

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. 9. API Well No. <div style="color: red; text-align: center;">30-045-38430</div>
2. Name of Operator 3a. Address 3b. Phone No. (include area code)		10. Field and Pool, or Exploratory 11. Sec., T. R. M. or Blk. and Survey or Area 12. County or Parish 13. State
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		14. Distance in miles and direction from nearest town or post office* 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) <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 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). </div> <div style="width: 48%;"> 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. </div> </div>		
25. Signature Title		Name (Printed/Typed) Date
Approved by (Signature) Title		Name (Printed/Typed) Office

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 Title	Name (Printed/Typed) Office	Date Date
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Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
 Conditions of approval, if any, are attached.

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

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: NENW / 64 FNL / 1582 FWL / TWSP: 23N / RANGE: 9W / SECTION: 7 / LAT: 36.248515 / LONG: -107.833756 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 128 FNL / 1556 FWL / TWSP: 23N / RANGE: 9W / SECTION: 7 / LAT: 36.248339 / LONG: -107.833845 (TVD: 4336 feet, MD: 4453 feet)

PPP: NESE / 1419 FSL / 1 FEL / TWSP: 23N / RANGE: 10W / SECTION: 1 / LAT: 36.252623 / LONG: -107.839133 (TVD: 4487 feet, MD: 11891 feet)

PPP: SESW / 1 FSL / 1427 FWL / TWSP: 23N / RANGE: 9W / SECTION: 6 / LAT: 36.248695 / LONG: -107.834283 (TVD: 4487 feet, MD: 11891 feet)

BHL: LOT 3 / 232 FNL / 1645 FWL / TWSP: 23N / RANGE: 10W / SECTION: 1 / LAT: 36.262535 / LONG: -107.851375 (TVD: 4487 feet, MD: 11891 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 30-045-38430	Pool Code 5860	Pool Name BISTI; S-GALLUP (O)
Property Code 336968	Property Name PONDEROSA UNIT	Well Number 111H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6802'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input 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
C	7	23N	9W		64' NORTH	1582' WEST	36.248515° N	107.833756° 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
C	1	23N	10W	3	232' NORTH	1645' WEST	36.262535° N	107.851375° W	SAN JUAN

Dedicated Acres SEC 7: NE/NW & LOT 1 (80.30 AC.); SEC 6: SE/SW, LOT 7 & LOT 6 (120.39 AC.); SEC 1: SE/SE, NE/SE, NW/SE, SE/NE, SW/NE, LOT 2, LOT 3 & SE/NW (319.44 AC.) = 520.63 ACRES	PENETRATED SPACING UNIT: Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code UNIT
Order Numbers: R-14194	Well Setbacks are under Common Ownership: <input checked="" 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
C	7	23N	9W		64' NORTH	1582' WEST	36.248515° N	107.833756° 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
C	7	23N	9W		128' NORTH	1556' WEST	36.248339° N	107.833845° 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
C	1	23N	10W	3	232' NORTH	1645' WEST	36.262535° N	107.851375° W	SAN JUAN

Unitized Area or Area of Uniform Interest PONDEROSA	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
Signature

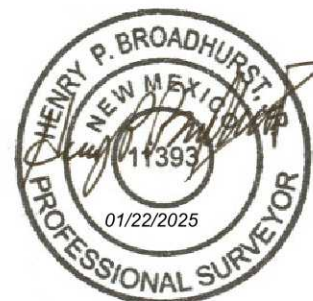
1/23/2025
Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
E-mail Address

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor:

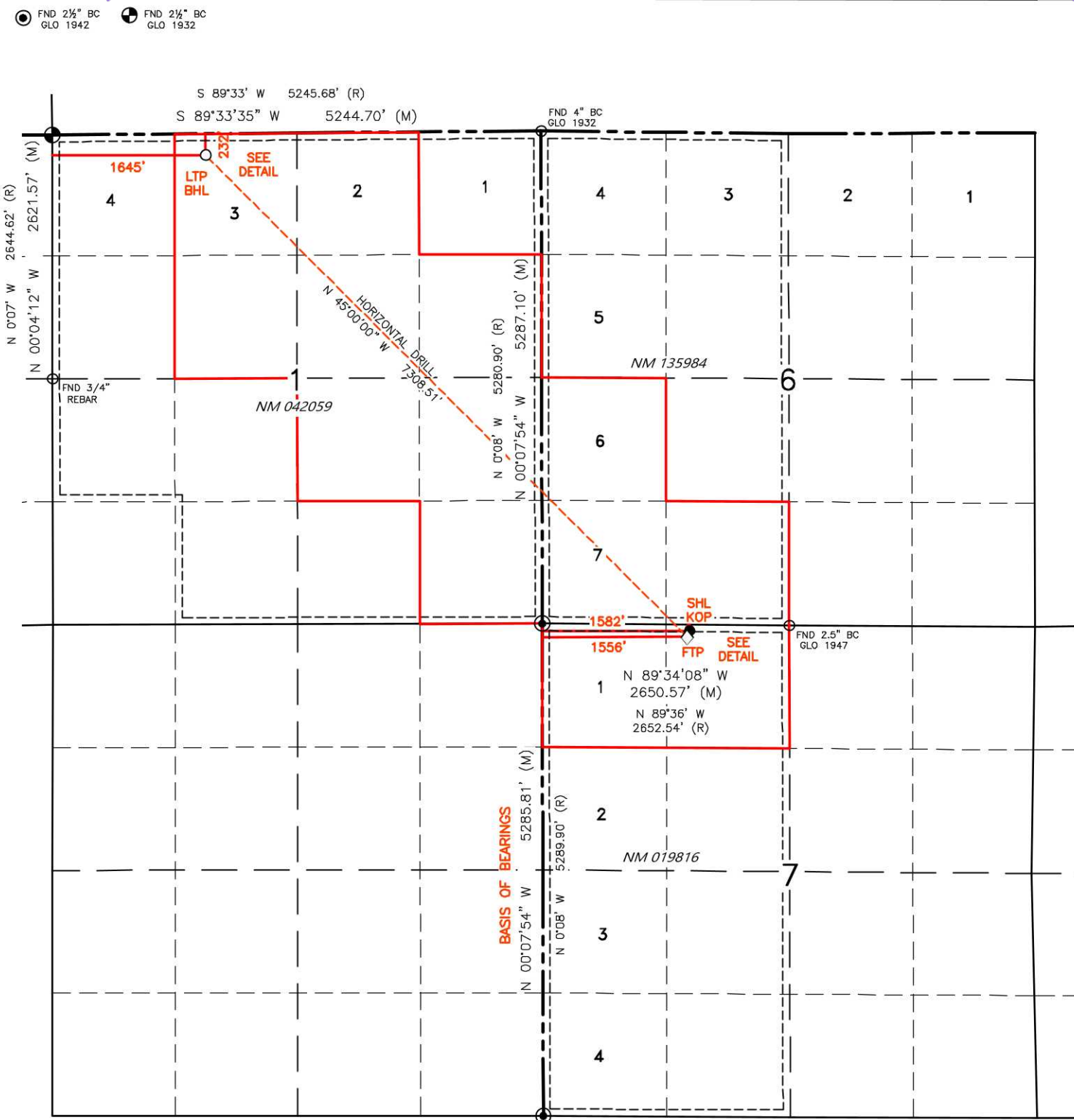
Certificate Number

11393

Date of Survey

JUNE 26, 2024

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



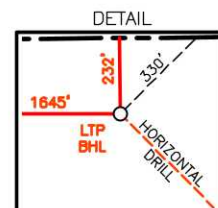
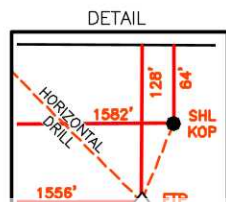
SURFACE LOCATION (SHL)
 64' FNL 1582' FWL
 SEC. 7, T23N, R9W
 LAT. 36.248515° N (NAD83)
 LONG. 107.833756° W (NAD83)

FIRST TAKE POINT (FTP)
 128' FNL 1556' FWL
 SEC. 7, T23N, R9W
 LAT. 36.248339° N (NAD83)
 LONG. 107.833845° W (NAD83)

BOTTOM HOLE LOCATION (BHL)
 232' FNL 1645' FWL
 SEC. 6, T23N, R10W
 LAT. 36.262535° N (NAD83)
 LONG. 107.851375° W (NAD83)

KICK OFF POINT (KOP)
 64' FNL 1582' FWL
 SEC. 7, T23N, R9W
 LAT. 36.248515° N (NAD83)
 LONG. 107.833756° W (NAD83)

LAST TAKE POINT (LTP)
 232' FNL 1645' FWL
 SEC. 6, T23N, R10W
 LAT. 36.262535° N (NAD83)
 LONG. 107.851375° W (NAD83)



State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: DJR Operating, LLC **OGRID:** 371838 **Date:** 10 / 22 / 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
Ponderosa 099H	TBD	C-07-23N-09W	87 FNL x 1615 FWL	383	488	136
Ponderosa 111H	TBD	C-07-23N-09W	64 FNL x 1582 FWL	407	519	145
Ponderosa 112H	TBD	C-07-23N-09W	53 FNL x 1566 FWL	420	535	149
Ponderosa 117H	TBD	C-07-23N-09W	76 FNL x 1598 FWL	371	472	132

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
Ponderosa 099H	TBD	12/16/2024	12/26/2024	02/14/2025	03/31/2025	03/31/2025
Ponderosa 111H	TBD	12/17/2024	12/27/2024	02/14/2025	03/31/2025	03/31/2025
Ponderosa 112H	TBD	12/18/2024	12/28/2024	02/14/2025	03/31/2025	03/31/2025
Ponderosa 117H	TBD	12/19/2024	12/29/2024	02/14/2025	03/31/2025	03/31/2025

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@djrlc.com
Date: 10/22/2024
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
PONDEROSA UNIT 099H, 111H, 112H and 117H
NENW C-07-23N-09W

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
PONDEROSA UNIT 099H, 111H, 112H and 117H
NENW C-07-23N-09W

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
PONDEROSA UNIT 099H, 111H, 112H and 117H
NENW C-07-23N-09W

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 separators 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 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
PONDEROSA UNIT 099H, 111H, 112H and 117H
NENW C-07-23N-09W

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.



ENDURING RESOURCES IV, LLC
6300 S SYRACUSE WAY, SUITE 525
CENTENNIAL, COLORADO 80211

DRILLING PLAN: *Drill, complete, and equip single lateral in the Mancos-Cms Silt formation*

WELL INFORMATION:

Name: Ponderosa Unit 111H

API Number: Not yet assigned

State: New Mexico

County: San Juan

Surface Elevation: 6,802 ft ASL (GL) 6,826 ft ASL (KB)

Surface Location: 7-23-9 Sec-Twn-Rng 64 ft FNL 1,582 ft FWL
 36.248515 ° N latitude 107.833756 ° W longitude (NAD 83)

BH Location: 6-23-10 Sec-Twn-Rng 232 ft FNL 1,645 ft FWL
 36.262535 ° N latitude 107.851375 ° W longitude (NAD 83)

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 36.8 miles to Nageezi Post Office; Right (SouthWest) on Cty Road 7800/7786 for 5.2 miles to 3-way intersection; Right (NorthWest) on Cty Road 7825 for 1.2 mi location access on right side to Ponderosa Unit 099H PAD. There are 9 wells staked on this pad, from SouthEast to North West: Ponderosa Unit 099H, 117H, 111H, 112H, 136H, 114H, 120H, 116H, 115H.

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	6,395	431	431	W	normal
	Kirtland	6,303	522	522	W	normal
	Fruitland	6,050	776	776	G, W	sub
	Pictured Cliffs	5,647	1,179	1,179	G, W	sub
	Lewis	5,488	1,338	1,340	G, W	normal
	Chacra	5,284	1,542	1,547	G, W	normal
	Cliff House	4,265	2,561	2,584	G, W	sub
	Menefee	4,257	2,569	2,592	G, W	normal
	Point Lookout	3,209	3,617	3,652	G, W	normal
	Mancos	3,072	3,754	3,789	O,G	sub (~0.38)
	Gallup (MNCS_A)	2,721	4,105	4,147	O,G	sub (~0.38)
	MNCS_B	2,611	4,215	4,277	O,G	sub (~0.38)
	MNCS_C	2,530	4,296	4,388	O,G	sub (~0.38)
	MNCS_Cms	2,490	4,336	4,453	O,G	sub (~0.38)
	MNCS_D		NA	NA	O,G	sub (~0.38)
	MNCS_E		NA	NA	O,G	sub (~0.38)
	MNCS_F		NA	NA	O,G	sub (~0.38)
	MNCS_G		NA	NA	O,G	sub (~0.38)
	MNCS_H		NA	NA	O,G	sub (~0.38)
	MNCS_I		NA	NA	O,G	sub (~0.38)
	FTP TARGET	2,490	4,336	4,453	O,G	sub (~0.38)
	PROJECTED TD	2,339	4,487	11,891	O,G	sub (~0.38)

Surface: Nacimiento

Oil & Gas Zones: Several gas bearing zones will be encountered; target formation is the Gallup

Pressure: Normal (0.43 psi/ft) or sub-normal pressure gradients anticipated in all formations

Max. pressure gradient: 0.43 psi/ft Evacuated hole gradient: 0.22 psi/ft

Maximum anticipated BH pressure, assuming maximum pressure gradient: 1,930 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 950 psi

Temperature: Maximum anticipated BHT is 125° F or less

H₂S INFORMATION:

H₂S Zones: Encountering hydrogen-sulfide bearing zones is **NOT** anticipated.

Safety: Sensors and alarms will be placed in the substructure, on the rig floor, above the pits, and at the shakers.

LOGGING, CORING, AND TESTING:

Mud Logs: None planned; remote geo-steering from drill out of 7" casing to TD; gas detection from drillout of 9-5/8" casing to TD.

MWD / LWD: Gamma Ray from drillout of 9-5/8" casing to TD

Open Hole Logs: None planned

Testing: None planned

Coring: None planned

Cased Hole Logs: CBL on 7" casing from deepest free-fall depth to surface

DRILLING RIG INFORMATION:

Contractor: Ensign

Rig No.: 140

Draw Works: Pacific Rim 1500AC (1,500 hp)

Mast: Process MFG Corp Swing Up Triple (136 ft, 750,000 lbs)

Top Drive: Tesco 400-EXI-600 (400 ton)

Prime Movers: 3 - CAT 3512C (1,350 hp)

Pumps: 2 - Gardner Denver PZ-11 (7,500 psi)

BOPE 1: T3 Annular & Shaffer double gate ram (11", 5,000 psi)

BOPE 2: T3 annular(11", 5,000 psi)

Choke 3", 5,000 psi

KB-GL (ft): 23.5

Note: Actual drilling rig may vary depending on availability at time the well is scheduled to be drilled.

BOPE REQUIREMENTS:

See attached diagram for details regarding BOPE specifications and configuration.

- 1) Rig will be equipped with upper and lower kelly cocks with handles available.
- 2) Inside BOP and TIW valves will be available to use on all sizes and threads of drill pipe used while drilling the well.
- 3) BOP accumulator will have enough capacity to open the HCR valve, close all rams and annular preventer, and retain minimum of 200 psi above precharge on the closing manifold without the use of closing pumps. The fluid reservoir capacity shall be at least double the usable fluid volume of the accumulator system capacity, and the fluid level shall be maintained at manufacturer's recommendation. There will be two additional sources of power for the closing pumps (electric and air). Sufficient nitrogen bottles will be available and will be recharged when pressure falls below manufacturer's recommended minimum.

- 4) BOP testing shall be conducted (a) when initially installed, (b) whenever any seal is broken or repaired, (c) if the time since the previous test exceeds 30 days. Tests will be conducted using a test plug. BOP ram preventers will be tested to 3,000 psig for 10 minutes, and the annular preventer will be tested to 1,500 psi for 10 minutes. Ram and annular preventers will be tested to 250 psi for 5 minutes. Additionally, BOP and casing strings will be tested to .22 psi/ft or 1,500 psi, whichever is greater but not exceeding 70% of yield strength of the casing, for 30 minutes, prior to drilling out 13-3/8" and 9-5/8" casing. Rams and hydraulically operated remote choke line valve will be function tested daily at a minimum.
- 5) Remote valve for BOP rams, HCR, and choke shall be placed in a location that is readily available to the driller. The remote BOP valve shall be capable of closing and opening the rams.
- 6) Manual locking devices (hand wheels) shall be installed on rams. A valve will be installed on the annular preventer's closing line as close as possible to the preventer to act as a locking device. The valve will be maintained in the open position and shall only be closed when there is no power to the accumulator.

FLUIDS AND SOLIDS CONTROL PROGRAM:

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).

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 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.).

Solids 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.).

Fluid Program: See "Detailed Drilling Plan" section and attached Newpark mud program for additional details.

DETAILED DRILLING PLAN:**SURFACE:** *Drill vertically to casing setting depth (plus necessary rathole), run casing, cement casing to surface.*

0 ft (MD)	to	350 ft (MD)	Hole Section Length:	350 ft
0 ft (TVD)	to	350 ft (TVD)	Casing Required:	350 ft

Note: Surface hole may be drilled, cased, and cemented with a smaller rig in advance of the drilling rig.

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	Fresh Water	8.4	N/C	2 - 8	2 - 12	9.0	Spud mud

Hole Size: 12-1/4"**Bit / Motor:** Mill Tooth or PDC, no motor**MWD / Survey:** No MWD, deviation survey**Logging:** None

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	9.625	36.0	K-55	STC	2,020	3,520	564,000	423,000
Loading					153	951	110,988	110,988
Min. S.F.					13.21	3.70	5.08	3.81

*Assumptions: Collapse: fully evacuated casing with 8.4 ppg equivalent external pressure gradient**Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling**intermediate hole and 8.4 ppg equivalent external pressure gradient**Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull***MU Torque (ft lbs):** Minumum: 3,400 Optimum: 4,530 Maximum: 5,660**Casing Summary:** Float shoe, 1 jt casing, float collar, casing to surface**Centralizers:** 2 centralizers per jt stop-banded 10' from each collar on bottom 3 jts, 1 centralizer per 2 jts to surface

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	Hole Cap. (cuft/ft)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Redi-Mix	TYPE I-II	14.5	1.61	7.41	0.3132	50%	0	114	184

Calculated cement volumes assume gauge hole and the excess noted in table

Csg ID 8.921

Mesa Ready Mix or first available

Shoe Track L 44

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out.

INTERMEDIATE: Drill as per directional plan to casing setting depth, run casing, cement casing to surface.

350 ft (MD)	to	4,749 ft (MD)	Hole Section Length:	4,399 ft
350 ft (TVD)	to	4,435 ft (TVD)	Casing Required:	4,749 ft

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	LSND (KCI)	8.8 - 9.2	15	8 - 14	6 - 12	10.8 - 11.2	No OBM

Hole Size (inches): 8.75

Bit / Motor: 8-3/4" PDC bit w/mud motor

MWD / Survey: MWD Survey with inclination and azimuth survey (every 100' at a minimum), GR optional

Logging: None

Pressure Test: NU BOPE and test (as noted above); pressure test 13-3/8" casing to **1,500** psi for 30 minutes.

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	7	26.0	K-55	LTC	4,320	4,980	415,000	367,000
Loading					1,937	1,204	207,675	207,675
Min. S.F.					2.23	4.14	2.00	1.77

Assumptions: Collapse: fully evacuated casing with 8.4 ppg equivalent external pressure gradient

Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling production hole and 8.4 ppg equivalent external pressure gradient

Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs): Minimum: 3,400 Optimum: 4,530 Maximum: 5,660

Centralizers: 1 per joint in non-vertical hole; 1 per 2-joints in vertical hole

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Lead	III:POZ Blend	12.5	2.140	12.05	70%	0	426	912
Tail	Type III	14.6	1.380	6.64	20%	3,689	145	201

Annular Capacity	0.16681	cuft/ft	7" casing x 9-5/8" casing annulus	Shoe Track L	44
	0.1503	cuft/ft	9-5/8" casing x 12-1/4" hole annulus	Casing ID	6.276
	0.2148	cuft/ft	7" casing casing volume		

Calculated cement volumes assume gauge hole and the excess noted in table

Drake Intermediate Cementing Program

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out.

PRODUCTION: Drill to TD following directional plan, run casing, cement casing to surface.

4,749 ft (MD)	to	11,891 ft (MD)	Hole Section Length:	7,142 ft
4,435 ft (TVD)	to	4,487 ft (TVD)	Casing Required:	7,293 ft
Estimated KOP:		3,899 ft (MD)	3,864 ft (TVD)	
Estimated Liner Top:		4,598 ft (MD)	4,402 ft (TVD)	
Estimated Landing Point (FTP):		4,453 ft (MD)	4,336 ft (TVD)	
Estimated Lateral Length:		7,438 ft (MD)		

Fluid:	Type	MW (ppg)	FL (mL/30')	PV (cp)	YP (lb/100 sqft)	pH	Comments	Comments
	WBM	8.7 - 9.0	NC	+20	±2	9-9.5	prod water	OBM as contingency

Hole Size: 6.125

Bit / Motor: 6-1/8" PDC bit w/mud motor

MWD / Survey: MWD with GR, inclination, and azimuth (survey every joint from KOP to Landing Point and survey every 100' minimum before KOP and after Landing Point)

Logging: GR MWD for entire section, no mud-log or cuttings sampling, no OH WL logs

Pressure Test: NU BOPE and test (as noted above); pressure test 9-5/8" casing to 1,500 psi for 30 minutes.

Liner/Casing Specs:

Specs

Loading

Min. S.F.

Size (in)	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
4.500	11.6	P-110	BTC	7,560	10,690	367,000	385,000
				2,217	8,757	219,026	219,026
				3.41	1.22	1.68	1.76

Assumptions: Collapse: fully evacuated casing with 9.5 ppg fluid in the annulus (floating casing during running)

Burst: 8,500 psi maximum surface treating pressure with 10.2 ppg equivalent mud weight sand laden fluid with 8.4 ppg equivalent external pressure gradient.

Tension: buoyed weight in 9.0 ppg fluid with 100,000 lbs over-pull. Tension calculations assume vertical hole to approximate drag in lateral.

MU Torque (ft lbs): Minimum: BTC Optimum: BTC Maximum: BTC

Centralizers: Centralizer count and placement may be adjusted based on well conditions and as-drilled surveys.

Cement:

Spacer

Type	Weight (ppg)	Yield	Water	% Excess	Planned TOC	Total Cmt	Total Cmt (cu)
IntegraGuard Star	11		31.6		0	40 bbls	
Tail	G:POZ blend	13.3	1.560	7.70	25%	4,598	582 908

Displacement

159 est bbls

Annular Capacities

0.1044	cuft/ft	4-1/2" casing x 7" casing annulus
0.09417	cuft/ft	4-1/2" casing x 6-1/8" hole annulus
0.0873	cuft/ft	4-1/2" casing volume est shoe jt ft 100
0.0102	bbls/ft	4" DP capacity

Calculated cement volumes assume gauge hole and the excess noted in table

American Cementing Liner & Production Blend

Spacer

S-8 Silica Flour	Avis 616 viscosifier	FP24 Defoamer .5	Plus 3K LCM 15	SS201 Surfactant 1			
163.7 lbs/bbl	11.6 lb/bbl	lb/bbl	lb/bbl	gal/bbl			
	Bentonite			IntegraGuard		FP24 Defoamer	
	BA90 Bonding	Viscosifier 8%	FL24 Fluid Loss .5%	GW86 Viscosifier	R7C Retarder .2%	0.3% BWOB, Anti-Static .01 lb/sx	
Lead/Tail	ASTM Type I/II	Agent 5.0 lb/sx	BWOB	.1% BWOB	BWOB		
			Bentonite		IntegraGuard		FP24 Defoamer .3% BWOB,
	Pozzolan Fly Ash	BA90 Bonding	Viscosifier 4%	FL24 Fluid Loss .4%	GW86 Viscosifier	R3 Retarder .5%	IntegraSeal 0.25
Type G 50%	Extender 50%	Agent 3.0 lb/sx	BWOB	BWOB	.1% BWOB	BWOB	lb/sx

Notify NMOC & BLM if cement is not circulated to surface.

Note: This well will not be considered an unorthodox well location as defined by NMAC 19.15.16.15.C.5. As defined in NMAC 19.15.16.15.C.1.a and 19.15.16.15.C.1.b, no point in the completed interval shall be closer to the unit boundary than 100' measured along the azimuth of the well or 330' measured perpendicular to the azimuth well. The boundaries of the completed interval, as defined by NMAC 19.15.16.7.B, are the last take point and first take point, as defined by NMAC 19.15.16.7.E and NMAC 19.15.16.7.J, respectively. In the case of this well, the last take point will be the bottom toe-initiation sleeve, and the first take point will be the top perforation. **Neither the toe-initiation sleeve nor the top perforation shall be closer to the unit boundary than 100' measured along the azimuth of the well or 330' measured perpendicular to the azimuth of the well.**

FINISH WELL: ND BOP, cap well, RDMO.

COMPLETION AND PRODUCTION PLAN:

Est Lateral Length: 7,338

Est Frac Inform: 31 Frac Stages 118,000 bbls slick water 9,540,000 lbs proppant

Flowback: Flow back through production tubing as pressures allow

Production: Produce through production tubing via gas-lift into permanent production and storage facilities

ESTIMATED START DATES:

Drilling: 12/16/2024

Completion: 2/14/2025

Production: 3/31/2025

Prepared by: Greg Olson 7/18/2024

Updated:

WELL NAME: **Ponderosa Unit 111H**
OBJECTIVE: **Drill, complete, and equip single lateral in the Mancos-Cms Silt formation**

API Number: *Not yet assigned*
AFE Number: *Not yet assigned*
ER Well Number: *Not yet assigned*

State: **New Mexico**
County: **San Juan**

Surface Elev.: **6,802** ft ASL (GL) **6,826** ft ASL (KB)
Surface Location: **7-23-9** Sec-Twn- Rng **64** ft FNL **1,582** ft FWL
BH Location: **6-23-10** Sec-Twn- Rng **232** ft FNL **1,645** ft FWL

Driving Directions: **FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:**

South on US Hwy 550 for 36.8 miles to Nageezi Post Office; Right (SouthWest) on Cty Road 7800/7786 for 5.2 miles to 3-way intersection;
Right (NorthWest) on Cty Road 7825 for 1.2 mi location access on right side to Ponderosa Unit 099H PAD. There are 9 wells staked on this pad,
from SouthEast to North West: Ponderosa Unit 099H, 117H, 111H, 112H, 136H, 114H, 120H, 116H, 115H.

