

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="text-align: right; color: red;">30-045-38432</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)		

- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.<br>2. A Drilling Plan.<br>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).<br>5. Operator certification.<br>6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

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

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

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

(Continued on page 2)

\*(Instructions on page 2)



## Additional Operator Remarks

### Location of Well

0. SHL: NENW / 76 FNL / 1598 FWL / TWSP: 23N / RANGE: 9W / SECTION: 7 / LAT: 36.248483 / LONG: -107.8337 ( TVD: 0 feet, MD: 0 feet )

PPP: SESW / 299 FSL / 1981 FWL / TWSP: 23N / RANGE: 9W / SECTION: 6 / LAT: 36.249505 / LONG: -107.832406 ( TVD: 4752 feet, MD: 4901 feet )

PPP: NESE / 2270 FSL / 1 FEL / TWSP: 23N / RANGE: 10W / SECTION: 1 / LAT: 36.254959 / LONG: -107.83914 ( TVD: 4892 feet, MD: 11730 feet )

BHL: LOT 3 / 232 FNL / 2487 FWL / TWSP: 23N / RANGE: 10W / SECTION: 1 / LAT: 36.262553 / LONG: -107.848518 ( TVD: 4892 feet, MD: 11730 feet )

### BLM Point of Contact

Name: CHRISTOPHER P WENMAN

Title: Natural Resource Specialist

Phone: (505) 564-7727

Email: cwenman@blm.gov

CONFIDENTIAL

<b>C-102</b> Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	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 <b>30-045-38432</b>	Pool Code <b>5860</b>	Pool Name <b>BISTI; S-GALLUP (O)</b>
Property Code <b>336968</b>	Property Name <b>PONDEROSA UNIT</b>	Well Number <b>117H</b>
OGRID No. <b>371838</b>	Operator Name <b>DJR OPERATING, LLC</b>	Ground Level Elevation <b>6802'</b>
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		76' NORTH	1598' WEST	36.248483° N	107.833700° 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	2487' WEST	36.262553° N	107.848518° W	SAN JUAN

Dedicated Acres SEC 6: SW/4 & LOT 5 (201.51 AC.); SEC 1: NE/SE, NE/4 & LOT 3 (239.37 AC.) = 440.88 ACRES	PENETRATED SPACING UNIT:	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/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		76' NORTH	1598' WEST	36.248483° N	107.833700° 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
N	6	23N	9W		299' SOUTH	1981' WEST	36.249505° N	107.832406° 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	2487' WEST	36.262553° N	107.848518° W	SAN JUAN

Unitized Area or Area of Uniform Interest <b>PONDEROSA</b>	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

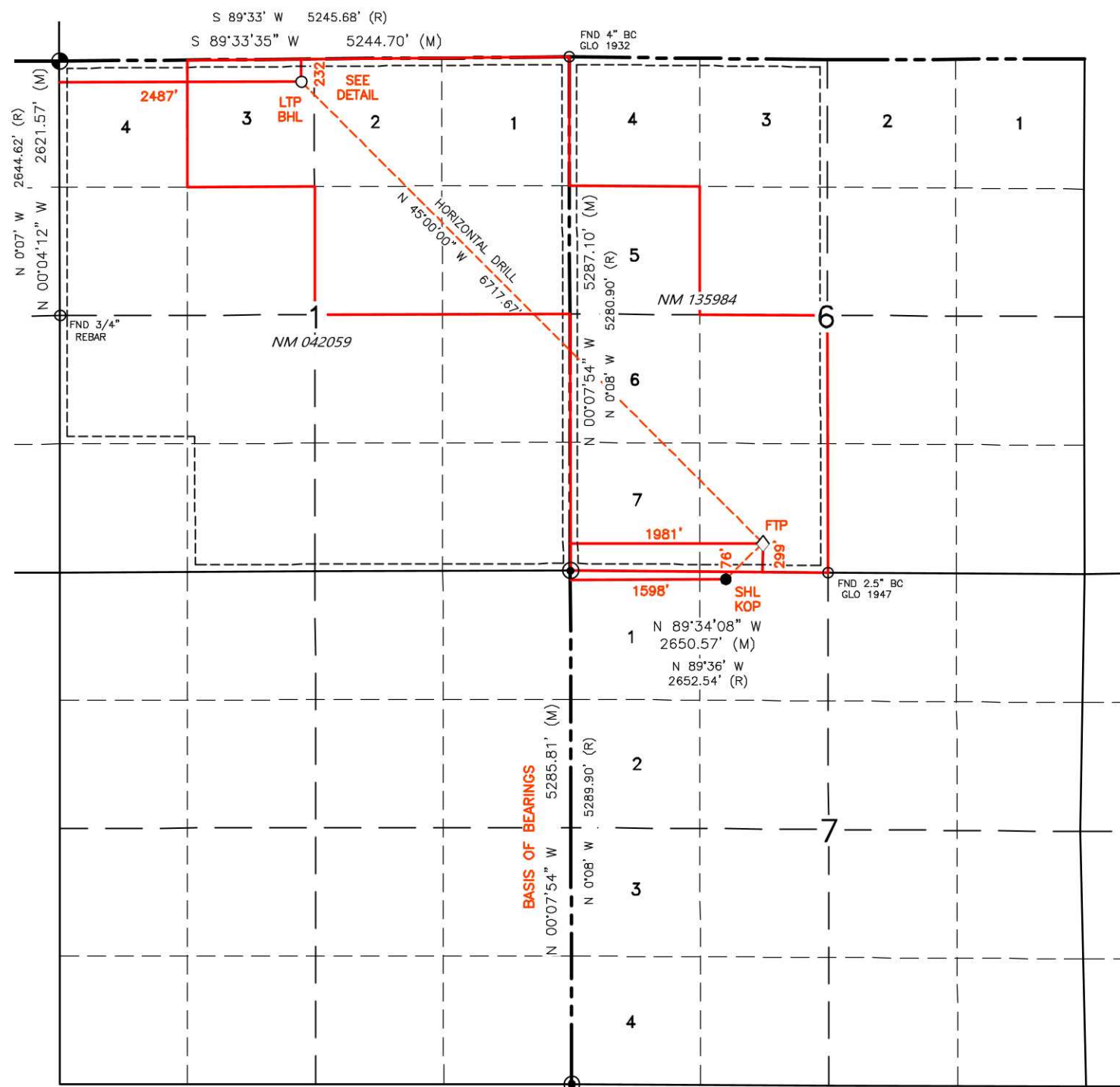
11393

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.

● FND 2 1/2" BC  
GLO 1942      ● FND 2 1/2" BC  
GLO 1932



**SURFACE LOCATION (SHL)** ●  
76' FNL 1598' FWL  
SEC. 7, T23N, R9W  
LAT. 36.248483° N (NAD83)  
LONG. 107.833700° W (NAD83)

**FIRST TAKE POINT (FTP)** ◇  
299' FSL 1981' FWL  
SEC. 6, T23N, R9W  
LAT. 36.249505° N (NAD83)  
LONG. 107.832406° W (NAD83)

**BOTTOM HOLE LOCATION (BHL)** ○  
232' FNL 2487' FWL  
SEC. 6, T23N, R10W  
LAT. 36.262553° N (NAD83)  
LONG. 107.774356° W (NAD83)

**KICK OFF POINT (KOP)** △  
76' FNL 1598' FWL  
SEC. 7, T23N, R9W  
LAT. 36.248483° N (NAD83)  
LONG. 107.833700° W (NAD83)

**LAST TAKE POINT (LTP)** □  
232' FNL 2487' FWL  
SEC. 6, T23N, R10W  
LAT. 36.262553° N (NAD83)  
LONG. 107.774356° W (NAD83)



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

Submit Electronically  
Via E-permitting

## NATURAL GAS MANAGEMENT PLAN

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

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** DJR Operating, LLC **OGRID:** 371838 **Date:** 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
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:





DJR OPERATING, LLC.  
OGRID NO: 371838  
NATURAL GAS MANAGEMENT PLAN  
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:

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



DJR OPERATING, LLC.  
OGRID NO: 371838  
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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-Gallup formation*

**WELL INFORMATION:**

**Name:** Ponderosa Unit 117H

**API Number:** Not yet assigned

**AFE Number:** Not yet assigned

**ER Well 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 76 ft FNL 1,598 ft FWL  
 36.248483 ° N latitude 107.8337 ° W longitude (NAD 83)

**BH Location:** 6-23-10 Sec-Twn-Rng 232 ft FNL 2,487 ft FWL  
 36.262553 ° N latitude 107.848518 ° 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:**

<b>Prognosis:</b>	<b>Formation Tops</b>	<b>TVD (ft ASL)</b>	<b>TVD (ft KB)</b>	<b>MD (ft KB)</b>	<b>O / G / W</b>	<b>Pressure</b>
	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	1,779	G, W	sub
	Lewis	5,488	1,338	1,340	G, W	normal
	Chacra	5,284	1,542	1,548	G, W	normal
	Cliff House	4,264	2,562	2,589	G, W	sub
	Menefee	4,256	2,570	2,597	G, W	normal
	Point Lookout	3,208	3,618	3,667	G, W	normal
	Mancos	3,062	3,764	3,817	O,G	sub (~0.38)
	Gallup (MNCS_A)	2,712	4,114	4,170	O,G	sub (~0.38)
	MNCS_B	2,602	4,224	4,280	O,G	sub (~0.38)
	MNCS_C	2,522	4,304	4,360	O,G	sub (~0.38)
	MNCS_Cms	2,482	4,344	4,400	O,G	sub (~0.38)
	MNCS_D	2,346	4,480	4,541	O,G	sub (~0.38)
	MNCS_E	2,211	4,615	4,697	O,G	sub (~0.38)
	MNCS_F	2,135	4,691	4,800	O,G	sub (~0.38)
	MNCS_G	2,074	4,752	4,901	O,G	sub (~0.38)
	MNCS_H	2,035	4,791	4,985	O,G	sub (~0.38)
	MNCS_I	1,993	4,833	5,133	O,G	sub (~0.38)
	<b>FTP TARGET</b>	<b>2,074</b>	<b>4,752</b>	<b>4,901</b>	<b>O,G</b>	<b>sub (~0.38)</b>

PROJECTED TD	1,934	4,892	11,730	O,G	sub (~0.38)
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**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:** 2,110 psi

**Maximum anticipated surface pressure, assuming partially evacuated hole:** 1,040 psi

**Temperature:** Maximum anticipated BHT is 125° F or less

## H<sub>2</sub>S INFORMATION:

**H<sub>2</sub>S 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 intalled 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 the 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	1,036	110,988	110,988

Min. S.F.		13.21	3.40	5.08	3.81
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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): Minimum: 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	5,192 ft (MD)	Hole Section Length:	4,842 ft
350 ft (TVD)	to	4,840 ft (TVD)	Casing Required:	5,192 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: Specs Loading Min. S.F.		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
	7	26.0	K-55	LTC	4,320	4,980	415,000	367,000
					2,114	1,317	217,720	217,720
					2.04	3.78	1.91	1.69

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	429	919
Tail	Type III	14.6	1.380	6.64	20%	3,717	200	276

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.

5,192 ft (MD)	to	11,730 ft (MD)	Hole Section Length:	6,538 ft
4,840 ft (TVD)	to	4,892 ft (TVD)	Casing Required:	6,709 ft
Estimated KOP:		4,321 ft (MD)	4,265 ft (TVD)	
Estimated Liner Top:		5,021 ft (MD)	4,804 ft (TVD)	
Estimated Landing Point (FTP):		4,901 ft (MD)	4,752 ft (TVD)	
Estimated Lateral Length:		6,829 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:	Size (in)	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	4.500	11.6	P-110	BTC	7,560	10,690	367,000	385,000
Loading					2,417	8,780	217,414	217,414
Min. S.F.					3.13	1.22	1.69	1.77

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:	Type	Weight (ppg)	Yield	Water	% Excess	Planned TOC	Total Cmt	Total Cmt (cu)
Spacer	IntegraGuard Star	11		31.6		0	40 bbls	
Tail	G:POZ blend	13.3	1.560	7.70	25%	5,021	538	839

Displacement 154 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			
Lead/Tail	ASTM Type I/II	BA90 Bonding Agent 5.0 lb/sx	Bentonite Viscosifier 8% BWOB	FL24 Fluid Loss .5% BWOB	IntegraGuard GW86 Viscosifier .1% BWOB	R7C Retarder .2% BWOB	FP24 Defoamer 0.3% BWOB, Anti-Static .01 lb/sx	
	Type G 50%	Pozzolan Fly Ash Extender 50%	BA90 Bonding Agent 3.0 lb/sx	Bentonite Viscosifier 4% BWOB	IntegraGuard FL24 Fluid Loss .4% BWOB	GW86 Viscosifier .1% BWOB	R3 Retarder .5% BWOB	FP24 Defoamer .3% BWOB, IntegraSeal 0.25 lb/sx

Notify NMOCD & 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:** 6,729

**Est Frac Inform:** 28 Frac Stages 108,000 bbls slick water 8,750,000 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 117H**  
OBJECTIVE: **Drill, complete, and equip single lateral in the Mancos-Gallup 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 **76** ft FNL **1,598** ft FWL  
BH Location: **6-23-10** Sec-Twn- Rng **232** ft FNL **2,487** 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)	5,192 ft
KOP (MD)	4,321 ft
KOP (TVD)	4,265 ft
Target (TVD)	4,752 ft
Curve BUR	10 °/100 ft
POE (MD)	4,901 ft
TD (MD)	11,730 ft
Lat Len (ft)	6,829 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	5,192	7	26.0	K-55	LTC	0	5,192
Production	6.125	11,730	4.500	11.6	P-110	BTC	5,021	11,730

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	429
Inter. (Tail)	Type III	14.6	1.38	6.64	0.1503	20%	3,717	200
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%	5,021	538

COMPLETION / PRODUCTION SUMMARY:

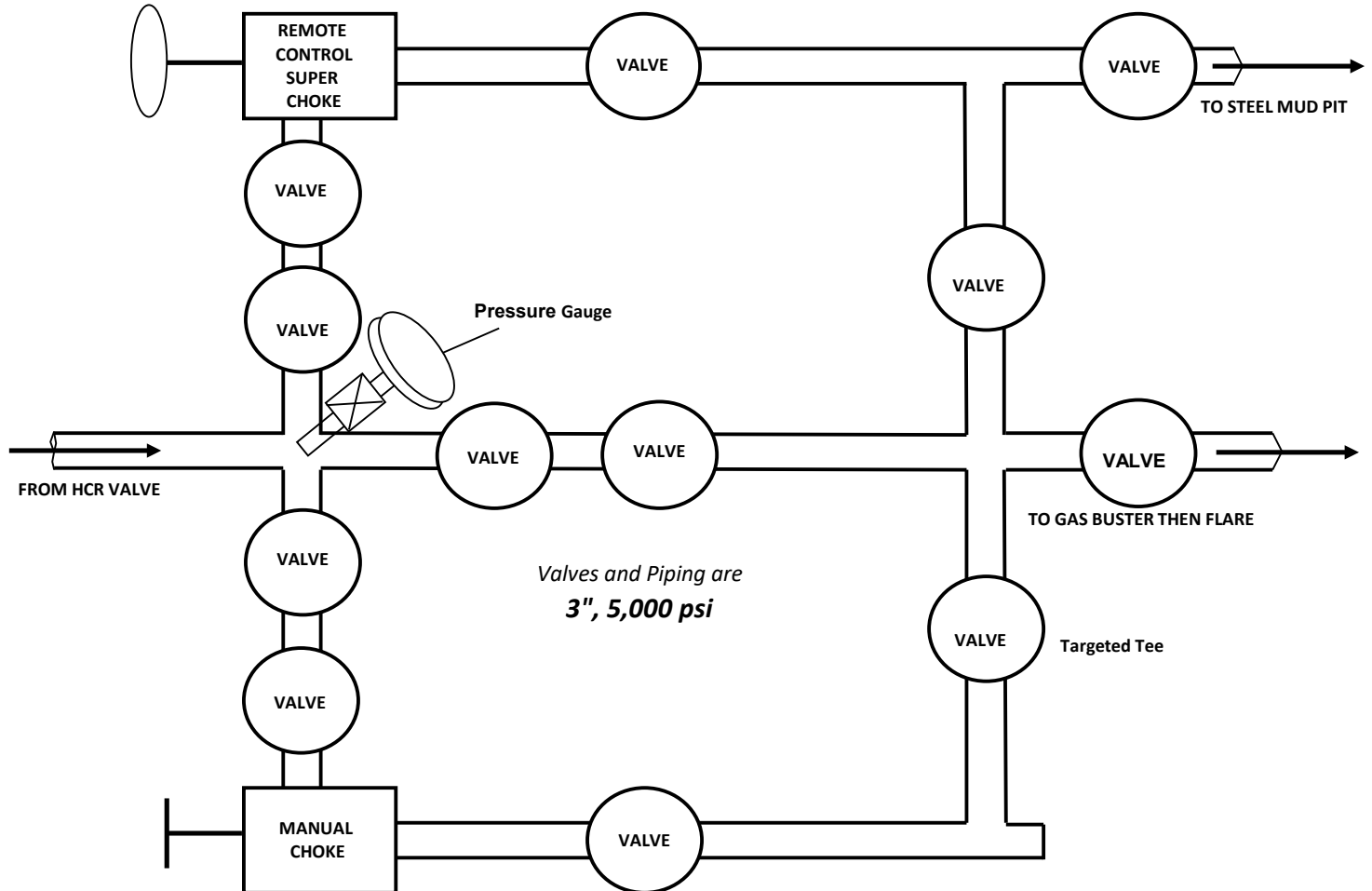
Frac: 39 plug-and-perf stages with 150,000 bbls slickwater fluid and 12,100,000 lbs of proppant (estimated)  
Flowback: Flow back through production tubing as pressures allow  
Production: Produce through production tubing via gas-lift into permanent production and storage facilities

Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	431	431
Kirtland	522	522
Fruitland	776	776
Pictured Cliffs	1,179	1,779
Lewis	1,338	1,340
Chacra	1,542	1,548
Cliff House	2,562	2,589
Menefee	2,570	2,597
Point Lookout	3,618	3,667
Mancos	3,764	3,817
Gallup (MNCS_A)	4,114	4,170
MNCS_B	4,224	4,280
MNCS_C	4,304	4,360
MNCS_Cms	4,344	4,400
MNCS_D	4,480	4,541
MNCS_E	4,615	4,697
MNCS_F	4,691	4,800
MNCS_G	4,752	4,901
MNCS_H	4,791	4,985
MNCS_I	4,833	5,133
FTP TARGET	4,752	4,901
PROJECTED TD	4,892	11,730

## Ponderosa Unit 117H

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.

