97	37.89	27.31	10.58	3.581	
1,500.00	1,474.58	1,499.52	1,477.61	5.97	5.80	-109.80	95.43	170.62	41.64	30.02	11.62	3.583	
1,600.00	1,569.30	1,599.45	1,572.85	6.53	6.33	-110.84	107.65	198.28	45.40	32.72	12.67	3.582	
1,700.00	1,664.03	1,699.37	1,668.10	7.11	6.88	-111.72	119.87	225.93	49.17	35.43	13.74	3.578	
1,800.00	1,758.76	1,799.30	1,763.34	7.70	7.43	-112.47	132.10	253.59	52.96	38.14	14.82	3.573	
1,900.00	1,853.48	1,899.22	1,858.58	8.29	7.99	-113.13	144.32	281.24	56.75	40.84	15.91	3.567	
2,000.00	1,948.21	1,999.15	1,953.82	8.88	8.55	-113.70	156.54	308.89	60.55	43.55	17.00	3.562	
2,100.00	2,042.94	2,099.08	2,049.07	9.48	9.11	-114.20	168.76	336.55	64.36	46.26	18.10	3.556	
2,200.00	2,137.67	2,199.00	2,144.31	10.08	9.68	-114.65	180.98	364.20	68.17	48.97	19.20	3.550	
2,300.00	2,232.39	2,298.93	2,239.55	10.69	10.25	-115.05	193.20	391.86	71.98	51.67	20.30	3.545	
2,400.00	2,327.12	2,398.86	2,334.79	11.29	10.82	-115.41	205.43	419.51	75.79	54.38	21.41	3.540	
2,500.00	2,421.85	2,498.78	2,430.03	11.90	11.39	-115.73	217.65	447.17	79.61	57.09	22.52	3.535	
2,600.00	2,516.57	2,598.71	2,525.28	12.51	11.97	-116.03	229.87	474.82	83.43	59.80	23.63	3.531	
2,700.00	2,611.30	2,698.63	2,620.52	13.12	12.54	-116.30	242.09	502.48	87.26	62.51	24.74	3.527	
2,800.00	2,706.03	2,798.56	2,715.76	13.73	13.12	-116.55	254.31	530.13	91.08	65.23	25.86	3.523	
2,900.00	2,800.76	2,898.49	2,811.00	14.35	13.70	-116.77	266.53	557.78	94.91	67.94	26.97	3.519	
3,000.00	2,895.48	2,998.41	2,906.25	14.96	14.27	-116.98	278.76	585.44	98.74	70.65	28.09	3.515	
3,100.00	2,990.21	3,098.34	3,001.49	15.57	14.85	-117.18	290.98	613.09	102.57	73.36	29.20	3.512	
3,200.00	3,084.94	3,198.26	3,096.73	16.19	15.43	-117.36	303.20	640.75	106.40	76.07	30.32	3.509	
3,300.00	3,179.66	3,298.19	3,191.97	16.81	16.02	-117.52	315.42	668.40	110.23	78.79	31.44	3.506	
3,400.00	3,274.39	3,398.12	3,287.22	17.42	16.60	-117.68	327.64	696.06	114.06	81.50	32.56	3.503	
3,500.00	3,369.12	3,498.04	3,382.46	18.04	17.18	-117.83	339.86	723.71	117.89	84.21	33.68	3.500	
3,600.00	3,463.84	3,597.97	3,477.70	18.66	17.76	-117.96	352.08	751.36	121.73	86.93	34.80	3.498	
3,700.00	3,558.57	3,697.89	3,572.94	19.27	18.34	-118.09	364.31	779.02	125.56	89.64	35.92	3.496	
3,800.00	3,653.30	3,797.82	3,668.18	19.89	18.93	-118.21	376.53	806.67	129.39	92.36	37.04	3.493	
3,900.00	3,748.03	3,897.75	3,763.43	20.51	19.51	-118.33	388.75	834.33	133.23	95.07	38.16	3.491	
4,000.00	3,842.75	3,997.67	3,858.67	21.13	20.09	-118.43	400.97	861.98	137.07	97.78	39.28	3.489	
4,100.00	3,937.48	4,097.60	3,953.91	21.75	20.68	-118.53	413.19	889.64	140.90	100.50	40.40	3.487	
4,200.00	4,032.21	4,197.52	4,049.15	22.37	21.26	-118.63	425.41	917.29	144.74	103.21	41.53	3.486 SF	
4,300.00	4,126.93	4,295.16	4,142.22	22.99	21.83	-118.72	437.41	944.26	148.67	106.04	42.63	3.488	
4,400.00	4,221.66	4,375.14	4,218.88	23.60	22.26	-118.75	451.55	961.93	160.32	117.13	43.19	3.712	
4,463.80	4,282.10	4,424.49	4,266.14	24.00	22.49	-118.74	463.69	969.18	174.14	130.92	43.22	4.029	
4,500.00	4,316.22	4,450.00	4,290.45	24.23	22.60	-126.57	470.97	971.81	185.07	142.03	43.04	4.300	
4,550.00	4,362.64	4,486.29	4,324.79	24.58	22.74	-135.20	482.45	974.23	205.58	162.65	42.92	4.790	
4,600.00	4,407.97	4,517.95	4,354.42	24.96	22.85	-141.75	493.54	975.07	231.86	189.22	42.64	5.438	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #605H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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	
4,650.00	4,451.95	4,550.00	4,384.05	25.37	22.96	-146.73	505.75	974.72	263.30	220.71	42.59	6.183	
4,700.00	4,494.30	4,570.16	4,402.46	25.80	23.02	-150.60	513.92	973.87	299.06	257.09	41.98	7.124	
4,750.00	4,534.75	4,590.55	4,420.88	26.27	23.08	-153.65	522.56	972.52	338.60	296.93	41.66	8.127	
4,800.00	4,573.06	4,600.00	4,429.34	26.77	23.11	-156.14	526.69	971.73	381.29	340.36	40.94	9.314	
4,850.00	4,608.99	4,620.55	4,447.57	27.30	23.17	-158.15	535.95	969.65	426.22	385.08	41.14	10.361	
4,900.00	4,642.32	4,630.65	4,456.44	27.86	23.19	-159.93	540.64	968.45	473.14	432.19	40.95	11.554	
4,950.00	4,672.85	4,637.87	4,462.73	28.46	23.21	-161.63	544.03	967.52	521.45	480.63	40.82	12.775	
5,000.00	4,700.38	4,650.00	4,473.25	29.09	23.24	-163.44	549.85	965.81	570.79	529.70	41.08	13.894	
5,050.00	4,724.76	4,650.00	4,473.25	29.75	23.24	-168.05	549.85	965.81	620.53	579.60	40.93	15.160	
5,100.00	4,745.81	4,650.00	4,473.25	30.45	23.24	31.80	549.85	965.81	670.51	629.58	40.92	16.384	
5,150.00	4,763.43	4,650.00	4,473.25	31.17	23.24	20.65	549.85	965.81	720.40	679.37	41.03	17.558	
5,200.00	4,777.49	4,650.00	4,473.25	31.93	23.24	18.80	549.85	965.81	769.95	728.72	41.23	18.676	
5,250.00	4,787.91	4,635.19	4,460.40	32.71	23.20	17.85	542.77	967.87	818.62	777.64	40.98	19.976	
5,300.00	4,794.63	4,629.11	4,455.09	33.50	23.19	17.38	539.91	968.64	866.57	825.44	41.13	21.069	
5,350.00	4,797.61	4,621.87	4,448.73	34.31	23.17	17.13	536.56	969.50	913.45	872.14	41.30	22.115	
5,371.78	4,797.73	4,618.39	4,445.67	34.66	23.16	17.07	534.96	969.90	933.49	892.10	41.39	22.556	
5,400.00	4,797.42	4,600.00	4,429.34	35.12	23.11	17.04	526.69	971.73	959.58	918.50	41.08	23.360	
5,500.00	4,796.33	4,600.00	4,429.34	36.83	23.11	17.04	526.69	971.73	1,051.52	1,009.64	41.88	25.108	
5,600.00	4,795.24	4,600.00	4,429.34	38.64	23.11	17.04	526.69	971.73	1,144.82	1,102.30	42.51	26.929	
5,700.00	4,794.15	4,573.22	4,405.24	40.54	23.03	16.99	515.19	973.70	1,238.31	1,195.90	42.40	29.202	
5,800.00	4,793.06	4,550.00	4,384.05	42.52	22.96	16.95	505.75	974.72	1,332.85	1,290.48	42.36	31.463	
5,900.00	4,791.97	4,550.00	4,384.05	44.58	22.96	16.95	505.75	974.72	1,427.57	1,384.79	42.78	33.370	
6,000.00	4,790.88	4,550.00	4,384.05	46.69	22.96	16.95	505.75	974.72	1,522.98	1,479.85	43.13	35.310	
6,100.00	4,789.79	4,550.00	4,384.05	48.86	22.96	16.95	505.75	974.72	1,618.93	1,575.50	43.43	37.277	
6,200.00	4,788.71	4,527.28	4,363.09	51.07	22.88	16.92	496.99	975.09	1,714.80	1,671.51	43.29	39.612	
6,300.00	4,787.62	4,520.25	4,356.56	53.33	22.86	16.91	494.38	975.09	1,811.22	1,767.81	43.41	41.721	
6,400.00	4,786.53	4,500.00	4,337.66	55.61	22.79	16.88	487.13	974.74	1,908.12	1,864.82	43.30	44.066	
6,500.00	4,785.44	4,500.00	4,337.66	57.93	22.79	16.88	487.13	974.74	2,004.93	1,961.42	43.51	46.083	
6,600.00	4,784.35	4,500.00	4,337.66	60.28	22.79	16.88	487.13	974.74	2,102.04	2,058.35	43.69	48.112	
6,700.00	4,783.26	4,500.00	4,337.66	62.65	22.79	16.88	487.13	974.74	2,199.41	2,155.55	43.86	50.151	
6,800.00	4,782.17	4,500.00	4,337.66	65.04	22.79	16.88	487.13	974.74	2,297.00	2,252.99	44.01	52.198	
6,900.00	4,781.08	4,500.00	4,337.66	67.45	22.79	16.88	487.13	974.74	2,394.79	2,350.65	44.14	54.252	
7,000.00	4,779.99	4,500.00	4,337.66	69.88	22.79	16.88	487.13	974.74	2,492.76	2,448.49	44.27	56.312	
7,100.00	4,778.90	4,479.23	4,318.13	72.32	22.71	16.86	480.11	973.88	2,590.46	2,546.36	44.10	58.737	
7,200.00	4,777.81	4,475.46	4,314.57	74.77	22.70	16.85	478.88	973.67	2,688.56	2,644.39	44.17	60.874	
7,300.00	4,776.72	4,471.90	4,311.21	77.24	22.68	16.85	477.74	973.45	2,786.77	2,742.54	44.23	63.010	
7,400.00	4,775.64	4,450.00	4,290.45	79.72	22.60	16.82	470.97	971.81	2,885.41	2,841.36	44.05	65.504	
7,500.00	4,774.55	4,450.00	4,290.45	82.21	22.60	16.82	470.97	971.81	2,983.70	2,939.55	44.15	67.581	
7,600.00	4,773.46	4,450.00	4,290.45	84.71	22.60	16.82	470.97	971.81	3,082.11	3,037.86	44.24	69.661	
7,700.00	4,772.37	4,450.00	4,290.45	87.21	22.60	16.82	470.97	971.81	3,180.62	3,136.28	44.33	71.741	
7,800.00	4,771.28	4,450.00	4,290.45	89.73	22.60	16.82	470.97	971.81	3,279.21	3,234.79	44.42	73.822	
7,900.00	4,770.19	4,450.00	4,290.45	92.25	22.60	16.82	470.97	971.81	3,377.89	3,333.39	44.50	75.904	
8,000.00	4,769.10	4,450.00	4,290.45	94.77	22.60	16.82	470.97	971.81	3,476.65	3,432.06	44.58	77.985	
8,100.00	4,768.01	4,450.00	4,290.45	97.31	22.60	16.82	470.97	971.81	3,575.47	3,530.81	44.66	80.065	
8,200.00	4,766.92	4,450.00	4,290.45	99.85	22.60	16.82	470.97	971.81	3,674.36	3,629.63	44.73	82.144	
8,300.00	4,765.83	4,450.00	4,290.45	102.39	22.60	16.82	470.97	971.81	3,773.30	3,728.50	44.80	84.222	
8,400.00	4,764.74	4,450.00	4,290.45	104.94	22.60	16.82	470.97	971.81	3,872.30	3,827.43	44.87	86.298	
8,500.00	4,763.65	4,450.00	4,290.45	107.49	22.60	16.82	470.97	971.81	3,971.35	3,926.41	44.94	88.373	
8,600.00	4,762.57	4,450.00	4,290.45	110.05	22.60	16.82	470.97	971.81	4,070.45	4,025.45	45.00	90.445	
8,700.00	4,761.48	4,450.00	4,290.45	112.61	22.60	16.82	470.97	971.81	4,169.59	4,124.52	45.07	92.515	
8,800.00	4,760.39	4,450.00	4,290.45	115.17	22.60	16.82	470.97	971.81	4,268.77	4,223.64	45.13	94.582	
8,900.00	4,759.30	4,450.00	4,290.45	117.74	22.60	16.82	470.97	971.81	4,367.99	4,322.79	45.20	96.646	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #605H - Original Drilling - APD Rev 3													Offset Site Error: 0.00 ft	
Survey Program: 0-MWD+HDGM		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 0.00 ft	
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	Warning	
9,000.00	4,758.21	4,450.00	4,290.45	120.31	22.60	16.82	470.97	971.81	4,467.24	4,421.98	45.26	98.708		
9,100.00	4,757.12	4,450.00	4,290.45	122.88	22.60	16.82	470.97	971.81	4,566.52	4,521.21	45.32	100.766		
9,200.00	4,756.03	4,450.00	4,290.45	125.45	22.60	16.82	470.97	971.81	4,665.84	4,620.46	45.38	102.821		
9,300.00	4,754.94	4,450.00	4,290.45	128.03	22.60	16.82	470.97	971.81	4,765.18	4,719.75	45.44	104.872		
9,400.00	4,753.85	4,426.73	4,268.28	130.61	22.50	16.80	464.30	969.44	4,864.07	4,818.82	45.25	107.489		
9,500.00	4,752.76	4,425.41	4,267.02	133.19	22.49	16.80	463.94	969.28	4,963.42	4,918.12	45.30	109.572		
9,600.00	4,751.67	4,424.14	4,265.81	135.78	22.49	16.80	463.60	969.13	5,062.78	5,017.44	45.34	111.650		
9,700.00	4,750.58	4,422.92	4,264.64	138.36	22.48	16.80	463.27	968.99	5,162.17	5,116.78	45.39	113.724		
9,800.00	4,749.49	4,400.00	4,242.72	140.95	22.38	16.78	457.35	965.93	5,261.99	5,216.77	45.22	116.373		
9,900.00	4,748.41	4,400.00	4,242.72	143.54	22.38	16.78	457.35	965.93	5,361.37	5,316.10	45.28	118.412		
10,000.00	4,747.32	4,400.00	4,242.72	146.13	22.38	16.78	457.35	965.93	5,460.78	5,415.44	45.34	120.447		
10,100.00	4,746.23	4,400.00	4,242.72	148.73	22.38	16.78	457.35	965.93	5,560.21	5,514.81	45.40	122.478		
10,200.00	4,745.14	4,400.00	4,242.72	151.32	22.38	16.78	457.35	965.93	5,659.65	5,614.20	45.46	124.504		
10,300.00	4,744.05	4,400.00	4,242.72	153.92	22.38	16.78	457.35	965.93	5,759.12	5,713.60	45.52	126.525		
10,400.00	4,742.96	4,400.00	4,242.72	156.51	22.38	16.78	457.35	965.93	5,858.61	5,813.03	45.58	128.542		
10,500.00	4,741.87	4,400.00	4,242.72	159.11	22.38	16.78	457.35	965.93	5,958.11	5,912.47	45.64	130.554		
10,600.00	4,740.78	4,400.00	4,242.72	161.71	22.38	16.78	457.35	965.93	6,057.63	6,011.93	45.70	132.561		
10,700.00	4,739.69	4,400.00	4,242.72	164.31	22.38	16.78	457.35	965.93	6,157.16	6,111.40	45.76	134.562		
10,800.00	4,738.60	4,400.00	4,242.72	166.91	22.38	16.78	457.35	965.93	6,256.71	6,210.89	45.82	136.559		
10,900.00	4,737.51	4,400.00	4,242.72	169.52	22.38	16.78	457.35	965.93	6,356.27	6,310.40	45.88	138.550		
11,000.00	4,736.42	4,400.00	4,242.72	172.12	22.38	16.78	457.35	965.93	6,455.85	6,409.91	45.94	140.536		
11,100.00	4,735.34	4,400.00	4,242.72	174.72	22.38	16.78	457.35	965.93	6,555.44	6,509.44	46.00	142.516		
11,200.00	4,734.25	4,400.00	4,242.72	177.33	22.38	16.78	457.35	965.93	6,655.04	6,608.98	46.06	144.491		
11,300.00	4,733.16	4,400.00	4,242.72	179.94	22.38	16.78	457.35	965.93	6,754.65	6,708.54	46.12	146.461		
11,400.00	4,732.07	4,400.00	4,242.72	182.54	22.38	16.78	457.35	965.93	6,854.28	6,808.10	46.18	148.425		
11,500.00	4,730.98	4,400.00	4,242.72	185.15	22.38	16.78	457.35	965.93	6,953.92	6,907.67	46.24	150.383		
11,600.00	4,729.89	4,400.00	4,242.72	187.76	22.38	16.78	457.35	965.93	7,053.56	7,007.26	46.30	152.335		
11,700.00	4,728.80	4,400.00	4,242.72	190.37	22.38	16.78	457.35	965.93	7,153.22	7,106.85	46.36	154.282		
11,800.00	4,727.71	4,400.00	4,242.72	192.98	22.38	16.78	457.35	965.93	7,252.88	7,206.46	46.43	156.223		
11,900.00	4,726.62	4,400.00	4,242.72	195.59	22.38	16.78	457.35	965.93	7,352.56	7,306.07	46.49	158.158		
12,000.00	4,725.53	4,400.00	4,242.72	198.20	22.38	16.78	457.35	965.93	7,452.24	7,405.69	46.55	160.087		
12,100.00	4,724.44	4,400.00	4,242.72	200.81	22.38	16.78	457.35	965.93	7,551.93	7,505.32	46.61	162.010		
12,200.00	4,723.35	4,400.00	4,242.72	203.43	22.38	16.78	457.35	965.93	7,651.63	7,604.95	46.68	163.926		
12,300.00	4,722.27	4,400.00	4,242.72	206.04	22.38	16.78	457.35	965.93	7,751.34	7,704.60	46.74	165.837		
12,400.00	4,721.18	4,400.00	4,242.72	208.65	22.38	16.78	457.35	965.93	7,851.05	7,804.25	46.80	167.742		
12,500.00	4,720.09	4,400.00	4,242.72	211.27	22.38	16.78	457.35	965.93	7,950.77	7,903.91	46.87	169.640		
12,600.00	4,719.00	4,400.00	4,242.72	213.88	22.38	16.78	457.35	965.93	8,050.50	8,003.57	46.93	171.532		
12,700.00	4,717.91	4,400.00	4,242.72	216.50	22.38	16.78	457.35	965.93	8,150.24	8,103.24	47.00	173.418		
12,800.00	4,716.82	4,400.00	4,242.72	219.11	22.38	16.78	457.35	965.93	8,249.98	8,202.92	47.06	175.298		
12,900.00	4,715.73	4,400.00	4,242.72	221.73	22.38	16.78	457.35	965.93	8,349.73	8,302.60	47.13	177.171		
13,000.00	4,714.64	4,400.00	4,242.72	224.35	22.38	16.78	457.35	965.93	8,449.48	8,402.29	47.19	179.038		
13,100.00	4,713.55	4,400.00	4,242.72	226.96	22.38	16.78	457.35	965.93	8,549.24	8,501.98	47.26	180.899		
13,200.00	4,712.46	4,400.00	4,242.72	229.58	22.38	16.78	457.35	965.93	8,649.01	8,601.68	47.33	182.753		
13,300.00	4,711.37	4,400.00	4,242.72	232.20	22.38	16.78	457.35	965.93	8,748.78	8,701.39	47.39	184.600		
13,400.00	4,710.28	4,400.00	4,242.72	234.82	22.38	16.78	457.35	965.93	8,848.55	8,801.09	47.46	186.442		
13,500.00	4,709.20	4,400.00	4,242.72	237.44	22.38	16.78	457.35	965.93	8,948.34	8,900.81	47.53	188.276		
13,600.00	4,708.11	4,400.00	4,242.72	240.06	22.38	16.78	457.35	965.93	9,048.12	9,000.53	47.60	190.104		
13,700.00	4,707.02	4,400.00	4,242.72	242.67	22.38	16.78	457.35	965.93	9,147.91	9,100.25	47.66	191.926		
13,800.00	4,705.93	4,400.00	4,242.72	245.29	22.38	16.78	457.35	965.93	9,247.71	9,199.97	47.73	193.741		
13,900.00	4,704.84	4,400.00	4,242.72	247.91	22.38	16.78	457.35	965.93	9,347.51	9,299.70	47.80	195.549		
14,000.00	4,703.75	4,400.00	4,242.72	250.53	22.38	16.78	457.35	965.93	9,447.31	9,399.44	47.87	197.351		
14,069.53	4,703.00	4,400.00	4,242.72	252.36	22.38	16.78	457.35	965.93	9,516.71	9,468.79	47.92	198.599		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #609H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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	
0.00	0.00	0.00	0.00	0.00	0.00	-0.17	40.00	-0.12	40.00				
100.00	100.00	100.00	100.00	0.15	0.15	-0.17	40.00	-0.12	40.00	39.69	0.31	129.750	
200.00	200.00	200.00	200.00	0.51	0.51	-0.17	40.00	-0.12	40.00	38.97	1.03	39.016	
300.00	300.00	300.00	300.00	0.87	0.87	-0.17	40.00	-0.12	40.00	38.26	1.74	22.960	
395.98	395.98	395.98	395.98	1.22	1.22	-0.17	40.00	-0.12	40.00	37.57	2.43	16.459	
400.00	400.00	400.03	400.03	1.23	1.23	-72.51	40.00	-0.12	40.00	37.54	2.46	16.270	
500.00	499.98	500.46	500.43	1.58	1.57	-77.67	39.14	-1.78	38.74	35.59	3.15	12.308	
600.00	599.83	600.09	600.02	1.94	1.91	-90.28	37.70	-4.56	37.31	33.47	3.85	9.699	
615.75	615.53	615.75	615.67	1.99	1.97	-92.80	37.48	-5.00	37.27	33.31	3.96	9.415 CC, ES	
700.00	699.43	699.37	699.25	2.30	2.26	-108.09	36.27	-7.34	38.73	34.17	4.56	8.499 SF	
800.00	798.66	798.17	798.00	2.67	2.61	-126.79	34.85	-10.10	45.52	40.24	5.27	8.631	
900.00	897.40	896.37	896.15	3.06	2.96	-141.77	33.43	-12.85	58.52	52.53	5.99	9.769	
1,000.00	995.53	993.86	993.59	3.47	3.31	-152.13	32.02	-15.57	77.11	70.40	6.71	11.498	
1,100.00	1,092.94	1,090.51	1,090.20	3.90	3.66	-159.05	30.63	-18.27	100.42	93.00	7.42	13.535	
1,200.00	1,189.49	1,186.21	1,185.84	4.37	4.00	-163.74	29.25	-20.95	127.89	119.76	8.13	15.727	
1,300.00	1,285.07	1,280.83	1,280.42	4.87	4.34	-167.02	27.88	-23.59	159.16	150.32	8.84	17.998	
1,330.44	1,313.95	1,309.40	1,308.98	5.03	4.44	-167.82	27.47	-24.39	169.40	160.33	9.06	18.689	
1,400.00	1,379.85	1,374.57	1,374.12	5.41	4.68	-169.45	26.53	-26.21	193.24	183.69	9.55	20.229	
1,500.00	1,474.58	1,468.26	1,467.76	5.97	5.02	-171.19	25.18	-28.83	227.69	217.44	10.26	22.200	
1,600.00	1,569.30	1,561.95	1,561.40	6.53	5.35	-172.47	23.83	-31.45	262.28	251.32	10.96	23.922	
1,700.00	1,664.03	1,655.63	1,655.04	7.11	5.69	-173.45	22.47	-34.07	296.96	285.28	11.68	25.434	
1,800.00	1,758.76	1,749.32	1,748.68	7.70	6.03	-174.23	21.12	-36.69	331.70	319.31	12.39	26.772	
1,900.00	1,853.48	1,843.01	1,842.32	8.29	6.37	-174.86	19.77	-39.31	366.48	353.38	13.11	27.961	
2,000.00	1,948.21	1,936.69	1,935.96	8.88	6.70	-175.38	18.42	-41.93	401.30	387.47	13.83	29.025	
2,100.00	2,042.94	2,030.38	2,029.60	9.48	7.04	-175.82	17.07	-44.54	436.14	421.59	14.55	29.981	
2,200.00	2,137.67	2,124.07	2,123.24	10.08	7.38	-176.20	15.71	-47.16	471.00	455.73	15.27	30.846	
2,300.00	2,232.39	2,217.75	2,216.88	10.69	7.72	-176.52	14.36	-49.78	505.87	489.88	15.99	31.630	
2,400.00	2,327.12	2,311.44	2,310.52	11.29	8.06	-176.80	13.01	-52.40	540.76	524.04	16.72	32.345	
2,500.00	2,421.85	2,405.13	2,404.16	11.90	8.40	-177.05	11.66	-55.02	575.66	558.21	17.44	32.999	
2,600.00	2,516.57	2,498.81	2,497.80	12.51	8.73	-177.26	10.31	-57.64	610.56	592.39	18.17	33.599	
2,700.00	2,611.30	2,592.50	2,591.44	13.12	9.07	-177.46	8.95	-60.26	645.47	626.57	18.90	34.152	
2,800.00	2,706.03	2,686.19	2,685.08	13.73	9.41	-177.63	7.60	-62.88	680.39	660.76	19.63	34.663	
2,900.00	2,800.76	2,779.87	2,778.72	14.35	9.75	-177.79	6.25	-65.49	715.31	694.96	20.36	35.137	
3,000.00	2,895.48	2,873.56	2,872.36	14.96	10.09	-177.93	4.90	-68.11	750.24	729.15	21.09	35.576	
3,100.00	2,990.21	2,967.24	2,966.00	15.57	10.43	-178.06	3.55	-70.73	785.17	763.35	21.82	35.986	
3,200.00	3,084.94	3,060.93	3,059.64	16.19	10.77	-178.18	2.20	-73.35	820.11	797.56	22.55	36.369	
3,300.00	3,179.66	3,154.62	3,153.28	16.81	11.10	-178.29	0.84	-75.97	855.04	831.76	23.28	36.726	
3,400.00	3,274.39	3,248.30	3,246.92	17.42	11.44	-178.39	-0.51	-78.59	889.98	865.97	24.01	37.062	
3,500.00	3,369.12	3,341.99	3,340.56	18.04	11.78	-178.49	-1.86	-81.21	924.92	900.18	24.75	37.377	
3,600.00	3,463.84	3,435.68	3,434.20	18.66	12.12	-178.57	-3.21	-83.82	959.87	934.39	25.48	37.673	
3,700.00	3,558.57	3,529.36	3,527.84	19.27	12.46	-178.65	-4.56	-86.44	994.81	968.60	26.21	37.953	
3,800.00	3,653.30	3,623.05	3,621.48	19.89	12.80	-178.73	-5.92	-89.06	1,029.76	1,002.82	26.95	38.217	
3,900.00	3,748.03	3,716.74	3,715.12	20.51	13.14	-178.80	-7.27	-91.68	1,064.71	1,037.03	27.68	38.466	
4,000.00	3,842.75	3,810.42	3,808.76	21.13	13.48	-178.87	-8.62	-94.30	1,099.66	1,071.25	28.41	38.702	
4,100.00	3,937.48	3,904.11	3,902.40	21.75	13.81	-178.93	-9.97	-96.92	1,134.61	1,105.46	29.15	38.926	
4,200.00	4,032.21	3,997.80	3,996.04	22.37	14.15	-178.98	-11.32	-99.54	1,169.56	1,139.68	29.88	39.139	
4,300.00	4,126.93	4,091.48	4,089.68	22.99	14.49	-179.04	-12.68	-102.16	1,204.52	1,173.90	30.62	39.341	
4,400.00	4,221.66	4,177.94	4,176.10	23.60	14.80	-179.09	-13.92	-104.57	1,239.49	1,208.19	31.30	39.602	
4,463.80	4,282.10	4,200.00	4,198.14	24.00	14.88	-179.08	-13.98	-105.47	1,262.77	1,231.29	31.48	40.118	
4,500.00	4,316.22	4,227.91	4,225.97	24.23	14.98	-179.14	-13.31	-107.41	1,276.88	1,245.19	31.69	40.287	
4,550.00	4,362.64	4,250.00	4,247.93	24.58	15.06	-161.54	-12.19	-109.57	1,298.65	1,266.79	31.87	40.754	
4,600.00	4,407.97	4,270.23	4,267.95	24.96	15.14	-153.01	-10.71	-112.04	1,322.74	1,290.73	32.02	41.314	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #609H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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	
4,650.00	4,451.95	4,300.00	4,297.23	25.37	15.24	146.04	-7.74	-116.52	1,349.09	1,316.84	32.25	41.832	
4,700.00	4,494.30	4,300.00	4,297.23	25.80	15.24	139.31	-7.74	-116.52	1,377.28	1,345.07	32.21	42.753	
4,750.00	4,534.75	4,321.10	4,317.81	26.27	15.32	133.67	-5.07	-120.29	1,407.33	1,374.96	32.37	43.477	
4,800.00	4,573.06	4,334.16	4,330.48	26.77	15.37	128.15	-3.19	-122.88	1,439.06	1,406.61	32.45	44.346	
4,850.00	4,608.99	4,350.00	4,345.74	27.30	15.42	122.95	-0.66	-126.27	1,472.25	1,439.69	32.56	45.213	
4,900.00	4,642.32	4,350.00	4,345.74	27.86	15.42	117.19	-0.66	-126.27	1,506.66	1,474.13	32.52	46.323	
4,950.00	4,672.85	4,350.00	4,345.74	28.46	15.42	111.41	-0.66	-126.27	1,542.18	1,509.69	32.49	47.461	
5,000.00	4,700.38	4,367.04	4,362.04	29.09	15.48	106.48	2.34	-130.22	1,578.30	1,545.65	32.65	48.344	
5,050.00	4,724.76	4,370.81	4,365.63	29.75	15.50	100.99	3.05	-131.14	1,615.09	1,582.41	32.68	49.419	
5,100.00	4,745.81	4,373.01	4,367.72	30.45	15.50	95.53	3.47	-131.68	1,652.22	1,619.50	32.72	50.500	
5,150.00	4,763.43	4,373.76	4,368.43	31.17	15.51	90.20	3.61	-131.87	1,689.46	1,656.70	32.76	51.575	
5,200.00	4,777.49	4,373.16	4,367.86	31.93	15.50	85.08	3.49	-131.72	1,726.59	1,693.78	32.81	52.632	
5,250.00	4,787.91	4,371.33	4,366.12	32.71	15.50	80.26	3.15	-131.27	1,763.38	1,730.51	32.86	53.661	
5,300.00	4,794.63	4,368.37	4,363.31	33.50	15.49	75.79	2.59	-130.54	1,799.62	1,766.69	32.93	54.652	
