

Form 3160-3  
(October 2024)

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2027

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> 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. <b>30-045-38526</b>
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)

## Additional Operator Remarks

### Location of Well

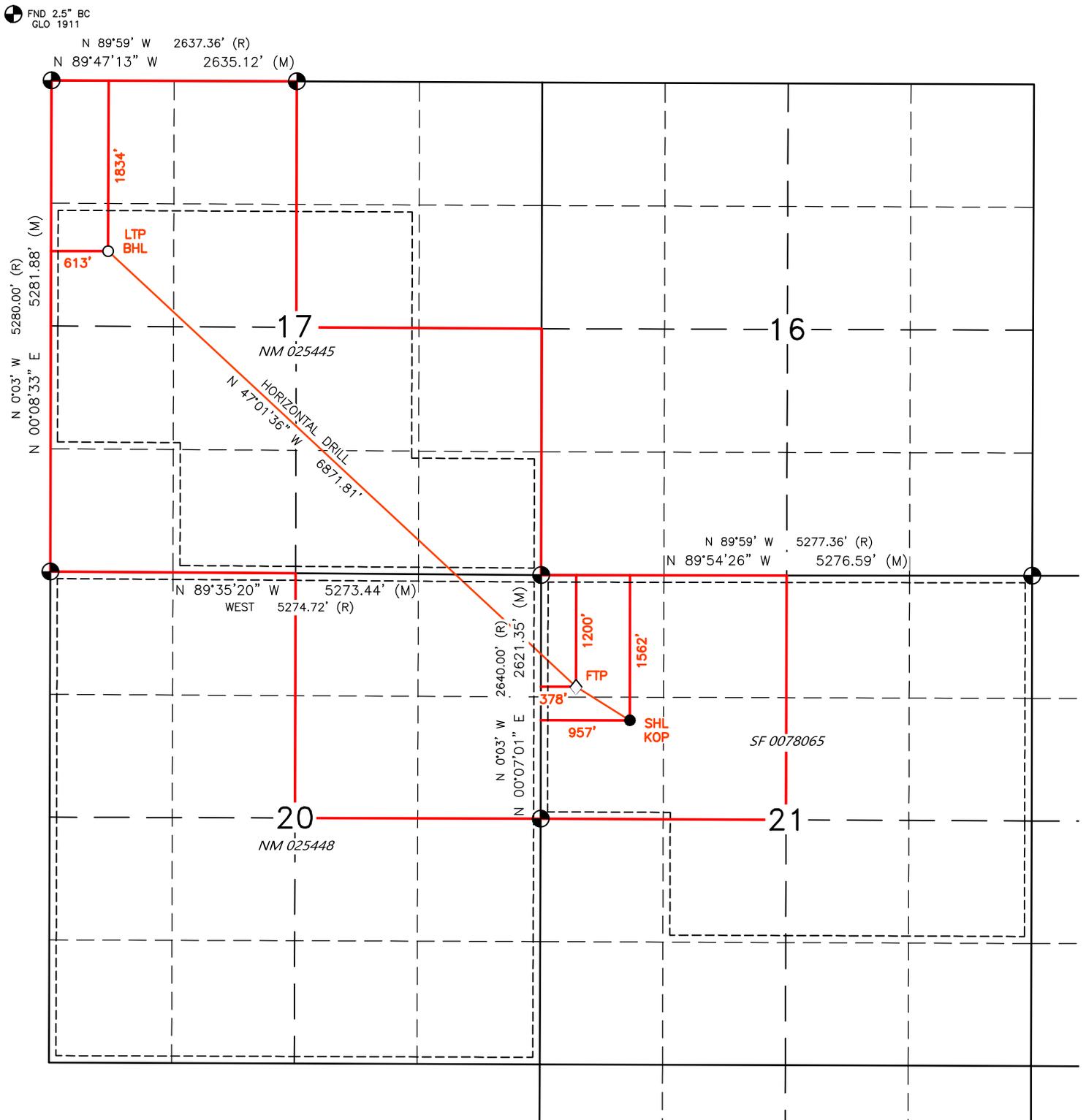
0. SHL: SWNW / 1562 FNL / 957 FWL / TWSP: 25N / RANGE: 12W / SECTION: 21 / LAT: 36.3895982 / LONG: -108.1225227 ( TVD: 0 feet, MD: 0 feet )  
PPP: NWNW / 1200 FNL / 378 FWL / TWSP: 25N / RANGE: 12W / SECTION: 21 / LAT: 36.2905873 / LONG: -108.1244888 ( TVD: 4803 feet, MD: 5116 feet )  
PPP: NESE / 1 FSL / 1 FEL / TWSP: 25N / RANGE: 12W / SECTION: 17 / LAT: 36.3939054 / LONG: -108.1289208 ( TVD: 4885 feet, MD: 12036 feet )  
PPP: NENE / 848 FNL / 1 FEL / TWSP: 25N / RANGE: 12W / SECTION: 20 / LAT: 36.3915534 / LONG: -108.1257791 ( TVD: 4885 feet, MD: 12036 feet )  
PPP: SESE / 1 FSL / 925 FEL / TWSP: 25N / RANGE: 12W / SECTION: 17 / LAT: 36.3939054 / LONG: -108.1289208 ( TVD: 4885 feet, MD: 12036 feet )  
BHL: SWNW / 1834 FNL / 613 FWL / TWSP: 25N / RANGE: 12W / SECTION: 17 / LAT: 36.4034119 / LONG: -108.1416224 ( TVD: 4885 feet, MD: 12036 feet )

### BLM Point of Contact

Name: CHRISTOPHER P WENMAN  
Title: Natural Resource Specialist  
Phone: (505) 564-7727  
Email: cwenman@blm.gov

CONFIDENTIAL





SURFACE LOCATION (SHL) ●  
 1562' FNL 957' FWL  
 SEC. 21, T25N, R12W  
 LAT. 36.389598° N (NAD83)  
 LONG. 108.122523° W (NAD83)

KICK OFF POINT (KOP) ▲  
 1562' FNL 957' FWL  
 SEC. 21, T25N, R12W  
 LAT. 36.389598° N (NAD83)  
 LONG. 108.122523° W (NAD83)

FIRST TAKE POINT (FTP) ◇  
 1200' FNL 378' FWL  
 SEC. 21, T25N, R12W  
 LAT. 36.390587° N (NAD83)  
 LONG. 108.124489° W (NAD83)

LAST TAKE POINT (LTP) □  
 1834' FNL 613' FWL  
 SEC. 17, T25N, R12W  
 LAT. 36.403412° N (NAD83)  
 LONG. 108.141622° W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○  
 1834' FNL 613' FWL  
 SEC. 17, T25N, R12W  
 LAT. 36.403412° N (NAD83)  
 LONG. 108.141622° 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
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
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:

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



DJR OPERATING, LLC.  
OGRID NO: 371838  
NATURAL GAS MANAGEMENT PLAN  
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 its 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 #609H**  
**San Juan County, New Mexico**

**Surface Location**

957-ft FWL & 1562-ft FNL  
 Sec 21 T25N R12W  
 Graded Elevation 6296' MSL  
 RKB Elevation 6310' (14' KB)

**SHL Geographical Coordinates (NAD-83)**

Latitude 36.3895982° N  
 Longitude 108.1225227° W

**Kick Off Point for Horizontal Build Curve**

4178-ft MD  
 4176-ft TVD

**Local Coordinates (from SHL)**

54-ft South  
 104-ft West

**Heel Location (Pay zone entry)**

378-ft FWL & 1200-ft FNL  
 Sec 21 T25N R12W

**Heel Geographical Coordinates (NAD-83)**

Latitude 36.39058734° N  
 Longitude 108.12448882° W

**Bottom Hole Location (TD)**

613-ft FWL & 1834-ft FNL  
 Sec 17 T25N R12W

**BHL Geographical Coordinates (NAD-83)**

Latitude 36.4034119° N  
 Longitude 108.1416224° W

**Well objectives**

This well is planned as a 6870-ft lateral in the Gallup C sand.

**Bottom Hole temperature and pressure**

The temperature in the Gallup C horizontal objective is 136°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	195	195	Sd	W	8.3	8.4 – 8.8
Kirtland	344	344	Sh	-	8.3	8.4 – 8.8
Fruitland	925	925	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1170	1170	Sd	W	8.3	9.0 - 9.5
Lewis	1263	1263	Sh	-		9.0 - 9.5
Chacra	1913	1912	Sd	-	8.3	9.0 - 9.5
Menefee	2496	2495	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3564	3562	Sd	-	8.3	9.0 - 9.5
Mancos	3721	3719	Sh	-		9.0 - 9.5
Mancos Silt	4046	4044	Slt	O/G	6.6	9.0 - 9.5
Gallup A	4607	4572	Slt	O/G	6.6	9.0 - 9.5
Gallup B	4697	4637	Sd	O/G	6.6	8.8 - 9.0
Gallup C	4860	4731	Sd	O/G	6.6	8.8 - 9.0
Target	5164	4806	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	5116	surf	4803	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	4838	12036	4720	4885	4838

Note: all casing will be new



Rev 3

**Casing Design Load Cases**

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

**Note #**

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

**Casing Design Factors**

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

**Cement Design**

9-5/8" Surface Casing

	<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	3678-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	356	230
Volume (bbls)	149	61
Volume (cu.ft.)	834	344
Excess %	55	55



Rev 3

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	4838-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	605
Volume (bbls)	168
Volume (cu.ft)	945
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 – 5116	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5116 – 12036	8.8 – 9.2	34 – 38	6 – 8	6 – 8

**Cores, tests and logs**

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

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

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

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

**Cuttings and drilling fluids management**

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

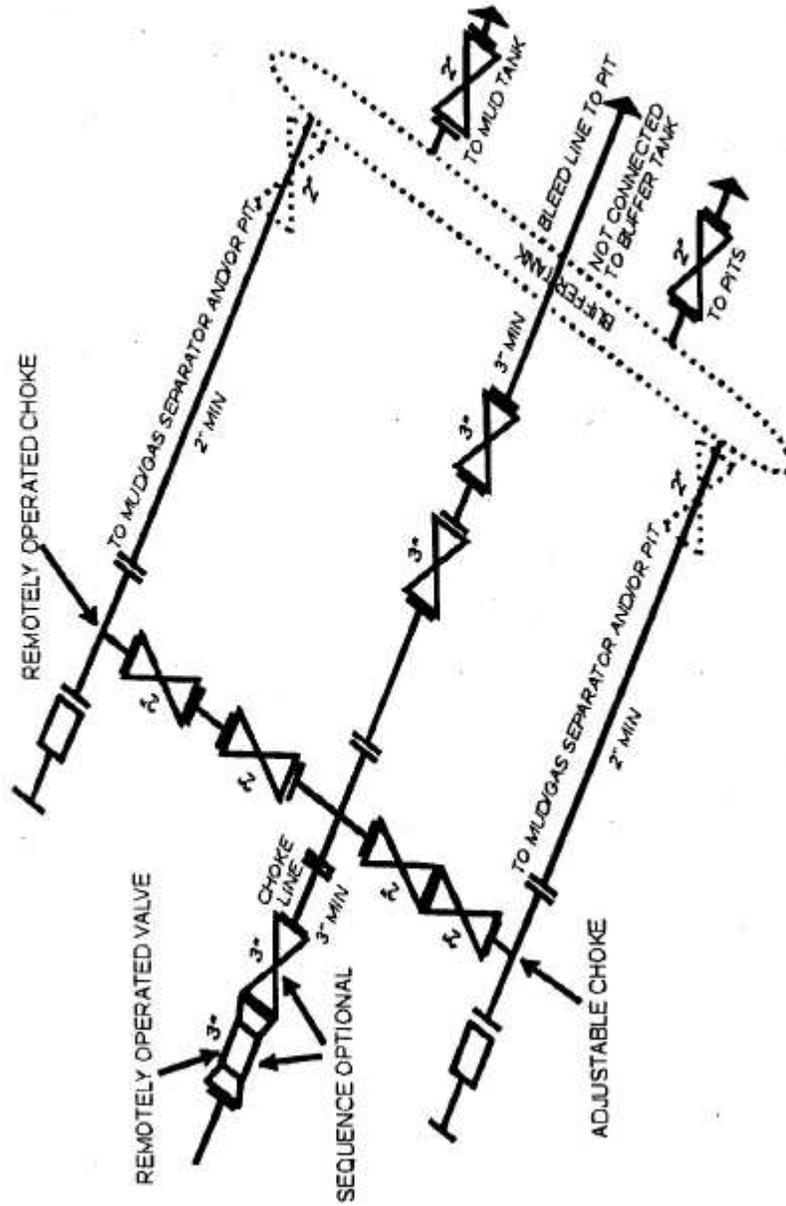
**Completion**

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



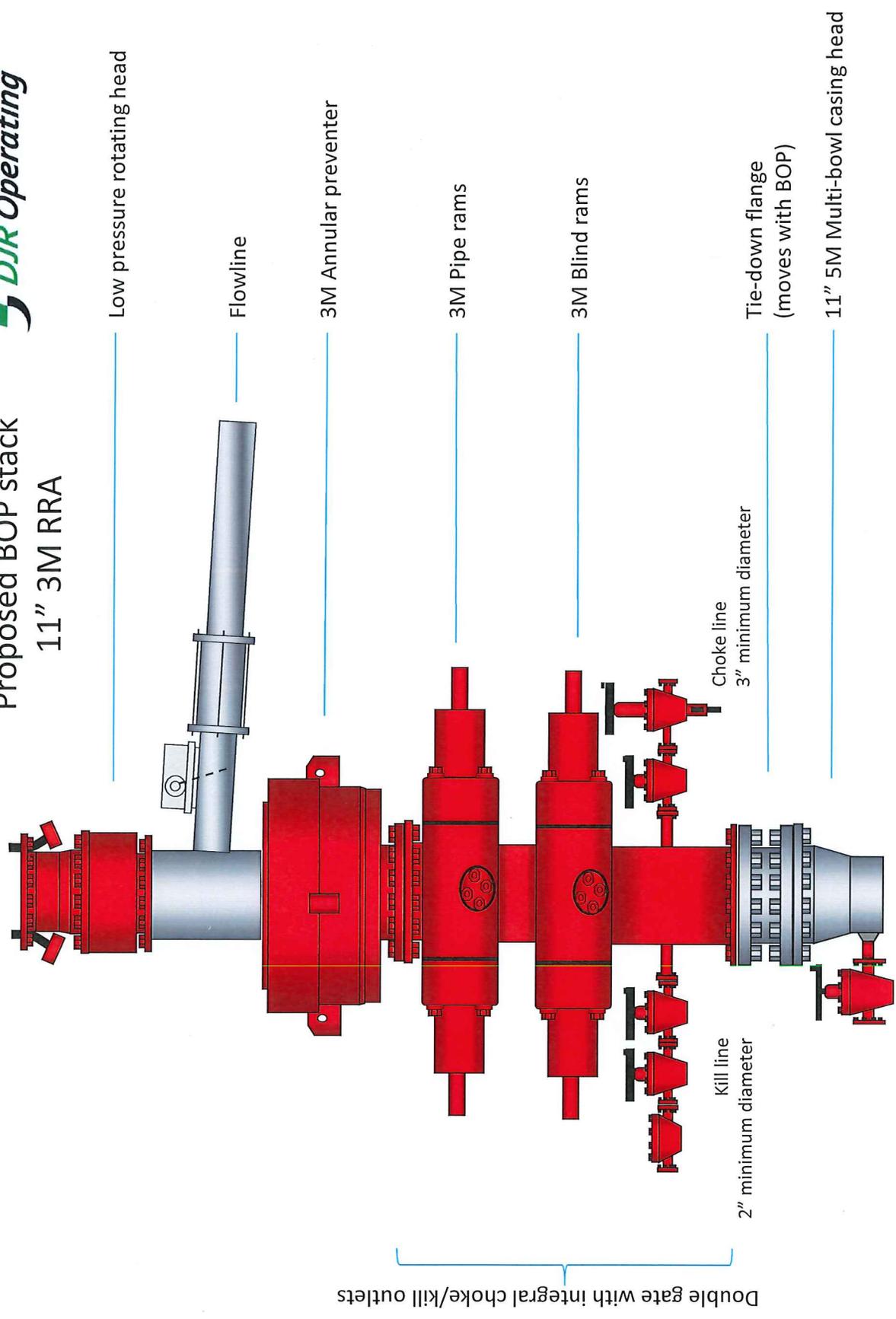
# Choke Manifold

Actual system to conform with Onshore Order 2





# Proposed BOP stack 11" 3M RRA





Company: DJR Operating  
 Project: Proposed Carson Unit  
 Site: WC 21-1 Pad  
 Well: Carson #609H  
 Wellbore: Original Drilling  
 Design: APD Rev 3

WELL DETAILS: Carson #609H

GL 6296' & RKB 14' @ 6310ft		Longitude	4
+N/-S	0	Northing	1961243.46
		Eastng	2637975.67
		Latitude	36.38959815
		Longitude	-108.12252283

DESIGN TARGET DETAILS

Time	+N/-S	+E/-W	Northing	Eastng	Latitude	Longitude
609H Heel Rev 3	360	-579	1961605.30	2637398.11	36.39058734	-108.12448862
609H Toe Rev 3	5029	-5621	1966289.52	2632370.21	36.40341190	-108.14162240

MD	Incl	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
396	0.00	0.00	396	0	0	0.00	0.00	0	
486	1.80	242.70	486	-1	-1	2.00	242.70	1	
416	0.00	0.00	416	0	0	0.00	0.00	42	609H Heel Rev 3
516	89.34	312.80	4806	564	-579	9.00	70.03	674	609H Toe Rev 3
12036	89.34	312.80	4885	5029	-5621	0.00	0.00	7542	

SECTION DETAILS

Plan: APD Rev 3 (Carson #609H/Original Drilling)  
 Created By: Janie Collins Date: 17:03, June 02 2021