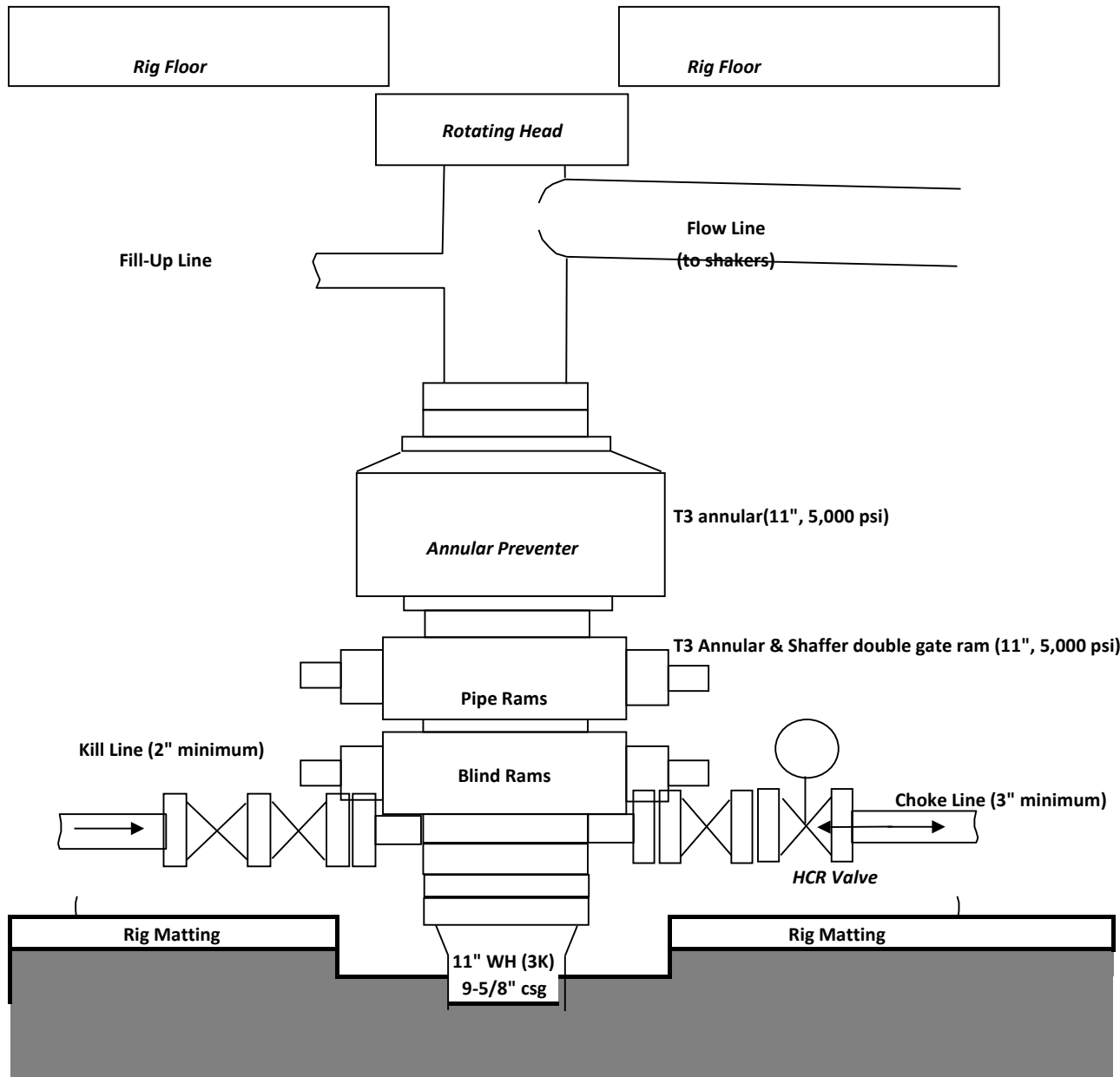
### CHOKE MANIFOLD



## Ponderosa Unit 117H

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



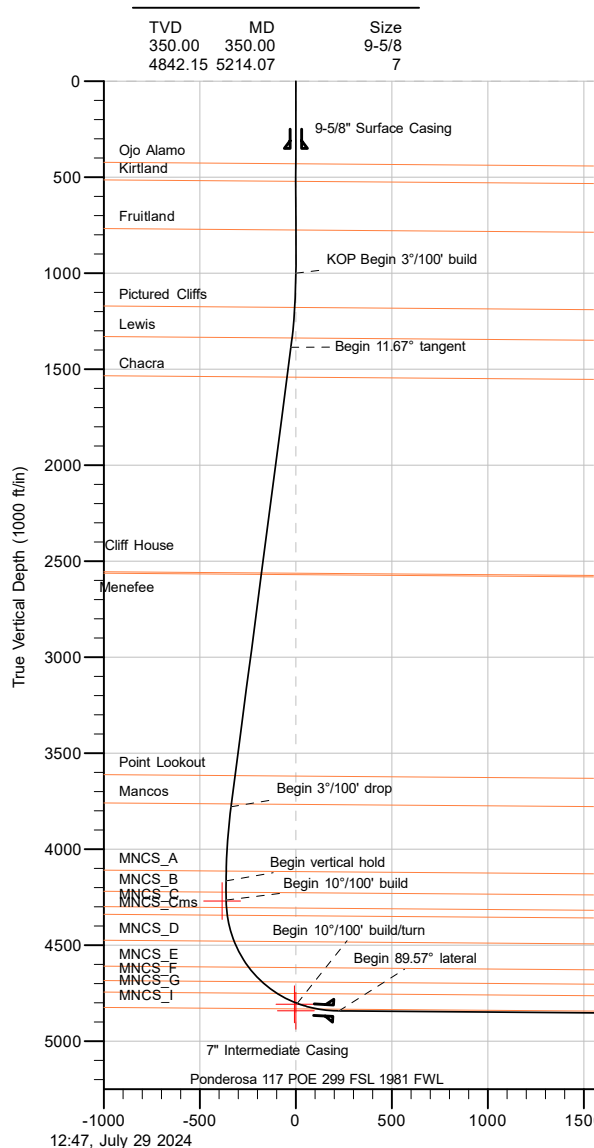


Well: Ponderosa 117H  
Site: Ponderosa (99, 111,112,114-117,120,136)  
Project: San Juan County, New Mexico NAD83 NM W  
Design: rev0  
Rig:

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 1909746.29 Easting 2722983.55 Latitude 36.24848300 Longitude -107.83370000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 8.512°  
CASING DETAILS



12:47, July 29 2024



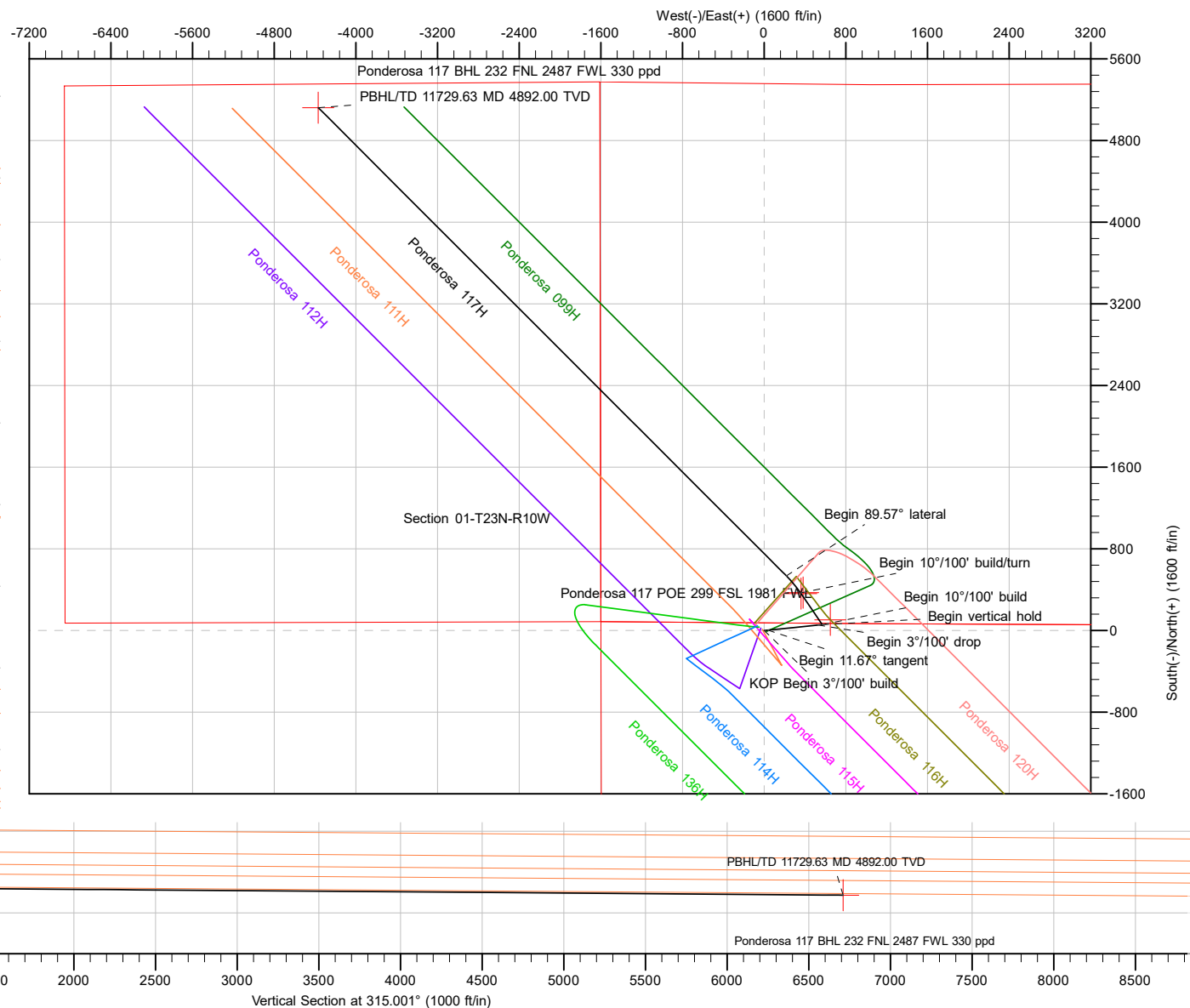
Azimuths to Grid North  
True North: 0.00°  
Magnetic North: 8.51°

Magnetic Field  
Strength: 48995.2nT  
Dip Angle: 62.68°  
Date: 7/11/2024  
Model: IGRF2020

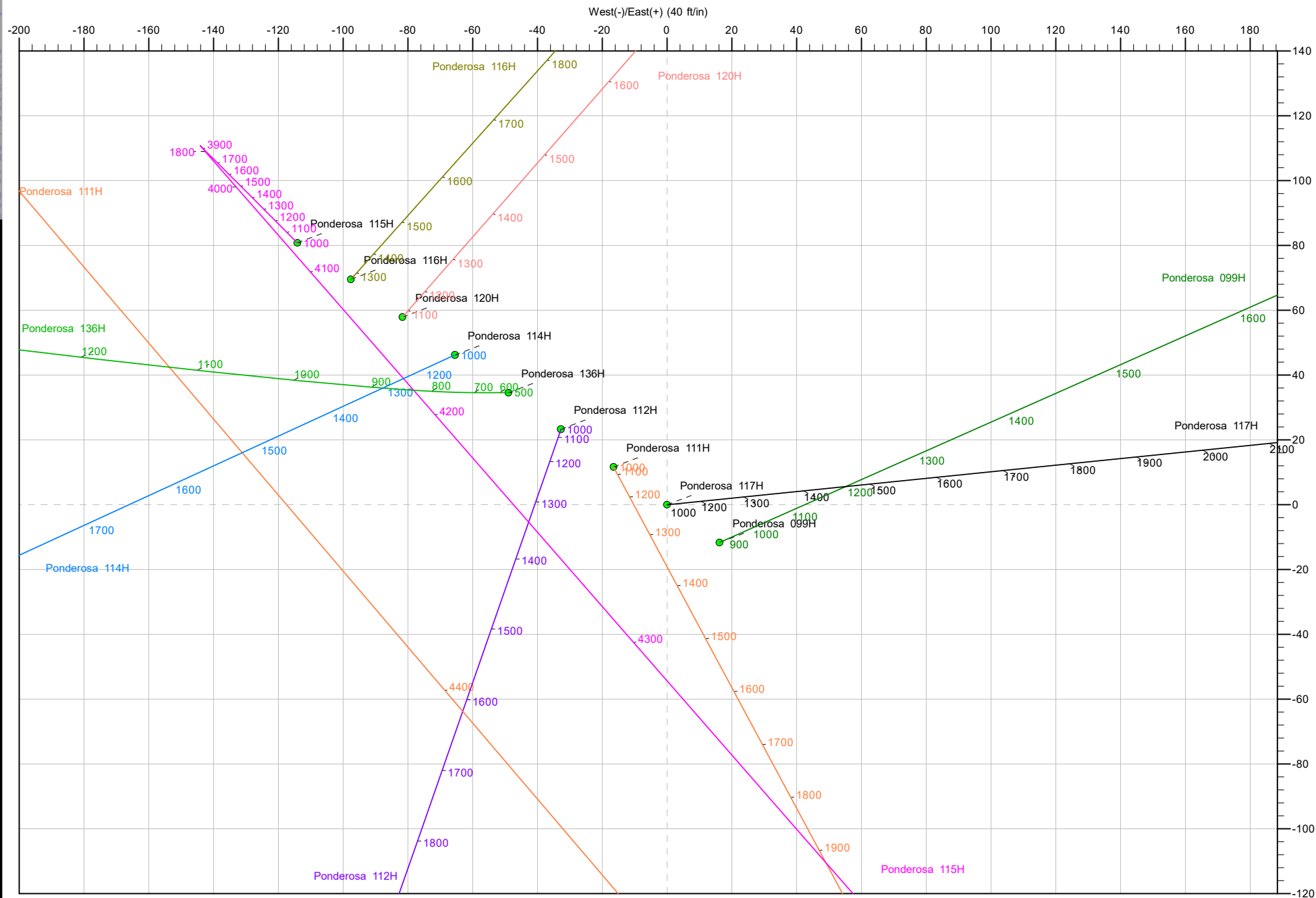
Section Details										Annotation
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect		
2	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		KOP Begin 3"/100' build
3	1388.96	11.67	84.189	1386.28	4.00	39.27	3.00	84.189	-24.94	Begin 11.67° tangent
4	3832.30	11.67	84.189	3779.12	54.03	530.90	0.00	0.00	-337.19	Begin 3"/100' drop
5	4221.26	0.00	0.001	4165.40	58.03	570.17	3.00	180.000	-362.13	Begin vertical hold
6	4321.26	0.00	0.001	4265.40	58.03	570.17	0.00	0.000	-362.13	Begin 10"/100' build
7	5021.26	70.00	325.600	4803.80	369.09	357.18	10.00	325.600	8.43	Begin 10"/100' build/turn
8	5242.74	89.57	315.001	4843.00	535.33	218.36	10.00	-29.203	224.14	Begin 89.57° lateral
9	11729.63	89.57	315.001	4892.00	5122.17	-4368.39	0.00	0.000	6710.85	PBHL/TD 11729.63 MD 4892.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Ponderosa 117 BHL 232 FNL 2487 FWL 330 ppd	4892.00	5122.17	-4368.39	1914868.45	2718615.17	36.26255300	-107.84851800
Ponderosa 117 POE 299 FSL 1981 FWL	4808.46	372.03	381.54	1910118.32	2723365.09	36.24950500	-107.83240600
Ponderosa 117 vert	4270.06	105.45	648.11	1909851.74	2723631.66	36.24877267	-107.83150195
Ponderosa 117 VS=0	4842.00	362.02	362.03	1910108.31	2723345.58	36.24947749	-107.83247217



(ft/in) 0091 (+) thru 0(-) thru 0





## Planning Report

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

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

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 117H, Surf loc: 76 FNL 1598 FWL Section 0-T23N-R09W					
Well Position	+N/-S	0.00 ft	Northing:	1,909,746.29 usft	Latitude:	36.24848300
	+E/-W	0.00 ft	Easting:	2,722,983.55 usft	Longitude:	-107.83370000
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,802.00 ft
Grid Convergence:		0.000 °				

<b>Wellbore</b>	Original Hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	7/11/2024	8.512	62.680	48,995.23899983

<b>Design</b>	rev0				
<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	315.001	

<b>Plan Survey Tool Program</b>	<b>Date</b>	7/29/2024			
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	11,729.63 rev0 (Original Hole)	MWD		
			OWSG MWD - Standard		





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 117H	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	
1,388.96	11.67	84.189	1,386.28	4.00	39.27	3.00	3.00	0.00	84.189	
3,832.30	11.67	84.189	3,779.13	54.03	530.90	0.00	0.00	0.00	0.000	
4,221.26	0.00	0.000	4,165.40	58.03	570.17	3.00	-3.00	0.00	180.000	
4,321.26	0.00	0.000	4,265.40	58.03	570.17	0.00	0.00	0.00	0.000	
5,021.26	70.00	325.600	4,803.80	369.09	357.18	10.00	10.00	0.00	325.600	
5,242.74	89.57	315.001	4,843.00	535.33	218.36	10.00	8.83	-4.79	-29.203	
11,729.63	89.57	315.001	4,892.00	5,122.17	-4,368.39	0.00	0.00	0.00	0.000	Ponderosa 117 BHL 2



## Planning Report

<b>Database:</b>	DT_Jul1724_v17	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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°/100' build									
1,100.00	3.00	84.189	1,099.95	0.27	2.60	-1.65	3.00	3.00	0.00
1,179.22	5.38	84.189	1,178.96	0.85	8.36	-5.31	3.00	3.00	0.00
Pictured Cliffs									
1,200.00	6.00	84.189	1,199.63	1.06	10.41	-6.61	3.00	3.00	0.00
1,300.00	9.00	84.189	1,298.77	2.38	23.39	-14.86	3.00	3.00	0.00
1,339.64	10.19	84.189	1,337.86	3.05	29.97	-19.03	3.00	3.00	0.00
Lewis									
1,388.96	11.67	84.189	1,386.28	4.00	39.27	-24.94	3.00	3.00	0.00
Begin 11.67° tangent									
1,400.00	11.67	84.189	1,397.09	4.22	41.49	-26.35	0.00	0.00	0.00
1,500.00	11.67	84.189	1,495.02	6.27	61.61	-39.13	0.00	0.00	0.00
1,547.62	11.67	84.189	1,541.66	7.25	71.19	-45.22	0.00	0.00	0.00
Chacra									
1,600.00	11.67	84.189	1,592.96	8.32	81.73	-51.91	0.00	0.00	0.00
1,700.00	11.67	84.189	1,690.89	10.37	101.85	-64.69	0.00	0.00	0.00
1,800.00	11.67	84.189	1,788.82	12.41	121.97	-77.47	0.00	0.00	0.00
1,900.00	11.67	84.189	1,886.76	14.46	142.10	-90.25	0.00	0.00	0.00
2,000.00	11.67	84.189	1,984.69	16.51	162.22	-103.03	0.00	0.00	0.00
2,100.00	11.67	84.189	2,082.62	18.56	182.34	-115.81	0.00	0.00	0.00
2,200.00	11.67	84.189	2,180.56	20.61	202.46	-128.59	0.00	0.00	0.00
2,300.00	11.67	84.189	2,278.49	22.65	222.58	-141.37	0.00	0.00	0.00
2,400.00	11.67	84.189	2,376.42	24.70	242.70	-154.15	0.00	0.00	0.00
2,500.00	11.67	84.189	2,474.36	26.75	262.82	-166.93	0.00	0.00	0.00
2,589.15	11.67	84.189	2,561.66	28.58	280.76	-178.32	0.00	0.00	0.00
Cliff House									
2,597.31	11.67	84.189	2,569.65	28.74	282.40	-179.36	0.00	0.00	0.00
Menefee									
2,600.00	11.67	84.189	2,572.29	28.80	282.95	-179.71	0.00	0.00	0.00
2,700.00	11.67	84.189	2,670.22	30.85	303.07	-192.49	0.00	0.00	0.00
2,800.00	11.67	84.189	2,768.16	32.89	323.19	-205.27	0.00	0.00	0.00
2,900.00	11.67	84.189	2,866.09	34.94	343.31	-218.05	0.00	0.00	0.00
3,000.00	11.67	84.189	2,964.02	36.99	363.43	-230.82	0.00	0.00	0.00
3,100.00	11.67	84.189	3,061.96	39.04	383.55	-243.60	0.00	0.00	0.00



## Planning Report

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<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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)	
3,200.00	11.67	84.189	3,159.89	41.08	403.67	-256.38	0.00	0.00	0.00	
3,300.00	11.67	84.189	3,257.82	43.13	423.80	-269.16	0.00	0.00	0.00	
3,400.00	11.67	84.189	3,355.76	45.18	443.92	-281.94	0.00	0.00	0.00	
3,500.00	11.67	84.189	3,453.69	47.23	464.04	-294.72	0.00	0.00	0.00	
3,600.00	11.67	84.189	3,551.62	49.28	484.16	-307.50	0.00	0.00	0.00	
3,667.40	11.67	84.189	3,617.63	50.66	497.72	-316.12	0.00	0.00	0.00	
<b>Point Lookout</b>										
3,700.00	11.67	84.189	3,649.56	51.32	504.28	-320.28	0.00	0.00	0.00	
3,800.00	11.67	84.189	3,747.49	53.37	524.40	-333.06	0.00	0.00	0.00	
3,817.35	11.67	84.189	3,764.48	53.73	527.89	-335.28	0.00	0.00	0.00	
<b>Mancos</b>										
3,832.30	11.67	84.189	3,779.13	54.03	530.90	-337.19	0.00	0.00	0.00	
<b>Begin 3°/100' drop</b>										
3,900.00	9.64	84.189	3,845.65	55.30	543.35	-345.10	3.00	-3.00	0.00	
4,000.00	6.64	84.189	3,944.63	56.73	557.43	-354.04	3.00	-3.00	0.00	
4,100.00	3.64	84.189	4,044.22	57.64	566.34	-359.70	3.00	-3.00	0.00	
4,170.14	1.53	84.189	4,114.29	57.96	569.49	-361.70	3.00	-3.00	0.00	
<b>MNCS_A</b>										
4,200.00	0.64	84.189	4,144.14	58.02	570.05	-362.06	3.00	-3.00	0.00	
4,221.26	0.00	0.000	4,165.40	58.03	570.17	-362.13	3.00	-3.00	0.00	
<b>Begin vertical hold</b>										
4,280.14	0.00	0.000	4,224.28	58.03	570.17	-362.13	0.00	0.00	0.00	
<b>MNCS_B</b>										
4,300.00	0.00	0.000	4,244.14	58.03	570.17	-362.13	0.00	0.00	0.00	
4,321.26	0.00	0.000	4,265.40	58.03	570.17	-362.13	0.00	0.00	0.00	
<b>Begin 10°/100' build</b>										
4,350.00	2.87	325.600	4,294.13	58.62	569.76	-361.42	10.00	10.00	0.00	
4,360.18	3.89	325.600	4,304.29	59.12	569.42	-360.83	10.00	10.00	0.00	
<b>MNCS_C</b>										
4,400.00	7.87	325.600	4,343.89	62.49	567.12	-356.82	10.00	10.00	0.00	
4,400.44	7.92	325.600	4,344.32	62.54	567.08	-356.76	10.00	10.00	0.00	
<b>MNCS_Cms</b>										
4,450.00	12.87	325.600	4,393.06	69.91	562.03	-347.97	10.00	10.00	0.00	
4,500.00	17.87	325.600	4,441.25	80.85	554.55	-334.95	10.00	10.00	0.00	
4,540.78	21.95	325.600	4,479.59	92.31	546.70	-321.30	10.00	10.00	0.00	
<b>MNCS_D</b>										
4,550.00	22.87	325.600	4,488.11	95.21	544.72	-317.84	10.00	10.00	0.00	
4,600.00	27.87	325.600	4,533.27	112.88	532.61	-296.79	10.00	10.00	0.00	
4,650.00	32.87	325.600	4,576.40	133.73	518.34	-271.95	10.00	10.00	0.00	
4,697.48	37.62	325.600	4,615.16	156.34	502.86	-245.02	10.00	10.00	0.00	
<b>MNCS_E</b>										
4,700.00	37.87	325.600	4,617.15	157.61	501.99	-243.50	10.00	10.00	0.00	
4,750.00	42.87	325.600	4,655.23	184.32	483.69	-211.68	10.00	10.00	0.00	
4,800.00	47.87	325.600	4,690.34	213.68	463.60	-176.71	10.00	10.00	0.00	
4,800.49	47.92	325.600	4,690.68	213.98	463.39	-176.35	10.00	10.00	0.00	
<b>MNCS_F</b>										
4,850.00	52.87	325.600	4,722.22	245.44	441.85	-138.87	10.00	10.00	0.00	
4,900.00	57.87	325.600	4,750.63	279.38	418.61	-98.44	10.00	10.00	0.00	
4,901.21	57.99	325.600	4,751.27	280.23	418.03	-97.43	10.00	10.00	0.00	
<b>MNCS_G</b>										
4,950.00	62.87	325.600	4,775.33	315.23	394.06	-55.73	10.00	10.00	0.00	
5,000.00	67.87	325.600	4,796.16	352.72	368.39	-11.07	10.00	10.00	0.00	



