

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

1a. Type of work: <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. 30-045-38507
3b. Phone No. (include area code)		10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

Additional Operator Remarks

Location of Well

0. SHL: NESW / 2358 FSL / 1852 FWL / TWSP: 25N / RANGE: 12W / SECTION: 22 / LAT: 36.3859002 / LONG: -108.1015528 (TVD: 0 feet, MD: 0 feet)
PPP: SWSE / 0 FSL / 0 FEL / TWSP: 25N / RANGE: 12W / SECTION: 22 / LAT: 36.379421 / LONG: -108.0963732 (TVD: 4831 feet, MD: 11537 feet)
PPP: NESW / 0 FSL / 0 FWL / TWSP: 25N / RANGE: 12W / SECTION: 22 / LAT: 36.3812965 / LONG: -108.0988764 (TVD: 4831 feet, MD: 11537 feet)
PPP: NWSW / 1911 FSL / 1314 FWL / TWSP: 25N / RANGE: 12W / SECTION: 22 / LAT: 36.3846715 / LONG: -108.1033805 (TVD: 4831 feet, MD: 5277 feet)
PPP: NWNE / 0 FNL / 0 FEL / TWSP: 25N / RANGE: 12W / SECTION: 27 / LAT: 36.3745752 / LONG: -108.0899062 (TVD: 4831 feet, MD: 11537 feet)
BHL: SWNW / 2302 FNL / 580 FWL / TWSP: 25N / RANGE: 12W / SECTION: 26 / LAT: 36.3731017 / LONG: -108.0879401 (TVD: 4831 feet, MD: 11537 feet)

BLM Point of Contact

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

CONFIDENTIAL

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

WELL LOCATION INFORMATION

API Number 30-045-38507	Pool Code 5890	Pool Name BISTI LOWER-GALLUP (O)
Property Code 320279	Property Name CARSON UNIT	Well Number 610H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6354'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
K	22	25N	12W		2358' SOUTH	1852' WEST	36.385900° N	108.101553° W	SAN JUAN

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
E	26	25N	12W		2302' NORTH	580' WEST	36.373102° N	108.087940° W	SAN JUAN

Dedicated Acres BASIN MANCOS: SEC 22: S/2 SW/4 & SE/4; SEC 27: S/2 NE/4 = 320 ACRES BISTI LOWER-GALLUP (O): SEC 22: N/2 SW/4; SEC 27: N/2 NE/4; SEC 26: NW/4 = 320 ACRES	PENETRATED SPACING UNIT; Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code UNIT
Order Numbers: R-828 R-828A	Well Setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
K	22	25N	12W		2358' SOUTH	1852' WEST	36.385900° N	108.101553° W	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
L	22	25N	12W		1911' SOUTH	1314' WEST	36.384672° N	108.103381° W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
E	26	25N	12W		1869' NORTH	113' WEST	36.374291° N	108.089527° W	SAN JUAN

Unitized Area or Area of Uniform Interest CARSON UNIT	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation
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OPERATOR CERTIFICATIONS

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

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

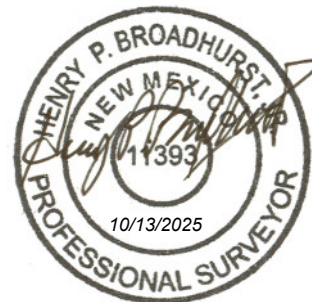
Shaw-Marie Ford 10/13/2025
Signature Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
E-mail Address

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor:

Certificate Number 11393	Date of Survey SEPTEMBER 14, 2021
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Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

BOTTOM HOLE LOCATION (BHL)
2302' FNL 580' FWL
SEC. 26, T25N, R12W
LAT. 36.373102° N (NAD83)
LONG. 108.087940° W (NAD83)

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

Submit Electronically
Via E-permitting

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 / 16 / 2024

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Carson Unit 606H	TBD	K-22-25N-12W	2358 FSL x 1912 FWL	850	1701	166
Carson Unit 610H	TBD	K-22-25N-12W	2358 FSL x 1852 FWL	850	1701	166
Carson Unit 627H	TBD	K-22-25N-12W	2358 FSL x 1872 FWL	850	1701	166
Carson Unit 631H	TBD	K-22-25N-12W	2358 FSL x 1892 FWL	850	1701	166
				3-year Decline	3-year Decline	3-year Decline
Carson Unit 606H	TBD	K-22-25N-12W	2358 FSL x 1912 FWL	192	384	38
Carson Unit 610H	TBD	K-22-25N-12W	2358 FSL x 1852 FWL	192	384	38
Carson Unit 627H	TBD	K-22-25N-12W	2358 FSL x 1872 FWL	192	384	38
Carson Unit 631H	TBD	K-22-25N-12W	2358 FSL x 1892 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 606H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
Carson Unit 610H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
Carson Unit 627H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
Carson Unit 631H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025

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

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

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

Section 2 – Enhanced Plan **EFFECTIVE APRIL 1, 2022**

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

If Operator checks this box, Operator will select one of the following:

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 12/19/2024
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
CARSON UNIT 606H, 610H, 627H and 631H

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 606H, 610H, 627H and 631H

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
CARSON UNIT 606H, 610H, 627H and 631H

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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

19.15.27.8 B. Venting and flaring during drilling operations

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

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

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

19.15.27.8 E. Performance standards

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



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

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

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
CARSON UNIT 606H, 610H, 627H and 631H

BEST MANAGEMENT PRACTICES

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

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

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

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

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

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

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

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

Rev 0



DRILLING PLAN

Carson Unit #610H

San Juan County, New Mexico

Surface Location

1852-ft FWL & 2358-ft FSL
 Sec 22 T25N R12W
 Graded Elevation 6354' MSL
 RKB Elevation 6368' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.3859002° N
 Longitude 108.1015528° W

Kick Off Point for Horizontal Build Curve

4193-ft MD
 4070-ft TVD

Local Coordinates (from SHL)

79-ft North
 905-ft West

Heel Location (Pay zone entry)

1314-ft FWL & 1911-ft FSL
 Sec 22 T25 R12

Heel Geographical Coordinates (NAD-83)

Latitude 36.38467148° N
 Longitude 108.10338052° W

Last Take Point (LTP)

113-ft FWL & 1869-ft FNL
 Sec 26 T25 R12

LTP Geographical Coordinates (NAD-83)

Latitude 36.37429107° N
 Longitude 108.08952704° W

Bottom Hole Location (TD)

580-ft FWL & 2302-ft FNL
 Sec 26 T25 R12

BHL Geographical Coordinates (NAD-83)

Latitude 36.3731017° N
 Longitude 108.0879401° W

Well objectives

This well is planned as a 6200-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 134°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	256	256	Sd	W	8.3	8.4 – 8.8
Kirtland	379	379	Sh	-	8.3	8.4 – 8.8
Fruitland	890	889	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1166	1160	Sd	W	8.3	9.0 - 9.5
Lewis	1318	1308	Sh	-		9.0 - 9.5
Chacra	1948	1913	Sd	-	8.3	9.0 - 9.5
Menefee	2629	2567	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3689	3586	Sd	-	8.3	9.0 - 9.5
Mancos	3867	3757	Sh	-		9.0 - 9.5
Mancos Silt	4203	4079	Slt	O/G	6.6	9.0 - 9.5
Gallup A	4777	4609	Slt	O/G	6.6	9.0 - 9.5
Gallup B	4861	4669	Sd	O/G	6.6	8.8 - 9.0
Gallup C	5030	4764	Sd	O/G	6.6	8.8 - 9.0
Target	5340	4834	Sd	O/G	6.6	8.8 - 9.0

Rev 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	380	surf	380	surface
7"	8-3/4"	26	K-55	LTC	surf	5277	surf	4831	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	4994	11537	4747	4771	4994

Note: all casing will be new

Casing Design Load Cases

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

Note

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

Casing Design Factors

Casing string	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

Name	Redi-Mix
Type	I-II
Planned top	Surface
Density (ppg)	14.50
Yield (cf/sx)	1.61
Mix water (gal/sx)	7.41
Volume (sx)	114
Volume (bbls)	33
Volume (cu. ft.)	185
Excess %	50

7" Intermediate Casing

Lead

Tail



Rev 0

	American Cementing	American Cementing
Type	I/II	Poz/G
Planned top	Surface	3867-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.32	1.46
Mix water (gal/sx)	13.22	7.11
Volume (sx)	431	151
Volume (bbls)	178	39
Volume (cu.ft.)	1000	221
Excess %	78	0

4-1/2" Production Liner

	American Cementing
Type	Poz/G
Planned top	4994-ft
Density (ppg)	13.3
Yield (cf/sx)	1.52
Mix water (gal/sx)	7.53
Volume (sx)	565
Volume (bbls)	153
Volume (cu.ft)	859
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 geograph 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 – 380	8.4 – 8.8	32 – 44	2 – 12	NC
Intermediate	7% KCl Low solids, non-dispersed	380 – 5277	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5277 – 11537	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.



Rev 0

Fluids and Solids Control Program**Closed-Loop System**

A fully, closed-loop system will be utilized. The system will consist of above-ground piping and above-ground storage tanks and bins. The system will not entail any earthen pits, below-grade storage, or drying pads. All equipment will be disassembled and removed from the site when drilling operations cease. The system will be capable of storing all fluids and generated cuttings and of preventing uncontrolled releases of the same. The system will be operated in an efficient manner to allow the recycling and reuse of as much fluid as possible and to minimize the amount of fluids and solids that require disposal.