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



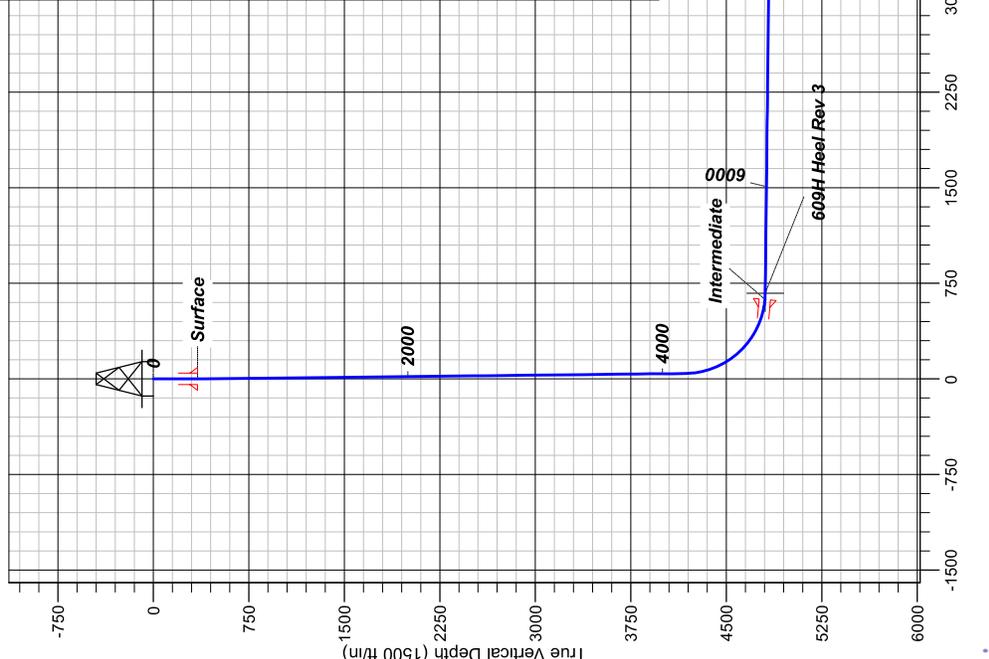
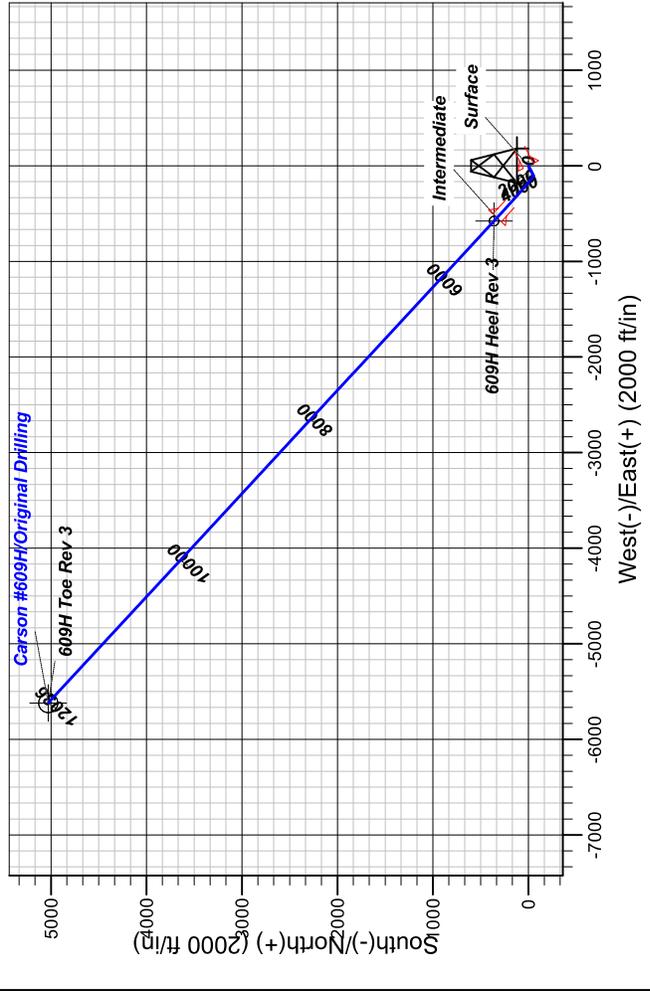
Azimuths to True North  
 Magnetic North: 9.3°  
 Magnetic Field  
 Strength: 49519  
 Dip Angle: 62  
 Date: 12/31/2019  
 Model: IGRF2015

CASING DETAILS

TVD	MD	Neur	Surf
346	346	346	Intermed
4803	5116	5116	

FORMATION DETAILS

TVDPath	MDPath	Formation
195	195	Ojo Alamo
344	344	Kirtland
925	925	Fruitland
1170	1170	Pictured Cliffs
1263	1263	Lewis
1912	1913	Chacra
2495	2496	Menefee
3562	3564	Point Lookout
3719	3721	Mancos
4044	4046	Mancos Silt
4572	4607	Gallup A
4637	4697	Gallup B
4731	4860	Gallup C





## **DJR Operating**

**Proposed Carson Unit**

**WC 21-1 Pad**

**Carson #609H - Slot 4**

**Original Drilling**

**Plan: APD Rev 3**

## **Standard Planning Report**

**02 June, 2021**





<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Project:</b>	Proposed Carson Unit	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site:</b>	WC 21-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Drilling		
<b>Design:</b>	APD Rev 3		

<b>Project</b>	Proposed Carson Unit		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Western Zone		

<b>Site</b>	WC 21-1 Pad				
<b>Site Position:</b>		<b>Northing:</b>	1,961,183.47 usft	<b>Latitude:</b>	36.38943333
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,637,975.67 usft	<b>Longitude:</b>	-108.12252222
<b>Position Uncertainty:</b>	0 ft	<b>Slot Radius:</b>	16.00 in	<b>Grid Convergence:</b>	-0.17 °

<b>Well</b>	Carson #609H - Slot 4					
<b>Well Position</b>	<b>+N/-S</b>	60 ft	<b>Northing:</b>	1,961,243.47 usft	<b>Latitude:</b>	36.38959815
	<b>+E/-W</b>	0 ft	<b>Easting:</b>	2,637,975.67 usft	<b>Longitude:</b>	-108.12252282
<b>Position Uncertainty</b>		0 ft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	6296 ft

<b>Wellbore</b>	Original Drilling				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	12/31/2019	9.12	62.94	49,519.12674979

<b>Design</b>	APD Rev 3			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0	0	0	311.82

<b>Plan Survey Tool Program</b>	<b>Date</b>	6/2/2021		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0	12,036 APD Rev 3 (Original Drilling)	MWD+HDGM	
			OWSG MWD + HDGM	

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
396	0.00	0.00	396	0	0	0.00	0.00	0.00	0.00	
486	1.80	242.70	486	-1	-1	2.00	2.00	0.00	242.70	
4178	1.80	242.70	4176	-54	-104	0.00	0.00	0.00	0.00	
5164	89.34	312.80	4806	360	-579	9.00	8.88	7.11	70.13	609H Heel Rev 3
12,036	89.34	312.80	4885	5029	-5621	0.00	0.00	0.00	0.00	609H Toe Rev 3



**Lonestar Consulting, LLC**  
 Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
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<b>Project:</b>	Proposed Carson Unit	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site:</b>	WC 21-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Drilling		
<b>Design:</b>	APD Rev 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
396	0.00	0.00	396	0	0	0	0.00	0.00	0.00
400	0.08	242.70	400	0	0	0	2.00	2.00	0.00
486	1.80	242.70	486	-1	-1	1	2.00	2.00	0.00
500	1.80	242.70	500	-1	-2	1	0.00	0.00	0.00
600	1.80	242.70	600	-2	-4	2	0.00	0.00	0.00
700	1.80	242.70	700	-4	-7	3	0.00	0.00	0.00
800	1.80	242.70	800	-5	-10	4	0.00	0.00	0.00
900	1.80	242.70	900	-7	-13	5	0.00	0.00	0.00
1000	1.80	242.70	1000	-8	-16	6	0.00	0.00	0.00
1100	1.80	242.70	1100	-10	-18	7	0.00	0.00	0.00
1200	1.80	242.70	1200	-11	-21	9	0.00	0.00	0.00
1300	1.80	242.70	1300	-12	-24	10	0.00	0.00	0.00
1400	1.80	242.70	1400	-14	-27	11	0.00	0.00	0.00
1500	1.80	242.70	1499	-15	-30	12	0.00	0.00	0.00
1600	1.80	242.70	1599	-17	-32	13	0.00	0.00	0.00
1700	1.80	242.70	1699	-18	-35	14	0.00	0.00	0.00
1800	1.80	242.70	1799	-20	-38	15	0.00	0.00	0.00
1900	1.80	242.70	1899	-21	-41	16	0.00	0.00	0.00
2000	1.80	242.70	1999	-22	-44	17	0.00	0.00	0.00
2100	1.80	242.70	2099	-24	-46	19	0.00	0.00	0.00
2200	1.80	242.70	2199	-25	-49	20	0.00	0.00	0.00
2300	1.80	242.70	2299	-27	-52	21	0.00	0.00	0.00
2400	1.80	242.70	2399	-28	-55	22	0.00	0.00	0.00
2500	1.80	242.70	2499	-30	-58	23	0.00	0.00	0.00
2600	1.80	242.70	2599	-31	-60	24	0.00	0.00	0.00
2700	1.80	242.70	2699	-33	-63	25	0.00	0.00	0.00
2800	1.80	242.70	2799	-34	-66	26	0.00	0.00	0.00
2900	1.80	242.70	2899	-35	-69	28	0.00	0.00	0.00
3000	1.80	242.70	2999	-37	-72	29	0.00	0.00	0.00
3100	1.80	242.70	3099	-38	-74	30	0.00	0.00	0.00
3200	1.80	242.70	3199	-40	-77	31	0.00	0.00	0.00
3300	1.80	242.70	3299	-41	-80	32	0.00	0.00	0.00
3400	1.80	242.70	3399	-43	-83	33	0.00	0.00	0.00
3500	1.80	242.70	3498	-44	-86	34	0.00	0.00	0.00
3600	1.80	242.70	3598	-46	-88	35	0.00	0.00	0.00
3700	1.80	242.70	3698	-47	-91	37	0.00	0.00	0.00
3800	1.80	242.70	3798	-48	-94	38	0.00	0.00	0.00
3900	1.80	242.70	3898	-50	-97	39	0.00	0.00	0.00
4000	1.80	242.70	3998	-51	-99	40	0.00	0.00	0.00
4100	1.80	242.70	4098	-53	-102	41	0.00	0.00	0.00
4178	1.80	242.70	4176	-54	-104	42	0.00	0.00	0.00
4200	3.10	279.71	4198	-54	-105	43	9.00	5.89	167.84
4300	11.72	304.62	4297	-48	-116	55	9.00	8.62	24.90
4400	20.66	308.32	4393	-31	-139	83	9.00	8.95	3.70
4500	29.64	309.84	4484	-4	-172	125	9.00	8.98	1.52
4600	38.63	310.70	4566	32	-214	181	9.00	8.99	0.86
4700	47.62	311.27	4639	77	-266	249	9.00	8.99	0.58
4800	56.61	311.70	4701	129	-325	328	9.00	8.99	0.43
4900	65.61	312.05	4749	188	-390	416	9.00	8.99	0.35
5000	74.60	312.35	4783	251	-460	510	9.00	9.00	0.30



**Lonestar Consulting, LLC**  
Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
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<b>Site:</b>	WC 21-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Drilling		
<b>Design:</b>	APD Rev 3		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5100	83.60	312.63	4802	317	-532	608	9.00	9.00	0.28	
5164	89.34	312.80	4806	360	-579	671	9.00	9.00	0.27	
5200	89.34	312.80	4806	385	-605	708	0.00	0.00	0.00	
5300	89.34	312.80	4807	453	-679	808	0.00	0.00	0.00	
5400	89.34	312.80	4808	521	-752	908	0.00	0.00	0.00	
5500	89.34	312.80	4809	589	-825	1007	0.00	0.00	0.00	
5600	89.34	312.80	4811	656	-899	1107	0.00	0.00	0.00	
5700	89.34	312.80	4812	724	-972	1207	0.00	0.00	0.00	
5800	89.34	312.80	4813	792	-1045	1307	0.00	0.00	0.00	
5900	89.34	312.80	4814	860	-1119	1407	0.00	0.00	0.00	
6000	89.34	312.80	4815	928	-1192	1507	0.00	0.00	0.00	
6100	89.34	312.80	4816	996	-1266	1607	0.00	0.00	0.00	
6200	89.34	312.80	4818	1064	-1339	1707	0.00	0.00	0.00	
6300	89.34	312.80	4819	1132	-1412	1807	0.00	0.00	0.00	
6400	89.34	312.80	4820	1200	-1486	1907	0.00	0.00	0.00	
6500	89.34	312.80	4821	1268	-1559	2007	0.00	0.00	0.00	
6600	89.34	312.80	4822	1336	-1632	2107	0.00	0.00	0.00	
6700	89.34	312.80	4823	1404	-1706	2207	0.00	0.00	0.00	
6800	89.34	312.80	4824	1472	-1779	2307	0.00	0.00	0.00	
6900	89.34	312.80	4826	1540	-1852	2407	0.00	0.00	0.00	
7000	89.34	312.80	4827	1608	-1926	2507	0.00	0.00	0.00	
7100	89.34	312.80	4828	1676	-1999	2607	0.00	0.00	0.00	
7200	89.34	312.80	4829	1744	-2073	2707	0.00	0.00	0.00	
7300	89.34	312.80	4830	1811	-2146	2807	0.00	0.00	0.00	
7400	89.34	312.80	4831	1879	-2219	2907	0.00	0.00	0.00	
7500	89.34	312.80	4833	1947	-2293	3007	0.00	0.00	0.00	
7600	89.34	312.80	4834	2015	-2366	3107	0.00	0.00	0.00	
7700	89.34	312.80	4835	2083	-2439	3207	0.00	0.00	0.00	
7800	89.34	312.80	4836	2151	-2513	3307	0.00	0.00	0.00	
7900	89.34	312.80	4837	2219	-2586	3407	0.00	0.00	0.00	
8000	89.34	312.80	4838	2287	-2659	3507	0.00	0.00	0.00	
8100	89.34	312.80	4840	2355	-2733	3607	0.00	0.00	0.00	
8200	89.34	312.80	4841	2423	-2806	3707	0.00	0.00	0.00	
8300	89.34	312.80	4842	2491	-2880	3807	0.00	0.00	0.00	
8400	89.34	312.80	4843	2559	-2953	3907	0.00	0.00	0.00	
8500	89.34	312.80	4844	2627	-3026	4007	0.00	0.00	0.00	
8600	89.34	312.80	4845	2695	-3100	4107	0.00	0.00	0.00	
8700	89.34	312.80	4846	2763	-3173	4207	0.00	0.00	0.00	
8800	89.34	312.80	4848	2831	-3246	4307	0.00	0.00	0.00	
8900	89.34	312.80	4849	2899	-3320	4407	0.00	0.00	0.00	
9000	89.34	312.80	4850	2967	-3393	4507	0.00	0.00	0.00	
9100	89.34	312.80	4851	3034	-3466	4607	0.00	0.00	0.00	
9200	89.34	312.80	4852	3102	-3540	4707	0.00	0.00	0.00	
9300	89.34	312.80	4853	3170	-3613	4807	0.00	0.00	0.00	
9400	89.34	312.80	4855	3238	-3687	4907	0.00	0.00	0.00	
9500	89.34	312.80	4856	3306	-3760	5007	0.00	0.00	0.00	
9600	89.34	312.80	4857	3374	-3833	5107	0.00	0.00	0.00	
9700	89.34	312.80	4858	3442	-3907	5207	0.00	0.00	0.00	
9800	89.34	312.80	4859	3510	-3980	5307	0.00	0.00	0.00	
9900	89.34	312.80	4860	3578	-4053	5407	0.00	0.00	0.00	
10,000	89.34	312.80	4861	3646	-4127	5507	0.00	0.00	0.00	
10,100	89.34	312.80	4863	3714	-4200	5607	0.00	0.00	0.00	
10,200	89.34	312.80	4864	3782	-4274	5706	0.00	0.00	0.00	
10,300	89.34	312.80	4865	3850	-4347	5806	0.00	0.00	0.00	



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Project:</b>	Proposed Carson Unit	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site:</b>	WC 21-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Drilling		
<b>Design:</b>	APD Rev 3		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	89.34	312.80	4866	3918	-4420	5906	0.00	0.00	0.00	
10,500	89.34	312.80	4867	3986	-4494	6006	0.00	0.00	0.00	
10,600	89.34	312.80	4868	4054	-4567	6106	0.00	0.00	0.00	
10,700	89.34	312.80	4870	4122	-4640	6206	0.00	0.00	0.00	
10,800	89.34	312.80	4871	4189	-4714	6306	0.00	0.00	0.00	
10,900	89.34	312.80	4872	4257	-4787	6406	0.00	0.00	0.00	
11,000	89.34	312.80	4873	4325	-4860	6506	0.00	0.00	0.00	
11,100	89.34	312.80	4874	4393	-4934	6606	0.00	0.00	0.00	
11,200	89.34	312.80	4875	4461	-5007	6706	0.00	0.00	0.00	
11,300	89.34	312.80	4876	4529	-5081	6806	0.00	0.00	0.00	
11,400	89.34	312.80	4878	4597	-5154	6906	0.00	0.00	0.00	
11,500	89.34	312.80	4879	4665	-5227	7006	0.00	0.00	0.00	
11,600	89.34	312.80	4880	4733	-5301	7106	0.00	0.00	0.00	
11,700	89.34	312.80	4881	4801	-5374	7206	0.00	0.00	0.00	
11,800	89.34	312.80	4882	4869	-5447	7306	0.00	0.00	0.00	
11,900	89.34	312.80	4883	4937	-5521	7406	0.00	0.00	0.00	
12,000	89.34	312.80	4885	5005	-5594	7506	0.00	0.00	0.00	
12,036	89.34	312.80	4885	5029	-5621	7542	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
609H Heel Rev 3 - hit/miss target - Shape - Circle (radius 50)	0.00	0.00	4806	360	-579	1,961,605.30	2,637,398.11	36.39058734	-108.12448881
609H Toe Rev 3 - plan hits target center - Circle (radius 100)	0.00	0.00	4885	5029	-5621	1,966,289.52	2,632,370.20	36.40341190	-108.14162240

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
346	346	Surface	9.63	12.25		
5116	4803	Intermediate	7.00	8.75		



**Lonestar Consulting, LLC**  
Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Project:</b>	Proposed Carson Unit	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site:</b>	WC 21-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Drilling		
<b>Design:</b>	APD Rev 3		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
195	195	Ojo Alamo		0.00	0.00	
344	344	Kirtland		0.00	0.00	
925	925	Fruitland		0.00	0.00	
1170	1170	Pictured Cliffs		0.00	0.00	
1263	1263	Lewis		0.00	0.00	
1913	1912	Chacra		0.00	0.00	
2496	2495	Menefee		0.00	0.00	
3564	3562	Point Lookout		0.00	0.00	
3721	3719	Mancos		0.00	0.00	
4046	4044	Mancos Silt		0.00	0.00	
4607	4572	Gallup A		0.00	0.00	
4697	4637	Gallup B		0.00	0.00	
4860	4731	Gallup C		0.00	0.00	