## Planning Report

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<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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)
5,021.26	70.00	325.600	4,803.80	369.09	357.18	8.43	10.00	10.00	0.00
<b>Begin 10°/100' build/turn</b>									
5,050.00	72.51	324.130	4,813.04	391.34	341.52	35.24	10.00	8.75	-5.11
5,100.00	76.91	321.665	4,826.22	429.79	312.42	83.00	10.00	8.80	-4.93
5,132.96	79.83	320.089	4,832.86	454.84	292.05	115.11	10.00	8.84	-4.78
<b>MNCS_I</b>									
5,150.00	81.33	319.287	4,835.65	467.65	281.18	131.86	10.00	8.85	-4.71
5,200.00	85.77	316.964	4,841.27	504.63	248.02	181.46	10.00	8.87	-4.65
5,214.07	87.02	316.316	4,842.15	514.84	238.38	195.49	10.00	8.88	-4.60
<b>7" Intermediate Casing</b>									
5,242.74	89.57	315.001	4,843.00	535.33	218.36	224.14	10.00	8.89	-4.59
<b>Begin 89.57° lateral</b>									
5,300.00	89.57	315.001	4,843.44	575.82	177.87	281.40	0.00	0.00	0.00
5,400.00	89.57	315.001	4,844.19	646.53	107.16	381.40	0.00	0.00	0.00
5,500.00	89.57	315.001	4,844.95	717.24	36.45	481.40	0.00	0.00	0.00
5,600.00	89.57	315.001	4,845.70	787.95	-34.26	581.40	0.00	0.00	0.00
5,700.00	89.57	315.001	4,846.46	858.66	-104.96	681.39	0.00	0.00	0.00
5,800.00	89.57	315.001	4,847.21	929.37	-175.67	781.39	0.00	0.00	0.00
5,900.00	89.57	315.001	4,847.97	1,000.08	-246.38	881.39	0.00	0.00	0.00
6,000.00	89.57	315.001	4,848.72	1,070.79	-317.09	981.38	0.00	0.00	0.00
6,100.00	89.57	315.001	4,849.48	1,141.50	-387.80	1,081.38	0.00	0.00	0.00
6,200.00	89.57	315.001	4,850.23	1,212.20	-458.50	1,181.38	0.00	0.00	0.00
6,300.00	89.57	315.001	4,850.99	1,282.91	-529.21	1,281.38	0.00	0.00	0.00
6,400.00	89.57	315.001	4,851.75	1,353.62	-599.92	1,381.37	0.00	0.00	0.00
6,500.00	89.57	315.001	4,852.50	1,424.33	-670.63	1,481.37	0.00	0.00	0.00
6,600.00	89.57	315.001	4,853.26	1,495.04	-741.34	1,581.37	0.00	0.00	0.00
6,700.00	89.57	315.001	4,854.01	1,565.75	-812.04	1,681.36	0.00	0.00	0.00
6,800.00	89.57	315.001	4,854.77	1,636.46	-882.75	1,781.36	0.00	0.00	0.00
6,900.00	89.57	315.001	4,855.52	1,707.17	-953.46	1,881.36	0.00	0.00	0.00
7,000.00	89.57	315.001	4,856.28	1,777.88	-1,024.17	1,981.36	0.00	0.00	0.00
7,100.00	89.57	315.001	4,857.03	1,848.59	-1,094.88	2,081.35	0.00	0.00	0.00
7,200.00	89.57	315.001	4,857.79	1,919.30	-1,165.58	2,181.35	0.00	0.00	0.00
7,300.00	89.57	315.001	4,858.54	1,990.01	-1,236.29	2,281.35	0.00	0.00	0.00
7,400.00	89.57	315.001	4,859.30	2,060.72	-1,307.00	2,381.34	0.00	0.00	0.00
7,500.00	89.57	315.001	4,860.05	2,131.43	-1,377.71	2,481.34	0.00	0.00	0.00
7,600.00	89.57	315.001	4,860.81	2,202.14	-1,448.42	2,581.34	0.00	0.00	0.00
7,700.00	89.57	315.001	4,861.56	2,272.84	-1,519.12	2,681.34	0.00	0.00	0.00
7,800.00	89.57	315.001	4,862.32	2,343.55	-1,589.83	2,781.33	0.00	0.00	0.00
7,900.00	89.57	315.001	4,863.07	2,414.26	-1,660.54	2,881.33	0.00	0.00	0.00
8,000.00	89.57	315.001	4,863.83	2,484.97	-1,731.25	2,981.33	0.00	0.00	0.00
8,100.00	89.57	315.001	4,864.59	2,555.68	-1,801.96	3,081.32	0.00	0.00	0.00
8,200.00	89.57	315.001	4,865.34	2,626.39	-1,872.66	3,181.32	0.00	0.00	0.00
8,300.00	89.57	315.001	4,866.10	2,697.10	-1,943.37	3,281.32	0.00	0.00	0.00
8,400.00	89.57	315.001	4,866.85	2,767.81	-2,014.08	3,381.32	0.00	0.00	0.00
8,500.00	89.57	315.001	4,867.61	2,838.52	-2,084.79	3,481.31	0.00	0.00	0.00
8,600.00	89.57	315.001	4,868.36	2,909.23	-2,155.50	3,581.31	0.00	0.00	0.00
8,700.00	89.57	315.001	4,869.12	2,979.94	-2,226.20	3,681.31	0.00	0.00	0.00
8,800.00	89.57	315.001	4,869.87	3,050.65	-2,296.91	3,781.30	0.00	0.00	0.00
8,900.00	89.57	315.001	4,870.63	3,121.36	-2,367.62	3,881.30	0.00	0.00	0.00
9,000.00	89.57	315.001	4,871.38	3,192.07	-2,438.33	3,981.30	0.00	0.00	0.00
9,100.00	89.57	315.001	4,872.14	3,262.78	-2,509.04	4,081.30	0.00	0.00	0.00
9,200.00	89.57	315.001	4,872.89	3,333.48	-2,579.74	4,181.29	0.00	0.00	0.00
9,300.00	89.57	315.001	4,873.65	3,404.19	-2,650.45	4,281.29	0.00	0.00	0.00



## Planning Report

<b>Database:</b>	DT_Jul1724_v17	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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)
9,400.00	89.57	315.001	4,874.40	3,474.90	-2,721.16	4,381.29	0.00	0.00	0.00
9,500.00	89.57	315.001	4,875.16	3,545.61	-2,791.87	4,481.28	0.00	0.00	0.00
9,600.00	89.57	315.001	4,875.92	3,616.32	-2,862.58	4,581.28	0.00	0.00	0.00
9,700.00	89.57	315.001	4,876.67	3,687.03	-2,933.28	4,681.28	0.00	0.00	0.00
9,800.00	89.57	315.001	4,877.43	3,757.74	-3,003.99	4,781.28	0.00	0.00	0.00
9,900.00	89.57	315.001	4,878.18	3,828.45	-3,074.70	4,881.27	0.00	0.00	0.00
10,000.00	89.57	315.001	4,878.94	3,899.16	-3,145.41	4,981.27	0.00	0.00	0.00
10,100.00	89.57	315.001	4,879.69	3,969.87	-3,216.12	5,081.27	0.00	0.00	0.00
10,200.00	89.57	315.001	4,880.45	4,040.58	-3,286.82	5,181.26	0.00	0.00	0.00
10,300.00	89.57	315.001	4,881.20	4,111.29	-3,357.53	5,281.26	0.00	0.00	0.00
10,400.00	89.57	315.001	4,881.96	4,182.00	-3,428.24	5,381.26	0.00	0.00	0.00
10,500.00	89.57	315.001	4,882.71	4,252.71	-3,498.95	5,481.26	0.00	0.00	0.00
10,600.00	89.57	315.001	4,883.47	4,323.42	-3,569.66	5,581.25	0.00	0.00	0.00
10,700.00	89.57	315.001	4,884.22	4,394.12	-3,640.36	5,681.25	0.00	0.00	0.00
10,800.00	89.57	315.001	4,884.98	4,464.83	-3,711.07	5,781.25	0.00	0.00	0.00
10,900.00	89.57	315.001	4,885.73	4,535.54	-3,781.78	5,881.24	0.00	0.00	0.00
11,000.00	89.57	315.001	4,886.49	4,606.25	-3,852.49	5,981.24	0.00	0.00	0.00
11,100.00	89.57	315.001	4,887.24	4,676.96	-3,923.20	6,081.24	0.00	0.00	0.00
11,200.00	89.57	315.001	4,888.00	4,747.67	-3,993.90	6,181.24	0.00	0.00	0.00
11,300.00	89.57	315.001	4,888.76	4,818.38	-4,064.61	6,281.23	0.00	0.00	0.00
11,400.00	89.57	315.001	4,889.51	4,889.09	-4,135.32	6,381.23	0.00	0.00	0.00
11,500.00	89.57	315.001	4,890.27	4,959.80	-4,206.03	6,481.23	0.00	0.00	0.00
11,600.00	89.57	315.001	4,891.02	5,030.51	-4,276.74	6,581.22	0.00	0.00	0.00
11,700.00	89.57	315.001	4,891.78	5,101.22	-4,347.44	6,681.22	0.00	0.00	0.00
11,729.63	89.57	315.001	4,892.00	5,122.17	-4,368.39	6,710.85	0.00	0.00	0.00
PBHL/TD 11729.63 MD 4892.00 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	
5,214.07	4,842.15	7" Intermediate Casing	7	8-3/4	



## Planning Report

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

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
431.00	431.00	Ojo Alamo		0.430	315.001	
522.00	522.00	Kirtland		0.430	315.001	
776.00	776.00	Fruitland		0.430	315.001	
1,179.22	1,178.96	Pictured Cliffs		0.430	315.001	
1,339.64	1,337.86	Lewis		0.430	315.001	
1,547.62	1,541.66	Chacra		0.430	315.001	
2,589.15	2,561.66	Cliff House		0.430	315.001	
2,597.31	2,569.65	Menefee		0.430	315.001	
3,667.40	3,617.63	Point Lookout		0.430	315.001	
3,817.35	3,764.48	Mancos		0.430	315.001	
4,170.14	4,114.29	MNCS_A		0.430	315.001	
4,280.14	4,224.28	MNCS_B		0.430	315.001	
4,360.18	4,304.29	MNCS_C		0.430	315.001	
4,400.44	4,344.32	MNCS_Cms		0.430	315.001	
4,540.78	4,479.59	MNCS_D		0.430	315.001	
4,697.48	4,615.16	MNCS_E		0.430	315.001	
4,800.49	4,690.68	MNCS_F		0.430	315.001	
4,901.21	4,751.27	MNCS_G		0.430	315.001	
5,132.96	4,832.86	MNCS_I		0.430	315.001	

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°/100' build	
1,388.96	1,386.28	4.00	39.27	Begin 11.67° tangent	
3,832.30	3,779.13	54.03	530.90	Begin 3°/100' drop	
4,221.26	4,165.40	58.03	570.17	Begin vertical hold	
4,321.26	4,265.40	58.03	570.17	Begin 10°/100' build	
5,021.26	4,803.80	369.09	357.18	Begin 10°/100' build/turn	
5,242.74	4,843.00	535.33	218.36	Begin 89.57° lateral	
11,729.63	4,892.00	5,122.17	-4,368.39	PBHL/TD 11729.63 MD 4892.00 TVD	





## Planning Report - Geographic

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

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

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 117H, Surf loc: 76 FNL 1598 FWL Section 0-T23N-R09W					
Well Position	+N/-S	0.00 ft	Northing:	1,909,746.29 usft	Latitude:	36.24848300
	+E/-W	0.00 ft	Easting:	2,722,983.55 usft	Longitude:	-107.83370000
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,802.00 ft
Grid Convergence:		0.000 °				

<b>Wellbore</b>	Original Hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	7/11/2024	8.512	62.680	48,995.23899983

<b>Design</b>	rev0			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	315.001

<b>Plan Survey Tool Program</b>	<b>Date</b>	7/29/2024		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	11,729.63 rev0 (Original Hole)	MWD	
			OWSG MWD - Standard	



Planning Report - Geographic

Database:	DT_Jul1724_v17	Local Co-ordinate Reference:	Well Ponderosa 117H
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 117H	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	
1,388.96	11.67	84.189	1,386.28	4.00	39.27	3.00	3.00	0.00	84.189	
3,832.30	11.67	84.189	3,779.13	54.03	530.90	0.00	0.00	0.00	0.000	
4,221.26	0.00	0.000	4,165.40	58.03	570.17	3.00	-3.00	0.00	180.000	
4,321.26	0.00	0.000	4,265.40	58.03	570.17	0.00	0.00	0.00	0.000	
5,021.26	70.00	325.600	4,803.80	369.09	357.18	10.00	10.00	0.00	325.600	
5,242.74	89.57	315.001	4,843.00	535.33	218.36	10.00	8.83	-4.79	-29.203	
11,729.63	89.57	315.001	4,892.00	5,122.17	-4,368.39	0.00	0.00	0.00	0.000	Ponderosa 117 BHL 2



## Planning Report - Geographic

<b>Database:</b>	DT_Jul1724_v17	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
100.00	0.00	0.000	100.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
200.00	0.00	0.000	200.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
300.00	0.00	0.000	300.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
350.00	0.00	0.000	350.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
9-5/8" Surface Casing									
400.00	0.00	0.000	400.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
431.00	0.00	0.000	431.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
Ojo Alamo									
500.00	0.00	0.000	500.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
522.00	0.00	0.000	522.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
Kirtland									
600.00	0.00	0.000	600.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
700.00	0.00	0.000	700.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
776.00	0.00	0.000	776.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
Fruitland									
800.00	0.00	0.000	800.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
900.00	0.00	0.000	900.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
1,000.00	0.00	0.000	1,000.00	0.00	0.00	1,909,746.29	2,722,983.55	36.24848300	-107.83370000
KOP Begin 3°/100' build									
1,100.00	3.00	84.189	1,099.95	0.27	2.60	1,909,746.56	2,722,986.16	36.24848373	-107.83369116
1,179.22	5.38	84.189	1,178.96	0.85	8.36	1,909,747.14	2,722,991.91	36.24848534	-107.83367164
Pictured Cliffs									
1,200.00	6.00	84.189	1,199.63	1.06	10.41	1,909,747.35	2,722,993.96	36.24848591	-107.83366469
1,300.00	9.00	84.189	1,298.77	2.38	23.39	1,909,748.67	2,723,006.95	36.24848954	-107.83362066
1,339.64	10.19	84.189	1,337.86	3.05	29.97	1,909,749.34	2,723,013.52	36.24849138	-107.83359836
Lewis									
1,388.96	11.67	84.189	1,386.28	4.00	39.27	1,909,750.29	2,723,022.82	36.24849398	-107.83356682
Begin 11.67° tangent									
1,400.00	11.67	84.189	1,397.09	4.22	41.49	1,909,750.52	2,723,025.04	36.24849460	-107.83355929
1,500.00	11.67	84.189	1,495.02	6.27	61.61	1,909,752.56	2,723,045.16	36.24850023	-107.83349104
1,547.62	11.67	84.189	1,541.66	7.25	71.19	1,909,753.54	2,723,054.75	36.24850291	-107.83345855
Chacra									
1,600.00	11.67	84.189	1,592.96	8.32	81.73	1,909,754.61	2,723,065.29	36.24850585	-107.83342280
1,700.00	11.67	84.189	1,690.89	10.37	101.85	1,909,756.66	2,723,085.41	36.24851148	-107.83335456
1,800.00	11.67	84.189	1,788.82	12.41	121.97	1,909,758.71	2,723,105.53	36.24851710	-107.83328632
1,900.00	11.67	84.189	1,886.76	14.46	142.10	1,909,760.76	2,723,125.65	36.24852273	-107.83321808
2,000.00	11.67	84.189	1,984.69	16.51	162.22	1,909,762.80	2,723,145.77	36.24852835	-107.83314984
2,100.00	11.67	84.189	2,082.62	18.56	182.34	1,909,764.85	2,723,165.89	36.24853398	-107.83308160
2,200.00	11.67	84.189	2,180.56	20.61	202.46	1,909,766.90	2,723,186.01	36.24853961	-107.83301336
2,300.00	11.67	84.189	2,278.49	22.65	222.58	1,909,768.95	2,723,206.13	36.24854523	-107.83294512
2,400.00	11.67	84.189	2,376.42	24.70	242.70	1,909,770.99	2,723,226.26	36.24855086	-107.83287687
2,500.00	11.67	84.189	2,474.36	26.75	262.82	1,909,773.04	2,723,246.38	36.24855648	-107.83280863
2,589.15	11.67	84.189	2,561.66	28.58	280.76	1,909,774.87	2,723,264.32	36.24856150	-107.83274780
Cliff House									
2,597.31	11.67	84.189	2,569.65	28.74	282.40	1,909,775.04	2,723,265.96	36.24856196	-107.83274223
Menefee									
2,600.00	11.67	84.189	2,572.29	28.80	282.95	1,909,775.09	2,723,266.50	36.24856211	-107.83274039
2,700.00	11.67	84.189	2,670.22	30.85	303.07	1,909,777.14	2,723,286.62	36.24856773	-107.83267215
2,800.00	11.67	84.189	2,768.16	32.89	323.19	1,909,779.19	2,723,306.74	36.24857336	-107.83260391
2,900.00	11.67	84.189	2,866.09	34.94	343.31	1,909,781.23	2,723,326.86	36.24857898	-107.83253567
3,000.00	11.67	84.189	2,964.02	36.99	363.43	1,909,783.28	2,723,346.98	36.24858461	-107.83246743
3,100.00	11.67	84.189	3,061.96	39.04	383.55	1,909,785.33	2,723,367.11	36.24859023	-107.83239919