Fluid Measurement

Pumps shall be equipped with stroke counters with displays in the dog-house. Slow pump speed shall be recorded daily and after mudding up, at a minimum, on the drilling report. A Pit Volume Totalizer will be installed and the readout will be displayed in the dog-house. Gas-detecting equipment will be installed at the shakers, and readouts will be available in the dog-house and the in the geologist's work-station (if geologist or mud-logger is on-site).

Fluid Disposal

Fluids that cannot be reused, recycled, or returned to the supplier will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Solid Disposal

Drilling solids will be stored (until haul-off) on-site in separate containers with no other waste, debris, or garbage products. Waste solids will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

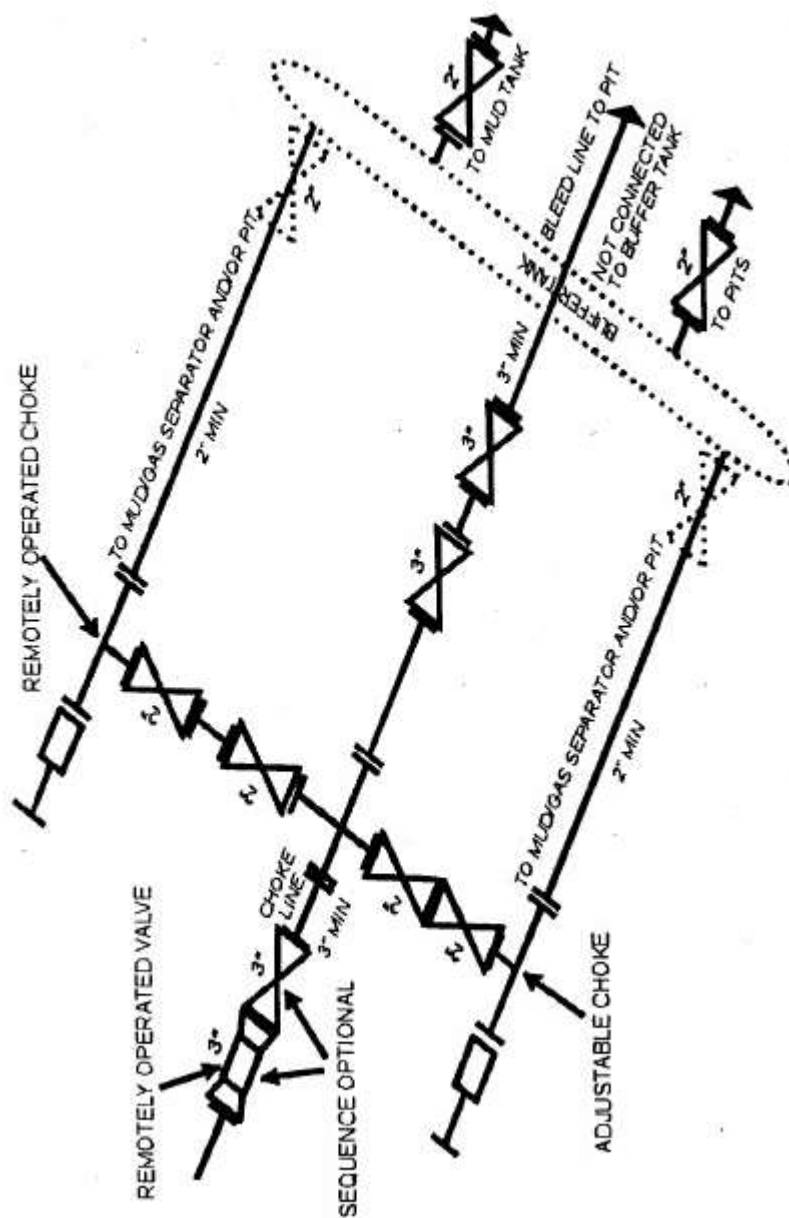
Completion

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



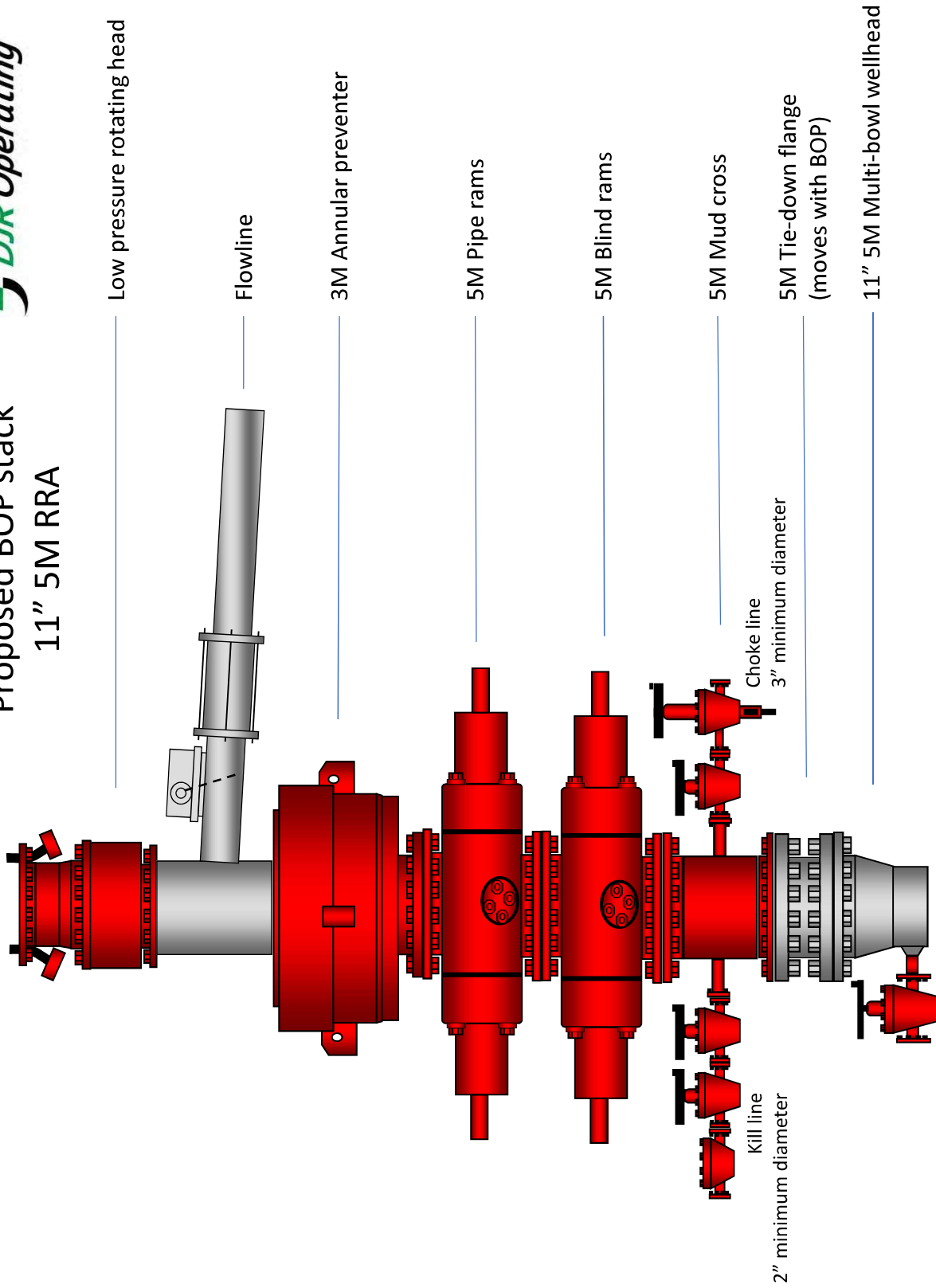
Choke Manifold

Actual system to conform with Onshore Order 2





Proposed BOP stack
11" 5M RRA





DJR Operating

Proposed Carson Unit

WC 22-2 Pad

610H

Original Drilling

APD

Anticollision Report

21 March, 2022





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	3/21/2022		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	11,537	APD (Original Drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
WC 22-2 Pad						
# 606H - Original Drilling - APD	515	515	60	56	16.712	CC, ES
# 606H - Original Drilling - APD	800	801	71	66	12.657	SF
# 627H - Original Drilling - APD	549	549	20	16	5.427	CC
# 627H - Original Drilling - APD	700	701	21	16	4.354	ES
# 627H - Original Drilling - APD	3100	3111	67	34	2.035	SF
# 631H - Original Drilling - APD	515	515	40	36	11.148	CC, ES
# 631H - Original Drilling - APD	700	701	44	39	9.055	SF
Adelaide Hixon 1 - OH - OH	4518	4396	274	122	1.809	CC
Adelaide Hixon 1 - OH - OH	4550	4426	274	122	1.805	ES, SF
Bisti Gallup 22-15 - OH - OH	7876	4790	661	441	3.003	CC, ES
Bisti Gallup 22-15 - OH - OH	7900	4790	661	441	3.001	SF
Joe Hixon 1 - OH - OH	6674	4791	467	275	2.436	CC
Joe Hixon 1 - OH - OH	6700	4791	468	275	2.430	ES, SF
Lee Hixon 1 - OH - OH	11,372	4735	289	-16	0.948	Level 3, CC, ES, SF
Polly Turpin 1 - OH - OH	8539	4772	537	301	2.279	CC, ES
Polly Turpin 1 - OH - OH	8600	4771	541	303	2.279	SF