## **DJR Operating**

**Proposed Carson Unit**

**WC 21-1 Pad**

**Carson #609H**

**Original Drilling**

**APD Rev 3**

## **Anticollision Report**

**02 June, 2021**





**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	APD Rev 3		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum centre distance of 10,000ft	<b>Error Surface:</b>	Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	6/2/2021		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0	12,036	APD Rev 3 (Original Drilling)	MWD+HDGM	OWSG MWD + HDGM

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Summary</b>						
<b>Offset Well - Wellbore - Design</b>						
WC 21-1 Pad						
Bisti Coal 17 Com 2 - OH - OH	9864	1245	3619	3568	70.332	CC
Bisti Coal 17 Com 2 - OH - OH	9900	1245	3619	3568	69.963	ES
Bisti Coal 17 Com 2 - OH - OH	11,800	1245	4105	4032	56.252	SF
Carson #578H - Original Drilling - APD Rev 3	616	616	37	33	9.415	CC, ES
Carson #578H - Original Drilling - APD Rev 3	700	699	39	34	8.502	SF
Carson #582H - Original Drilling - APD Rev 3	1002	1001	59	52	8.884	CC
Carson #582H - Original Drilling - APD Rev 3	3800	3799	70	43	2.621	ES
Carson #582H - Original Drilling - APD Rev 3	4178	4175	73	44	2.491	SF
Carson #605H - Original Drilling - APD Rev 3	592	592	18	14	4.754	CC
Carson #605H - Original Drilling - APD Rev 3	600	600	18	14	4.688	ES
Carson #605H - Original Drilling - APD Rev 3	11,900	12,523	1332	936	3.362	SF
New Mexico Fed 2 - OH - OH	10,028	4326	152	-165	0.479	Level 3, CC, ES, SF
South Bisti 17-0 - OH - OH	8557	4802	190	-62	0.754	Level 3, CC, ES, SF
South Bisti H 18 - OH - OH	12,036	4875	1678	1360	5.283	CC, ES, SF

Offset Design: WC 21-1 Pad - Bisti Coal 17 Com 2 - OH - OH													Offset Site Error:	0 ft
Survey Program: 99-INCLINOMETER													Offset Well Error:	0 ft
Measured Reference Depth (ft)	Vertical Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)		Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-53.93	3207	-4404	5448					
100	100	68	68	0	2	-53.93	3207	-4404	5448	5446	2.22	2,454.793		
200	200	168	168	1	5	-53.93	3207	-4404	5448	5442	5.61	970.310		
300	300	268	268	1	8	-53.93	3207	-4404	5448	5439	9.01	604.653		
396	396	364	364	1	11	-53.93	3207	-4404	5448	5436	12.27	444.047		
400	400	368	368	1	11	63.37	3207	-4404	5448	5435	12.40	439.177		
486	486	454	454	2	14	63.40	3207	-4404	5447	5432	15.31	355.803		
500	500	468	468	2	14	63.40	3207	-4404	5447	5431	15.78	345.203		
600	600	568	568	2	17	63.43	3207	-4404	5446	5426	19.16	284.205		
700	700	668	668	2	20	63.46	3207	-4404	5444	5422	22.55	241.457		
800	800	768	768	3	23	63.49	3207	-4404	5443	5417	25.94	209.850		
900	900	868	868	3	26	63.52	3207	-4404	5441	5412	29.33	185.537		
1000	1000	968	968	3	29	63.55	3207	-4404	5440	5407	32.72	166.258		
1100	1100	1068	1068	4	32	63.58	3207	-4404	5439	5403	36.11	150.597		



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Bisti Coal 17 Com 2 - OH - OH													Offset Site Error:	0 ft		
Survey Program: 99-INCLINOMETER													Offset Well Error:	0 ft		
Reference				Offset			Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor				
1200	1200	1168	1168	4	35	63.61	3207	-4404	5437	5398	39.51	137.624				
1300	1300	1245	1245	4	38	63.63	3207	-4404	5436	5394	42.22	128.763				
1353	1353	1245	1245	5	38	63.63	3207	-4404	5436	5393	42.40	128.184				
1400	1400	1245	1245	5	38	63.63	3207	-4404	5436	5393	42.57	127.703				
1500	1499	1245	1245	5	38	63.63	3207	-4404	5438	5395	42.90	126.743				
1600	1599	1245	1245	5	38	63.63	3207	-4404	5441	5398	43.22	125.881				
1700	1699	1245	1245	6	38	63.63	3207	-4404	5447	5403	43.53	125.115				
1800	1799	1245	1245	6	38	63.63	3207	-4404	5454	5410	43.83	124.443				
1900	1899	1245	1245	7	38	63.63	3207	-4404	5463	5419	44.11	123.863				
2000	1999	1245	1245	7	38	63.63	3207	-4404	5474	5430	44.37	123.372				
2100	2099	1245	1245	7	38	63.63	3207	-4404	5487	5442	44.62	122.968				
2200	2199	1245	1245	8	38	63.63	3207	-4404	5501	5456	44.85	122.650				
2300	2299	1245	1245	8	38	63.63	3207	-4404	5517	5472	45.07	122.415				
2400	2399	1245	1245	8	38	63.63	3207	-4404	5535	5490	45.28	122.262				
2500	2499	1245	1245	9	38	63.63	3207	-4404	5555	5510	45.46	122.187				
2600	2599	1245	1245	9	38	63.63	3207	-4404	5577	5531	45.64	122.190				
2700	2699	1245	1245	9	38	63.63	3207	-4404	5600	5554	45.80	122.269				
2800	2799	1245	1245	10	38	63.63	3207	-4404	5625	5579	45.95	122.421				
2900	2899	1245	1245	10	38	63.63	3207	-4404	5651	5605	46.08	122.645				
3000	2999	1245	1245	11	38	63.63	3207	-4404	5680	5633	46.20	122.939				
3100	3099	1245	1245	11	38	63.63	3207	-4404	5709	5663	46.30	123.301				
3200	3199	1245	1245	11	38	63.63	3207	-4404	5741	5694	46.40	123.730				
3300	3299	1245	1245	12	38	63.63	3207	-4404	5774	5727	46.48	124.224				
3400	3399	1245	1245	12	38	63.63	3207	-4404	5808	5762	46.55	124.781				
3500	3498	1245	1245	12	38	63.63	3207	-4404	5844	5798	46.60	125.399				
3600	3598	1245	1245	13	38	63.63	3207	-4404	5882	5835	46.65	126.077				
3700	3698	1245	1245	13	38	63.63	3207	-4404	5921	5874	46.69	126.814				
3800	3798	1245	1245	13	38	63.63	3207	-4404	5961	5914	46.71	127.607				
3900	3898	1245	1245	14	38	63.63	3207	-4404	6003	5956	46.73	128.456				
4000	3998	1245	1245	14	38	63.63	3207	-4404	6046	5999	46.74	129.358				
4100	4098	1245	1245	15	38	63.63	3207	-4404	6090	6043	46.73	130.313				
4178	4176	1245	1245	15	38	63.63	3207	-4404	6126	6079	46.73	131.092				
4200	4198	1245	1245	15	38	26.75	3207	-4404	6136	6089	46.72	131.320				
4250	4248	1245	1245	15	38	7.30	3207	-4404	6156	6109	46.70	131.805				
4300	4297	1245	1245	15	38	2.37	3207	-4404	6172	6126	46.67	132.242				
4350	4346	1245	1245	15	38	0.22	3207	-4404	6186	6139	46.64	132.621				
4400	4393	1245	1245	16	38	-0.97	3207	-4404	6196	6149	46.61	132.940				
4450	4439	1245	1245	16	38	-1.73	3207	-4404	6202	6156	46.56	133.199				
4500	4484	1245	1245	16	38	-2.27	3207	-4404	6205	6159	46.52	133.397				
4550	4526	1245	1245	16	38	-2.68	3207	-4404	6205	6158	46.47	133.534				
4600	4566	1245	1245	16	38	-3.02	3207	-4404	6201	6155	46.41	133.609				
4650	4604	1245	1245	17	38	-3.32	3207	-4404	6194	6147	46.35	133.620				
4700	4639	1245	1245	17	38	-3.61	3207	-4404	6183	6136	46.29	133.566				
4750	4671	1245	1245	17	38	-3.90	3207	-4404	6168	6122	46.22	133.447				
4800	4701	1245	1245	18	38	-4.20	3207	-4404	6151	6105	46.16	133.262				
4850	4726	1245	1245	18	38	-4.52	3207	-4404	6130	6084	46.09	133.010				
4900	4749	1245	1245	19	38	-4.88	3207	-4404	6106	6060	46.02	132.691				
4950	4768	1245	1245	19	38	-5.28	3207	-4404	6079	6033	45.94	132.307				
5000	4783	1245	1245	20	38	-5.76	3207	-4404	6049	6003	45.87	131.858				
5050	4794	1245	1245	21	38	-6.32	3207	-4404	6016	5970	45.80	131.345				
5100	4802	1245	1245	21	38	-7.00	3207	-4404	5981	5935	45.73	130.770				
5150	4805	1245	1245	22	38	-7.83	3207	-4404	5943	5897	45.67	130.136				



**Lonestar Consulting, LLC**  
Anticollision Report



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<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Bisti Coal 17 Com 2 - OH - OH													Offset Site Error:	0 ft	
Survey Program: 99-INCLINOMETER													Offset Well Error:		0 ft
Reference													Rule Assigned:		
Offset				Semi Major Axis			Highside		Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	(ft)				
5164	4806	1245	1245	22	38	-8.10	3207	-4404	5932	5886	45.65	129.937			
5200	4806	1245	1245	23	38	-8.10	3207	-4404	5903	5858	45.60	129.465			
5300	4807	1245	1245	25	38	-8.10	3207	-4404	5825	5779	45.45	128.158			
5400	4808	1245	1245	27	38	-8.10	3207	-4404	5747	5701	45.31	126.819			
5500	4809	1245	1245	29	38	-8.10	3207	-4404	5669	5624	45.19	125.449			
5600	4811	1245	1245	31	38	-8.10	3207	-4404	5593	5548	45.09	124.047			
5700	4812	1245	1245	33	38	-8.10	3207	-4404	5517	5472	44.99	122.612			
5800	4813	1245	1245	36	38	-8.10	3207	-4404	5442	5397	44.92	121.147			
5900	4814	1245	1245	38	38	-8.10	3207	-4404	5368	5323	44.86	119.651			
6000	4815	1245	1245	40	38	-8.10	3207	-4404	5294	5249	44.82	118.126			
6100	4816	1245	1245	43	38	-8.10	3207	-4404	5222	5177	44.79	116.574			
6200	4818	1245	1245	45	38	-8.10	3207	-4404	5150	5105	44.78	114.998			
6300	4819	1245	1245	48	38	-8.10	3207	-4404	5079	5035	44.79	113.400			
6400	4820	1245	1245	50	38	-8.10	3207	-4404	5010	4965	44.82	111.783			
6500	4821	1245	1245	53	38	-8.10	3207	-4404	4941	4896	44.86	110.151			
6600	4822	1245	1245	55	38	-8.10	3207	-4404	4873	4829	44.91	108.507			
6700	4823	1245	1245	58	38	-8.10	3207	-4404	4807	4762	44.99	106.856			
6800	4824	1245	1245	60	38	-8.10	3207	-4404	4742	4697	45.07	105.203			
6900	4826	1245	1245	63	38	-8.10	3207	-4404	4678	4633	45.18	103.550			
7000	4827	1245	1245	65	38	-8.10	3207	-4404	4615	4570	45.29	101.904			
7100	4828	1245	1245	68	38	-8.10	3207	-4404	4554	4508	45.42	100.268			
7200	4829	1245	1245	70	38	-8.10	3207	-4404	4494	4448	45.55	98.648			
7300	4830	1245	1245	73	38	-8.10	3207	-4404	4435	4390	45.70	97.048			
7400	4831	1245	1245	76	38	-8.10	3207	-4404	4378	4332	45.86	95.472			
7500	4833	1245	1245	78	38	-8.10	3207	-4404	4323	4277	46.02	93.925			
7600	4834	1245	1245	81	38	-8.10	3207	-4404	4269	4223	46.19	92.412			
7700	4835	1245	1245	83	38	-8.10	3207	-4404	4217	4170	46.37	90.936			
7800	4836	1245	1245	86	38	-8.10	3207	-4404	4166	4120	46.55	89.501			
7900	4837	1245	1245	89	38	-8.10	3207	-4404	4118	4071	46.73	88.112			
8000	4838	1245	1245	91	38	-8.10	3207	-4404	4071	4024	46.92	86.772			
8100	4840	1245	1245	94	38	-8.10	3207	-4404	4026	3979	47.10	85.483			
8200	4841	1245	1245	96	38	-8.10	3207	-4404	3983	3936	47.28	84.250			
8300	4842	1245	1245	99	38	-8.10	3207	-4404	3943	3895	47.46	83.073			
8400	4843	1245	1245	102	38	-8.10	3207	-4404	3904	3856	47.64	81.957			
8500	4844	1245	1245	104	38	-8.10	3207	-4404	3868	3820	47.81	80.901			
8600	4845	1245	1245	107	38	-8.10	3207	-4404	3834	3786	47.97	79.908			
8700	4846	1245	1245	109	38	-8.10	3207	-4404	3802	3754	48.14	78.976			
8800	4848	1245	1245	112	38	-8.10	3207	-4404	3772	3724	48.30	78.105			
8900	4849	1245	1245	115	38	-8.10	3207	-4404	3745	3697	48.46	77.294			
9000	4850	1245	1245	117	38	-8.10	3207	-4404	3721	3672	48.62	76.537			
9100	4851	1245	1245	120	38	-8.10	3207	-4404	3699	3650	48.78	75.830			
9200	4852	1245	1245	123	38	-8.10	3207	-4404	3680	3631	48.96	75.163			
9300	4853	1245	1245	125	38	-8.10	3207	-4404	3663	3614	49.15	74.522			
9400	4855	1245	1245	128	38	-8.10	3207	-4404	3649	3599	49.38	73.892			
9500	4856	1245	1245	130	38	-8.10	3207	-4404	3637	3588	49.66	73.249			
9600	4857	1245	1245	133	38	-8.10	3207	-4404	3629	3579	50.01	72.563			
9700	4858	1245	1245	136	38	-8.10	3207	-4404	3623	3572	50.46	71.805			
9800	4859	1245	1245	138	38	-8.10	3207	-4404	3620	3569	51.02	70.944			
9864	4860	1245	1245	140	38	-8.10	3207	-4404	3619	3568	51.46	70.332 CC			
9900	4860	1245	1245	141	38	-8.10	3207	-4404	3619	3568	51.73	69.963 ES			
10,000	4861	1245	1245	144	38	-8.10	3207	-4404	3622	3569	52.59	68.867			
10,100	4863	1245	1245	146	38	-8.10	3207	-4404	3627	3573	53.59	67.682			



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Bisti Coal 17 Com 2 - OH - OH													Offset Site Error:	0 ft	
Survey Program: 99-INCLINOMETER													Offset Well Error:	0 ft	
Reference				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			
10,200	4864	1245	1245	149	38	-8.10	3207	-4404	3635	3580	54.70	66.450			
10,300	4865	1245	1245	151	38	-8.10	3207	-4404	3645	3590	55.90	65.215			
10,400	4866	1245	1245	154	38	-8.10	3207	-4404	3659	3602	57.16	64.014			
10,500	4867	1245	1245	157	38	-8.10	3207	-4404	3675	3616	58.44	62.876			
10,600	4868	1245	1245	159	38	-8.10	3207	-4404	3693	3634	59.74	61.821			
10,700	4870	1245	1245	162	38	-8.10	3207	-4404	3715	3654	61.04	60.857			
10,800	4871	1245	1245	165	38	-8.10	3207	-4404	3738	3676	62.32	59.991			
10,900	4872	1245	1245	167	38	-8.10	3207	-4404	3765	3701	63.57	59.224			
11,000	4873	1245	1245	170	38	-8.10	3207	-4404	3793	3729	64.78	58.555			
11,100	4874	1245	1245	173	38	-8.10	3207	-4404	3825	3759	65.96	57.979			
11,200	4875	1245	1245	175	38	-8.10	3207	-4404	3858	3791	67.10	57.495			
11,300	4876	1245	1245	178	38	-8.10	3207	-4404	3894	3826	68.20	57.097			
11,400	4878	1245	1245	180	38	-8.10	3207	-4404	3932	3863	69.24	56.782			
11,500	4879	1245	1245	183	38	-8.10	3207	-4404	3972	3902	70.25	56.544			
11,600	4880	1245	1245	186	38	-8.10	3207	-4404	4014	3943	71.20	56.379			
11,700	4881	1245	1245	188	38	-8.10	3207	-4404	4058	3986	72.11	56.283			
11,800	4882	1245	1245	191	38	-8.10	3207	-4404	4105	4032	72.97	56.252 SF			
11,900	4883	1245	1245	194	38	-8.10	3207	-4404	4153	4079	73.78	56.282			
12,000	4885	1245	1245	196	38	-8.10	3207	-4404	4203	4128	74.56	56.369			
12,036	4885	1245	1245	197	38	-8.10	3207	-4404	4221	4146	74.82	56.414			