## Planning Report - Geographic

<b>Database:</b>	DT_Jul1724_v17	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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	
3,200.00	11.67	84.189	3,159.89	41.08	403.67	1,909,787.38	2,723,387.23	36.24859586	-107.83233094	
3,300.00	11.67	84.189	3,257.82	43.13	423.80	1,909,789.43	2,723,407.35	36.24860148	-107.83226270	
3,400.00	11.67	84.189	3,355.76	45.18	443.92	1,909,791.47	2,723,427.47	36.24860711	-107.83219446	
3,500.00	11.67	84.189	3,453.69	47.23	464.04	1,909,793.52	2,723,447.59	36.24861273	-107.83212622	
3,600.00	11.67	84.189	3,551.62	49.28	484.16	1,909,795.57	2,723,467.71	36.24861836	-107.83205798	
3,667.40	11.67	84.189	3,617.63	50.66	497.72	1,909,796.95	2,723,481.27	36.24862215	-107.83201199	
Point Lookout										
3,700.00	11.67	84.189	3,649.56	51.32	504.28	1,909,797.62	2,723,487.83	36.24862398	-107.83198974	
3,800.00	11.67	84.189	3,747.49	53.37	524.40	1,909,799.66	2,723,507.95	36.24862961	-107.83192150	
3,817.35	11.67	84.189	3,764.48	53.73	527.89	1,909,800.02	2,723,511.45	36.24863059	-107.83190965	
Mancos										
3,832.30	11.67	84.189	3,779.13	54.03	530.90	1,909,800.33	2,723,514.45	36.24863143	-107.83189945	
Begin 3°/100' drop										
3,900.00	9.64	84.189	3,845.65	55.30	543.35	1,909,801.59	2,723,526.90	36.24863491	-107.83185723	
4,000.00	6.64	84.189	3,944.63	56.73	557.43	1,909,803.03	2,723,540.99	36.24863884	-107.83180947	
4,100.00	3.64	84.189	4,044.22	57.64	566.34	1,909,803.93	2,723,549.89	36.24864133	-107.83177926	
4,170.14	1.53	84.189	4,114.29	57.96	569.49	1,909,804.25	2,723,553.04	36.24864221	-107.83176859	
MNCS_A										
4,200.00	0.64	84.189	4,144.14	58.02	570.05	1,909,804.31	2,723,553.60	36.24864237	-107.83176668	
4,221.26	0.00	0.000	4,165.40	58.03	570.17	1,909,804.32	2,723,553.72	36.24864240	-107.83176628	
Begin vertical hold										
4,280.14	0.00	0.000	4,224.28	58.03	570.17	1,909,804.32	2,723,553.72	36.24864240	-107.83176628	
MNCS_B										
4,300.00	0.00	0.000	4,244.14	58.03	570.17	1,909,804.32	2,723,553.72	36.24864240	-107.83176628	
4,321.26	0.00	0.000	4,265.40	58.03	570.17	1,909,804.32	2,723,553.72	36.24864240	-107.83176628	
Begin 10°/100' build										
4,350.00	2.87	325.600	4,294.13	58.62	569.76	1,909,804.92	2,723,553.32	36.24864404	-107.83176766	
4,360.18	3.89	325.600	4,304.29	59.12	569.42	1,909,805.41	2,723,552.98	36.24864540	-107.83176881	
MNCS_C										
4,400.00	7.87	325.600	4,343.89	62.49	567.12	1,909,808.78	2,723,550.67	36.24865465	-107.83177663	
4,400.44	7.92	325.600	4,344.32	62.54	567.08	1,909,808.83	2,723,550.64	36.24865478	-107.83177674	
MNCS_Cms										
4,450.00	12.87	325.600	4,393.06	69.91	562.03	1,909,816.21	2,723,545.59	36.24867505	-107.83179387	
4,500.00	17.87	325.600	4,441.25	80.85	554.55	1,909,827.14	2,723,538.10	36.24870509	-107.83181926	
4,540.78	21.95	325.600	4,479.59	92.31	546.70	1,909,838.60	2,723,530.25	36.24873656	-107.83184587	
MNCS_D										
4,550.00	22.87	325.600	4,488.11	95.21	544.72	1,909,841.50	2,723,528.27	36.24874453	-107.83185260	
4,600.00	27.87	325.600	4,533.27	112.88	532.61	1,909,859.17	2,723,516.17	36.24879308	-107.83189364	
4,650.00	32.87	325.600	4,576.40	133.73	518.34	1,909,880.03	2,723,501.89	36.24885037	-107.83194207	
4,697.48	37.62	325.600	4,615.16	156.34	502.86	1,909,902.63	2,723,486.41	36.24891246	-107.83199456	
MNCS_E										
4,700.00	37.87	325.600	4,617.15	157.61	501.99	1,909,903.90	2,723,485.54	36.24891596	-107.83199751	
4,750.00	42.87	325.600	4,655.23	184.32	483.69	1,909,930.62	2,723,467.25	36.24898935	-107.83205955	
4,800.00	47.87	325.600	4,690.34	213.68	463.60	1,909,959.97	2,723,447.15	36.24906998	-107.83212771	
4,800.49	47.92	325.600	4,690.68	213.98	463.39	1,909,960.27	2,723,446.94	36.24907081	-107.83212842	
MNCS_F										
4,850.00	52.87	325.600	4,722.22	245.44	441.85	1,909,991.74	2,723,425.40	36.24915725	-107.83220148	
4,900.00	57.87	325.600	4,750.63	279.38	418.61	1,910,025.67	2,723,402.16	36.24925048	-107.83228029	
4,901.21	57.99	325.600	4,751.27	280.23	418.03	1,910,026.52	2,723,401.58	36.24925280	-107.83228225	
MNCS_G										
4,950.00	62.87	325.600	4,775.33	315.23	394.06	1,910,061.52	2,723,377.61	36.24934896	-107.83236354	
5,000.00	67.87	325.600	4,796.16	352.72	368.39	1,910,099.01	2,723,351.94	36.24945195	-107.83245060	



## Planning Report - Geographic

<b>Database:</b>	DT_Jul1724_v17	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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	
5,021.26	70.00	325.600	4,803.80	369.09	357.18	1,910,115.39	2,723,340.73	36.24949693	-107.83248862	
Begin 10°/100' build/turn										
5,050.00	72.51	324.130	4,813.04	391.34	341.52	1,910,137.64	2,723,325.07	36.24955805	-107.83254173	
5,100.00	76.91	321.665	4,826.22	429.79	312.42	1,910,176.08	2,723,295.98	36.24966367	-107.83264041	
5,132.96	79.83	320.089	4,832.86	454.84	292.05	1,910,201.13	2,723,275.61	36.24973247	-107.83270950	
MNCS_I										
5,150.00	81.33	319.287	4,835.65	467.65	281.18	1,910,213.94	2,723,264.73	36.24976767	-107.83274637	
5,200.00	85.77	316.964	4,841.27	504.63	248.02	1,910,250.92	2,723,231.58	36.24986926	-107.83285882	
5,214.07	87.02	316.316	4,842.15	514.84	238.38	1,910,261.13	2,723,221.94	36.24989730	-107.83289152	
7" Intermediate Casing										
5,242.74	89.57	315.001	4,843.00	535.33	218.36	1,910,281.62	2,723,201.91	36.24995360	-107.83295944	
Begin 89.57° lateral										
5,300.00	89.57	315.001	4,843.44	575.82	177.87	1,910,322.11	2,723,161.42	36.25006482	-107.83309676	
5,400.00	89.57	315.001	4,844.19	646.53	107.16	1,910,392.82	2,723,090.71	36.25025907	-107.83333656	
5,500.00	89.57	315.001	4,844.95	717.24	36.45	1,910,463.53	2,723,020.01	36.25045331	-107.83357638	
5,600.00	89.57	315.001	4,845.70	787.95	-34.26	1,910,534.24	2,722,949.30	36.25064755	-107.83381619	
5,700.00	89.57	315.001	4,846.46	858.66	-104.96	1,910,604.95	2,722,878.59	36.25084180	-107.83405600	
5,800.00	89.57	315.001	4,847.21	929.37	-175.67	1,910,675.66	2,722,807.88	36.25103604	-107.83429581	
5,900.00	89.57	315.001	4,847.97	1,000.08	-246.38	1,910,746.37	2,722,737.17	36.25123028	-107.83453563	
6,000.00	89.57	315.001	4,848.72	1,070.79	-317.09	1,910,817.08	2,722,666.47	36.25142452	-107.83477544	
6,100.00	89.57	315.001	4,849.48	1,141.50	-387.80	1,910,887.79	2,722,595.76	36.25161876	-107.83501526	
6,200.00	89.57	315.001	4,850.23	1,212.20	-458.50	1,910,958.50	2,722,525.05	36.25181300	-107.83525508	
6,300.00	89.57	315.001	4,850.99	1,282.91	-529.21	1,911,029.20	2,722,454.34	36.25200724	-107.83549490	
6,400.00	89.57	315.001	4,851.75	1,353.62	-599.92	1,911,099.91	2,722,383.63	36.25220148	-107.83573472	
6,500.00	89.57	315.001	4,852.50	1,424.33	-670.63	1,911,170.62	2,722,312.93	36.25239572	-107.83597454	
6,600.00	89.57	315.001	4,853.26	1,495.04	-741.34	1,911,241.33	2,722,242.22	36.25258996	-107.83621437	
6,700.00	89.57	315.001	4,854.01	1,565.75	-812.04	1,911,312.04	2,722,171.51	36.25278420	-107.83645419	
6,800.00	89.57	315.001	4,854.77	1,636.46	-882.75	1,911,382.75	2,722,100.80	36.25297843	-107.83669402	
6,900.00	89.57	315.001	4,855.52	1,707.17	-953.46	1,911,453.46	2,722,030.10	36.25317267	-107.83693384	
7,000.00	89.57	315.001	4,856.28	1,777.88	-1,024.17	1,911,524.17	2,721,959.39	36.25336691	-107.83717367	
7,100.00	89.57	315.001	4,857.03	1,848.59	-1,094.88	1,911,594.88	2,721,888.68	36.25356114	-107.83741350	
7,200.00	89.57	315.001	4,857.79	1,919.30	-1,165.58	1,911,665.59	2,721,817.97	36.25375538	-107.83765333	
7,300.00	89.57	315.001	4,858.54	1,990.01	-1,236.29	1,911,736.30	2,721,747.26	36.25394961	-107.83789316	
7,400.00	89.57	315.001	4,859.30	2,060.72	-1,307.00	1,911,807.01	2,721,676.56	36.25414385	-107.83813299	
7,500.00	89.57	315.001	4,860.05	2,131.43	-1,377.71	1,911,877.72	2,721,605.85	36.25433808	-107.83837283	
7,600.00	89.57	315.001	4,860.81	2,202.14	-1,448.42	1,911,948.42	2,721,535.14	36.25453231	-107.83861266	
7,700.00	89.57	315.001	4,861.56	2,272.84	-1,519.12	1,912,019.13	2,721,464.43	36.25472655	-107.83885250	
7,800.00	89.57	315.001	4,862.32	2,343.55	-1,589.83	1,912,089.84	2,721,393.72	36.25492078	-107.83909234	
7,900.00	89.57	315.001	4,863.07	2,414.26	-1,660.54	1,912,160.55	2,721,323.02	36.25511501	-107.83933217	
8,000.00	89.57	315.001	4,863.83	2,484.97	-1,731.25	1,912,231.26	2,721,252.31	36.25530924	-107.83957201	
8,100.00	89.57	315.001	4,864.59	2,555.68	-1,801.96	1,912,301.97	2,721,181.60	36.25550347	-107.83981186	
8,200.00	89.57	315.001	4,865.34	2,626.39	-1,872.66	1,912,372.68	2,721,110.89	36.25569770	-107.84005170	
8,300.00	89.57	315.001	4,866.10	2,697.10	-1,943.37	1,912,443.39	2,721,040.19	36.25589193	-107.84029154	
8,400.00	89.57	315.001	4,866.85	2,767.81	-2,014.08	1,912,514.10	2,720,969.48	36.25608616	-107.84053139	
8,500.00	89.57	315.001	4,867.61	2,838.52	-2,084.79	1,912,584.81	2,720,898.77	36.25628039	-107.84077123	
8,600.00	89.57	315.001	4,868.36	2,909.23	-2,155.50	1,912,655.52	2,720,828.06	36.25647462	-107.84101108	
8,700.00	89.57	315.001	4,869.12	2,979.94	-2,226.20	1,912,726.23	2,720,757.35	36.25666885	-107.84125093	
8,800.00	89.57	315.001	4,869.87	3,050.65	-2,296.91	1,912,796.93	2,720,686.65	36.25686308	-107.84149078	
8,900.00	89.57	315.001	4,870.63	3,121.36	-2,367.62	1,912,867.64	2,720,615.94	36.25705730	-107.84173063	
9,000.00	89.57	315.001	4,871.38	3,192.07	-2,438.33	1,912,938.35	2,720,545.23	36.25725153	-107.84197048	
9,100.00	89.57	315.001	4,872.14	3,262.78	-2,509.04	1,913,009.06	2,720,474.52	36.25744575	-107.84221033	
9,200.00	89.57	315.001	4,872.89	3,333.48	-2,579.74	1,913,079.77	2,720,403.81	36.25763998	-107.84245019	
9,300.00	89.57	315.001	4,873.65	3,404.19	-2,650.45	1,913,150.48	2,720,333.11	36.25783421	-107.84269004	
9,400.00	89.57	315.001	4,874.40	3,474.90	-2,721.16	1,913,221.19	2,720,262.40	36.25802843	-107.84292990	



## Planning Report - Geographic

<b>Database:</b>	DT_Jul1724_v17	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Company:</b>	Enduring Resources LLC	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>North Reference:</b>	Grid
<b>Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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	
9,500.00	89.57	315.001	4,875.16	3,545.61	-2,791.87	1,913,291.90	2,720,191.69	36.25822265	-107.84316975	
9,600.00	89.57	315.001	4,875.92	3,616.32	-2,862.58	1,913,362.61	2,720,120.98	36.25841688	-107.84340961	
9,700.00	89.57	315.001	4,876.67	3,687.03	-2,933.28	1,913,433.32	2,720,050.28	36.25861110	-107.84364947	
9,800.00	89.57	315.001	4,877.43	3,757.74	-3,003.99	1,913,504.03	2,719,979.57	36.25880532	-107.84388933	
9,900.00	89.57	315.001	4,878.18	3,828.45	-3,074.70	1,913,574.74	2,719,908.86	36.25899955	-107.84412920	
10,000.00	89.57	315.001	4,878.94	3,899.16	-3,145.41	1,913,645.44	2,719,838.15	36.25919377	-107.84436906	
10,100.00	89.57	315.001	4,879.69	3,969.87	-3,216.12	1,913,716.15	2,719,767.44	36.25938799	-107.84460893	
10,200.00	89.57	315.001	4,880.45	4,040.58	-3,286.82	1,913,786.86	2,719,696.74	36.25958221	-107.84484879	
10,300.00	89.57	315.001	4,881.20	4,111.29	-3,357.53	1,913,857.57	2,719,626.03	36.25977643	-107.84508866	
10,400.00	89.57	315.001	4,881.96	4,182.00	-3,428.24	1,913,928.28	2,719,555.32	36.25997065	-107.84532853	
10,500.00	89.57	315.001	4,882.71	4,252.71	-3,498.95	1,913,998.99	2,719,484.61	36.26016487	-107.84556840	
10,600.00	89.57	315.001	4,883.47	4,323.42	-3,569.66	1,914,069.70	2,719,413.90	36.26035909	-107.84580827	
10,700.00	89.57	315.001	4,884.22	4,394.12	-3,640.36	1,914,140.41	2,719,343.20	36.26055330	-107.84604814	
10,800.00	89.57	315.001	4,884.98	4,464.83	-3,711.07	1,914,211.12	2,719,272.49	36.26074752	-107.84628801	
10,900.00	89.57	315.001	4,885.73	4,535.54	-3,781.78	1,914,281.83	2,719,201.78	36.26094174	-107.84652789	
11,000.00	89.57	315.001	4,886.49	4,606.25	-3,852.49	1,914,352.54	2,719,131.07	36.26113596	-107.84676776	
11,100.00	89.57	315.001	4,887.24	4,676.96	-3,923.20	1,914,423.25	2,719,060.37	36.26133017	-107.84700764	
11,200.00	89.57	315.001	4,888.00	4,747.67	-3,993.90	1,914,493.96	2,718,989.66	36.26152439	-107.84724752	
11,300.00	89.57	315.001	4,888.76	4,818.38	-4,064.61	1,914,564.66	2,718,918.95	36.26171860	-107.84748740	
11,400.00	89.57	315.001	4,889.51	4,889.09	-4,135.32	1,914,635.37	2,718,848.24	36.26191282	-107.84772728	
11,500.00	89.57	315.001	4,890.27	4,959.80	-4,206.03	1,914,706.08	2,718,777.53	36.26210703	-107.84796716	
11,600.00	89.57	315.001	4,891.02	5,030.51	-4,276.74	1,914,776.79	2,718,706.83	36.26230125	-107.84820704	
11,700.00	89.57	315.001	4,891.78	5,101.22	-4,347.44	1,914,847.50	2,718,636.12	36.26249546	-107.84844692	
11,729.63	89.57	315.001	4,892.00	5,122.17	-4,368.39	1,914,868.45	2,718,615.17	36.26255300	-107.84851800	
PBHL/TD 11729.63 MD 4892.00 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Ponderosa 117 vert	0.00	0.000	4,270.06	105.45	648.11	1,909,851.74	2,723,631.66	36.24877267	-107.83150194	
- plan misses target center by 91.23ft at 4325.80ft MD (4269.94 TVD, 58.04 N, 570.16 E)										
- Point										
Ponderosa 117 POE 295	0.00	0.000	4,808.46	372.03	381.54	1,910,118.33	2,723,365.09	36.24950500	-107.83240600	
- plan misses target center by 23.30ft at 5012.35ft MD (4800.69 TVD, 362.21 N, 361.90 E)										
- Point										
Ponderosa 117 VS=0	0.00	0.000	4,842.00	362.02	362.03	1,910,108.31	2,723,345.58	36.24947749	-107.83247217	
- plan misses target center by 38.85ft at 5025.42ft MD (4805.21 TVD, 372.31 N, 354.97 E)										
- Point										
Ponderosa 117 BHL 232	0.00	0.000	4,892.00	5,122.17	-4,368.39	1,914,868.45	2,718,615.17	36.26255300	-107.84851800	
- plan hits target center										
- Point										

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	
5,214.07	4,842.15	7" Intermediate Casing	7	8-3/4	



## Planning Report - Geographic

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

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
431.00	431.00	Ojo Alamo		0.430	315.001	
522.00	522.00	Kirtland		0.430	315.001	
776.00	776.00	Fruitland		0.430	315.001	
1,179.22	1,178.96	Pictured Cliffs		0.430	315.001	
1,339.64	1,337.86	Lewis		0.430	315.001	
1,547.62	1,541.66	Chacra		0.430	315.001	
2,589.15	2,561.66	Cliff House		0.430	315.001	
2,597.31	2,569.65	Menefee		0.430	315.001	
3,667.40	3,617.63	Point Lookout		0.430	315.001	
3,817.35	3,764.48	Mancos		0.430	315.001	
4,170.14	4,114.29	MNCS_A		0.430	315.001	
4,280.14	4,224.28	MNCS_B		0.430	315.001	
4,360.18	4,304.29	MNCS_C		0.430	315.001	
4,400.44	4,344.32	MNCS_Cms		0.430	315.001	
4,540.78	4,479.59	MNCS_D		0.430	315.001	
4,697.48	4,615.16	MNCS_E		0.430	315.001	
4,800.49	4,690.68	MNCS_F		0.430	315.001	
4,901.21	4,751.27	MNCS_G		0.430	315.001	
5,132.96	4,832.86	MNCS_I		0.430	315.001	

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°/100' build	
1,388.96	1,386.28	4.00	39.27	Begin 11.67° tangent	
3,832.30	3,779.13	54.03	530.90	Begin 3°/100' drop	
4,221.26	4,165.40	58.03	570.17	Begin vertical hold	
4,321.26	4,265.40	58.03	570.17	Begin 10°/100' build	
5,021.26	4,803.80	369.09	357.18	Begin 10°/100' build/turn	
5,242.74	4,843.00	535.33	218.36	Begin 89.57° lateral	
11,729.63	4,892.00	5,122.17	-4,368.39	PBHL/TD 11729.63 MD 4892.00 TVD	





## Anticollision Report

<b>Company:</b>	Enduring Resources LLC	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Reference Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	<b>Database:</b>	DT_Jul1724_v17
<b>Reference Design:</b>	rev0	<b>Offset TVD Reference:</b>	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 1,372.96ft	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	11,729.63	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	19.97	14.41	3.594	CC, ES
Ponderosa 099H - Original Hole - rev0	11,200.00	10,980.21	721.42	482.32	3.017	SF
Ponderosa 111H - Original Hole - rev0	1,095.33	1,096.17	20.03	12.38	2.619	CC
Ponderosa 111H - Original Hole - rev0	1,100.00	1,100.87	20.03	12.35	2.609	ES, SF
Ponderosa 112H - Original Hole - rev0	1,000.00	1,000.00	40.17	33.18	5.747	CC, ES
Ponderosa 112H - Original Hole - rev0	11,729.63	11,598.35	1,200.26	884.50	3.801	SF
Ponderosa 114H - Original Hole - rev0	1,000.00	1,000.00	80.14	73.15	11.464	CC, ES
Ponderosa 114H - Original Hole - rev0	1,100.00	1,097.68	83.49	75.81	10.874	SF
Ponderosa 115H - Original Hole - rev0	1,000.00	1,000.00	139.83	132.84	20.003	CC, ES
Ponderosa 115H - Original Hole - rev0	4,471.01	4,677.69	505.93	470.86	14.428	SF
Ponderosa 116H - Original Hole - rev0	4,904.45	4,909.62	69.65	34.18	1.964	Level 3<2.00, CC, ES, SF
Ponderosa 120H - Original Hole - rev0	1,000.00	1,000.00	100.10	93.11	14.321	CC, ES
Ponderosa 120H - Original Hole - rev0	1,300.00	1,300.63	115.66	106.54	12.681	SF
Ponderosa 136H - Original Hole - rev0	500.00	500.00	59.93	56.53	17.598	CC, ES
Ponderosa 136H - Original Hole - rev0	700.00	694.33	68.50	63.70	14.280	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:					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	125.690	-11.65	16.22	19.97					
100.00	100.00	100.00	100.00	0.27	0.27	125.690	-11.65	16.22	19.97	19.43	0.54	37.134		
200.00	200.00	200.00	200.00	0.63	0.63	125.690	-11.65	16.22	19.97	18.71	1.25	15.915		
300.00	300.00	300.00	300.00	0.99	0.99	125.690	-11.65	16.22	19.97	18.00	1.97	10.127		
400.00	400.00	400.00	400.00	1.34	1.34	125.690	-11.65	16.22	19.97	17.28	2.69	7.427		
500.00	500.00	500.00	500.00	1.70	1.70	125.690	-11.65	16.22	19.97	16.56	3.41	5.863		
600.00	600.00	600.00	600.00	2.06	2.06	125.690	-11.65	16.22	19.97	15.84	4.12	4.844		
700.00	700.00	700.00	700.00	2.42	2.42	125.690	-11.65	16.22	19.97	15.13	4.84	4.126		
800.00	800.00	800.00	800.00	2.78	2.78	125.690	-11.65	16.22	19.97	14.41	5.56	3.594	CC, ES	
900.00	900.00	899.38	899.34	3.14	3.13	119.707	-10.60	18.58	21.40	15.14	6.26	3.417		
1,000.00	1,000.00	998.23	997.88	3.50	3.48	106.287	-7.48	25.61	26.77	19.81	6.96	3.848		
1,100.00	1,099.95	1,096.36	1,095.17	3.85	3.84	10.075	-2.35	37.20	35.02	27.41	7.61	4.600		
1,200.00	1,199.63	1,193.92	1,191.13	4.20	4.22	0.864	4.76	53.22	43.81	35.57	8.23	5.320		