Offset Design: WC 22-2 Pad - # 606H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program:		0-MWD+IGRF					Rule Assigned:				Offset Well Error:	0 ft		
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance				Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
0	0	0	0	0	0	89.77	0	60	60					
100	100	100	100	0	0	89.77	0	60	60	59	0.62	97.358		
200	200	200	200	1	1	89.77	0	60	60	59	1.33	45.015		
300	300	300	300	1	1	89.77	0	60	60	58	2.05	29.275		
400	400	400	400	1	1	89.77	0	60	60	57	2.77	21.691		
500	500	500	500	2	2	89.77	0	60	60	57	3.48	17.228		
515	515	515	515	2	2	89.77	0	60	60	56	3.59	16.712	CC, ES	
600	600	600	600	2	2	173.72	1	60	61	57	4.20	14.522		
700	700	701	701	2	2	170.10	6	58	64	60	4.90	13.148		
800	800	801	800	3	3	164.70	14	56	71	66	5.62	12.657	SF	
900	899	900	899	3	3	158.63	25	53	82	75	6.36	12.821		
1000	998	999	996	4	4	152.78	39	48	96	89	7.12	13.472		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - # 606H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
				(ft)	(ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
1100	1096	1096	1092	4	4	147.64	56	43	115	107	7.92	14.467	
1200	1193	1192	1186	4	4	143.34	76	37	137	129	8.75	15.682	
1300	1290	1287	1277	5	5	139.81	99	30	164	154	9.64	17.022	
1320	1309	1305	1295	5	5	139.19	104	29	170	160	9.82	17.295	
1400	1386	1382	1369	6	5	137.29	124	23	193	183	10.57	18.308	
1500	1482	1477	1460	6	6	135.49	149	15	223	212	11.53	19.362	
1600	1578	1572	1552	7	6	134.11	173	8	253	241	12.52	20.226	
1700	1675	1667	1644	7	7	133.02	198	0	283	270	13.52	20.943	
1800	1771	1763	1735	8	8	132.14	223	-7	313	299	14.54	21.545	
1900	1867	1858	1827	9	8	131.42	248	-15	344	328	15.58	22.054	
2000	1963	1953	1919	9	9	130.81	273	-22	374	357	16.62	22.489	
2100	2059	2048	2010	10	9	130.29	297	-30	404	386	17.67	22.865	
2200	2155	2144	2102	10	10	129.84	322	-37	434	416	18.72	23.192	
2300	2251	2239	2194	11	10	129.46	347	-45	465	445	19.79	23.478	
2400	2347	2334	2285	12	11	129.12	372	-52	495	474	20.85	23.731	
2500	2443	2430	2377	12	12	128.82	397	-60	525	503	21.92	23.956	
2600	2539	2525	2469	13	12	128.55	421	-67	555	532	23.00	24.156	
2700	2635	2620	2560	14	13	128.31	446	-75	586	562	24.07	24.336	
2800	2731	2715	2652	14	13	128.09	471	-82	616	591	25.15	24.499	
2900	2828	2811	2744	15	14	127.89	496	-90	647	620	26.23	24.646	
3000	2924	2906	2835	16	14	127.72	521	-97	677	650	27.32	24.780	
3100	3020	3001	2927	16	15	127.55	545	-104	707	679	28.40	24.903	
3200	3116	3096	3019	17	16	127.40	570	-112	738	708	29.49	25.015	
3300	3212	3192	3110	18	16	127.26	595	-119	768	737	30.58	25.119	
3400	3308	3287	3202	18	17	127.14	620	-127	798	767	31.66	25.214	
3500	3404	3382	3294	19	17	127.02	645	-134	829	796	32.75	25.302	
3600	3500	3477	3385	19	18	126.91	669	-142	859	825	33.85	25.384	
3700	3596	3573	3477	20	19	126.81	694	-149	890	855	34.94	25.460	
3800	3692	3668	3569	21	19	126.71	719	-157	920	884	36.03	25.531	
3900	3788	3763	3661	21	20	126.62	744	-164	950	913	37.13	25.597	
4000	3884	3858	3752	22	20	126.54	769	-172	981	943	38.22	25.660	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - # 627H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S	+E/-W	Between Centres	Between Ellipses	(ft)			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
0	0	0	0	0	0	89.84	0	20	20					
100	100	100	100	0	0	89.84	0	20	20	20	0.46	43.211		
200	200	200	200	1	1	89.84	0	20	20	19	1.18	16.943		
300	300	300	300	1	1	89.84	0	20	20	18	1.90	10.537		
400	400	400	400	1	1	89.84	0	20	20	17	2.61	7.646		
500	500	500	500	2	2	89.84	0	20	20	17	3.33	6.000		
515	515	515	515	2	2	89.83	0	20	20	17	3.44	5.812		
549	549	549	549	2	2	174.50	0	20	20	16	3.68	5.427 CC		
600	600	601	601	2	2	173.10	1	19	20	16	4.04	4.957		
700	700	701	701	2	2	167.41	3	14	21	16	4.74	4.354 ES		
800	800	801	801	3	3	159.27	7	7	22	17	5.45	4.115		
900	899	901	900	3	3	154.81	12	0	27	21	6.17	4.428		
1000	998	1001	1000	4	3	154.18	16	-8	35	28	6.90	5.098		
1100	1096	1102	1100	4	4	154.29	21	-19	44	36	7.64	5.694		
1200	1193	1204	1200	4	4	154.56	25	-33	52	43	8.39	6.161		
1300	1290	1305	1300	5	5	154.90	30	-51	60	51	9.16	6.527		
1320	1309	1325	1320	5	5	154.98	31	-55	61	52	9.32	6.588		
1400	1386	1407	1400	6	5	154.95	35	-73	67	57	9.95	6.707		
1500	1482	1509	1499	6	6	153.95	40	-98	70	60	10.77	6.536		
1600	1578	1611	1597	7	6	151.87	45	-127	71	59	11.65	6.079		
1700	1675	1713	1693	7	7	148.61	50	-158	68	56	12.65	5.413		
1800	1771	1812	1787	8	8	144.90	55	-190	66	52	13.77	4.781		
1900	1867	1912	1882	9	8	140.90	60	-222	63	49	14.98	4.237		
2000	1963	2012	1976	9	9	136.61	65	-254	61	45	16.29	3.772		
2100	2059	2112	2071	10	10	132.07	70	-285	60	42	17.70	3.379		
2200	2155	2212	2165	10	10	127.29	75	-317	59	39	19.20	3.050		
2300	2251	2312	2260	11	11	122.35	80	-349	58	37	20.77	2.780		
2400	2347	2412	2354	12	12	117.30	85	-381	57	35	22.37	2.563		
2436	2382	2448	2389	12	12	115.46	86	-392	57	34	22.96	2.496		
2500	2443	2512	2449	12	12	112.22	90	-412	57	33	24.00	2.392		
2504	2447	2516	2453	12	12	111.99	90	-414	57	33	24.07	2.386		
2600	2539	2611	2544	13	13	107.19	94	-444	58	32	25.60	2.263		
2700	2635	2711	2638	14	14	102.28	99	-476	59	32	27.16	2.167		
2800	2731	2811	2733	14	14	97.57	104	-508	60	32	28.66	2.102		
2900	2828	2911	2827	15	15	93.09	109	-539	62	32	30.08	2.061		
3000	2924	3011	2922	16	16	88.88	114	-571	64	33	31.43	2.040		
3100	3020	3111	3016	16	17	84.96	119	-603	67	34	32.69	2.035 SF		
3200	3116	3211	3111	17	17	81.33	124	-635	69	35	33.89	2.044		
3300	3212	3311	3206	18	18	77.99	129	-666	72	37	35.03	2.063		
3400	3308	3410	3300	18	19	74.92	134	-698	75	39	36.11	2.090		
3500	3404	3510	3395	19	20	72.11	139	-730	79	42	37.14	2.123		
3600	3500	3610	3489	19	20	69.54	144	-762	82	44	38.14	2.161		
3700	3596	3710	3584	20	21	67.19	149	-793	86	47	39.12	2.203		
3800	3692	3810	3678	21	22	65.03	154	-825	90	50	40.07	2.247		
3900	3788	3910	3773	21	22	63.06	159	-857	94	53	41.00	2.294		
4000	3884	4010	3867	22	23	61.24	164	-889	98	56	41.91	2.341		
4100	3980	4109	3962	23	24	59.57	169	-920	102	59	42.82	2.389		
4193	4070	4202	4050	23	25	58.14	174	-950	106	63	43.66	2.433		
4200	4077	4209	4057	23	25	59.44	174	-952	107	63	43.72	2.438		
4250	4125	4259	4104	24	25	71.60	177	-968	111	67	44.05	2.522		
4300	4174	4308	4150	24	25	90.13	179	-984	119	75	44.24	2.699		
4350	4223	4357	4196	24	26	113.43	181	-999	131	87	44.31	2.968		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - # 627H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF									Rule Assigned:				Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
4400	4272	4404	4241	24	26	134.04	184	-1014	147	103	44.31	3.325		
4450	4321	4450	4284	24	26	147.92	186	-1029	167	123	44.30	3.767		
4500	4369	4494	4326	24	27	156.51	188	-1043	190	146	44.30	4.291		
4550	4416	4536	4366	24	27	161.93	190	-1056	217	172	44.31	4.890		
4600	4462	4572	4400	24	27	165.66	192	-1067	247	202	44.29	5.568		
4650	4506	4600	4426	24	27	168.50	194	-1077	280	236	44.18	6.349		
4700	4548	4622	4447	24	28	170.81	196	-1085	318	274	44.01	7.236		
4750	4589	4641	4464	24	28	172.87	198	-1092	360	316	43.82	8.210		
4800	4626	4650	4472	24	28	175.21	199	-1095	404	360	43.50	9.282		
4850	4662	4667	4487	24	28	177.27	202	-1102	450	406	43.46	10.350		
4900	4694	4675	4495	24	28	-179.50	203	-1106	498	454	43.32	11.487		
4950	4724	4680	4500	24	28	-173.88	204	-1108	546	503	43.20	12.651		
5000	4750	4684	4502	24	28	-159.74	205	-1109	596	553	43.10	13.829		
5050	4773	4685	4503	24	28	-99.26	205	-1110	646	603	43.03	15.011		
5100	4792	4684	4502	24	28	-38.80	205	-1109	696	653	42.98	16.188		
5150	4808	4681	4500	24	28	-24.86	204	-1108	745	702	42.96	17.352		
5200	4820	4677	4496	23	28	-19.62	203	-1106	794	752	42.95	18.497		
5250	4828	4671	4491	23	28	-16.95	202	-1104	843	800	42.96	19.616		
5300	4833	4650	4472	23	28	-15.19	199	-1095	890	848	42.76	20.821		
5340	4834	4650	4472	23	28	-14.47	199	-1095	927	884	42.89	21.616		
5400	4833	4650	4472	24	28	-14.47	199	-1095	982	939	43.08	22.800		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - # 631H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	89.87	0	40	40					
100	100	100	100	0	0	89.87	0	40	40	39	0.62	64.945		
200	200	200	200	1	1	89.87	0	40	40	39	1.33	30.028		
300	300	300	300	1	1	89.87	0	40	40	38	2.05	19.529		
400	400	400	400	1	1	89.87	0	40	40	37	2.77	14.470		
500	500	500	500	2	2	89.87	0	40	40	37	3.48	11.492		
515	515	515	515	2	2	89.87	0	40	40	36	3.59	11.148 CC, ES		
600	600	600	600	2	2	173.33	1	40	41	37	4.20	9.752		
700	700	701	700	2	2	168.16	6	38	44	39	4.90	9.055 SF		
800	800	800	800	3	3	160.98	14	36	51	46	5.62	9.095		
900	899	900	898	3	3	153.61	25	32	62	55	6.36	9.703		
1000	998	998	996	4	4	147.20	39	27	76	69	7.12	10.724		
1100	1096	1095	1091	4	4	142.05	56	21	95	87	7.92	12.015		
1200	1193	1192	1185	4	4	138.05	75	15	118	109	8.76	13.464		
1300	1290	1286	1277	5	5	134.93	98	7	145	135	9.65	14.985		
1320	1309	1305	1295	5	5	134.39	103	6	150	141	9.83	15.287		
1400	1386	1380	1367	6	5	132.56	123	-1	174	164	10.58	16.459		
1500	1482	1475	1458	6	6	130.57	149	-10	205	193	11.57	17.676		
1600	1578	1570	1549	7	7	129.09	176	-19	235	222	12.58	18.675		
1700	1675	1665	1639	7	7	127.95	203	-28	266	252	13.62	19.505		
1800	1771	1760	1730	8	8	127.04	229	-37	296	282	14.67	20.200		
1900	1867	1855	1821	9	8	126.31	256	-46	327	311	15.73	20.789		
2000	1963	1950	1912	9	9	125.70	282	-55	358	341	16.81	21.293		
2100	2059	2046	2003	10	9	125.19	309	-64	389	371	17.89	21.728		
2200	2155	2141	2094	10	10	124.75	336	-73	419	401	18.98	22.107		
2300	2251	2236	2185	11	11	124.37	362	-82	450	430	20.07	22.439		
2400	2347	2331	2275	12	11	124.04	389	-91	481	460	21.17	22.732		
2500	2443	2426	2366	12	12	123.76	415	-100	512	490	22.27	22.993		
2600	2539	2521	2457	13	12	123.50	442	-109	543	520	23.38	23.226		
2700	2635	2616	2548	14	13	123.27	468	-118	574	549	24.49	23.435		
2800	2731	2711	2639	14	14	123.07	495	-127	605	579	25.60	23.624		
2900	2828	2806	2730	15	14	122.88	522	-136	636	609	26.72	23.795		
3000	2924	2901	2821	16	15	122.71	548	-145	667	639	27.83	23.951		
3100	3020	2996	2911	16	16	122.56	575	-153	698	669	28.95	24.094		
3200	3116	3091	3002	17	16	122.42	601	-162	728	698	30.07	24.225		
3300	3212	3187	3093	18	17	122.29	628	-171	759	728	31.19	24.345		
3400	3308	3282	3184	18	17	122.17	654	-180	790	758	32.32	24.456		
3500	3404	3377	3275	19	18	122.06	681	-189	821	788	33.44	24.559		
3600	3500	3472	3366	19	19	121.96	708	-198	852	818	34.57	24.655		
3700	3596	3567	3456	20	19	121.86	734	-207	883	847	35.69	24.744		
3800	3692	3662	3547	21	20	121.78	761	-216	914	877	36.82	24.827		
3900	3788	3757	3638	21	21	121.69	787	-225	945	907	37.95	24.904		
4000	3884	3852	3729	22	21	121.62	814	-234	976	937	39.08	24.977		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - Adelaide Hixon 1 - OH - OH													Offset Site Error: 0 ft	
Survey Program: Reference		90-INCLINOMETER Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 0 ft	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
1700	1675	1685	1685	7	51	-9.26	-48	-1198	983	926	57.27	17.163		
1800	1771	1781	1780	8	54	-9.48	-47	-1198	955	895	60.56	15.776		
1900	1867	1877	1876	9	57	-9.79	-47	-1198	928	864	63.86	14.533		
2000	1963	1973	1973	9	60	-10.11	-48	-1198	901	834	67.18	13.409		
2100	2059	2069	2069	10	63	-10.43	-48	-1198	874	803	70.49	12.392		
2200	2155	2165	2165	10	66	-10.74	-47	-1198	846	772	73.80	11.467		
2300	2251	2261	2261	11	69	-11.13	-48	-1198	819	742	77.12	10.620		
2400	2347	2357	2357	12	72	-11.52	-48	-1198	792	711	80.44	9.843		
2500	2443	2453	2453	12	75	-11.94	-48	-1198	765	681	83.76	9.128		
2600	2539	2549	2549	13	77	-12.31	-47	-1198	737	650	87.08	8.467		
2700	2635	2645	2645	14	80	-12.80	-47	-1198	710	620	90.41	7.856		
2800	2731	2741	2741	14	83	-13.35	-47	-1198	683	589	93.73	7.289		
2900	2828	2838	2838	15	86	-13.93	-48	-1198	656	559	97.09	6.759		
3000	2924	2934	2934	16	89	-14.54	-48	-1198	629	529	100.43	6.266		
3100	3020	3030	3030	16	92	-15.20	-48	-1198	602	499	103.78	5.805		
3200	3116	3126	3126	17	95	-15.86	-47	-1198	576	468	107.14	5.372		
3300	3212	3222	3222	18	98	-16.66	-47	-1198	549	438	110.50	4.967		
3400	3308	3318	3318	18	101	-17.56	-48	-1198	522	408	113.88	4.587		
3500	3404	3414	3414	19	104	-18.55	-48	-1198	496	379	117.29	4.228		
3600	3500	3510	3510	19	107	-19.62	-48	-1198	470	349	120.70	3.891		
3700	3596	3606	3606	20	110	-20.74	-47	-1198	443	319	124.11	3.572		
3800	3692	3702	3702	21	112	-22.13	-48	-1198	418	290	127.56	3.273		
3900	3788	3799	3798	21	115	-23.68	-48	-1198	392	261	131.06	2.990		
4000	3884	3895	3894	22	118	-25.41	-48	-1198	366	232	134.59	2.723		
4100	3980	3991	3990	23	121	-27.30	-47	-1198	341	203	138.15	2.470		
4193	4070	4080	4080	23	124	-29.42	-47	-1198	318	177	141.53	2.249		
4200	4077	4087	4086	23	124	-28.05	-47	-1198	317	175	141.78	2.234		
4250	4125	4135	4135	24	126	-14.77	-47	-1198	306	162	143.56	2.128		
4300	4174	4184	4184	24	127	5.75	-48	-1198	296	151	145.24	2.037		
4350	4223	4233	4233	24	129	31.79	-48	-1198	288	141	146.80	1.959		
4400	4272	4283	4282	24	130	55.79	-48	-1198	281	133	148.25	1.895		
4450	4321	4331	4331	24	132	73.52	-48	-1198	276	127	149.56	1.846		
4500	4369	4379	4379	24	133	86.27	-48	-1198	274	123	150.78	1.815		
4518	4386	4396	4396	24	134	89.95	-48	-1198	274	122	151.18	1.809 CC		
4550	4416	4426	4426	24	134	96.03	-48	-1198	274	122	151.94	1.805 ES, SF		
4600	4462	4472	4472	24	136	103.95	-48	-1198	278	125	153.11	1.817		
4650	4506	4516	4516	24	137	110.72	-47	-1198	286	132	154.32	1.853		
4700	4548	4559	4558	24	138	116.41	-47	-1198	298	143	155.64	1.916		
4750	4589	4599	4599	24	140	121.24	-47	-1198	315	158	157.05	2.006		
4800	4626	4637	4636	24	141	125.25	-47	-1198	336	178	158.51	2.122		
4850	4662	4672	4672	24	142	128.48	-48	-1198	362	202	159.98	2.264		
4900	4694	4705	4705	24	143	130.95	-48	-1198	392	231	161.39	2.430		
4950	4724	4734	4734	24	144	132.57	-48	-1198	426	263	162.70	2.618		
5000	4750	4760	4760	24	145	133.42	-48	-1198	463	299	163.90	2.825		
5050	4773	4783	4783	24	145	133.34	-48	-1198	503	338	164.95	3.049		
5100	4792	4803	4802	24	146	132.12	-48	-1198	545	380	165.86	3.289		
5150	4808	4818	4818	24	146	129.41	-48	-1198	590	423	166.61	3.541		
5200	4820	4830	4830	23	147	124.51	-48	-1198	636	469	167.21	3.805		
5250	4828	4839	4838	23	147	116.24	-48	-1198	684	516	167.67	4.077		
5300	4833	4843	4843	23	147	102.75	-48	-1198	732	564	167.97	4.358		
5340	4834	4844	4844	23	147	87.17	-48	-1198	771	603	168.12	4.587		
5400	4833	4844	4843	24	147	86.95	-48	-1198	830	662	168.25	4.933		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design:	WC 22-2 Pad - Adelaide Hixon 1 - OH - OH												Offset Site Error:	0 ft	
	Survey Program:		90-INCLINOMETER		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Offset Well Error:
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
5500	4832	4843	4842	24	147	86.58	-48	-1198	928	760	168.44	5.511			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - Bisti Gallup 22-15 - OH - OH											Offset Site Error:	0 ft
Survey Program: 120-INCLINOMETER											Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
7200	4815	4794	4793	59	146	-90.61	-1686	1771	945	753	192.42	4.913
7300	4814	4793	4793	61	146	-90.57	-1686	1771	877	680	196.60	4.459
7400	4813	4793	4792	63	146	-90.52	-1686	1771	814	613	201.16	4.049
7500	4812	4792	4792	66	146	-90.48	-1686	1771	760	554	205.96	3.691
7600	4811	4792	4791	68	146	-90.43	-1686	1771	716	505	210.72	3.398
7700	4810	4791	4791	70	145	-90.38	-1686	1771	684	469	215.02	3.180
7800	4809	4790	4790	73	145	-90.34	-1686	1771	665	447	218.36	3.046
7876	4808	4790	4790	75	145	-90.30	-1686	1771	661	441	219.99	3.003 CC, ES
7900	4808	4790	4789	75	145	-90.29	-1686	1771	661	441	220.32	3.001 SF
8000	4807	4789	4789	78	145	-90.24	-1686	1771	672	452	220.70	3.046
8100	4806	4789	4788	80	145	-90.19	-1686	1771	698	478	219.62	3.177
8200	4805	4788	4788	83	145	-90.15	-1686	1771	736	518	217.43	3.384
8300	4804	4788	4787	85	145	-90.10	-1686	1771	785	570	214.57	3.658
8400	4803	4787	4787	88	145	-90.05	-1686	1771	843	632	211.40	3.989
8500	4802	4787	4786	90	145	-90.00	-1686	1771	909	701	208.20	4.365
8600	4801	4786	4786	92	145	-89.95	-1686	1771	980	775	205.12	4.778