5,350.00	4,797.61	4,350.00	4,345.74	34.31	15.42	71.16	-0.66	-126.27	1,835.30	1,802.44	32.86	55.847	
5,371.78	4,797.73	4,350.00	4,345.74	34.66	15.42	69.62	-0.66	-126.27	1,850.44	1,817.52	32.92	56.211	
5,400.00	4,797.42	4,350.00	4,345.74	35.12	15.42	69.62	-0.66	-126.27	1,870.04	1,837.04	33.00	56.666	
5,500.00	4,796.33	4,350.00	4,345.74	36.83	15.42	69.62	-0.66	-126.27	1,941.22	1,907.91	33.31	58.279	
5,600.00	4,795.24	4,350.00	4,345.74	38.64	15.42	69.62	-0.66	-126.27	2,014.85	1,981.22	33.63	59.913	
5,700.00	4,794.15	4,350.00	4,345.74	40.54	15.42	69.62	-0.66	-126.27	2,090.67	2,056.71	33.96	61.570	
5,800.00	4,793.06	4,327.75	4,324.27	42.52	15.34	68.76	-4.14	-121.59	2,168.02	2,133.93	34.09	63.604	
5,900.00	4,791.97	4,321.31	4,318.01	44.58	15.32	68.51	-5.05	-120.33	2,247.27	2,212.91	34.36	65.409	
6,000.00	4,790.88	4,300.00	4,297.23	46.69	15.24	67.68	-7.74	-116.52	2,328.26	2,293.76	34.50	67.493	
6,100.00	4,789.79	4,300.00	4,297.23	48.86	15.24	67.68	-7.74	-116.52	2,410.31	2,375.50	34.81	69.240	
6,200.00	4,788.71	4,300.00	4,297.23	51.07	15.24	67.68	-7.74	-116.52	2,493.66	2,458.55	35.11	71.018	
6,300.00	4,787.62	4,300.00	4,297.23	53.33	15.24	67.68	-7.74	-116.52	2,578.21	2,542.80	35.40	72.824	
6,400.00	4,786.53	4,300.00	4,297.23	55.61	15.24	67.68	-7.74	-116.52	2,663.82	2,628.14	35.68	74.656	
6,500.00	4,785.44	4,300.00	4,297.23	57.93	15.24	67.68	-7.74	-116.52	2,750.40	2,714.46	35.95	76.515	
6,600.00	4,784.35	4,300.00	4,297.23	60.28	15.24	67.68	-7.74	-116.52	2,837.87	2,801.67	36.20	78.396	
6,700.00	4,783.26	4,300.00	4,297.23	62.65	15.24	67.68	-7.74	-116.52	2,926.14	2,889.70	36.44	80.299	
6,800.00	4,782.17	4,300.00	4,297.23	65.04	15.24	67.68	-7.74	-116.52	3,015.14	2,978.47	36.67	82.222	
6,900.00	4,781.08	4,276.73	4,274.36	67.45	15.16	66.78	-10.14	-112.93	3,104.34	3,067.61	36.73	84.522	
7,000.00	4,779.99	4,273.61	4,271.29	69.88	15.15	66.66	-10.42	-112.50	3,194.49	3,157.57	36.92	86.526	
7,100.00	4,778.90	4,250.00	4,247.93	72.32	15.06	65.75	-12.19	-109.57	3,285.56	3,248.60	36.96	88.895	
7,200.00	4,777.81	4,250.00	4,247.93	74.77	15.06	65.75	-12.19	-109.57	3,376.68	3,339.53	37.16	90.875	
7,300.00	4,776.72	4,250.00	4,247.93	77.24	15.06	65.75	-12.19	-109.57	3,468.29	3,430.95	37.35	92.868	
7,400.00	4,775.64	4,250.00	4,247.93	79.72	15.06	65.75	-12.19	-109.57	3,560.35	3,522.83	37.53	94.874	
7,500.00	4,774.55	4,250.00	4,247.93	82.21	15.06	65.75	-12.19	-109.57	3,652.83	3,615.13	37.70	96.891	
7,600.00	4,773.46	4,250.00	4,247.93	84.71	15.06	65.75	-12.19	-109.57	3,745.70	3,707.83	37.87	98.918	
7,700.00	4,772.37	4,250.00	4,247.93	87.21	15.06	65.75	-12.19	-109.57	3,838.92	3,800.89	38.03	100.954	
7,800.00	4,771.28	4,250.00	4,247.93	89.73	15.06	65.75	-12.19	-109.57	3,932.47	3,894.29	38.18	102.998	
7,900.00	4,770.19	4,250.00	4,247.93	92.25	15.06	65.75	-12.19	-109.57	4,026.34	3,988.01	38.33	105.049	
8,000.00	4,769.10	4,250.00	4,247.93	94.77	15.06	65.75	-12.19	-109.57	4,120.49	4,082.02	38.47	107.106	
8,100.00	4,768.01	4,250.00	4,247.93	97.31	15.06	65.75	-12.19	-109.57	4,214.92	4,176.31	38.61	109.169	
8,200.00	4,766.92	4,250.00	4,247.93	99.85	15.06	65.75	-12.19	-109.57	4,309.59	4,270.85	38.74	111.237	
8,300.00	4,765.83	4,250.00	4,247.93	102.39	15.06	65.75	-12.19	-109.57	4,404.50	4,365.63	38.87	113.308	
8,400.00	4,764.74	4,250.00	4,247.93	104.94	15.06	65.75	-12.19	-109.57	4,499.63	4,460.64	39.00	115.384	
8,500.00	4,763.65	4,250.00	4,247.93	107.49	15.06	65.75	-12.19	-109.57	4,594.97	4,555.85	39.12	117.462	
8,600.00	4,762.57	4,250.00	4,247.93	110.05	15.06	65.75	-12.19	-109.57	4,690.50	4,651.27	39.24	119.543	
8,700.00	4,761.48	4,250.00	4,247.93	112.61	15.06	65.75	-12.19	-109.57	4,786.22	4,746.87	39.35	121.626	
8,800.00	4,760.39	4,250.00	4,247.93	115.17	15.06	65.75	-12.19	-109.57	4,882.10	4,842.64	39.46	123.710	
8,900.00	4,759.30	4,250.00	4,247.93	117.74	15.06	65.75	-12.19	-109.57	4,978.15	4,938.58	39.57	125.796	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Carson #609H - Original Drilling - APD Rev 3												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 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)			
9,000.00	4,758.21	4,250.00	4,247.93	120.31	15.06	65.75	-12.19	-109.57	5,074.35	5,034.67	39.68	127.882	
9,100.00	4,757.12	4,250.00	4,247.93	122.88	15.06	65.75	-12.19	-109.57	5,170.70	5,130.91	39.78	129.968	
9,200.00	4,756.03	4,250.00	4,247.93	125.45	15.06	65.75	-12.19	-109.57	5,267.18	5,227.29	39.89	132.054	
9,300.00	4,754.94	4,250.00	4,247.93	128.03	15.06	65.75	-12.19	-109.57	5,363.79	5,323.80	39.99	134.140	
9,400.00	4,753.85	4,250.00	4,247.93	130.61	15.06	65.75	-12.19	-109.57	5,460.52	5,420.44	40.08	136.225	
9,500.00	4,752.76	4,250.00	4,247.93	133.19	15.06	65.75	-12.19	-109.57	5,557.37	5,517.19	40.18	138.309	
9,600.00	4,751.67	4,250.00	4,247.93	135.78	15.06	65.75	-12.19	-109.57	5,654.33	5,614.05	40.28	140.392	
9,700.00	4,750.58	4,226.73	4,224.80	138.36	14.98	64.87	-13.36	-107.31	5,750.93	5,710.68	40.24	142.909	
9,800.00	4,749.49	4,225.75	4,223.82	140.95	14.98	64.83	-13.39	-107.22	5,848.05	5,807.72	40.33	145.009	
9,900.00	4,748.41	4,224.81	4,222.88	143.54	14.97	64.79	-13.43	-107.15	5,945.26	5,904.85	40.41	147.107	
10,000.00	4,747.32	4,223.89	4,221.97	146.13	14.97	64.76	-13.46	-107.07	6,042.57	6,002.07	40.50	149.202	
10,100.00	4,746.23	4,223.00	4,221.08	148.73	14.97	64.73	-13.49	-107.00	6,139.96	6,099.38	40.58	151.295	
10,200.00	4,745.14	4,200.00	4,198.14	151.32	14.88	63.86	-13.98	-105.47	6,237.85	6,197.30	40.55	153.844	
10,300.00	4,744.05	4,200.00	4,198.14	153.92	14.88	63.86	-13.98	-105.47	6,335.36	6,294.73	40.63	155.916	
10,400.00	4,742.96	4,200.00	4,198.14	156.51	14.88	63.86	-13.98	-105.47	6,432.96	6,392.24	40.72	157.984	
10,500.00	4,741.87	4,200.00	4,198.14	159.11	14.88	63.86	-13.98	-105.47	6,530.62	6,489.82	40.80	160.049	
10,600.00	4,740.78	4,200.00	4,198.14	161.71	14.88	63.86	-13.98	-105.47	6,628.36	6,587.47	40.89	162.111	
10,700.00	4,739.69	4,200.00	4,198.14	164.31	14.88	63.86	-13.98	-105.47	6,726.16	6,685.19	40.97	164.169	
10,800.00	4,738.60	4,200.00	4,198.14	166.91	14.88	63.86	-13.98	-105.47	6,824.03	6,782.98	41.05	166.223	
10,900.00	4,737.51	4,200.00	4,198.14	169.52	14.88	63.86	-13.98	-105.47	6,921.96	6,880.82	41.14	168.274	
11,000.00	4,736.42	4,200.00	4,198.14	172.12	14.88	63.86	-13.98	-105.47	7,019.94	6,978.73	41.22	170.320	
11,100.00	4,735.34	4,200.00	4,198.14	174.72	14.88	63.86	-13.98	-105.47	7,117.99	7,076.69	41.30	172.363	
11,200.00	4,734.25	4,200.00	4,198.14	177.33	14.88	63.86	-13.98	-105.47	7,216.08	7,174.70	41.38	174.401	
11,300.00	4,733.16	4,200.00	4,198.14	179.94	14.88	63.86	-13.98	-105.47	7,314.23	7,272.77	41.46	176.434	
11,400.00	4,732.07	4,200.00	4,198.14	182.54	14.88	63.86	-13.98	-105.47	7,412.42	7,370.89	41.53	178.463	
11,500.00	4,730.98	4,200.00	4,198.14	185.15	14.88	63.86	-13.98	-105.47	7,510.67	7,469.06	41.61	180.487	
11,600.00	4,729.89	4,200.00	4,198.14	187.76	14.88	63.86	-13.98	-105.47	7,608.96	7,567.27	41.69	182.507	
11,700.00	4,728.80	4,200.00	4,198.14	190.37	14.88	63.86	-13.98	-105.47	7,707.29	7,665.52	41.77	184.521	
11,800.00	4,727.71	4,200.00	4,198.14	192.98	14.88	63.86	-13.98	-105.47	7,805.67	7,763.82	41.85	186.531	
11,900.00	4,726.62	4,200.00	4,198.14	195.59	14.88	63.86	-13.98	-105.47	7,904.09	7,862.16	41.92	188.535	
12,000.00	4,725.53	4,200.00	4,198.14	198.20	14.88	63.86	-13.98	-105.47	8,002.54	7,960.54	42.00	190.534	
12,100.00	4,724.44	4,200.00	4,198.14	200.81	14.88	63.86	-13.98	-105.47	8,101.04	8,058.96	42.08	192.528	
12,200.00	4,723.35	4,200.00	4,198.14	203.43	14.88	63.86	-13.98	-105.47	8,199.57	8,157.41	42.15	194.517	
12,300.00	4,722.27	4,200.00	4,198.14	206.04	14.88	63.86	-13.98	-105.47	8,298.13	8,255.90	42.23	196.500	
12,400.00	4,721.18	4,200.00	4,198.14	208.65	14.88	63.86	-13.98	-105.47	8,396.73	8,354.43	42.31	198.477	
12,500.00	4,720.09	4,200.00	4,198.14	211.27	14.88	63.86	-13.98	-105.47	8,495.37	8,452.98	42.38	200.449	
12,600.00	4,719.00	4,200.00	4,198.14	213.88	14.88	63.86	-13.98	-105.47	8,594.03	8,551.57	42.46	202.415	
12,700.00	4,717.91	4,200.00	4,198.14	216.50	14.88	63.86	-13.98	-105.47	8,692.73	8,650.19	42.53	204.376	
12,800.00	4,716.82	4,200.00	4,198.14	219.11	14.88	63.86	-13.98	-105.47	8,791.45	8,748.84	42.61	206.330	
12,900.00	4,715.73	4,200.00	4,198.14	221.73	14.88	63.86	-13.98	-105.47	8,890.20	8,847.52	42.68	208.279	
13,000.00	4,714.64	4,200.00	4,198.14	224.35	14.88	63.86	-13.98	-105.47	8,988.98	8,946.22	42.76	210.222	
13,100.00	4,713.55	4,200.00	4,198.14	226.96	14.88	63.86	-13.98	-105.47	9,087.79	9,044.95	42.83	212.158	
13,200.00	4,712.46	4,200.00	4,198.14	229.58	14.88	63.86	-13.98	-105.47	9,186.62	9,143.71	42.91	214.089	
13,300.00	4,711.37	4,200.00	4,198.14	232.20	14.88	63.86	-13.98	-105.47	9,285.48	9,242.49	42.99	216.013	
13,400.00	4,710.28	4,200.00	4,198.14	234.82	14.88	63.86	-13.98	-105.47	9,384.36	9,341.30	43.06	217.932	
13,500.00	4,709.20	4,200.00	4,198.14	237.44	14.88	63.86	-13.98	-105.47	9,483.27	9,440.13	43.14	219.844	
13,600.00	4,708.11	4,200.00	4,198.14	240.06	14.88	63.86	-13.98	-105.47	9,582.19	9,538.98	43.21	221.750	
13,700.00	4,707.02	4,200.00	4,198.14	242.67	14.88	63.86	-13.98	-105.47	9,681.14	9,637.86	43.29	223.649	
13,800.00	4,705.93	4,200.00	4,198.14	245.29	14.88	63.86	-13.98	-105.47	9,780.12	9,736.75	43.36	225.542	
13,900.00	4,704.84	4,200.00	4,198.14	247.91	14.88	63.86	-13.98	-105.47	9,879.11	9,835.67	43.44	227.429	
14,000.00	4,703.75	4,200.00	4,198.14	250.53	14.88	63.86	-13.98	-105.47	9,978.12	9,934.61	43.51	229.309	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Renate Hixon 1 - OH - OH														Offset Site Error:	0.00 ft
Survey Program: 232-INCLINOMETER														Offset Well Error:	0.00 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)					
0.00	0.00	13.00	13.00	0.00	0.39	124.19	-1,685.11	2,480.29	2,998.57						
100.00	100.00	113.00	113.00	0.15	3.43	124.19	-1,685.11	2,480.29	2,998.57	2,994.98	3.59	836.208			
200.00	200.00	213.00	213.00	0.51	6.47	124.19	-1,685.11	2,480.29	2,998.57	2,991.59	6.98	429.522			
300.00	300.00	313.00	313.00	0.87	9.51	124.19	-1,685.11	2,480.29	2,998.57	2,988.19	10.38	288.977			
395.98	395.98	408.98	408.98	1.22	12.42	124.19	-1,685.11	2,480.29	2,998.57	2,984.93	13.64	219.914			
400.00	400.00	413.00	413.00	1.23	12.54	51.86	-1,685.11	2,480.29	2,998.57	2,984.80	13.77	217.737			
500.00	499.98	512.67	512.67	1.58	15.57	51.90	-1,684.83	2,480.29	2,997.25	2,980.10	17.15	174.794			
600.00	599.83	611.12	611.12	1.94	18.56	52.03	-1,684.88	2,480.29	2,993.97	2,973.47	20.49	146.106			
700.00	699.43	709.33	709.32	2.30	21.54	52.25	-1,685.02	2,480.29	2,988.60	2,964.76	23.83	125.392			
800.00	798.66	811.68	811.66	2.67	24.65	52.57	-1,685.11	2,480.29	2,981.09	2,953.78	27.31	109.158			
900.00	897.40	910.43	910.40	3.06	27.65	52.96	-1,685.11	2,480.29	2,971.46	2,940.77	30.69	96.834			
1,000.00	995.53	1,008.56	1,008.53	3.47	30.63	53.44	-1,685.11	2,480.29	2,959.81	2,925.75	34.06	86.907			
1,100.00	1,092.94	1,102.79	1,102.77	3.90	33.49	53.99	-1,684.28	2,480.29	2,945.71	2,908.38	37.33	78.914			
1,200.00	1,189.49	1,195.55	1,195.52	4.37	36.31	54.63	-1,684.55	2,480.29	2,930.35	2,889.78	40.58	72.218			
1,300.00	1,285.07	1,287.34	1,287.30	4.87	39.09	55.36	-1,685.03	2,480.29	2,913.30	2,869.48	43.82	66.478			
1,330.44	1,313.95	1,327.04	1,326.95	5.03	40.30	55.66	-1,685.11	2,480.29	2,907.71	2,862.53	45.18	64.363			
1,400.00	1,379.85	1,392.94	1,392.85	5.41	42.30	56.01	-1,685.11	2,480.29	2,894.72	2,847.21	47.52	60.919			
1,500.00	1,474.58	1,487.66	1,487.58	5.97	45.18	56.52	-1,685.11	2,480.29	2,876.26	2,825.37	50.89	56.514			
1,600.00	1,569.30	1,580.84	1,580.74	6.53	48.01	57.01	-1,684.01	2,480.29	2,857.36	2,803.13	54.24	52.681			
1,700.00	1,664.03	1,670.17	1,670.07	7.11	50.72	57.51	-1,684.22	2,480.29	2,839.52	2,782.04	57.48	49.402			
1,800.00	1,758.76	1,759.46	1,759.35	7.70	53.43	58.01	-1,684.71	2,480.29	2,822.11	2,761.39	60.73	46.473			
1,900.00	1,853.48	1,866.61	1,866.48	8.29	56.69	58.62	-1,685.11	2,480.29	2,804.86	2,740.34	64.52	43.471			
2,000.00	1,948.21	1,960.51	1,960.39	8.88	59.54	59.16	-1,684.98	2,480.29	2,787.56	2,719.64	67.93	41.038			
2,100.00	2,042.94	2,052.33	2,052.21	9.48	62.33	59.69	-1,685.09	2,480.29	2,770.69	2,699.41	71.27	38.874			
2,200.00	2,137.67	2,150.80	2,150.67	10.08	65.32	60.26	-1,685.11	2,480.29	2,754.01	2,679.18	74.83	36.805			
2,300.00	2,232.39	2,245.52	2,245.39	10.69	68.19	60.82	-1,685.11	2,480.29	2,737.60	2,659.33	78.28	34.974			
2,400.00	2,327.12	2,339.43	2,339.29	11.29	71.04	61.37	-1,684.25	2,480.29	2,720.89	2,639.19	81.70	33.302			
2,500.00	2,421.85	2,430.00	2,429.86	11.90	73.79	61.92	-1,684.39	2,480.29	2,705.14	2,620.11	85.04	31.812			
2,600.00	2,516.57	2,520.53	2,520.38	12.51	76.54	62.48	-1,684.74	2,480.29	2,689.83	2,601.46	88.37	30.437			
2,700.00	2,611.30	2,624.49	2,624.30	13.12	79.70	63.12	-1,685.11	2,480.29	2,674.80	2,582.68	92.12	29.036			
2,800.00	2,706.03	2,719.22	2,719.03	13.73	82.58	63.71	-1,685.11	2,480.29	2,659.83	2,564.24	95.59	27.825			
2,900.00	2,800.76	2,813.95	2,813.76	14.35	85.45	64.31	-1,685.11	2,480.29	2,645.16	2,546.10	99.07	26.700			
3,000.00	2,895.48	2,904.06	2,903.85	14.96	88.19	64.86	-1,684.10	2,480.29	2,630.09	2,527.68	102.41	25.682			
3,100.00	2,990.21	2,992.88	2,992.67	15.57	90.89	65.44	-1,684.46	2,480.29	2,616.32	2,510.60	105.72	24.749			
3,200.00	3,084.94	3,098.17	3,097.94	16.19	94.09	66.13	-1,685.11	2,480.29	2,603.04	2,493.52	109.52	23.767			
3,300.00	3,179.66	3,192.90	3,192.66	16.81	96.96	66.75	-1,685.11	2,480.29	2,589.64	2,476.63	113.02	22.914			
3,400.00	3,274.39	3,287.63	3,287.39	17.42	99.84	67.37	-1,685.11	2,480.29	2,576.57	2,460.06	116.51	22.114			
3,500.00	3,369.12	3,380.61	3,380.37	18.04	102.66	67.99	-1,684.59	2,480.29	2,563.45	2,443.49	119.96	21.369			
3,600.00	3,463.84	3,472.17	3,471.93	18.66	105.44	68.60	-1,684.75	2,480.29	2,551.17	2,427.80	123.37	20.680			
3,700.00	3,558.57	3,563.69	3,563.45	19.27	108.22	69.23	-1,685.05	2,480.29	2,539.36	2,412.58	126.77	20.030			
3,800.00	3,653.30	3,666.55	3,666.30	19.89	111.35	69.93	-1,685.11	2,480.29	2,527.68	2,397.15	130.53	19.365			
3,900.00	3,748.03	3,761.28	3,761.03	20.51	114.22	70.59	-1,685.11	2,480.29	2,516.33	2,382.29	134.04	18.773			
4,000.00	3,842.75	3,855.06	3,854.80	21.13	117.07	71.23	-1,684.56	2,480.29	2,504.90	2,367.38	137.52	18.214			
4,100.00	3,937.48	3,946.61	3,946.35	21.75	119.85	71.87	-1,684.68	2,480.29	2,494.37	2,353.42	140.95	17.697			
4,200.00	4,032.21	4,038.13	4,037.87	22.37	122.63	72.52	-1,684.94	2,480.29	2,484.32	2,339.95	144.37	17.208			
4,300.00	4,126.93	4,140.22	4,139.93	22.99	125.73	73.25	-1,685.11	2,480.29	2,474.55	2,326.44	148.11	16.708			
4,400.00	4,221.66	4,234.95	4,234.66	23.60	128.61	73.93	-1,685.11	2,480.29	2,465.04	2,313.41	151.63	16.257			
4,463.80	4,282.10	4,295.38	4,295.10	24.00	130.44	74.37	-1,685.11	2,480.29	2,459.17	2,305.29	153.88	15.981			
4,500.00	4,316.22	4,329.50	4,329.22	24.23	131.48	66.87	-1,685.11	2,480.29	2,454.91	2,299.75	155.16	15.822			
4,550.00	4,362.64	4,375.92	4,375.64	24.58	132.89	58.79	-1,685.11	2,480.29	2,445.84	2,288.93	156.92	15.587			
4,600.00	4,407.97	4,421.26	4,420.97	24.96	134.27	52.89	-1,685.11	2,480.29	2,433.16	2,274.50	158.66	15.336			
4,650.00	4,451.95	4,465.24	4,464.95	25.37	135.60	48.68	-1,685.11	2,480.29	2,416.94	2,256.57	160.38	15.070			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Renate Hixon 1 - OH - OH											Offset Site Error:	0.00 ft
Survey Program: 232-INCLINOMETER											Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface	Offset Wellbore Centre		Distance		Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset		+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	
4,700.00	4,494.30	4,507.58	4,507.30	25.80	136.89	45.75	-1,685.11	2,480.29	2,397.31	2,235.25	162.06	14.793
4,750.00	4,534.75	4,548.03	4,547.75	26.27	138.12	43.84	-1,685.11	2,480.29	2,374.38	2,210.68	163.70	14.505
4,800.00	4,573.06	4,586.34	4,586.06	26.77	139.28	42.74	-1,685.11	2,480.29	2,348.32	2,183.03	165.28	14.208
4,850.00	4,608.99	4,596.99	4,596.66	27.30	139.60	41.98	-1,685.11	2,480.29	2,319.43	2,153.39	166.04	13.969
4,900.00	4,642.32	4,596.99	4,596.66	27.86	139.60	41.64	-1,685.11	2,480.29	2,288.23	2,121.78	166.45	13.747
4,950.00	4,672.85	4,596.99	4,596.66	28.46	139.60	41.82	-1,685.11	2,480.29	2,254.85	2,088.01	166.84	13.515
5,000.00	4,700.38	4,596.99	4,596.66	29.09	139.60	42.52	-1,685.11	2,480.29	2,219.41	2,052.19	167.22	13.273
5,050.00	4,724.76	4,596.99	4,596.66	29.75	139.60	43.78	-1,685.11	2,480.29	2,182.02	2,014.45	167.58	13.021
5,100.00	4,745.81	4,596.99	4,596.66	30.45	139.60	45.66	-1,685.11	2,480.29	2,142.83	1,974.90	167.93	12.760
5,150.00	4,763.43	4,596.99	4,596.66	31.17	139.60	48.27	-1,685.11	2,480.29	2,101.97	1,933.69	168.28	12.491
5,200.00	4,777.49	4,596.99	4,596.66	31.93	139.60	51.76	-1,685.11	2,480.29	2,059.61	1,890.98	168.63	12.214
5,250.00	4,787.91	4,596.99	4,596.66	32.71	139.60	56.37	-1,685.11	2,480.29	2,015.93	1,846.94	168.99	11.930
5,300.00	4,794.63	4,596.99	4,596.66	33.50	139.60	62.37	-1,685.11	2,480.29	1,971.11	1,801.75	169.35	11.639
5,350.00	4,797.61	4,596.99	4,596.66	34.31	139.60	70.07	-1,685.11	2,480.29	1,925.36	1,755.62	169.74	11.343
5,371.78	4,797.73	4,596.99	4,596.66	34.66	139.60	74.02	-1,685.11	2,480.29	1,905.20	1,735.29	169.91	11.213
5,400.00	4,797.42	4,596.99	4,596.66	35.12	139.60	74.02	-1,685.11	2,480.29	1,879.02	1,708.88	170.14	11.044
5,500.00	4,796.33	4,596.99	4,596.66	36.83	139.60	74.02	-1,685.11	2,480.29	1,786.78	1,615.77	171.01	10.449
5,600.00	4,795.24	4,596.99	4,596.66	38.64	139.60	74.02	-1,685.11	2,480.29	1,695.42	1,523.44	171.98	9.858
5,700.00	4,794.15	4,596.99	4,596.66	40.54	139.60	74.02	-1,685.11	2,480.29	1,605.08	1,432.01	173.07	9.274
5,800.00	4,793.06	4,596.99	4,596.66	42.52	139.60	74.02	-1,685.11	2,480.29	1,515.97	1,341.66	174.30	8.697
5,900.00	4,791.97	4,596.99	4,596.66	44.58	139.60	74.02	-1,685.11	2,480.29	1,428.29	1,252.61	175.68	8.130
6,000.00	4,790.88	4,596.99	4,596.66	46.69	139.60	74.02	-1,685.11	2,480.29	1,342.34	1,165.10	177.24	7.574
6,100.00	4,789.79	4,596.99	4,596.66	48.86	139.60	74.02	-1,685.11	2,480.29	1,258.46	1,079.47	178.98	7.031
6,200.00	4,788.71	4,596.99	4,596.66	51.07	139.60	74.02	-1,685.11	2,480.29	1,177.10	996.16	180.94	6.505
6,300.00	4,787.62	4,596.99	4,596.66	53.33	139.60	74.02	-1,685.11	2,480.29	1,098.83	915.70	183.13	6.000
6,400.00	4,786.53	4,596.99	4,596.66	55.61	139.60	74.02	-1,685.11	2,480.29	1,024.35	838.80	185.54	5.521
6,500.00	4,785.44	4,596.99	4,596.66	57.93	139.60	74.02	-1,685.11	2,480.29	954.54	766.37	188.17	5.073
6,600.00	4,784.35	4,596.99	4,596.66	60.28	139.60	74.02	-1,685.11	2,480.29	890.50	699.54	190.97	4.663
6,700.00	4,783.26	4,596.99	4,596.66	62.65	139.60	74.02	-1,685.11	2,480.29	833.58	639.74	193.83	4.300
6,800.00	4,782.17	4,596.99	4,596.66	65.04	139.60	74.02	-1,685.11	2,480.29	785.31	588.69	196.62	3.994
6,900.00	4,781.08	4,596.99	4,596.66	67.45	139.60	74.02	-1,685.11	2,480.29	747.37	548.27	199.10	3.754
7,000.00	4,779.99	4,596.99	4,596.66	69.88	139.60	74.02	-1,685.11	2,480.29	721.40	520.38	201.02	3.589
7,100.00	4,778.90	4,596.99	4,596.66	72.32	139.60	74.02	-1,685.11	2,480.29	708.71	506.60	202.12	3.506
7,140.72	4,778.46	4,596.99	4,596.66	73.32	139.60	74.02	-1,685.11	2,480.29	707.54	505.25	202.29	3.498 CC, ES, SF
7,200.00	4,777.81	4,596.99	4,596.66	74.77	139.60	74.02	-1,685.11	2,480.29	710.02	507.77	202.25	3.511
7,300.00	4,776.72	4,596.99	4,596.66	77.24	139.60	74.02	-1,685.11	2,480.29	725.25	523.84	201.40	3.601
7,400.00	4,775.64	4,596.99	4,596.66	79.72	139.60	74.02	-1,685.11	2,480.29	753.55	553.81	199.74	3.773
7,500.00	4,774.55	4,596.99	4,596.66	82.21	139.60	74.02	-1,685.11	2,480.29	793.53	596.04	197.50	4.018
7,600.00	4,773.46	4,596.99	4,596.66	84.71	139.60	74.02	-1,685.11	2,480.29	843.54	648.60	194.93	4.327
7,700.00	4,772.37	4,596.99	4,596.66	87.21	139.60	74.02	-1,685.11	2,480.29	901.89	709.63	192.27	4.691
7,800.00	4,771.28	4,596.99	4,596.66	89.73	139.60	74.02	-1,685.11	2,480.29	967.09	777.44	189.65	5.099
7,900.00	4,770.19	4,596.99	4,596.66	92.25	139.60	74.02	-1,685.11	2,480.29	1,037.84	850.67	187.17	5.545
8,000.00	4,769.10	4,596.99	4,596.66	94.77	139.60	74.02	-1,685.11	2,480.29	1,113.09	928.21	184.88	6.021
8,100.00	4,768.01	4,596.99	4,596.66	97.31	139.60	74.02	-1,685.11	2,480.29	1,191.99	1,009.18	182.80	6.521
8,200.00	4,766.92	4,596.99	4,596.66	99.85	139.60	74.02	-1,685.11	2,480.29	1,273.85	1,092.91	180.93	7.040
8,300.00	4,765.83	4,596.99	4,596.66	102.39	139.60	74.02	-1,685.11	2,480.29	1,358.14	1,178.88	179.26	7.576
8,400.00	4,764.74	4,596.99	4,596.66	104.94	139.60	74.02	-1,685.11	2,480.29	1,444.44	1,266.67	177.77	8.125
8,500.00	4,763.65	4,596.99	4,596.66	107.49	139.60	74.02	-1,685.11	2,480.29	1,532.40	1,355.96	176.44	8.685
8,600.00	4,762.57	4,596.99	4,596.66	110.05	139.60	74.02	-1,685.11	2,480.29	1,621.76	1,446.50	175.26	9.253
8,700.00	4,761.48	4,596.99	4,596.66	112.61	139.60	74.02	-1,685.11	2,480.29	1,712.30	1,538.09	174.21	9.829
8,800.00	4,760.39	4,596.99	4,596.66	115.17	139.60	74.02	-1,685.11	2,480.29	1,803.83	1,630.56	173.27	10.410
8,900.00	4,759.30	4,596.99	4,596.66	117.74	139.60	74.02	-1,685.11	2,480.29	1,896.23	1,723.79	172.44	10.997