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	4,749 ft
KOP (MD)	3,899 ft
KOP (TVD)	3,864 ft
Target (TVD)	4,336 ft
Curve BUR	10 °/100 ft
POE (MD)	4,453 ft
TD (MD)	11,891 ft
Lat Len (ft)	7,438 ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	12.250	350	9.625	36	K-55	STC	0	350
Intermediate	8.750	4,749	7	26.0	K-55	LTC	0	4,749
Production	6.125	11,891	4.500	11.6	P-110	BTC	4,598	11,891

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	TYPE I-II	14.5	1.61	7.41	0.3132	50%	0	114
Inter. (Lead)	III:POZ Blend	12.5	2.14	12.05	0.1668	70%	0	426
Inter. (Tail)	Type III	14.6	1.38	6.64	0.1503	20%	3,689	145
Prod. (Lead)	0	0	0.000	0	0.1044	0%	0	0
Prod. (Tail)	G:POZ blend	13.3	1.560	7.7	0.0873	25%	4,598	582

COMPLETION / PRODUCTION SUMMARY:

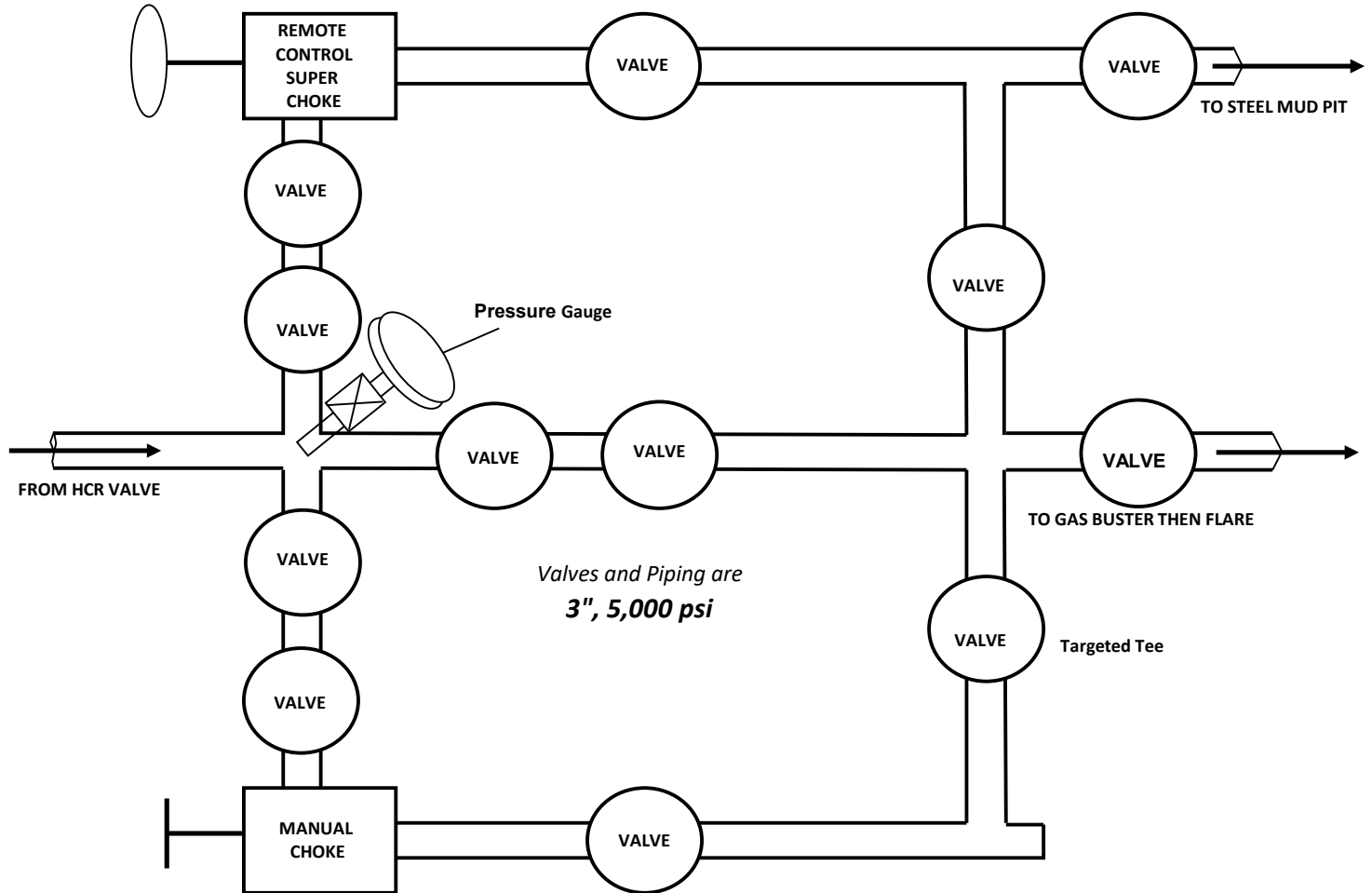
Frac: 31 plug-and-perf stages with 150,000 bbls slickwater fluid and 12,100,000 lbs of proppant (estimated)
Flowback: Flow back through production tubing as pressures allow
Production: Produce through production tubing via gas-lift into permanent production and storage facilities

Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	431	431
Kirtland	522	522
Fruitland	776	776
Pictured Cliffs	1,179	1,179
Lewis	1,338	1,340
Chacra	1,542	1,547
Cliff House	2,561	2,584
Menefee	2,569	2,592
Point Lookout	3,617	3,652
Mancos	3,754	3,789
Gallup (MNCS_A)	4,105	4,147
MNCS_B	4,215	4,277
MNCS_C	4,296	4,388
MNCS_Cms	4,336	4,453
MNCS_D	NA	NA
MNCS_E	NA	NA
MNCS_F	NA	NA
MNCS_G	NA	NA
MNCS_H	NA	NA
MNCS_I	NA	NA
FTP TARGET	4,336	4,453
PROJECTED TD	4,487	11,891

Ponderosa Unit 111H

NOTE: EXACT BOPE AND CHOKE CONFIGURATION AND COMPONENTS MAY DIFFER FROM WHAT IS DEPICTED IN THE DIGRAMS BELOW DEPENDING ON THE RIG AND ITS ASSOCIATED EQUIPMENT. RAM PREVENTERS, ANNULAR PREVENTERS, AND CHOKE MANIFOLD AND COMPONENTS WILL BE RATED TO 3,000 PSI MINIMUM.

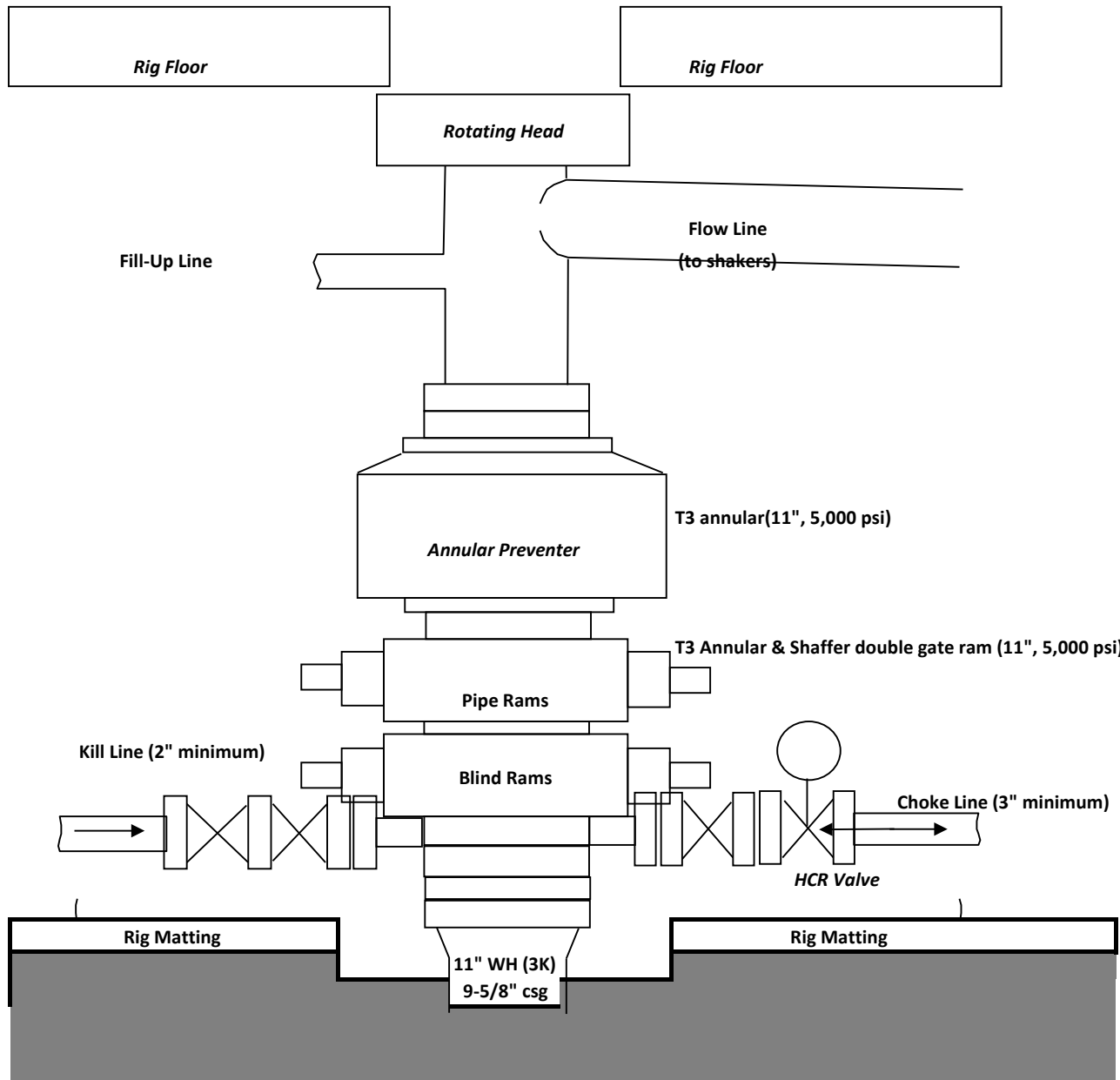
CHOKE MANIFOLD



Ponderosa Unit 111H

NOTE: EXACT BOPE AND CHOKE CONFIGURATION AND COMPONENTS MAY DIFFER FROM WHAT IS DEPICTED IN THE DIGRAMS BELOW DEPENDING ON THE RIG AND ITS ASSOCIATED EQUIPMENT. RAM PREVENTERS, ANNULAR PREVENTERS, AND CHOKE MANIFOLD AND COMPONENTS WILL BE RATED TO 3,000 PSI MINIMUM.

BOPE

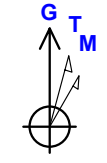




Well: Ponderosa 111H
Site: Ponderosa (99, 111,112,114-117,120,136)
Project: San Juan County, New Mexico NAD83 NM W
Design: rev0
Rig:

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Depth Reference: RKB=6802+25 @ 6827.00ft

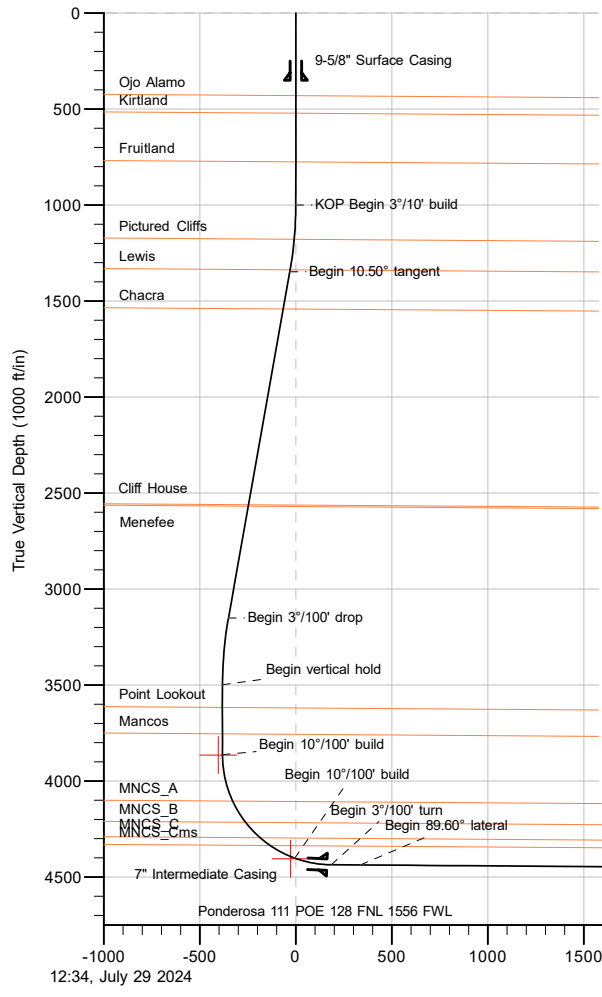
Surface location:
Northing 1909757.94 Easting 2722967.04 Latitude 36.24851500 Longitude -107.83375600



Azimuths to Grid North
True North: 0.00°
Magnetic North: 8.51°
Magnetic Field
Strength: 48995.3nT
Dip Angle: 62.68°
Date: 7/11/2024
Model: IGRF2020

CASING DETAILS

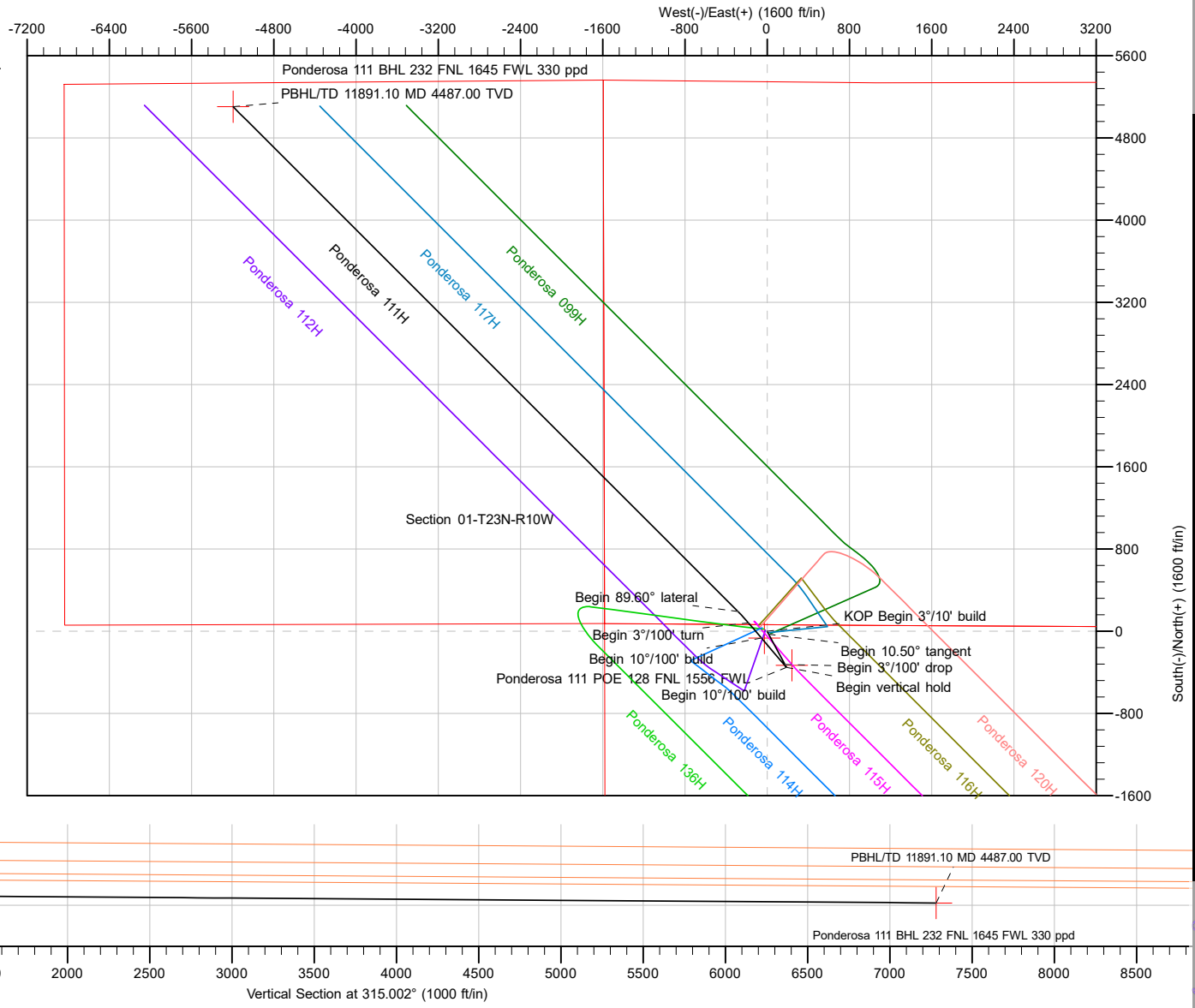
TVD	MD	Size
350.00	350.00	9-5/8
4436.31	4771.63	7



Section Details										
Seq	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.000	0.00	KOP Begin 3°/10' build
2	1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.000	0.00	Begin 10.50° tangent
3	1350.00	10.50	151.778	1348.05	-28.18	15.12	3.00	151.778	-30.62	Begin 3°/100' drop
4	3184.63	10.50	151.778	3151.95	-322.77	173.23	0.00	0.000	-350.73	Begin vertical hold
5	3534.63	0.00	0.001	3500.00	-350.95	188.35	3.00	180.000	-381.35	Begin 10°/100' build
6	3898.62	0.00	0.001	3863.99	-350.95	188.35	0.00	0.000	-381.35	Begin 10°/100' build
7	4598.62	70.00	319.550	4402.39	-64.07	-56.24	10.00	319.550	-5.54	Begin 3°/100' turn
8	4794.62	89.60	319.550	4436.93	82.01	-180.78	10.00	0.000	185.82	Begin 89.60° lateral
9	4946.24	89.60	315.001	4438.00	193.36	-283.62	3.00	-90.070	337.27	PBHL/TD 11891.10 MD 4487.00 TVD
10	11891.10	89.60	315.001	4487.00	5104.11	-5194.14	0.00	0.000	7281.96	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Ponderosa 111 BHL 232 FNL 1645 FWL 330 ppd	4487.00	5104.11	-5194.14	1914862.04	2717772.91	36.26253500	-107.85137500
Ponderosa 111 POE 128 FNL 1556 FWL	4405.00	-64.07	-26.24	1909693.87	2722940.80	36.24833900	-107.83384500
Ponderosa 111 vert	3865.06	-330.65	240.32	1909427.29	2723207.36	36.24760668	-107.83294097

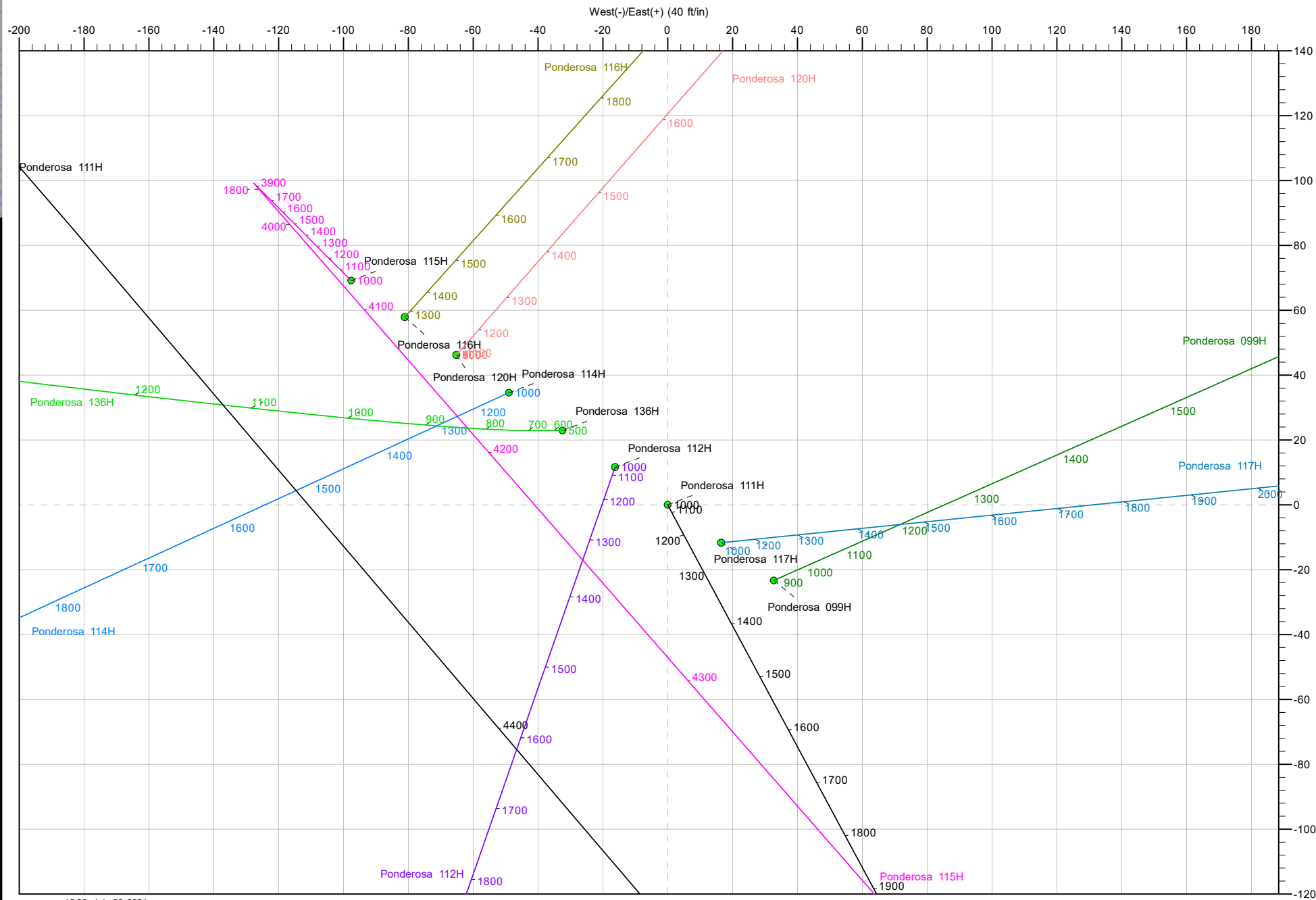


12:34, July 29 2024

Vertical Section at 315.002° (1000 ft/in)



Well: Ponderosa 111H
Site: Ponderosa (99, 111,112,114-117,120,136)
Project: San Juan County, New Mexico NAD83 NM W
Design: rev0
Rig:





Planning Report

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project	San Juan County, New Mexico NAD83 NM W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	Ponderosa (99, 111,112,114-117,120,136)				
Site Position:		Northing:	1,909,734.64 usft	Latitude:	36.24845100
From:	Lat/Long	Easting:	2,722,999.77 usft	Longitude:	-107.83364500
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	Ponderosa 111H, Surf loc: 64 FNL 1582 FWL Section07-T23N-R09W					
Well Position	+N/-S	0.00 ft	Northing:	1,909,757.94 usft	Latitude:	36.24851500
	+E/-W	0.00 ft	Easting:	2,722,967.04 usft	Longitude:	-107.83375600
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,802.00 ft
Grid Convergence:		0.000 °				

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/11/2024	8.512	62.680	48,995.25004926

Design	rev0				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	315.002	

Plan Survey Tool Program	Date	7/29/2024			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	11,891.10 rev0 (Original Hole)	MWD		
			OWSG MWD - Standard		



Planning Report

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,350.00	10.50	151.778	1,348.05	-28.18	15.12	3.00	3.00	0.00	151.778	
3,184.63	10.50	151.778	3,151.95	-322.77	173.23	0.00	0.00	0.00	0.000	
3,534.63	0.00	0.000	3,500.00	-350.95	188.35	3.00	-3.00	0.00	180.000	
3,898.62	0.00	0.000	3,863.99	-350.95	188.35	0.00	0.00	0.00	0.000	
4,598.62	70.00	319.550	4,402.39	-64.07	-56.24	10.00	10.00	0.00	319.550	
4,794.62	89.60	319.550	4,436.93	82.01	-180.78	10.00	10.00	0.00	0.000	
4,946.24	89.60	315.001	4,438.00	193.36	-283.62	3.00	0.00	-3.00	-90.070	
11,891.10	89.60	315.001	4,487.00	5,104.11	-5,194.14	0.00	0.00	0.00	0.000	Ponderosa 111 BHL 2