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 099H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	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
1,300.00	1,298.77	1,290.88	1,285.50	4.56	4.62	-6.791	13.78	73.57	53.14	44.31	8.83	6.015	
1,400.00	1,397.09	1,387.23	1,378.02	4.94	5.06	-13.442	24.65	98.10	63.13	53.71	9.42	6.703	
1,500.00	1,495.02	1,482.60	1,468.16	5.34	5.55	-18.670	37.26	126.55	76.81	66.79	10.01	7.671	
1,600.00	1,592.96	1,577.42	1,556.13	5.75	6.09	-22.071	51.59	158.88	95.82	85.17	10.65	9.000	
1,700.00	1,690.89	1,673.91	1,644.74	6.18	6.69	-24.254	67.07	193.81	117.48	106.09	11.38	10.319	
1,800.00	1,788.82	1,771.46	1,734.31	6.61	7.33	-25.776	82.72	229.11	139.26	127.08	12.18	11.437	
1,900.00	1,886.76	1,869.00	1,823.88	7.05	7.99	-26.886	98.37	264.42	161.11	148.13	12.98	12.412	
2,000.00	1,984.69	1,966.54	1,913.45	7.50	8.66	-27.731	114.02	299.72	183.00	169.21	13.79	13.266	
2,100.00	2,082.62	2,064.08	2,003.03	7.96	9.35	-28.396	129.67	335.03	204.93	190.31	14.62	14.019	
2,200.00	2,180.56	2,161.63	2,092.60	8.41	10.05	-28.932	145.32	370.33	226.87	211.42	15.45	14.685	
2,300.00	2,278.49	2,259.17	2,182.17	8.87	10.76	-29.373	160.97	405.64	248.83	232.55	16.29	15.279	
2,400.00	2,376.42	2,356.71	2,271.74	9.34	11.47	-29.743	176.62	440.94	270.80	253.68	17.13	15.810	
2,500.00	2,474.36	2,454.25	2,361.32	9.81	12.20	-30.057	192.27	476.25	292.79	274.81	17.98	16.287	
2,600.00	2,572.29	2,551.80	2,450.89	10.27	12.92	-30.328	207.92	511.55	314.77	295.95	18.83	16.717	
2,700.00	2,670.22	2,649.34	2,540.46	10.75	13.65	-30.563	223.57	546.86	336.77	317.08	19.68	17.108	
2,800.00	2,768.16	2,746.88	2,630.03	11.22	14.38	-30.769	239.22	582.16	358.77	338.22	20.54	17.464	
2,900.00	2,866.09	2,844.42	2,719.61	11.69	15.12	-30.952	254.87	617.47	380.77	359.37	21.41	17.789	
3,000.00	2,964.02	2,941.97	2,809.18	12.17	15.86	-31.114	270.52	652.77	402.78	380.51	22.27	18.086	
3,100.00	3,061.96	3,039.51	2,898.75	12.65	16.60	-31.260	286.17	688.08	424.79	401.65	23.14	18.360	
3,200.00	3,159.89	3,137.05	2,988.32	13.12	17.34	-31.391	301.82	723.38	446.80	422.79	24.01	18.613	
3,300.00	3,257.82	3,234.59	3,077.90	13.60	18.09	-31.510	317.47	758.69	468.81	443.94	24.88	18.846	
3,400.00	3,355.76	3,332.14	3,167.47	14.08	18.83	-31.619	333.12	793.99	490.83	465.08	25.75	19.063	
3,500.00	3,453.69	3,429.68	3,257.04	14.56	19.58	-31.718	348.76	829.30	512.84	486.22	26.62	19.264	
3,600.00	3,551.62	3,527.22	3,346.61	15.04	20.33	-31.809	364.41	864.60	534.86	507.36	27.50	19.452	
3,700.00	3,649.56	3,624.76	3,436.18	15.53	21.08	-31.892	380.06	899.91	556.88	528.51	28.37	19.628	
3,800.00	3,747.49	3,722.31	3,525.76	16.01	21.82	-31.970	395.71	935.21	578.90	549.65	29.25	19.792	
3,900.00	3,845.65	3,819.62	3,615.12	16.48	22.57	-32.240	411.33	970.43	601.91	571.80	30.11	19.987	
4,000.00	3,944.63	3,915.84	3,703.47	16.90	23.32	-32.451	426.76	1,005.26	628.99	598.06	30.92	20.339	
4,100.00	4,044.22	4,017.85	3,797.20	17.28	24.09	-32.486	443.26	1,041.97	660.26	628.50	31.76	20.788	
4,200.00	4,144.14	4,118.86	3,954.38	17.61	25.08	-34.153	464.84	1,077.53	689.73	656.47	33.26	20.740	
4,300.00	4,244.14	4,343.04	4,100.29	17.91	25.59	45.874	544.31	1,071.52	713.10	678.51	34.59	20.616	
4,400.00	4,343.89	4,479.68	4,215.33	18.18	25.79	73.838	607.93	1,035.49	730.35	694.48	35.87	20.361	
4,500.00	4,441.25	4,600.43	4,302.97	18.41	25.84	68.066	670.62	981.47	741.09	704.05	37.04	20.009	
4,600.00	4,533.27	4,707.14	4,366.19	18.58	25.80	63.331	728.73	918.39	745.67	707.62	38.05	19.599	
4,700.00	4,617.15	4,801.92	4,409.28	18.72	25.73	59.512	780.81	852.10	744.42	705.60	38.83	19.173	
4,800.00	4,690.34	4,850.00	4,426.04	18.81	25.69	57.990	807.13	815.54	738.85	700.15	38.71	19.088	
4,900.00	4,750.63	4,900.00	4,439.80	18.86	25.65	56.785	836.30	777.35	731.75	693.18	38.57	18.972	
5,000.00	4,796.16	4,950.00	4,449.76	18.89	25.62	56.060	867.54	739.63	723.09	684.53	38.56	18.752	
5,100.00	4,826.22	5,000.00	4,455.85	19.04	25.58	56.924	900.63	702.67	714.95	676.09	38.86	18.400	
5,199.76	4,841.25	5,048.72	4,458.00	19.86	25.55	57.362	934.41	667.64	712.52	672.88	39.64	17.974	
5,200.00	4,841.27	5,048.72	4,458.00	19.86	25.55	57.363	934.41	667.64	712.52	672.88	39.64	17.974	
5,300.00	4,843.44	5,143.68	4,458.54	20.95	25.47	57.315	1,001.56	600.50	712.75	671.20	41.55	17.154	
5,400.00	4,844.19	5,243.68	4,459.11	22.21	25.40	57.302	1,072.27	529.79	712.85	669.04	43.80	16.273	
5,500.00	4,844.95	5,343.68	4,459.69	23.62	25.58	57.290	1,142.98	459.08	712.95	666.78	46.17	15.442	
5,600.00	4,845.70	5,443.68	4,460.26	25.15	26.95	57.278	1,213.69	388.37	713.04	664.22	48.82	14.604	
5,700.00	4,846.46	5,543.68	4,460.83	26.79	28.69	57.265	1,284.40	317.66	713.14	661.51	51.64	13.811	
5,800.00	4,847.21	5,643.68	4,461.41	28.51	30.51	57.253	1,355.11	246.95	713.24	658.67	54.57	13.070	
5,900.00	4,847.97	5,743.68	4,461.98	30.31	32.38	57.241	1,425.82	176.25	713.34	655.73	57.61	12.382	
6,000.00	4,848.72	5,843.68	4,462.55	32.17	34.30	57.229	1,496.53	105.54	713.44	652.70	60.74	11.745	
6,100.00	4,849.48	5,943.68	4,463.13	34.08	36.27	57.216	1,567.24	34.83	713.54	649.59	63.95	11.157	
6,200.00	4,850.23	6,043.68	4,463.70	36.04	38.26	57.204	1,637.95	-35.88	713.64	646.41	67.22	10.616	
6,300.00	4,850.99	6,143.68	4,464.27	38.03	40.29	57.192	1,708.66	-106.59	713.74	643.19	70.55	10.117	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 099H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	0.00 ft
<b>Rule Assigned:</b>													
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference</b>	<b>Offset</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
6,400.00	4,851.75	6,243.68	4,464.85	40.05	42.35	57.180	1,779.37	-177.30	713.84	639.92	73.92	9.657	
6,500.00	4,852.50	6,343.68	4,465.42	42.10	44.42	57.167	1,850.08	-248.01	713.93	636.61	77.32	9.233	
6,600.00	4,853.26	6,443.68	4,465.99	44.18	46.52	57.155	1,920.79	-318.71	714.03	633.27	80.76	8.841	
6,700.00	4,854.01	6,543.68	4,466.57	46.27	48.63	57.143	1,991.50	-389.42	714.13	629.91	84.23	8.479	
6,800.00	4,854.77	6,643.68	4,467.14	48.38	50.76	57.131	2,062.21	-460.13	714.23	626.52	87.71	8.143	
6,900.00	4,855.52	6,743.68	4,467.71	50.51	52.90	57.118	2,132.92	-530.84	714.33	623.11	91.22	7.831	
7,000.00	4,856.28	6,843.68	4,468.29	52.66	55.06	57.106	2,203.63	-601.55	714.43	619.69	94.74	7.541	
7,100.00	4,857.03	6,943.68	4,468.86	54.81	57.22	57.094	2,274.34	-672.26	714.53	616.26	98.27	7.271	
7,200.00	4,857.79	7,043.68	4,469.43	56.98	59.40	57.082	2,345.05	-742.96	714.63	612.82	101.81	7.019	
7,300.00	4,858.54	7,143.68	4,470.01	59.15	61.58	57.069	2,415.76	-813.67	714.73	609.37	105.36	6.784	
7,400.00	4,859.30	7,243.68	4,470.58	61.33	63.77	57.057	2,486.48	-884.38	714.83	605.91	108.92	6.563	
7,500.00	4,860.05	7,343.68	4,471.15	63.53	65.97	57.045	2,557.19	-955.09	714.93	602.45	112.48	6.356	
7,600.00	4,860.81	7,443.68	4,471.73	65.73	68.17	57.033	2,627.90	-1,025.80	715.03	598.99	116.04	6.162	
7,700.00	4,861.56	7,543.68	4,472.30	67.93	70.38	57.021	2,698.61	-1,096.51	715.13	595.53	119.60	5.979	
7,800.00	4,862.32	7,643.68	4,472.87	70.14	72.59	57.008	2,769.32	-1,167.21	715.23	592.06	123.16	5.807	
7,900.00	4,863.07	7,743.68	4,473.45	72.36	74.81	56.996	2,840.03	-1,237.92	715.33	588.60	126.72	5.645	
8,000.00	4,863.83	7,843.68	4,474.02	74.58	77.04	56.984	2,910.74	-1,308.63	715.43	585.14	130.29	5.491	
8,100.00	4,864.59	7,943.68	4,474.59	76.80	79.26	56.972	2,981.45	-1,379.34	715.52	581.68	133.84	5.346	
8,200.00	4,865.34	8,043.68	4,475.17	79.03	81.50	56.960	3,052.16	-1,450.05	715.62	578.23	137.40	5.208	
8,300.00	4,866.10	8,143.68	4,475.74	81.26	83.73	56.947	3,122.87	-1,520.76	715.72	574.78	140.95	5.078	
8,400.00	4,866.85	8,243.68	4,476.31	83.50	85.97	56.935	3,193.58	-1,591.46	715.82	571.33	144.49	4.954	
8,500.00	4,867.61	8,343.68	4,476.89	85.74	88.21	56.923	3,264.29	-1,662.17	715.92	567.89	148.03	4.836	
8,600.00	4,868.36	8,443.68	4,477.46	87.98	90.45	56.911	3,335.00	-1,732.88	716.02	564.46	151.57	4.724	
8,700.00	4,869.12	8,543.68	4,478.03	90.23	92.70	56.899	3,405.71	-1,803.59	716.12	561.03	155.09	4.617	
8,800.00	4,869.87	8,643.68	4,478.61	92.47	94.95	56.886	3,476.42	-1,874.30	716.22	557.61	158.61	4.516	
8,900.00	4,870.63	8,743.67	4,479.18	94.72	97.20	56.874	3,547.13	-1,945.01	716.32	554.20	162.13	4.418	
9,000.00	4,871.38	8,843.67	4,479.75	96.98	99.45	56.862	3,617.84	-2,015.71	716.42	550.79	165.63	4.325	
9,100.00	4,872.14	8,943.67	4,480.33	99.23	101.70	56.850	3,688.55	-2,086.42	716.52	547.39	169.13	4.237	
9,200.00	4,872.89	9,043.67	4,480.90	101.48	103.96	56.838	3,759.26	-2,157.13	716.62	544.01	172.62	4.152	
9,300.00	4,873.65	9,143.67	4,481.47	103.74	106.21	56.826	3,829.97	-2,227.84	716.72	540.63	176.10	4.070	
9,400.00	4,874.40	9,243.67	4,482.05	106.00	108.47	56.813	3,900.68	-2,298.55	716.82	537.26	179.57	3.992	
9,500.00	4,875.16	9,343.67	4,482.62	108.26	110.73	56.801	3,971.39	-2,369.26	716.92	533.90	183.03	3.917	
9,600.00	4,875.92	9,443.67	4,483.19	110.52	113.00	56.789	4,042.10	-2,439.97	717.02	530.55	186.48	3.845	
9,700.00	4,876.67	9,543.67	4,483.76	112.79	115.26	56.777	4,112.81	-2,510.67	717.12	527.21	189.92	3.776	
9,800.00	4,877.43	9,643.67	4,484.34	115.05	117.52	56.765	4,183.53	-2,581.38	717.22	523.88	193.35	3.710	
9,900.00	4,878.18	9,743.67	4,484.91	117.32	119.79	56.753	4,254.24	-2,652.09	717.32	520.56	196.77	3.646	
10,000.00	4,878.94	9,843.67	4,485.48	119.58	122.06	56.741	4,324.95	-2,722.80	717.42	517.25	200.17	3.584	
10,100.00	4,879.69	9,943.67	4,486.06	121.85	124.32	56.728	4,395.66	-2,793.51	717.52	513.95	203.57	3.525	
10,200.00	4,880.45	10,043.67	4,486.63	124.12	126.59	56.716	4,466.37	-2,864.22	717.62	510.67	206.96	3.468	
10,300.00	4,881.20	10,143.67	4,487.20	126.39	128.86	56.704	4,537.08	-2,934.92	717.72	507.39	210.33	3.412	
10,400.00	4,881.96	10,243.67	4,487.78	128.66	131.13	56.692	4,607.79	-3,005.63	717.82	504.13	213.69	3.359	
10,500.00	4,882.71	10,343.67	4,488.35	130.93	133.40	56.680	4,678.50	-3,076.34	717.93	500.88	217.04	3.308	
10,600.00	4,883.47	10,443.67	4,488.92	133.21	135.68	56.668	4,749.21	-3,147.05	718.03	497.65	220.38	3.258	
10,700.00	4,884.22	10,543.67	4,489.50	135.48	137.95	56.656	4,819.92	-3,217.76	718.13	494.42	223.70	3.210	
10,800.00	4,884.98	10,643.67	4,490.07	137.75	140.22	56.644	4,890.63	-3,288.47	718.23	491.21	227.01	3.164	
10,900.00	4,885.73	10,743.67	4,490.64	140.03	142.50	56.631	4,961.34	-3,359.17	718.33	488.01	230.31	3.119	
11,000.00	4,886.49	10,843.67	4,491.22	142.30	144.77	56.619	5,032.05	-3,429.88	718.43	484.83	233.60	3.076	
11,100.00	4,887.24	10,943.67	4,491.79	144.58	147.05	56.607	5,102.76	-3,500.59	718.53	481.66	236.87	3.033	
11,200.00	4,888.00	10,980.21	4,492.00	146.86	147.88	56.603	5,128.60	-3,526.43	721.42	482.32	239.10	3.017 SF	
11,300.00	4,888.76	10,980.21	4,492.00	149.13	147.88	56.603	5,128.60	-3,526.43	737.08	501.42	235.66	3.128	
11,400.00	4,889.51	10,980.21	4,492.00	151.41	147.88	56.603	5,128.60	-3,526.43	765.59	538.37	227.22	3.369	
11,500.00	4,890.27	10,980.21	4,492.00	153.69	147.88	56.603	5,128.60	-3,526.43	805.58	589.83	215.76	3.734	

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 117H
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 117H	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		Offset Wellbore Centre			Rule Assigned:				Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)					
11,600.00	4,891.02	10,980.21	4,492.00	155.97	147.88	56.603	5,128.60	-3,526.43	855.45	652.38	203.07	4.213				
11,700.00	4,891.78	10,980.21	4,492.00	158.25	147.88	56.603	5,128.60	-3,526.43	913.58	723.18	190.41	4.798				
11,729.63	4,892.00	10,980.21	4,492.00	158.92	147.88	56.603	5,128.60	-3,526.43	932.17	745.40	186.77	4.991				