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Renate Hixon 1 - OH - OH													Offset Site Error:	0.00 ft
Survey Program:		232-INCLINOMETER				Rule Assigned:				Offset Well Error:		0.00 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	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
9,000.00	4,758.21	4,596.99	4,596.66	120.31	139.60	74.02	-1,685.11	2,480.29	1,989.35	1,817.66	171.69	11.587		
9,100.00	4,757.12	4,596.99	4,596.66	122.88	139.60	74.02	-1,685.11	2,480.29	2,083.12	1,912.10	171.02	12.181		
9,200.00	4,756.03	4,596.99	4,596.66	125.45	139.60	74.02	-1,685.11	2,480.29	2,177.44	2,007.02	170.42	12.777		
9,300.00	4,754.94	4,596.99	4,596.66	128.03	139.60	74.02	-1,685.11	2,480.29	2,272.25	2,102.36	169.88	13.375		
9,400.00	4,753.85	4,596.99	4,596.66	130.61	139.60	74.02	-1,685.11	2,480.29	2,367.48	2,198.08	169.40	13.976		
9,500.00	4,752.76	4,596.99	4,596.66	133.19	139.60	74.02	-1,685.11	2,480.29	2,463.09	2,294.13	168.96	14.578		
9,600.00	4,751.67	4,596.99	4,596.66	135.78	139.60	74.02	-1,685.11	2,480.29	2,559.04	2,390.47	168.57	15.181		
9,700.00	4,750.58	4,596.99	4,596.66	138.36	139.60	74.02	-1,685.11	2,480.29	2,655.28	2,487.07	168.22	15.785		
9,800.00	4,749.49	4,596.99	4,596.66	140.95	139.60	74.02	-1,685.11	2,480.29	2,751.80	2,583.90	167.90	16.390		
9,900.00	4,748.41	4,596.99	4,596.66	143.54	139.60	74.02	-1,685.11	2,480.29	2,848.55	2,680.94	167.61	16.996		
10,000.00	4,747.32	4,596.99	4,596.66	146.13	139.60	74.02	-1,685.11	2,480.29	2,945.52	2,778.18	167.34	17.602		
10,100.00	4,746.23	4,596.99	4,596.66	148.73	139.60	74.02	-1,685.11	2,480.29	3,042.69	2,875.58	167.11	18.208		
10,200.00	4,745.14	4,596.99	4,596.66	151.32	139.60	74.02	-1,685.11	2,480.29	3,140.03	2,973.14	166.89	18.815		
10,300.00	4,744.05	4,596.99	4,596.66	153.92	139.60	74.02	-1,685.11	2,480.29	3,237.54	3,070.84	166.70	19.421		
10,400.00	4,742.96	4,596.99	4,596.66	156.51	139.60	74.02	-1,685.11	2,480.29	3,335.19	3,168.67	166.52	20.028		
10,500.00	4,741.87	4,596.99	4,596.66	159.11	139.60	74.02	-1,685.11	2,480.29	3,432.98	3,266.62	166.36	20.635		
10,600.00	4,740.78	4,596.99	4,596.66	161.71	139.60	74.02	-1,685.11	2,480.29	3,530.90	3,364.67	166.22	21.242		
10,700.00	4,739.69	4,596.99	4,596.66	164.31	139.60	74.02	-1,685.11	2,480.29	3,628.92	3,462.83	166.09	21.849		
10,800.00	4,738.60	4,596.99	4,596.66	166.91	139.60	74.02	-1,685.11	2,480.29	3,727.05	3,561.08	165.98	22.455		
10,900.00	4,737.51	4,596.99	4,596.66	169.52	139.60	74.02	-1,685.11	2,480.29	3,825.28	3,659.41	165.87	23.062		
11,000.00	4,736.42	4,596.99	4,596.66	172.12	139.60	74.02	-1,685.11	2,480.29	3,923.60	3,757.82	165.78	23.668		
11,100.00	4,735.34	4,596.99	4,596.66	174.72	139.60	74.02	-1,685.11	2,480.29	4,022.00	3,856.31	165.69	24.274		
11,200.00	4,734.25	4,596.99	4,596.66	177.33	139.60	74.02	-1,685.11	2,480.29	4,120.48	3,954.86	165.62	24.879		
11,300.00	4,733.16	4,596.99	4,596.66	179.94	139.60	74.02	-1,685.11	2,480.29	4,219.03	4,053.48	165.55	25.485		
11,400.00	4,732.07	4,596.99	4,596.66	182.54	139.60	74.02	-1,685.11	2,480.29	4,317.65	4,152.15	165.49	26.089		
11,500.00	4,730.98	4,596.99	4,596.66	185.15	139.60	74.02	-1,685.11	2,480.29	4,416.32	4,250.88	165.44	26.694		
11,600.00	4,729.89	4,596.99	4,596.66	187.76	139.60	74.02	-1,685.11	2,480.29	4,515.06	4,349.66	165.40	27.298		
11,700.00	4,728.80	4,596.99	4,596.66	190.37	139.60	74.02	-1,685.11	2,480.29	4,613.85	4,448.49	165.36	27.902		
11,800.00	4,727.71	4,596.99	4,596.66	192.98	139.60	74.02	-1,685.11	2,480.29	4,712.69	4,547.37	165.33	28.505		
11,900.00	4,726.62	4,596.99	4,596.66	195.59	139.60	74.02	-1,685.11	2,480.29	4,811.58	4,646.28	165.30	29.108		
12,000.00	4,725.53	4,596.99	4,596.66	198.20	139.60	74.02	-1,685.11	2,480.29	4,910.52	4,745.24	165.28	29.710		
12,100.00	4,724.44	4,596.99	4,596.66	200.81	139.60	74.02	-1,685.11	2,480.29	5,009.50	4,844.23	165.26	30.312		
12,200.00	4,723.35	4,596.99	4,596.66	203.43	139.60	74.02	-1,685.11	2,480.29	5,108.51	4,943.26	165.25	30.914		
12,300.00	4,722.27	4,596.99	4,596.66	206.04	139.60	74.02	-1,685.11	2,480.29	5,207.57	5,042.32	165.24	31.515		
12,400.00	4,721.18	4,596.99	4,596.66	208.65	139.60	74.02	-1,685.11	2,480.29	5,306.66	5,141.42	165.24	32.115		
12,500.00	4,720.09	4,596.99	4,596.66	211.27	139.60	74.02	-1,685.11	2,480.29	5,405.78	5,240.54	165.24	32.715		
12,600.00	4,719.00	4,596.99	4,596.66	213.88	139.60	74.02	-1,685.11	2,480.29	5,504.94	5,339.69	165.24	33.314		
12,700.00	4,717.91	4,596.99	4,596.66	216.50	139.60	74.02	-1,685.11	2,480.29	5,604.12	5,438.87	165.25	33.913		
12,800.00	4,716.82	4,596.99	4,596.66	219.11	139.60	74.02	-1,685.11	2,480.29	5,703.34	5,538.08	165.26	34.511		
12,900.00	4,715.73	4,596.99	4,596.66	221.73	139.60	74.02	-1,685.11	2,480.29	5,802.58	5,637.30	165.27	35.109		
13,000.00	4,714.64	4,596.99	4,596.66	224.35	139.60	74.02	-1,685.11	2,480.29	5,901.84	5,736.56	165.29	35.706		
13,100.00	4,713.55	4,596.99	4,596.66	226.96	139.60	74.02	-1,685.11	2,480.29	6,001.13	5,835.83	165.31	36.303		
13,200.00	4,712.46	4,596.99	4,596.66	229.58	139.60	74.02	-1,685.11	2,480.29	6,100.45	5,935.12	165.33	36.899		
13,300.00	4,711.37	4,596.99	4,596.66	232.20	139.60	74.02	-1,685.11	2,480.29	6,199.78	6,034.43	165.35	37.495		
13,400.00	4,710.28	4,596.99	4,596.66	234.82	139.60	74.02	-1,685.11	2,480.29	6,299.14	6,133.76	165.38	38.090		
13,500.00	4,709.20	4,596.99	4,596.66	237.44	139.60	74.02	-1,685.11	2,480.29	6,398.52	6,233.11	165.40	38.684		
13,600.00	4,708.11	4,596.99	4,596.66	240.06	139.60	74.02	-1,685.11	2,480.29	6,497.91	6,332.48	165.44	39.278		
13,700.00	4,707.02	4,596.99	4,596.66	242.67	139.60	74.02	-1,685.11	2,480.29	6,597.33	6,431.86	165.47	39.871		
13,800.00	4,705.93	4,596.99	4,596.66	245.29	139.60	74.02	-1,685.11	2,480.29	6,696.76	6,531.26	165.50	40.463		
13,900.00	4,704.84	4,596.99	4,596.66	247.91	139.60	74.02	-1,685.11	2,480.29	6,796.21	6,630.67	165.54	41.055		
14,000.00	4,703.75	4,596.99	4,596.66	250.53	139.60	74.02	-1,685.11	2,480.29	6,895.67	6,730.10	165.58	41.647		
14,069.53	4,703.00	4,596.99	4,596.66	252.36	139.60	74.02	-1,685.11	2,480.29	6,964.84	6,799.24	165.60	42.057		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
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Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti 21-C - OH - OH													Offset Site Error:	0.00 ft				
Survey Program:		365-INCLINOMETER				Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned:		Offset Well Error:		0.00 ft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)							
0.00	0.00	0.00	0.00	0.00	0.00	58.39	626.06	1,017.30	1,194.82									
100.00	100.00	73.00	73.00	0.15	1.11	58.39	626.06	1,017.30	1,194.51	1,193.25	1.26	945.951						
200.00	200.00	173.00	173.00	0.51	2.63	58.39	626.06	1,017.30	1,194.51	1,191.37	3.14	380.464						
300.00	300.00	273.00	273.00	0.87	4.15	58.39	626.06	1,017.30	1,194.51	1,189.49	5.02	238.118						
395.98	395.98	368.98	368.98	1.22	5.66	58.39	626.06	1,017.30	1,194.51	1,187.63	6.88	173.665						
400.00	400.00	373.00	373.00	1.23	5.79	-13.94	626.06	1,017.30	1,194.51	1,187.49	7.01	170.289						
500.00	499.98	472.98	472.98	1.58	8.82	-13.97	626.06	1,017.30	1,192.68	1,182.28	10.40	114.676						
600.00	599.83	572.83	572.83	1.94	11.85	-14.06	626.06	1,017.30	1,187.46	1,173.67	13.79	86.112						
700.00	699.43	672.63	672.63	2.30	14.88	-14.22	626.35	1,017.30	1,179.03	1,161.84	17.18	68.621						
800.00	798.66	772.37	772.37	2.67	17.91	-14.42	626.27	1,017.30	1,167.04	1,146.46	20.57	56.722						
900.00	897.40	871.60	871.60	3.06	20.93	-14.69	626.12	1,017.30	1,151.67	1,127.71	23.96	48.074						
1,000.00	995.53	968.55	968.53	3.47	23.87	-15.03	626.06	1,017.30	1,133.04	1,105.77	27.27	41.545						
1,100.00	1,092.94	1,065.95	1,065.94	3.90	26.83	-15.45	626.06	1,017.30	1,111.17	1,080.56	30.61	36.303						
1,200.00	1,189.49	1,162.50	1,162.49	4.37	29.76	-15.96	626.06	1,017.30	1,086.06	1,052.14	33.92	32.015						
1,300.00	1,285.07	1,258.80	1,258.79	4.87	32.69	-16.59	626.62	1,017.30	1,058.08	1,020.84	37.24	28.413						
1,330.44	1,313.95	1,287.95	1,287.93	5.03	33.57	-16.80	626.58	1,017.30	1,048.82	1,010.57	38.25	27.421						
1,400.00	1,379.85	1,354.43	1,354.41	5.41	35.59	-17.15	626.43	1,017.30	1,027.33	986.79	40.54	25.341						
1,500.00	1,474.58	1,449.98	1,449.96	5.97	38.49	-17.68	626.10	1,017.30	996.43	952.59	43.84	22.730						
1,600.00	1,569.30	1,542.35	1,542.30	6.53	41.30	-18.24	626.06	1,017.30	965.76	918.72	47.05	20.527						
1,700.00	1,664.03	1,637.08	1,637.03	7.11	44.17	-18.85	626.06	1,017.30	935.23	884.89	50.34	18.580						
1,800.00	1,758.76	1,732.08	1,732.03	7.70	47.06	-19.55	626.88	1,017.30	905.28	851.64	53.64	16.877						
1,900.00	1,853.48	1,828.12	1,828.06	8.29	49.98	-20.25	626.71	1,017.30	874.86	817.88	56.98	15.354						
2,000.00	1,948.21	1,924.11	1,924.05	8.88	52.89	-20.98	626.31	1,017.30	844.43	784.11	60.33	13.998						
2,100.00	2,042.94	2,016.03	2,015.94	9.48	55.68	-21.74	626.06	1,017.30	814.23	750.66	63.56	12.810						
2,200.00	2,137.67	2,110.76	2,110.67	10.08	58.56	-22.61	626.06	1,017.30	784.33	717.44	66.89	11.726						
2,300.00	2,232.39	2,205.48	2,205.39	10.69	61.43	-23.53	626.06	1,017.30	754.62	684.39	70.22	10.746						
2,400.00	2,327.12	2,301.33	2,301.23	11.29	64.35	-24.59	626.77	1,017.30	725.56	651.96	73.60	9.858						
2,500.00	2,421.85	2,397.23	2,397.13	11.90	67.26	-25.67	626.42	1,017.30	696.05	619.06	76.99	9.041						
2,600.00	2,516.57	2,489.72	2,489.57	12.51	70.07	-26.80	626.06	1,017.30	666.76	586.46	80.30	8.304						
2,700.00	2,611.30	2,584.45	2,584.30	13.12	72.94	-28.08	626.06	1,017.30	638.00	554.32	83.68	7.624						
2,800.00	2,706.03	2,679.18	2,679.03	13.73	75.82	-29.48	626.06	1,017.30	609.58	522.49	87.08	7.000						
2,900.00	2,800.76	2,774.69	2,774.53	14.35	78.72	-31.10	627.14	1,017.30	582.32	491.79	90.53	6.432						
3,000.00	2,895.48	2,870.78	2,870.61	14.96	81.64	-32.79	626.81	1,017.30	554.48	460.47	94.01	5.898						
3,100.00	2,990.21	2,966.80	2,966.63	15.57	84.55	-34.63	626.17	1,017.30	526.89	429.38	97.51	5.403						
3,200.00	3,084.94	3,060.00	3,059.75	16.19	87.38	-36.65	626.32	1,017.30	500.46	399.49	100.97	4.956						
3,300.00	3,179.66	3,152.94	3,152.66	16.81	90.21	-38.85	626.06	1,017.30	474.41	369.95	104.46	4.542						
3,400.00	3,274.39	3,247.67	3,247.39	17.42	93.08	-41.36	626.06	1,017.30	449.35	341.32	108.03	4.159						
3,500.00	3,369.12	3,342.39	3,342.12	18.04	95.96	-44.14	626.06	1,017.30	425.24	313.59	111.65	3.809						
3,600.00	3,463.84	3,438.31	3,438.02	18.66	98.87	-47.35	627.38	1,017.30	403.41	288.06	115.35	3.497						
3,700.00	3,558.57	3,534.43	3,534.12	19.27	101.79	-50.81	626.88	1,017.30	381.30	262.20	119.09	3.202						
3,800.00	3,653.30	3,626.70	3,626.30	19.89	104.59	-54.47	626.06	1,017.30	360.38	237.60	122.79	2.935						
3,900.00	3,748.03	3,721.43	3,721.03	20.51	107.47	-58.67	626.06	1,017.30	342.05	215.47	126.59	2.702						
4,000.00	3,842.75	3,816.16	3,815.75	21.13	110.35	-63.29	626.06	1,017.30	325.85	195.43	130.42	2.499						
4,100.00	3,937.48	3,912.05	3,911.63	21.75	113.26	-68.39	627.10	1,017.30	313.14	178.86	134.28	2.332						
4,200.00	4,032.21	4,008.26	4,007.83	22.37	116.18	-73.87	626.51	1,017.30	301.61	163.49	138.12	2.184						
4,300.00	4,126.93	4,100.40	4,099.93	22.99	118.98	-79.42	626.06	1,017.30	293.31	151.51	141.80	2.069						
4,400.00	4,221.66	4,195.13	4,194.66	23.60	121.86	-85.36	626.06	1,017.30	288.83	143.39	145.44	1.986						
4,463.80	4,282.10	4,255.57	4,255.10	24.00	123.69	-89.20	626.06	1,017.30	287.81	140.12	147.69	1.949						
4,466.51	4,284.66	4,258.13	4,257.66	24.02	123.77	-90.00	626.06	1,017.30	287.80	140.01	147.79	1.947 CC						
4,500.00	4,316.22	4,289.69	4,289.22	24.23	124.73	-99.24	626.06	1,017.30	288.79	139.85	148.95	1.939 ES, SF						
4,550.00	4,362.64	4,336.12	4,335.64	24.58	126.14	-110.90	626.98	1,017.30	294.92	144.28	150.64	1.958						
4,600.00	4,407.97	4,381.75	4,381.27	24.96	127.52	-120.49	626.95	1,017.30	304.84	152.57	152.27	2.002						