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - Joe Hixon 1 - OH - OH											Offset Site Error:	0 ft
Survey Program: 292-INCLINOMETER											Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
5800	4829	4800	4799	28	146	91.09	-1696	123	991	822	168.55	5.877
5900	4828	4799	4798	30	146	90.96	-1696	123	904	735	169.06	5.345
6000	4827	4798	4797	32	146	90.84	-1696	123	820	650	169.94	4.823
6100	4826	4797	4796	34	146	90.71	-1696	123	740	568	171.34	4.317
6200	4825	4796	4795	36	146	90.59	-1696	123	665	492	173.44	3.835
6300	4824	4795	4794	38	146	90.47	-1696	123	598	422	176.39	3.391
6400	4823	4794	4793	40	146	90.34	-1696	123	541	361	180.21	3.003
6500	4822	4793	4792	43	146	90.22	-1696	123	498	314	184.65	2.698
6600	4821	4792	4791	45	146	90.09	-1696	123	473	284	189.04	2.501
6674	4820	4791	4790	46	146	90.00	-1696	123	467	275	191.71	2.436 CC
6700	4820	4791	4790	47	145	89.97	-1696	123	468	275	192.47	2.430 ES, SF
6800	4819	4790	4789	49	145	89.84	-1696	123	484	289	194.29	2.490
6900	4818	4789	4788	52	145	89.72	-1696	123	519	324	194.52	2.668
7000	4817	4788	4787	54	145	89.59	-1696	123	570	376	193.65	2.942
7100	4816	4787	4786	56	145	89.47	-1696	123	632	440	192.23	3.289
7200	4815	4786	4785	59	145	89.35	-1696	123	704	513	190.65	3.690
7300	4814	4785	4784	61	145	89.22	-1696	123	781	592	189.10	4.131
7400	4813	4784	4783	63	145	89.10	-1696	123	863	676	187.68	4.600
7500	4812	4783	4782	66	145	88.97	-1696	123	949	763	186.41	5.091