Planning Report

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
350.00	0.00	0.000	350.00	0.00	0.00	0.00	0.00	0.00	0.00
9-5/8" Surface Casing									
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
431.00	0.00	0.000	431.00	0.00	0.00	0.00	0.00	0.00	0.00
Ojo Alamo									
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
522.00	0.00	0.000	522.00	0.00	0.00	0.00	0.00	0.00	0.00
Kirtland									
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
776.00	0.00	0.000	776.00	0.00	0.00	0.00	0.00	0.00	0.00
Fruitland									
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 3°/10° build									
1,100.00	3.00	151.778	1,099.95	-2.31	1.24	-2.51	3.00	3.00	0.00
1,179.21	5.38	151.778	1,178.95	-7.40	3.97	-8.04	3.00	3.00	0.00
Pictured Cliffs									
1,200.00	6.00	151.778	1,199.63	-9.22	4.95	-10.02	3.00	3.00	0.00
1,300.00	9.00	151.778	1,298.77	-20.72	11.12	-22.51	3.00	3.00	0.00
1,339.59	10.19	151.778	1,337.80	-26.53	14.24	-28.83	3.00	3.00	0.00
Lewis									
1,350.00	10.50	151.778	1,348.05	-28.18	15.12	-30.62	3.00	3.00	0.00
Begin 10.50° tangent									
1,400.00	10.50	151.778	1,397.21	-36.21	19.43	-39.34	0.00	0.00	0.00
1,500.00	10.50	151.778	1,495.53	-52.26	28.05	-56.79	0.00	0.00	0.00
1,546.81	10.50	151.778	1,541.56	-59.78	32.08	-64.96	0.00	0.00	0.00
Chacra									
1,600.00	10.50	151.778	1,593.86	-68.32	36.67	-74.24	0.00	0.00	0.00
1,700.00	10.50	151.778	1,692.18	-84.38	45.29	-91.69	0.00	0.00	0.00
1,800.00	10.50	151.778	1,790.51	-100.44	53.90	-109.14	0.00	0.00	0.00
1,900.00	10.50	151.778	1,888.83	-116.49	62.52	-126.58	0.00	0.00	0.00
2,000.00	10.50	151.778	1,987.16	-132.55	71.14	-144.03	0.00	0.00	0.00
2,100.00	10.50	151.778	2,085.49	-148.61	79.76	-161.48	0.00	0.00	0.00
2,200.00	10.50	151.778	2,183.81	-164.67	88.37	-178.93	0.00	0.00	0.00
2,300.00	10.50	151.778	2,282.14	-180.72	96.99	-196.38	0.00	0.00	0.00
2,400.00	10.50	151.778	2,380.46	-196.78	105.61	-213.82	0.00	0.00	0.00
2,500.00	10.50	151.778	2,478.79	-212.84	114.23	-231.27	0.00	0.00	0.00
2,583.94	10.50	151.778	2,561.33	-226.32	121.46	-245.92	0.00	0.00	0.00
Cliff House									
2,592.07	10.50	151.778	2,569.32	-227.62	122.16	-247.34	0.00	0.00	0.00
Menefee									
2,600.00	10.50	151.778	2,577.11	-228.89	122.84	-248.72	0.00	0.00	0.00
2,700.00	10.50	151.778	2,675.44	-244.95	131.46	-266.17	0.00	0.00	0.00
2,800.00	10.50	151.778	2,773.76	-261.01	140.08	-283.62	0.00	0.00	0.00
2,900.00	10.50	151.778	2,872.09	-277.07	148.70	-301.06	0.00	0.00	0.00
3,000.00	10.50	151.778	2,970.41	-293.12	157.32	-318.51	0.00	0.00	0.00
3,100.00	10.50	151.778	3,068.74	-309.18	165.93	-335.96	0.00	0.00	0.00



Planning Report

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,184.63	10.50	151.778	3,151.95	-322.77	173.23	-350.73	0.00	0.00	0.00	
Begin 3°/100' drop										
3,200.00	10.04	151.778	3,167.08	-325.18	174.52	-353.35	3.00	-3.00	0.00	
3,300.00	7.04	151.778	3,265.96	-338.27	181.54	-367.56	3.00	-3.00	0.00	
3,400.00	4.04	151.778	3,365.48	-346.77	186.11	-376.81	3.00	-3.00	0.00	
3,500.00	1.04	151.778	3,465.37	-350.67	188.20	-381.05	3.00	-3.00	0.00	
3,534.63	0.00	0.000	3,500.00	-350.95	188.35	-381.35	3.00	-3.00	0.00	
Begin vertical hold										
3,600.00	0.00	0.000	3,565.37	-350.95	188.35	-381.35	0.00	0.00	0.00	
3,652.04	0.00	0.000	3,617.40	-350.95	188.35	-381.35	0.00	0.00	0.00	
Point Lookout										
3,700.00	0.00	0.000	3,665.37	-350.95	188.35	-381.35	0.00	0.00	0.00	
3,789.04	0.00	0.000	3,754.40	-350.95	188.35	-381.35	0.00	0.00	0.00	
Mancos										
3,800.00	0.00	0.000	3,765.37	-350.95	188.35	-381.35	0.00	0.00	0.00	
3,898.62	0.00	0.000	3,863.99	-350.95	188.35	-381.35	0.00	0.00	0.00	
Begin 10°/100' build										
3,900.00	0.14	319.550	3,865.37	-350.95	188.35	-381.35	10.00	10.00	0.00	
3,950.00	5.14	319.550	3,915.30	-349.20	186.86	-379.05	10.00	10.00	0.00	
4,000.00	10.14	319.550	3,964.84	-344.14	182.55	-372.43	10.00	10.00	0.00	
4,050.00	15.14	319.550	4,013.61	-335.82	175.45	-361.53	10.00	10.00	0.00	
4,100.00	20.14	319.550	4,061.25	-324.30	165.63	-346.43	10.00	10.00	0.00	
4,147.11	24.85	319.550	4,104.76	-310.58	153.93	-328.47	10.00	10.00	0.00	
MNCS_A										
4,150.00	25.14	319.550	4,107.38	-309.66	153.14	-327.25	10.00	10.00	0.00	
4,200.00	30.14	319.550	4,151.66	-292.01	138.10	-304.14	10.00	10.00	0.00	
4,250.00	35.14	319.550	4,193.75	-271.50	120.61	-277.27	10.00	10.00	0.00	
4,276.70	37.81	319.550	4,215.22	-259.42	110.31	-261.45	10.00	10.00	0.00	
MNCS_B										
4,300.00	40.14	319.550	4,233.33	-248.27	100.81	-246.84	10.00	10.00	0.00	
4,350.00	45.14	319.550	4,270.10	-222.51	78.84	-213.09	10.00	10.00	0.00	
4,387.60	48.90	319.550	4,295.74	-201.58	61.00	-185.67	10.00	10.00	0.00	
MNCS_C										
4,400.00	50.14	319.550	4,303.79	-194.40	54.88	-176.27	10.00	10.00	0.00	
4,450.00	55.14	319.550	4,334.12	-164.17	29.10	-136.67	10.00	10.00	0.00	
4,453.46	55.48	319.550	4,336.09	-162.00	27.26	-133.83	10.00	10.00	0.00	
MNCS_Cms										
4,500.00	60.14	319.550	4,360.87	-132.04	1.71	-94.58	10.00	10.00	0.00	
4,550.00	65.14	319.550	4,383.85	-98.26	-27.09	-50.33	10.00	10.00	0.00	
4,598.62	70.00	319.550	4,402.39	-64.07	-56.24	-5.54	10.00	10.00	0.00	
Begin 10°/100' build										
4,600.00	70.14	319.550	4,402.86	-63.08	-57.08	-4.25	10.00	10.00	0.00	
4,650.00	75.14	319.550	4,417.78	-26.78	-88.03	43.31	10.00	10.00	0.00	
4,700.00	80.14	319.550	4,428.48	10.38	-119.71	91.98	10.00	10.00	0.00	
4,750.00	85.14	319.550	4,434.89	48.10	-151.87	141.40	10.00	10.00	0.00	
4,771.63	87.30	319.550	4,436.31	64.52	-165.87	162.91	10.00	10.00	0.00	
7" Intermediate Casing										
4,794.62	89.60	319.550	4,436.93	82.01	-180.78	185.82	10.00	10.00	0.00	
Begin 3°/100' turn										
4,800.00	89.60	319.389	4,436.97	86.10	-184.28	191.18	3.00	0.00	-3.00	
4,900.00	89.60	316.389	4,437.67	160.27	-251.32	291.04	3.00	0.00	-3.00	
4,946.24	89.60	315.001	4,438.00	193.36	-283.62	337.27	3.00	0.00	-3.00	



Planning Report

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM 4W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Begin 89.60° lateral									
5,000.00	89.60	315.001	4,438.38	231.38	-321.63	391.03	0.00	0.00	0.00
5,100.00	89.60	315.001	4,439.08	302.09	-392.34	491.03	0.00	0.00	0.00
5,200.00	89.60	315.001	4,439.79	372.80	-463.05	591.03	0.00	0.00	0.00
5,300.00	89.60	315.001	4,440.49	443.51	-533.75	691.02	0.00	0.00	0.00
5,400.00	89.60	315.001	4,441.20	514.22	-604.46	791.02	0.00	0.00	0.00
5,500.00	89.60	315.001	4,441.91	584.93	-675.17	891.02	0.00	0.00	0.00
5,600.00	89.60	315.001	4,442.61	655.64	-745.87	991.02	0.00	0.00	0.00
5,700.00	89.60	315.001	4,443.32	726.35	-816.58	1,091.02	0.00	0.00	0.00
5,800.00	89.60	315.001	4,444.02	797.06	-887.29	1,191.01	0.00	0.00	0.00
5,900.00	89.60	315.001	4,444.73	867.77	-958.00	1,291.01	0.00	0.00	0.00
6,000.00	89.60	315.001	4,445.43	938.48	-1,028.70	1,391.01	0.00	0.00	0.00
6,100.00	89.60	315.001	4,446.14	1,009.19	-1,099.41	1,491.01	0.00	0.00	0.00
6,200.00	89.60	315.001	4,446.84	1,079.90	-1,170.12	1,591.00	0.00	0.00	0.00
6,300.00	89.60	315.001	4,447.55	1,150.61	-1,240.83	1,691.00	0.00	0.00	0.00
6,400.00	89.60	315.001	4,448.26	1,221.32	-1,311.53	1,791.00	0.00	0.00	0.00
6,500.00	89.60	315.001	4,448.96	1,292.03	-1,382.24	1,891.00	0.00	0.00	0.00
6,600.00	89.60	315.001	4,449.67	1,362.74	-1,452.95	1,990.99	0.00	0.00	0.00
6,700.00	89.60	315.001	4,450.37	1,433.46	-1,523.65	2,090.99	0.00	0.00	0.00
6,800.00	89.60	315.001	4,451.08	1,504.17	-1,594.36	2,190.99	0.00	0.00	0.00
6,900.00	89.60	315.001	4,451.78	1,574.88	-1,665.07	2,290.99	0.00	0.00	0.00
7,000.00	89.60	315.001	4,452.49	1,645.59	-1,735.78	2,390.98	0.00	0.00	0.00
7,100.00	89.60	315.001	4,453.20	1,716.30	-1,806.48	2,490.98	0.00	0.00	0.00
7,200.00	89.60	315.001	4,453.90	1,787.01	-1,877.19	2,590.98	0.00	0.00	0.00
7,300.00	89.60	315.001	4,454.61	1,857.72	-1,947.90	2,690.98	0.00	0.00	0.00
7,400.00	89.60	315.001	4,455.31	1,928.43	-2,018.61	2,790.97	0.00	0.00	0.00
7,500.00	89.60	315.001	4,456.02	1,999.14	-2,089.31	2,890.97	0.00	0.00	0.00
7,600.00	89.60	315.001	4,456.72	2,069.85	-2,160.02	2,990.97	0.00	0.00	0.00
7,700.00	89.60	315.001	4,457.43	2,140.56	-2,230.73	3,090.97	0.00	0.00	0.00
7,800.00	89.60	315.001	4,458.13	2,211.27	-2,301.43	3,190.96	0.00	0.00	0.00
7,900.00	89.60	315.001	4,458.84	2,281.98	-2,372.14	3,290.96	0.00	0.00	0.00
8,000.00	89.60	315.001	4,459.55	2,352.69	-2,442.85	3,390.96	0.00	0.00	0.00
8,100.00	89.60	315.001	4,460.25	2,423.40	-2,513.56	3,490.96	0.00	0.00	0.00
8,200.00	89.60	315.001	4,460.96	2,494.11	-2,584.26	3,590.95	0.00	0.00	0.00
8,300.00	89.60	315.001	4,461.66	2,564.82	-2,654.97	3,690.95	0.00	0.00	0.00
8,400.00	89.60	315.001	4,462.37	2,635.53	-2,725.68	3,790.95	0.00	0.00	0.00
8,500.00	89.60	315.001	4,463.07	2,706.25	-2,796.39	3,890.95	0.00	0.00	0.00
8,600.00	89.60	315.001	4,463.78	2,776.96	-2,867.09	3,990.94	0.00	0.00	0.00
8,700.00	89.60	315.001	4,464.48	2,847.67	-2,937.80	4,090.94	0.00	0.00	0.00
8,800.00	89.60	315.001	4,465.19	2,918.38	-3,008.51	4,190.94	0.00	0.00	0.00
8,900.00	89.60	315.001	4,465.90	2,989.09	-3,079.21	4,290.94	0.00	0.00	0.00
9,000.00	89.60	315.001	4,466.60	3,059.80	-3,149.92	4,390.93	0.00	0.00	0.00
9,100.00	89.60	315.001	4,467.31	3,130.51	-3,220.63	4,490.93	0.00	0.00	0.00
9,200.00	89.60	315.001	4,468.01	3,201.22	-3,291.34	4,590.93	0.00	0.00	0.00
9,300.00	89.60	315.001	4,468.72	3,271.93	-3,362.04	4,690.93	0.00	0.00	0.00
9,400.00	89.60	315.001	4,469.42	3,342.64	-3,432.75	4,790.92	0.00	0.00	0.00
9,500.00	89.60	315.001	4,470.13	3,413.35	-3,503.46	4,890.92	0.00	0.00	0.00
9,600.00	89.60	315.001	4,470.83	3,484.06	-3,574.17	4,990.92	0.00	0.00	0.00
9,700.00	89.60	315.001	4,471.54	3,554.77	-3,644.87	5,090.92	0.00	0.00	0.00
9,800.00	89.60	315.001	4,472.25	3,625.48	-3,715.58	5,190.91	0.00	0.00	0.00
9,900.00	89.60	315.001	4,472.95	3,696.19	-3,786.29	5,290.91	0.00	0.00	0.00
10,000.00	89.60	315.001	4,473.66	3,766.90	-3,856.99	5,390.91	0.00	0.00	0.00
10,100.00	89.60	315.001	4,474.36	3,837.61	-3,927.70	5,490.91	0.00	0.00	0.00
10,200.00	89.60	315.001	4,475.07	3,908.33	-3,998.41	5,590.90	0.00	0.00	0.00



Planning Report

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,300.00	89.60	315.001	4,475.77	3,979.04	-4,069.12	5,690.90	0.00	0.00	0.00
10,400.00	89.60	315.001	4,476.48	4,049.75	-4,139.82	5,790.90	0.00	0.00	0.00
10,500.00	89.60	315.001	4,477.18	4,120.46	-4,210.53	5,890.90	0.00	0.00	0.00
10,600.00	89.60	315.001	4,477.89	4,191.17	-4,281.24	5,990.89	0.00	0.00	0.00
10,700.00	89.60	315.001	4,478.60	4,261.88	-4,351.95	6,090.89	0.00	0.00	0.00
10,800.00	89.60	315.001	4,479.30	4,332.59	-4,422.65	6,190.89	0.00	0.00	0.00
10,900.00	89.60	315.001	4,480.01	4,403.30	-4,493.36	6,290.89	0.00	0.00	0.00
11,000.00	89.60	315.001	4,480.71	4,474.01	-4,564.07	6,390.88	0.00	0.00	0.00
11,100.00	89.60	315.001	4,481.42	4,544.72	-4,634.77	6,490.88	0.00	0.00	0.00
11,200.00	89.60	315.001	4,482.12	4,615.43	-4,705.48	6,590.88	0.00	0.00	0.00
11,300.00	89.60	315.001	4,482.83	4,686.14	-4,776.19	6,690.88	0.00	0.00	0.00
11,400.00	89.60	315.001	4,483.54	4,756.85	-4,846.90	6,790.87	0.00	0.00	0.00
11,500.00	89.60	315.001	4,484.24	4,827.56	-4,917.60	6,890.87	0.00	0.00	0.00
11,600.00	89.60	315.001	4,484.95	4,898.27	-4,988.31	6,990.87	0.00	0.00	0.00
11,700.00	89.60	315.001	4,485.65	4,968.98	-5,059.02	7,090.87	0.00	0.00	0.00
11,800.00	89.60	315.001	4,486.36	5,039.69	-5,129.72	7,190.86	0.00	0.00	0.00
11,891.10	89.60	315.001	4,487.00	5,104.11	-5,194.14	7,281.96	0.00	0.00	0.00
PBHL/TD 11891.10 MD 4487.00 TVD									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
350.00	350.00	9-5/8" Surface Casing	9-5/8	12-1/4
4,771.63	4,436.31	7" Intermediate Casing	7	8-3/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
431.00	431.00	Ojo Alamo		0.390	315.002
522.00	522.00	Kirtland		0.390	315.002
776.00	776.00	Fruitland		0.390	315.002
1,179.21	1,178.95	Pictured Cliffs		0.390	315.002
1,339.59	1,337.80	Lewis		0.390	315.002
1,546.81	1,541.56	Chacra		0.390	315.002
2,583.94	2,561.33	Cliff House		0.390	315.002
2,592.07	2,569.32	Menefee		0.390	315.002
3,652.04	3,617.40	Point Lookout		0.390	315.002
3,789.04	3,754.40	Mancos		0.390	315.002
4,147.11	4,104.76	MNCS_A		0.390	315.002
4,276.70	4,215.22	MNCS_B		0.390	315.002
4,387.60	4,295.74	MNCS_C		0.390	315.002
4,453.46	4,336.09	MNCS_Cms		0.390	315.002



Planning Report

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Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,000.00	1,000.00	0.00	0.00	KOP Begin 3°/10' build	
1,350.00	1,348.05	-28.18	15.12	Begin 10.50° tangent	
3,184.63	3,151.95	-322.77	173.23	Begin 3°/100' drop	
3,534.63	3,500.00	-350.95	188.35	Begin vertical hold	
3,898.62	3,863.99	-350.95	188.35	Begin 10°/100' build	
4,598.62	4,402.39	-64.07	-56.24	Begin 10°/100' build	
4,794.62	4,436.93	82.01	-180.78	Begin 3°/100' turn	
4,946.24	4,438.00	193.36	-283.62	Begin 89.60° lateral	
11,891.10	4,487.00	5,104.11	-5,194.14	PBHL/TD 11891.10 MD 4487.00 TVD	



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project	San Juan County, New Mexico NAD83 NM W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	Ponderosa (99, 111,112,114-117,120,136)				
Site Position:		Northing:	1,909,734.64 usft	Latitude:	36.24845100
From:	Lat/Long	Easting:	2,722,999.77 usft	Longitude:	-107.83364500
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	Ponderosa 111H, Surf loc: 64 FNL 1582 FWL Section07-T23N-R09W					
Well Position	+N/-S	0.00 ft	Northing:	1,909,757.94 usft	Latitude:	36.24851500
	+E/-W	0.00 ft	Easting:	2,722,967.04 usft	Longitude:	-107.83375600
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,802.00 ft
Grid Convergence:		0.000 °				

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/11/2024	8.512	62.680	48,995.25004926

Design	rev0			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	315.002

Plan Survey Tool Program	Date	7/29/2024		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,891.10 rev0 (Original Hole)	MWD	
			OWSG MWD - Standard	



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,350.00	10.50	151.778	1,348.05	-28.18	15.12	3.00	3.00	0.00	151.778	
3,184.63	10.50	151.778	3,151.95	-322.77	173.23	0.00	0.00	0.00	0.000	
3,534.63	0.00	0.000	3,500.00	-350.95	188.35	3.00	-3.00	0.00	180.000	
3,898.62	0.00	0.000	3,863.99	-350.95	188.35	0.00	0.00	0.00	0.000	
4,598.62	70.00	319.550	4,402.39	-64.07	-56.24	10.00	10.00	0.00	319.550	
4,794.62	89.60	319.550	4,436.93	82.01	-180.78	10.00	10.00	0.00	0.000	
4,946.24	89.60	315.001	4,438.00	193.36	-283.62	3.00	0.00	-3.00	-90.070	
11,891.10	89.60	315.001	4,487.00	5,104.11	-5,194.14	0.00	0.00	0.00	0.000	Ponderosa 111 BHL 2



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.000	0.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
100.00	0.00	0.000	100.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
200.00	0.00	0.000	200.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
300.00	0.00	0.000	300.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
350.00	0.00	0.000	350.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
9-5/8" Surface Casing									
400.00	0.00	0.000	400.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
431.00	0.00	0.000	431.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
Ojo Alamo									
500.00	0.00	0.000	500.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
522.00	0.00	0.000	522.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
Kirtland									
600.00	0.00	0.000	600.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
700.00	0.00	0.000	700.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
776.00	0.00	0.000	776.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
Fruitland									
800.00	0.00	0.000	800.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
900.00	0.00	0.000	900.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
1,000.00	0.00	0.000	1,000.00	0.00	0.00	1,909,757.94	2,722,967.04	36.24851500	-107.83375600
KOP Begin 3°/10' build									
1,100.00	3.00	151.778	1,099.95	-2.31	1.24	1,909,755.64	2,722,968.28	36.24850866	-107.83375180
1,179.21	5.38	151.778	1,178.95	-7.40	3.97	1,909,750.54	2,722,971.01	36.24849466	-107.83374252
Pictured Cliffs									
1,200.00	6.00	151.778	1,199.63	-9.22	4.95	1,909,748.72	2,722,971.99	36.24848968	-107.83373922
1,300.00	9.00	151.778	1,298.77	-20.72	11.12	1,909,737.22	2,722,978.16	36.24845809	-107.83371828
1,339.59	10.19	151.778	1,337.80	-26.53	14.24	1,909,731.41	2,722,981.28	36.24844211	-107.83370770
Lewis									
1,350.00	10.50	151.778	1,348.05	-28.18	15.12	1,909,729.76	2,722,982.16	36.24843759	-107.83370470
Begin 10.50° tangent									
1,400.00	10.50	151.778	1,397.21	-36.21	19.43	1,909,721.73	2,722,986.47	36.24841554	-107.83369009
1,500.00	10.50	151.778	1,495.53	-52.26	28.05	1,909,705.68	2,722,995.09	36.24837142	-107.83366086
1,546.81	10.50	151.778	1,541.56	-59.78	32.08	1,909,698.16	2,722,999.13	36.24835078	-107.83364718
Chacra									
1,600.00	10.50	151.778	1,593.86	-68.32	36.67	1,909,689.62	2,723,003.71	36.24832731	-107.83363164
1,700.00	10.50	151.778	1,692.18	-84.38	45.29	1,909,673.56	2,723,012.33	36.24828320	-107.83360241
1,800.00	10.50	151.778	1,790.51	-100.44	53.90	1,909,657.51	2,723,020.94	36.24823909	-107.83357318
1,900.00	10.50	151.778	1,888.83	-116.49	62.52	1,909,641.45	2,723,029.56	36.24819498	-107.83354396
2,000.00	10.50	151.778	1,987.16	-132.55	71.14	1,909,625.39	2,723,038.18	36.24815087	-107.83351473
2,100.00	10.50	151.778	2,085.49	-148.61	79.76	1,909,609.33	2,723,046.80	36.24810676	-107.83348550
2,200.00	10.50	151.778	2,183.81	-164.67	88.37	1,909,593.28	2,723,055.42	36.24806265	-107.83345628
2,300.00	10.50	151.778	2,282.14	-180.72	96.99	1,909,577.22	2,723,064.03	36.24801854	-107.83342705
2,400.00	10.50	151.778	2,380.46	-196.78	105.61	1,909,561.16	2,723,072.65	36.24797443	-107.83339782
2,500.00	10.50	151.778	2,478.79	-212.84	114.23	1,909,545.10	2,723,081.27	36.24793032	-107.83336860
2,583.94	10.50	151.778	2,561.33	-226.32	121.46	1,909,531.63	2,723,088.50	36.24789329	-107.83334406
Cliff House									
2,592.07	10.50	151.778	2,569.32	-227.62	122.16	1,909,530.32	2,723,089.20	36.24788971	-107.83334169
Menefee									
2,600.00	10.50	151.778	2,577.11	-228.89	122.84	1,909,529.05	2,723,089.89	36.24788621	-107.83333937
2,700.00	10.50	151.778	2,675.44	-244.95	131.46	1,909,512.99	2,723,098.50	36.24784210	-107.83331014
2,800.00	10.50	151.778	2,773.76	-261.01	140.08	1,909,496.93	2,723,107.12	36.24779799	-107.83328092
2,900.00	10.50	151.778	2,872.09	-277.07	148.70	1,909,480.88	2,723,115.74	36.24775388	-107.83325169
3,000.00	10.50	151.778	2,970.41	-293.12	157.32	1,909,464.82	2,723,124.36	36.24770977	-107.83322247
3,100.00	10.50	151.778	3,068.74	-309.18	165.93	1,909,448.76	2,723,132.97	36.24766566	-107.83319324