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti 21-C - OH - OH											Offset Site Error:	0.00 ft
Survey Program: 365-INCLINOMETER											Offset Well Error:	0.00 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
4,650.00	4,451.95	4,426.02	4,425.55	25.37	128.87	-128.37	626.88	1,017.30	319.44	165.61	153.83	2.077
4,700.00	4,494.30	4,468.67	4,468.20	25.80	130.16	-134.90	626.76	1,017.30	338.60	183.30	155.30	2.180
4,750.00	4,534.75	4,509.44	4,508.96	26.27	131.40	-140.35	626.62	1,017.30	362.11	205.43	156.67	2.311
4,800.00	4,573.06	4,548.09	4,547.61	26.77	132.58	-144.93	626.44	1,017.30	389.67	231.71	157.96	2.467
4,850.00	4,608.99	4,584.37	4,583.89	27.30	133.68	-148.79	626.24	1,017.30	420.96	261.80	159.16	2.645
4,900.00	4,642.32	4,615.86	4,615.32	27.86	134.63	-151.91	626.06	1,017.30	455.64	295.44	160.20	2.844
4,950.00	4,672.85	4,646.39	4,645.85	28.46	135.56	-154.64	626.06	1,017.30	493.48	332.28	161.21	3.061
5,000.00	4,700.38	4,673.92	4,673.38	29.09	136.40	-156.99	626.06	1,017.30	533.98	371.87	162.11	3.294
5,050.00	4,724.76	4,698.29	4,697.76	29.75	137.14	-159.01	626.06	1,017.30	576.80	413.88	162.92	3.540
5,100.00	4,745.81	4,719.35	4,718.81	30.45	137.78	-160.79	626.06	1,017.30	621.61	457.99	163.61	3.799
5,150.00	4,763.43	4,736.96	4,736.43	31.17	138.31	-162.41	626.06	1,017.30	668.07	503.87	164.20	4.069
5,200.00	4,777.49	4,751.02	4,750.49	31.93	138.74	-164.02	626.06	1,017.30	715.87	551.20	164.66	4.347
5,250.00	4,787.91	4,761.45	4,760.91	32.71	139.05	-165.91	626.06	1,017.30	764.68	599.67	165.01	4.634
5,300.00	4,794.63	4,768.17	4,767.63	33.50	139.26	-169.26	626.06	1,017.30	814.19	648.95	165.23	4.928
5,350.00	4,797.61	4,771.14	4,770.61	34.31	139.35	-168.69	626.06	1,017.30	864.08	698.75	165.33	5.226
5,371.78	4,797.73	4,771.26	4,770.73	34.66	139.35	51.85	626.06	1,017.30	885.86	720.52	165.34	5.358
5,400.00	4,797.42	4,770.95	4,770.42	35.12	139.34	50.97	626.06	1,017.30	914.08	748.74	165.33	5.529
5,500.00	4,796.33	4,769.86	4,769.33	36.83	139.31	48.03	626.06	1,017.30	1,014.06	848.75	165.31	6.134
5,600.00	4,795.24	4,768.78	4,768.24	38.64	139.28	45.35	626.06	1,017.30	1,114.05	948.76	165.29	6.740
5,700.00	4,794.15	4,767.69	4,767.15	40.54	139.24	42.88	626.06	1,017.30	1,214.04	1,048.78	165.26	7.346
5,800.00	4,793.06	4,766.60	4,766.06	42.52	139.21	40.63	626.06	1,017.30	1,314.03	1,148.79	165.24	7.952
5,900.00	4,791.97	4,765.51	4,764.97	44.58	139.18	38.57	626.06	1,017.30	1,414.02	1,248.80	165.22	8.558
6,000.00	4,790.88	4,764.42	4,763.88	46.69	139.15	36.68	626.06	1,017.30	1,514.01	1,348.81	165.20	9.165
6,100.00	4,789.79	4,763.33	4,762.79	48.86	139.11	34.94	626.06	1,017.30	1,614.00	1,448.82	165.18	9.771
6,200.00	4,788.71	4,762.24	4,761.71	51.07	139.08	33.34	626.06	1,017.30	1,713.99	1,548.84	165.16	10.378
6,300.00	4,787.62	4,761.15	4,760.62	53.33	139.05	31.86	626.06	1,017.30	1,813.98	1,648.85	165.14	10.985
6,400.00	4,786.53	4,760.06	4,759.53	55.61	139.01	30.50	626.06	1,017.30	1,913.97	1,748.86	165.12	11.592
6,500.00	4,785.44	4,758.97	4,758.44	57.93	138.98	29.24	626.06	1,017.30	2,013.97	1,848.87	165.10	12.199
6,600.00	4,784.35	4,757.88	4,757.35	60.28	138.95	28.07	626.06	1,017.30	2,113.96	1,948.88	165.08	12.806
6,700.00	4,783.26	4,756.79	4,756.26	62.65	138.91	26.99	626.06	1,017.30	2,213.95	2,048.89	165.06	13.413
6,800.00	4,782.17	4,755.71	4,755.17	65.04	138.88	25.98	626.06	1,017.30	2,313.94	2,148.90	165.05	14.020
6,900.00	4,781.08	4,754.62	4,754.08	67.45	138.85	25.04	626.06	1,017.30	2,413.94	2,248.91	165.03	14.627
7,000.00	4,779.99	4,753.53	4,752.99	69.88	138.81	24.16	626.06	1,017.30	2,513.93	2,348.92	165.01	15.235
7,100.00	4,778.90	4,752.44	4,751.90	72.32	138.78	23.33	626.06	1,017.30	2,613.92	2,448.92	165.00	15.842
7,200.00	4,777.81	4,751.35	4,750.81	74.77	138.75	22.56	626.06	1,017.30	2,713.92	2,548.93	164.98	16.450
7,300.00	4,776.72	4,750.26	4,749.72	77.24	138.72	21.84	626.06	1,017.30	2,813.91	2,648.94	164.97	17.057
7,400.00	4,775.64	4,749.17	4,748.64	79.72	138.68	21.15	626.06	1,017.30	2,913.90	2,748.94	164.96	17.664
7,500.00	4,774.55	4,748.08	4,747.55	82.21	138.65	20.51	626.06	1,017.30	3,013.89	2,848.95	164.95	18.272
7,600.00	4,773.46	4,746.99	4,746.46	84.71	138.62	19.90	626.06	1,017.30	3,113.89	2,948.95	164.93	18.880
7,700.00	4,772.37	4,745.90	4,745.37	87.21	138.58	19.33	626.06	1,017.30	3,213.88	3,048.96	164.92	19.487
7,800.00	4,771.28	4,744.81	4,744.28	89.73	138.55	18.79	626.06	1,017.30	3,313.87	3,148.96	164.91	20.095
7,900.00	4,770.19	4,743.72	4,743.19	92.25	138.52	18.28	626.06	1,017.30	3,413.87	3,248.96	164.90	20.702
8,000.00	4,769.10	4,742.63	4,742.10	94.77	138.48	17.79	626.06	1,017.30	3,513.86	3,348.97	164.89	21.310
8,100.00	4,768.01	4,741.55	4,741.01	97.31	138.45	17.33	626.06	1,017.30	3,613.86	3,448.97	164.89	21.917
8,200.00	4,766.92	4,740.46	4,739.92	99.85	138.42	16.89	626.06	1,017.30	3,713.85	3,548.97	164.88	22.525
8,300.00	4,765.83	4,739.37	4,738.83	102.39	138.38	16.47	626.06	1,017.30	3,813.84	3,648.97	164.87	23.132
8,400.00	4,764.74	4,738.28	4,737.74	104.94	138.35	16.07	626.06	1,017.30	3,913.84	3,748.97	164.86	23.740
8,500.00	4,763.65	4,737.19	4,736.65	107.49	138.32	15.69	626.06	1,017.30	4,013.83	3,848.97	164.86	24.347
8,600.00	4,762.57	4,736.10	4,735.57	110.05	138.29	15.33	626.06	1,017.30	4,113.82	3,948.97	164.85	24.954
8,700.00	4,761.48	4,735.01	4,734.48	112.61	138.25	14.98	626.06	1,017.30	4,213.82	4,048.97	164.85	25.562
8,800.00	4,760.39	4,733.92	4,733.39	115.17	138.22	14.65	626.06	1,017.30	4,313.81	4,148.97	164.84	26.169
8,900.00	4,759.30	4,732.83	4,732.30	117.74	138.19	14.33	626.06	1,017.30	4,413.80	4,248.96	164.84	26.776