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - Lee Hixon 1 - OH - OH													Offset Site Error: 0 ft	
Survey Program: 300-INCLINOMETER									Rule Assigned:				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)				
10,500	4782	4744	4744	140	144	-91.75	-4334	4083	918	720	198.25	4.632		
10,600	4780	4743	4742	142	144	-91.55	-4334	4083	824	620	203.57	4.047		
10,700	4779	4742	4741	145	144	-91.35	-4334	4083	731	521	210.24	3.478		
10,800	4778	4741	4740	147	144	-91.15	-4334	4083	641	422	218.75	2.928		
10,900	4777	4740	4739	150	144	-90.95	-4334	4083	553	323	229.72	2.408		
11,000	4776	4739	4738	152	144	-90.75	-4334	4083	471	227	243.92	1.930		
11,100	4775	4738	4737	155	144	-90.55	-4334	4083	397	135	261.92	1.514		
11,200	4774	4737	4736	157	144	-90.34	-4334	4083	336	54	282.62	1.189	Level 3	
11,300	4773	4736	4735	160	144	-90.14	-4334	4083	298	-2	300.22	0.992	Level 3	
11,372	4773	4735	4735	161	144	-90.00	-4334	4083	289	-16	304.97	0.948	Level 3, CC, ES, SF	
11,400	4772	4735	4734	162	144	-89.94	-4334	4083	290	-14	304.25	0.955	Level 3	
11,500	4771	4734	4733	165	144	-89.74	-4334	4083	316	25	291.54	1.085	Level 3	
11,537	4771	4733	4733	165	144	-89.67	-4334	4083	333	49	284.33	1.171	Level 3	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: WC 22-2 Pad - Polly Turpin 1 - OH - OH											Offset Site Error:	0 ft
Survey Program: 127-INCLINOMETER											Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
7700	4810	4780	4780	70	145	90.91	-3015	1443	996	813	182.86	5.448
7800	4809	4779	4779	73	145	90.80	-3015	1443	914	727	186.98	4.886
7900	4808	4778	4778	75	145	90.69	-3015	1443	835	643	191.96	4.349
8000	4807	4777	4777	78	145	90.58	-3015	1443	761	563	197.90	3.845
8100	4806	4776	4776	80	145	90.48	-3015	1443	694	489	204.80	3.387
8200	4805	4775	4775	83	145	90.37	-3015	1443	635	423	212.51	2.989
8300	4804	4774	4774	85	145	90.26	-3015	1443	588	367	220.58	2.665
8400	4803	4773	4773	88	145	90.15	-3015	1443	555	327	228.13	2.432
8500	4802	4772	4772	90	145	90.04	-3015	1443	538	304	234.01	2.301
8539	4801	4772	4771	91	145	90.00	-3015	1443	537	301	235.61	2.279 CC, ES
8600	4801	4771	4771	92	145	89.93	-3015	1443	541	303	237.22	2.279 SF
8700	4800	4770	4770	95	145	89.83	-3015	1443	561	323	237.48	2.361
8800	4799	4769	4769	97	145	89.72	-3015	1443	597	362	235.34	2.537
8900	4798	4768	4768	100	145	89.61	-3015	1443	647	415	231.71	2.793
9000	4797	4767	4767	102	145	89.50	-3015	1443	708	480	227.42	3.112
9100	4796	4766	4766	105	145	89.39	-3015	1443	777	553	223.06	3.481
9200	4795	4765	4765	107	145	89.28	-3015	1443	852	633	218.92	3.890
9300	4794	4764	4764	110	145	89.18	-3015	1443	931	716	215.14	4.329