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 111H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	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	-54.798	11.65	-16.51	20.21				
100.00	100.00	100.00	100.00	0.27	0.27	-54.798	11.65	-16.51	20.21	19.67	0.54	37.581	
200.00	200.00	200.00	200.00	0.63	0.63	-54.798	11.65	-16.51	20.21	18.95	1.25	16.106	
300.00	300.00	300.00	300.00	0.99	0.99	-54.798	11.65	-16.51	20.21	18.24	1.97	10.249	
400.00	400.00	400.00	400.00	1.34	1.34	-54.798	11.65	-16.51	20.21	17.52	2.69	7.516	
500.00	500.00	500.00	500.00	1.70	1.70	-54.798	11.65	-16.51	20.21	16.80	3.41	5.934	
600.00	600.00	600.00	600.00	2.06	2.06	-54.798	11.65	-16.51	20.21	16.08	4.12	4.902	
700.00	700.00	700.00	700.00	2.42	2.42	-54.798	11.65	-16.51	20.21	15.37	4.84	4.176	
800.00	800.00	800.00	800.00	2.78	2.78	-54.798	11.65	-16.51	20.21	14.65	5.56	3.637	
900.00	900.00	900.00	900.00	3.14	3.14	-54.798	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	-54.798	11.65	-16.51	20.21	13.22	6.99	2.891	
1,095.33	1,095.29	1,096.17	1,096.13	3.83	3.82	-146.612	9.52	-15.37	20.03	12.38	7.65	2.619 CC	
1,100.00	1,099.95	1,100.87	1,100.82	3.85	3.84	-147.379	9.30	-15.25	20.03	12.35	7.68	2.609 ES, SF	
1,200.00	1,199.63	1,201.22	1,200.85	4.20	4.18	-170.906	2.32	-11.50	21.98	13.63	8.35	2.633	
1,300.00	1,298.77	1,300.55	1,299.31	4.56	4.52	163.816	-9.15	-5.35	30.97	21.92	9.06	3.420	
1,400.00	1,397.09	1,398.59	1,395.82	4.94	4.87	148.695	-24.33	2.80	48.10	38.32	9.78	4.916	
1,500.00	1,495.02	1,496.28	1,491.88	5.34	5.24	142.337	-40.02	11.22	68.50	57.98	10.52	6.513	
1,600.00	1,592.96	1,593.98	1,587.94	5.75	5.63	138.911	-55.71	19.64	89.33	78.06	11.27	7.925	
1,700.00	1,690.89	1,691.68	1,684.00	6.18	6.02	136.783	-71.39	28.06	110.36	98.31	12.05	9.160	
1,800.00	1,788.82	1,789.38	1,780.07	6.61	6.43	135.337	-87.08	36.48	131.48	118.64	12.84	10.243	
1,900.00	1,886.76	1,887.08	1,876.13	7.05	6.84	134.291	-102.77	44.90	152.66	139.02	13.64	11.194	
2,000.00	1,984.69	1,984.78	1,972.19	7.50	7.26	133.501	-118.46	53.31	173.87	159.42	14.45	12.033	
2,100.00	2,082.62	2,082.48	2,068.25	7.96	7.68	132.882	-134.15	61.73	195.12	179.85	15.27	12.778	
2,200.00	2,180.56	2,180.17	2,164.32	8.41	8.11	132.385	-149.83	70.15	216.38	200.28	16.10	13.441	
2,300.00	2,278.49	2,277.87	2,260.38	8.87	8.53	131.976	-165.52	78.57	237.65	220.72	16.93	14.036	
2,400.00	2,376.42	2,375.57	2,356.44	9.34	8.97	131.635	-181.21	86.99	258.93	241.16	17.77	14.571	
2,500.00	2,474.36	2,473.27	2,452.51	9.81	9.40	131.346	-196.90	95.41	280.22	261.60	18.61	15.054	
2,600.00	2,572.29	2,570.97	2,548.57	10.27	9.84	131.097	-212.58	103.83	301.51	282.05	19.46	15.493	
2,700.00	2,670.22	2,668.67	2,644.63	10.75	10.28	130.882	-228.27	112.25	322.81	302.50	20.31	15.893	
2,800.00	2,768.16	2,766.37	2,740.69	11.22	10.72	130.693	-243.96	120.67	344.12	322.95	21.17	16.258	
2,900.00	2,866.09	2,864.06	2,836.76	11.69	11.16	130.526	-259.65	129.09	365.42	343.40	22.02	16.593	
3,000.00	2,964.02	2,961.76	2,932.82	12.17	11.61	130.377	-275.34	137.51	386.73	363.85	22.88	16.902	
3,100.00	3,061.96	3,059.46	3,028.88	12.65	12.05	130.244	-291.02	145.93	408.04	384.30	23.74	17.187	
3,200.00	3,159.89	3,157.16	3,124.94	13.12	12.50	130.124	-306.71	154.35	429.36	404.75	24.60	17.450	
3,300.00	3,257.82	3,263.12	3,229.40	13.60	12.97	130.194	-322.32	162.73	450.03	424.50	25.53	17.628	
3,400.00	3,355.76	3,372.94	3,338.50	14.08	13.41	130.926	-333.27	168.60	468.32	441.88	26.43	17.716	
3,500.00	3,453.69	3,482.84	3,448.22	14.56	13.80	132.281	-338.68	171.51	484.29	457.01	27.27	17.757	
3,600.00	3,551.62	3,586.25	3,551.62	15.04	14.12	134.004	-339.30	171.84	498.53	470.52	28.01	17.796	
3,700.00	3,649.56	3,684.19	3,649.56	15.53	14.42	135.613	-339.30	171.84	512.94	484.23	28.71	17.865	
3,800.00	3,747.49	3,782.12	3,747.49	16.01	14.71	137.135	-339.30	171.84	527.73	498.32	29.41	17.946	
3,900.00	3,845.65	3,880.28	3,845.65	16.48	15.01	138.682	-339.30	171.84	541.97	511.88	30.09	18.009	
4,000.00	3,944.63	3,986.48	3,951.51	16.90	15.30	140.604	-334.18	167.48	552.21	521.46	30.74	17.963	
4,100.00	4,044.22	4,087.48	4,049.44	17.28	15.50	143.758	-315.83	151.83	557.97	526.76	31.21	17.878	
4,200.00	4,144.14	4,177.69	4,132.15	17.61	15.63	147.664	-288.60	128.61	561.39	529.88	31.51	17.816	
4,300.00	4,244.14	4,255.62	4,198.33	17.91	15.74	-123.967	-257.37	101.98	566.37	534.75	31.61	17.916	
4,400.00	4,343.89	4,323.66	4,251.10	18.18	15.85	-84.596	-224.74	74.16	578.02	546.55	31.47	18.366	
4,500.00	4,441.25	4,388.78	4,296.51	18.41	15.98	-79.450	-189.25	43.91	595.53	564.39	31.14	19.126	
4,600.00	4,533.27	4,450.00	4,334.12	18.58	16.15	-74.623	-152.52	12.59	616.86	586.19	30.67	20.112	
4,700.00	4,617.15	4,513.57	4,367.49	18.72	16.40	-70.073	-111.37	-22.49	640.12	609.86	30.26	21.153	
4,800.00	4,690.34	4,574.12	4,393.52	18.81	16.71	-66.163	-69.80	-57.93	663.67	633.70	29.96	22.149	
4,900.00	4,750.63	4,633.85	4,413.42	18.86	17.10	-62.892	-26.97	-94.45	686.14	656.23	29.91	22.937	
5,000.00	4,796.16	4,700.00	4,428.48	18.89	17.61	-60.217	22.02	-136.22	706.53	676.24	30.28	23.331	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 111H - Original Hole - rev0													<b>Offset Site Error:</b> 0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b> 0.00 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>			<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum</b>	<b>Separation</b>	<b>Warning</b>
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Separation (ft)</b>	<b>Factor</b>	
5,100.00	4,826.22	4,750.00	4,434.89	19.04	18.07	-57.737	59.75	-168.38	721.97	691.12	30.85	23.401	
5,200.00	4,841.27	4,814.86	4,437.08	19.86	18.73	-56.218	108.99	-210.50	728.11	696.25	31.86	22.850	
5,300.00	4,843.44	4,900.00	4,437.67	20.95	19.71	-55.950	171.92	-267.84	725.56	692.09	33.47	21.678	
5,372.72	4,843.99	4,946.24	4,438.00	21.86	20.31	-55.924	205.01	-300.13	724.62	689.96	34.66	20.904	
5,400.00	4,844.19	4,973.32	4,438.19	22.21	20.68	-55.923	224.16	-319.28	724.63	689.36	35.27	20.548	
5,500.00	4,844.95	5,073.32	4,438.90	23.62	22.16	-55.920	294.87	-389.99	724.66	686.99	37.66	19.240	
5,600.00	4,845.70	5,173.32	4,439.60	25.15	23.76	-55.916	365.58	-460.70	724.68	684.40	40.28	17.992	
5,700.00	4,846.46	5,273.32	4,440.31	26.79	25.46	-55.913	436.29	-531.40	724.71	681.64	43.07	16.827	
5,800.00	4,847.21	5,373.32	4,441.01	28.51	27.26	-55.910	507.00	-602.11	724.74	678.73	46.01	15.753	
5,900.00	4,847.97	5,473.32	4,441.72	30.31	29.12	-55.907	577.71	-672.82	724.76	675.70	49.06	14.773	
6,000.00	4,848.72	5,573.32	4,442.42	32.17	31.05	-55.903	648.42	-743.52	724.79	672.58	52.21	13.883	
6,100.00	4,849.48	5,673.32	4,443.13	34.08	33.02	-55.900	719.13	-814.23	724.82	669.38	55.43	13.076	
6,200.00	4,850.23	5,773.32	4,443.83	36.04	35.03	-55.897	789.85	-884.94	724.84	666.12	58.72	12.344	
6,300.00	4,850.99	5,873.32	4,444.54	38.03	37.07	-55.893	860.56	-955.65	724.87	662.81	62.06	11.681	
6,400.00	4,851.75	5,973.32	4,445.25	40.05	39.14	-55.890	931.27	-1,026.35	724.90	659.46	65.44	11.078	
6,500.00	4,852.50	6,073.32	4,445.95	42.10	41.24	-55.887	1,001.98	-1,097.06	724.92	656.07	68.85	10.529	
6,600.00	4,853.26	6,173.32	4,446.66	44.18	43.35	-55.883	1,072.69	-1,167.77	724.95	652.66	72.29	10.028	
6,700.00	4,854.01	6,273.32	4,447.36	46.27	45.49	-55.880	1,143.40	-1,238.48	724.98	649.22	75.76	9.569	
6,800.00	4,854.77	6,373.32	4,448.07	48.38	47.64	-55.877	1,214.11	-1,309.18	725.00	645.76	79.24	9.149	
6,900.00	4,855.52	6,473.32	4,448.77	50.51	49.80	-55.873	1,284.82	-1,379.89	725.03	642.29	82.74	8.763	
7,000.00	4,856.28	6,573.32	4,449.48	52.66	51.97	-55.870	1,355.53	-1,450.60	725.06	638.81	86.25	8.406	
7,100.00	4,857.03	6,673.32	4,450.18	54.81	54.15	-55.867	1,426.24	-1,521.30	725.08	635.31	89.77	8.077	
7,200.00	4,857.79	6,773.32	4,450.89	56.98	56.35	-55.863	1,496.95	-1,592.01	725.11	631.81	93.30	7.772	
7,300.00	4,858.54	6,873.32	4,451.60	59.15	58.55	-55.860	1,567.66	-1,662.72	725.14	628.31	96.83	7.489	
7,400.00	4,859.30	6,973.32	4,452.30	61.33	60.75	-55.857	1,638.37	-1,733.43	725.16	624.80	100.36	7.226	
7,500.00	4,860.05	7,073.32	4,453.01	63.53	62.97	-55.853	1,709.08	-1,804.13	725.19	621.29	103.90	6.980	
7,600.00	4,860.81	7,173.32	4,453.71	65.73	65.19	-55.850	1,779.79	-1,874.84	725.22	617.78	107.43	6.750	
7,700.00	4,861.56	7,273.32	4,454.42	67.93	67.41	-55.847	1,850.50	-1,945.55	725.24	614.27	110.97	6.536	
7,800.00	4,862.32	7,373.32	4,455.12	70.14	69.64	-55.844	1,921.21	-2,016.25	725.27	610.76	114.50	6.334	
7,900.00	4,863.07	7,473.32	4,455.83	72.36	71.87	-55.840	1,991.92	-2,086.96	725.30	607.26	118.04	6.145	
8,000.00	4,863.83	7,573.32	4,456.53	74.58	74.11	-55.837	2,062.64	-2,157.67	725.32	603.76	121.57	5.966	
8,100.00	4,864.59	7,673.32	4,457.24	76.80	76.35	-55.834	2,133.35	-2,228.38	725.35	600.26	125.09	5.799	
8,200.00	4,865.34	7,773.32	4,457.95	79.03	78.59	-55.830	2,204.06	-2,299.08	725.38	596.77	128.61	5.640	
8,300.00	4,866.10	7,873.32	4,458.65	81.26	80.84	-55.827	2,274.77	-2,369.79	725.40	593.28	132.13	5.490	
8,400.00	4,866.85	7,973.32	4,459.36	83.50	83.09	-55.824	2,345.48	-2,440.50	725.43	589.79	135.64	5.348	
8,500.00	4,867.61	8,073.32	4,460.06	85.74	85.34	-55.820	2,416.19	-2,511.21	725.46	586.32	139.14	5.214	
8,600.00	4,868.36	8,173.32	4,460.77	87.98	87.59	-55.817	2,486.90	-2,581.91	725.48	582.85	142.64	5.086	
8,700.00	4,869.12	8,273.32	4,461.47	90.23	89.85	-55.814	2,557.61	-2,652.62	725.51	579.38	146.13	4.965	
8,800.00	4,869.87	8,373.32	4,462.18	92.47	92.11	-55.810	2,628.32	-2,723.33	725.54	575.93	149.61	4.850	
8,900.00	4,870.63	8,473.32	4,462.88	94.72	94.37	-55.807	2,699.03	-2,794.03	725.56	572.48	153.08	4.740	
9,000.00	4,871.38	8,573.32	4,463.59	96.98	96.63	-55.804	2,769.74	-2,864.74	725.59	569.04	156.55	4.635	
9,100.00	4,872.14	8,673.32	4,464.30	99.23	98.89	-55.800	2,840.45	-2,935.45	725.62	565.61	160.01	4.535	
9,200.00	4,872.89	8,773.32	4,465.00	101.48	101.16	-55.797	2,911.16	-3,006.16	725.64	562.19	163.45	4.439	
9,300.00	4,873.65	8,873.32	4,465.71	103.74	103.42	-55.794	2,981.87	-3,076.86	725.67	558.78	166.89	4.348	
9,400.00	4,874.40	8,973.32	4,466.41	106.00	105.69	-55.791	3,052.58	-3,147.57	725.70	555.37	170.32	4.261	
9,500.00	4,875.16	9,073.32	4,467.12	108.26	107.96	-55.787	3,123.29	-3,218.28	725.72	551.98	173.74	4.177	
9,600.00	4,875.92	9,173.32	4,467.82	110.52	110.23	-55.784	3,194.00	-3,288.99	725.75	548.60	177.15	4.097	
9,700.00	4,876.67	9,273.32	4,468.53	112.79	112.50	-55.781	3,264.72	-3,359.69	725.78	545.22	180.55	4.020	
9,800.00	4,877.43	9,373.32	4,469.24	115.05	114.77	-55.777	3,335.43	-3,430.40	725.81	541.86	183.94	3.946	
9,900.00	4,878.18	9,473.32	4,469.94	117.32	117.04	-55.774	3,406.14	-3,501.11	725.83	538.51	187.32	3.875	
10,000.00	4,878.94	9,573.32	4,470.65	119.58	119.32	-55.771	3,476.85	-3,571.81	725.86	535.17	190.69	3.806	
10,100.00	4,879.69	9,673.32	4,471.35	121.85	121.59	-55.767	3,547.56	-3,642.52	725.89	531.84	194.05	3.741	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 111H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	0.00 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>		<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>			
10,200.00	4,880.45	9,773.32	4,472.06	124.12	123.87	-55.764	3,618.27	-3,713.23	725.91	528.52	197.40	3.677	
10,300.00	4,881.20	9,873.32	4,472.76	126.39	126.14	-55.761	3,688.98	-3,783.94	725.94	525.21	200.73	3.616	
10,400.00	4,881.96	9,973.32	4,473.47	128.66	128.42	-55.757	3,759.69	-3,854.64	725.97	521.91	204.05	3.558	
10,500.00	4,882.71	10,073.32	4,474.17	130.93	130.70	-55.754	3,830.40	-3,925.35	725.99	518.63	207.36	3.501	
10,600.00	4,883.47	10,173.32	4,474.88	133.21	132.97	-55.751	3,901.11	-3,996.06	726.02	515.36	210.66	3.446	
10,700.00	4,884.22	10,273.32	4,475.59	135.48	135.25	-55.748	3,971.82	-4,066.77	726.05	512.10	213.95	3.394	
10,800.00	4,884.98	10,373.32	4,476.29	137.75	137.53	-55.744	4,042.53	-4,137.47	726.07	508.85	217.23	3.342	
10,900.00	4,885.73	10,473.32	4,477.00	140.03	139.81	-55.741	4,113.24	-4,208.18	726.10	505.61	220.49	3.293	
11,000.00	4,886.49	10,573.32	4,477.70	142.30	142.09	-55.738	4,183.95	-4,278.89	726.13	502.39	223.74	3.245	
11,100.00	4,887.24	10,673.32	4,478.41	144.58	144.37	-55.734	4,254.66	-4,349.59	726.15	499.18	226.98	3.199	
11,200.00	4,888.00	10,773.32	4,479.11	146.86	146.65	-55.731	4,325.37	-4,420.30	726.18	495.98	230.20	3.155	
11,300.00	4,888.76	10,873.32	4,479.82	149.13	148.93	-55.728	4,396.08	-4,491.01	726.21	492.80	233.41	3.111	
11,400.00	4,889.51	10,973.32	4,480.52	151.41	151.22	-55.724	4,466.79	-4,561.72	726.23	489.62	236.61	3.069	
11,500.00	4,890.27	11,073.32	4,481.23	153.69	153.50	-55.721	4,537.51	-4,632.42	726.26	486.47	239.80	3.029	
11,600.00	4,891.02	11,173.32	4,481.94	155.97	155.78	-55.718	4,608.22	-4,703.13	726.29	483.32	242.97	2.989	
11,700.00	4,891.78	11,273.32	4,482.64	158.25	158.06	-55.715	4,678.93	-4,773.84	726.32	480.19	246.13	2.951	
11,729.63	4,892.00	11,302.95	4,482.85	158.92	158.74	-55.714	4,699.88	-4,794.79	726.32	479.26	247.06	2.940	





## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 112H - Original Hole - rev0													<b>Offset Site Error:</b> 0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b> 0.00 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>		<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	-54.555	23.30	-32.73	40.17				
100.00	100.00	100.00	100.00	0.27	0.27	-54.555	23.30	-32.73	40.17	39.64	0.54	74.714	
200.00	200.00	200.00	200.00	0.63	0.63	-54.555	23.30	-32.73	40.17	38.92	1.25	32.020	
300.00	300.00	300.00	300.00	0.99	0.99	-54.555	23.30	-32.73	40.17	38.20	1.97	20.377	
400.00	400.00	400.00	400.00	1.34	1.34	-54.555	23.30	-32.73	40.17	37.49	2.69	14.943	
500.00	500.00	500.00	500.00	1.70	1.70	-54.555	23.30	-32.73	40.17	36.77	3.41	11.797	
600.00	600.00	600.00	600.00	2.06	2.06	-54.555	23.30	-32.73	40.17	36.05	4.12	9.745	
700.00	700.00	700.00	700.00	2.42	2.42	-54.555	23.30	-32.73	40.17	35.33	4.84	8.302	
800.00	800.00	800.00	800.00	2.78	2.78	-54.555	23.30	-32.73	40.17	34.62	5.56	7.230	
900.00	900.00	900.00	900.00	3.14	3.14	-54.555	23.30	-32.73	40.17	33.90	6.27	6.404	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.555	23.30	-32.73	40.17	33.18	6.99	5.747 CC, ES	
1,100.00	1,099.95	1,100.39	1,100.35	3.85	3.84	-144.596	20.81	-33.60	41.63	33.94	7.68	5.418	
1,200.00	1,199.63	1,199.62	1,199.25	4.20	4.17	-159.161	13.46	-36.16	48.19	39.83	8.36	5.766	
1,300.00	1,298.77	1,296.56	1,295.37	4.56	4.50	-174.784	1.60	-40.29	63.78	54.75	9.03	7.061	
1,400.00	1,397.09	1,390.24	1,387.53	4.94	4.83	-173.615	-14.22	-45.81	89.73	80.04	9.70	9.255	
1,500.00	1,495.02	1,482.66	1,477.68	5.34	5.19	-165.953	-33.41	-52.50	122.05	111.71	10.34	11.805	
1,600.00	1,592.96	1,576.15	1,568.77	5.75	5.57	-161.288	-53.29	-59.43	155.91	144.89	11.02	14.151	
1,700.00	1,690.89	1,669.64	1,659.86	6.18	5.97	-158.284	-73.17	-66.36	190.36	178.64	11.72	16.246	
1,800.00	1,788.82	1,763.13	1,750.95	6.61	6.38	-156.199	-93.05	-73.29	225.13	212.70	12.43	18.113	
1,900.00	1,886.76	1,856.62	1,842.04	7.05	6.79	-154.671	-112.93	-80.22	260.10	246.95	13.15	19.774	
2,000.00	1,984.69	1,950.11	1,933.13	7.50	7.22	-153.504	-132.81	-87.15	295.19	281.31	13.89	21.257	
2,100.00	2,082.62	2,043.60	2,024.22	7.96	7.65	-152.585	-152.68	-94.08	330.37	315.74	14.63	22.585	
2,200.00	2,180.56	2,137.09	2,115.31	8.41	8.09	-151.842	-172.56	-101.01	365.61	350.23	15.38	23.779	
2,300.00	2,278.49	2,230.58	2,206.40	8.87	8.54	-151.230	-192.44	-107.94	400.89	384.76	16.13	24.856	
2,400.00	2,376.42	2,324.07	2,297.49	9.34	8.98	-150.717	-212.32	-114.88	436.20	419.32	16.89	25.832	
2,500.00	2,474.36	2,417.57	2,388.58	9.81	9.44	-150.281	-232.20	-121.81	471.54	453.89	17.65	26.719	
2,600.00	2,572.29	2,511.06	2,479.67	10.27	9.89	-149.905	-252.08	-128.74	506.90	488.49	18.41	27.528	
2,700.00	2,670.22	2,604.55	2,570.76	10.75	10.35	-149.579	-271.96	-135.67	542.28	523.10	19.18	28.268	
2,800.00	2,768.16	2,698.04	2,661.85	11.22	10.81	-149.292	-291.84	-142.60	577.67	557.72	19.96	28.948	
2,900.00	2,866.09	2,791.53	2,752.94	11.69	11.27	-149.038	-311.72	-149.53	613.08	592.35	20.73	29.575	
3,000.00	2,964.02	2,885.02	2,844.03	12.17	11.73	-148.812	-331.59	-156.46	648.49	626.98	21.51	30.153	
3,100.00	3,061.96	2,978.51	2,935.12	12.65	12.20	-148.610	-351.47	-163.39	683.91	661.62	22.29	30.689	
3,200.00	3,159.89	3,072.00	3,026.21	13.12	12.67	-148.427	-371.35	-170.32	719.34	696.27	23.07	31.186	
3,300.00	3,257.82	3,165.49	3,117.30	13.60	13.13	-148.262	-391.23	-177.25	754.77	730.92	23.85	31.649	
3,400.00	3,355.76	3,258.99	3,208.39	14.08	13.60	-148.111	-411.11	-184.18	790.21	765.57	24.63	32.081	
3,500.00	3,453.69	3,352.48	3,299.48	14.56	14.07	-147.974	-430.99	-191.11	825.65	800.23	25.42	32.484	
3,600.00	3,551.62	3,445.97	3,390.57	15.04	14.55	-147.847	-450.87	-198.04	861.09	834.89	26.20	32.862	
3,700.00	3,649.56	3,539.46	3,481.66	15.53	15.02	-147.731	-470.75	-204.97	896.54	869.55	26.99	33.217	
3,800.00	3,747.49	3,632.95	3,572.75	16.01	15.49	-147.623	-490.63	-211.90	931.99	904.22	27.78	33.550	
3,900.00	3,845.65	3,726.78	3,664.16	16.48	15.97	-147.876	-510.58	-218.86	966.50	937.93	28.56	33.836	
4,000.00	3,944.63	3,851.41	3,785.85	16.90	16.58	-148.022	-535.97	-227.71	996.47	966.89	29.59	33.677	
4,100.00	4,044.22	4,026.79	3,959.31	17.28	17.34	-148.011	-560.02	-236.10	1,016.18	985.30	30.88	32.912	
4,200.00	4,144.14	4,207.37	4,139.58	17.61	17.96	-148.041	-568.98	-239.22	1,023.75	991.82	31.93	32.065	
4,300.00	4,244.14	4,311.93	4,244.14	17.91	18.24	-127.765	-569.00	-239.23	1,023.86	991.30	32.56	31.441	
4,400.00	4,343.89	4,377.57	4,309.67	18.18	18.42	-93.205	-567.26	-241.85	1,025.76	992.72	33.04	31.050	
4,500.00	4,441.25	4,450.00	4,381.03	18.41	18.60	-92.872	-560.56	-251.93	1,032.20	998.78	33.42	30.882	
4,600.00	4,533.27	4,500.00	4,429.14	18.58	18.72	-92.194	-553.06	-263.23	1,042.92	1,009.29	33.63	31.009	
4,700.00	4,617.15	4,567.44	4,491.79	18.72	18.86	-91.455	-539.31	-283.92	1,057.85	1,023.97	33.88	31.219	
4,800.00	4,690.34	4,630.33	4,547.22	18.81	18.98	-90.483	-522.91	-308.61	1,076.73	1,042.57	34.16	31.521	
4,900.00	4,750.63	4,700.00	4,604.42	18.86	19.10	-89.472	-500.94	-341.67	1,099.23	1,064.64	34.58	31.784	
5,000.00	4,796.16	4,750.00	4,642.29	18.89	19.17	-87.894	-482.88	-368.85	1,124.92	1,089.83	35.09	32.061	
5,100.00	4,826.22	4,819.87	4,690.14	19.04	19.27	-86.050	-454.74	-411.21	1,150.89	1,114.97	35.92	32.039	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 112H - Original Hole - rev0													<b>Offset Site Error:</b> 0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b> 0.00 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>		<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>			
5,200.00	4,841.27	4,887.17	4,730.05	19.86	19.37	-85.212	-424.78	-456.30	1,171.43	1,134.42	37.01	31.651	
5,300.00	4,843.44	4,959.66	4,765.63	20.95	19.50	-86.263	-389.86	-508.86	1,187.51	1,149.10	38.41	30.913	
5,400.00	4,844.19	5,268.72	4,828.19	22.21	21.53	-89.236	-202.02	-741.59	1,200.28	1,157.65	42.63	28.159	
5,500.00	4,844.95	5,368.72	4,828.90	23.62	22.73	-89.234	-131.31	-812.29	1,200.28	1,154.99	45.29	26.505	
5,600.00	4,845.70	5,468.72	4,829.61	25.15	24.11	-89.232	-60.60	-883.00	1,200.28	1,152.04	48.24	24.881	
5,700.00	4,846.46	5,568.72	4,830.33	26.79	25.64	-89.230	10.11	-953.71	1,200.28	1,148.85	51.43	23.337	
5,800.00	4,847.21	5,668.72	4,831.04	28.51	27.27	-89.228	80.82	-1,024.42	1,200.28	1,145.46	54.82	21.894	
5,900.00	4,847.97	5,768.72	4,831.75	30.31	29.00	-89.226	151.53	-1,095.12	1,200.28	1,141.90	58.38	20.561	
6,000.00	4,848.72	5,868.72	4,832.47	32.17	30.79	-89.224	222.24	-1,165.83	1,200.28	1,138.21	62.07	19.339	
6,100.00	4,849.48	5,968.72	4,833.18	34.08	32.65	-89.222	292.95	-1,236.54	1,200.28	1,134.41	65.87	18.222	
6,200.00	4,850.23	6,068.72	4,833.89	36.04	34.57	-89.220	363.66	-1,307.25	1,200.28	1,130.51	69.77	17.204	
6,300.00	4,850.99	6,168.72	4,834.61	38.03	36.52	-89.218	434.37	-1,377.95	1,200.28	1,126.53	73.75	16.276	
6,400.00	4,851.75	6,268.72	4,835.32	40.05	38.51	-89.216	505.08	-1,448.66	1,200.28	1,122.48	77.79	15.429	
6,500.00	4,852.50	6,368.72	4,836.04	42.10	40.54	-89.214	575.79	-1,519.37	1,200.27	1,118.38	81.90	14.656	
6,600.00	4,853.26	6,468.72	4,836.75	44.18	42.59	-89.212	646.50	-1,590.08	1,200.27	1,114.23	86.05	13.949	
6,700.00	4,854.01	6,568.72	4,837.46	46.27	44.66	-89.210	717.21	-1,660.78	1,200.27	1,110.03	90.24	13.301	
6,800.00	4,854.77	6,668.72	4,838.18	48.38	46.76	-89.208	787.92	-1,731.49	1,200.27	1,105.80	94.47	12.705	
6,900.00	4,855.52	6,768.72	4,838.89	50.51	48.87	-89.206	858.63	-1,802.20	1,200.27	1,101.54	98.74	12.156	
7,000.00	4,856.28	6,868.72	4,839.60	52.66	51.00	-89.204	929.34	-1,872.91	1,200.27	1,097.24	103.03	11.650	
7,100.00	4,857.03	6,968.72	4,840.32	54.81	53.14	-89.202	1,000.05	-1,943.61	1,200.27	1,092.93	107.35	11.181	
7,200.00	4,857.79	7,068.72	4,841.03	56.98	55.30	-89.200	1,070.76	-2,014.32	1,200.27	1,088.59	111.69	10.747	
7,300.00	4,858.54	7,168.72	4,841.74	59.15	57.46	-89.198	1,141.47	-2,085.03	1,200.27	1,084.23	116.04	10.343	
7,400.00	4,859.30	7,268.72	4,842.46	61.33	59.64	-89.196	1,212.18	-2,155.74	1,200.27	1,079.85	120.42	9.967	
7,500.00	4,860.05	7,368.72	4,843.17	63.53	61.82	-89.194	1,282.89	-2,226.44	1,200.27	1,075.46	124.81	9.617	
7,600.00	4,860.81	7,468.72	4,843.89	65.73	64.01	-89.192	1,353.60	-2,297.15	1,200.27	1,071.06	129.21	9.289	
7,700.00	4,861.56	7,568.72	4,844.60	67.93	66.21	-89.190	1,424.31	-2,367.86	1,200.27	1,066.64	133.63	8.982	
7,800.00	4,862.32	7,668.72	4,845.31	70.14	68.41	-89.188	1,495.02	-2,438.57	1,200.27	1,062.21	138.06	8.694	
7,900.00	4,863.07	7,768.72	4,846.03	72.36	70.62	-89.186	1,565.73	-2,509.27	1,200.27	1,057.77	142.50	8.423	
8,000.00	4,863.83	7,868.72	4,846.74	74.58	72.84	-89.184	1,636.44	-2,579.98	1,200.27	1,053.32	146.95	8.168	
8,100.00	4,864.59	7,968.72	4,847.45	76.80	75.06	-89.182	1,707.15	-2,650.69	1,200.27	1,048.87	151.40	7.928	
8,200.00	4,865.34	8,068.72	4,848.17	79.03	77.28	-89.180	1,777.86	-2,721.40	1,200.27	1,044.40	155.87	7.701	
8,300.00	4,866.10	8,168.72	4,848.88	81.26	79.51	-89.178	1,848.57	-2,792.11	1,200.27	1,039.93	160.34	7.486	
8,400.00	4,866.85	8,268.72	4,849.59	83.50	81.74	-89.176	1,919.28	-2,862.81	1,200.27	1,035.45	164.82	7.282	
8,500.00	4,867.61	8,368.72	4,850.31	85.74	83.98	-89.174	1,989.99	-2,933.52	1,200.27	1,030.97	169.30	7.090	
8,600.00	4,868.36	8,468.72	4,851.02	87.98	86.22	-89.172	2,060.70	-3,004.23	1,200.27	1,026.48	173.79	6.906	
8,700.00	4,869.12	8,568.72	4,851.74	90.23	88.46	-89.170	2,131.41	-3,074.94	1,200.27	1,021.98	178.28	6.732	
8,800.00	4,869.87	8,668.72	4,852.45	92.47	90.71	-89.168	2,202.12	-3,145.64	1,200.27	1,017.48	182.78	6.567	
8,900.00	4,870.63	8,768.72	4,853.16	94.72	92.95	-89.166	2,272.83	-3,216.35	1,200.27	1,012.98	187.29	6.409	
9,000.00	4,871.38	8,868.72	4,853.88	96.98	95.20	-89.164	2,343.54	-3,287.06	1,200.27	1,008.47	191.79	6.258	
9,100.00	4,872.14	8,968.72	4,854.59	99.23	97.45	-89.162	2,414.25	-3,357.77	1,200.27	1,003.96	196.31	6.114	
9,200.00	4,872.89	9,068.72	4,855.30	101.48	99.71	-89.160	2,484.96	-3,428.47	1,200.27	999.44	200.82	5.977	
9,300.00	4,873.65	9,168.72	4,856.02	103.74	101.96	-89.158	2,555.67	-3,499.18	1,200.27	994.93	205.34	5.845	
9,400.00	4,874.40	9,268.72	4,856.73	106.00	104.22	-89.156	2,626.39	-3,569.89	1,200.26	990.40	209.86	5.719	
9,500.00	4,875.16	9,368.72	4,857.44	108.26	106.48	-89.154	2,697.10	-3,640.60	1,200.26	985.88	214.39	5.599	
9,600.00	4,875.92	9,468.72	4,858.16	110.52	108.74	-89.152	2,767.81	-3,711.30	1,200.26	981.35	218.91	5.483	
9,700.00	4,876.67	9,568.72	4,858.87	112.79	111.00	-89.150	2,838.52	-3,782.01	1,200.26	976.82	223.44	5.372	
9,800.00	4,877.43	9,668.72	4,859.59	115.05	113.26	-89.148	2,909.23	-3,852.72	1,200.26	972.29	227.98	5.265	
9,900.00	4,878.18	9,768.72	4,860.30	117.32	115.53	-89.146	2,979.94	-3,923.43	1,200.26	967.75	232.51	5.162	
10,000.00	4,878.94	9,868.72	4,861.01	119.58	117.79	-89.144	3,050.65	-3,994.13	1,200.26	963.22	237.05	5.063	
10,100.00	4,879.69	9,968.72	4,861.73	121.85	120.06	-89.142	3,121.36	-4,064.84	1,200.26	958.68	241.59	4.968	
10,200.00	4,880.45	10,068.72	4,862.44	124.12	122.33	-89.140	3,192.07	-4,135.55	1,200.26	954.14	246.13	4.877	
10,300.00	4,881.20	10,168.72	4,863.15	126.39	124.59	-89.138	3,262.78	-4,206.26	1,200.26	949.59	250.67	4.788	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 112H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	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
10,400.00	4,881.96	10,268.72	4,863.87	128.66	126.86	-89.136	3,333.49	-4,276.96	1,200.26	945.05	255.21	4.703	
10,500.00	4,882.71	10,368.72	4,864.58	130.93	129.13	-89.134	3,404.20	-4,347.67	1,200.26	940.50	259.76	4.621	
10,600.00	4,883.47	10,468.72	4,865.29	133.21	131.41	-89.132	3,474.91	-4,418.38	1,200.26	935.96	264.31	4.541	
10,700.00	4,884.22	10,568.72	4,866.01	135.48	133.68	-89.130	3,545.62	-4,489.09	1,200.26	931.41	268.85	4.464	
10,800.00	4,884.98	10,668.72	4,866.72	137.75	135.95	-89.128	3,616.33	-4,559.79	1,200.26	926.86	273.40	4.390	
10,900.00	4,885.73	10,768.72	4,867.44	140.03	138.22	-89.126	3,687.04	-4,630.50	1,200.26	922.31	277.96	4.318	
11,000.00	4,886.49	10,868.72	4,868.15	142.30	140.50	-89.124	3,757.75	-4,701.21	1,200.26	917.75	282.51	4.249	
11,100.00	4,887.24	10,968.72	4,868.86	144.58	142.77	-89.122	3,828.46	-4,771.92	1,200.26	913.20	287.06	4.181	
11,200.00	4,888.00	11,068.72	4,869.58	146.86	145.05	-89.120	3,899.17	-4,842.62	1,200.26	908.64	291.62	4.116	
11,300.00	4,888.76	11,168.72	4,870.29	149.13	147.33	-89.118	3,969.88	-4,913.33	1,200.26	904.09	296.17	4.053	
11,400.00	4,889.51	11,268.72	4,871.00	151.41	149.60	-89.117	4,040.59	-4,984.04	1,200.26	899.53	300.73	3.991	
11,500.00	4,890.27	11,368.72	4,871.72	153.69	151.88	-89.115	4,111.30	-5,054.75	1,200.26	894.97	305.29	3.932	
11,600.00	4,891.02	11,468.72	4,872.43	155.97	154.16	-89.113	4,182.01	-5,125.45	1,200.26	890.41	309.85	3.874	
11,700.00	4,891.78	11,568.72	4,873.14	158.25	156.44	-89.111	4,252.72	-5,196.16	1,200.26	885.85	314.41	3.818	
11,729.63	4,892.00	11,598.35	4,873.36	158.92	157.11	-89.110	4,273.67	-5,217.11	1,200.26	884.50	315.76	3.801 SF	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 114H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.00	0.00	0.00	-54.767	46.23	-65.46	80.14				
100.00	100.00	100.00	100.00	0.27	0.27	-54.767	46.23	-65.46	80.14	79.60	0.54	149.036	
200.00	200.00	200.00	200.00	0.63	0.63	-54.767	46.23	-65.46	80.14	78.88	1.25	63.873	
300.00	300.00	300.00	300.00	0.99	0.99	-54.767	46.23	-65.46	80.14	78.17	1.97	40.646	
400.00	400.00	400.00	400.00	1.34	1.34	-54.767	46.23	-65.46	80.14	77.45	2.69	29.807	
500.00	500.00	500.00	500.00	1.70	1.70	-54.767	46.23	-65.46	80.14	76.73	3.41	23.532	
600.00	600.00	600.00	600.00	2.06	2.06	-54.767	46.23	-65.46	80.14	76.02	4.12	19.440	
700.00	700.00	700.00	700.00	2.42	2.42	-54.767	46.23	-65.46	80.14	75.30	4.84	16.560	
800.00	800.00	800.00	800.00	2.78	2.78	-54.767	46.23	-65.46	80.14	74.58	5.56	14.423	
900.00	900.00	900.00	900.00	3.14	3.14	-54.767	46.23	-65.46	80.14	73.86	6.27	12.775	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.767	46.23	-65.46	80.14	73.15	6.99	11.464	CC, ES
1,100.00	1,099.95	1,097.68	1,097.64	3.85	3.83	-141.531	45.19	-67.73	83.49	75.81	7.68	10.874	SF
1,200.00	1,199.63	1,193.86	1,193.53	4.20	4.16	-148.001	42.13	-74.39	94.42	86.08	8.34	11.316	
1,300.00	1,298.77	1,287.13	1,286.05	4.56	4.49	-155.688	37.24	-85.03	114.60	105.61	8.99	12.743	
1,400.00	1,397.09	1,376.25	1,373.82	4.94	4.82	-162.568	30.81	-99.03	144.89	135.27	9.62	15.066	
1,500.00	1,495.02	1,461.48	1,457.00	5.34	5.16	-168.027	23.07	-115.88	182.29	172.11	10.18	17.905	
1,600.00	1,592.96	1,543.32	1,536.02	5.75	5.50	-172.055	14.19	-135.22	224.37	213.66	10.71	20.951	
1,700.00	1,690.89	1,631.18	1,620.28	6.18	5.91	-175.282	3.80	-157.85	269.21	257.88	11.33	23.757	
1,800.00	1,788.82	1,719.67	1,705.13	6.61	6.33	-177.616	-6.68	-180.66	314.57	302.59	11.98	26.266	
1,900.00	1,886.76	1,808.15	1,789.98	7.05	6.77	-179.367	-17.15	-203.46	360.24	347.61	12.63	28.525	
2,000.00	1,984.69	1,896.63	1,874.83	7.50	7.22	-179.273	-27.63	-226.27	406.12	392.83	13.29	30.560	
2,100.00	2,082.62	1,985.12	1,959.68	7.96	7.69	-178.188	-38.10	-249.07	452.15	438.19	13.96	32.398	
2,200.00	2,180.56	2,073.60	2,044.53	8.41	8.16	-177.303	-48.58	-271.87	498.28	483.65	14.63	34.062	
2,300.00	2,278.49	2,162.09	2,129.38	8.87	8.64	-176.567	-59.05	-294.68	544.49	529.18	15.31	35.575	
2,400.00	2,376.42	2,250.57	2,214.23	9.34	9.12	-175.946	-69.52	-317.48	590.76	574.77	15.99	36.953	
2,500.00	2,474.36	2,339.05	2,299.08	9.81	9.61	-175.415	-80.00	-340.29	637.07	620.40	16.67	38.215	
2,600.00	2,572.29	2,427.54	2,383.93	10.27	10.11	-174.955	-90.47	-363.09	683.42	666.07	17.36	39.372	
2,700.00	2,670.22	2,516.02	2,468.79	10.75	10.60	-174.554	-100.95	-385.90	729.81	711.76	18.05	40.437	
2,800.00	2,768.16	2,604.51	2,553.64	11.22	11.11	-174.201	-111.42	-408.70	776.21	757.47	18.74	41.419	
2,900.00	2,866.09	2,692.99	2,638.49	11.69	11.61	-173.888	-121.89	-431.51	822.64	803.21	19.44	42.327	
3,000.00	2,964.02	2,781.47	2,723.34	12.17	12.12	-173.608	-132.37	-454.31	869.09	848.96	20.13	43.169	
3,100.00	3,061.96	2,869.96	2,808.19	12.65	12.63	-173.356	-142.84	-477.12	915.55	894.72	20.83	43.951	
3,200.00	3,159.89	2,958.44	2,893.04	13.12	13.14	-173.129	-153.32	-499.92	962.02	940.49	21.53	44.680	
3,300.00	3,257.82	3,046.92	2,977.89	13.60	13.65	-172.929	-163.79	-522.73	1,008.50	986.27	22.23	45.360	
3,400.00	3,355.76	3,135.41	3,062.74	14.08	14.17	-172.734	-174.27	-545.53	1,055.00	1,032.06	22.94	45.996	
3,500.00	3,453.69	3,223.89	3,147.59	14.56	14.68	-172.561	-184.74	-568.34	1,101.50	1,077.86	23.64	46.593	
3,600.00	3,551.62	3,312.38	3,232.44	15.04	15.20	-172.403	-195.21	-591.14	1,148.01	1,123.66	24.35	47.153	
3,700.00	3,649.56	3,400.86	3,317.29	15.53	15.72	-172.257	-205.69	-613.94	1,194.52	1,169.47	25.05	47.679	
3,800.00	3,747.49	3,489.34	3,402.14	16.01	16.24	-172.122	-216.16	-636.75	1,241.04	1,215.28	25.76	48.175	
3,900.00	3,845.65	3,578.36	3,487.51	16.48	16.76	-172.128	-226.70	-659.69	1,286.51	1,260.04	26.47	48.604	
4,000.00	3,944.63	3,669.48	3,574.88	16.90	17.30	-172.156	-237.49	-683.18	1,327.55	1,300.37	27.18	48.843	
4,100.00	4,044.22	3,760.46	3,671.03	17.28	17.77	-172.156	-248.28	-706.66	1,368.60	1,339.44	27.89	49.082	
4,200.00	4,144.14	3,852.04	3,761.03	17.61	18.17	-172.156	-259.07	-729.13	1,409.65	1,379.49	28.60	49.321	
4,300.00	4,244.14	3,943.34	3,851.03	17.91	18.54	-172.156	-269.86	-751.58	1,450.70	1,419.54	29.31	49.560	
4,400.00	4,343.89	4,034.64	3,941.03	18.21	18.96	-172.156	-280.65	-774.03	1,491.75	1,459.59	30.02	49.799	
4,500.00	4,441.25	4,125.94	4,031.03	18.41	19.37	-172.156	-291.44	-796.48	1,532.80	1,500.04	30.73	50.038	
4,600.00	4,533.27	4,217.24	4,121.03	18.58	19.83	-172.156	-302.23	-818.93	1,573.85	1,540.09	31.44	50.277	
4,700.00	4,617.15	4,308.54	4,211.03	18.72	20.29	-172.156	-313.02	-841.38	1,614.90	1,580.14	32.15	50.516	
4,726.10	4,637.38	4,328.77	4,231.26	18.74	20.78	-172.156	-315.95	-845.95	1,617.45	1,582.69	32.18	50.532	
4,800.00	4,690.34	4,381.70	4,284.20	18.81	20.69	-172.156	-318.87	-850.52	1,660.00	1,625.24	32.89	50.771	
4,900.00	4,750.63	4,442.00	4,344.49	18.86	20.67	-172.156	-321.79	-855.09	1,702.55	1,667.79	33.60	51.010	
5,000.00	4,796.16	4,487.53	4,390.02	18.89	20.67	-172.156	-324.71	-859.66	1,745.10	1,710.34	34.31	51.249	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 114H - Original Hole - rev0													<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	0.00 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>						
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
5,100.00	4,826.22	5,083.95	4,794.37	19.04	20.67	-91.615	-522.57	-434.79	1,210.92	1,172.92	38.00	31.866		
5,200.00	4,841.27	5,029.68	4,776.53	19.86	20.68	-87.759	-491.27	-475.35	1,232.59	1,194.22	38.37	32.126		
5,300.00	4,843.44	4,950.00	4,741.86	20.95	20.68	-85.342	-447.94	-532.43	1,250.17	1,211.38	38.79	32.230		
5,400.00	4,844.19	4,887.12	4,707.68	22.21	20.67	-83.777	-416.05	-574.45	1,269.76	1,230.20	39.56	32.097		
5,500.00	4,844.95	4,830.34	4,672.02	23.62	20.66	-82.168	-389.36	-609.61	1,293.00	1,252.51	40.49	31.933		
5,600.00	4,845.70	4,782.20	4,638.48	25.15	20.64	-80.675	-368.48	-637.11	1,320.50	1,278.97	41.52	31.800		
5,700.00	4,846.46	4,750.00	4,614.48	26.79	20.62	-79.619	-355.51	-654.20	1,352.66	1,310.03	42.63	31.732		