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti 21-C - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 365-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)			
9,000.00	4,758.21	4,731.74	4,731.21	120.31	138.15	14.02	626.06	1,017.30	4,513.80	4,348.96	164.84	27.383	
9,100.00	4,757.12	4,730.65	4,730.12	122.88	138.12	13.73	626.06	1,017.30	4,613.79	4,448.96	164.84	27.990	
9,200.00	4,756.03	4,729.56	4,729.03	125.45	138.09	13.45	626.06	1,017.30	4,713.78	4,548.95	164.83	28.597	
9,300.00	4,754.94	4,728.48	4,727.94	128.03	138.05	13.18	626.06	1,017.30	4,813.78	4,648.95	164.83	29.204	
9,400.00	4,753.85	4,727.39	4,726.85	130.61	138.02	12.92	626.06	1,017.30	4,913.77	4,748.94	164.83	29.811	
9,500.00	4,752.76	4,726.30	4,725.76	133.19	137.99	12.67	626.06	1,017.30	5,013.77	4,848.93	164.83	30.417	
9,600.00	4,751.67	4,725.21	4,724.67	135.78	137.95	12.43	626.06	1,017.30	5,113.76	4,948.93	164.83	31.024	
9,700.00	4,750.58	4,724.12	4,723.58	138.36	137.92	12.20	626.06	1,017.30	5,213.75	5,048.92	164.84	31.630	
9,800.00	4,749.49	4,723.03	4,722.50	140.95	137.89	11.98	626.06	1,017.30	5,313.75	5,148.91	164.84	32.236	
9,900.00	4,748.41	4,721.94	4,721.41	143.54	137.86	11.76	626.06	1,017.30	5,413.74	5,248.90	164.84	32.842	
10,000.00	4,747.32	4,720.85	4,720.32	146.13	137.82	11.56	626.06	1,017.30	5,513.74	5,348.89	164.84	33.448	
10,100.00	4,746.23	4,719.76	4,719.23	148.73	137.79	11.36	626.06	1,017.30	5,613.73	5,448.88	164.85	34.054	
10,200.00	4,745.14	4,718.67	4,718.14	151.32	137.76	11.16	626.06	1,017.30	5,713.72	5,548.87	164.85	34.660	
10,300.00	4,744.05	4,717.58	4,717.05	153.92	137.72	10.98	626.06	1,017.30	5,813.72	5,648.86	164.86	35.265	
10,400.00	4,742.96	4,716.49	4,715.96	156.51	137.69	10.79	626.06	1,017.30	5,913.71	5,748.85	164.86	35.870	
10,500.00	4,741.87	4,715.41	4,714.87	159.11	137.66	10.62	626.06	1,017.30	6,013.70	5,848.83	164.87	36.476	
10,600.00	4,740.78	4,714.32	4,713.78	161.71	137.62	10.45	626.06	1,017.30	6,113.70	5,948.82	164.88	37.081	
10,700.00	4,739.69	4,713.23	4,712.69	164.31	137.59	10.28	626.06	1,017.30	6,213.69	6,048.81	164.88	37.685	
10,800.00	4,738.60	4,712.14	4,711.60	166.91	137.56	10.13	626.06	1,017.30	6,313.69	6,148.79	164.89	38.290	
10,900.00	4,737.51	4,711.05	4,710.51	169.52	137.52	9.97	626.06	1,017.30	6,413.68	6,248.78	164.90	38.894	
11,000.00	4,736.42	4,709.96	4,709.42	172.12	137.49	9.82	626.06	1,017.30	6,513.67	6,348.76	164.91	39.499	
11,100.00	4,735.34	4,708.87	4,708.34	174.72	137.46	9.67	626.06	1,017.30	6,613.67	6,448.75	164.92	40.103	
11,200.00	4,734.25	4,707.78	4,707.25	177.33	137.43	9.53	626.06	1,017.30	6,713.66	6,548.73	164.93	40.706	
11,300.00	4,733.16	4,706.69	4,706.16	179.94	137.39	9.40	626.06	1,017.30	6,813.66	6,648.72	164.94	41.310	
11,400.00	4,732.07	4,705.60	4,705.07	182.54	137.36	9.26	626.06	1,017.30	6,913.65	6,748.70	164.95	41.913	
11,500.00	4,730.98	4,704.51	4,703.98	185.15	137.33	9.13	626.06	1,017.30	7,013.64	6,848.68	164.96	42.516	
11,600.00	4,729.89	4,703.42	4,702.89	187.76	137.29	9.01	626.06	1,017.30	7,113.64	6,948.66	164.98	43.119	
11,700.00	4,728.80	4,702.34	4,701.80	190.37	137.26	8.88	626.06	1,017.30	7,213.63	7,048.64	164.99	43.722	
11,800.00	4,727.71	4,701.25	4,700.71	192.98	137.23	8.76	626.06	1,017.30	7,313.63	7,148.62	165.00	44.324	
11,900.00	4,726.62	4,700.16	4,699.62	195.59	137.19	8.65	626.06	1,017.30	7,413.62	7,248.60	165.02	44.926	
12,000.00	4,725.53	4,699.07	4,698.53	198.20	137.16	8.53	626.06	1,017.30	7,513.61	7,348.58	165.03	45.528	
12,100.00	4,724.44	4,697.98	4,697.44	200.81	137.13	8.42	626.06	1,017.30	7,613.61	7,448.56	165.05	46.130	
12,200.00	4,723.35	4,696.89	4,696.35	203.43	137.09	8.32	626.06	1,017.30	7,713.60	7,548.54	165.06	46.733	
12,300.00	4,722.27	4,695.80	4,695.27	206.04	137.06	8.21	626.06	1,017.30	7,813.59	7,648.52	165.08	47.333	
12,400.00	4,721.18	4,694.71	4,694.18	208.65	137.03	8.11	626.06	1,017.30	7,913.59	7,748.49	165.10	47.933	
12,500.00	4,720.09	4,693.62	4,693.09	211.27	137.00	8.01	626.06	1,017.30	8,013.58	7,848.47	165.11	48.534	
12,600.00	4,719.00	4,692.53	4,692.00	213.88	136.96	7.91	626.06	1,017.30	8,113.58	7,948.45	165.13	49.134	
12,700.00	4,717.91	4,691.44	4,690.91	216.50	136.93	7.82	626.06	1,017.30	8,213.57	8,048.42	165.15	49.734	
12,800.00	4,716.82	4,690.35	4,689.82	219.11	136.90	7.72	626.06	1,017.30	8,313.56	8,148.40	165.17	50.334	
12,900.00	4,715.73	4,689.27	4,688.73	221.73	136.86	7.63	626.06	1,017.30	8,413.56	8,248.37	165.19	50.933	
13,000.00	4,714.64	4,688.18	4,687.64	224.35	136.83	7.54	626.06	1,017.30	8,513.55	8,348.35	165.21	51.533	
13,100.00	4,713.55	4,687.09	4,686.55	226.96	136.80	7.46	626.06	1,017.30	8,613.55	8,448.32	165.23	52.131	
13,200.00	4,712.46	4,686.00	4,685.46	229.58	136.76	7.37	626.06	1,017.30	8,713.54	8,548.29	165.25	52.730	
13,300.00	4,711.37	4,684.91	4,684.37	232.20	136.73	7.29	626.06	1,017.30	8,813.53	8,648.26	165.27	53.328	
13,400.00	4,710.28	4,683.82	4,683.28	234.82	136.70	7.21	626.06	1,017.30	8,913.53	8,748.24	165.29	53.926	
13,500.00	4,709.20	4,682.73	4,682.20	237.44	136.66	7.13	626.06	1,017.30	9,013.52	8,848.21	165.31	54.524	
13,600.00	4,708.11	4,681.64	4,681.11	240.06	136.63	7.05	626.06	1,017.30	9,113.52	8,948.18	165.34	55.121	
13,700.00	4,707.02	4,680.55	4,680.02	242.67	136.60	6.98	626.06	1,017.30	9,213.51	9,048.15	165.36	55.718	
13,800.00	4,705.93	4,679.46	4,678.93	245.29	136.57	6.90	626.06	1,017.30	9,313.50	9,148.12	165.38	56.314	
13,900.00	4,704.84	4,678.37	4,677.84	247.91	136.53	6.83	626.06	1,017.30	9,413.50	9,248.09	165.41	56.910	
14,000.00	4,703.75	4,677.28	4,676.75	250.53	136.50	6.76	626.06	1,017.30	9,513.49	9,348.06	165.43	57.506	
14,069.53	4,703.00	4,676.53	4,676.00	252.36	136.48	6.71	626.06	1,017.30	9,583.02	9,417.57	165.45	57.920	