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6354' & RKB 14' @ 6368ft

Offset Depths are relative to Offset Datum

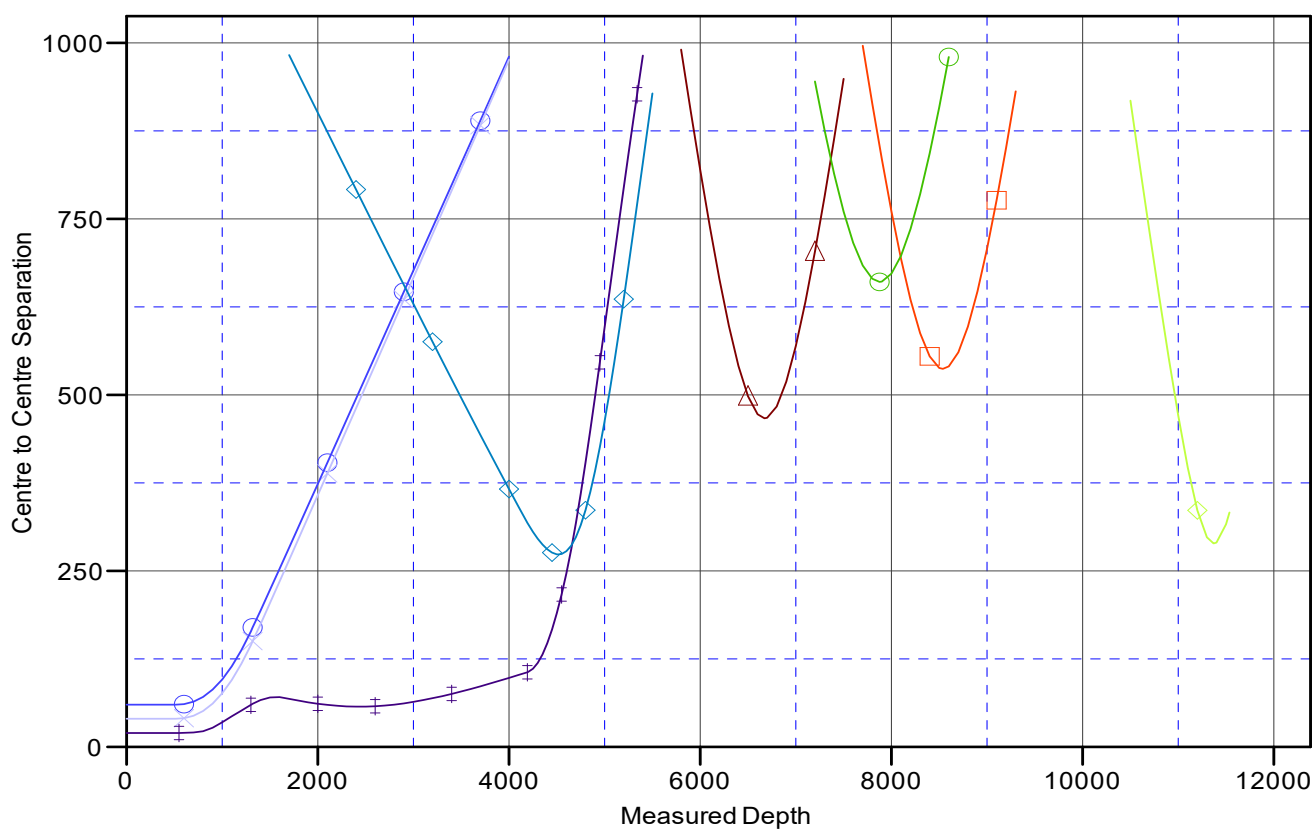
Central Meridian is -107.8333333

Coordinates are relative to: # 610H - Slot 1

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

Grid Convergence at Surface is: -0.16°

Ladder Plot



LEGEND

# 606H, Original Drilling, APD V0	Joe Hixon 1, OH, OHV0	# 627H, Original Drilling, APD V0
Lee Hixon 1, OH, OHV0	Polly Turpin 1, OH, OH V0	Adelaide Hixon 1, OH, OHV0
# 631H, Original Drilling, APD V0	Bisti Gallup 22-15, OH, OH V0	



Lonestar Consulting, LLC

Anticollision Report

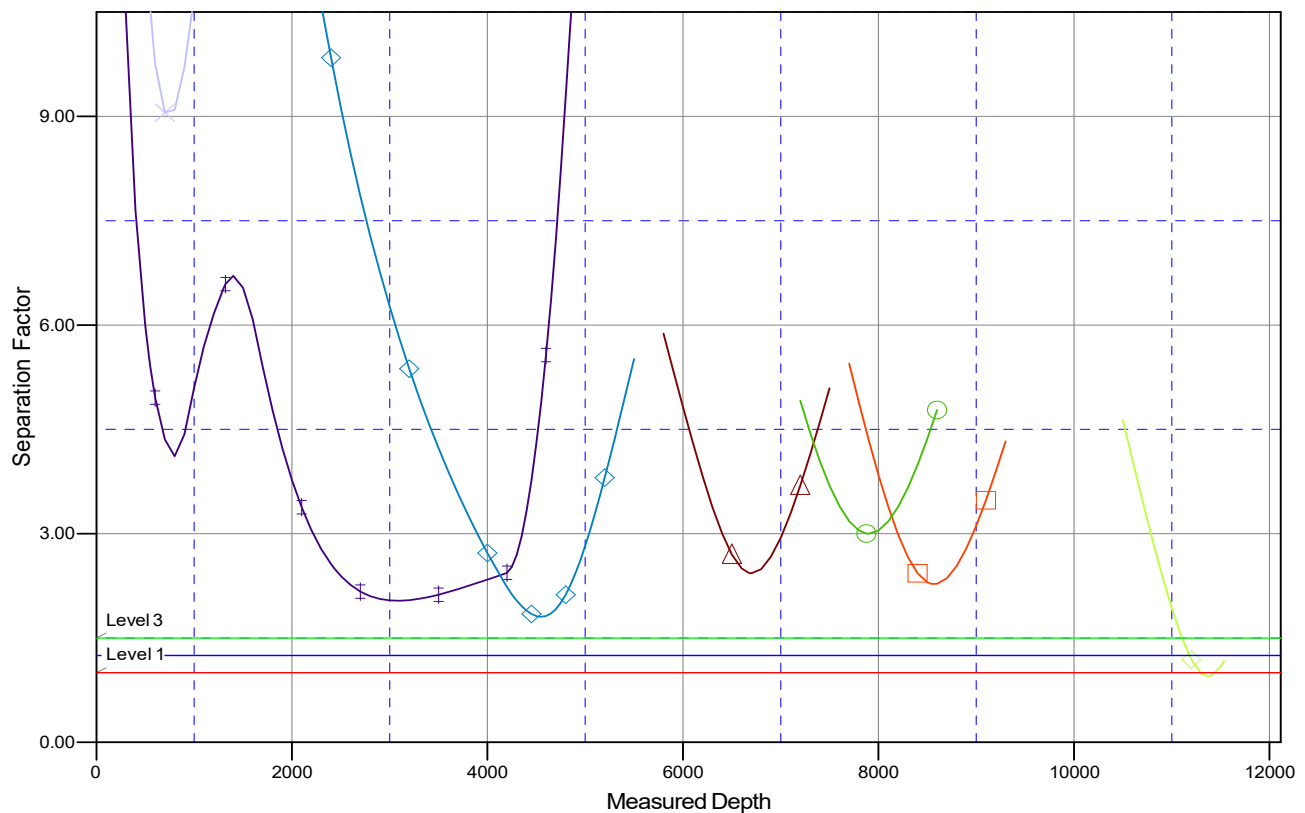


Company:	DJR Operating	Local Co-ordinate Reference:	Well # 610H - Slot 1
Project:	Proposed Carson Unit	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Reference Site:	WC 22-2 Pad	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6354' & RKB 14' @ 6368ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.8333333

Coordinates are relative to: # 610H - Slot 1
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: -0.16°

Separation Factor Plot



LEGEND

#606H, Original Drilling, APD V0	Joe Hixon 1, OH, OH V0	#627H, Original Drilling, APD V0
Lee Hixon 1, OH, OH V0	Polly Turpin 1, OH, OH V0	Adelaide Hixon 1, OH, OH V0
#631H, Original Drilling, APD V0	Bisti Gallup 22-15, OH, OH V0	



Company: DJR Operating
Project: Proposed Carson Unit
Site: WC 22-2 Pad
Well: # 610H
Wellbore: Original Drilling
Design: APD

PROJECT DETAILS: Proposed Carson Unit

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



WELL DETAILS: # 610H

GL 6354' & RKB 14' @ 6368ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0	0	1959879.47	2644143.98	36.38590016	-108.10155276	1

Plan: APD (# 610H/Original Drilling)

Created By: Janie Collins Date: 23:09, March 21 2022



Azimuths to True North
Magnetic North: 8

Magnetic Field
Strength: 49352
Dip Angle: 62.83°
Date: 7/27/2015
Model: IGRF2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
610H Heel	4834	-447	-538	1959433.68	2643604.75	36.38467148108	10338052
610H Toe	4771	-4659	4007	1955209.57	2648138.46	36.37310179108	08794010