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,184.63	10.50	151.778	3,151.95	-322.77	173.23	1,909,435.17	2,723,140.27	36.24762833	-107.83316850
Begin 3°/100' drop									
3,200.00	10.04	151.778	3,167.08	-325.18	174.52	1,909,432.76	2,723,141.56	36.24762169	-107.83316411
3,300.00	7.04	151.778	3,265.96	-338.27	181.54	1,909,419.68	2,723,148.58	36.24758576	-107.83314030
3,400.00	4.04	151.778	3,365.48	-346.77	186.11	1,909,411.17	2,723,153.15	36.24756240	-107.83312482
3,500.00	1.04	151.778	3,465.37	-350.67	188.20	1,909,407.27	2,723,155.24	36.24755167	-107.83311772
3,534.63	0.00	0.000	3,500.00	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
Begin vertical hold									
3,600.00	0.00	0.000	3,565.37	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
3,652.04	0.00	0.000	3,617.40	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
Point Lookout									
3,700.00	0.00	0.000	3,665.37	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
3,789.04	0.00	0.000	3,754.40	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
Mancos									
3,800.00	0.00	0.000	3,765.37	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
3,898.62	0.00	0.000	3,863.99	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755091	-107.83311721
Begin 10°/100' build									
3,900.00	0.14	319.550	3,865.37	-350.95	188.35	1,909,406.99	2,723,155.39	36.24755092	-107.83311722
3,950.00	5.14	319.550	3,915.30	-349.20	186.86	1,909,408.74	2,723,153.90	36.24755573	-107.83312228
4,000.00	10.14	319.550	3,964.84	-344.14	182.55	1,909,413.80	2,723,149.59	36.24756961	-107.83313690
4,050.00	15.14	319.550	4,013.61	-335.82	175.45	1,909,422.12	2,723,142.49	36.24759248	-107.83316096
4,100.00	20.14	319.550	4,061.25	-324.30	165.63	1,909,433.65	2,723,132.67	36.24762414	-107.83319428
4,147.11	24.85	319.550	4,104.76	-310.58	153.93	1,909,447.36	2,723,120.98	36.24766180	-107.83323393
MNCS_A									
4,150.00	25.14	319.550	4,107.38	-309.66	153.14	1,909,448.29	2,723,120.18	36.24766435	-107.83323661
4,200.00	30.14	319.550	4,151.66	-292.01	138.10	1,909,465.93	2,723,105.14	36.24771282	-107.83328763
4,250.00	35.14	319.550	4,193.75	-271.50	120.61	1,909,486.45	2,723,087.65	36.24776918	-107.83334695
4,276.70	37.81	319.550	4,215.22	-259.42	110.31	1,909,498.52	2,723,077.36	36.24780235	-107.83338187
MNCS_B									
4,300.00	40.14	319.550	4,233.33	-248.27	100.81	1,909,509.67	2,723,067.85	36.24783299	-107.83341411
4,350.00	45.14	319.550	4,270.10	-222.51	78.84	1,909,535.44	2,723,045.88	36.24790376	-107.83348861
4,387.60	48.90	319.550	4,295.74	-201.58	61.00	1,909,556.37	2,723,028.04	36.24796126	-107.83354912
MNCS_C									
4,400.00	50.14	319.550	4,303.79	-194.40	54.88	1,909,563.54	2,723,021.92	36.24798097	-107.83356987
4,450.00	55.14	319.550	4,334.12	-164.17	29.10	1,909,593.77	2,722,996.15	36.24806402	-107.83365729
4,453.46	55.48	319.550	4,336.09	-162.00	27.26	1,909,595.94	2,722,994.30	36.24806997	-107.83366355
MNCS_Cms									
4,500.00	60.14	319.550	4,360.87	-132.04	1.71	1,909,625.90	2,722,968.75	36.24815228	-107.83375018
4,550.00	65.14	319.550	4,383.85	-98.26	-27.09	1,909,659.68	2,722,939.95	36.24824508	-107.83384786
4,598.62	70.00	319.550	4,402.39	-64.07	-56.24	1,909,693.87	2,722,910.80	36.24833900	-107.83394672
Begin 10°/100' build									
4,600.00	70.14	319.550	4,402.86	-63.08	-57.08	1,909,694.86	2,722,909.96	36.24834171	-107.83394957
4,650.00	75.14	319.550	4,417.78	-26.78	-88.03	1,909,731.16	2,722,879.01	36.24844144	-107.83405454
4,700.00	80.14	319.550	4,428.48	10.38	-119.71	1,909,768.32	2,722,847.34	36.24854350	-107.83416198
4,750.00	85.14	319.550	4,434.89	48.10	-151.87	1,909,806.04	2,722,815.17	36.24864713	-107.83427105
4,771.63	87.30	319.550	4,436.31	64.52	-165.87	1,909,822.46	2,722,801.17	36.24869224	-107.83431854
7" Intermediate Casing									
4,794.62	89.60	319.550	4,436.93	82.01	-180.78	1,909,839.95	2,722,786.26	36.24874029	-107.83436911
Begin 3°/100' turn									
4,800.00	89.60	319.389	4,436.97	86.10	-184.28	1,909,844.04	2,722,782.77	36.24875151	-107.83438096
4,900.00	89.60	316.389	4,437.67	160.27	-251.32	1,909,918.21	2,722,715.72	36.24895527	-107.83460836
4,946.24	89.60	315.001	4,438.00	193.36	-283.62	1,909,951.30	2,722,683.42	36.24904617	-107.83471789
Begin 89.60° lateral									



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111, 112, 114-117, 120, 136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,000.00	89.60	315.001	4,438.38	231.38	-321.63	1,909,989.32	2,722,645.41	36.24915060	-107.83484681	
5,100.00	89.60	315.001	4,439.08	302.09	-392.34	1,910,060.03	2,722,574.70	36.24934484	-107.83508662	
5,200.00	89.60	315.001	4,439.79	372.80	-463.05	1,910,130.74	2,722,504.00	36.24953908	-107.83532643	
5,300.00	89.60	315.001	4,440.49	443.51	-533.75	1,910,201.45	2,722,433.29	36.24973333	-107.83556624	
5,400.00	89.60	315.001	4,441.20	514.22	-604.46	1,910,272.16	2,722,362.58	36.24992757	-107.83580605	
5,500.00	89.60	315.001	4,441.91	584.93	-675.17	1,910,342.87	2,722,291.88	36.25012181	-107.83604586	
5,600.00	89.60	315.001	4,442.61	655.64	-745.87	1,910,413.58	2,722,221.17	36.25031605	-107.83628568	
5,700.00	89.60	315.001	4,443.32	726.35	-816.58	1,910,484.29	2,722,150.46	36.25051029	-107.83652549	
5,800.00	89.60	315.001	4,444.02	797.06	-887.29	1,910,555.00	2,722,079.75	36.25070453	-107.83676531	
5,900.00	89.60	315.001	4,444.73	867.77	-958.00	1,910,625.71	2,722,009.05	36.25089877	-107.83700513	
6,000.00	89.60	315.001	4,445.43	938.48	-1,028.70	1,910,696.42	2,721,938.34	36.25109301	-107.83724495	
6,100.00	89.60	315.001	4,446.14	1,009.19	-1,099.41	1,910,767.13	2,721,867.63	36.25128725	-107.83748476	
6,200.00	89.60	315.001	4,446.84	1,079.90	-1,170.12	1,910,837.84	2,721,796.93	36.25148149	-107.83772459	
6,300.00	89.60	315.001	4,447.55	1,150.61	-1,240.83	1,910,908.55	2,721,726.22	36.25167573	-107.83796441	
6,400.00	89.60	315.001	4,448.26	1,221.32	-1,311.53	1,910,979.26	2,721,655.51	36.25186997	-107.83820423	
6,500.00	89.60	315.001	4,448.96	1,292.03	-1,382.24	1,911,049.97	2,721,584.80	36.25206421	-107.83844406	
6,600.00	89.60	315.001	4,449.67	1,362.74	-1,452.95	1,911,120.68	2,721,514.10	36.25225844	-107.83868388	
6,700.00	89.60	315.001	4,450.37	1,433.46	-1,523.65	1,911,191.39	2,721,443.39	36.25245268	-107.83892371	
6,800.00	89.60	315.001	4,451.08	1,504.17	-1,594.36	1,911,262.10	2,721,372.68	36.25264691	-107.83916354	
6,900.00	89.60	315.001	4,451.78	1,574.88	-1,665.07	1,911,332.81	2,721,301.98	36.25284115	-107.83940337	
7,000.00	89.60	315.001	4,452.49	1,645.59	-1,735.78	1,911,403.53	2,721,231.27	36.25303538	-107.83964320	
7,100.00	89.60	315.001	4,453.20	1,716.30	-1,806.48	1,911,474.24	2,721,160.56	36.25322962	-107.83988303	
7,200.00	89.60	315.001	4,453.90	1,787.01	-1,877.19	1,911,544.95	2,721,089.85	36.25342385	-107.84012286	
7,300.00	89.60	315.001	4,454.61	1,857.72	-1,947.90	1,911,615.66	2,721,019.15	36.25361808	-107.84036270	
7,400.00	89.60	315.001	4,455.31	1,928.43	-2,018.61	1,911,686.37	2,720,948.44	36.25381232	-107.84060253	
7,500.00	89.60	315.001	4,456.02	1,999.14	-2,089.31	1,911,757.08	2,720,877.73	36.25400655	-107.84084237	
7,600.00	89.60	315.001	4,456.72	2,069.85	-2,160.02	1,911,827.79	2,720,807.03	36.25420078	-107.84108221	
7,700.00	89.60	315.001	4,457.43	2,140.56	-2,230.73	1,911,898.50	2,720,736.32	36.25439501	-107.84132204	
7,800.00	89.60	315.001	4,458.13	2,211.27	-2,301.43	1,911,969.21	2,720,665.61	36.25458924	-107.84156188	
7,900.00	89.60	315.001	4,458.84	2,281.98	-2,372.14	1,912,039.92	2,720,594.90	36.25478347	-107.84180173	
8,000.00	89.60	315.001	4,459.55	2,352.69	-2,442.85	1,912,110.63	2,720,524.20	36.25497770	-107.84204157	
8,100.00	89.60	315.001	4,460.25	2,423.40	-2,513.56	1,912,181.34	2,720,453.49	36.25517193	-107.84228141	
8,200.00	89.60	315.001	4,460.96	2,494.11	-2,584.26	1,912,252.05	2,720,382.78	36.25536616	-107.84252126	
8,300.00	89.60	315.001	4,461.66	2,564.82	-2,654.97	1,912,322.76	2,720,312.08	36.25556039	-107.84276110	
8,400.00	89.60	315.001	4,462.37	2,635.53	-2,725.68	1,912,393.47	2,720,241.37	36.25575462	-107.84300095	
8,500.00	89.60	315.001	4,463.07	2,706.25	-2,796.39	1,912,464.18	2,720,170.66	36.25594885	-107.84324080	
8,600.00	89.60	315.001	4,463.78	2,776.96	-2,867.09	1,912,534.89	2,720,099.95	36.25614307	-107.84348065	
8,700.00	89.60	315.001	4,464.48	2,847.67	-2,937.80	1,912,605.60	2,720,029.25	36.25633730	-107.84372050	
8,800.00	89.60	315.001	4,465.19	2,918.38	-3,008.51	1,912,676.31	2,719,958.54	36.25653153	-107.84396035	
8,900.00	89.60	315.001	4,465.90	2,989.09	-3,079.21	1,912,747.02	2,719,887.83	36.25672575	-107.84420020	
9,000.00	89.60	315.001	4,466.60	3,059.80	-3,149.92	1,912,817.73	2,719,817.13	36.25691998	-107.84444006	
9,100.00	89.60	315.001	4,467.31	3,130.51	-3,220.63	1,912,888.44	2,719,746.42	36.25711420	-107.84467991	
9,200.00	89.60	315.001	4,468.01	3,201.22	-3,291.34	1,912,959.15	2,719,675.71	36.25730842	-107.84491977	
9,300.00	89.60	315.001	4,468.72	3,271.93	-3,362.04	1,913,029.87	2,719,605.00	36.25750265	-107.84515963	
9,400.00	89.60	315.001	4,469.42	3,342.64	-3,432.75	1,913,100.58	2,719,534.30	36.25769687	-107.84539949	
9,500.00	89.60	315.001	4,470.13	3,413.35	-3,503.46	1,913,171.29	2,719,463.59	36.25789109	-107.84563935	
9,600.00	89.60	315.001	4,470.83	3,484.06	-3,574.17	1,913,242.00	2,719,392.88	36.25808532	-107.84587921	
9,700.00	89.60	315.001	4,471.54	3,554.77	-3,644.87	1,913,312.71	2,719,322.18	36.25827954	-107.84611907	
9,800.00	89.60	315.001	4,472.25	3,625.48	-3,715.58	1,913,383.42	2,719,251.47	36.25847376	-107.84635894	
9,900.00	89.60	315.001	4,472.95	3,696.19	-3,786.29	1,913,454.13	2,719,180.76	36.25866798	-107.84659880	
10,000.00	89.60	315.001	4,473.66	3,766.90	-3,856.99	1,913,524.84	2,719,110.05	36.25886220	-107.84683867	
10,100.00	89.60	315.001	4,474.36	3,837.61	-3,927.70	1,913,595.55	2,719,039.35	36.25905642	-107.84707853	
10,200.00	89.60	315.001	4,475.07	3,908.33	-3,998.41	1,913,666.26	2,718,968.64	36.25925064	-107.84731840	
10,300.00	89.60	315.001	4,475.77	3,979.04	-4,069.12	1,913,736.97	2,718,897.93	36.25944486	-107.84755827	
10,400.00	89.60	315.001	4,476.48	4,049.75	-4,139.82	1,913,807.68	2,718,827.23	36.25963907	-107.84779814	



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111, 112, 114-117, 120, 136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,500.00	89.60	315.001	4,477.18	4,120.46	-4,210.53	1,913,878.39	2,718,756.52	36.25983329	-107.84803802	
10,600.00	89.60	315.001	4,477.89	4,191.17	-4,281.24	1,913,949.10	2,718,685.81	36.26002751	-107.84827789	
10,700.00	89.60	315.001	4,478.60	4,261.88	-4,351.95	1,914,019.81	2,718,615.11	36.26022173	-107.84851776	
10,800.00	89.60	315.001	4,479.30	4,332.59	-4,422.65	1,914,090.52	2,718,544.40	36.26041594	-107.84875764	
10,900.00	89.60	315.001	4,480.01	4,403.30	-4,493.36	1,914,161.23	2,718,473.69	36.26061016	-107.84899752	
11,000.00	89.60	315.001	4,480.71	4,474.01	-4,564.07	1,914,231.94	2,718,402.98	36.26080437	-107.84923739	
11,100.00	89.60	315.001	4,481.42	4,544.72	-4,634.77	1,914,302.65	2,718,332.28	36.26099859	-107.84947727	
11,200.00	89.60	315.001	4,482.12	4,615.43	-4,705.48	1,914,373.36	2,718,261.57	36.26119280	-107.84971715	
11,300.00	89.60	315.001	4,482.83	4,686.14	-4,776.19	1,914,444.07	2,718,190.86	36.26138702	-107.84995703	
11,400.00	89.60	315.001	4,483.54	4,756.85	-4,846.90	1,914,514.78	2,718,120.16	36.26158123	-107.85019692	
11,500.00	89.60	315.001	4,484.24	4,827.56	-4,917.60	1,914,585.50	2,718,049.45	36.26177544	-107.85043680	
11,600.00	89.60	315.001	4,484.95	4,898.27	-4,988.31	1,914,656.21	2,717,978.74	36.26196965	-107.85067669	
11,700.00	89.60	315.001	4,485.65	4,968.98	-5,059.02	1,914,726.92	2,717,908.03	36.26216387	-107.85091657	
11,800.00	89.60	315.001	4,486.36	5,039.69	-5,129.72	1,914,797.63	2,717,837.33	36.26235808	-107.85115646	
11,891.10	89.60	315.001	4,487.00	5,104.11	-5,194.14	1,914,862.04	2,717,772.91	36.26253500	-107.85137500	
PBHL/TD 11891.10 MD 4487.00 TVD										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Ponderosa 111 vert - plan misses target center by 55.79ft at 3899.67ft MD (3865.04 TVD, -350.95 N, 188.35 E) - Point	0.00	0.000	3,865.06	-330.65	240.32	1,909,427.29	2,723,207.36	36.24760668	-107.83294096	
Ponderosa 111 POE 12E - plan misses target center by 24.67ft at 4581.62ft MD (4396.34 TVD, -76.16 N, -45.93 E) - Point	0.00	0.000	4,405.00	-64.07	-26.24	1,909,693.87	2,722,940.80	36.24833900	-107.83384500	
Ponderosa 111 BHL 232 - plan hits target center - Point	0.00	0.000	4,487.00	5,104.11	-5,194.14	1,914,862.04	2,717,772.91	36.26253500	-107.85137500	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
350.00	350.00	9-5/8" Surface Casing	9-5/8	12-1/4	
4,771.63	4,436.31	7" Intermediate Casing	7	8-3/4	



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 111H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6802+25 @ 6827.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6802+25 @ 6827.00ft
Site:	Ponderosa (99, 111,112,114-117,120,136)	North Reference:	Grid
Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
431.00	431.00	Ojo Alamo		0.390	315.002	
522.00	522.00	Kirtland		0.390	315.002	
776.00	776.00	Fruitland		0.390	315.002	
1,179.21	1,178.95	Pictured Cliffs		0.390	315.002	
1,339.59	1,337.80	Lewis		0.390	315.002	
1,546.81	1,541.56	Chacra		0.390	315.002	
2,583.94	2,561.33	Cliff House		0.390	315.002	
2,592.07	2,569.32	Menefee		0.390	315.002	
3,652.04	3,617.40	Point Lookout		0.390	315.002	
3,789.04	3,754.40	Mancos		0.390	315.002	
4,147.11	4,104.76	MNCS_A		0.390	315.002	
4,276.70	4,215.22	MNCS_B		0.390	315.002	
4,387.60	4,295.74	MNCS_C		0.390	315.002	
4,453.46	4,336.09	MNCS_Cms		0.390	315.002	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	KOP Begin 3°/10' build	
1,350.00	1,348.05	-28.18	15.12	Begin 10.50° tangent	
3,184.63	3,151.95	-322.77	173.23	Begin 3°/100' drop	
3,534.63	3,500.00	-350.95	188.35	Begin vertical hold	
3,898.62	3,863.99	-350.95	188.35	Begin 10°/100' build	
4,598.62	4,402.39	-64.07	-56.24	Begin 10°/100' build	
4,794.62	4,436.93	82.01	-180.78	Begin 3°/100' turn	
4,946.24	4,438.00	193.36	-283.62	Begin 89.60° lateral	
11,891.10	4,487.00	5,104.11	-5,194.14	PBHL/TD 11891.10 MD 4487.00 TVD	



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Reference	rev0		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,389.11ft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	7/29/2024		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	11,891.10	rev0 (Original Hole)	MWD	OWSG MWD - Standard	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured	Offset Measured	Distance		Separation Factor	Warning
	Depth (ft)	Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
Ponderosa (99, 111,112,114-117,120,136)						
Ponderosa 099H - Original Hole - rev0	800.00	800.00	40.17	34.62	7.230	CC, ES
Ponderosa 099H - Original Hole - rev0	10,800.00	10,980.21	1,203.52	909.10	4.088	SF
Ponderosa 112H - Original Hole - rev0	1,000.00	1,000.00	19.97	12.98	2.856	CC, ES
Ponderosa 112H - Original Hole - rev0	11,891.10	12,186.47	715.92	447.37	2.666	SF
Ponderosa 114H - Original Hole - rev0	1,000.00	1,000.00	59.93	52.94	8.574	CC, ES
Ponderosa 114H - Original Hole - rev0	1,100.00	1,098.31	63.57	55.90	8.287	SF
Ponderosa 115H - Original Hole - rev0	4,482.28	4,449.49	54.79	22.48	1.695	Level 3<2.00, CC, ES, SF
Ponderosa 116H - Original Hole - rev0	1,000.00	1,000.00	99.62	92.63	14.252	CC, ES
Ponderosa 116H - Original Hole - rev0	1,200.00	1,199.63	109.11	100.73	13.020	SF
Ponderosa 117H - Original Hole - rev0	1,096.17	1,095.34	20.03	12.38	2.619	CC
Ponderosa 117H - Original Hole - rev0	1,100.00	1,099.12	20.03	12.36	2.611	ES, SF
Ponderosa 120H - Original Hole - rev0	1,000.00	1,000.00	79.90	72.91	11.430	CC, ES
Ponderosa 120H - Original Hole - rev0	1,100.00	1,100.24	82.06	74.37	10.673	SF
Ponderosa 136H - Original Hole - rev0	500.00	500.00	39.72	36.32	11.664	CC, ES
Ponderosa 136H - Original Hole - rev0	700.00	695.97	48.47	43.67	10.094	SF