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Whee Whitney 1 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 318-INCLINOMETER													Offset Well Error:	0.00 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)				
0.00	0.00	20.00	20.00	0.00	0.61	123.41	-4,083.52	6,189.87	7,415.50					
100.00	100.00	120.00	120.00	0.15	3.64	123.41	-4,083.52	6,189.87	7,415.50	7,411.70	3.80	1,952.211		
200.00	200.00	220.00	220.00	0.51	6.68	123.41	-4,083.52	6,189.87	7,415.50	7,408.31	7.19	1,030.819		
300.00	300.00	320.01	320.00	0.87	9.72	123.41	-4,083.52	6,189.87	7,415.50	7,404.91	10.59	700.279		
395.98	395.98	415.99	415.98	1.22	12.63	123.41	-4,083.52	6,189.87	7,415.50	7,401.65	13.85	535.489		
400.00	400.00	420.01	420.00	1.23	12.76	51.08	-4,083.52	6,189.87	7,415.50	7,401.52	13.98	530.268		
500.00	499.98	519.99	519.98	1.58	15.79	51.11	-4,083.52	6,189.87	7,414.32	7,396.95	17.37	426.857		
600.00	599.83	614.12	614.11	1.94	18.65	51.19	-4,082.76	6,189.87	7,410.52	7,389.94	20.58	360.030		
700.00	699.43	703.89	703.87	2.30	21.38	51.32	-4,083.00	6,189.87	7,405.11	7,381.44	23.67	312.863		
800.00	798.66	818.73	818.66	2.67	24.86	51.53	-4,083.52	6,189.87	7,397.67	7,370.14	27.52	268.773		
900.00	897.40	917.47	917.40	3.06	27.86	51.78	-4,083.52	6,189.87	7,387.80	7,356.90	30.90	239.091		
1,000.00	995.53	1,015.60	1,015.53	3.47	30.84	52.09	-4,083.52	6,189.87	7,375.81	7,341.54	34.27	215.228		
1,100.00	1,092.94	1,108.13	1,108.05	3.90	33.65	52.44	-4,082.39	6,189.87	7,361.10	7,323.61	37.49	196.364		
1,200.00	1,189.49	1,193.20	1,193.11	4.37	36.24	52.83	-4,082.61	6,189.87	7,345.11	7,304.61	40.50	181.368		
1,300.00	1,285.07	1,277.37	1,277.28	4.87	38.79	53.28	-4,083.06	6,189.87	7,327.25	7,283.74	43.51	168.410		
1,330.44	1,313.95	1,302.80	1,302.71	5.03	39.56	53.43	-4,083.24	6,189.87	7,321.45	7,277.03	44.43	164.802		
1,400.00	1,379.85	1,399.98	1,399.85	5.41	42.52	53.63	-4,083.52	6,189.87	7,307.85	7,260.14	47.71	153.171		
1,500.00	1,474.58	1,494.70	1,494.58	5.97	45.39	53.83	-4,083.52	6,189.87	7,288.22	7,237.15	51.08	142.691		
1,600.00	1,569.30	1,581.82	1,581.69	6.53	48.04	54.01	-4,082.95	6,189.87	7,268.36	7,214.14	54.22	134.043		
1,700.00	1,664.03	1,664.68	1,664.54	7.11	50.55	54.18	-4,083.22	6,189.87	7,249.09	7,191.84	57.25	126.619		
1,800.00	1,758.76	1,778.92	1,778.76	7.70	54.02	54.42	-4,083.52	6,189.87	7,229.89	7,168.65	61.24	118.063		
1,900.00	1,853.48	1,873.65	1,873.48	8.29	56.90	54.62	-4,083.52	6,189.87	7,210.62	7,145.98	64.64	111.553		
2,000.00	1,948.21	1,968.37	1,968.21	8.88	59.78	54.82	-4,083.52	6,189.87	7,191.45	7,123.40	68.04	105.687		
2,100.00	2,042.94	2,055.11	2,054.95	9.48	62.41	55.00	-4,082.74	6,189.87	7,171.91	7,100.70	71.21	100.710		
2,200.00	2,137.67	2,140.76	2,140.59	10.08	65.01	55.19	-4,083.00	6,189.87	7,153.09	7,078.73	74.35	96.204		
2,300.00	2,232.39	2,252.62	2,252.39	10.69	68.41	55.43	-4,083.52	6,189.87	7,134.48	7,056.19	78.29	91.128		
2,400.00	2,327.12	2,347.34	2,347.12	11.29	71.29	55.64	-4,083.52	6,189.87	7,115.68	7,033.97	81.71	87.081		
2,500.00	2,421.85	2,442.07	2,441.85	11.90	74.16	55.84	-4,083.52	6,189.87	7,096.97	7,011.83	85.14	83.358		
2,600.00	2,516.57	2,530.60	2,530.36	12.51	76.85	56.03	-4,082.47	6,189.87	7,077.73	6,989.35	88.38	80.084		
2,700.00	2,611.30	2,613.01	2,612.77	13.12	79.35	56.21	-4,082.71	6,189.87	7,059.38	6,967.94	91.44	77.205		
2,800.00	2,706.03	2,695.38	2,695.14	13.73	81.86	56.40	-4,083.19	6,189.87	7,041.29	6,946.79	94.50	74.514		
2,900.00	2,800.76	2,821.05	2,820.76	14.35	85.67	56.68	-4,083.52	6,189.87	7,023.11	6,924.24	98.87	71.035		
3,000.00	2,895.48	2,902.84	2,902.53	14.96	88.16	56.85	-4,083.05	6,189.87	7,004.61	6,902.69	101.91	68.730		
3,100.00	2,990.21	3,010.54	3,010.21	15.57	91.43	57.10	-4,083.52	6,189.87	6,986.76	6,881.01	105.75	66.070		
3,200.00	3,084.94	3,105.26	3,104.94	16.19	94.30	57.31	-4,083.52	6,189.87	6,968.74	6,859.55	109.19	63.822		
3,300.00	3,179.66	3,199.99	3,199.66	16.81	97.18	57.53	-4,083.52	6,189.87	6,950.82	6,838.19	112.63	61.711		
3,400.00	3,274.39	3,289.04	3,288.71	17.42	99.88	57.72	-4,082.72	6,189.87	6,932.50	6,816.59	115.91	59.810		
3,500.00	3,369.12	3,374.27	3,373.94	18.04	102.47	57.92	-4,082.93	6,189.87	6,914.93	6,795.86	119.07	58.074		
3,600.00	3,463.84	3,459.46	3,459.12	18.66	105.06	58.12	-4,083.32	6,189.87	6,897.59	6,775.35	122.23	56.430		
3,700.00	3,558.57	3,578.96	3,578.57	19.27	108.69	58.39	-4,083.52	6,189.87	6,880.16	6,753.73	126.43	54.417		
3,800.00	3,653.30	3,673.69	3,673.30	19.89	111.56	58.61	-4,083.52	6,189.87	6,862.76	6,732.87	129.89	52.836		
3,900.00	3,748.03	3,762.60	3,762.20	20.51	114.27	58.81	-4,082.53	6,189.87	6,844.82	6,711.66	133.17	51.400		
4,000.00	3,842.75	3,844.00	3,843.60	21.13	116.74	59.00	-4,082.76	6,189.87	6,827.80	6,691.58	136.22	50.122		
4,100.00	3,937.48	3,925.36	3,924.95	21.75	119.21	59.20	-4,083.24	6,189.87	6,811.08	6,671.80	139.28	48.903		
4,200.00	4,032.21	4,052.67	4,052.21	22.37	123.07	59.50	-4,083.52	6,189.87	6,794.21	6,650.48	143.72	47.273		
4,300.00	4,126.93	4,147.39	4,146.93	22.99	125.95	59.72	-4,083.52	6,189.87	6,777.34	6,630.15	147.19	46.046		
4,400.00	4,221.66	4,237.58	4,237.11	23.60	128.69	59.93	-4,082.46	6,189.87	6,759.89	6,609.37	150.51	44.912		
4,463.80	4,282.10	4,289.85	4,289.37	24.00	130.28	60.06	-4,082.56	6,189.87	6,749.33	6,596.85	152.48	44.264		
4,500.00	4,316.22	4,319.35	4,318.87	24.23	131.17	52.28	-4,082.66	6,189.87	6,742.38	6,588.79	153.59	43.898		
4,550.00	4,362.64	4,359.49	4,359.01	24.58	132.39	43.70	-4,082.85	6,189.87	6,729.55	6,574.43	155.11	43.384		
4,600.00	4,407.97	4,398.71	4,398.23	24.96	133.58	37.19	-4,083.08	6,189.87	6,713.04	6,556.42	156.61	42.864		
4,650.00	4,451.95	4,472.47	4,471.95	25.37	135.82	32.32	-4,083.52	6,189.87	6,692.95	6,533.80	159.15	42.053		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Whee Whitney 1 - OH - OH											Offset Site Error:	0.00 ft
Survey Program: 318-INCLINOMETER											Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)		
4,700.00	4,494.30	4,514.81	4,514.30	25.80	137.11	28.50	-4,083.52	6,189.87	6,669.14	6,508.40	160.74	41.490
4,750.00	4,534.75	4,555.26	4,554.75	26.27	138.34	25.51	-4,083.52	6,189.87	6,641.98	6,479.72	162.26	40.934
4,800.00	4,573.06	4,593.57	4,593.06	26.77	139.50	23.12	-4,083.52	6,189.87	6,611.63	6,447.92	163.71	40.387
4,850.00	4,608.99	4,629.51	4,628.99	27.30	140.59	21.19	-4,083.52	6,189.87	6,578.27	6,413.21	165.07	39.852
4,900.00	4,642.32	4,662.84	4,662.32	27.86	141.60	19.59	-4,083.52	6,189.87	6,542.11	6,375.78	166.33	39.332
4,950.00	4,672.85	4,693.37	4,692.85	28.46	142.53	18.25	-4,083.52	6,189.87	6,503.37	6,335.88	167.49	38.829
5,000.00	4,700.38	4,720.90	4,720.38	29.09	143.37	17.10	-4,083.52	6,189.87	6,462.27	6,293.74	168.53	38.344
5,050.00	4,724.76	4,745.27	4,744.75	29.75	144.11	16.06	-4,083.52	6,189.87	6,419.08	6,249.62	169.46	37.880
5,100.00	4,745.81	4,766.33	4,765.81	30.45	144.75	15.08	-4,083.52	6,189.87	6,374.05	6,203.79	170.26	37.438
5,150.00	4,763.43	4,783.94	4,783.43	31.17	145.28	14.04	-4,083.52	6,189.87	6,327.47	6,156.54	170.92	37.019
5,200.00	4,777.49	4,798.00	4,797.49	31.93	145.71	12.75	-4,083.52	6,189.87	6,279.61	6,108.15	171.45	36.626
5,250.00	4,787.91	4,808.43	4,807.91	32.71	146.03	10.71	-4,083.52	6,189.87	6,230.76	6,058.93	171.84	36.259
5,300.00	4,794.63	4,815.15	4,814.63	33.50	146.23	5.82	-4,083.52	6,189.87	6,181.24	6,009.16	172.08	35.920
5,350.00	4,797.61	4,818.12	4,817.61	34.31	146.32	-29.69	-4,083.52	6,189.87	6,131.34	5,959.16	172.19	35.609
5,371.78	4,797.73	4,818.24	4,817.73	34.66	146.32	-116.07	-4,083.52	6,189.87	6,109.57	5,937.38	172.19	35.482
5,400.00	4,797.42	4,817.94	4,817.42	35.12	146.31	-115.96	-4,083.52	6,189.87	6,081.36	5,909.19	172.17	35.322
5,500.00	4,796.33	4,816.85	4,816.33	36.83	146.28	-115.59	-4,083.52	6,189.87	5,981.39	5,809.29	172.10	34.755
5,600.00	4,795.24	4,815.76	4,815.24	38.64	146.25	-115.21	-4,083.52	6,189.87	5,881.42	5,709.38	172.04	34.187
5,700.00	4,794.15	4,814.67	4,814.15	40.54	146.21	-114.84	-4,083.52	6,189.87	5,781.45	5,609.48	171.97	33.619
5,800.00	4,793.06	4,813.58	4,813.06	42.52	146.18	-114.46	-4,083.52	6,189.87	5,681.49	5,509.59	171.90	33.051
5,900.00	4,791.97	4,812.49	4,811.97	44.58	146.15	-114.08	-4,083.52	6,189.87	5,581.52	5,409.69	171.83	32.482
6,000.00	4,790.88	4,811.40	4,810.88	46.69	146.12	-113.69	-4,083.52	6,189.87	5,481.56	5,309.79	171.76	31.913
6,100.00	4,789.79	4,810.31	4,809.79	48.86	146.08	-113.31	-4,083.52	6,189.87	5,381.60	5,209.90	171.70	31.344
6,200.00	4,788.71	4,809.22	4,808.71	51.07	146.05	-112.92	-4,083.52	6,189.87	5,281.63	5,110.01	171.62	30.774
6,300.00	4,787.62	4,808.13	4,807.62	53.33	146.02	-112.53	-4,083.52	6,189.87	5,181.67	5,010.12	171.55	30.204
6,400.00	4,786.53	4,807.04	4,806.53	55.61	145.98	-112.14	-4,083.52	6,189.87	5,081.72	4,910.23	171.48	29.634
6,500.00	4,785.44	4,805.95	4,805.44	57.93	145.95	-111.74	-4,083.52	6,189.87	4,981.76	4,810.35	171.41	29.064
6,600.00	4,784.35	4,804.87	4,804.35	60.28	145.92	-111.35	-4,083.52	6,189.87	4,881.80	4,710.47	171.33	28.493
6,700.00	4,783.26	4,803.78	4,803.26	62.65	145.88	-110.95	-4,083.52	6,189.87	4,781.85	4,610.59	171.26	27.922
6,800.00	4,782.17	4,802.69	4,802.17	65.04	145.85	-110.55	-4,083.52	6,189.87	4,681.89	4,510.72	171.18	27.351
6,900.00	4,781.08	4,801.60	4,801.08	67.45	145.82	-110.14	-4,083.52	6,189.87	4,581.94	4,410.84	171.10	26.779
7,000.00	4,779.99	4,800.51	4,799.99	69.88	145.78	-109.74	-4,083.52	6,189.87	4,481.99	4,310.98	171.02	26.208
7,100.00	4,778.90	4,799.42	4,798.90	72.32	145.75	-109.33	-4,083.52	6,189.87	4,382.05	4,211.11	170.94	25.635
7,200.00	4,777.81	4,798.33	4,797.81	74.77	145.72	-108.92	-4,083.52	6,189.87	4,282.10	4,111.25	170.85	25.063
7,300.00	4,776.72	4,797.24	4,796.72	77.24	145.69	-108.51	-4,083.52	6,189.87	4,182.16	4,011.39	170.77	24.491
7,400.00	4,775.64	4,796.15	4,795.64	79.72	145.65	-108.09	-4,083.52	6,189.87	4,082.22	3,911.54	170.68	23.918
7,500.00	4,774.55	4,795.06	4,794.55	82.21	145.62	-107.68	-4,083.52	6,189.87	3,982.28	3,811.70	170.59	23.345
7,600.00	4,773.46	4,793.97	4,793.46	84.71	145.59	-107.26	-4,083.52	6,189.87	3,882.35	3,711.86	170.49	22.771
7,700.00	4,772.37	4,792.88	4,792.37	87.21	145.55	-106.84	-4,083.52	6,189.87	3,782.42	3,612.02	170.40	22.198
7,800.00	4,771.28	4,791.80	4,791.28	89.73	145.52	-106.42	-4,083.52	6,189.87	3,682.49	3,512.19	170.30	21.624
7,900.00	4,770.19	4,790.71	4,790.19	92.25	145.49	-106.00	-4,083.52	6,189.87	3,582.57	3,412.37	170.20	21.050
8,000.00	4,769.10	4,789.62	4,789.10	94.77	145.45	-105.57	-4,083.52	6,189.87	3,482.65	3,312.56	170.09	20.475
8,100.00	4,768.01	4,788.53	4,788.01	97.31	145.42	-105.15	-4,083.52	6,189.87	3,382.73	3,212.75	169.98	19.901
8,200.00	4,766.92	4,787.44	4,786.92	99.85	145.39	-104.72	-4,083.52	6,189.87	3,282.82	3,112.95	169.87	19.326
8,300.00	4,765.83	4,786.35	4,785.83	102.39	145.35	-104.29	-4,083.52	6,189.87	3,182.91	3,013.16	169.75	18.750
8,400.00	4,764.74	4,785.26	4,784.74	104.94	145.32	-103.86	-4,083.52	6,189.87	3,083.02	2,913.39	169.63	18.175
8,500.00	4,763.65	4,784.17	4,783.65	107.49	145.29	-103.42	-4,083.52	6,189.87	2,983.12	2,813.62	169.50	17.599
8,600.00	4,762.57	4,783.08	4,782.57	110.05	145.26	-102.99	-4,083.52	6,189.87	2,883.24	2,713.86	169.37	17.023
8,700.00	4,761.48	4,781.99	4,781.48	112.61	145.22	-102.55	-4,083.52	6,189.87	2,783.36	2,614.12	169.24	16.446
8,800.00	4,760.39	4,780.90	4,780.39	115.17	145.19	-102.11	-4,083.52	6,189.87	2,683.49	2,514.39	169.10	15.869
8,900.00	4,759.30	4,779.81	4,779.30	117.74	145.16	-101.67	-4,083.52	6,189.87	2,583.63	2,414.67	168.95	15.292
9,000.00	4,758.21	4,778.72	4,778.21	120.31	145.12	-101.23	-4,083.52	6,189.87	2,483.78	2,314.98	168.80	14.714