SECTION DETAILS

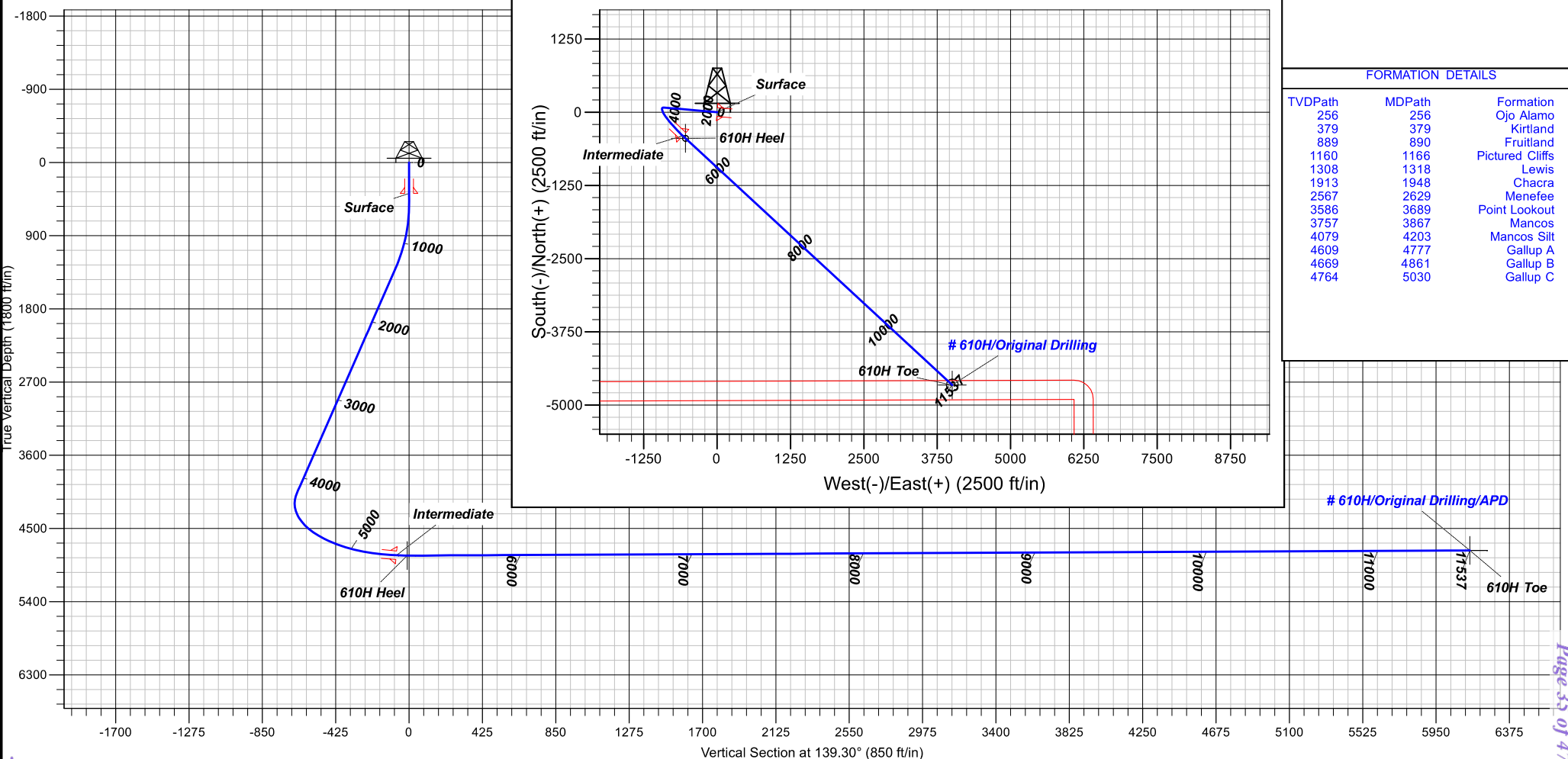
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl
0	0.00	0.00	0	0	0	0.00	0.00	0
515	0.00	0.00	515	0	0	0.00	0.00	0
1320	16.10	275.01	1309	10	-112	2.00	275.01	-80
4193	16.10	275.01	4070	79	-905	0.00	0.00	-651
5340	90.58	132.82	4834	-447	-538	9.00	-140.98	-12
11537	90.58	132.82	4771	-4659	4007	0.00	0.00	6145

CASING DETAILS

TVD	MD	Na
380	380	Surface
4831	5277	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
256	256	Ojo Alamo
379	379	Kirtland
889	890	Fruitland
1160	1166	Pictured Cliffs
1308	1318	Lewis
1913	1948	Chacra
2567	2629	Menefee
3586	3689	Point Lookout
3757	3867	Mancos
4079	4203	Mancos Silt
4609	4777	Gallup A
4669	4861	Gallup B
4764	5030	Gallup C





DJR Operating

Proposed Carson Unit

WC 22-2 Pad

610H - Slot 1

Original Drilling

Plan: APD

Standard Planning Report

21 March, 2022





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 610H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Project:	Proposed Carson Unit	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site:	WC 22-2 Pad	North Reference:	True
Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

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

Site	WC 22-2 Pad				
Site Position:		Northing:	1,959,879.47 usft	Latitude:	36.38590016
From:	Lat/Long	Easting:	2,644,143.98 usft	Longitude:	-108.10155276
Position Uncertainty:	0 ft	Slot Radius:	13.20 in		

Well	# 610H - Slot 1					
Well Position	+N/-S	0 ft	Northing:	1,959,879.47 usft	Latitude:	36.38590016
	+E/-W	0 ft	Easting:	2,644,143.98 usft	Longitude:	-108.10155276
Position Uncertainty		0 ft	Wellhead Elevation:	ft	Ground Level:	6354 ft
Grid Convergence:		-0.16 °				

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/27/2021	8.95	62.93	49,352.56011965

Design	APD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0	0	0	139.30

Plan Survey Tool Program	Date	3/21/2022		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	11,537 APD (Original Drilling)	MWD+IGRF	
			OWSG MWD + IGRF or WMM	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
515	0.00	0.00	515	0	0	0.00	0.00	0.00	0.00	
1320	16.10	275.01	1309	10	-112	2.00	2.00	0.00	275.01	
4193	16.10	275.01	4070	79	-905	0.00	0.00	0.00	0.00	
5340	90.58	132.82	4834	-447	-538	9.00	6.49	-12.40	-140.98	610H Heel
11,537	90.58	132.82	4771	-4659	4007	0.00	0.00	0.00	0.00	610H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 610H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Project:	Proposed Carson Unit	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site:	WC 22-2 Pad	North Reference:	True
Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
500	0.00	0.00	500	0	0	0	0.00	0.00	0.00
515	0.00	0.00	515	0	0	0	0.00	0.00	0.00
600	1.70	275.01	600	0	-1	-1	2.00	2.00	0.00
700	3.70	275.01	700	1	-6	-4	2.00	2.00	0.00
800	5.70	275.01	800	1	-14	-10	2.00	2.00	0.00
900	7.70	275.01	899	2	-26	-18	2.00	2.00	0.00
1000	9.70	275.01	998	4	-41	-29	2.00	2.00	0.00
1100	11.70	275.01	1096	5	-59	-43	2.00	2.00	0.00
1200	13.70	275.01	1193	7	-81	-58	2.00	2.00	0.00
1300	15.70	275.01	1290	9	-106	-77	2.00	2.00	0.00
1320	16.10	275.01	1309	10	-112	-80	2.00	2.00	0.00
1400	16.10	275.01	1386	12	-134	-96	0.00	0.00	0.00
1500	16.10	275.01	1482	14	-162	-116	0.00	0.00	0.00
1600	16.10	275.01	1578	17	-189	-136	0.00	0.00	0.00
1700	16.10	275.01	1675	19	-217	-156	0.00	0.00	0.00
1800	16.10	275.01	1771	21	-245	-176	0.00	0.00	0.00
1900	16.10	275.01	1867	24	-272	-196	0.00	0.00	0.00
2000	16.10	275.01	1963	26	-300	-215	0.00	0.00	0.00
2100	16.10	275.01	2059	29	-327	-235	0.00	0.00	0.00
2200	16.10	275.01	2155	31	-355	-255	0.00	0.00	0.00
2300	16.10	275.01	2251	34	-383	-275	0.00	0.00	0.00
2400	16.10	275.01	2347	36	-410	-295	0.00	0.00	0.00
2500	16.10	275.01	2443	38	-438	-315	0.00	0.00	0.00
2600	16.10	275.01	2539	41	-465	-334	0.00	0.00	0.00
2700	16.10	275.01	2635	43	-493	-354	0.00	0.00	0.00
2800	16.10	275.01	2731	46	-521	-374	0.00	0.00	0.00
2900	16.10	275.01	2828	48	-548	-394	0.00	0.00	0.00
3000	16.10	275.01	2924	50	-576	-414	0.00	0.00	0.00
3100	16.10	275.01	3020	53	-604	-434	0.00	0.00	0.00
3200	16.10	275.01	3116	55	-631	-454	0.00	0.00	0.00
3300	16.10	275.01	3212	58	-659	-473	0.00	0.00	0.00
3400	16.10	275.01	3308	60	-686	-493	0.00	0.00	0.00
3500	16.10	275.01	3404	63	-714	-513	0.00	0.00	0.00
3600	16.10	275.01	3500	65	-742	-533	0.00	0.00	0.00
3700	16.10	275.01	3596	67	-769	-553	0.00	0.00	0.00
3800	16.10	275.01	3692	70	-797	-573	0.00	0.00	0.00
3900	16.10	275.01	3788	72	-825	-592	0.00	0.00	0.00
4000	16.10	275.01	3884	75	-852	-612	0.00	0.00	0.00
4100	16.10	275.01	3980	77	-880	-632	0.00	0.00	0.00
4193	16.10	275.01	4070	79	-905	-651	0.00	0.00	0.00
4200	15.62	273.56	4077	80	-907	-652	9.00	-6.92	-21.05
4300	10.49	239.71	4174	76	-929	-663	9.00	-5.13	-33.85
4400	11.68	191.93	4272	61	-939	-659	9.00	1.19	-47.78
4500	17.98	166.03	4369	36	-937	-639	9.00	6.30	-25.90
4600	25.89	154.34	4462	2	-924	-604	9.00	7.91	-11.69
4700	34.32	147.97	4548	-42	-899	-555	9.00	8.43	-6.37
4800	42.95	143.90	4626	-94	-864	-493	9.00	8.64	-4.08
4900	51.69	140.97	4694	-152	-819	-419	9.00	8.74	-2.93
5000	60.49	138.68	4750	-215	-766	-336	9.00	8.80	-2.29