Offset Design:	Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 099H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program:	0-MWD												Offset Well Error:	0.00 ft
Reference	Offset		Semi Major Axis		Offset Wellbore Centre				Rule Assigned:				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	125.445	-23.30	32.73	40.17					
100.00	100.00	100.00	100.00	0.27	0.27	125.445	-23.30	32.73	40.17	39.64	0.54	74.714		
200.00	200.00	200.00	200.00	0.63	0.63	125.445	-23.30	32.73	40.17	38.92	1.25	32.020		
300.00	300.00	300.00	300.00	0.99	0.99	125.445	-23.30	32.73	40.17	38.20	1.97	20.377		
400.00	400.00	400.00	400.00	1.34	1.34	125.445	-23.30	32.73	40.17	37.49	2.69	14.943		
500.00	500.00	500.00	500.00	1.70	1.70	125.445	-23.30	32.73	40.17	36.77	3.41	11.797		
600.00	600.00	600.00	600.00	2.06	2.06	125.445	-23.30	32.73	40.17	36.05	4.12	9.745		
700.00	700.00	700.00	700.00	2.42	2.42	125.445	-23.30	32.73	40.17	35.33	4.84	8.302		
800.00	800.00	800.00	800.00	2.78	2.78	125.445	-23.30	32.73	40.17	34.62	5.56	7.230 CC, ES		
900.00	900.00	898.85	898.81	3.14	3.13	122.408	-22.26	35.07	41.55	35.29	6.26	6.635		
1,000.00	1,000.00	997.17	996.82	3.50	3.48	114.528	-19.18	42.03	46.30	39.35	6.96	6.655		
1,100.00	1,099.95	1,094.45	1,093.28	3.84	3.83	-48.786	-14.12	53.44	53.93	46.32	7.61	7.086		
1,200.00	1,199.63	1,190.04	1,187.34	4.17	4.20	-62.674	-7.21	69.01	65.27	57.05	8.22	7.944		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 099H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)		
1,300.00	1,298.77	1,283.34	1,278.20	4.51	4.59	-75.650	1.36	88.34	82.91	74.11	8.80		
1,400.00	1,397.21	1,373.90	1,365.30	4.88	5.00	-86.038	11.38	110.97	107.99	98.58	9.40		
1,500.00	1,495.53	1,461.91	1,448.74	5.26	5.44	-92.617	22.72	136.54	139.94	129.93	10.01		
1,600.00	1,593.86	1,547.20	1,528.29	5.65	5.91	-96.425	35.18	164.66	177.19	166.57	10.62		
1,700.00	1,692.18	1,635.32	1,609.30	6.06	6.45	-98.807	49.23	196.35	218.04	206.72	11.32		
1,800.00	1,790.51	1,726.15	1,692.71	6.47	7.03	-100.482	63.80	229.23	259.38	247.28	12.10		
1,900.00	1,888.83	1,816.99	1,776.12	6.89	7.63	-101.697	78.38	262.11	300.85	287.96	12.90		
2,000.00	1,987.16	1,907.82	1,859.53	7.32	8.25	-102.619	92.95	294.98	342.41	328.70	13.71		
2,100.00	2,085.49	1,998.66	1,942.95	7.76	8.89	-103.342	107.52	327.86	384.03	369.50	14.53		
2,200.00	2,183.81	2,089.49	2,026.36	8.19	9.53	-103.923	122.10	360.74	425.68	410.33	15.36		
2,300.00	2,282.14	2,180.33	2,109.77	8.63	10.19	-104.401	136.67	393.61	467.37	451.17	16.20		
2,400.00	2,380.46	2,271.16	2,193.18	9.08	10.85	-104.801	151.24	426.49	509.08	492.04	17.04		
2,500.00	2,478.79	2,361.99	2,276.59	9.52	11.51	-105.140	165.82	459.37	550.80	532.91	17.89		
2,600.00	2,577.11	2,452.83	2,360.01	9.97	12.18	-105.431	180.39	492.24	592.54	573.79	18.75		
2,700.00	2,675.44	2,543.66	2,443.42	10.42	12.86	-105.684	194.96	525.12	634.29	614.68	19.61		
2,800.00	2,773.76	2,634.50	2,526.83	10.87	13.54	-105.906	209.54	558.00	676.05	655.57	20.48		
2,900.00	2,872.09	2,725.33	2,610.24	11.33	14.22	-106.102	224.11	590.87	717.82	696.47	21.35		
3,000.00	2,970.41	2,816.17	2,693.66	11.78	14.91	-106.277	238.68	623.75	759.59	737.37	22.22		
3,100.00	3,068.74	2,907.00	2,777.07	12.24	15.59	-106.433	253.26	656.63	801.37	778.28	23.09		
3,200.00	3,167.08	2,997.84	2,860.49	12.69	16.28	-106.772	267.83	689.51	843.13	819.16	23.97		
3,300.00	3,265.96	3,089.08	2,944.28	13.12	16.98	-107.949	282.47	722.53	884.00	859.19	24.81		
3,400.00	3,365.48	3,180.76	3,028.46	13.51	17.67	-108.739	297.18	755.71	923.42	897.81	25.61		
3,500.00	3,465.37	3,272.62	3,112.82	13.86	18.38	-109.190	311.92	788.96	961.37	935.02	26.35		
3,600.00	3,565.37	3,364.46	3,197.15	14.16	19.08	43.089	326.65	822.20	998.25	971.22	27.03		
3,700.00	3,665.37	3,456.29	3,281.47	14.46	19.78	43.936	341.38	855.44	1,035.23	1,007.52	27.71		
3,800.00	3,765.37	3,548.12	3,365.80	14.76	20.49	44.725	356.12	888.68	1,072.41	1,044.01	28.40		
3,900.00	3,865.37	3,639.95	3,450.13	15.07	21.19	85.858	370.85	921.91	1,109.75	1,080.66	29.09		
4,000.00	3,964.84	3,730.28	3,533.08	15.33	21.89	83.047	385.34	954.61	1,146.58	1,116.90	29.68		
4,100.00	4,061.25	3,815.87	3,611.68	15.52	22.55	81.052	399.08	985.59	1,182.25	1,152.12	30.13		
4,200.00	4,151.66	3,894.12	3,683.53	15.66	23.15	79.570	411.63	1,013.91	1,217.08	1,186.64	30.45		
4,300.00	4,233.33	3,962.64	3,746.45	15.81	23.68	78.251	422.62	1,038.71	1,251.72	1,221.02	30.70		
4,400.00	4,303.79	4,050.00	4,426.04	16.01	25.69	86.947	795.48	832.05	1,264.44	1,229.21	35.22		
4,500.00	4,360.87	4,900.00	4,439.80	16.34	25.65	88.214	824.65	793.86	1,244.58	1,208.50	36.08		
4,600.00	4,402.86	4,950.00	4,449.76	16.87	25.62	89.329	855.89	756.14	1,228.03	1,190.92	37.10		
4,700.00	4,428.48	5,000.00	4,455.85	17.61	25.58	90.269	888.98	719.18	1,215.08	1,176.74	38.34		
4,800.00	4,436.97	5,071.04	4,458.12	18.56	25.53	90.977	938.55	668.37	1,205.87	1,165.81	40.06		
4,900.00	4,437.67	5,170.90	4,458.70	19.71	25.46	90.994	1,009.16	597.76	1,200.83	1,158.35	42.48		
4,992.62	4,438.33	5,263.52	4,459.23	20.95	25.40	90.998	1,074.64	532.27	1,199.62	1,154.56	45.06		
5,000.00	4,438.38	5,270.90	4,459.27	21.06	25.41	90.997	1,079.87	527.05	1,200.27	1,155.00	45.26		
5,100.00	4,439.08	5,370.90	4,459.84	22.56	25.75	90.991	1,150.58	456.34	1,200.26	1,152.16	48.10		
5,200.00	4,439.79	5,470.90	4,460.42	24.19	27.41	90.985	1,221.29	385.64	1,200.26	1,148.77	51.49		
5,300.00	4,440.49	5,570.90	4,460.99	25.93	29.18	90.978	1,292.00	314.93	1,200.26	1,145.29	54.97		
5,400.00	4,441.20	5,670.90	4,461.56	27.74	31.01	90.972	1,362.71	244.22	1,200.25	1,141.66	58.59		
5,500.00	4,441.91	5,770.90	4,462.14	29.63	32.90	90.966	1,433.42	173.51	1,200.25	1,137.91	62.34		
5,600.00	4,442.61	5,870.90	4,462.71	31.56	34.83	90.959	1,504.13	102.80	1,200.25	1,134.05	66.19		
5,700.00	4,443.32	5,970.90	4,463.28	33.55	36.81	90.953	1,574.84	32.09	1,200.24	1,130.11	70.14		
5,800.00	4,444.02	6,070.90	4,463.86	35.57	38.81	90.947	1,645.55	-38.62	1,200.24	1,126.09	74.15		
5,900.00	4,444.73	6,170.90	4,464.43	37.62	40.85	90.941	1,716.26	-109.32	1,200.24	1,122.00	78.23		
6,000.00	4,445.43	6,270.90	4,465.00	39.70	42.91	90.934	1,786.97	-180.03	1,200.23	1,117.87	82.37		
6,100.00	4,446.14	6,370.90	4,465.58	41.80	44.99	90.928	1,857.68	-250.74	1,200.23	1,113.69	86.55		
6,200.00	4,446.84	6,470.90	4,466.15	43.92	47.09	90.922	1,928.39	-321.45	1,200.23	1,109.46	90.76		
6,300.00	4,447.55	6,570.90	4,466.72	46.06	49.21	90.915	1,999.10	-392.16	1,200.22	1,105.21	95.02		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 099H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
6,400.00	4,448.26	6,670.90	4,467.30	48.21	51.34	90.909	2,069.81	-462.87	1,200.22	1,100.92	99.30	12.087	
6,500.00	4,448.96	6,770.90	4,467.87	50.37	53.49	90.903	2,140.52	-533.57	1,200.22	1,096.61	103.61	11.584	
6,600.00	4,449.67	6,870.90	4,468.44	52.55	55.65	90.896	2,211.23	-604.28	1,200.22	1,092.27	107.94	11.119	
6,700.00	4,450.37	6,970.90	4,469.02	54.74	57.81	90.890	2,281.94	-674.99	1,200.21	1,087.92	112.30	10.688	
6,800.00	4,451.08	7,070.90	4,469.59	56.93	59.99	90.884	2,352.65	-745.70	1,200.21	1,083.54	116.67	10.287	
6,900.00	4,451.78	7,170.90	4,470.16	59.13	62.18	90.877	2,423.36	-816.41	1,200.21	1,079.15	121.06	9.915	
7,000.00	4,452.49	7,270.90	4,470.74	61.34	64.37	90.871	2,494.07	-887.12	1,200.20	1,074.75	125.46	9.567	
7,100.00	4,453.20	7,370.90	4,471.31	63.56	66.57	90.865	2,564.79	-957.82	1,200.20	1,070.33	129.87	9.241	
7,200.00	4,453.90	7,470.90	4,471.88	65.78	68.77	90.858	2,635.50	-1,028.53	1,200.20	1,065.90	134.30	8.937	
7,300.00	4,454.61	7,570.90	4,472.46	68.00	70.98	90.852	2,706.21	-1,099.24	1,200.19	1,061.46	138.74	8.651	
7,400.00	4,455.31	7,670.90	4,473.03	70.23	73.20	90.846	2,776.92	-1,169.95	1,200.19	1,057.01	143.18	8.382	
7,500.00	4,456.02	7,770.90	4,473.60	72.47	75.42	90.840	2,847.63	-1,240.66	1,200.19	1,052.55	147.64	8.129	
7,600.00	4,456.72	7,870.90	4,474.18	74.71	77.64	90.833	2,918.34	-1,311.37	1,200.19	1,048.08	152.10	7.891	
7,700.00	4,457.43	7,970.90	4,474.75	76.95	79.87	90.827	2,989.05	-1,382.08	1,200.18	1,043.61	156.58	7.665	
7,800.00	4,458.13	8,070.90	4,475.32	79.19	82.10	90.821	3,059.76	-1,452.78	1,200.18	1,039.13	161.05	7.452	
7,900.00	4,458.84	8,170.90	4,475.90	81.44	84.34	90.814	3,130.47	-1,523.49	1,200.18	1,034.64	165.54	7.250	
8,000.00	4,459.55	8,270.90	4,476.47	83.69	86.58	90.808	3,201.18	-1,594.20	1,200.18	1,030.15	170.03	7.059	
8,100.00	4,460.25	8,370.90	4,477.04	85.94	88.82	90.802	3,271.89	-1,664.91	1,200.17	1,025.65	174.52	6.877	
8,200.00	4,460.96	8,470.90	4,477.61	88.20	91.06	90.795	3,342.60	-1,735.62	1,200.17	1,021.15	179.02	6.704	
8,300.00	4,461.66	8,570.90	4,478.19	90.45	93.31	90.789	3,413.31	-1,806.33	1,200.17	1,016.64	183.53	6.539	
8,400.00	4,462.37	8,670.90	4,478.76	92.71	95.56	90.783	3,484.02	-1,877.03	1,200.16	1,012.13	188.04	6.383	
8,500.00	4,463.07	8,770.90	4,479.33	94.97	97.81	90.776	3,554.73	-1,947.74	1,200.16	1,007.61	192.55	6.233	
8,600.00	4,463.78	8,870.90	4,479.91	97.23	100.06	90.770	3,625.44	-2,018.45	1,200.16	1,003.09	197.07	6.090	
8,700.00	4,464.48	8,970.90	4,480.48	99.50	102.32	90.764	3,696.15	-2,089.16	1,200.16	998.57	201.59	5.954	
8,800.00	4,465.19	9,070.90	4,481.05	101.76	104.57	90.757	3,766.86	-2,159.87	1,200.15	994.04	206.11	5.823	
8,900.00	4,465.90	9,170.90	4,481.63	104.03	106.83	90.751	3,837.57	-2,230.58	1,200.15	989.52	210.63	5.698	
9,000.00	4,466.60	9,270.90	4,482.20	106.30	109.09	90.745	3,908.28	-2,301.29	1,200.15	984.98	215.16	5.578	
9,100.00	4,467.31	9,370.90	4,482.77	108.56	111.35	90.738	3,978.99	-2,371.99	1,200.15	980.45	219.69	5.463	
9,200.00	4,468.01	9,470.90	4,483.35	110.83	113.61	90.732	4,049.70	-2,442.70	1,200.14	975.91	224.23	5.352	
9,300.00	4,468.72	9,570.90	4,483.92	113.11	115.88	90.726	4,120.42	-2,513.41	1,200.14	971.38	228.76	5.246	
9,400.00	4,469.42	9,670.90	4,484.49	115.38	118.14	90.720	4,191.13	-2,584.12	1,200.14	966.84	233.30	5.144	
9,500.00	4,470.13	9,770.90	4,485.07	117.65	120.41	90.713	4,261.84	-2,654.83	1,200.13	962.29	237.84	5.046	
9,600.00	4,470.83	9,870.90	4,485.64	119.92	122.67	90.707	4,332.55	-2,725.54	1,200.13	957.75	242.38	4.951	
9,700.00	4,471.54	9,970.90	4,486.21	122.20	124.94	90.701	4,403.26	-2,796.24	1,200.13	953.20	246.93	4.860	
9,800.00	4,472.25	10,070.90	4,486.79	124.47	127.21	90.694	4,473.97	-2,866.95	1,200.13	948.65	251.47	4.772	
9,900.00	4,472.95	10,170.90	4,487.36	126.75	129.48	90.688	4,544.68	-2,937.66	1,200.12	944.10	256.02	4.688	
10,000.00	4,473.66	10,270.90	4,487.93	129.03	131.75	90.682	4,615.39	-3,008.37	1,200.12	939.55	260.57	4.606	
10,100.00	4,474.36	10,370.90	4,488.51	131.30	134.02	90.675	4,686.10	-3,079.08	1,200.12	935.00	265.12	4.527	
10,200.00	4,475.07	10,470.90	4,489.08	133.58	136.29	90.669	4,756.81	-3,149.79	1,200.12	930.45	269.67	4.450	
10,300.00	4,475.77	10,570.90	4,489.65	135.86	138.57	90.663	4,827.52	-3,220.50	1,200.11	925.89	274.22	4.376	
10,400.00	4,476.48	10,670.90	4,490.23	138.14	140.84	90.656	4,898.23	-3,291.20	1,200.11	921.33	278.78	4.305	
10,500.00	4,477.18	10,770.90	4,490.80	140.42	143.12	90.650	4,968.94	-3,361.91	1,200.11	916.78	283.33	4.236	
10,600.00	4,477.89	10,870.90	4,491.37	142.70	145.39	90.644	5,039.65	-3,432.62	1,200.11	912.22	287.89	4.169	
10,700.00	4,478.60	10,970.90	4,491.95	144.98	147.67	90.637	5,110.36	-3,503.33	1,200.11	907.66	292.45	4.104	
10,709.30	4,478.66	10,980.20	4,492.00	145.19	147.88	90.637	5,116.94	-3,509.90	1,200.10	907.23	292.87	4.098	
10,800.00	4,479.30	10,980.21	4,492.00	147.26	147.88	90.637	5,116.95	-3,509.92	1,203.52	909.10	294.42	4.088 SF	
10,900.00	4,480.01	10,980.21	4,492.00	149.54	147.88	90.637	5,116.95	-3,509.92	1,215.15	921.49	293.67	4.138	
11,000.00	4,480.71	10,980.21	4,492.00	151.82	147.88	90.637	5,116.95	-3,509.92	1,234.80	944.29	290.51	4.250	
11,100.00	4,481.42	10,980.21	4,492.00	154.11	147.88	90.637	5,116.95	-3,509.92	1,262.09	976.78	285.30	4.424	
11,200.00	4,482.12	10,980.21	4,492.00	156.39	147.88	90.637	5,116.95	-3,509.92	1,296.53	1,018.03	278.50	4.655	
11,300.00	4,482.83	10,980.21	4,492.00	158.67	147.88	90.637	5,116.95	-3,509.92	1,337.58	1,067.03	270.55	4.944	
11,400.00	4,483.54	10,980.21	4,492.00	160.96	147.88	90.637	5,116.95	-3,509.92	1,384.65	1,122.75	261.89	5.287	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 112H - Original Hole - rev0													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-54.310	11.65	-16.22	19.97				
100.00	100.00	100.00	100.00	0.27	0.27	-54.310	11.65	-16.22	19.97	19.43	0.54	37.134	
200.00	200.00	200.00	200.00	0.63	0.63	-54.310	11.65	-16.22	19.97	18.71	1.25	15.915	
300.00	300.00	300.00	300.00	0.99	0.99	-54.310	11.65	-16.22	19.97	18.00	1.97	10.127	
400.00	400.00	400.00	400.00	1.34	1.34	-54.310	11.65	-16.22	19.97	17.28	2.69	7.427	
500.00	500.00	500.00	500.00	1.70	1.70	-54.310	11.65	-16.22	19.97	16.56	3.41	5.863	
600.00	600.00	600.00	600.00	2.06	2.06	-54.310	11.65	-16.22	19.97	15.84	4.12	4.844	
700.00	700.00	700.00	700.00	2.42	2.42	-54.310	11.65	-16.22	19.97	15.13	4.84	4.126	
800.00	800.00	800.00	800.00	2.78	2.78	-54.310	11.65	-16.22	19.97	14.41	5.56	3.594	
900.00	900.00	900.00	900.00	3.14	3.14	-54.310	11.65	-16.22	19.97	13.69	6.27	3.183	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.310	11.65	-16.22	19.97	12.98	6.99	2.856 CC, ES	
1,100.00	1,099.95	1,100.25	1,100.21	3.84	3.84	150.257	9.16	-17.08	21.62	13.94	7.67	2.817	
1,200.00	1,199.63	1,200.24	1,199.87	4.17	4.17	142.111	1.75	-19.67	26.95	18.62	8.33	3.234	
1,300.00	1,298.77	1,299.70	1,298.47	4.51	4.51	134.048	-10.51	-23.94	36.52	27.51	9.01	4.052	
1,400.00	1,397.21	1,398.41	1,395.52	4.88	4.86	127.552	-27.45	-29.85	50.08	40.36	9.72	5.152	
1,500.00	1,495.53	1,496.83	1,491.49	5.26	5.25	120.916	-48.07	-37.04	65.35	54.89	10.46	6.249	
1,600.00	1,593.86	1,595.41	1,587.54	5.65	5.65	116.591	-69.03	-44.35	81.26	70.04	11.23	7.239	
1,700.00	1,692.18	1,693.99	1,683.58	6.06	6.07	113.690	-89.99	-51.65	97.48	85.46	12.02	8.110	
1,800.00	1,790.51	1,792.56	1,779.63	6.47	6.51	111.619	-110.95	-58.96	113.87	101.04	12.83	8.873	
1,900.00	1,888.83	1,891.14	1,875.67	6.89	6.95	110.070	-131.91	-66.27	130.38	116.71	13.66	9.541	
2,000.00	1,987.16	1,989.71	1,971.71	7.32	7.40	108.869	-152.87	-73.58	146.95	132.44	14.51	10.130	
2,100.00	2,085.49	2,088.29	2,067.76	7.76	7.86	107.912	-173.83	-80.88	163.57	148.21	15.36	10.649	
2,200.00	2,183.81	2,186.86	2,163.80	8.19	8.33	107.132	-194.79	-88.19	180.23	164.01	16.22	11.110	
2,300.00	2,282.14	2,285.44	2,259.85	8.63	8.80	106.484	-215.75	-95.50	196.92	179.83	17.09	11.520	
2,400.00	2,380.46	2,384.01	2,355.89	9.08	9.27	105.937	-236.71	-102.81	213.63	195.66	17.97	11.888	
2,500.00	2,478.79	2,482.59	2,451.93	9.52	9.75	105.469	-257.67	-110.11	230.35	211.50	18.85	12.219	
2,600.00	2,577.11	2,581.17	2,547.98	9.97	10.23	105.065	-278.63	-117.42	247.08	227.35	19.74	12.518	
2,700.00	2,675.44	2,679.74	2,644.02	10.42	10.72	104.712	-299.59	-124.73	263.83	243.20	20.63	12.789	
2,800.00	2,773.76	2,778.32	2,740.06	10.87	11.21	104.401	-320.55	-132.04	280.59	259.06	21.52	13.036	
2,900.00	2,872.09	2,876.89	2,836.11	11.33	11.69	104.125	-341.51	-139.34	297.35	274.93	22.42	13.262	
3,000.00	2,970.41	2,975.47	2,932.15	11.78	12.18	103.879	-362.47	-146.65	314.12	290.80	23.32	13.469	
3,100.00	3,068.74	3,074.04	3,028.20	12.24	12.68	103.657	-383.43	-153.96	330.89	306.67	24.22	13.660	
3,200.00	3,167.08	3,172.62	3,124.24	12.69	13.17	103.523	-404.39	-161.27	347.65	322.53	25.13	13.835	
3,300.00	3,265.96	3,271.22	3,220.31	13.12	13.67	103.285	-425.36	-168.58	363.67	337.67	26.00	13.989	
3,400.00	3,365.48	3,369.66	3,316.22	13.51	14.16	102.301	-446.29	-175.87	378.63	351.82	26.81	14.125	
3,500.00	3,465.37	3,467.66	3,411.70	13.86	14.65	100.667	-467.13	-183.14	392.86	365.31	27.55	14.261	
3,600.00	3,565.37	3,565.13	3,506.68	14.16	15.15	-109.875	-487.85	-190.36	406.95	378.74	28.21	14.424	
3,700.00	3,665.37	3,662.57	3,601.60	14.46	15.64	-112.216	-508.57	-197.59	421.73	392.87	28.87	14.610	
3,800.00	3,765.37	3,760.00	3,696.53	14.76	16.13	-114.399	-529.29	-204.81	437.17	407.66	29.51	14.812	
3,900.00	3,865.37	3,872.66	3,806.74	15.07	16.68	-76.093	-551.33	-212.50	451.96	421.66	30.30	14.915	
4,000.00	3,964.84	3,991.23	3,923.97	15.33	17.20	-78.025	-568.01	-218.31	460.95	429.95	30.99	14.873	
4,100.00	4,061.25	4,107.91	4,040.18	15.52	17.64	-82.292	-577.68	-221.68	463.31	431.89	31.42	14.745	
4,200.00	4,151.66	4,219.45	4,151.66	15.66	17.99	-88.450	-580.65	-222.72	462.06	430.48	31.59	14.629	
4,227.60	4,175.19	4,242.98	4,175.19	15.70	18.05	-89.998	-580.65	-222.72	461.84	430.24	31.60	14.614	
4,300.00	4,233.33	4,301.13	4,233.33	15.81	18.21	-94.075	-580.65	-222.72	463.84	432.23	31.61	14.674	
4,400.00	4,303.79	4,369.83	4,301.97	16.01	18.40	-98.617	-579.33	-224.71	475.75	444.09	31.66	15.026	
4,500.00	4,360.87	4,440.09	4,371.36	16.34	18.58	-102.164	-573.42	-233.60	500.30	468.46	31.84	15.715	
4,600.00	4,402.86	4,515.89	4,444.15	16.87	18.75	-104.861	-561.84	-251.04	536.73	504.63	32.10	16.719	
4,700.00	4,428.48	4,600.73	4,521.55	17.61	18.93	-106.893	-542.70	-279.84	583.26	550.94	32.32	18.045	
4,800.00	4,436.97	4,701.81	4,605.84	18.56	19.10	-109.028	-511.97	-326.10	637.43	605.09	32.34	19.710	
4,900.00	4,437.67	4,852.45	4,710.26	19.71	19.32	-116.906	-452.21	-416.04	690.34	658.15	32.19	21.445	
5,000.00	4,438.38	5,295.37	4,828.38	21.06	21.83	-123.026	-194.83	-743.92	715.59	681.20	34.39	20.809	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 112H - Original Hole - rev0													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference	Offset	Rule Assigned:											
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,100.00	4,439.08	5,395.37	4,829.09	22.56	23.08	-123.026	-124.12	-814.62	715.60	678.80	36.80	19.447	
5,200.00	4,439.79	5,495.37	4,829.80	24.19	24.51	-123.027	-53.41	-885.33	715.60	676.16	39.44	18.144	
5,300.00	4,440.49	5,595.37	4,830.52	25.93	26.06	-123.027	17.30	-956.04	715.61	673.34	42.27	16.929	
5,400.00	4,441.20	5,695.37	4,831.23	27.74	27.72	-123.028	88.01	-1,026.75	715.61	670.36	45.26	15.813	
5,500.00	4,441.91	5,795.37	4,831.94	29.63	29.47	-123.028	158.72	-1,097.45	715.62	667.26	48.36	14.798	
5,600.00	4,442.61	5,895.37	4,832.66	31.56	31.28	-123.029	229.43	-1,168.16	715.62	664.06	51.56	13.878	
5,700.00	4,443.32	5,995.37	4,833.37	33.55	33.16	-123.029	300.14	-1,238.87	715.63	660.78	54.85	13.048	
5,800.00	4,444.02	6,095.37	4,834.08	35.57	35.08	-123.030	370.85	-1,309.58	715.63	657.44	58.19	12.297	
5,900.00	4,444.73	6,195.37	4,834.80	37.62	37.05	-123.030	441.56	-1,380.28	715.64	654.04	61.59	11.619	
6,000.00	4,445.43	6,295.37	4,835.51	39.70	39.05	-123.031	512.27	-1,450.99	715.64	650.60	65.04	11.003	
6,100.00	4,446.14	6,395.37	4,836.23	41.80	41.08	-123.031	582.98	-1,521.70	715.65	647.13	68.52	10.445	
6,200.00	4,446.84	6,495.37	4,836.94	43.92	43.14	-123.032	653.69	-1,592.41	715.65	643.63	72.02	9.937	
6,300.00	4,447.55	6,595.37	4,837.65	46.06	45.22	-123.032	724.40	-1,663.11	715.65	640.10	75.55	9.472	
6,400.00	4,448.26	6,695.37	4,838.37	48.21	47.32	-123.033	795.11	-1,733.82	715.66	636.56	79.10	9.048	
6,500.00	4,448.96	6,795.37	4,839.08	50.37	49.44	-123.033	865.82	-1,804.53	715.66	633.00	82.66	8.657	
6,600.00	4,449.67	6,895.37	4,839.79	52.55	51.57	-123.034	936.53	-1,875.24	715.67	629.43	86.24	8.299	
6,700.00	4,450.37	6,995.37	4,840.51	54.74	53.71	-123.034	1,007.24	-1,945.94	715.67	625.85	89.82	7.967	
6,800.00	4,451.08	7,095.37	4,841.22	56.93	55.87	-123.035	1,077.95	-2,016.65	715.68	622.26	93.42	7.661	
6,900.00	4,451.78	7,195.37	4,841.93	59.13	58.04	-123.035	1,148.66	-2,087.36	715.68	618.67	97.02	7.377	
7,000.00	4,452.49	7,295.37	4,842.65	61.34	60.22	-123.036	1,219.37	-2,158.07	715.69	615.07	100.62	7.113	
7,100.00	4,453.20	7,395.37	4,843.36	63.56	62.40	-123.037	1,290.08	-2,228.77	715.69	611.47	104.22	6.867	
7,200.00	4,453.90	7,495.37	4,844.08	65.78	64.60	-123.037	1,360.80	-2,299.48	715.70	607.87	107.83	6.638	
7,300.00	4,454.61	7,595.37	4,844.79	68.00	66.80	-123.038	1,431.51	-2,370.19	715.70	604.27	111.43	6.423	
7,400.00	4,455.31	7,695.37	4,845.50	70.23	69.00	-123.038	1,502.22	-2,440.90	715.71	600.67	115.04	6.222	
7,500.00	4,456.02	7,795.37	4,846.22	72.47	71.21	-123.039	1,572.93	-2,511.60	715.71	597.08	118.64	6.033	
7,600.00	4,456.72	7,895.37	4,846.93	74.71	73.43	-123.039	1,643.64	-2,582.31	715.72	593.48	122.24	5.855	
7,700.00	4,457.43	7,995.37	4,847.64	76.95	75.65	-123.040	1,714.35	-2,653.02	715.72	589.89	125.83	5.688	
7,800.00	4,458.13	8,095.37	4,848.36	79.19	77.88	-123.040	1,785.06	-2,723.73	715.73	586.30	129.42	5.530	
7,900.00	4,458.84	8,195.37	4,849.07	81.44	80.11	-123.041	1,855.77	-2,794.43	715.73	582.72	133.01	5.381	
8,000.00	4,459.55	8,295.37	4,849.78	83.69	82.34	-123.041	1,926.48	-2,865.14	715.74	579.15	136.59	5.240	
8,100.00	4,460.25	8,395.37	4,850.50	85.94	84.58	-123.042	1,997.19	-2,935.85	715.74	575.58	140.17	5.106	
8,200.00	4,460.96	8,495.37	4,851.21	88.20	86.82	-123.042	2,067.90	-3,006.56	715.75	572.01	143.73	4.980	
8,300.00	4,461.66	8,595.37	4,851.93	90.45	89.06	-123.043	2,138.61	-3,077.27	715.75	568.45	147.30	4.859	
8,400.00	4,462.37	8,695.37	4,852.64	92.71	91.30	-123.043	2,209.32	-3,147.97	715.76	564.90	150.85	4.745	
8,500.00	4,463.07	8,795.37	4,853.35	94.97	93.55	-123.044	2,280.03	-3,218.68	715.76	561.36	154.40	4.636	
8,600.00	4,463.78	8,895.37	4,854.07	97.23	95.80	-123.044	2,350.74	-3,289.39	715.77	557.83	157.94	4.532	
8,700.00	4,464.48	8,995.37	4,854.78	99.50	98.05	-123.045	2,421.45	-3,360.10	715.77	554.30	161.47	4.433	
8,800.00	4,465.19	9,095.37	4,855.49	101.76	100.31	-123.045	2,492.16	-3,430.80	715.77	550.78	165.00	4.338	
8,900.00	4,465.90	9,195.37	4,856.21	104.03	102.56	-123.046	2,562.87	-3,501.51	715.78	547.27	168.51	4.248	
9,000.00	4,466.60	9,295.37	4,856.92	106.30	104.82	-123.046	2,633.58	-3,572.22	715.78	543.77	172.02	4.161	
9,100.00	4,467.31	9,395.37	4,857.63	108.56	107.08	-123.047	2,704.29	-3,642.93	715.79	540.28	175.51	4.078	
9,200.00	4,468.01	9,495.37	4,858.35	110.83	109.34	-123.047	2,775.00	-3,713.63	715.79	536.79	179.00	3.999	
9,300.00	4,468.72	9,595.37	4,859.06	113.11	111.60	-123.048	2,845.71	-3,784.34	715.80	533.32	182.48	3.923	
9,400.00	4,469.42	9,695.37	4,859.78	115.38	113.86	-123.048	2,916.42	-3,855.05	715.80	529.86	185.94	3.850	
9,500.00	4,470.13	9,795.37	4,860.49	117.65	116.13	-123.049	2,987.13	-3,925.76	715.81	526.41	189.40	3.779	
9,600.00	4,470.83	9,895.37	4,861.20	119.92	118.39	-123.050	3,057.84	-3,996.46	715.81	522.96	192.85	3.712	
9,700.00	4,471.54	9,995.37	4,861.92	122.20	120.66	-123.050	3,128.55	-4,067.17	715.82	519.53	196.28	3.647	
9,800.00	4,472.25	10,095.37	4,862.63	124.47	122.93	-123.051	3,199.26	-4,137.88	715.82	516.11	199.71	3.584	
9,900.00	4,472.95	10,195.37	4,863.34	126.75	125.20	-123.051	3,269.97	-4,208.59	715.83	512.70	203.12	3.524	
10,000.00	4,473.66	10,295.37	4,864.06	129.03	127.47	-123.052	3,340.68	-4,279.29	715.83	509.31	206.53	3.466	
10,100.00	4,474.36	10,395.37	4,864.77	131.30	129.74	-123.052	3,411.39	-4,350.00	715.84	505.92	209.92	3.410	
10,200.00	4,475.07	10,495.37	4,865.49	133.58	132.01	-123.053	3,482.10	-4,420.71	715.84	502.54	213.30	3.356	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 112H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	4,475.77	10,595.37	4,866.20	135.86	134.28	-123.053	3,552.81	-4,491.42	715.85	499.18	216.67	3.304		