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Offset Design: WC 21-1 Pad - Whee Whitney 1 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 318-INCLINOMETER												Offset Well Error:	0.00 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	
9,100.00	4,757.12	4,777.64	4,777.12	122.88	145.09	-100.79	-4,083.52	6,189.87	2,383.94	2,215.30	168.64	14.136	
9,200.00	4,756.03	4,776.55	4,776.03	125.45	145.06	-100.35	-4,083.52	6,189.87	2,284.11	2,115.63	168.48	13.557	
9,300.00	4,754.94	4,775.46	4,774.94	128.03	145.02	-99.90	-4,083.52	6,189.87	2,184.31	2,015.99	168.31	12.978	
9,400.00	4,753.85	4,774.37	4,773.85	130.61	144.99	-99.46	-4,083.52	6,189.87	2,084.51	1,916.37	168.14	12.398	
9,500.00	4,752.76	4,773.28	4,772.76	133.19	144.96	-99.01	-4,083.52	6,189.87	1,984.74	1,816.78	167.97	11.816	
9,600.00	4,751.67	4,772.19	4,771.67	135.78	144.92	-98.56	-4,083.52	6,189.87	1,885.00	1,717.21	167.79	11.234	
9,700.00	4,750.58	4,771.10	4,770.58	138.36	144.89	-98.11	-4,083.52	6,189.87	1,785.28	1,617.66	167.62	10.651	
9,800.00	4,749.49	4,770.01	4,769.49	140.95	144.86	-97.66	-4,083.52	6,189.87	1,685.59	1,518.14	167.45	10.066	
9,900.00	4,748.41	4,768.92	4,768.41	143.54	144.83	-97.21	-4,083.52	6,189.87	1,585.95	1,418.65	167.30	9.480	
10,000.00	4,747.32	4,767.83	4,767.32	146.13	144.79	-96.76	-4,083.52	6,189.87	1,486.34	1,319.17	167.17	8.891	
10,100.00	4,746.23	4,766.74	4,766.23	148.73	144.76	-96.31	-4,083.52	6,189.87	1,386.80	1,219.71	167.09	8.300	
10,200.00	4,745.14	4,765.65	4,765.14	151.32	144.73	-95.85	-4,083.52	6,189.87	1,287.33	1,120.25	167.07	7.705	
10,300.00	4,744.05	4,764.57	4,764.05	153.92	144.69	-95.40	-4,083.52	6,189.87	1,187.94	1,020.78	167.16	7.107	
10,400.00	4,742.96	4,763.48	4,762.96	156.51	144.66	-94.94	-4,083.52	6,189.87	1,088.66	921.25	167.42	6.503	
10,500.00	4,741.87	4,762.39	4,761.87	159.11	144.63	-94.49	-4,083.52	6,189.87	989.53	821.60	167.93	5.893	
10,600.00	4,740.78	4,761.30	4,760.78	161.71	144.59	-94.03	-4,083.52	6,189.87	890.59	721.75	168.84	5.275	
10,700.00	4,739.69	4,760.21	4,759.69	164.31	144.56	-93.58	-4,083.52	6,189.87	791.92	621.56	170.36	4.648	
10,800.00	4,738.60	4,759.12	4,758.60	166.91	144.53	-93.12	-4,083.52	6,189.87	693.62	520.78	172.84	4.013	
10,900.00	4,737.51	4,758.03	4,757.51	169.52	144.49	-92.66	-4,083.52	6,189.87	595.89	419.09	176.80	3.370	
11,000.00	4,736.42	4,756.94	4,756.42	172.12	144.46	-92.20	-4,083.52	6,189.87	499.06	315.90	183.16	2.725	
11,100.00	4,735.34	4,755.85	4,755.34	174.72	144.43	-91.74	-4,083.52	6,189.87	403.77	210.28	193.49	2.087	
11,200.00	4,734.25	4,754.76	4,754.25	177.33	144.40	-91.29	-4,083.52	6,189.87	311.45	100.53	210.92	1.477 Level 3	
11,300.00	4,733.16	4,753.67	4,753.16	179.94	144.36	-90.83	-4,083.52	6,189.87	225.75	-16.02	241.77	0.934 Level 3	
11,400.00	4,732.07	4,752.58	4,752.07	182.54	144.33	-90.37	-4,083.52	6,189.87	157.89	-135.72	293.61	0.538 Level 3	
11,480.20	4,731.19	4,751.71	4,751.19	184.63	144.30	-90.00	-4,083.52	6,189.87	136.01	-192.27	328.28	0.414 Level 3, CC, ES, SF	
11,500.00	4,730.98	4,751.50	4,750.98	185.15	144.30	-89.91	-4,083.52	6,189.87	137.44	-191.68	329.12	0.418 Level 3	
11,600.00	4,729.89	4,750.41	4,749.89	187.76	144.26	-89.45	-4,083.52	6,189.87	181.24	-114.42	295.67	0.613 Level 3	
11,700.00	4,728.80	4,749.32	4,748.80	190.37	144.23	-88.99	-4,083.52	6,189.87	258.47	-0.45	258.92	0.998 Level 3	
11,800.00	4,727.71	4,748.23	4,747.71	192.98	144.20	-88.53	-4,083.52	6,189.87	347.51	111.28	236.23	1.471 Level 3	
11,900.00	4,726.62	4,747.14	4,746.62	195.59	144.16	-88.07	-4,083.52	6,189.87	441.26	219.08	222.18	1.986	
12,000.00	4,725.53	4,746.05	4,745.53	198.20	144.13	-87.62	-4,083.52	6,189.87	537.27	324.34	212.93	2.523	
12,100.00	4,724.44	4,744.96	4,744.44	200.81	144.10	-87.16	-4,083.52	6,189.87	634.51	428.05	206.46	3.073	
12,200.00	4,723.35	4,743.87	4,743.35	203.43	144.06	-86.70	-4,083.52	6,189.87	732.50	530.76	201.74	3.631	
12,300.00	4,722.27	4,742.78	4,742.27	206.04	144.03	-86.24	-4,083.52	6,189.87	830.96	632.81	198.15	4.194	
12,400.00	4,721.18	4,741.69	4,741.18	208.65	144.00	-85.79	-4,083.52	6,189.87	929.75	734.40	195.35	4.759	
12,500.00	4,720.09	4,740.60	4,740.09	211.27	143.97	-85.33	-4,083.52	6,189.87	1,028.77	835.67	193.11	5.327	
12,600.00	4,719.00	4,739.51	4,739.00	213.88	143.93	-84.88	-4,083.52	6,189.87	1,127.97	936.69	191.28	5.897	
12,700.00	4,717.91	4,738.43	4,737.91	216.50	143.90	-84.42	-4,083.52	6,189.87	1,227.29	1,037.53	189.76	6.468	
12,800.00	4,716.82	4,737.34	4,736.82	219.11	143.87	-83.97	-4,083.52	6,189.87	1,326.71	1,138.23	188.48	7.039	
12,900.00	4,715.73	4,736.25	4,735.73	221.73	143.83	-83.51	-4,083.52	6,189.87	1,426.22	1,238.82	187.40	7.611	
13,000.00	4,714.64	4,735.16	4,734.64	224.35	143.80	-83.06	-4,083.52	6,189.87	1,525.79	1,339.33	186.46	8.183	
13,100.00	4,713.55	4,734.07	4,733.55	226.96	143.77	-82.61	-4,083.52	6,189.87	1,625.41	1,439.76	185.65	8.755	
13,200.00	4,712.46	4,732.98	4,732.46	229.58	143.73	-82.16	-4,083.52	6,189.87	1,725.07	1,540.13	184.94	9.328	
13,300.00	4,711.37	4,731.89	4,731.37	232.20	143.70	-81.71	-4,083.52	6,189.87	1,824.77	1,640.46	184.31	9.900	
13,400.00	4,710.28	4,730.80	4,730.28	234.82	143.67	-81.26	-4,083.52	6,189.87	1,924.50	1,740.74	183.76	10.473	
13,500.00	4,709.20	4,729.71	4,729.20	237.44	143.63	-80.81	-4,083.52	6,189.87	2,024.26	1,841.00	183.26	11.046	
13,600.00	4,708.11	4,728.62	4,728.11	240.06	143.60	-80.37	-4,083.52	6,189.87	2,124.04	1,941.22	182.82	11.618	
13,700.00	4,707.02	4,727.53	4,727.02	242.67	143.57	-79.92	-4,083.52	6,189.87	2,223.83	2,041.42	182.42	12.191	
13,800.00	4,705.93	4,726.44	4,725.93	245.29	143.54	-79.48	-4,083.52	6,189.87	2,323.65	2,141.59	182.06	12.763	
13,900.00	4,704.84	4,725.35	4,724.84	247.91	143.50	-79.03	-4,083.52	6,189.87	2,423.48	2,241.75	181.73	13.336	
14,000.00	4,703.75	4,724.27	4,723.75	250.53	143.47	-78.59	-4,083.52	6,189.87	2,523.32	2,341.89	181.43	13.908	
14,069.53	4,703.00	4,723.52	4,723.00	252.36	143.45	-78.29	-4,083.52	6,189.87	2,592.75	2,411.51	181.24	14.305	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6296' & RKB 14' @ 6309.99ft