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 610H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Project:	Proposed Carson Unit	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site:	WC 22-2 Pad	North Reference:	True
Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5100	69.32	136.76	4792	-282	-705	-246	9.00	8.83	-1.92	
5200	78.17	135.05	4820	-351	-638	-150	9.00	8.85	-1.71	
5300	87.03	133.45	4833	-420	-567	-52	9.00	8.86	-1.60	
5340	90.58	132.82	4834	-447	-538	-12	9.00	8.86	-1.57	
5400	90.58	132.82	4833	-488	-494	48	0.00	0.00	0.00	
5500	90.58	132.82	4832	-556	-421	147	0.00	0.00	0.00	
5600	90.58	132.82	4831	-624	-347	247	0.00	0.00	0.00	
5700	90.58	132.82	4830	-692	-274	346	0.00	0.00	0.00	
5800	90.58	132.82	4829	-760	-201	445	0.00	0.00	0.00	
5900	90.58	132.82	4828	-828	-127	545	0.00	0.00	0.00	
6000	90.58	132.82	4827	-896	-54	644	0.00	0.00	0.00	
6100	90.58	132.82	4826	-964	19	743	0.00	0.00	0.00	
6200	90.58	132.82	4825	-1032	93	843	0.00	0.00	0.00	
6300	90.58	132.82	4824	-1100	166	942	0.00	0.00	0.00	
6400	90.58	132.82	4823	-1168	239	1041	0.00	0.00	0.00	
6500	90.58	132.82	4822	-1236	313	1141	0.00	0.00	0.00	
6600	90.58	132.82	4821	-1304	386	1240	0.00	0.00	0.00	
6700	90.58	132.82	4820	-1372	460	1339	0.00	0.00	0.00	
6800	90.58	132.82	4819	-1439	533	1439	0.00	0.00	0.00	
6900	90.58	132.82	4818	-1507	606	1538	0.00	0.00	0.00	
7000	90.58	132.82	4817	-1575	680	1637	0.00	0.00	0.00	
7100	90.58	132.82	4816	-1643	753	1737	0.00	0.00	0.00	
7200	90.58	132.82	4815	-1711	826	1836	0.00	0.00	0.00	
7300	90.58	132.82	4814	-1779	900	1936	0.00	0.00	0.00	
7400	90.58	132.82	4813	-1847	973	2035	0.00	0.00	0.00	
7500	90.58	132.82	4812	-1915	1046	2134	0.00	0.00	0.00	
7600	90.58	132.82	4811	-1983	1120	2234	0.00	0.00	0.00	
7700	90.58	132.82	4810	-2051	1193	2333	0.00	0.00	0.00	
7800	90.58	132.82	4809	-2119	1266	2432	0.00	0.00	0.00	
7900	90.58	132.82	4808	-2187	1340	2532	0.00	0.00	0.00	
8000	90.58	132.82	4807	-2255	1413	2631	0.00	0.00	0.00	
8100	90.58	132.82	4806	-2323	1486	2730	0.00	0.00	0.00	
8200	90.58	132.82	4805	-2391	1560	2830	0.00	0.00	0.00	
8300	90.58	132.82	4804	-2459	1633	2929	0.00	0.00	0.00	
8400	90.58	132.82	4803	-2527	1706	3028	0.00	0.00	0.00	
8500	90.58	132.82	4802	-2595	1780	3128	0.00	0.00	0.00	
8600	90.58	132.82	4801	-2663	1853	3227	0.00	0.00	0.00	
8700	90.58	132.82	4800	-2731	1927	3327	0.00	0.00	0.00	
8800	90.58	132.82	4799	-2799	2000	3426	0.00	0.00	0.00	
8900	90.58	132.82	4798	-2867	2073	3525	0.00	0.00	0.00	
9000	90.58	132.82	4797	-2935	2147	3625	0.00	0.00	0.00	
9100	90.58	132.82	4796	-3003	2220	3724	0.00	0.00	0.00	
9200	90.58	132.82	4795	-3071	2293	3823	0.00	0.00	0.00	
9300	90.58	132.82	4794	-3139	2367	3923	0.00	0.00	0.00	
9400	90.58	132.82	4793	-3206	2440	4022	0.00	0.00	0.00	
9500	90.58	132.82	4792	-3274	2513	4121	0.00	0.00	0.00	
9600	90.58	132.82	4791	-3342	2587	4221	0.00	0.00	0.00	
9700	90.58	132.82	4790	-3410	2660	4320	0.00	0.00	0.00	
9800	90.58	132.82	4789	-3478	2733	4419	0.00	0.00	0.00	
9900	90.58	132.82	4788	-3546	2807	4519	0.00	0.00	0.00	
10,000	90.58	132.82	4787	-3614	2880	4618	0.00	0.00	0.00	
10,100	90.58	132.82	4786	-3682	2953	4718	0.00	0.00	0.00	
10,200	90.58	132.82	4785	-3750	3027	4817	0.00	0.00	0.00	
10,300	90.58	132.82	4784	-3818	3100	4916	0.00	0.00	0.00	



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 610H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Project:	Proposed Carson Unit	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site:	WC 22-2 Pad	North Reference:	True
Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	90.58	132.82	4783	-3886	3173	5016	0.00	0.00	0.00	
10,500	90.58	132.82	4782	-3954	3247	5115	0.00	0.00	0.00	
10,600	90.58	132.82	4780	-4022	3320	5214	0.00	0.00	0.00	
10,700	90.58	132.82	4779	-4090	3394	5314	0.00	0.00	0.00	
10,800	90.58	132.82	4778	-4158	3467	5413	0.00	0.00	0.00	
10,900	90.58	132.82	4777	-4226	3540	5512	0.00	0.00	0.00	
11,000	90.58	132.82	4776	-4294	3614	5612	0.00	0.00	0.00	
11,100	90.58	132.82	4775	-4362	3687	5711	0.00	0.00	0.00	
11,200	90.58	132.82	4774	-4430	3760	5810	0.00	0.00	0.00	
11,300	90.58	132.82	4773	-4498	3834	5910	0.00	0.00	0.00	
11,400	90.58	132.82	4772	-4566	3907	6009	0.00	0.00	0.00	
11,500	90.58	132.82	4771	-4634	3980	6108	0.00	0.00	0.00	
11,537	90.58	132.82	4771	-4659	4007	6145	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
610H Toe	0.00	0.00	4771	-4659	4007	1,955,209.58	2,648,138.46	36.37310170		-108.08794010
- plan hits target center										
- Circle (radius 100)										
610H Heel	0.00	0.00	4834	-447	-538	1,959,433.69	2,643,604.74	36.38467148		-108.10338051
- plan hits target center										
- Circle (radius 50)										

Casing Points							Casing Diameter (in)	Hole Diameter (in)
Measured Depth (ft)	Vertical Depth (ft)	Name						
380	380	Surface					9.63	12.25
5277	4831	Intermediate					7.00	8.75



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 610H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6354' & RKB 14' @ 6368ft
Project:	Proposed Carson Unit	MD Reference:	GL 6354' & RKB 14' @ 6368ft
Site:	WC 22-2 Pad	North Reference:	True
Well:	# 610H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
256	256	Ojo Alamo		0.00	0.00	
379	379	Kirtland		0.00	0.00	
890	889	Fruitland		0.00	0.00	
1166	1160	Pictured Cliffs		0.00	0.00	
1318	1308	Lewis		0.00	0.00	
1948	1913	Chacra		0.00	0.00	
2629	2567	Menefee		0.00	0.00	
3689	3586	Point Lookout		0.00	0.00	
3867	3757	Mancos		0.00	0.00	
4203	4079	Mancos Silt		0.00	0.00	
4777	4609	Gallup A		0.00	0.00	
4861	4669	Gallup B		0.00	0.00	
5030	4764	Gallup C		0.00	0.00	



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

#610H CARSON UNIT

Lease: NOO-C-14-20-5578 Agreement: NMNM78385X

SH: NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 22, T.25 N., R.12 W.

San Juan County, New Mexico

BH: SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 26, 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.**

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

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 523261

ACKNOWLEDGMENTS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 523261
	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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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 523261

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 523261
	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.	11/5/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	11/5/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	11/21/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	11/21/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	11/21/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	11/21/2025