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #578H - Original Drilling - APD Rev 3													Offset Site Error:	0 ft		
Survey Program: 0-MWD+HDGM													Rule Assigned:		Offset Well Error:	0 ft
Measured Reference Depth (ft)	Vertical Reference Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
0	0	0	0	0	0	179.83	-40	0	40							
100	100	100	100	0	0	179.83	-40	0	40	40	0.31	129.750				
200	200	200	200	1	1	179.83	-40	0	40	39	1.03	39.016				
300	300	300	300	1	1	179.83	-40	0	40	38	1.74	22.960				
396	396	396	396	1	1	179.83	-40	0	40	38	2.43	16.459				
400	400	400	400	1	1	-62.87	-40	0	40	38	2.46	16.270				
486	486	486	486	2	2	-66.74	-40	1	39	36	3.05	12.788				
500	500	500	500	2	2	-68.02	-39	2	39	36	3.15	12.309				
600	600	600	600	2	2	-80.63	-38	7	37	33	3.85	9.699				
616	616	616	616	2	2	-83.16	-37	8	37	33	3.96	9.415 CC, ES				
700	700	699	699	2	2	-98.41	-35	15	39	34	4.55	8.502 SF				
800	800	797	796	3	3	-117.06	-31	27	45	40	5.26	8.645				
900	900	894	892	3	3	-131.98	-27	41	58	52	5.95	9.806				
1000	1000	990	986	3	3	-142.31	-21	59	77	70	6.63	11.572				
1100	1100	1084	1077	4	4	-149.21	-15	78	100	92	7.29	13.660				
1200	1200	1177	1167	4	4	-153.89	-8	101	126	118	7.93	15.927				
1300	1300	1267	1254	4	5	-157.17	0	125	157	148	8.57	18.278				
1400	1400	1357	1340	5	5	-159.58	8	152	190	181	9.22	20.629				
1500	1499	1451	1428	5	6	-161.37	18	181	225	215	9.92	22.643				
1600	1599	1545	1517	5	6	-162.68	27	209	259	249	10.63	24.392				
1700	1699	1638	1606	6	7	-163.69	36	238	294	283	11.34	25.922				
1800	1799	1732	1695	6	7	-164.48	45	267	329	317	12.05	27.269				
1900	1899	1826	1783	7	8	-165.13	54	295	363	351	12.77	28.462				
2000	1999	1920	1872	7	8	-165.66	63	324	398	385	13.49	29.526				
2100	2099	2013	1961	7	9	-166.10	72	353	433	419	14.21	30.479				
2200	2199	2107	2049	8	10	-166.48	81	381	468	453	14.93	31.339				
2300	2299	2201	2138	8	10	-166.81	90	410	503	487	15.65	32.116				
2400	2399	2294	2227	8	11	-167.09	100	438	538	521	16.38	32.824				
2500	2499	2388	2316	9	11	-167.34	109	467	573	555	17.11	33.469				
2600	2599	2482	2404	9	12	-167.56	118	496	607	590	17.83	34.061				
2700	2699	2575	2493	9	12	-167.76	127	524	642	624	18.56	34.605				
2800	2799	2669	2582	10	13	-167.93	136	553	677	658	19.29	35.107				
2900	2899	2763	2671	10	14	-168.09	145	581	712	692	20.02	35.571				
3000	2999	2856	2759	11	14	-168.24	154	610	747	726	20.75	36.001				
3100	3099	2950	2848	11	15	-168.37	163	639	782	761	21.48	36.402				
3200	3199	3044	2937	11	15	-168.49	172	667	817	795	22.22	36.775				
3300	3299	3137	3026	12	16	-168.60	182	696	852	829	22.95	37.124				
3400	3399	3231	3114	12	16	-168.70	191	724	887	863	23.68	37.451				
3500	3498	3325	3203	12	17	-168.79	200	753	922	897	24.41	37.758				
3600	3598	3419	3292	13	18	-168.88	209	782	957	932	25.15	38.046				
3700	3698	3512	3381	13	18	-168.96	218	810	992	966	25.88	38.317				
3800	3798	3606	3469	13	19	-169.04	227	839	1027	1000	26.62	38.573				
3900	3898	3700	3558	14	19	-169.11	236	867	1062	1034	27.35	38.815				
4000	3998	3793	3647	14	20	-169.17	245	896	1097	1068	28.09	39.044				
4100	4098	3887	3736	15	20	-169.24	254	925	1132	1103	28.82	39.261				
4178	4176	3960	3805	15	21	-169.28	262	947	1159	1129	29.39	39.422				
4200	4198	3981	3824	15	21	153.08	264	953	1167	1137	29.56	39.472				
4250	4248	4027	3868	15	21	131.91	268	967	1186	1156	29.92	39.635				
4300	4297	4072	3911	15	22	125.29	272	981	1207	1176	30.27	39.862				
4350	4346	4115	3952	15	22	121.43	277	994	1229	1199	30.62	40.151				
4400	4393	4157	3992	16	22	118.50	281	1007	1253	1223	30.95	40.497				
4450	4439	4198	4030	16	22	115.95	285	1019	1279	1248	31.28	40.897				



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Anticollision Report



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<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #578H - Original Drilling - APD Rev 3													Offset Site Error:	0 ft		
Survey Program: 0-MWD+HDGM													Rule Assigned:		Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning			
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)						
4500	4484	4236	4066	16	23	113.52	288	1031	1306	1275	31.59	41.344				
4550	4526	4271	4100	16	23	111.09	292	1042	1335	1303	31.91	41.833				
4600	4566	4304	4131	16	23	108.57	295	1052	1365	1332	32.22	42.357				
4650	4604	4335	4160	17	23	105.89	298	1061	1396	1363	32.53	42.909				
4700	4639	4362	4186	17	23	102.99	301	1070	1428	1395	32.84	43.480				
4750	4671	4386	4209	17	24	99.85	303	1077	1461	1428	33.16	44.064				
4800	4701	4407	4229	18	24	96.41	305	1083	1496	1462	33.49	44.655				
4850	4726	4425	4245	18	24	92.69	307	1089	1531	1497	33.83	45.245				
4900	4749	4439	4258	19	24	88.67	308	1093	1567	1533	34.18	45.832				
4950	4768	4449	4268	19	24	84.38	309	1096	1603	1569	34.54	46.413				
5000	4783	4456	4275	20	24	79.89	310	1098	1640	1605	34.90	46.986				
5050	4794	4459	4277	21	24	75.26	310	1099	1677	1641	35.26	47.551				
5100	4802	4458	4277	21	24	70.59	310	1099	1713	1678	35.61	48.111				
5150	4805	4454	4272	22	24	65.97	310	1098	1750	1714	35.95	48.665				
5164	4806	4452	4271	22	24	64.72	309	1097	1760	1724	36.05	48.820				
5200	4806	4446	4266	23	24	64.47	309	1095	1786	1750	36.29	49.217				
5300	4807	4432	4252	25	24	63.80	307	1091	1860	1823	36.97	50.325				
5400	4808	4417	4238	27	24	63.13	306	1086	1937	1899	37.63	51.469				
5500	4809	4402	4224	29	24	62.46	305	1082	2015	1977	38.27	52.659				
5600	4811	4388	4210	31	24	61.79	303	1077	2095	2057	38.88	53.898				
5700	4812	4373	4196	33	23	61.13	302	1073	2177	2138	39.45	55.190				
5800	4813	4358	4182	36	23	60.47	300	1069	2260	2220	39.98	56.534				
5900	4814	4344	4168	38	23	59.82	299	1064	2345	2304	40.47	57.927				
6000	4815	4329	4154	40	23	59.17	297	1060	2430	2389	40.93	59.368				
6100	4816	4314	4140	43	23	58.52	296	1055	2516	2475	41.35	60.855				
6200	4818	4299	4126	45	23	57.88	295	1051	2604	2562	41.74	62.384				
6300	4819	4285	4113	48	23	57.24	293	1046	2692	2650	42.09	63.952				
6400	4820	4270	4099	50	23	56.60	292	1042	2781	2738	42.41	65.558				
6500	4821	4255	4085	53	23	55.97	290	1037	2870	2827	42.71	67.200				
6600	4822	4241	4071	55	23	55.35	289	1033	2960	2917	42.98	68.874				
6700	4823	4226	4057	58	23	54.73	287	1028	3051	3008	43.23	70.579				
6800	4824	4211	4043	60	22	54.11	286	1024	3142	3099	43.45	72.313				
6900	4826	4197	4029	63	22	53.50	285	1019	3234	3190	43.65	74.074				
7000	4827	4182	4015	65	22	52.89	283	1015	3326	3282	43.84	75.862				
7100	4828	4167	4001	68	22	52.28	282	1010	3418	3374	44.00	77.674				
7200	4829	4152	3987	70	22	51.69	280	1006	3511	3467	44.16	79.509				
7300	4830	4138	3973	73	22	51.09	279	1001	3604	3560	44.29	81.366				
7400	4831	4123	3959	76	22	50.51	277	997	3697	3653	44.41	83.245				
7500	4833	4108	3945	78	22	49.92	276	992	3791	3746	44.52	85.143				
7600	4834	4094	3932	81	22	49.35	275	988	3885	3840	44.62	87.061				
7700	4835	4079	3918	83	22	48.77	273	983	3979	3934	44.71	88.997				
7800	4836	4064	3904	86	22	48.21	272	979	4073	4029	44.79	90.951				
7900	4837	4050	3890	89	21	47.64	270	974	4168	4123	44.85	92.921				
8000	4838	4035	3876	91	21	47.09	269	970	4263	4218	44.91	94.908				
8100	4840	4020	3862	94	21	46.54	267	965	4358	4313	44.97	96.911				
8200	4841	4005	3848	96	21	45.99	266	961	4453	4408	45.01	98.928				
8300	4842	3991	3834	99	21	45.45	265	956	4548	4503	45.05	100.960				
8400	4843	3976	3820	102	21	44.91	263	952	4644	4599	45.08	103.007				
8500	4844	3961	3806	104	21	44.38	262	947	4739	4694	45.11	105.067				
8600	4845	3947	3792	107	21	43.86	260	943	4835	4790	45.13	107.140				
8700	4846	3932	3778	109	21	43.34	259	938	4931	4886	45.14	109.225				
8800	4848	3917	3764	112	21	42.83	257	934	5027	4982	45.16	111.324				



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<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #578H - Original Drilling - APD Rev 3													Offset Site Error:	0 ft		
Survey Program: 0-MWD+HDGM													Rule Assigned:		Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
8900	4849	3903	3750	115	21	42.32	256	929	5123	5078	45.16	113.434				
9000	4850	3888	3737	117	20	41.82	255	925	5219	5174	45.17	115.556				
9100	4851	3873	3723	120	20	41.32	253	920	5315	5270	45.17	117.688				
9200	4852	3859	3709	123	20	40.83	252	916	5412	5367	45.16	119.832				
9300	4853	3844	3695	125	20	40.34	250	911	5508	5463	45.16	121.987				
9400	4855	3829	3681	128	20	39.86	249	907	5605	5560	45.15	124.152				
9500	4856	3814	3667	130	20	39.38	247	902	5702	5656	45.13	126.326				
9600	4857	3800	3653	133	20	38.91	246	898	5798	5753	45.12	128.511				
9700	4858	3785	3639	136	20	38.45	245	893	5895	5850	45.10	130.704				
9800	4859	3770	3625	138	20	37.99	243	889	5992	5947	45.08	132.907				
9900	4860	3756	3611	141	20	37.53	242	885	6089	6044	45.06	135.119				
10,000	4861	3741	3597	144	20	37.09	240	880	6186	6141	45.04	137.339				
10,100	4863	3726	3583	146	19	36.64	239	876	6283	6238	45.02	139.567				
10,200	4864	3712	3569	149	19	36.20	237	871	6380	6335	44.99	141.804				
10,300	4865	3697	3556	151	19	35.77	236	867	6477	6432	44.97	144.048				
10,400	4866	3682	3542	154	19	35.34	235	862	6574	6529	44.94	146.300				
10,500	4867	3667	3528	157	19	34.91	233	858	6672	6627	44.91	148.559				
10,600	4868	3653	3514	159	19	34.50	232	853	6769	6724	44.88	150.824				
10,700	4870	3638	3500	162	19	34.08	230	849	6866	6821	44.85	153.097				
10,800	4871	3623	3486	165	19	33.67	229	844	6964	6919	44.82	155.376				
10,900	4872	3609	3472	167	19	33.27	227	840	7061	7016	44.79	157.662				
11,000	4873	3594	3458	170	19	32.87	226	835	7159	7114	44.75	159.953				
11,100	4874	3579	3444	173	19	32.47	225	831	7256	7211	44.72	162.250				
11,200	4875	3565	3430	175	18	32.08	223	826	7354	7309	44.69	164.553				
11,300	4876	3550	3416	178	18	31.70	222	822	7451	7407	44.66	166.861				
11,400	4878	3535	3402	180	18	31.32	220	817	7549	7504	44.62	169.174				
11,500	4879	3520	3388	183	18	30.94	219	813	7647	7602	44.59	171.492				
11,600	4880	3506	3375	186	18	30.57	217	808	7744	7700	44.56	173.815				
11,700	4881	3491	3361	188	18	30.20	216	804	7842	7798	44.52	176.142				
11,800	4882	3476	3347	191	18	29.84	215	799	7940	7895	44.49	178.473				
11,900	4883	3462	3333	194	18	29.48	213	795	8038	7993	44.45	180.808				
12,000	4885	3447	3319	196	18	29.13	212	790	8135	8091	44.42	183.147				
12,036	4885	3442	3314	197	18	29.00	211	789	8171	8126	44.41	183.991				



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3														Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM														Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0	0	0	0	0	0	179.83	-60	0	60						
100	100	100	100	0	0	179.83	-60	0	60	60	0.31	194.625			
200	200	200	200	1	1	179.83	-60	0	60	59	1.03	58.524			
300	300	300	300	1	1	179.83	-60	0	60	58	1.74	34.440			
396	396	396	396	1	1	179.83	-60	0	60	58	2.43	24.689			
400	400	400	400	1	1	-62.87	-60	0	60	58	2.46	24.404			
486	486	486	486	2	2	-63.88	-60	0	60	56	3.05	19.521			
500	500	499	499	2	2	-64.09	-60	0	59	56	3.15	18.917			
600	600	599	599	2	2	-65.38	-62	-2	59	56	3.83	15.505			
700	700	699	699	2	2	-66.69	-63	-3	59	55	4.52	13.100			
800	800	799	799	3	3	-67.99	-64	-5	59	54	5.22	11.325			
900	900	899	899	3	3	-69.30	-65	-6	59	53	5.93	9.969			
1000	1000	999	999	3	3	-70.61	-67	-7	59	52	6.64	8.901			
1002	1001	1001	1001	3	3	-70.64	-67	-7	59	52	6.65	8.884 CC			
1100	1100	1099	1099	4	4	-71.93	-68	-9	59	52	7.35	8.041			
1200	1200	1199	1199	4	4	-73.24	-69	-10	59	51	8.07	7.335			
1300	1300	1299	1299	4	4	-74.54	-70	-12	59	50	8.78	6.747			
1400	1400	1399	1399	5	5	-75.85	-72	-13	59	50	9.50	6.250			
1500	1499	1499	1499	5	5	-77.14	-73	-15	59	49	10.21	5.824			
1600	1599	1599	1599	5	5	-78.43	-74	-16	60	49	10.93	5.457			
1700	1699	1699	1699	6	6	-79.72	-75	-18	60	48	11.65	5.138			
1800	1799	1799	1799	6	6	-80.99	-77	-19	60	48	12.37	4.858			
1900	1899	1899	1899	7	7	-82.26	-78	-21	60	47	13.09	4.611			
2000	1999	1999	1999	7	7	-83.51	-79	-22	61	47	13.81	4.391			
2100	2099	2099	2099	7	7	-84.75	-80	-23	61	46	14.53	4.195			
2200	2199	2199	2199	8	8	-85.97	-82	-25	61	46	15.25	4.020			
2300	2299	2299	2299	8	8	-87.19	-83	-26	62	46	15.97	3.862			
2400	2399	2399	2399	8	8	-88.38	-84	-28	62	45	16.69	3.719			
2500	2499	2499	2499	9	9	-89.57	-85	-29	62	45	17.41	3.589			
2600	2599	2599	2599	9	9	-90.73	-87	-31	63	45	18.13	3.472			
2700	2699	2699	2699	9	9	-91.88	-88	-32	63	45	18.85	3.364			
2800	2799	2799	2799	10	10	-93.01	-89	-34	64	44	19.57	3.266			
2900	2899	2899	2899	10	10	-94.12	-90	-35	64	44	20.29	3.176			
3000	2999	2999	2999	11	10	-95.22	-92	-37	65	44	21.01	3.093			
3100	3099	3099	3099	11	11	-96.29	-93	-38	66	44	21.73	3.017			
3200	3199	3199	3199	11	11	-97.35	-94	-39	66	44	22.46	2.947			
3300	3299	3299	3298	12	12	-98.38	-95	-41	67	44	23.18	2.882			
3400	3399	3399	3398	12	12	-99.40	-97	-42	67	44	23.90	2.822			
3500	3498	3499	3498	12	12	-100.40	-98	-44	68	43	24.62	2.766			
3600	3598	3599	3598	13	13	-101.38	-99	-45	69	43	25.34	2.714			
3700	3698	3699	3698	13	13	-102.34	-101	-47	69	43	26.06	2.666			
3800	3798	3799	3798	13	13	-103.28	-102	-48	70	43	26.78	2.621 ES			
3900	3898	3899	3898	14	14	-104.20	-103	-50	71	43	27.50	2.579			
4000	3998	3999	3998	14	14	-105.10	-104	-51	72	43	28.22	2.540			
4100	4098	4099	4098	15	14	-105.98	-106	-53	72	44	28.95	2.503			
4178	4176	4175	4174	15	15	-106.65	-107	-53	73	44	29.48	2.491 SF			
4200	4198	4194	4194	15	15	-143.84	-108	-53	75	45	29.59	2.535			
4250	4248	4238	4237	15	15	-164.06	-111	-51	84	54	29.75	2.821			
4300	4297	4279	4278	15	15	-169.68	-116	-46	100	70	29.79	3.351			
4350	4346	4317	4315	15	15	-172.37	-122	-41	122	93	29.74	4.112			
4400	4393	4350	4346	16	15	-173.94	-129	-35	151	121	29.54	5.096			
4450	4439	4381	4376	16	15	-174.97	-136	-28	184	154	29.46	6.240			