10,400.00	4,476.48	10,695.37	4,866.91	138.14	136.56	-123.054	3,623.52	-4,562.12	715.85	495.83	220.02	3.254		
10,500.00	4,477.18	10,795.37	4,867.63	140.42	138.83	-123.054	3,694.23	-4,632.83	715.86	492.49	223.37	3.205		
10,600.00	4,477.89	10,895.37	4,868.34	142.70	141.10	-123.055	3,764.94	-4,703.54	715.86	489.16	226.70	3.158		
10,700.00	4,478.60	10,995.37	4,869.05	144.98	143.38	-123.055	3,835.65	-4,774.25	715.87	485.85	230.02	3.112		
10,800.00	4,479.30	11,095.37	4,869.77	147.26	145.66	-123.056	3,906.36	-4,844.95	715.87	482.55	233.32	3.068		
10,900.00	4,480.01	11,195.37	4,870.48	149.54	147.93	-123.056	3,977.07	-4,915.66	715.88	479.26	236.62	3.025		
11,000.00	4,480.71	11,295.37	4,871.19	151.82	150.21	-123.057	4,047.78	-4,986.37	715.88	475.98	239.90	2.984		
11,100.00	4,481.42	11,395.37	4,871.91	154.11	152.49	-123.057	4,118.49	-5,057.08	715.89	472.72	243.17	2.944		
11,200.00	4,482.12	11,495.37	4,872.62	156.39	154.77	-123.058	4,189.20	-5,127.78	715.89	469.47	246.42	2.905		
11,300.00	4,482.83	11,595.37	4,873.34	158.67	157.04	-123.058	4,259.91	-5,198.49	715.89	466.23	249.66	2.867		
11,400.00	4,483.54	11,695.37	4,874.05	160.96	159.32	-123.059	4,330.62	-5,269.20	715.90	463.01	252.89	2.831		
11,500.00	4,484.24	11,795.37	4,874.76	163.24	161.60	-123.059	4,401.33	-5,339.91	715.90	459.80	256.11	2.795		
11,600.00	4,484.95	11,895.37	4,875.48	165.52	163.88	-123.060	4,472.04	-5,410.61	715.91	456.60	259.31	2.761		
11,700.00	4,485.65	11,995.37	4,876.19	167.81	166.16	-123.060	4,542.75	-5,481.32	715.91	453.42	262.50	2.727		
11,800.00	4,486.36	12,095.37	4,876.90	170.09	168.44	-123.061	4,613.46	-5,552.03	715.92	450.25	265.67	2.695		
11,891.10	4,487.00	12,186.47	4,877.55	172.18	170.52	-123.061	4,677.88	-5,616.44	715.92	447.37	268.55	2.666 SF		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 114H - Original Hole - rev0													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.00	0.00	0.00	-54.757	34.58	-48.95	59.93				
100.00	100.00	100.00	100.00	0.27	0.27	-54.757	34.58	-48.95	59.93	59.39	0.54	111.456	
200.00	200.00	200.00	200.00	0.63	0.63	-54.757	34.58	-48.95	59.93	58.68	1.25	47.767	
300.00	300.00	300.00	300.00	0.99	0.99	-54.757	34.58	-48.95	59.93	57.96	1.97	30.397	
400.00	400.00	400.00	400.00	1.34	1.34	-54.757	34.58	-48.95	59.93	57.24	2.69	22.291	
500.00	500.00	500.00	500.00	1.70	1.70	-54.757	34.58	-48.95	59.93	56.53	3.41	17.598	
600.00	600.00	600.00	600.00	2.06	2.06	-54.757	34.58	-48.95	59.93	55.81	4.12	14.538	
700.00	700.00	700.00	700.00	2.42	2.42	-54.757	34.58	-48.95	59.93	55.09	4.84	12.384	
800.00	800.00	800.00	800.00	2.78	2.78	-54.757	34.58	-48.95	59.93	54.37	5.56	10.786	
900.00	900.00	900.00	900.00	3.14	3.14	-54.757	34.58	-48.95	59.93	53.66	6.27	9.553	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.757	34.58	-48.95	59.93	52.94	6.99	8.574 CC, ES	
1,100.00	1,099.95	1,098.31	1,098.27	3.84	3.84	152.476	33.53	-51.24	63.57	55.90	7.67	8.287 SF	
1,200.00	1,199.63	1,195.79	1,195.45	4.17	4.17	150.078	30.40	-58.06	74.54	66.21	8.33	8.951	
1,300.00	1,298.77	1,291.63	1,290.50	4.51	4.51	147.298	25.31	-69.14	92.89	83.90	8.99	10.337	
1,400.00	1,397.21	1,385.23	1,382.62	4.88	4.85	144.825	18.42	-84.13	117.99	108.35	9.64	12.235	
1,500.00	1,495.53	1,476.78	1,471.84	5.26	5.22	142.109	9.87	-102.75	146.73	136.44	10.29	14.261	
1,600.00	1,593.86	1,567.13	1,558.85	5.65	5.61	139.221	-0.27	-124.83	178.71	167.77	10.94	16.338	
1,700.00	1,692.18	1,661.10	1,648.96	6.06	6.05	136.824	-11.39	-149.05	212.04	200.37	11.67	18.174	
1,800.00	1,790.51	1,755.06	1,739.07	6.47	6.51	135.077	-22.52	-173.27	245.61	233.19	12.41	19.784	
1,900.00	1,888.83	1,849.03	1,829.18	6.89	6.98	133.750	-33.64	-197.48	279.33	266.15	13.18	21.196	
2,000.00	1,987.16	1,943.00	1,919.29	7.32	7.46	132.708	-44.76	-221.70	313.16	299.20	13.95	22.441	
2,100.00	2,085.49	2,036.97	2,009.40	7.76	7.96	131.869	-55.89	-245.92	347.06	332.32	14.74	23.541	
2,200.00	2,183.81	2,130.94	2,099.51	8.19	8.47	131.179	-67.01	-270.14	381.02	365.48	15.54	24.520	
2,300.00	2,282.14	2,224.90	2,189.62	8.63	8.98	130.601	-78.13	-294.36	415.01	398.67	16.34	25.393	
2,400.00	2,380.46	2,318.87	2,279.73	9.08	9.50	130.112	-89.26	-318.57	449.04	431.89	17.15	26.176	
2,500.00	2,478.79	2,412.84	2,369.84	9.52	10.02	129.691	-100.38	-342.79	483.10	465.13	17.97	26.881	
2,600.00	2,577.11	2,506.81	2,459.95	9.97	10.55	129.325	-111.50	-367.01	517.17	498.38	18.79	27.519	
2,700.00	2,675.44	2,600.77	2,550.06	10.42	11.08	129.005	-122.63	-391.23	551.26	531.64	19.62	28.099	
2,800.00	2,773.76	2,694.74	2,640.17	10.87	11.62	128.722	-133.75	-415.45	585.37	564.92	20.45	28.626	
2,900.00	2,872.09	2,788.71	2,730.28	11.33	12.16	128.470	-144.87	-439.67	619.48	598.20	21.28	29.109	
3,000.00	2,970.41	2,882.68	2,820.39	11.78	12.70	128.244	-156.00	-463.88	653.61	631.49	22.12	29.552	
3,100.00	3,068.74	2,976.65	2,910.50	12.24	13.24	128.041	-167.12	-488.10	687.74	664.78	22.96	29.959	
3,200.00	3,167.08	3,070.63	3,000.62	12.69	13.79	127.984	-178.25	-512.32	721.84	698.05	23.80	30.335	
3,300.00	3,265.96	3,165.19	3,091.29	13.12	14.34	128.001	-189.44	-536.69	754.00	729.39	24.62	30.630	
3,400.00	3,365.48	3,260.45	3,182.65	13.51	14.89	128.450	-200.72	-561.25	783.13	757.73	25.40	30.826	
3,500.00	3,465.37	3,356.16	3,274.43	13.86	15.45	128.172	-212.05	-585.91	809.28	783.12	26.16	30.938	
3,600.00	3,565.37	3,452.05	3,366.38	14.16	16.02	-80.929	-223.40	-610.62	833.20	806.34	26.87	31.012	
3,700.00	3,665.37	3,547.94	3,458.33	14.46	16.58	-81.970	-234.75	-635.34	857.22	829.65	27.57	31.090	
3,800.00	3,765.37	3,643.84	3,550.29	14.76	17.14	-82.955	-246.10	-660.05	881.50	853.22	28.28	31.175	
3,900.00	3,865.37	3,768.36	3,670.05	15.07	17.86	-43.646	-260.33	-691.04	905.37	876.12	29.24	30.961	
4,000.00	3,964.84	3,936.03	3,834.08	15.33	18.69	-44.586	-274.73	-722.38	916.96	886.55	30.41	30.156	
4,100.00	4,061.25	4,103.20	4,000.00	15.52	19.36	-47.728	-283.05	-740.50	909.13	877.86	31.27	29.075	
4,200.00	4,151.66	5,314.15	4,819.63	15.66	21.20	-124.365	-688.00	-250.55	868.35	844.94	23.41	37.091	
4,300.00	4,233.33	5,239.31	4,819.61	15.81	20.73	-125.762	-635.24	-303.61	810.57	786.10	24.47	33.125	
4,400.00	4,303.79	5,105.29	4,800.13	16.01	20.67	-122.180	-547.14	-402.30	761.44	735.73	25.71	29.612	
4,500.00	4,360.87	4,935.65	4,734.57	16.34	20.68	-114.297	-452.11	-525.77	721.34	693.19	28.15	25.625	
4,600.00	4,402.86	4,796.56	4,648.79	16.87	20.65	-106.920	-386.18	-612.63	688.12	657.32	30.80	22.340	
4,700.00	4,428.48	4,707.69	4,581.19	17.61	20.60	-102.059	-351.38	-658.48	666.68	633.84	32.84	20.299	
4,800.00	4,436.97	4,635.52	4,520.26	18.56	20.53	-97.261	-328.04	-689.22	658.35	623.73	34.62	19.015	
4,838.80	4,437.24	4,611.67	4,499.12	19.00	20.51	-95.397	-321.37	-698.01	657.90	622.59	35.31	18.634	
4,900.00	4,437.67	4,580.73	4,471.04	19.71	20.47	-92.921	-313.52	-708.36	659.14	622.81	36.34	18.140	
5,000.00	4,438.38	4,542.77	4,435.70	21.06	20.42	-89.828	-305.16	-719.37	667.89	629.83	38.05	17.551	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 114H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,100.00	4,439.08	4,515.30	4,409.59	22.56	20.38	-87.564	-300.00	-726.17	689.07	649.41	39.66	17.373	
5,200.00	4,439.79	4,500.00	4,394.88	24.19	20.36	-86.295	-297.45	-729.52	722.68	681.63	41.04	17.607	
5,300.00	4,440.49	4,478.49	4,374.03	25.93	20.32	-84.506	-294.28	-733.70	767.29	725.17	42.12	18.216	
5,400.00	4,441.20	4,465.61	4,361.45	27.74	20.30	-83.432	-292.61	-735.91	821.34	778.43	42.91	19.140	
5,500.00	4,441.91	4,450.00	4,346.12	29.63	20.27	-82.133	-290.81	-738.27	883.22	839.77	43.45	20.329	
5,600.00	4,442.61	4,450.00	4,346.12	31.56	20.27	-82.133	-290.81	-738.27	951.39	907.57	43.82	21.713	
5,700.00	4,443.32	4,450.00	4,346.12	33.55	20.27	-82.133	-290.81	-738.27	1,024.79	980.75	44.04	23.271	
5,800.00	4,444.02	4,432.61	4,328.96	35.57	20.24	-80.689	-289.11	-740.52	1,102.06	1,057.94	44.12	24.978	
5,900.00	4,444.73	4,427.14	4,323.55	37.62	20.23	-80.235	-288.64	-741.14	1,182.79	1,138.63	44.16	26.785	
6,000.00	4,445.43	4,422.36	4,318.81	39.70	20.22	-79.840	-288.25	-741.65	1,266.22	1,222.07	44.15	28.681	
6,100.00	4,446.14	4,418.15	4,314.63	41.80	20.21	-79.493	-287.93	-742.07	1,351.85	1,307.75	44.11	30.649	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 115H - Original Hole - rev0													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:				Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-54.676	69.17	-97.60	119.62				
100.00	100.00	100.00	100.00	0.27	0.27	-54.676	69.17	-97.60	119.62	119.08	0.54	222.463	
200.00	200.00	200.00	200.00	0.63	0.63	-54.676	69.17	-97.60	119.62	118.37	1.25	95.341	
300.00	300.00	300.00	300.00	0.99	0.99	-54.676	69.17	-97.60	119.62	117.65	1.97	60.672	
400.00	400.00	400.00	400.00	1.34	1.34	-54.676	69.17	-97.60	119.62	116.93	2.69	44.493	
500.00	500.00	500.00	500.00	1.70	1.70	-54.676	69.17	-97.60	119.62	116.21	3.41	35.126	
600.00	600.00	600.00	600.00	2.06	2.06	-54.676	69.17	-97.60	119.62	115.50	4.12	29.017	
700.00	700.00	700.00	700.00	2.42	2.42	-54.676	69.17	-97.60	119.62	114.78	4.84	24.718	
800.00	800.00	800.00	800.00	2.78	2.78	-54.676	69.17	-97.60	119.62	114.06	5.56	21.529	
900.00	900.00	900.00	900.00	3.14	3.14	-54.676	69.17	-97.60	119.62	113.35	6.27	19.068	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.676	69.17	-97.60	119.62	112.63	6.99	17.113	
1,100.00	1,099.95	1,093.77	1,093.67	3.84	3.83	154.301	72.13	-100.56	126.27	118.61	7.66	16.486	
1,200.00	1,199.63	1,192.95	1,192.72	4.17	4.18	155.880	75.67	-104.10	138.36	130.02	8.34	16.583	
1,300.00	1,298.77	1,291.32	1,290.97	4.51	4.53	157.882	79.17	-107.60	155.35	146.32	9.03	17.201	
1,400.00	1,397.21	1,388.79	1,388.31	4.88	4.88	160.057	82.64	-111.07	176.74	167.02	9.72	18.180	
1,500.00	1,495.53	1,486.11	1,485.51	5.26	5.23	161.915	86.11	-114.54	198.95	188.54	10.41	19.119	
1,600.00	1,593.86	1,583.43	1,582.71	5.65	5.59	163.399	89.57	-118.01	221.31	210.22	11.09	19.948	
1,700.00	1,692.18	1,680.75	1,679.91	6.06	5.94	164.611	93.04	-121.47	243.80	232.01	11.79	20.682	
1,800.00	1,790.51	1,778.08	1,777.11	6.47	6.29	165.618	96.51	-124.94	266.37	253.88	12.49	21.335	
1,900.00	1,888.83	1,889.89	1,888.83	6.89	6.69	166.607	99.17	-127.60	287.50	274.24	13.26	21.685	
2,000.00	1,987.16	1,988.22	1,987.16	7.32	7.04	167.399	99.17	-127.60	305.27	291.30	13.97	21.858	
2,100.00	2,085.49	2,086.55	2,085.49	7.76	7.39	168.103	99.17	-127.60	323.09	308.41	14.68	22.015	
2,200.00	2,183.81	2,184.87	2,183.81	8.19	7.74	168.734	99.17	-127.60	340.95	325.57	15.39	22.158	
2,300.00	2,282.14	2,283.20	2,282.14	8.63	8.09	169.302	99.17	-127.60	358.86	342.76	16.10	22.288	
2,400.00	2,380.46	2,381.52	2,380.46	9.08	8.44	169.817	99.17	-127.60	376.79	359.97	16.81	22.408	
2,500.00	2,478.79	2,479.85	2,478.79	9.52	8.79	170.284	99.17	-127.60	394.75	377.22	17.53	22.518	
2,600.00	2,577.11	2,578.17	2,577.11	9.97	9.15	170.711	99.17	-127.60	412.73	394.48	18.25	22.619	
2,700.00	2,675.44	2,676.50	2,675.44	10.42	9.50	171.102	99.17	-127.60	430.73	411.77	18.96	22.713	
2,800.00	2,773.76	2,774.82	2,773.76	10.87	9.85	171.462	99.17	-127.60	448.75	429.07	19.68	22.800	
2,900.00	2,872.09	2,873.15	2,872.09	11.33	10.20	171.794	99.17	-127.60	466.79	446.39	20.40	22.881	
3,000.00	2,970.41	2,971.48	2,970.41	11.78	10.55	172.101	99.17	-127.60	484.84	463.72	21.12	22.956	
3,100.00	3,068.74	3,069.80	3,068.74	12.24	10.90	172.386	99.17	-127.60	502.90	481.06	21.84	23.027	
3,200.00	3,167.08	3,168.14	3,167.08	12.69	11.25	172.661	99.17	-127.60	520.91	498.35	22.56	23.090	
3,300.00	3,265.96	3,267.02	3,265.96	13.12	11.61	172.920	99.17	-127.60	535.64	512.37	23.28	23.012	
3,400.00	3,365.48	3,366.54	3,365.48	13.51	11.96	173.079	99.17	-127.60	545.22	521.23	23.99	22.727	
3,500.00	3,465.37	3,466.43	3,465.37	13.86	12.32	173.151	99.17	-127.60	549.62	524.92	24.70	22.254	
3,600.00	3,565.37	3,566.43	3,565.37	14.16	12.68	-35.066	99.17	-127.60	549.93	524.54	25.39	21.661	
3,700.00	3,665.37	3,666.43	3,665.37	14.46	13.04	-35.066	99.17	-127.60	549.93	523.86	26.08	21.089	
3,800.00	3,765.37	3,766.43	3,765.37	14.76	13.39	-35.066	99.17	-127.60	549.93	523.17	26.77	20.545	
3,900.00	3,865.37	3,950.00	3,948.61	15.07	14.03	5.459	94.21	-123.27	549.73	522.10	27.63	19.895	
4,000.00	3,964.84	4,574.91	4,404.38	15.33	17.11	38.410	-193.23	127.61	467.96	451.98	15.98	29.279	
4,100.00	4,061.25	4,592.56	4,409.82	15.52	17.28	108.631	-205.89	138.66	369.12	353.29	15.83	23.323	
4,200.00	4,151.66	4,566.40	4,401.58	15.66	17.02	130.384	-187.18	122.33	271.47	254.67	16.80	16.164	
4,300.00	4,233.33	4,528.67	4,387.72	15.81	16.69	130.706	-160.75	99.26	177.47	158.98	18.49	9.600	
4,400.00	4,303.79	4,486.24	4,369.41	16.01	16.35	116.820	-131.92	74.10	92.63	69.99	22.63	4.093	
4,482.28	4,351.82	4,449.49	4,351.30	16.28	16.08	89.364	-107.83	53.07	54.79	22.48	32.32	1.695 Level 3<2.00, CC, ES, SF	
4,500.00	4,360.87	4,441.43	4,347.06	16.34	16.02	81.712	-102.67	48.57	57.00	26.25	30.75	1.854 Level 3<2.00	
4,600.00	4,402.86	4,395.27	4,320.94	16.87	15.73	43.869	-74.01	23.55	115.47	92.74	22.73	5.080	
4,700.00	4,428.48	4,350.00	4,292.42	17.61	15.48	25.455	-47.53	0.44	190.53	167.51	23.01	8.278	
4,800.00	4,436.97	4,300.00	4,257.82	18.56	15.23	16.573	-20.36	-23.28	263.34	239.40	23.94	10.999	
4,900.00	4,437.67	4,250.00	4,220.20	19.71	15.02	11.009	4.44	-44.92	337.90	313.07	24.83	13.608	
5,000.00	4,438.38	4,220.76	4,196.92	21.06	14.91	8.658	17.77	-56.55	417.37	391.24	26.13	15.974	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 115H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	4,439.08	4,200.00	4,179.86	22.56	14.83	8.262	26.68	-64.33	500.64	473.52	27.12	18.461	
5,200.00	4,439.79	4,163.36	4,148.75	24.19	14.71	7.631	41.24	-77.04	586.20	558.76	27.44	21.362	
5,300.00	4,440.49	4,150.00	4,137.10	25.93	14.66	7.420	46.18	-81.35	674.23	646.18	28.05	24.039	
5,400.00	4,441.20	4,120.89	4,111.22	27.74	14.57	6.990	56.21	-90.11	763.68	735.42	28.26	27.020	
5,500.00	4,441.91	4,100.00	4,092.25	29.63	14.50	6.704	62.80	-95.85	854.68	826.16	28.52	29.967	
5,600.00	4,442.61	4,100.00	4,092.25	31.56	14.50	6.704	62.80	-95.85	946.97	918.05	28.91	32.755	
5,700.00	4,443.32	4,075.13	4,069.26	33.55	14.42	6.386	69.95	-102.10	1,039.84	1,010.83	29.01	35.845	
5,800.00	4,444.02	4,050.00	4,045.64	35.57	14.34	6.086	76.41	-107.73	1,133.91	1,104.82	29.09	38.981	
5,900.00	4,444.73	4,050.00	4,045.64	37.62	14.34	6.086	76.41	-107.73	1,228.20	1,198.89	29.31	41.901	
6,000.00	4,445.43	4,050.00	4,045.64	39.70	14.34	6.086	76.41	-107.73	1,323.33	1,293.84	29.49	44.874	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 116H - Original Hole - rev0													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.00	0.00	0.00	-54.480	57.88	-81.09	99.62				
100.00	100.00	100.00	100.00	0.27	0.27	-54.480	57.88	-81.09	99.62	99.09	0.54	185.275	
200.00	200.00	200.00	200.00	0.63	0.63	-54.480	57.88	-81.09	99.62	98.37	1.25	79.404	
300.00	300.00	300.00	300.00	0.99	0.99	-54.480	57.88	-81.09	99.62	97.65	1.97	50.530	
400.00	400.00	400.00	400.00	1.34	1.34	-54.480	57.88	-81.09	99.62	96.94	2.69	37.055	
500.00	500.00	500.00	500.00	1.70	1.70	-54.480	57.88	-81.09	99.62	96.22	3.41	29.254	
600.00	600.00	600.00	600.00	2.06	2.06	-54.480	57.88	-81.09	99.62	95.50	4.12	24.166	
700.00	700.00	700.00	700.00	2.42	2.42	-54.480	57.88	-81.09	99.62	94.78	4.84	20.586	
800.00	800.00	800.00	800.00	2.78	2.78	-54.480	57.88	-81.09	99.62	94.07	5.56	17.930	
900.00	900.00	900.00	900.00	3.14	3.14	-54.480	57.88	-81.09	99.62	93.35	6.27	15.881	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.480	57.88	-81.09	99.62	92.63	6.99	14.252 CC, ES	
1,100.00	1,099.95	1,099.95	1,099.95	3.84	3.85	154.362	57.88	-81.09	101.98	94.29	7.69	13.260	
1,200.00	1,199.63	1,199.63	1,199.63	4.17	4.21	156.057	57.88	-81.09	109.11	100.73	8.38	13.020 SF	
1,300.00	1,298.77	1,298.83	1,298.79	4.51	4.56	159.647	59.79	-79.38	121.12	112.05	9.07	13.353	
1,400.00	1,397.21	1,396.20	1,395.85	4.88	4.91	165.242	65.38	-74.37	138.28	128.52	9.76	14.166	
1,500.00	1,495.53	1,491.81	1,490.68	5.26	5.26	171.378	74.46	-66.25	158.03	147.59	10.44	15.135	
1,600.00	1,593.86	1,585.37	1,582.76	5.65	5.61	177.497	86.75	-55.24	180.61	169.49	11.12	16.245	
1,700.00	1,692.18	1,677.08	1,672.15	6.06	5.97	-176.650	102.01	-41.58	206.61	194.83	11.79	17.530	
1,800.00	1,790.51	1,771.04	1,763.35	6.47	6.35	-171.606	118.83	-26.53	235.13	222.64	12.49	18.829	
1,900.00	1,888.83	1,864.99	1,854.55	6.89	6.76	-167.640	135.65	-11.47	265.00	251.80	13.20	20.072	
2,000.00	1,987.16	1,958.94	1,945.75	7.32	7.17	-164.469	152.47	3.58	295.83	281.90	13.93	21.239	
2,100.00	2,085.49	2,052.89	2,036.95	7.76	7.59	-161.890	169.29	18.64	327.33	312.67	14.66	22.323	
2,200.00	2,183.81	2,146.84	2,128.15	8.19	8.03	-159.759	186.10	33.69	359.34	343.94	15.41	23.324	
2,300.00	2,282.14	2,240.80	2,219.35	8.63	8.46	-157.974	202.92	48.74	391.73	375.58	16.16	24.247	
2,400.00	2,380.46	2,334.75	2,310.55	9.08	8.91	-156.460	219.74	63.80	424.41	407.50	16.91	25.097	
2,500.00	2,478.79	2,428.70	2,401.75	9.52	9.36	-155.160	236.56	78.85	457.32	439.65	17.67	25.879	
2,600.00	2,577.11	2,522.65	2,492.95	9.97	9.81	-154.034	253.38	93.91	490.41	471.98	18.44	26.601	
2,700.00	2,675.44	2,616.61	2,584.15	10.42	10.27	-153.049	270.20	108.96	523.66	504.45	19.20	27.268	
2,800.00	2,773.76	2,710.56	2,675.35	10.87	10.73	-152.182	287.01	124.02	557.02	537.04	19.98	27.886	
2,900.00	2,872.09	2,804.51	2,766.56	11.33	11.20	-151.412	303.83	139.07	590.49	569.74	20.75	28.458	
3,000.00	2,970.41	2,898.46	2,857.76	11.78	11.66	-150.724	320.65	154.13	624.04	602.51	21.53	28.990	
3,100.00	3,068.74	2,992.41	2,948.96	12.24	12.13	-150.106	337.47	169.18	657.66	635.35	22.31	29.485	
3,200.00	3,167.08	3,086.38	3,040.17	12.69	12.60	-149.628	354.29	184.24	691.29	668.21	23.09	29.945	
3,300.00	3,265.96	3,181.15	3,132.16	13.12	13.08	-149.472	371.25	199.42	722.25	698.39	23.86	30.271	
3,400.00	3,365.48	3,276.97	3,225.17	13.51	13.56	-149.087	388.40	214.77	748.99	724.37	24.62	30.420	
3,500.00	3,465.37	3,373.57	3,318.95	13.86	14.05	-148.487	405.70	230.25	771.56	746.19	25.37	30.413	
3,600.00	3,565.37	3,470.61	3,413.15	14.16	14.55	4.245	423.07	245.80	790.93	764.84	26.10	30.309	
3,700.00	3,665.37	3,567.68	3,507.38	14.46	15.04	5.271	440.45	261.36	810.31	783.49	26.82	30.212	
3,800.00	3,765.37	3,664.75	3,601.60	14.76	15.54	6.249	457.82	276.91	829.92	802.38	27.54	30.131	
3,900.00	3,865.37	3,761.82	3,695.83	15.07	16.03	47.612	475.20	292.47	849.77	821.50	28.27	30.063	
4,000.00	3,964.84	3,909.91	3,840.62	15.33	16.75	48.595	498.25	313.10	861.46	832.09	29.37	29.331	
4,100.00	4,061.25	4,065.42	3,994.74	15.52	17.38	51.844	513.43	326.68	855.65	825.34	30.32	28.223	
4,200.00	4,151.66	4,212.60	4,141.69	15.66	17.89	57.441	519.14	331.80	834.02	803.02	31.00	26.903	
4,300.00	4,233.33	4,304.25	4,233.33	15.81	18.16	63.777	519.27	331.91	801.58	770.17	31.41	25.523	
4,400.00	4,303.79	4,457.60	4,385.83	16.01	18.57	76.466	509.45	339.35	763.59	731.85	31.74	24.059	
4,500.00	4,360.87	4,540.67	4,465.58	16.34	18.77	87.292	491.15	353.22	723.11	691.05	32.06	22.552	
4,600.00	4,402.86	4,553.31	4,477.40	16.87	18.80	91.602	487.57	355.94	692.35	659.56	32.79	21.117	
4,700.00	4,428.48	4,539.32	4,464.32	17.61	18.77	92.141	491.52	352.94	675.41	641.66	33.75	20.013	
4,764.87	4,436.15	4,523.31	4,449.21	18.22	18.73	91.115	495.74	349.75	672.32	637.87	34.45	19.514	
4,800.00	4,436.97	4,512.83	4,439.24	18.56	18.71	90.213	498.31	347.80	673.07	638.25	34.82	19.330	
4,900.00	4,437.67	4,487.56	4,414.97	19.71	18.65	88.150	503.92	343.55	687.37	651.42	35.96	19.117	
5,000.00	4,438.38	4,468.79	4,396.76	21.06	18.60	86.578	507.52	340.81	718.90	681.83	37.07	19.393	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 116H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,439.08	4,450.00	4,378.38	22.56	18.55	85.002	510.66	338.44	762.38	724.34	38.04	20.039	
5,200.00	4,439.79	4,450.00	4,378.38	24.19	18.55	85.002	510.66	338.44	815.57	776.69	38.88	20.974	
5,300.00	4,440.49	4,433.34	4,362.00	25.93	18.51	83.604	513.04	336.64	876.69	837.19	39.50	22.197	
5,400.00	4,441.20	4,425.55	4,354.30	27.74	18.49	82.951	514.02	335.89	944.36	904.39	39.97	23.625	
5,500.00	4,441.91	4,418.98	4,347.80	29.63	18.47	82.401	514.78	335.32	1,017.28	976.96	40.32	25.228	
5,600.00	4,442.61	4,400.00	4,328.97	31.56	18.42	80.816	516.65	333.90	1,094.60	1,054.06	40.54	27.000	
5,700.00	4,443.32	4,400.00	4,328.97	33.55	18.42	80.816	516.65	333.90	1,175.02	1,134.28	40.74	28.843	
5,800.00	4,444.02	4,400.00	4,328.97	35.57	18.42	80.816	516.65	333.90	1,258.24	1,217.37	40.88	30.782	
5,900.00	4,444.73	4,400.00	4,328.97	37.62	18.42	80.816	516.65	333.90	1,343.76	1,302.79	40.97	32.797	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 117H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	125.202	-11.65	16.51	20.21					
100.00	100.00	100.00	100.00	0.27	0.27	125.202	-11.65	16.51	20.21	19.67	0.54	37.581		
200.00	200.00	200.00	200.00	0.63	0.63	125.202	-11.65	16.51	20.21	18.95	1.25	16.106		
300.00	300.00	300.00	300.00	0.99	0.99	125.202	-11.65	16.51	20.21	18.24	1.97	10.249		
400.00	400.00	400.00	400.00	1.34	1.34	125.202	-11.65	16.51	20.21	17.52	2.69	7.516		
500.00	500.00	500.00	500.00	1.70	1.70	125.202	-11.65	16.51	20.21	16.80	3.41	5.934		
600.00	600.00	600.00	600.00	2.06	2.06	125.202	-11.65	16.51	20.21	16.08	4.12	4.902		
700.00	700.00	700.00	700.00	2.42	2.42	125.202	-11.65	16.51	20.21	15.37	4.84	4.176		
800.00	800.00	800.00	800.00	2.78	2.78	125.202	-11.65	16.51	20.21	14.65	5.56	3.637		
900.00	900.00	900.00	900.00	3.14	3.14	125.202	-11.65	16.51	20.21	13.93	6.27	3.221		
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	125.202	-11.65	16.51	20.21	13.22	6.99	2.891		
1,096.17	1,096.13	1,095.34	1,095.30	3.82	3.83	-34.135	-11.41	18.88	20.03	12.38	7.65	2.619 CC		
1,100.00	1,099.95	1,099.12	1,099.08	3.84	3.84	-34.751	-11.39	19.07	20.03	12.36	7.67	2.611 ES, SF		
1,200.00	1,199.63	1,197.75	1,197.40	4.17	4.19	-57.730	-10.61	26.69	21.90	13.59	8.31	2.636		
1,300.00	1,298.77	1,295.41	1,294.23	4.51	4.54	-82.583	-9.34	39.20	30.63	21.68	8.95	3.423		
1,400.00	1,397.21	1,391.77	1,389.02	4.88	4.90	-97.588	-7.59	56.34	47.41	37.78	9.64	4.921		
1,500.00	1,495.53	1,489.46	1,484.70	5.26	5.29	-104.106	-5.59	76.00	67.79	57.39	10.40	6.519		
1,600.00	1,593.86	1,587.16	1,580.38	5.65	5.70	-107.596	-3.59	95.66	88.61	77.44	11.17	7.935		
1,700.00	1,692.18	1,684.86	1,676.06	6.06	6.11	-109.756	-1.59	115.32	109.63	97.68	11.95	9.172		
1,800.00	1,790.51	1,782.56	1,771.74	6.47	6.54	-111.219	0.41	134.98	130.75	118.00	12.75	10.255		
1,900.00	1,888.83	1,880.26	1,867.42	6.89	6.97	-112.276	2.41	154.64	151.93	138.37	13.56	11.207		
2,000.00	1,987.16	1,977.96	1,963.10	7.32	7.40	-113.074	4.41	174.29	173.14	158.77	14.37	12.047		
2,100.00	2,085.49	2,075.66	2,058.78	7.76	7.85	-113.697	6.41	193.95	194.38	179.19	15.20	12.791		
2,200.00	2,183.81	2,173.35	2,154.46	8.19	8.29	-114.198	8.41	213.61	215.64	199.62	16.03	13.455		
2,300.00	2,282.14	2,271.05	2,250.14	8.63	8.74	-114.609	10.41	233.27	236.91	220.05	16.86	14.050		
2,400.00	2,380.46	2,368.75	2,345.82	9.08	9.19	-114.952	12.41	252.93	258.19	240.49	17.70	14.585		
2,500.00	2,478.79	2,466.45	2,441.50	9.52	9.65	-115.243	14.41	272.59	279.48	260.94	18.55	15.068		
2,600.00	2,577.11	2,564.15	2,537.18	9.97	10.11	-115.493	16.41	292.24	300.78	281.38	19.40	15.507		
2,700.00	2,675.44	2,661.85	2,632.86	10.42	10.57	-115.710	18.42	311.90	322.08	301.83	20.25	15.906		