Offset Depths are relative to Offset Datum

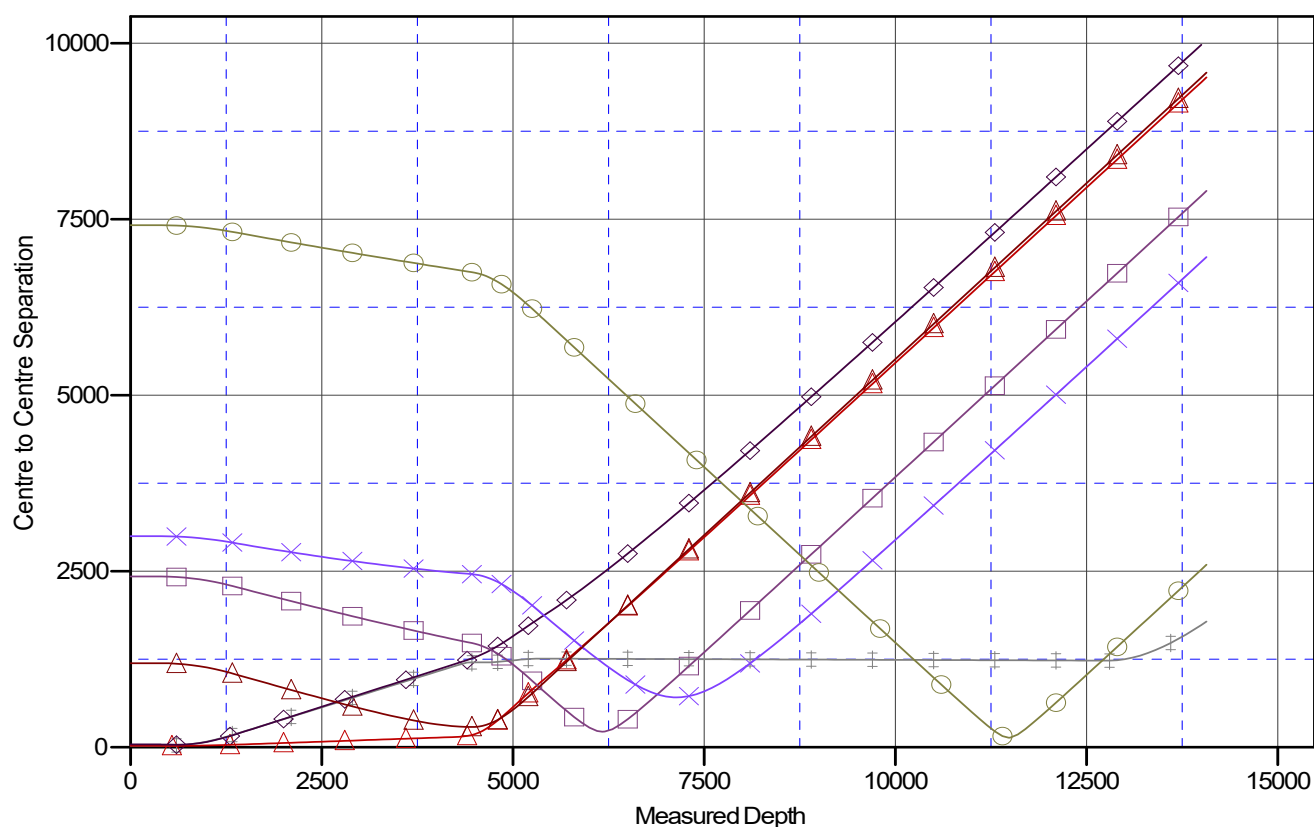
Central Meridian is -107.833

Coordinates are relative to: Carson #578H - Slot 2

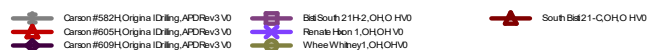
Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: -0.17°

Ladder Plot



LEGEND





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Carson #578H - Slot 2
Project:	Proposed Carson Unit	TVD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Reference Site:	WC 21-1 Pad	MD Reference:	GL 6296' & RKB 14' @ 6309.99ft
Site Error:	0.00 ft	North Reference:	True
Reference Well:	Carson #578H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6296' & RKB 14' @ 6309.99ft

Offset Depths are relative to Offset Datum

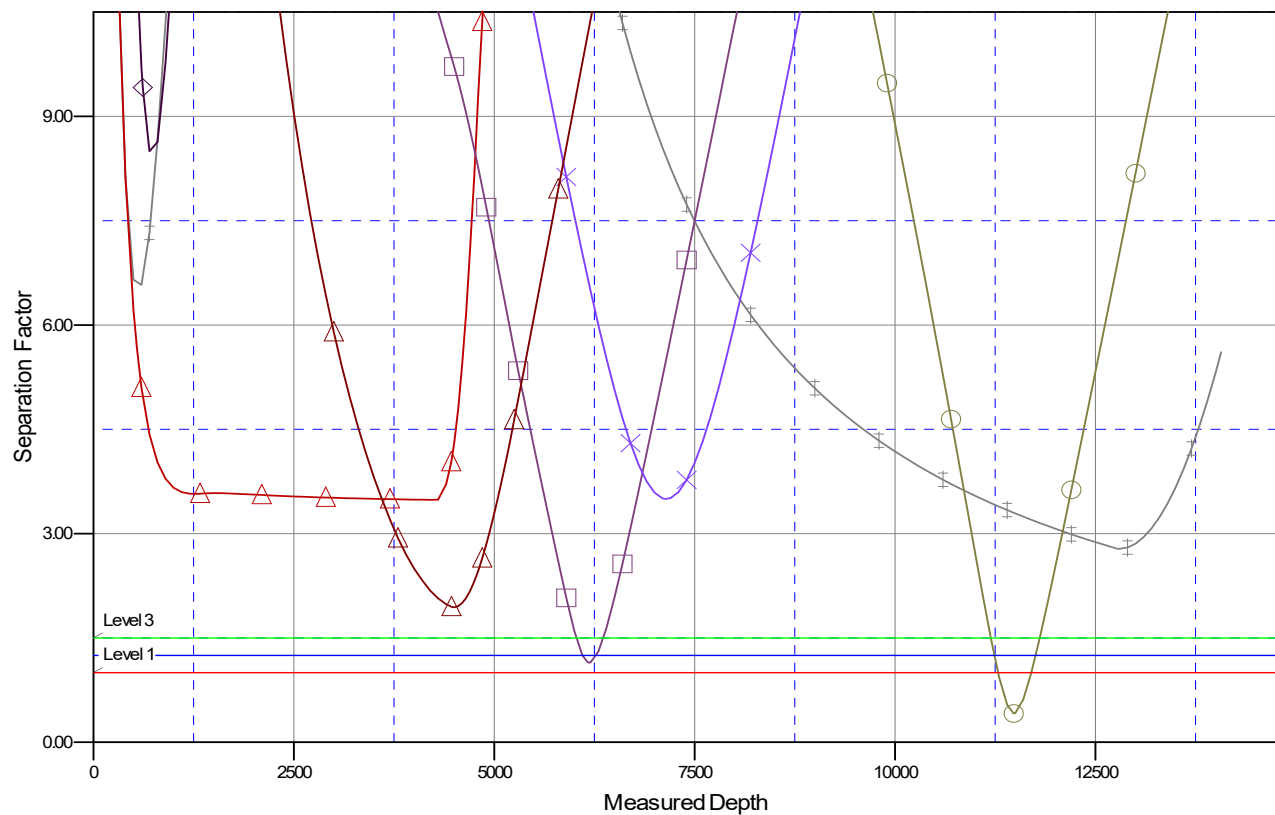
Central Meridian is -107.833

Coordinates are relative to: Carson #578H - Slot 2

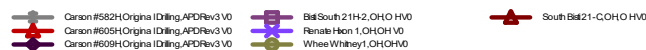
Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: -0.17°

Separation Factor Plot



LEGEND





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

#578H CARSON UNIT

Lease: NMSF078065 Agreement: NMNM78385A
SH: SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 21, T.25 N., R.12 W.
San Juan County, New Mexico
BH: SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 27, T.25 N., R.12 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 the surface casing to a minimum of _____ psi for 30 minutes.
- D. ☐ Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.
- E. ☐ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.
- F. ☐ The use of co-flex hose is authorized contingent upon the following:
 1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
 2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
 3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

- A. Full compliance with all applicable laws 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. 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.
- L. 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.
- M. **Commingling:** No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office. (See 43 CFR 3173.14)

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 534557

ACKNOWLEDGMENTS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 534557
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

☒	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

CONDITIONS

Action 534557

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 534557
	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.	12/12/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	12/12/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	1/29/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	1/29/2026
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	1/29/2026
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	1/29/2026