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Rule Assigned:		Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
4500	4484	4400	4393	16	15	-175.60	-141	-23	222	193	28.99	7.641		
4550	4526	4427	4418	16	16	-176.12	-149	-16	262	233	29.13	9.012		
4600	4566	4450	4439	16	16	-176.49	-156	-9	307	277	29.26	10.474		
4650	4604	4450	4439	17	16	-176.56	-156	-9	353	324	28.64	12.312		
4700	4639	4465	4452	17	16	-176.65	-161	-4	400	371	28.77	13.910		
4750	4671	4471	4458	17	16	-176.45	-163	-2	449	420	28.72	15.640		
4800	4701	4475	4461	18	16	-175.45	-164	0	499	470	28.69	17.382		
4850	4726	4476	4462	18	16	-113.06	-165	0	549	520	28.70	19.120		
4900	4749	4475	4461	19	16	-0.42	-164	0	599	570	28.73	20.837		
4950	4768	4472	4459	19	16	0.73	-163	-1	648	620	28.79	22.520		
5000	4783	4468	4455	20	16	1.07	-162	-3	697	669	28.87	24.159		
5050	4794	4450	4439	21	16	1.24	-156	-9	746	717	28.72	25.975		
5100	4802	4450	4439	21	16	1.31	-156	-9	793	764	29.00	27.353		
5150	4805	4450	4439	22	16	1.37	-156	-9	839	810	29.30	28.654		
5164	4806	4450	4439	22	16	1.39	-156	-9	852	823	29.38	29.003		
5200	4806	4450	4439	23	16	1.39	-156	-9	885	855	29.59	29.908		
5300	4807	4421	4413	25	16	1.38	-147	-17	976	947	29.65	32.924		
5400	4808	4400	4393	27	15	1.38	-141	-23	1069	1039	29.80	35.858		
5500	4809	4400	4393	29	15	1.38	-141	-23	1162	1132	30.18	38.500		
5600	4811	4381	4376	31	15	1.38	-136	-28	1256	1225	30.27	41.482		
5700	4812	4370	4366	33	15	1.37	-134	-30	1350	1320	30.43	44.373		
5800	4813	4350	4346	36	15	1.37	-129	-35	1445	1415	30.46	47.439		
5900	4814	4350	4346	38	15	1.37	-129	-35	1541	1510	30.68	50.219		
6000	4815	4350	4346	40	15	1.37	-129	-35	1636	1606	30.86	53.031		
6100	4816	4350	4346	43	15	1.37	-129	-35	1733	1702	31.02	55.867		
6200	4818	4329	4326	45	15	1.36	-125	-39	1829	1798	31.00	58.997		
6300	4819	4323	4320	48	15	1.36	-123	-40	1926	1895	31.09	61.943		
6400	4820	4300	4298	50	15	1.36	-119	-43	2023	1992	31.06	65.132		
6500	4821	4300	4298	53	15	1.36	-119	-43	2120	2089	31.18	68.002		
6600	4822	4300	4298	55	15	1.36	-119	-43	2217	2186	31.28	70.881		
6700	4823	4300	4298	58	15	1.36	-119	-43	2315	2284	31.38	73.768		
6800	4824	4300	4298	60	15	1.36	-119	-43	2413	2381	31.47	76.661		
6900	4826	4300	4298	63	15	1.36	-119	-43	2511	2479	31.56	79.558		
7000	4827	4300	4298	65	15	1.36	-119	-43	2609	2577	31.64	82.457		
7100	4828	4300	4298	68	15	1.36	-119	-43	2707	2675	31.71	85.357		
7200	4829	4300	4298	70	15	1.36	-119	-43	2805	2774	31.79	88.257		
7300	4830	4278	4277	73	15	1.35	-116	-46	2903	2872	31.75	91.437		
7400	4831	4275	4274	76	15	1.35	-116	-47	3002	2970	31.81	94.373		
7500	4833	4272	4271	78	15	1.35	-115	-47	3100	3068	31.86	97.303		
7600	4834	4250	4249	81	15	1.34	-112	-50	3199	3167	31.83	100.501		
7700	4835	4250	4249	83	15	1.34	-112	-50	3298	3266	31.90	103.381		
7800	4836	4250	4249	86	15	1.34	-112	-50	3396	3364	31.96	106.257		
7900	4837	4250	4249	89	15	1.34	-112	-50	3495	3463	32.03	109.128		
8000	4838	4250	4249	91	15	1.34	-112	-50	3594	3562	32.09	111.994		
8100	4840	4250	4249	94	15	1.34	-112	-50	3693	3661	32.15	114.854		
8200	4841	4250	4249	96	15	1.34	-112	-50	3792	3759	32.21	117.707		
8300	4842	4250	4249	99	15	1.34	-112	-50	3891	3858	32.27	120.553		
8400	4843	4250	4249	102	15	1.34	-112	-50	3990	3957	32.33	123.392		
8500	4844	4250	4249	104	15	1.34	-112	-50	4089	4056	32.39	126.223		
8600	4845	4250	4249	107	15	1.34	-112	-50	4188	4155	32.45	129.045		
8700	4846	4250	4249	109	15	1.34	-112	-50	4287	4255	32.51	131.859		
8800	4848	4250	4249	112	15	1.34	-112	-50	4386	4354	32.57	134.664		



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #582H - Original Drilling - APD Rev 3												Offset Site Error:	0 ft		
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft		
Reference												Rule Assigned:			
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)					
8900	4849	4250	4249	115	15	1.34	-112	-50	4485	4453	32.63	137.460			
9000	4850	4250	4249	117	15	1.34	-112	-50	4585	4552	32.69	140.246			
9100	4851	4250	4249	120	15	1.34	-112	-50	4684	4651	32.75	143.022			
9200	4852	4250	4249	123	15	1.34	-112	-50	4783	4751	32.81	145.788			
9300	4853	4250	4249	125	15	1.34	-112	-50	4883	4850	32.87	148.544			
9400	4855	4250	4249	128	15	1.34	-112	-50	4982	4949	32.93	151.289			
9500	4856	4250	4249	130	15	1.34	-112	-50	5081	5048	32.99	154.023			
9600	4857	4250	4249	133	15	1.34	-112	-50	5181	5148	33.05	156.746			
9700	4858	4250	4249	136	15	1.34	-112	-50	5280	5247	33.11	159.458			
9800	4859	4250	4249	138	15	1.34	-112	-50	5380	5347	33.18	162.159			
9900	4860	4250	4249	141	15	1.34	-112	-50	5479	5446	33.24	164.848			
10,000	4861	4250	4249	144	15	1.34	-112	-50	5579	5546	33.30	167.525			
10,100	4863	4227	4227	146	15	1.33	-110	-51	5678	5645	33.29	170.541			
10,200	4864	4226	4226	149	15	1.33	-110	-51	5777	5744	33.35	173.212			
10,300	4865	4225	4225	151	15	1.33	-110	-52	5877	5844	33.42	175.870			
10,400	4866	4224	4224	154	15	1.33	-110	-52	5976	5943	33.48	178.516			
10,500	4867	4224	4223	157	15	1.33	-110	-52	6076	6042	33.54	181.148			
10,600	4868	4223	4222	159	15	1.33	-110	-52	6176	6142	33.61	183.769			
10,700	4870	4200	4199	162	15	1.33	-108	-53	6276	6242	33.60	186.749			
10,800	4871	4200	4199	165	15	1.33	-108	-53	6375	6341	33.67	189.331			
10,900	4872	4200	4199	167	15	1.33	-108	-53	6475	6441	33.74	191.899			
11,000	4873	4200	4199	170	15	1.33	-108	-53	6574	6540	33.81	194.455			
11,100	4874	4200	4199	173	15	1.33	-108	-53	6674	6640	33.88	196.998			
11,200	4875	4200	4199	175	15	1.33	-108	-53	6773	6739	33.95	199.528			
11,300	4876	4200	4199	178	15	1.33	-108	-53	6873	6839	34.02	202.044			
11,400	4878	4200	4199	180	15	1.33	-108	-53	6973	6939	34.09	204.548			
11,500	4879	4200	4199	183	15	1.33	-108	-53	7072	7038	34.16	207.038			
11,600	4880	4200	4199	186	15	1.33	-108	-53	7172	7138	34.23	209.514			
11,700	4881	4200	4199	188	15	1.33	-108	-53	7272	7237	34.30	211.977			
11,800	4882	4200	4199	191	15	1.33	-108	-53	7371	7337	34.38	214.426			
11,900	4883	4200	4199	194	15	1.33	-108	-53	7471	7436	34.45	216.862			
12,000	4885	4200	4199	196	15	1.33	-108	-53	7571	7536	34.52	219.284			
12,036	4885	4200	4199	197	15	1.33	-108	-53	7607	7572	34.55	220.155			



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #605H - Original Drilling - APD Rev 3													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference				Offset				Semi Major Axis		Distance		Rule Assigned:		Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	179.83	-20	0	20					
100	100	100	100	0	0	179.83	-20	0	20	20	0.31	64.875		
200	200	200	200	1	1	179.83	-20	0	20	19	1.03	19.508		
300	300	300	300	1	1	179.83	-20	0	20	18	1.74	11.480		
396	396	396	396	1	1	179.83	-20	0	20	18	2.43	8.230		
400	400	400	400	1	1	-62.87	-20	0	20	18	2.46	8.134		
486	486	486	486	2	2	-67.40	-20	0	19	16	3.06	6.315		
500	500	500	500	2	2	-69.26	-20	1	19	16	3.15	6.047		
592	592	592	592	2	2	-87.86	-18	3	18	14	3.79	4.754 CC		
600	600	600	600	2	2	-90.02	-18	4	18	14	3.85	4.688 ES		
700	700	699	699	2	2	-118.79	-15	10	21	17	4.55	4.639		
800	800	798	797	3	3	-140.99	-11	20	31	25	5.25	5.825		
900	900	895	893	3	3	-153.61	-6	32	46	40	5.94	7.665		
1000	1000	991	988	3	3	-160.69	1	47	65	58	6.61	9.789		
1100	1100	1086	1081	4	4	-164.92	9	65	88	80	7.28	12.046		
1200	1200	1179	1171	4	4	-167.64	18	85	114	106	7.93	14.379		
1300	1300	1270	1259	4	5	-169.48	28	108	144	135	8.57	16.757		
1400	1400	1362	1346	5	5	-170.80	39	133	176	167	9.22	19.085		
1500	1499	1456	1436	5	6	-171.76	50	159	209	199	9.93	21.067		
1600	1599	1551	1526	5	6	-172.46	62	185	242	232	10.64	22.782		
1700	1699	1645	1616	6	7	-172.99	73	211	275	264	11.35	24.277		
1800	1799	1739	1706	6	7	-173.40	85	237	309	297	12.06	25.590		
1900	1899	1834	1796	7	8	-173.74	96	263	342	329	12.78	26.752		
2000	1999	1928	1886	7	8	-174.01	108	289	375	362	13.50	27.787		
2100	2099	2022	1976	7	9	-174.24	119	315	408	394	14.22	28.714		
2200	2199	2116	2066	8	9	-174.44	131	341	441	426	14.94	29.549		
2300	2299	2211	2156	8	10	-174.61	142	368	475	459	15.66	30.305		
2400	2399	2305	2245	8	10	-174.76	154	394	508	491	16.39	30.992		
2500	2499	2399	2335	9	11	-174.88	165	420	541	524	17.11	31.619		
2600	2599	2494	2425	9	11	-175.00	177	446	574	556	17.84	32.194		
2700	2699	2588	2515	9	12	-175.10	189	472	607	589	18.57	32.722		
2800	2799	2682	2605	10	12	-175.19	200	498	641	621	19.29	33.209		
2900	2899	2777	2695	10	13	-175.27	212	524	674	654	20.02	33.660		
3000	2999	2871	2785	11	14	-175.35	223	550	707	686	20.75	34.078		
3100	3099	2965	2875	11	14	-175.41	235	576	740	719	21.48	34.467		
3200	3199	3060	2965	11	15	-175.47	246	603	774	751	22.21	34.830		
3300	3299	3154	3054	12	15	-175.53	258	629	807	784	22.94	35.169		
3400	3399	3248	3144	12	16	-175.58	269	655	840	816	23.67	35.486		
3500	3498	3343	3234	12	16	-175.63	281	681	873	849	24.40	35.784		
3600	3598	3437	3324	13	17	-175.68	292	707	907	881	25.14	36.064		
3700	3698	3531	3414	13	17	-175.72	304	733	940	914	25.87	36.328		
3800	3798	3626	3504	13	18	-175.76	315	759	973	946	26.60	36.576		
3900	3898	3720	3594	14	18	-175.79	327	785	1006	979	27.33	36.811		
4000	3998	3814	3684	14	19	-175.83	339	811	1039	1011	28.07	37.034		
4100	4098	3908	3774	15	20	-175.86	350	837	1073	1044	28.80	37.245		
4178	4176	3982	3844	15	20	-175.88	359	858	1099	1069	29.37	37.401		
4200	4198	4003	3863	15	20	146.49	362	864	1106	1077	29.53	37.449		
4250	4248	4049	3908	15	20	125.38	367	876	1124	1094	29.90	37.598		
4300	4297	4095	3951	15	21	118.88	373	889	1143	1113	30.25	37.798		
4350	4346	4139	3994	15	21	115.20	378	901	1164	1134	30.60	38.047		
4400	4393	4182	4035	16	21	112.51	384	913	1186	1155	30.93	38.342		
4450	4439	4223	4074	16	21	110.25	389	925	1209	1178	31.26	38.680		



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #605H - Original Drilling - APD Rev 3													Offset Site Error:	0 ft		
Survey Program: 0-MWD+HDGM													Rule Assigned:		Offset Well Error:	0 ft
Measured Reference Depth (ft)	Vertical Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
4500	4484	4263	4111	16	22	108.18	393	935	1234	1202	31.59	39.055				
4550	4526	4419	4261	16	22	108.91	422	969	1259	1226	32.76	38.421				
4600	4566	4908	4668	16	24	108.45	659	891	1274	1240	34.29	37.159				
4650	4604	5280	4811	17	24	100.42	918	675	1275	1238	37.47	34.028				
4700	4639	5385	4816	17	24	97.38	991	600	1271	1232	39.51	32.179				
4750	4671	5424	4817	17	25	96.37	1017	572	1268	1228	40.62	31.231				
4800	4701	5464	4817	18	25	95.35	1046	542	1267	1225	41.83	30.280				
4850	4726	5508	4818	18	26	94.35	1075	511	1266	1223	43.21	29.295				
4900	4749	5552	4818	19	26	93.41	1106	478	1266	1221	44.62	28.360				
4909	4752	5561	4818	19	27	93.25	1112	472	1266	1221	44.90	28.187				
4950	4768	5599	4819	19	27	92.57	1138	444	1266	1219	46.15	27.421				
5000	4783	5647	4819	20	28	91.86	1171	409	1266	1218	47.77	26.500				
5050	4794	5695	4820	21	29	91.30	1204	374	1267	1217	49.48	25.595				
5100	4802	5745	4820	21	30	90.91	1238	338	1267	1216	51.27	24.712				
5150	4805	5795	4821	22	31	90.72	1272	302	1268	1214	53.13	23.861				
5164	4806	5809	4821	22	31	90.70	1282	292	1268	1214	53.65	23.632				
5200	4806	5845	4821	23	32	90.69	1307	265	1268	1213	55.03	23.042				
5300	4807	5945	4822	25	34	90.69	1375	193	1269	1210	59.02	21.500				
5400	4808	6045	4823	27	37	90.68	1444	120	1270	1207	63.22	20.090				
5500	4809	6145	4824	29	39	90.68	1513	47	1271	1203	67.57	18.811				
5600	4811	6245	4825	31	41	90.67	1581	-25	1272	1200	72.05	17.654				
5700	4812	6345	4826	33	43	90.67	1650	-98	1273	1196	76.64	16.609				
5800	4813	6445	4827	36	46	90.66	1718	-171	1274	1193	81.31	15.666				
5900	4814	6545	4829	38	48	90.65	1787	-244	1275	1189	86.06	14.812				
6000	4815	6645	4830	40	51	90.65	1856	-316	1276	1185	90.87	14.039				
6100	4816	6745	4831	43	53	90.64	1924	-389	1277	1181	95.74	13.336				
6200	4818	6845	4832	45	56	90.64	1993	-462	1278	1177	100.64	12.695				
6300	4819	6945	4833	48	58	90.63	2062	-534	1279	1173	105.59	12.110				
6400	4820	7045	4834	50	61	90.63	2130	-607	1280	1169	110.56	11.573				
6500	4821	7145	4835	53	63	90.62	2199	-680	1281	1165	115.57	11.080				
6600	4822	7245	4836	55	66	90.62	2268	-753	1281	1161	120.60	10.626				
6700	4823	7345	4837	58	68	90.61	2336	-825	1282	1157	125.65	10.207				
6800	4824	7445	4838	60	71	90.61	2405	-898	1283	1153	130.72	9.818				
6900	4826	7545	4839	63	73	90.60	2474	-971	1284	1149	135.80	9.458				
7000	4827	7645	4840	65	76	90.60	2542	-1043	1285	1144	140.90	9.122				
7100	4828	7745	4841	68	78	90.59	2611	-1116	1286	1140	146.02	8.809				
7200	4829	7845	4842	70	81	90.58	2679	-1189	1287	1136	151.14	8.517				
7300	4830	7945	4843	73	83	90.58	2748	-1262	1288	1132	156.28	8.243				
7400	4831	8045	4844	76	86	90.57	2817	-1334	1289	1128	161.43	7.986				
7500	4833	8145	4845	78	88	90.57	2885	-1407	1290	1124	166.59	7.744				
7600	4834	8245	4846	81	91	90.56	2954	-1480	1291	1119	171.75	7.517				
7700	4835	8345	4847	83	94	90.56	3023	-1552	1292	1115	176.92	7.303				
7800	4836	8445	4848	86	96	90.55	3091	-1625	1293	1111	182.10	7.100				
7900	4837	8545	4849	89	99	90.55	3160	-1698	1294	1107	187.29	6.909				
8000	4838	8645	4850	91	101	90.54	3229	-1771	1295	1102	192.48	6.728				
8100	4840	8745	4852	94	104	90.54	3297	-1843	1296	1098	197.67	6.556				
8200	4841	8845	4853	96	107	90.53	3366	-1916	1297	1094	202.87	6.392				
8300	4842	8945	4854	99	109	90.53	3434	-1989	1298	1090	208.08	6.237				
8400	4843	9045	4855	102	112	90.52	3503	-2061	1299	1085	213.28	6.089				
8500	4844	9145	4856	104	114	90.52	3572	-2134	1300	1081	218.50	5.948				
8600	4845	9245	4857	107	117	90.51	3640	-2207	1301	1077	223.71	5.814				
8700	4846	9345	4858	109	120	90.51	3709	-2279	1302	1073	228.93	5.686				