2,800.00	2,773.76	2,759.55	2,728.54	10.87	11.03	-115.900	20.42	331.56	343.38	322.28	21.10	16.271		
2,900.00	2,872.09	2,857.24	2,824.22	11.33	11.49	-116.067	22.42	351.22	364.69	342.73	21.96	16.606		
3,000.00	2,970.41	2,954.94	2,919.90	11.78	11.95	-116.216	24.42	370.88	386.00	363.18	22.82	16.914		
3,100.00	3,068.74	3,052.64	3,015.58	12.24	12.42	-116.350	26.42	390.54	407.31	383.62	23.68	17.198		
3,200.00	3,167.08	3,150.35	3,111.26	12.69	12.89	-116.552	28.42	410.20	428.59	404.05	24.55	17.461		
3,300.00	3,265.96	3,248.33	3,207.22	13.12	13.36	-116.804	30.43	429.91	448.41	423.02	25.39	17.664		
3,400.00	3,365.48	3,346.54	3,303.40	13.51	13.83	-116.434	32.44	449.67	465.96	439.77	26.19	17.794		
3,500.00	3,465.37	3,444.70	3,399.54	13.86	14.30	-115.507	34.45	469.42	481.39	454.45	26.94	17.867		
3,600.00	3,565.37	3,542.66	3,495.47	14.16	14.77	37.826	36.45	489.13	495.42	467.77	27.65	17.918		
3,700.00	3,665.37	3,640.59	3,591.38	14.46	15.24	39.455	38.46	508.84	509.73	481.39	28.35	17.982		
3,800.00	3,765.37	3,738.53	3,687.29	14.76	15.71	40.995	40.46	528.55	524.44	495.40	29.04	18.058		
3,900.00	3,865.37	3,837.58	3,784.30	15.07	16.19	82.897	42.49	548.47	539.49	509.75	29.74	18.138		
4,000.00	3,964.84	3,961.98	3,906.92	15.33	16.74	84.308	44.60	569.20	551.34	520.77	30.57	18.033		
4,100.00	4,061.25	4,084.64	4,028.89	15.52	17.22	87.727	45.89	581.82	557.94	526.76	31.18	17.895		
4,200.00	4,151.66	4,202.90	4,147.04	15.66	17.62	92.719	46.37	586.59	561.85	530.29	31.56	17.802		
4,300.00	4,233.33	4,289.20	4,233.33	15.81	17.87	97.071	46.38	586.68	568.24	536.46	31.78	17.883		
4,400.00	4,303.79	4,367.84	4,311.92	16.01	18.10	100.968	47.94	585.61	583.50	551.53	31.97	18.251		
4,500.00	4,360.87	4,458.93	4,401.74	16.34	18.32	104.800	59.96	577.38	608.22	576.05	32.17	18.904		
4,600.00	4,402.86	4,567.75	4,504.35	16.87	18.53	108.673	89.46	557.19	641.01	608.73	32.28	19.860		
4,700.00	4,428.48	4,708.23	4,623.61	17.61	18.73	113.077	150.17	515.62	679.16	647.10	32.06	21.183		
4,800.00	4,436.97	4,907.52	4,754.58	18.56	18.86	118.465	273.01	431.51	717.64	686.08	31.55	22.745		
4,900.00	4,437.67	5,326.49	4,843.64	19.71	21.28	124.047	582.90	175.65	725.07	691.38	33.69	21.519		
4,999.39	4,438.37	5,425.86	4,844.39	21.05	22.57	124.107	653.17	105.38	724.10	688.24	35.86	20.195		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 117H - Original Hole - rev0													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	4,438.38	5,426.48	4,844.39	21.06	22.58	124.078	653.61	104.95	724.64	688.75	35.88	20.196	
5,100.00	4,439.08	5,526.48	4,845.15	22.56	24.02	124.081	724.32	34.24	724.66	686.32	38.34	18.902	
5,200.00	4,439.79	5,626.48	4,845.90	24.19	25.58	124.084	795.03	-36.47	724.69	683.69	41.00	17.674	
5,300.00	4,440.49	5,726.48	4,846.66	25.93	27.24	124.088	865.74	-107.18	724.72	680.88	43.84	16.532	
5,400.00	4,441.20	5,826.48	4,847.41	27.74	28.99	124.091	936.45	-177.89	724.74	677.93	46.81	15.483	
5,500.00	4,441.91	5,926.48	4,848.17	29.63	30.80	124.094	1,007.15	-248.59	724.77	674.88	49.89	14.528	
5,600.00	4,442.61	6,026.48	4,848.92	31.56	32.67	124.098	1,077.86	-319.30	724.80	671.74	53.06	13.661	
5,700.00	4,443.32	6,126.48	4,849.68	33.55	34.60	124.101	1,148.57	-390.01	724.82	668.52	56.30	12.874	
5,800.00	4,444.02	6,226.48	4,850.43	35.57	36.56	124.104	1,219.28	-460.72	724.85	665.25	59.60	12.161	
5,900.00	4,444.73	6,326.48	4,851.19	37.62	38.56	124.108	1,289.99	-531.43	724.88	661.92	62.95	11.515	
6,000.00	4,445.43	6,426.48	4,851.95	39.70	40.59	124.111	1,360.70	-602.13	724.90	658.56	66.34	10.926	
6,100.00	4,446.14	6,526.48	4,852.70	41.80	42.65	124.114	1,431.41	-672.84	724.93	655.16	69.77	10.391	
6,200.00	4,446.84	6,626.48	4,853.46	43.92	44.73	124.118	1,502.12	-743.55	724.96	651.74	73.21	9.902	
6,300.00	4,447.55	6,726.48	4,854.21	46.06	46.83	124.121	1,572.83	-814.26	724.98	648.30	76.68	9.454	
6,400.00	4,448.26	6,826.48	4,854.97	48.21	48.95	124.124	1,643.54	-884.97	725.01	644.84	80.17	9.043	
6,500.00	4,448.96	6,926.48	4,855.72	50.37	51.08	124.128	1,714.25	-955.67	725.04	641.36	83.67	8.665	
6,600.00	4,449.67	7,026.48	4,856.48	52.55	53.23	124.131	1,784.96	-1,026.38	725.06	637.88	87.19	8.316	
6,700.00	4,450.37	7,126.48	4,857.23	54.74	55.38	124.134	1,855.67	-1,097.09	725.09	634.38	90.71	7.994	
6,800.00	4,451.08	7,226.48	4,857.99	56.93	57.55	124.137	1,926.38	-1,167.80	725.12	630.88	94.23	7.695	
6,900.00	4,451.78	7,326.48	4,858.74	59.13	59.73	124.141	1,997.08	-1,238.51	725.14	627.38	97.77	7.417	
7,000.00	4,452.49	7,426.48	4,859.50	61.34	61.92	124.144	2,067.79	-1,309.21	725.17	623.87	101.30	7.158	
7,100.00	4,453.20	7,526.48	4,860.25	63.56	64.11	124.147	2,138.50	-1,379.92	725.20	620.36	104.84	6.917	
7,200.00	4,453.90	7,626.48	4,861.01	65.78	66.31	124.151	2,209.21	-1,450.63	725.22	616.85	108.37	6.692	
7,300.00	4,454.61	7,726.48	4,861.76	68.00	68.52	124.154	2,279.92	-1,521.34	725.25	613.34	111.91	6.481	
7,400.00	4,455.31	7,826.48	4,862.52	70.23	70.73	124.157	2,350.63	-1,592.05	725.28	609.83	115.44	6.282	
7,500.00	4,456.02	7,926.48	4,863.27	72.47	72.94	124.161	2,421.34	-1,662.75	725.30	606.33	118.98	6.096	
7,600.00	4,456.72	8,026.48	4,864.03	74.71	75.17	124.164	2,492.05	-1,733.46	725.33	602.83	122.50	5.921	
7,700.00	4,457.43	8,126.48	4,864.79	76.95	77.39	124.167	2,562.76	-1,804.17	725.36	599.33	126.03	5.755	
7,800.00	4,458.13	8,226.48	4,865.54	79.19	79.62	124.171	2,633.47	-1,874.88	725.38	595.84	129.55	5.599	
7,900.00	4,458.84	8,326.48	4,866.30	81.44	81.86	124.174	2,704.18	-1,945.59	725.41	592.35	133.06	5.452	
8,000.00	4,459.55	8,426.48	4,867.05	83.69	84.09	124.177	2,774.89	-2,016.29	725.44	588.87	136.57	5.312	
8,100.00	4,460.25	8,526.48	4,867.81	85.94	86.33	124.181	2,845.60	-2,087.00	725.46	585.39	140.07	5.179	
8,200.00	4,460.96	8,626.48	4,868.56	88.20	88.58	124.184	2,916.31	-2,157.71	725.49	581.93	143.57	5.053	
8,300.00	4,461.66	8,726.48	4,869.32	90.45	90.82	124.187	2,987.02	-2,228.42	725.52	578.46	147.05	4.934	
8,400.00	4,462.37	8,826.48	4,870.07	92.71	93.07	124.190	3,057.72	-2,299.13	725.54	575.01	150.53	4.820	
8,500.00	4,463.07	8,926.48	4,870.83	94.97	95.32	124.194	3,128.43	-2,369.83	725.57	571.57	154.01	4.711	
8,600.00	4,463.78	9,026.48	4,871.58	97.23	97.57	124.197	3,199.14	-2,440.54	725.60	568.13	157.47	4.608	
8,700.00	4,464.48	9,126.48	4,872.34	99.50	99.83	124.200	3,269.85	-2,511.25	725.62	564.70	160.93	4.509	
8,800.00	4,465.19	9,226.48	4,873.09	101.76	102.08	124.204	3,340.56	-2,581.96	725.65	561.28	164.37	4.415	
8,900.00	4,465.90	9,326.48	4,873.85	104.03	104.34	124.207	3,411.27	-2,652.67	725.68	557.87	167.81	4.324	
9,000.00	4,466.60	9,426.48	4,874.60	106.30	106.60	124.210	3,481.98	-2,723.37	725.71	554.47	171.24	4.238	
9,100.00	4,467.31	9,526.48	4,875.36	108.56	108.86	124.214	3,552.69	-2,794.08	725.73	551.08	174.65	4.155	
9,200.00	4,468.01	9,626.48	4,876.12	110.83	111.12	124.217	3,623.40	-2,864.79	725.76	547.70	178.06	4.076	
9,300.00	4,468.72	9,726.48	4,876.87	113.11	113.39	124.220	3,694.11	-2,935.50	725.79	544.33	181.46	4.000	
9,400.00	4,469.42	9,826.48	4,877.63	115.38	115.65	124.224	3,764.82	-3,006.21	725.81	540.97	184.85	3.927	
9,500.00	4,470.13	9,926.48	4,878.38	117.65	117.92	124.227	3,835.53	-3,076.91	725.84	537.62	188.22	3.856	
9,600.00	4,470.83	10,026.48	4,879.14	119.92	120.18	124.230	3,906.24	-3,147.62	725.87	534.28	191.59	3.789	
9,700.00	4,471.54	10,126.48	4,879.89	122.20	122.45	124.233	3,976.95	-3,218.33	725.89	530.95	194.94	3.724	
9,800.00	4,472.25	10,226.48	4,880.65	124.47	124.72	124.237	4,047.66	-3,289.04	725.92	527.64	198.28	3.661	
9,900.00	4,472.95	10,326.48	4,881.40	126.75	126.99	124.240	4,118.36	-3,359.75	725.95	524.33	201.62	3.601	
10,000.00	4,473.66	10,426.48	4,882.16	129.03	129.26	124.243	4,189.07	-3,430.45	725.97	521.04	204.94	3.542	
10,100.00	4,474.36	10,526.48	4,882.91	131.30	131.54	124.247	4,259.78	-3,501.16	726.00	517.76	208.24	3.486	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 117H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	4,475.07	10,626.48	4,883.67	133.58	133.81	124.250	4,330.49	-3,571.87	726.03	514.49	211.54	3.432		
10,300.00	4,475.77	10,726.48	4,884.42	135.86	136.08	124.253	4,401.20	-3,642.58	726.05	511.23	214.82	3.380		
10,400.00	4,476.48	10,826.48	4,885.18	138.14	138.36	124.257	4,471.91	-3,713.29	726.08	507.99	218.10	3.329		
10,500.00	4,477.18	10,926.48	4,885.93	140.42	140.63	124.260	4,542.62	-3,783.99	726.11	504.75	221.35	3.280		
10,600.00	4,477.89	11,026.48	4,886.69	142.70	142.91	124.263	4,613.33	-3,854.70	726.13	501.53	224.60	3.233		
10,700.00	4,478.60	11,126.48	4,887.44	144.98	145.18	124.267	4,684.04	-3,925.41	726.16	498.33	227.83	3.187		
10,800.00	4,479.30	11,226.48	4,888.20	147.26	147.46	124.270	4,754.75	-3,996.12	726.19	495.13	231.06	3.143		
10,900.00	4,480.01	11,326.48	4,888.96	149.54	149.74	124.273	4,825.46	-4,066.82	726.21	491.95	234.26	3.100		
11,000.00	4,480.71	11,426.48	4,889.71	151.82	152.01	124.276	4,896.17	-4,137.53	726.24	488.78	237.46	3.058		
11,100.00	4,481.42	11,526.48	4,890.47	154.11	154.29	124.280	4,966.88	-4,208.24	726.27	485.63	240.64	3.018		
11,200.00	4,482.12	11,626.48	4,891.22	156.39	156.57	124.283	5,037.59	-4,278.95	726.30	482.49	243.81	2.979		
11,300.00	4,482.83	11,726.48	4,891.98	158.67	158.85	124.286	5,108.30	-4,349.66	726.32	479.36	246.96	2.941		
11,400.00	4,483.54	11,729.63	4,892.00	160.96	158.92	124.286	5,110.52	-4,351.88	732.78	486.72	246.06	2.978		
11,500.00	4,484.24	11,729.63	4,892.00	163.24	158.92	124.286	5,110.52	-4,351.88	752.58	513.58	239.00	3.149		
11,600.00	4,484.95	11,729.63	4,892.00	165.52	158.92	124.286	5,110.52	-4,351.88	784.72	557.11	227.61	3.448		
11,700.00	4,485.65	11,729.63	4,892.00	167.81	158.92	124.286	5,110.52	-4,351.88	827.76	613.78	213.99	3.868		
11,800.00	4,486.36	11,729.63	4,892.00	170.09	158.92	124.286	5,110.52	-4,351.88	880.12	680.31	199.80	4.405		
11,891.10	4,487.00	11,729.63	4,892.00	172.18	158.92	124.286	5,110.52	-4,351.88	934.59	747.30	187.29	4.990		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 120H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-54.645	46.23	-65.16	79.90				
100.00	100.00	100.00	100.00	0.27	0.27	-54.645	46.23	-65.16	79.90	79.36	0.54	148.589	
200.00	200.00	200.00	200.00	0.63	0.63	-54.645	46.23	-65.16	79.90	78.64	1.25	63.681	
300.00	300.00	300.00	300.00	0.99	0.99	-54.645	46.23	-65.16	79.90	77.93	1.97	40.524	
400.00	400.00	400.00	400.00	1.34	1.34	-54.645	46.23	-65.16	79.90	77.21	2.69	29.718	
500.00	500.00	500.00	500.00	1.70	1.70	-54.645	46.23	-65.16	79.90	76.49	3.41	23.461	
600.00	600.00	600.00	600.00	2.06	2.06	-54.645	46.23	-65.16	79.90	75.77	4.12	19.381	
700.00	700.00	700.00	700.00	2.42	2.42	-54.645	46.23	-65.16	79.90	75.06	4.84	16.510	
800.00	800.00	800.00	800.00	2.78	2.78	-54.645	46.23	-65.16	79.90	74.34	5.56	14.380	
900.00	900.00	900.00	900.00	3.14	3.14	-54.645	46.23	-65.16	79.90	73.62	6.27	12.736	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.645	46.23	-65.16	79.90	72.91	6.99	11.430	CC, ES
1,100.00	1,099.95	1,100.24	1,100.20	3.84	3.85	156.192	48.21	-63.43	82.06	74.37	7.69	10.673	SF
1,200.00	1,199.63	1,199.38	1,199.02	4.17	4.21	163.128	54.05	-58.31	89.47	81.10	8.37	10.683	
1,300.00	1,298.77	1,296.35	1,295.17	4.51	4.56	172.092	63.49	-50.04	104.14	95.07	9.07	11.487	
1,400.00	1,397.21	1,390.38	1,387.67	4.88	4.92	-179.218	76.13	-38.96	126.97	117.22	9.75	13.021	
1,500.00	1,495.53	1,481.79	1,476.69	5.26	5.28	-171.803	91.69	-25.32	154.69	144.28	10.41	14.860	
1,600.00	1,593.86	1,570.41	1,561.97	5.65	5.67	-165.608	109.82	-9.44	186.76	175.71	11.04	16.909	
1,700.00	1,692.18	1,656.01	1,643.18	6.06	6.07	-160.453	130.13	8.36	223.12	211.46	11.66	19.141	
1,800.00	1,790.51	1,745.74	1,727.56	6.47	6.52	-156.100	153.09	28.48	262.46	250.12	12.34	21.262	
1,900.00	1,888.83	1,836.02	1,812.45	6.89	7.00	-152.838	176.20	48.73	302.81	289.75	13.06	23.189	
2,000.00	1,987.16	1,926.30	1,897.34	7.32	7.49	-150.332	199.31	68.98	343.80	330.02	13.79	24.937	
2,100.00	2,085.49	2,016.58	1,982.23	7.76	8.00	-148.354	222.41	89.23	385.24	370.71	14.53	26.518	
2,200.00	2,183.81	2,106.85	2,067.12	8.19	8.52	-146.756	245.52	109.48	426.98	411.71	15.28	27.949	
2,300.00	2,282.14	2,197.13	2,152.01	8.63	9.05	-145.441	268.63	129.73	468.96	452.92	16.04	29.245	
2,400.00	2,380.46	2,287.41	2,236.90	9.08	9.59	-144.340	291.74	149.97	511.10	494.30	16.80	30.421	
2,500.00	2,478.79	2,377.69	2,321.80	9.52	10.14	-143.406	314.84	170.22	553.38	535.81	17.57	31.491	
2,600.00	2,577.11	2,467.97	2,406.69	9.97	10.69	-142.604	337.95	190.47	595.76	577.41	18.35	32.469	
2,700.00	2,675.44	2,558.25	2,491.58	10.42	11.25	-141.907	361.06	210.72	638.23	619.10	19.13	33.364	
2,800.00	2,773.76	2,648.53	2,576.47	10.87	11.81	-141.298	384.16	230.97	680.76	660.85	19.91	34.185	
2,900.00	2,872.09	2,738.81	2,661.36	11.33	12.37	-140.759	407.27	251.22	723.35	702.65	20.70	34.942	
3,000.00	2,970.41	2,829.09	2,746.25	11.78	12.94	-140.281	430.38	271.47	765.99	744.50	21.49	35.640	
3,100.00	3,068.74	2,919.37	2,831.14	12.24	13.51	-139.852	453.49	291.72	808.66	786.38	22.29	36.286	
3,200.00	3,167.08	3,009.67	2,916.04	12.69	14.08	-139.604	476.60	311.97	851.33	828.25	23.08	36.884	
3,300.00	3,265.96	3,100.87	3,001.80	13.12	14.66	-139.955	499.94	332.43	891.70	867.84	23.86	37.365	
3,400.00	3,365.48	3,193.30	3,088.72	13.51	15.25	-140.033	523.60	353.16	928.46	903.84	24.63	37.699	
3,500.00	3,465.37	3,286.70	3,176.54	13.86	15.85	-139.869	547.50	374.11	961.62	936.25	25.37	37.902	
3,600.00	3,565.37	3,380.69	3,264.92	14.16	16.45	12.638	571.56	395.19	992.01	965.92	26.09	38.027	
3,700.00	3,665.37	3,474.72	3,353.34	14.46	17.06	13.539	595.63	416.28	1,022.41	995.61	26.80	38.145	
3,800.00	3,765.37	3,568.75	3,441.76	14.76	17.66	14.389	619.70	437.37	1,053.04	1,025.52	27.52	38.266	
3,900.00	3,865.37	3,662.78	3,530.17	15.07	18.27	55.605	643.76	458.46	1,083.87	1,055.63	28.23	38.389	
4,000.00	3,964.84	3,756.76	3,618.54	15.33	18.88	54.508	667.82	479.54	1,110.04	1,081.15	28.89	38.425	
4,100.00	4,061.25	3,848.69	3,704.99	15.52	19.48	54.796	691.35	500.16	1,127.11	1,097.66	29.44	38.284	
4,200.00	4,151.66	3,935.80	3,786.90	15.66	20.04	56.213	713.64	519.70	1,135.79	1,105.89	29.90	37.989	
4,300.00	4,233.33	4,015.43	3,861.77	15.81	20.56	58.494	734.03	537.56	1,137.42	1,107.13	30.29	37.552	
4,400.00	4,303.79	4,095.54	3,937.09	16.01	21.08	61.738	754.21	555.89	1,133.72	1,102.94	30.78	36.831	
4,500.00	4,360.87	4,172.39	4,008.90	16.34	21.59	65.809	768.27	579.21	1,126.03	1,094.59	31.45	35.808	
4,600.00	4,402.86	4,203.91	4,037.94	16.87	21.79	68.087	771.97	590.89	1,118.19	1,086.21	31.98	34.970	
4,700.00	4,428.48	4,209.90	4,043.41	17.61	21.83	68.932	772.54	593.24	1,112.41	1,079.80	32.61	34.108	
4,800.00	4,436.97	4,200.00	4,034.35	18.56	21.77	68.711	771.58	589.37	1,109.29	1,075.85	33.44	33.172	
4,809.07	4,437.03	4,200.00	4,034.35	18.66	21.77	68.713	771.58	589.37	1,109.23	1,075.68	33.55	33.063	
4,900.00	4,437.67	4,188.29	4,023.59	19.71	21.69	68.073	770.29	584.95	1,114.87	1,080.33	34.54	32.275	
5,000.00	4,438.38	4,177.40	4,013.54	21.06	21.62	67.443	768.94	580.99	1,133.22	1,097.38	35.84	31.620	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 120H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,439.08	4,168.56	4,005.35	22.56	21.56	66.989	767.74	577.87	1,160.29	1,123.06	37.23	31.165		
5,200.00	4,439.79	4,150.00	3,988.09	24.19	21.44	66.034	764.91	571.65	1,195.15	1,156.66	38.49	31.054		
5,300.00	4,440.49	4,150.00	3,988.09	25.93	21.44	66.034	764.91	571.65	1,236.88	1,196.98	39.90	30.997		
5,400.00	4,441.20	4,150.00	3,988.09	27.74	21.44	66.034	764.91	571.65	1,285.06	1,243.85	41.22	31.179		
5,500.00	4,441.91	4,150.00	3,988.09	29.63	21.44	66.034	764.91	571.65	1,338.99	1,296.59	42.40	31.580		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 136H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)	Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-54.737	22.93	-32.43	39.72				
100.00	100.00	100.00	100.00	0.27	0.27	-54.737	22.93	-32.43	39.72	39.19	0.54	73.875	
200.00	200.00	200.00	200.00	0.63	0.63	-54.737	22.93	-32.43	39.72	38.47	1.25	31.661	
300.00	300.00	300.00	300.00	0.99	0.99	-54.737	22.93	-32.43	39.72	37.75	1.97	20.148	
400.00	400.00	400.00	400.00	1.34	1.34	-54.737	22.93	-32.43	39.72	37.03	2.69	14.775	
500.00	500.00	500.00	500.00	1.70	1.70	-54.737	22.93	-32.43	39.72	36.32	3.41	11.664 CC, ES	
600.00	600.00	598.24	598.20	2.06	2.05	-56.736	22.93	-34.96	41.85	37.74	4.11	10.187	
700.00	700.00	695.97	695.63	2.42	2.39	-61.636	22.93	-42.48	48.47	43.67	4.80	10.094 SF	
800.00	800.00	792.54	791.40	2.78	2.75	-66.965	23.29	-54.77	60.13	54.65	5.49	10.963	
900.00	900.00	887.63	884.99	3.14	3.13	-71.175	24.38	-71.52	77.04	70.89	6.15	12.524	
1,000.00	1,000.00	980.83	975.79	3.50	3.54	-74.180	26.18	-92.39	99.03	92.23	6.80	14.567	
1,100.00	1,099.95	1,071.31	1,062.87	3.84	3.98	132.178	28.60	-116.80	127.53	120.11	7.41	17.201	
1,200.00	1,199.63	1,157.93	1,145.07	4.17	4.45	131.787	31.53	-143.97	163.75	155.75	8.00	20.460	
1,300.00	1,298.77	1,239.97	1,221.69	4.51	4.94	131.974	34.87	-173.06	207.25	198.68	8.57	24.178	
1,400.00	1,397.21	1,317.10	1,292.53	4.88	5.45	132.831	38.49	-203.35	257.23	248.10	9.13	28.171	
1,500.00	1,495.53	1,390.48	1,358.73	5.26	5.99	133.816	42.37	-234.77	311.04	301.38	9.66	32.212	
1,600.00	1,593.86	1,460.38	1,420.61	5.65	6.56	134.425	46.45	-267.00	367.97	357.81	10.17	36.199	
1,700.00	1,692.18	1,526.85	1,478.32	6.06	7.14	134.799	50.67	-299.71	427.78	417.13	10.66	40.147	
1,800.00	1,790.51	1,600.00	1,540.46	6.47	7.82	135.048	55.70	-337.97	490.38	479.12	11.26	43.548	
1,900.00	1,888.83	1,658.28	1,589.09	6.89	8.41	135.167	59.94	-369.82	554.88	543.19	11.69	47.455	
2,000.00	1,987.16	1,734.33	1,652.45	7.32	9.20	135.291	65.49	-411.48	619.82	607.44	12.38	50.068	
2,100.00	2,085.49	1,810.37	1,715.82	7.76	10.00	135.391	71.04	-453.15	684.75	671.68	13.08	52.367	
2,200.00	2,183.81	1,886.41	1,779.18	8.19	10.81	135.473	76.59	-494.82	749.69	735.91	13.78	54.397	
2,300.00	2,282.14	1,962.45	1,842.55	8.63	11.63	135.543	82.13	-536.49	814.63	800.14	14.50	56.199	
2,400.00	2,380.46	2,038.49	1,905.92	9.08	12.46	135.602	87.68	-578.16	879.57	864.36	15.22	57.808	
2,500.00	2,478.79	2,114.53	1,969.28	9.52	13.30	135.653	93.23	-619.83	944.51	928.57	15.94	59.251	
2,600.00	2,577.11	2,190.57	2,032.65	9.97	14.14	135.698	98.78	-661.49	1,009.46	992.78	16.67	60.550	
2,700.00	2,675.44	2,266.62	2,096.01	10.42	14.99	135.737	104.33	-703.16	1,074.40	1,056.99	17.41	61.723	
2,800.00	2,773.76	2,342.66	2,159.38	10.87	15.83	135.771	109.88	-744.83	1,139.34	1,121.19	18.15	62.788	
2,900.00	2,872.09	2,418.70	2,222.75	11.33	16.69	135.802	115.43	-786.50	1,204.28	1,185.39	18.89	63.758	
3,000.00	2,970.41	2,494.74	2,286.11	11.78	17.54	135.830	120.98	-828.17	1,269.22	1,249.59	19.63	64.645	
3,100.00	3,068.74	2,570.78	2,349.48	12.24	18.40	135.855	126.53	-869.84	1,334.17	1,313.78	20.38	65.456	
3,200.00	3,167.07	2,646.82	2,412.85	12.69	19.26	135.877	132.08	-911.51	1,398.66	1,377.39	21.13	66.229	
3,300.00	3,265.37	2,722.86	2,476.12	13.14	20.11	135.896	137.63	-953.18	1,463.15	1,441.90	21.88	66.961	
3,400.00	3,363.67	2,798.90	2,539.39	13.59	20.96	135.912	143.18	-994.85	1,527.64	1,506.44	22.63	67.651	
3,500.00	3,461.97	2,874.94	2,602.66	14.04	21.81	135.926	148.73	-1,036.52	1,592.13	1,571.13	23.38	68.301	
3,600.00	3,560.27	2,950.98	2,665.93	14.49	22.66	135.938	154.28	-1,078.19	1,656.62	1,636.62	24.13	68.911	
3,700.00	3,658.57	3,027.02	2,729.20	14.94	23.51	135.948	159.83	-1,119.86	1,721.11	1,701.11	24.88	69.481	
3,800.00	3,756.87	3,103.06	2,792.47	15.39	24.36	135.956	165.38	-1,161.53	1,785.60	1,765.60	25.63	70.011	
3,900.00	3,855.17	3,179.10	2,855.74	15.84	25.21	135.962	170.93	-1,203.20	1,850.09	1,830.09	26.38	70.501	
4,000.00	3,953.47	3,255.14	2,919.01	16.29	26.06	135.966	176.48	-1,244.87	1,914.58	1,894.58	27.13	70.951	
4,100.00	4,051.77	3,331.18	2,982.28	16.74	26.91	135.968	182.03	-1,286.54	1,979.07	1,959.07	27.88	71.361	
4,200.00	4,150.07	3,407.22	3,045.55	17.19	27.76	135.968	187.58	-1,328.21	2,043.56	2,023.56	28.63	71.731	
4,300.00	4,248.37	3,483.26	3,108.82	17.64	28.61	135.966	193.13	-1,369.88	2,108.05	2,088.05	29.38	72.061	
4,400.00	4,346.67	3,559.30	3,172.09	18.09	29.46	135.962	198.68	-1,411.55	2,172.54	2,152.54	30.13	72.351	
4,413.13	4,312.08	3,618.71	3,429.39	16.05	45.83	-97.355	-1,011.72	-775.38	1,171.71	1,112.13	59.58	19.667	
4,500.00	4,360.87	3,694.75	3,486.66	16.34	44.89	-95.211	-960.84	-826.26	1,173.55	1,114.45	59.10	19.856	
4,600.00	4,402.86	3,770.79	3,543.93	16.87	43.77	-92.830	-896.72	-890.38	1,179.03	1,120.55	58.48	20.160	
4,700.00	4,428.48	3,846.83	3,599.20	17.61	42.70	-90.928	-828.53	-958.57	1,186.37	1,128.44	57.92	20.481	
4,800.00	4,436.97	3,922.87	3,654.47	18.56	41.71	-89.811	-758.34	-1,028.76	1,194.26	1,136.75	57.51	20.767	
4,900.00	4,437.67	3,998.91	3,709.74	19.71	40.86	-89.798	-687.73	-1,099.37	1,199.30	1,141.96	57.34	20.916	
5,000.00	4,438.38	4,074.95	3,765.01	21.06	40.13	-89.795	-617.02	-1,170.08	1,199.86	1,142.39	57.46	20.880	
5,100.00	4,439.08	4,150.99	3,819.28	22.56	39.53	-89.802	-546.32	-1,240.78	1,199.86	1,142.00	57.86	20.739	
5,200.00	4,439.79	4,227.03	3,873.55	24.19	39.05	-89.808	-475.61	-1,311.49	1,199.86	1,141.37	58.49	20.515	
5,300.00	4,440.49	4,303.07	3,927.82	25.93	38.68	-89.815	-404.90	-1,382.20	1,199.86	1,140.52	59.35	20.218	
5,400.00	4,441.20	4,379.11	3,982.09	27.74	38.43	-89.821	-334.19	-1,452.91	1,199.87	1,139.44	60.43	19.856	
5,404.45	4,441.23	4,356.06	3,959.04	27.83	38.42	-89.821	-331.05	-1,456.06	1,199.87	1,139.38	60.48	19.838	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design:	Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 136H - Original Hole - rev0												Offset Site Error:	0.00 ft
	Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,500.00	4,441.91	5,260.77	4,437.27	29.63	38.26	-89.779	-263.67	-1,523.43	1,199.87	1,138.16	61.71	19.443		
5,600.00	4,442.61	5,163.67	4,424.11	31.56	38.15	-89.118	-195.73	-1,591.37	1,200.02	1,136.72	63.29	18.960		
5,700.00	4,443.32	5,041.72	4,385.09	33.55	38.10	-87.217	-113.72	-1,672.41	1,200.64	1,135.90	64.74	18.547		
5,800.00	4,444.02	4,845.44	4,276.75	35.57	38.23	-81.924	12.43	-1,774.87	1,196.42	1,130.96	65.46	18.277		
5,900.00	4,444.73	4,725.81	4,188.03	37.62	38.35	-77.526	81.55	-1,815.00	1,191.01	1,123.64	67.37	17.678		
5,980.10	4,445.29	4,663.73	4,136.73	39.28	38.40	-74.962	113.81	-1,828.35	1,189.29	1,120.04	69.25	17.175		
6,000.00	4,445.43	4,651.39	4,126.17	39.70	38.41	-74.433	119.88	-1,830.37	1,189.41	1,119.68	69.73	17.058		
6,100.00	4,446.14	4,602.16	4,083.07	41.80	38.42	-72.271	142.88	-1,836.31	1,193.87	1,121.73	72.14	16.549		
6,200.00	4,446.84	4,567.65	4,052.02	43.92	38.41	-70.713	157.77	-1,838.45	1,205.35	1,130.95	74.41	16.200		
6,300.00	4,447.55	4,542.29	4,028.83	46.06	38.40	-69.550	168.03	-1,838.94	1,224.14	1,147.76	76.39	16.025		
6,400.00	4,448.26	4,522.93	4,010.96	48.21	38.38	-68.654	175.46	-1,838.71	1,250.19	1,172.17	78.02	16.024		
6,500.00	4,448.96	4,500.00	3,989.62	50.37	38.36	-67.586	183.79	-1,837.74	1,283.23	1,204.09	79.14	16.215		
6,600.00	4,449.67	4,500.00	3,989.62	52.55	38.36	-67.586	183.79	-1,837.74	1,322.74	1,242.45	80.29	16.474		
6,700.00	4,450.37	4,485.33	3,975.89	54.74	38.33	-66.899	188.85	-1,836.73	1,368.28	1,287.50	80.78	16.939		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111,112,114-117,120,136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6802+25 @ 6827.00ft