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - Carson #605H - Original Drilling - APD Rev 3											Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Offset Well Error:	0 ft
Reference				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)	
8800	4848	9445	4859	112	122	90.50	3778	-2352	1303	1068	234.16	5.563
8900	4849	9545	4860	115	125	90.49	3846	-2425	1304	1064	239.38	5.445
9000	4850	9645	4861	117	127	90.49	3915	-2498	1304	1060	244.61	5.333
9100	4851	9745	4862	120	130	90.48	3984	-2570	1305	1056	249.84	5.225
9200	4852	9845	4863	123	133	90.48	4052	-2643	1306	1051	255.07	5.122
9300	4853	9945	4864	125	135	90.47	4121	-2716	1307	1047	260.31	5.022
9400	4855	10,045	4865	128	138	90.47	4190	-2788	1308	1043	265.55	4.927
9500	4856	10,145	4866	130	140	90.46	4258	-2861	1309	1038	270.79	4.835
9600	4857	10,245	4867	133	143	90.46	4327	-2934	1310	1034	276.03	4.747
9700	4858	10,345	4868	136	146	90.45	4395	-3007	1311	1030	281.27	4.662
9800	4859	10,445	4869	138	148	90.45	4464	-3079	1312	1026	286.52	4.580
9900	4860	10,545	4870	141	151	90.44	4533	-3152	1313	1021	291.76	4.501
10,000	4861	10,645	4871	144	154	90.44	4601	-3225	1314	1017	297.01	4.424
10,100	4863	10,745	4872	146	156	90.43	4670	-3297	1315	1013	302.26	4.351
10,200	4864	10,845	4873	149	159	90.43	4739	-3370	1316	1008	307.51	4.279
10,300	4865	10,945	4874	151	161	90.42	4807	-3443	1317	1004	312.76	4.211
10,400	4866	11,045	4876	154	164	90.42	4876	-3516	1318	1000	318.02	4.144
10,500	4867	11,145	4877	157	167	90.41	4945	-3588	1319	996	323.27	4.080
10,600	4868	11,245	4878	159	169	90.41	5013	-3661	1320	991	328.53	4.017
10,700	4870	11,345	4879	162	172	90.40	5082	-3734	1321	987	333.78	3.957
10,800	4871	11,445	4880	165	174	90.40	5150	-3806	1322	983	339.04	3.898
10,900	4872	11,545	4881	167	177	90.39	5219	-3879	1323	978	344.30	3.842
11,000	4873	11,645	4882	170	180	90.39	5288	-3952	1324	974	349.56	3.787
11,100	4874	11,745	4883	173	182	90.38	5356	-4024	1325	970	354.82	3.733
11,200	4875	11,845	4884	175	185	90.38	5425	-4097	1326	965	360.08	3.681
11,300	4876	11,945	4885	178	188	90.37	5494	-4170	1327	961	365.34	3.631
11,400	4878	12,045	4886	180	190	90.37	5562	-4243	1327	957	370.60	3.582
11,500	4879	12,145	4887	183	193	90.36	5631	-4315	1328	953	375.87	3.534
11,600	4880	12,245	4888	186	195	90.36	5700	-4388	1329	948	381.13	3.488
11,700	4881	12,345	4889	188	198	90.35	5768	-4461	1330	944	386.40	3.443
11,800	4882	12,445	4890	191	201	90.35	5837	-4533	1331	940	391.66	3.399
11,900	4883	12,523	4891	194	203	90.34	5890	-4590	1332	936	396.30	3.362 SF
12,000	4885	12,523	4891	196	203	90.34	5890	-4590	1339	941	397.35	3.369
12,036	4885	12,523	4891	197	203	90.34	5890	-4590	1343	946	397.19	3.381



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - New Mexico Fed 2 - OH - OH														Offset Site Error:	0 ft		
Survey Program: 100-UNKNOWN														Rule Assigned:		Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning				
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)							
0	0	0	0	0	0	-50.11	3553	-4251	5566								
100	100	0	0	0	0	-50.11	3553	-4251	5557	5557	0.24	N/A					
200	200	0	0	1	0	-50.11	3553	-4251	5550	5550	0.53	N/A					
300	300	0	0	1	0	-50.11	3553	-4251	5545	5544	0.88	6,329.408					
396	396	0	0	1	0	-50.11	3553	-4251	5542	5541	1.22	4,555.992					
400	400	0	0	1	0	67.20	3553	-4251	5542	5541	1.23	4,504.692					
486	486	0	0	2	0	67.24	3553	-4251	5540	5538	1.52	3,644.804					
500	500	0	0	2	0	67.24	3553	-4251	5539	5538	1.57	3,533.439					
600	600	64	64	2	3	67.26	3553	-4251	5538	5534	4.47	1,238.704					
700	700	164	164	2	7	67.29	3553	-4251	5537	5528	8.82	627.764					
800	800	264	264	3	11	67.32	3553	-4251	5536	5523	13.17	420.258					
900	900	364	364	3	15	67.35	3553	-4251	5534	5517	17.53	315.786					
1000	1000	464	464	3	19	67.38	3553	-4251	5533	5511	21.88	252.877					
1100	1100	564	564	4	23	67.41	3553	-4251	5532	5506	26.24	210.847					
1200	1200	664	664	4	27	67.44	3553	-4251	5531	5500	30.59	180.782					
1300	1300	764	764	4	31	67.47	3553	-4251	5530	5495	34.95	158.210					
1400	1400	864	864	5	35	67.50	3553	-4251	5528	5489	39.31	140.641					
1500	1499	963	963	5	39	67.53	3553	-4251	5527	5484	43.67	126.578					
1600	1599	1063	1063	5	43	67.56	3553	-4251	5526	5478	48.03	115.066					
1700	1699	1163	1163	6	47	67.59	3553	-4251	5525	5472	52.38	105.469					
1800	1799	1263	1263	6	51	67.62	3553	-4251	5524	5467	56.74	97.347					
1900	1899	1363	1363	7	55	67.65	3553	-4251	5522	5461	61.10	90.383					
2000	1999	1463	1463	7	59	67.68	3553	-4251	5521	5456	65.46	84.346					
2100	2099	1563	1563	7	63	67.71	3553	-4251	5520	5450	69.82	79.063					
2200	2199	1663	1663	8	67	67.74	3553	-4251	5519	5445	74.18	74.401					
2300	2299	1763	1763	8	71	67.77	3553	-4251	5518	5439	78.54	70.256					
2400	2399	1863	1863	8	75	67.80	3553	-4251	5516	5434	82.90	66.548					
2500	2499	1963	1963	9	79	67.83	3553	-4251	5515	5428	87.25	63.209					
2600	2599	2063	2063	9	83	67.86	3553	-4251	5514	5422	91.61	60.189					
2700	2699	2163	2163	9	87	67.89	3553	-4251	5513	5417	95.97	57.442					
2800	2799	2263	2263	10	91	67.92	3553	-4251	5512	5411	100.33	54.935					
2900	2899	2363	2363	10	95	67.95	3553	-4251	5511	5406	104.69	52.636					
3000	2999	2463	2463	11	99	67.98	3553	-4251	5509	5400	109.05	50.521					
3100	3099	2563	2563	11	103	68.01	3553	-4251	5508	5395	113.41	48.569					
3200	3199	2663	2663	11	107	68.04	3553	-4251	5507	5389	117.77	46.761					
3300	3299	2763	2763	12	111	68.07	3553	-4251	5506	5384	122.13	45.082					
3400	3399	2863	2863	12	115	68.10	3553	-4251	5505	5378	126.49	43.519					
3500	3498	2962	2962	12	118	68.13	3553	-4251	5503	5373	130.85	42.060					
3600	3598	3062	3062	13	122	68.16	3553	-4251	5502	5367	135.21	40.695					
3700	3698	3162	3162	13	126	68.19	3553	-4251	5501	5362	139.57	39.416					
3800	3798	3262	3262	13	130	68.22	3553	-4251	5500	5356	143.93	38.214					
3900	3898	3362	3362	14	134	68.25	3553	-4251	5499	5351	148.29	37.082					
4000	3998	3462	3462	14	138	68.28	3553	-4251	5498	5345	152.65	36.016					
4100	4098	3562	3562	15	142	68.31	3553	-4251	5496	5339	157.01	35.008					
4178	4176	3640	3640	15	146	68.34	3553	-4251	5496	5335	160.40	34.261					
4200	4198	3662	3662	15	146	31.35	3553	-4251	5495	5334	161.36	34.053					
4250	4248	3712	3712	15	148	11.68	3553	-4251	5491	5327	163.53	33.575					
4300	4297	3761	3761	15	150	6.57	3553	-4251	5483	5317	165.68	33.090					
4350	4346	3810	3810	15	152	4.27	3553	-4251	5471	5303	167.80	32.601					
4400	4393	3857	3857	16	154	2.95	3553	-4251	5455	5285	169.87	32.112					
4450	4439	3903	3903	16	156	2.08	3553	-4251	5435	5263	171.87	31.624					
4500	4484	3948	3948	16	158	1.44	3553	-4251	5412	5239	173.81	31.140					



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - New Mexico Fed 2 - OH - OH													Offset Site Error:	0 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0 ft
Reference							Rule Assigned:						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4550	4526	3990	3990	16	160	0.94	3553	-4251	5386	5210	175.66	30.662		
4600	4566	4030	4030	16	161	0.51	3553	-4251	5356	5179	177.41	30.192		
4650	4604	4068	4068	17	163	0.13	3553	-4251	5324	5145	179.05	29.733		
4700	4639	4103	4103	17	164	-0.25	3553	-4251	5288	5107	180.57	29.285		
4750	4671	4135	4135	17	165	-0.65	3553	-4251	5250	5068	181.97	28.850		
4800	4701	4165	4165	18	167	-1.10	3553	-4251	5209	5026	183.23	28.430		
4850	4726	4190	4190	18	168	-1.65	3553	-4251	5166	4982	184.34	28.026		
4900	4749	4213	4213	19	169	-2.35	3553	-4251	5122	4936	185.31	27.639		
4950	4768	4232	4232	19	169	-3.33	3553	-4251	5075	4889	186.12	27.270		
5000	4783	4247	4247	20	170	-4.86	3553	-4251	5028	4841	186.77	26.920		
5050	4794	4258	4258	21	170	-7.61	3553	-4251	4979	4792	187.25	26.590		
5100	4802	4266	4266	21	171	-14.05	3553	-4251	4930	4742	187.57	26.281		
5150	4805	4269	4269	22	171	-42.62	3553	-4251	4880	4692	187.73	25.994		
5164	4806	4270	4270	22	171	-69.72	3553	-4251	4866	4678	187.74	25.919		
5200	4806	4270	4270	23	171	-69.86	3553	-4251	4830	4642	187.76	25.723		
5300	4807	4271	4271	25	171	-70.24	3553	-4251	4730	4542	187.82	25.184		
5400	4808	4272	4272	27	171	-70.63	3553	-4251	4630	4442	187.87	24.644		
5500	4809	4273	4273	29	171	-71.02	3553	-4251	4530	4342	187.93	24.105		
5600	4811	4275	4275	31	171	-71.41	3553	-4251	4430	4242	187.99	23.566		
5700	4812	4276	4276	33	171	-71.80	3553	-4251	4330	4142	188.05	23.027		
5800	4813	4277	4277	36	171	-72.19	3553	-4251	4230	4042	188.12	22.488		
5900	4814	4278	4278	38	171	-72.59	3553	-4251	4130	3942	188.18	21.949		
6000	4815	4279	4279	40	171	-72.99	3553	-4251	4030	3842	188.25	21.410		
6100	4816	4280	4280	43	171	-73.38	3553	-4251	3930	3742	188.32	20.872		
6200	4818	4282	4282	45	171	-73.79	3553	-4251	3831	3642	188.39	20.333		
6300	4819	4283	4283	48	171	-74.19	3553	-4251	3731	3542	188.46	19.795		
6400	4820	4284	4284	50	171	-74.59	3553	-4251	3631	3442	188.54	19.257		
6500	4821	4285	4285	53	171	-75.00	3553	-4251	3531	3342	188.62	18.719		
6600	4822	4286	4286	55	171	-75.40	3553	-4251	3431	3242	188.70	18.182		
6700	4823	4287	4287	58	171	-75.81	3553	-4251	3331	3142	188.79	17.644		
6800	4824	4288	4288	60	172	-76.22	3553	-4251	3231	3042	188.88	17.107		
6900	4826	4290	4290	63	172	-76.63	3553	-4251	3131	2942	188.98	16.569		
7000	4827	4291	4291	65	172	-77.05	3553	-4251	3031	2842	189.08	16.032		
7100	4828	4292	4292	68	172	-77.46	3553	-4251	2932	2742	189.19	15.495		
7200	4829	4293	4293	70	172	-77.88	3553	-4251	2832	2642	189.31	14.958		
7300	4830	4294	4294	73	172	-78.29	3553	-4251	2732	2542	189.43	14.422		
7400	4831	4295	4295	76	172	-78.71	3553	-4251	2632	2442	189.56	13.885		
7500	4833	4297	4297	78	172	-79.13	3553	-4251	2532	2343	189.70	13.348		
7600	4834	4298	4298	81	172	-79.55	3553	-4251	2432	2243	189.86	12.812		
7700	4835	4299	4299	83	172	-79.97	3553	-4251	2333	2143	190.03	12.275		
7800	4836	4300	4300	86	172	-80.39	3553	-4251	2233	2043	190.21	11.739		
7900	4837	4301	4301	89	172	-80.82	3553	-4251	2133	1943	190.42	11.202		
8000	4838	4302	4302	91	172	-81.24	3553	-4251	2033	1843	190.65	10.665		
8100	4840	4304	4304	94	172	-81.67	3553	-4251	1934	1743	190.92	10.128		
8200	4841	4305	4305	96	172	-82.09	3553	-4251	1834	1643	191.21	9.591		
8300	4842	4306	4306	99	172	-82.52	3553	-4251	1734	1543	191.56	9.054		
8400	4843	4307	4307	102	172	-82.95	3553	-4251	1635	1443	191.96	8.517		
8500	4844	4308	4308	104	172	-83.38	3553	-4251	1535	1343	192.42	7.979		
8600	4845	4309	4309	107	172	-83.81	3553	-4251	1436	1243	192.98	7.440		
8700	4846	4310	4310	109	172	-84.24	3553	-4251	1336	1143	193.65	6.901		
8800	4848	4312	4312	112	172	-84.67	3553	-4251	1237	1043	194.46	6.362		
8900	4849	4313	4313	115	173	-85.10	3553	-4251	1138	942	195.46	5.822		



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - New Mexico Fed 2 - OH - OH												Offset Site Error:	0 ft		
Survey Program: 100-UNKNOWN												Offset Well Error:	0 ft		
Reference												Rule Assigned:			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
9000	4850	4314	4314	117	173	-85.54	3553	-4251	1039	842	196.72	5.281			
9100	4851	4315	4315	120	173	-85.97	3553	-4251	940	742	198.32	4.740			
9200	4852	4316	4316	123	173	-86.40	3553	-4251	842	641	200.40	4.200			
9300	4853	4317	4317	125	173	-86.84	3553	-4251	743	540	203.16	3.660			
9400	4855	4319	4319	128	173	-87.27	3553	-4251	646	439	206.91	3.122			
9500	4856	4320	4320	130	173	-87.70	3553	-4251	549	337	212.16	2.589			
9600	4857	4321	4321	133	173	-88.14	3553	-4251	454	234	219.83	2.065			
9700	4858	4322	4322	136	173	-88.57	3553	-4251	361	130	231.56	1.560			
9800	4859	4323	4323	138	173	-89.01	3553	-4251	274	23	250.47	1.093	Level 3		
9900	4860	4324	4324	141	173	-89.44	3553	-4251	199	-82	280.92	0.707	Level 3		
10,000	4861	4325	4325	144	173	-89.88	3553	-4251	155	-160	314.10	0.492	Level 3		
10,028	4862	4326	4326	144	173	-90.00	3553	-4251	152	-165	317.31	0.479	Level 3, CC, ES, SF		
10,100	4863	4327	4327	146	173	-90.31	3553	-4251	168	-137	305.76	0.551	Level 3		
10,200	4864	4328	4328	149	173	-90.75	3553	-4251	230	-44	273.30	0.840	Level 3		
10,300	4865	4329	4329	151	173	-91.18	3553	-4251	312	62	249.61	1.249	Level 3		
10,400	4866	4330	4330	154	173	-91.62	3553	-4251	402	167	234.85	1.712			
10,500	4867	4331	4331	157	173	-92.05	3553	-4251	496	271	225.37	2.201			
10,600	4868	4332	4332	159	173	-92.49	3553	-4251	592	373	218.95	2.704			
10,700	4870	4334	4334	162	173	-92.92	3553	-4251	689	475	214.41	3.214			
10,800	4871	4335	4335	165	173	-93.36	3553	-4251	787	576	211.08	3.728			
10,900	4872	4336	4336	167	173	-93.79	3553	-4251	885	677	208.56	4.245			
11,000	4873	4337	4337	170	173	-94.22	3553	-4251	984	777	206.62	4.762			
11,100	4874	4338	4338	173	174	-94.66	3553	-4251	1083	878	205.09	5.280			
11,200	4875	4339	4339	175	174	-95.09	3553	-4251	1182	978	203.87	5.798			
11,300	4876	4340	4340	178	174	-95.52	3553	-4251	1281	1078	202.88	6.315			
11,400	4878	4342	4342	180	174	-95.95	3553	-4251	1380	1178	202.07	6.832			
11,500	4879	4343	4343	183	174	-96.38	3553	-4251	1480	1279	201.41	7.348			
11,600	4880	4344	4344	186	174	-96.81	3553	-4251	1579	1379	200.85	7.863			
11,700	4881	4345	4345	188	174	-97.24	3553	-4251	1679	1479	200.40	8.378			
11,800	4882	4346	4346	191	174	-97.67	3553	-4251	1779	1579	200.01	8.892			
11,900	4883	4347	4347	194	174	-98.10	3553	-4251	1878	1679	199.69	9.406			
12,000	4885	4349	4349	196	174	-98.52	3553	-4251	1978	1778	199.43	9.918			
12,036	4885	4349	4349	197	174	-98.67	3553	-4251	2014	1815	199.34	10.103			



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti 17-0 - OH - OH														Offset Site Error:	0 ft	
Survey Program: 368-INCLINOMETER														Offset Well Error:		0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)						
0	0	0	0	0	0	-51.68	2527	-3197	4075							
100	100	57	57	0	2	-51.68	2527	-3197	4075	4073	1.89	2,161.354				
200	200	157	157	1	5	-51.68	2527	-3197	4075	4070	5.28	771.665				
300	300	257	257	1	8	-51.68	2527	-3197	4075	4066	8.68	469.676				
396	396	353	353	1	11	-51.68	2527	-3197	4075	4063	11.93	341.433				
400	400	357	357	1	11	65.62	2527	-3197	4075	4063	12.07	337.584				
486	486	443	443	2	13	65.65	2527	-3197	4074	4059	14.98	272.060				
500	500	457	457	2	14	65.66	2527	-3197	4074	4059	15.45	263.779				
600	600	557	557	2	17	65.70	2527	-3197	4073	4054	18.83	216.329				
700	700	657	657	2	20	65.74	2527	-3197	4072	4049	22.22	183.206				
800	800	759	759	3	23	65.78	2527	-3197	4070	4045	25.68	158.520				
900	900	861	861	3	26	65.82	2527	-3197	4069	4040	29.13	139.675				
1000	1000	957	957	3	29	65.86	2527	-3197	4068	4035	32.39	125.595				
1100	1100	1057	1057	4	32	65.90	2527	-3197	4066	4031	35.78	113.648				
1200	1200	1157	1157	4	35	65.94	2527	-3197	4065	4026	39.17	103.769				
1300	1300	1261	1261	4	38	65.99	2527	-3197	4064	4021	42.70	95.177				
1400	1400	1365	1365	5	41	66.03	2527	-3197	4063	4016	46.23	87.870				
1500	1499	1457	1456	5	44	66.06	2527	-3197	4061	4012	49.36	82.279				
1600	1599	1556	1556	5	47	66.10	2527	-3197	4060	4007	52.76	76.959				
1700	1699	1656	1656	6	50	66.14	2527	-3197	4059	4003	56.15	72.282				
1800	1799	1761	1761	6	53	66.19	2527	-3197	4058	3998	59.69	67.984				
1900	1899	1866	1866	7	57	66.23	2527	-3197	4056	3993	63.23	64.155				
2000	1999	1956	1956	7	59	66.26	2527	-3197	4055	3989	66.34	61.123				
2100	2099	2056	2056	7	62	66.30	2527	-3197	4054	3984	69.74	58.128				
2200	2199	2156	2156	8	65	66.35	2527	-3197	4052	3979	73.13	55.411				
2300	2299	2256	2256	8	69	66.39	2527	-3197	4051	3975	76.53	52.936				
2400	2399	2357	2356	8	72	66.44	2528	-3197	4051	3971	79.94	50.673				
2500	2499	2460	2460	9	75	66.48	2528	-3197	4049	3966	83.45	48.522				
2600	2599	2564	2564	9	78	66.52	2528	-3197	4048	3961	86.97	46.544				
2700	2699	2668	2668	9	81	66.56	2527	-3197	4046	3956	90.49	44.718				
2800	2799	2772	2772	10	84	66.60	2527	-3197	4045	3951	94.01	43.028				
2900	2899	2856	2856	10	87	66.63	2527	-3197	4044	3947	96.91	41.725				
3000	2999	2956	2956	11	90	66.67	2527	-3197	4042	3942	100.31	40.300				
3100	3099	3058	3057	11	93	66.72	2527	-3197	4042	3938	103.76	38.953				
3200	3199	3165	3165	11	96	66.76	2527	-3197	4040	3933	107.37	37.627				
3300	3299	3272	3272	12	99	66.80	2527	-3197	4039	3928	110.99	36.387				
3400	3399	3356	3356	12	102	66.84	2527	-3197	4037	3923	113.89	35.448				
3500	3498	3456	3455	12	105	66.88	2527	-3197	4036	3919	117.29	34.411				
3600	3598	3557	3557	13	108	66.93	2527	-3197	4035	3915	120.74	33.423				
3700	3698	3664	3664	13	111	66.97	2527	-3197	4034	3910	124.35	32.441				
3800	3798	3771	3771	13	115	67.01	2527	-3197	4033	3905	127.96	31.513				
3900	3898	3856	3855	14	117	67.04	2527	-3197	4031	3900	130.88	30.801				
4000	3998	3955	3955	14	120	67.08	2527	-3197	4030	3896	134.28	30.012				
4100	4098	4057	4057	15	123	67.13	2527	-3197	4029	3892	137.72	29.256				
4178	4176	4141	4141	15	126	67.17	2527	-3197	4028	3888	140.55	28.661				
4200	4198	4164	4164	15	126	30.18	2527	-3197	4028	3886	141.34	28.494				
4250	4248	4218	4218	15	128	10.50	2527	-3197	4023	3880	143.15	28.105				
4300	4297	4271	4271	15	130	5.38	2527	-3197	4015	3870	144.93	27.701				
4350	4346	4303	4303	15	131	3.05	2527	-3197	4003	3857	146.09	27.399				
4400	4393	4350	4350	16	132	1.69	2527	-3197	3987	3839	147.70	26.994				
4450	4439	4396	4396	16	134	0.77	2527	-3197	3967	3818	149.26	26.581				
4500	4484	4441	4441	16	135	0.09	2527	-3197	3945	3794	150.77	26.164				



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti 17-0 - OH - OH													Offset Site Error:	0 ft
Survey Program: 368-INCLINOMETER											Rule Assigned:		Offset Well Error:	0 ft
Measured Reference Depth (ft)	Vertical Reference Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
4550	4526	4490	4490	16	136	-0.49	2527	-3197	3918	3766	152.41	25.709		
4600	4566	4537	4536	16	138	-1.01	2527	-3197	3889	3735	153.96	25.257		
4650	4604	4580	4580	17	139	-1.53	2527	-3197	3856	3700	155.41	24.810		
4700	4639	4621	4620	17	140	-2.08	2526	-3197	3820	3663	156.75	24.369		
4750	4671	4629	4628	17	141	-2.66	2527	-3197	3782	3625	157.11	24.071		
4800	4701	4658	4658	18	141	-3.36	2527	-3197	3741	3583	158.09	23.665		
4850	4726	4684	4683	18	142	-4.25	2527	-3197	3698	3540	158.96	23.267		
4900	4749	4706	4706	19	143	-5.43	2527	-3197	3654	3494	159.71	22.878		
4950	4768	4725	4725	19	143	-7.12	2527	-3197	3608	3447	160.33	22.500		
5000	4783	4740	4740	20	144	-9.76	2527	-3197	3560	3399	160.84	22.134		
5050	4794	4751	4751	21	144	-14.47	2527	-3197	3511	3350	161.21	21.781		
5100	4802	4759	4759	21	145	-24.96	2527	-3197	3462	3301	161.46	21.442		
5150	4805	4763	4762	22	145	-58.90	2527	-3197	3412	3251	161.58	21.117		
5164	4806	4763	4763	22	145	-78.32	2527	-3197	3398	3237	161.59	21.031		
5200	4806	4763	4763	23	145	-78.44	2527	-3197	3362	3201	161.61	20.805		
5300	4807	4764	4764	25	145	-78.77	2527	-3197	3262	3101	161.66	20.181		
5400	4808	4766	4765	27	145	-79.11	2527	-3197	3163	3001	161.71	19.558		
5500	4809	4767	4766	29	145	-79.45	2527	-3197	3063	2901	161.76	18.935		
5600	4811	4768	4768	31	145	-79.79	2527	-3197	2963	2801	161.81	18.311		
5700	4812	4769	4769	33	145	-80.12	2527	-3197	2863	2701	161.88	17.688		
5800	4813	4770	4770	36	145	-80.46	2527	-3197	2763	2602	161.94	17.065		
5900	4814	4771	4771	38	145	-80.80	2527	-3197	2664	2502	162.02	16.441		
6000	4815	4773	4772	40	145	-81.14	2527	-3197	2564	2402	162.10	15.818		
6100	4816	4774	4773	43	145	-81.48	2527	-3197	2464	2302	162.18	15.194		
6200	4818	4775	4775	45	145	-81.83	2527	-3197	2365	2202	162.28	14.571		
6300	4819	4776	4776	48	145	-82.17	2527	-3197	2265	2103	162.40	13.947		
6400	4820	4777	4777	50	145	-82.51	2527	-3197	2165	2003	162.52	13.323		
6500	4821	4778	4778	53	145	-82.86	2527	-3197	2066	1903	162.66	12.699		
6600	4822	4780	4779	55	145	-83.20	2527	-3197	1966	1803	162.83	12.075		
6700	4823	4781	4780	58	145	-83.54	2527	-3197	1867	1704	163.02	11.451		
6800	4824	4782	4781	60	145	-83.89	2527	-3197	1767	1604	163.25	10.826		
6900	4826	4783	4783	63	145	-84.23	2527	-3197	1668	1504	163.52	10.200		
7000	4827	4784	4784	65	145	-84.58	2527	-3197	1569	1405	163.84	9.574		
7100	4828	4785	4785	68	145	-84.93	2527	-3197	1469	1305	164.22	8.947		
7200	4829	4786	4786	70	145	-85.27	2527	-3197	1370	1206	164.70	8.320		
7300	4830	4788	4787	73	145	-85.62	2527	-3197	1271	1106	165.28	7.692		
7400	4831	4789	4788	76	145	-85.97	2527	-3197	1173	1007	166.02	7.063		
7500	4833	4790	4790	78	145	-86.31	2527	-3197	1074	907	166.95	6.433		
7600	4834	4791	4791	81	145	-86.66	2527	-3197	976	808	168.16	5.802		
7700	4835	4792	4792	83	146	-87.01	2527	-3197	878	708	169.73	5.172		
7800	4836	4793	4793	86	146	-87.36	2527	-3197	780	609	171.83	4.542		
7900	4837	4795	4794	89	146	-87.71	2527	-3197	684	509	174.69	3.915		
8000	4838	4796	4795	91	146	-88.06	2527	-3197	589	410	178.66	3.294		
8100	4840	4797	4797	94	146	-88.40	2527	-3197	495	311	184.35	2.685		
8200	4841	4798	4798	96	146	-88.75	2527	-3197	404	212	192.75	2.098		
8300	4842	4799	4799	99	146	-89.10	2527	-3197	319	114	205.46	1.555		
8400	4843	4800	4800	102	146	-89.45	2527	-3197	246	22	224.22	1.098 Level 3		
8500	4844	4801	4801	104	146	-89.80	2527	-3197	198	-47	245.43	0.807 Level 3		
8557	4845	4802	4802	106	146	-90.00	2527	-3197	190	-62	251.52	0.754 Level 3, CC, ES, SF		
8600	4845	4803	4802	107	146	-90.15	2527	-3197	194	-56	250.30	0.777 Level 3		
8700	4846	4804	4803	109	146	-90.50	2527	-3197	237	3	234.50	1.012 Level 3		
8800	4848	4805	4805	112	146	-90.85	2527	-3197	308	91	217.03	1.419 Level 3		



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti 17-0 - OH - OH												Offset Site Error:	0 ft
Survey Program: 368-INCLINOMETER												Offset Well Error:	0 ft
Rule Assigned:													
Measured Reference Depth (ft)	Vertical Reference Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8900	4849	4806	4806	115	146	-91.20	2527	-3197	392	187	204.42	1.916	
9000	4850	4807	4807	117	146	-91.55	2527	-3197	482	286	195.85	2.459	
9100	4851	4808	4808	120	146	-91.89	2527	-3197	575	385	189.91	3.028	
9200	4852	4810	4809	123	146	-92.24	2527	-3197	670	485	185.65	3.610	
9300	4853	4811	4810	125	146	-92.59	2527	-3197	767	584	182.51	4.200	
9400	4855	4812	4812	128	146	-92.94	2527	-3197	864	684	180.13	4.796	
9500	4856	4813	4813	130	146	-93.29	2527	-3197	962	783	178.28	5.394	
9600	4857	4814	4814	133	146	-93.64	2527	-3197	1060	883	176.82	5.994	
9700	4858	4815	4815	136	146	-93.98	2527	-3197	1158	983	175.65	6.595	
9800	4859	4816	4816	138	146	-94.33	2527	-3197	1257	1082	174.70	7.196	
9900	4860	4818	4817	141	146	-94.68	2527	-3197	1356	1182	173.91	7.797	
10,000	4861	4819	4818	144	146	-95.02	2527	-3197	1455	1282	173.27	8.398	
10,100	4863	4820	4820	146	146	-95.37	2527	-3197	1554	1382	172.73	8.999	
10,200	4864	4821	4821	149	146	-95.72	2527	-3197	1654	1481	172.27	9.599	
10,300	4865	4822	4822	151	146	-96.06	2527	-3197	1753	1581	171.89	10.198	
10,400	4866	4823	4823	154	146	-96.41	2527	-3197	1852	1681	171.57	10.797	
10,500	4867	4825	4824	157	147	-96.75	2527	-3197	1952	1781	171.30	11.395	
10,600	4868	4826	4825	159	147	-97.10	2527	-3197	2051	1880	171.07	11.992	
10,700	4870	4827	4827	162	147	-97.44	2527	-3197	2151	1980	170.87	12.589	
10,800	4871	4828	4828	165	147	-97.78	2527	-3197	2251	2080	170.71	13.185	
10,900	4872	4829	4829	167	147	-98.12	2527	-3197	2350	2180	170.57	13.780	
11,000	4873	4830	4830	170	147	-98.47	2527	-3197	2450	2280	170.45	14.374	
11,100	4874	4832	4831	173	147	-98.81	2527	-3197	2550	2379	170.36	14.967	
11,200	4875	4833	4832	175	147	-99.15	2527	-3197	2649	2479	170.28	15.560	
11,300	4876	4834	4833	178	147	-99.49	2527	-3197	2749	2579	170.21	16.151	
11,400	4878	4835	4835	180	147	-99.83	2527	-3197	2849	2679	170.17	16.742	
11,500	4879	4836	4836	183	147	-100.17	2527	-3197	2949	2779	170.13	17.332	
11,600	4880	4837	4837	186	147	-100.50	2527	-3197	3049	2878	170.10	17.921	
11,700	4881	4838	4838	188	147	-100.84	2527	-3197	3148	2978	170.09	18.510	
11,800	4882	4840	4839	191	147	-101.18	2527	-3197	3248	3078	170.08	19.097	
11,900	4883	4841	4840	194	147	-101.51	2527	-3197	3348	3178	170.09	19.684	
12,000	4885	4842	4842	196	147	-101.85	2527	-3197	3448	3278	170.09	20.270	
12,036	4885	4842	4842	197	147	-101.97	2527	-3197	3484	3314	170.10	20.481	



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti H 18 - OH - OH													Offset Site Error:	0 ft	
Survey Program: 374-INCLINOMETER													Offset Well Error:		0 ft
Rule Assigned:															
Measured Reference Depth (ft)	Vertical Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
0	0	0	0	0	0	-57.81	4551	-7229	8542						
100	100	95	95	0	3	-57.81	4551	-7229	8542	8539	3.04	2,810.574			
200	200	195	195	1	6	-57.81	4551	-7229	8542	8536	6.43	1,327.545			
300	300	295	295	1	9	-57.81	4551	-7229	8542	8532	9.83	869.005			
396	396	391	391	1	12	-57.81	4551	-7229	8542	8529	13.09	652.630			
400	400	395	395	1	12	59.50	4551	-7229	8542	8529	13.22	645.916			
486	486	481	481	2	15	59.52	4551	-7229	8542	8525	16.13	529.542			
500	500	495	495	2	15	59.52	4551	-7229	8541	8525	16.60	514.549			
600	600	595	595	2	18	59.54	4551	-7229	8540	8520	19.98	427.388			
700	700	705	705	2	21	59.56	4552	-7229	8538	8515	23.67	360.727			
800	800	818	818	3	25	59.58	4552	-7229	8537	8509	27.47	310.710			
900	900	895	895	3	27	59.60	4551	-7229	8535	8505	30.15	283.087			
1000	1000	995	995	3	30	59.61	4551	-7229	8533	8500	33.54	254.409			
1100	1100	1100	1100	4	33	59.64	4552	-7229	8532	8495	37.10	229.948			
1200	1200	1225	1225	4	37	59.66	4552	-7229	8530	8489	41.24	206.826			
1300	1300	1295	1295	4	39	59.67	4551	-7229	8529	8485	43.73	195.050			
1400	1400	1395	1395	5	42	59.69	4551	-7229	8527	8480	47.12	180.964			
1500	1499	1495	1494	5	45	59.70	4551	-7229	8525	8475	50.51	168.770			
1600	1599	1605	1604	5	49	59.73	4552	-7229	8524	8470	54.21	157.240			
1700	1699	1722	1722	6	52	59.75	4552	-7229	8523	8464	58.15	146.568			
1800	1799	1840	1840	6	56	59.77	4551	-7229	8521	8458	62.08	137.245			
1900	1899	1894	1894	7	58	59.78	4551	-7229	8519	8455	64.10	132.904			
2000	1999	1994	1994	7	61	59.80	4551	-7229	8517	8450	67.50	126.193			
2100	2099	2094	2094	7	64	59.81	4551	-7229	8516	8445	70.89	120.126			
2200	2199	2201	2201	8	67	59.84	4553	-7229	8515	8441	74.50	114.293			
2300	2299	2315	2315	8	70	59.86	4552	-7229	8513	8435	78.30	108.720			
2400	2399	2428	2428	8	74	59.88	4552	-7229	8511	8429	82.11	103.661			
2500	2499	2494	2494	9	76	59.89	4551	-7229	8510	8425	84.48	100.731			
2600	2599	2594	2594	9	79	59.91	4551	-7229	8508	8420	87.87	96.820			
2700	2699	2694	2694	9	82	59.92	4551	-7229	8506	8415	91.27	93.200			
2800	2799	2804	2804	10	85	59.95	4552	-7229	8505	8410	94.96	89.563			
2900	2899	2914	2914	10	88	59.96	4551	-7229	8503	8405	98.66	86.184			
3000	2999	2994	2994	11	91	59.98	4551	-7229	8502	8400	101.46	83.793			
3100	3099	3094	3094	11	94	60.00	4551	-7229	8500	8395	104.86	81.064			
3200	3199	3194	3194	11	97	60.02	4551	-7229	8499	8390	108.25	78.506			
3300	3299	3294	3294	12	100	60.03	4551	-7229	8497	8385	111.65	76.103			
3400	3399	3394	3394	12	103	60.05	4551	-7229	8495	8380	115.05	73.843			
3500	3498	3502	3502	12	106	60.08	4553	-7229	8495	8376	118.70	71.566			
3600	3598	3611	3611	13	110	60.10	4553	-7229	8493	8371	122.37	69.405			
3700	3698	3720	3720	13	113	60.12	4553	-7229	8491	8365	126.04	67.369			
3800	3798	3829	3829	13	116	60.14	4552	-7229	8489	8360	129.71	65.448			
3900	3898	3894	3893	14	118	60.14	4551	-7229	8488	8355	132.04	64.282			
4000	3998	3994	3993	14	121	60.16	4551	-7229	8486	8351	135.43	62.658			
4100	4098	4094	4093	15	124	60.18	4551	-7229	8484	8346	138.83	61.114			
4178	4176	4182	4181	15	127	60.20	4553	-7229	8484	8342	141.78	59.839			
4200	4198	4209	4209	15	128	23.21	4553	-7229	8483	8340	142.70	59.448			
4250	4248	4272	4271	15	130	3.47	4552	-7229	8479	8334	144.77	58.565			
4300	4297	4334	4333	15	132	-1.77	4552	-7229	8470	8323	146.83	57.688			
4350	4346	4394	4394	15	133	-4.26	4551	-7229	8458	8309	148.84	56.824			
4400	4393	4389	4388	16	133	-5.82	4551	-7229	8442	8293	148.85	56.716			
4450	4439	4435	4434	16	135	-7.00	4551	-7229	8423	8272	150.41	55.998			
4500	4484	4479	4479	16	136	-8.04	4551	-7229	8400	8248	151.91	55.294			