Offset Depths are relative to Offset Datum

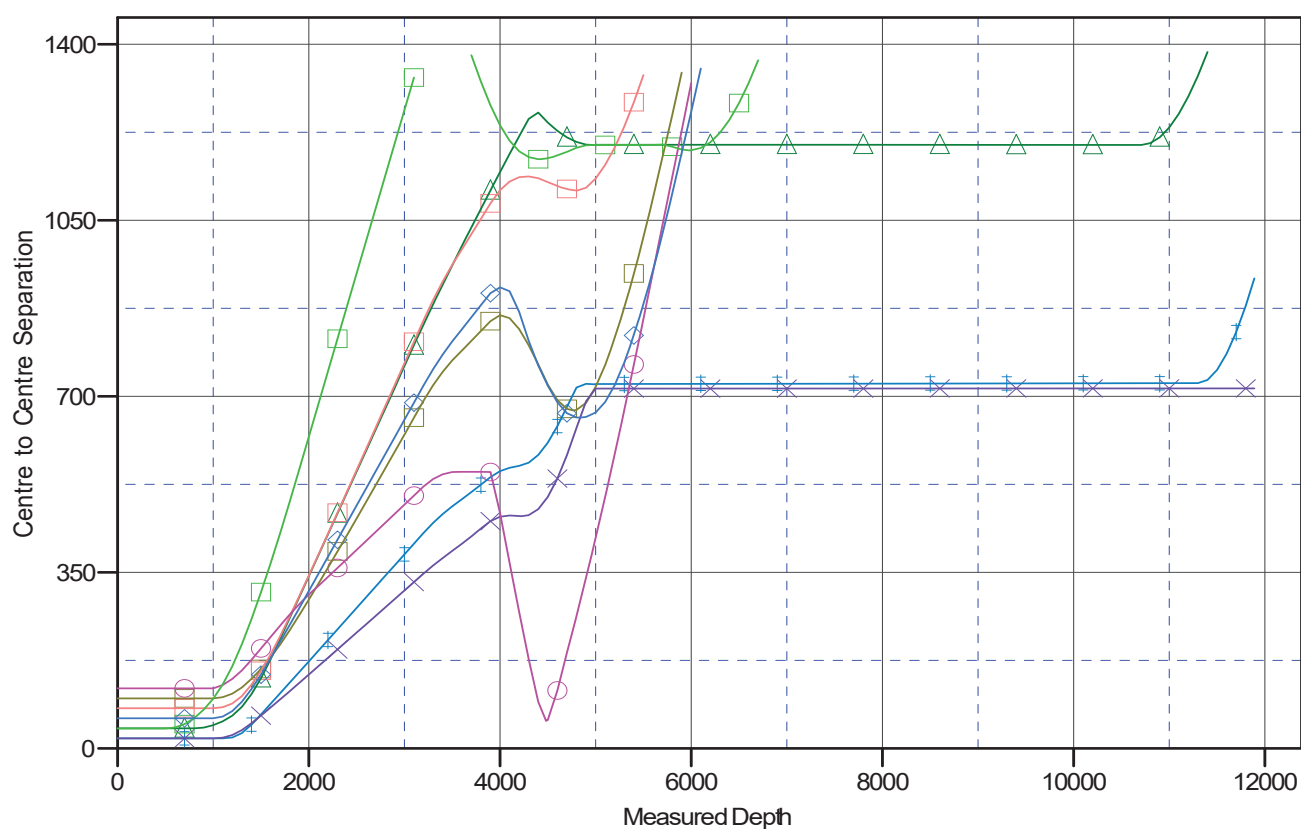
Central Meridian is -107.83333333

Coordinates are relative to: Ponderosa 111H

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

Grid Convergence at Surface is: 0.000°

Ladder Plot



LEGEND

	Ponderosa 099H Original Hole rev0/0		Ponderosa 112H Original Hole rev0/0		Ponderosa 136H Original Hole rev0/0
	Ponderosa 117H Original Hole rev0/0		Ponderosa 120H Original Hole rev0/0		Ponderosa 114H Original Hole rev0/0
	Ponderosa 116H Original Hole rev0/0		Ponderosa 115H Original Hole rev0/0		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ponderosa 111H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6802+25 @ 6827.00ft
Reference Site:	Ponderosa (99, 111, 112, 114-117, 120, 136)	MD Reference:	RKB=6802+25 @ 6827.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ponderosa 111H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Jul1724_v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6802+25 @ 6827.00ft

Offset Depths are relative to Offset Datum

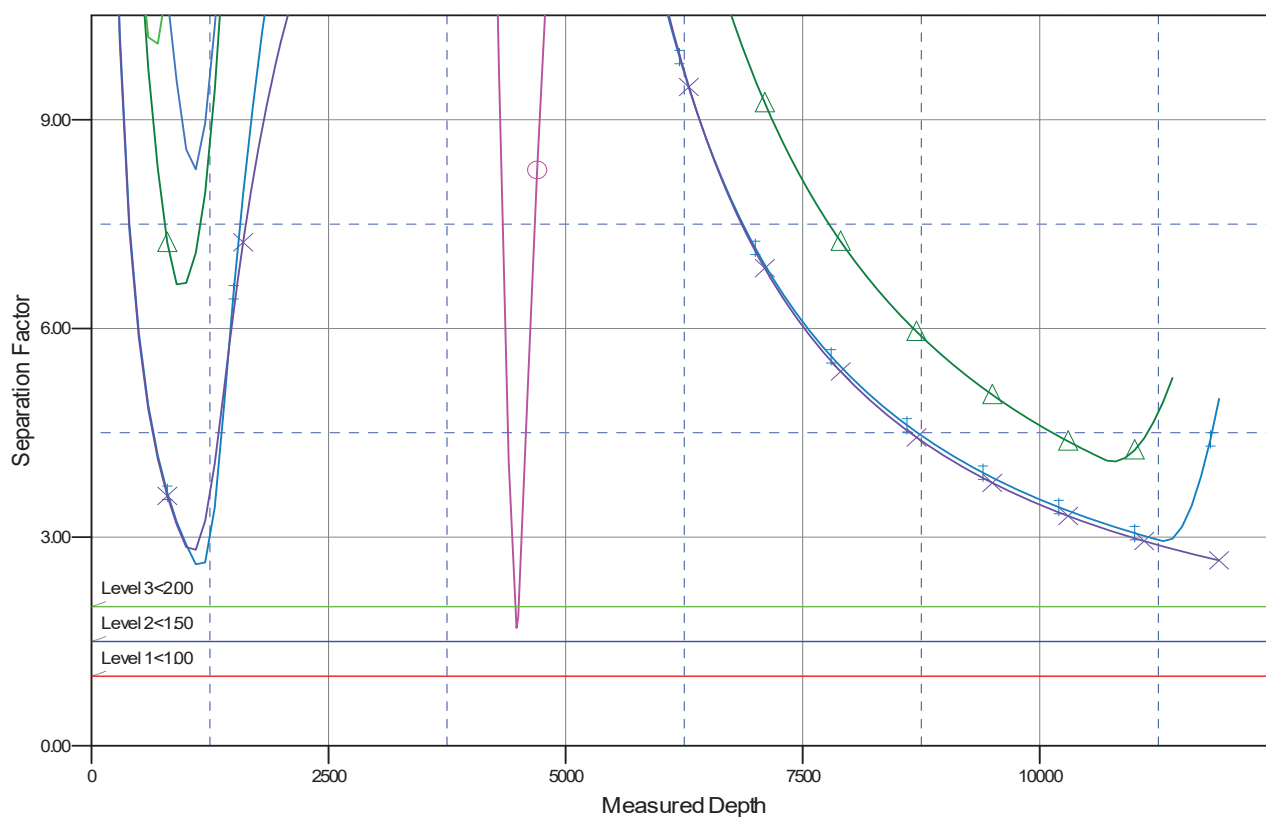
Central Meridian is -107.8333333

Coordinates are relative to: Ponderosa 111H

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

Grid Convergence at Surface is: 0.000°

Separation Factor Plot



LEGEND

	Ponderosa 099H Original Hole, rev0/0		Ponderosa 112H Original Hole, rev0/0		Ponderosa 136H Original Hole, rev0/0
	Ponderosa 117H Original Hole, rev0/0		Ponderosa 120H Original Hole, rev0/0		Ponderosa 114H Original Hole, rev0/0
	Ponderosa 116H Original Hole, rev0/0		Ponderosa 119H Original Hole, rev0/0		

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



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
#111H PONDEROSA UNIT
Lease: NMNM19816 Agreement: NMNM106318743

SH: NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7, T. 23N., R. 9W.
San Juan County, New Mexico
BH: Lot 3 Section 1, T. 23N., R. 10W.
San Juan County, New Mexico
***Above Data Required on Well Sign**

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

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

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

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

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

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

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

VII. PHONE NUMBERS

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

Virgil Lucero (505) 793-1836
Dustin Porch (505) 386-9876
Kenneth Rennick (505) 564-7742
Matthew Kade (505) 564-7736

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 424154

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 424154
	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.	1/23/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/23/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	2/10/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	2/10/2025
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.	2/10/2025
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.	2/10/2025