**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Reference Site:</b>	WC 21-1 Pad	<b>MD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti H 18 - OH - OH													Offset Site Error:	0 ft		
Survey Program: 374-INCLINOMETER													Offset Well Error:	0 ft		
Reference													Rule Assigned:			
Measured Reference Depth (ft)	Vertical Depth (ft)	Measured Offset Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
4550	4526	4522	4521	16	137	-9.04	4551	-7229	8374	8220	153.35	54.605				
4600	4566	4562	4561	16	139	-10.08	4551	-7229	8344	8190	154.71	53.936				
4650	4604	4600	4599	17	140	-11.24	4551	-7229	8312	8156	155.98	53.287				
4700	4639	4636	4635	17	141	-12.56	4553	-7229	8278	8120	157.19	52.660				
4750	4671	4677	4677	17	142	-14.18	4553	-7229	8240	8081	158.57	51.964				
4800	4701	4715	4714	18	143	-16.21	4553	-7229	8200	8040	159.81	51.309				
4850	4726	4748	4748	18	144	-18.80	4553	-7229	8157	7996	160.90	50.697				
4900	4749	4777	4777	19	145	-22.25	4552	-7229	8113	7951	161.85	50.128				
4950	4768	4801	4801	19	146	-27.02	4552	-7229	8067	7905	162.64	49.603				
5000	4783	4820	4820	20	146	-33.89	4552	-7229	8020	7857	163.27	49.122				
5050	4794	4835	4834	21	147	-44.22	4552	-7229	7972	7809	163.75	48.686				
5100	4802	4844	4843	21	147	-59.91	4552	-7229	7924	7760	164.07	48.295				
5150	4805	4848	4847	22	147	-81.69	4552	-7229	7875	7710	164.23	47.949				
5164	4806	4848	4848	22	147	-88.32	4552	-7229	7861	7697	164.25	47.861				
5200	4806	4848	4848	23	147	-88.33	4552	-7229	7825	7661	164.28	47.636				
5300	4807	4849	4848	25	147	-88.35	4552	-7229	7727	7563	164.37	47.011				
5400	4808	4849	4849	27	147	-88.37	4552	-7229	7629	7465	164.48	46.382				
5500	4809	4850	4849	29	147	-88.39	4552	-7229	7531	7366	164.61	45.749				
5600	4811	4850	4850	31	147	-88.40	4552	-7229	7433	7268	164.77	45.110				
5700	4812	4851	4850	33	147	-88.42	4552	-7229	7335	7170	164.94	44.467				
5800	4813	4851	4851	36	147	-88.44	4552	-7229	7237	7071	165.14	43.820				
5900	4814	4852	4851	38	147	-88.46	4552	-7229	7139	6973	165.37	43.168				
6000	4815	4852	4852	40	147	-88.48	4552	-7229	7041	6875	165.62	42.512				
6100	4816	4853	4852	43	147	-88.50	4552	-7229	6943	6777	165.90	41.851				
6200	4818	4853	4853	45	147	-88.52	4552	-7229	6845	6679	166.20	41.186				
6300	4819	4854	4853	48	147	-88.54	4552	-7229	6747	6581	166.54	40.516				
6400	4820	4854	4853	50	147	-88.55	4552	-7229	6650	6483	166.90	39.843				
6500	4821	4855	4854	53	147	-88.57	4552	-7229	6552	6385	167.30	39.165				
6600	4822	4855	4854	55	147	-88.59	4552	-7229	6455	6287	167.72	38.484				
6700	4823	4855	4855	58	147	-88.61	4552	-7229	6357	6189	168.18	37.800				
6800	4824	4856	4855	60	147	-88.62	4552	-7229	6260	6091	168.68	37.112				
6900	4826	4856	4856	63	147	-88.64	4552	-7229	6163	5993	169.21	36.420				
7000	4827	4857	4856	65	147	-88.66	4552	-7229	6065	5896	169.77	35.727				
7100	4828	4857	4857	68	148	-88.68	4552	-7229	5968	5798	170.38	35.030				
7200	4829	4858	4857	70	148	-88.69	4552	-7229	5871	5700	171.02	34.332				
7300	4830	4858	4857	73	148	-88.71	4552	-7229	5775	5603	171.70	33.631				
7400	4831	4858	4858	76	148	-88.73	4552	-7229	5678	5505	172.43	32.928				
7500	4833	4859	4858	78	148	-88.74	4552	-7229	5581	5408	173.19	32.225				
7600	4834	4859	4859	81	148	-88.76	4552	-7229	5485	5311	174.00	31.520				
7700	4835	4860	4859	83	148	-88.78	4552	-7229	5388	5213	174.86	30.814				
7800	4836	4860	4859	86	148	-88.79	4552	-7229	5292	5116	175.76	30.108				
7900	4837	4861	4860	89	148	-88.81	4552	-7229	5196	5019	176.71	29.402				
8000	4838	4861	4860	91	148	-88.82	4552	-7229	5100	4922	177.72	28.696				
8100	4840	4861	4861	94	148	-88.84	4552	-7229	5004	4825	178.77	27.990				
8200	4841	4862	4861	96	148	-88.86	4552	-7229	4908	4728	179.88	27.286				
8300	4842	4862	4861	99	148	-88.87	4552	-7229	4813	4632	181.05	26.582				
8400	4843	4862	4862	102	148	-88.89	4552	-7229	4717	4535	182.28	25.880				
8500	4844	4863	4862	104	148	-88.90	4552	-7229	4622	4439	183.57	25.180				
8600	4845	4863	4863	107	148	-88.92	4552	-7229	4527	4343	184.93	24.482				
8700	4846	4864	4863	109	148	-88.93	4552	-7229	4433	4246	186.36	23.787				
8800	4848	4864	4863	112	148	-88.95	4552	-7229	4338	4151	187.86	23.094				
8900	4849	4864	4864	115	148	-88.96	4552	-7229	4244	4055	189.43	22.405				



**Lonestar Consulting, LLC**  
Anticollision Report



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<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: WC 21-1 Pad - South Bisti H 18 - OH - OH													Offset Site Error:	0 ft		
Survey Program: 374-INCLINOMETER													Offset Well Error:	0 ft		
Reference													Rule Assigned:			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
9000	4850	4865	4864	117	148	-88.98	4552	-7229	4150	3959	191.09	21.719				
9100	4851	4865	4864	120	148	-88.99	4552	-7229	4057	3864	192.83	21.038				
9200	4852	4865	4865	123	148	-89.00	4552	-7229	3963	3769	194.66	20.360				
9300	4853	4866	4865	125	148	-89.02	4552	-7229	3870	3674	196.59	19.688				
9400	4855	4866	4866	128	148	-89.03	4552	-7229	3778	3579	198.62	19.021				
9500	4856	4867	4866	130	148	-89.05	4552	-7229	3686	3485	200.75	18.359				
9600	4857	4867	4866	133	148	-89.06	4552	-7229	3594	3391	203.00	17.704				
9700	4858	4867	4867	136	148	-89.08	4552	-7229	3502	3297	205.37	17.055				
9800	4859	4868	4867	138	148	-89.09	4552	-7229	3412	3204	207.86	16.413				
9900	4860	4868	4867	141	148	-89.10	4552	-7229	3321	3111	210.49	15.778				
10,000	4861	4868	4868	144	148	-89.12	4552	-7229	3232	3018	213.27	15.152				
10,100	4863	4869	4868	146	148	-89.13	4552	-7229	3142	2926	216.20	14.534				
10,200	4864	4869	4868	149	148	-89.14	4552	-7229	3054	2835	219.30	13.925				
10,300	4865	4869	4869	151	148	-89.16	4552	-7229	2966	2744	222.57	13.326				
10,400	4866	4870	4869	154	148	-89.17	4552	-7229	2879	2653	226.03	12.738				
10,500	4867	4870	4869	157	148	-89.18	4552	-7229	2793	2563	229.69	12.160				
10,600	4868	4870	4870	159	148	-89.20	4552	-7229	2708	2474	233.56	11.594				
10,700	4870	4871	4870	162	148	-89.21	4551	-7229	2624	2386	237.65	11.041				
10,800	4871	4871	4870	165	148	-89.22	4551	-7229	2541	2299	241.98	10.501				
10,900	4872	4871	4871	167	148	-89.23	4551	-7229	2459	2213	246.56	9.975				
11,000	4873	4872	4871	170	148	-89.25	4551	-7229	2379	2128	251.40	9.463				
11,100	4874	4872	4871	173	148	-89.26	4551	-7229	2300	2044	256.52	8.968				
11,200	4875	4872	4872	175	148	-89.27	4551	-7229	2223	1962	261.92	8.489				
11,300	4876	4873	4872	178	148	-89.28	4551	-7229	2148	1881	267.60	8.028				
11,400	4878	4873	4872	180	148	-89.30	4551	-7229	2075	1802	273.58	7.586				
11,500	4879	4873	4872	183	148	-89.31	4551	-7229	2005	1725	279.85	7.163				
11,600	4880	4873	4873	186	148	-89.32	4551	-7229	1937	1650	286.41	6.762				
11,700	4881	4874	4873	188	148	-89.33	4551	-7229	1871	1578	293.22	6.382				
11,800	4882	4874	4873	191	148	-89.34	4551	-7229	1809	1509	300.27	6.026				
11,900	4883	4874	4874	194	148	-89.36	4551	-7229	1751	1443	307.51	5.694				
12,000	4885	4875	4874	196	148	-89.37	4551	-7229	1696	1382	314.87	5.388				
12,036	4885	4875	4874	197	148	-89.37	4551	-7229	1678	1360	317.54	5.283	CC, ES, SF			



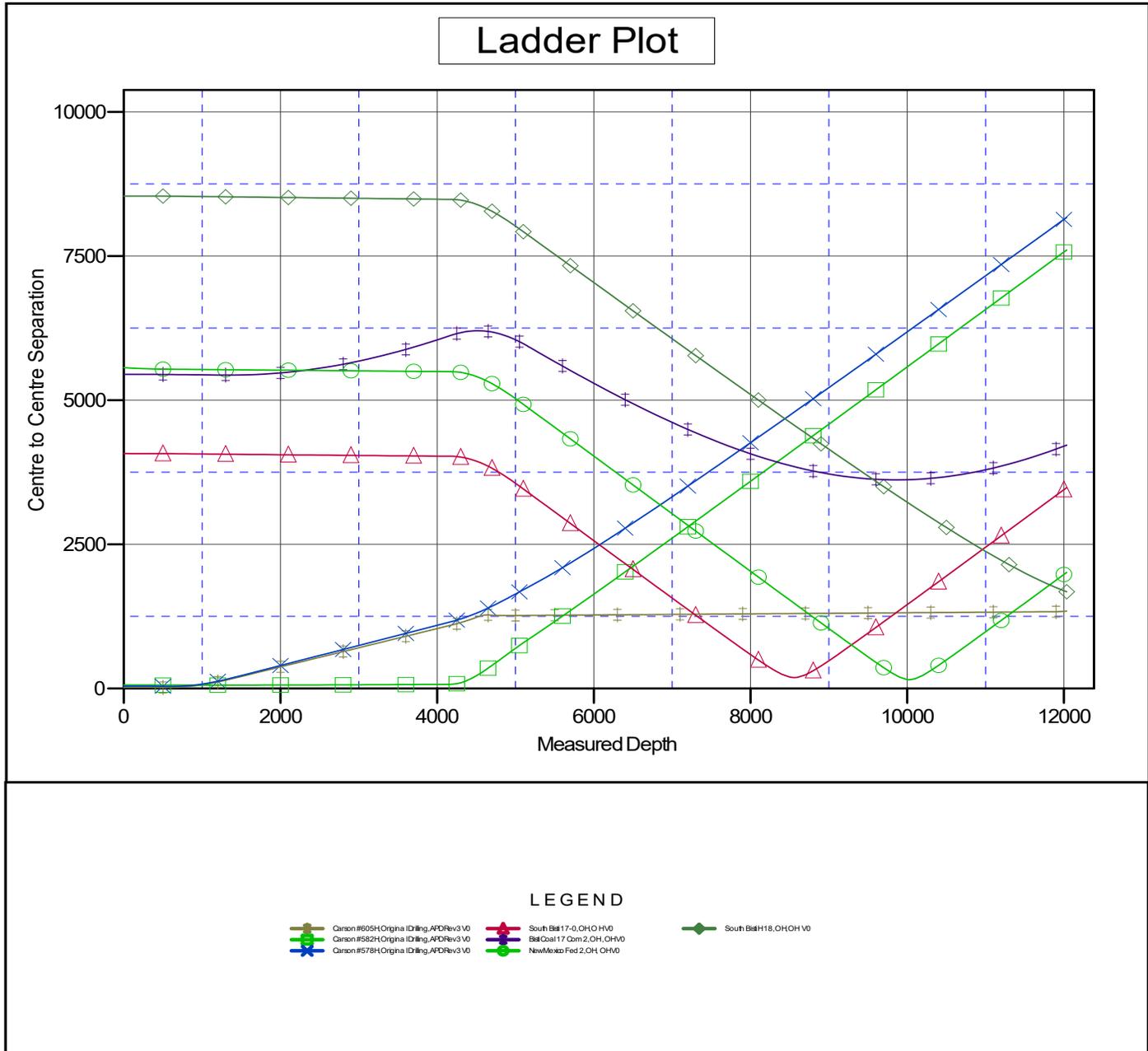
**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
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<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to GL 6296' & RKB 14' @ 6310ft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -107.8333333

Coordinates are relative to: Carson #609H - Slot 4  
 Coordinate System is US State Plane 1983, New Mexico Western Zone  
 Grid Convergence at Surface is: -0.17°

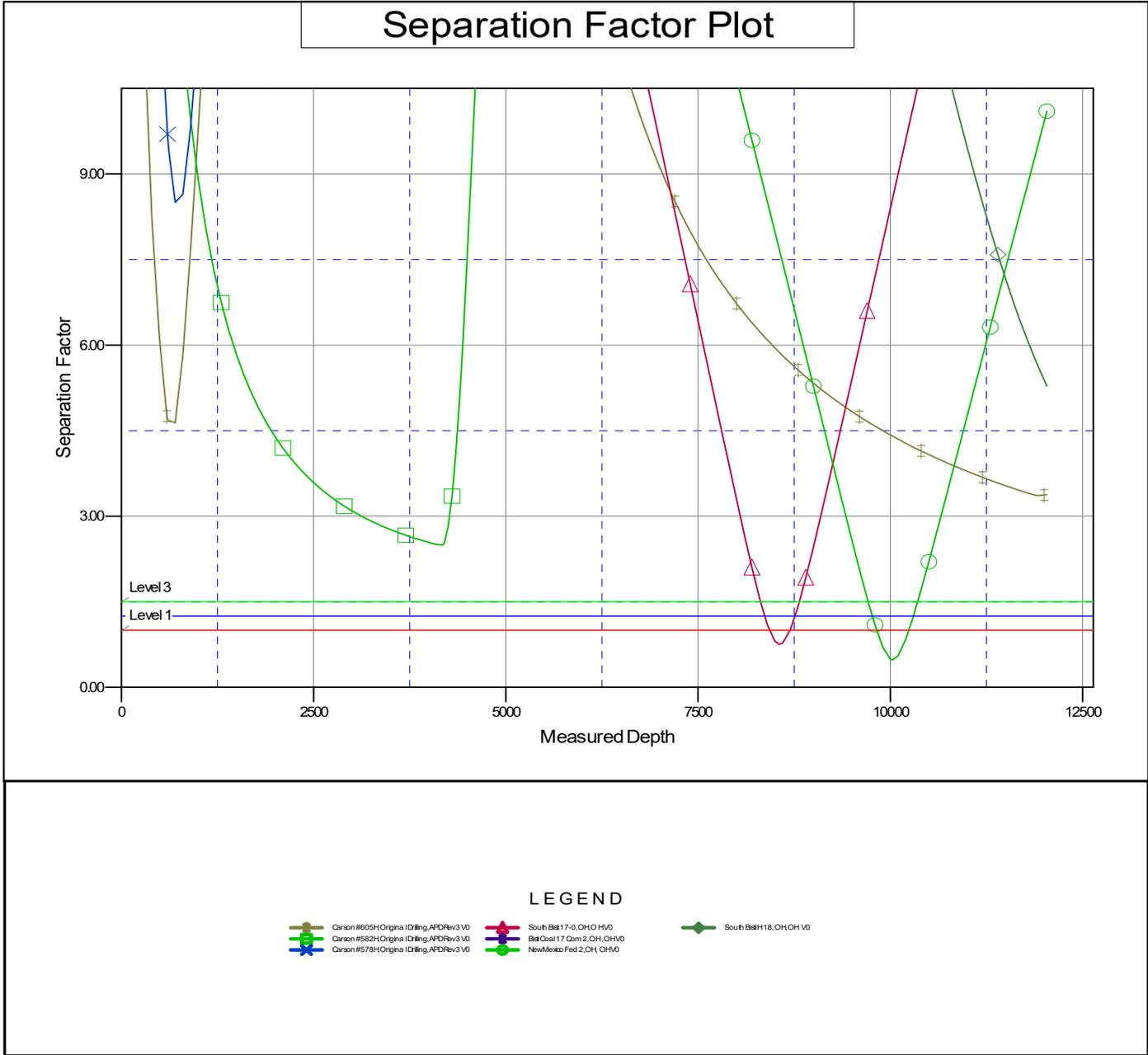




<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well Carson #609H - Slot 4
<b>Project:</b>	Proposed Carson Unit	<b>TVD Reference:</b>	GL 6296' & RKB 14' @ 6310ft
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<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Carson #609H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD Rev 3	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to GL 6296' & RKB 14' @ 6310ft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -107.83333333

Coordinates are relative to: Carson #609H - Slot 4  
 Coordinate System is US State Plane 1983, New Mexico Western Zone  
 Grid Convergence at Surface is: -0.17°





# 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  
#609H 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 $\frac{1}{4}$ NW $\frac{1}{4}$  Section 17, 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 5<sup>th</sup> business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

### **III. DRILLER'S LOG**

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

### **IV. GAS FLARING**

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

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

### **V. SAFETY**

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

### **VI. CHANGE OF PLANS OR ABANDONMENT**

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

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

General Information  
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 536271

**ACKNOWLEDGMENTS**

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 536271
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
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CONDITIONS

Action 536271

**CONDITIONS**

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 536271
	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.	12/18/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	12/18/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	2/20/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	2/20/2026
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.	2/20/2026
ward.rikala	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.	2/20/2026