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 115H - Original Hole - rev0													<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	0.00 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>	<b>Highside</b>	<b>Rule Assigned:</b>				<b>Warning</b>						
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
0.00	0.00	0.00	0.00	0.00	0.00	-54.693	80.81	-114.11	139.83					
100.00	100.00	100.00	100.00	0.27	0.27	-54.693	80.81	-114.11	139.83	139.29	0.54	260.044		
200.00	200.00	200.00	200.00	0.63	0.63	-54.693	80.81	-114.11	139.83	138.57	1.25	111.447		
300.00	300.00	300.00	300.00	0.99	0.99	-54.693	80.81	-114.11	139.83	137.86	1.97	70.921		
400.00	400.00	400.00	400.00	1.34	1.34	-54.693	80.81	-114.11	139.83	137.14	2.69	52.009		
500.00	500.00	500.00	500.00	1.70	1.70	-54.693	80.81	-114.11	139.83	136.42	3.41	41.060		
600.00	600.00	600.00	600.00	2.06	2.06	-54.693	80.81	-114.11	139.83	135.71	4.12	33.919		
700.00	700.00	700.00	700.00	2.42	2.42	-54.693	80.81	-114.11	139.83	134.99	4.84	28.894		
800.00	800.00	800.00	800.00	2.78	2.78	-54.693	80.81	-114.11	139.83	134.27	5.56	25.166		
900.00	900.00	900.00	900.00	3.14	3.14	-54.693	80.81	-114.11	139.83	133.55	6.27	22.290		
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.693	80.81	-114.11	139.83	132.84	6.99	20.003	CC, ES	
1,100.00	1,099.95	1,092.81	1,092.71	3.85	3.83	-139.147	83.75	-117.04	146.07	138.41	7.66	19.058		
1,200.00	1,199.63	1,192.11	1,191.89	4.20	4.18	-140.490	87.28	-120.58	157.01	148.65	8.37	18.770		
1,300.00	1,298.77	1,290.71	1,290.35	4.56	4.53	-142.637	90.80	-124.09	172.16	163.09	9.07	18.985		
1,400.00	1,397.09	1,388.32	1,387.85	4.94	4.88	-145.267	94.27	-127.57	191.77	181.99	9.78	19.613		
1,500.00	1,495.02	1,485.49	1,484.89	5.34	5.23	-147.961	97.73	-131.03	213.49	203.01	10.48	20.375		
1,600.00	1,592.96	1,582.65	1,581.93	5.75	5.58	-150.158	101.20	-134.49	235.59	224.40	11.18	21.068		
1,700.00	1,690.89	1,679.82	1,678.97	6.18	5.93	-151.978	104.66	-137.95	257.95	246.06	11.89	21.697		
1,800.00	1,788.82	1,776.98	1,776.01	6.61	6.29	-153.508	108.12	-141.41	280.53	267.93	12.60	22.267		
1,900.00	1,886.76	1,887.82	1,886.76	7.05	6.68	-155.129	110.81	-144.11	301.99	288.61	13.38	22.576		
2,000.00	1,984.69	1,985.75	1,984.69	7.50	7.03	-156.645	110.81	-144.11	320.51	306.42	14.09	22.744		
2,100.00	2,082.62	2,083.68	2,082.62	7.96	7.38	-157.996	110.81	-144.11	339.23	324.43	14.81	22.908		
2,200.00	2,180.56	2,181.62	2,180.56	8.41	7.73	-159.205	110.81	-144.11	358.12	342.59	15.53	23.067		
2,300.00	2,278.49	2,279.55	2,278.49	8.87	8.08	-160.293	110.81	-144.11	377.14	360.90	16.24	23.219		
2,400.00	2,376.42	2,377.48	2,376.42	9.34	8.43	-161.277	110.81	-144.11	396.28	379.32	16.96	23.364		
2,500.00	2,474.36	2,475.42	2,474.36	9.81	8.78	-162.171	110.81	-144.11	415.53	397.85	17.68	23.503		
2,600.00	2,572.29	2,573.35	2,572.29	10.27	9.13	-162.985	110.81	-144.11	434.86	416.46	18.40	23.636		
2,700.00	2,670.22	2,671.28	2,670.22	10.75	9.48	-163.731	110.81	-144.11	454.27	435.15	19.12	23.761		
2,800.00	2,768.16	2,769.22	2,768.16	11.22	9.83	-164.415	110.81	-144.11	473.75	453.91	19.84	23.881		
2,900.00	2,866.09	2,867.15	2,866.09	11.69	10.18	-165.045	110.81	-144.11	493.29	472.73	20.56	23.994		
3,000.00	2,964.02	2,965.08	2,964.02	12.17	10.53	-165.628	110.81	-144.11	512.88	491.60	21.28	24.102		
3,100.00	3,061.96	3,063.02	3,061.96	12.65	10.88	-166.167	110.81	-144.11	532.52	510.52	22.00	24.204		
3,200.00	3,159.89	3,160.95	3,159.89	13.12	11.23	-166.668	110.81	-144.11	552.20	529.48	22.72	24.302		
3,300.00	3,257.82	3,258.88	3,257.82	13.60	11.58	-167.135	110.81	-144.11	571.92	548.48	23.45	24.394		
3,400.00	3,355.76	3,356.82	3,355.76	14.08	11.93	-167.571	110.81	-144.11	591.68	567.51	24.17	24.482		
3,500.00	3,453.69	3,454.75	3,453.69	14.56	12.28	-167.978	110.81	-144.11	611.46	586.57	24.89	24.566		
3,600.00	3,551.62	3,552.68	3,551.62	15.04	12.63	-168.360	110.81	-144.11	631.28	605.66	25.61	24.646		
3,700.00	3,649.56	3,650.62	3,649.56	15.53	12.98	-168.719	110.81	-144.11	651.11	624.78	26.34	24.722		
3,800.00	3,747.49	3,748.55	3,747.49	16.01	13.33	-169.057	110.81	-144.11	670.97	643.91	27.06	24.794		
3,900.00	3,845.65	3,846.71	3,845.65	16.48	13.68	-169.426	110.81	-144.11	689.70	661.91	27.78	24.823		
4,000.00	3,944.63	4,356.62	4,296.76	16.90	15.51	176.444	-39.64	-12.79	677.08	650.03	27.05	25.031		
4,100.00	4,044.22	4,564.72	4,401.01	17.28	17.01	159.951	-174.34	104.78	627.82	599.68	28.14	22.312		
4,200.00	4,144.14	4,636.12	4,421.00	17.61	17.73	151.925	-225.95	149.82	577.83	547.17	30.65	18.850		
4,300.00	4,244.14	4,668.76	4,427.27	17.91	18.09	-127.655	-250.08	170.88	536.56	503.52	33.04	16.242		
4,400.00	4,343.89	4,681.78	4,429.25	18.18	18.24	-96.599	-259.77	179.35	511.38	476.68	34.69	14.740		
4,471.01	4,413.45	4,677.69	4,428.66	18.34	18.19	-96.681	-256.73	176.69	505.93	470.86	35.07	14.428	SF	
4,500.00	4,441.25	4,673.86	4,428.08	18.41	18.14	-96.162	-253.87	174.20	506.83	471.81	35.02	14.471		
4,600.00	4,533.27	4,650.00	4,423.89	18.58	17.87	-91.896	-236.18	158.75	523.05	489.03	34.02	15.377		
4,700.00	4,617.15	4,626.63	4,418.84	18.72	17.63	-85.924	-218.99	143.75	556.32	523.86	32.46	17.141		
4,800.00	4,690.34	4,600.00	4,411.95	18.81	17.35	-78.358	-199.61	126.83	601.43	570.58	30.85	19.493		
4,900.00	4,750.63	4,559.42	4,399.19	18.86	16.96	-69.249	-170.59	101.51	653.10	623.74	29.36	22.244		
5,000.00	4,796.16	4,521.94	4,385.00	18.89	16.63	-61.015	-144.46	78.70	707.22	678.75	28.47	24.839		

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 115H - Original Hole - rev0													<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	0.00 ft
<b>Reference</b>	<b>Rule Assigned:</b>													
<b>Measured Depth</b>	<b>Vertical Depth</b>	<b>Measured Depth</b>	<b>Vertical Depth</b>	<b>Semi Major Axis Reference</b>	<b>Offset</b>	<b>Highside Toolface</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation</b>	<b>Separation Factor</b>	<b>Warning</b>	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	(ft)			
5,100.00	4,826.22	4,482.93	4,367.86	19.04	16.32	-54.559	-118.07	55.66	759.06	731.01	28.05	27.064		
5,200.00	4,841.27	4,450.00	4,351.57	19.86	16.08	-50.430	-96.51	36.85	803.60	775.48	28.12	28.578		
5,300.00	4,843.44	4,400.00	4,323.75	20.95	15.76	-47.899	-65.23	9.54	842.23	814.09	28.13	29.937		
5,400.00	4,844.19	4,367.52	4,303.79	22.21	15.57	-46.720	-45.93	-7.30	885.80	857.19	28.61	30.966		
5,500.00	4,844.95	4,334.83	4,282.26	23.62	15.40	-45.502	-27.40	-23.48	935.25	906.16	29.09	32.152		
5,600.00	4,845.70	4,300.00	4,257.82	25.15	15.23	-44.183	-8.71	-39.79	990.10	960.57	29.53	33.531		
5,700.00	4,846.46	4,278.64	4,242.10	26.79	15.14	-43.368	2.19	-49.30	1,049.71	1,019.56	30.15	34.815		
5,800.00	4,847.21	4,250.00	4,220.20	28.51	15.02	-42.273	16.09	-61.43	1,113.67	1,083.06	30.61	36.386		
5,900.00	4,847.97	4,232.74	4,206.57	30.31	14.95	-41.615	24.07	-68.39	1,181.38	1,150.22	31.17	37.905		
6,000.00	4,848.72	4,200.00	4,179.86	32.17	14.83	-40.377	38.33	-80.84	1,252.66	1,221.20	31.46	39.816		
6,100.00	4,849.48	4,200.00	4,179.86	34.08	14.83	-40.377	38.33	-80.84	1,326.50	1,294.42	32.08	41.347		

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





## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 116H - Original Hole - rev0													<b>Offset Site Error:</b> 0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b> 0.00 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>	<b>Highside</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum</b>	<b>Separation</b>	<b>Warning</b>			
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Separation (ft)</b>	<b>Factor</b>	
0.00	0.00	0.00	0.00	0.00	0.00	-54.534	69.53	-97.60	119.83				
100.00	100.00	100.00	100.00	0.27	0.27	-54.534	69.53	-97.60	119.83	119.29	0.54	222.855	
200.00	200.00	200.00	200.00	0.63	0.63	-54.534	69.53	-97.60	119.83	118.58	1.25	95.510	
300.00	300.00	300.00	300.00	0.99	0.99	-54.534	69.53	-97.60	119.83	117.86	1.97	60.779	
400.00	400.00	400.00	400.00	1.34	1.34	-54.534	69.53	-97.60	119.83	117.14	2.69	44.571	
500.00	500.00	500.00	500.00	1.70	1.70	-54.534	69.53	-97.60	119.83	116.43	3.41	35.188	
600.00	600.00	600.00	600.00	2.06	2.06	-54.534	69.53	-97.60	119.83	115.71	4.12	29.068	
700.00	700.00	700.00	700.00	2.42	2.42	-54.534	69.53	-97.60	119.83	114.99	4.84	24.762	
800.00	800.00	800.00	800.00	2.78	2.78	-54.534	69.53	-97.60	119.83	114.27	5.56	21.567	
900.00	900.00	900.00	900.00	3.14	3.14	-54.534	69.53	-97.60	119.83	113.56	6.27	19.102	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.534	69.53	-97.60	119.83	112.84	6.99	17.143	
1,100.00	1,099.95	1,099.95	1,099.95	3.85	3.85	-139.496	69.53	-97.60	121.81	114.11	7.70	15.821	
1,200.00	1,199.63	1,199.63	1,199.63	4.20	4.21	-141.663	69.53	-97.60	127.88	119.48	8.40	15.215	
1,300.00	1,298.77	1,300.29	1,300.24	4.56	4.57	-143.811	71.49	-95.84	137.82	128.71	9.11	15.121	
1,400.00	1,397.09	1,401.00	1,400.63	4.94	4.93	-144.788	77.40	-90.55	151.00	141.17	9.83	15.357	
1,500.00	1,495.02	1,501.89	1,500.64	5.34	5.30	-144.383	87.27	-81.72	164.73	154.17	10.56	15.603	
1,600.00	1,592.96	1,602.72	1,599.74	5.75	5.67	-142.350	101.05	-69.38	177.43	166.12	11.31	15.686	
1,700.00	1,690.89	1,702.41	1,696.74	6.18	6.07	-139.161	118.20	-54.03	189.64	177.54	12.10	15.672	
1,800.00	1,788.82	1,801.07	1,792.50	6.61	6.48	-136.123	135.86	-38.23	202.28	189.36	12.92	15.658	
1,900.00	1,886.76	1,899.72	1,888.27	7.05	6.91	-133.445	153.52	-22.42	215.41	201.65	13.76	15.655	
2,000.00	1,984.69	1,998.38	1,984.03	7.50	7.35	-131.077	171.18	-6.61	228.97	214.34	14.62	15.659	
2,100.00	2,082.62	2,097.04	2,079.80	7.96	7.80	-128.974	188.84	9.20	242.86	227.36	15.50	15.668	
2,200.00	2,180.56	2,195.69	2,175.57	8.41	8.25	-127.100	206.50	25.01	257.04	240.65	16.39	15.681	
2,300.00	2,278.49	2,294.35	2,271.33	8.87	8.72	-125.422	224.16	40.81	271.47	254.17	17.29	15.697	
2,400.00	2,376.42	2,393.00	2,367.10	9.34	9.19	-123.913	241.82	56.62	286.10	267.89	18.21	15.714	
2,500.00	2,474.36	2,491.66	2,462.87	9.81	9.66	-122.552	259.48	72.43	300.91	281.78	19.13	15.733	
2,600.00	2,572.29	2,590.31	2,558.63	10.27	10.14	-121.318	277.14	88.24	315.86	295.81	20.05	15.753	
2,700.00	2,670.22	2,688.97	2,654.40	10.75	10.63	-120.195	294.80	104.05	330.95	309.97	20.98	15.773	
2,800.00	2,768.16	2,787.63	2,750.17	11.22	11.11	-119.171	312.46	119.85	346.16	324.24	21.92	15.793	
2,900.00	2,866.09	2,886.28	2,845.93	11.69	11.60	-118.233	330.12	135.66	361.46	338.60	22.86	15.814	
3,000.00	2,964.02	2,984.94	2,941.70	12.17	12.10	-117.371	347.78	151.47	376.85	353.05	23.80	15.834	
3,100.00	3,061.96	3,083.59	3,037.46	12.65	12.59	-116.576	365.44	167.28	392.32	367.57	24.75	15.854	
3,200.00	3,159.89	3,182.25	3,133.23	13.12	13.09	-115.842	383.10	183.09	407.85	382.16	25.69	15.874	
3,300.00	3,257.82	3,280.90	3,229.00	13.60	13.58	-115.162	400.76	198.89	423.45	396.80	26.64	15.893	
3,400.00	3,355.76	3,379.56	3,324.76	14.08	14.08	-114.530	418.42	214.70	439.10	411.50	27.59	15.912	
3,500.00	3,453.69	3,478.22	3,420.53	14.56	14.59	-113.941	436.08	230.51	454.80	426.25	28.55	15.931	
3,600.00	3,551.62	3,576.87	3,516.30	15.04	15.09	-113.392	453.74	246.32	470.54	441.04	29.50	15.949	
3,700.00	3,649.56	3,675.53	3,612.06	15.53	15.59	-112.878	471.40	262.13	486.32	455.86	30.46	15.967	
3,800.00	3,747.49	3,774.18	3,707.83	16.01	16.10	-112.397	489.06	277.93	502.14	470.72	31.42	15.984	
3,900.00	3,845.65	3,882.59	3,813.73	16.48	16.62	-112.348	506.27	293.34	516.62	484.20	32.42	15.933	
4,000.00	3,944.63	3,992.02	3,921.78	16.90	17.10	-112.438	519.08	304.80	527.36	494.02	33.34	15.817	
4,100.00	4,044.22	4,102.11	4,031.31	17.28	17.52	-112.490	527.29	312.15	534.18	500.02	34.15	15.640	
4,200.00	4,144.14	4,212.57	4,141.66	17.61	17.89	-112.504	530.79	315.28	537.05	502.19	34.86	15.407	
4,300.00	4,244.14	4,315.05	4,244.14	17.91	18.19	-28.313	530.92	315.40	537.15	501.68	35.47	15.145	
4,400.00	4,343.89	4,418.88	4,342.72	18.18	19.48	16.312	340.29	459.84	489.76	465.24	24.53	19.969	
4,500.00	4,441.25	5,019.52	4,799.24	18.41	19.93	67.537	244.61	532.33	394.30	375.13	19.16	20.574	
4,600.00	4,533.27	5,016.23	4,798.01	18.58	19.91	108.555	247.04	530.49	296.80	277.35	19.45	15.259	
4,700.00	4,617.15	4,988.90	4,787.07	18.72	19.80	118.185	267.00	515.37	202.52	181.66	20.86	9.707	
4,800.00	4,690.34	4,952.42	4,770.63	18.81	19.68	111.330	292.95	495.70	117.30	93.02	24.29	4.830	
4,900.00	4,750.63	4,911.50	4,749.77	18.86	19.56	88.180	321.00	474.45	69.65	34.42	35.23	1.977 Level 3<2.00	
4,904.45	4,752.98	4,909.62	4,748.74	18.86	19.55	86.775	322.26	473.49	69.65	34.18	35.46	1.964 Level 3<2.00, CC, ES, SF	
5,000.00	4,796.16	4,868.11	4,724.96	18.89	19.45	55.347	349.37	452.96	110.60	80.99	29.61	3.735	

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 116H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	0.00 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>		<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	
5,100.00	4,826.22	4,823.58	4,696.78	19.04	19.35	31.446	376.83	432.15	184.10	155.40	28.70	6.415	
5,200.00	4,841.27	4,779.20	4,666.11	19.86	19.26	17.478	402.40	412.78	261.29	231.30	29.99	8.712	
5,300.00	4,843.44	4,736.27	4,634.18	20.95	19.18	12.879	425.25	395.47	337.36	305.82	31.54	10.698	
5,400.00	4,844.19	4,700.00	4,605.58	22.21	19.11	12.063	443.03	381.99	416.99	384.18	32.81	12.711	
5,500.00	4,844.95	4,668.28	4,579.47	23.62	19.04	11.402	457.37	371.13	500.02	466.27	33.76	14.812	
5,600.00	4,845.70	4,650.00	4,563.97	25.15	19.01	11.042	465.10	365.27	585.85	551.12	34.73	16.867	
5,700.00	4,846.46	4,618.68	4,536.74	26.79	18.94	10.458	477.42	355.94	673.57	638.44	35.14	19.171	
5,800.00	4,847.21	4,600.00	4,520.11	28.51	18.90	10.127	484.20	350.80	763.12	727.47	35.65	21.408	
5,900.00	4,847.97	4,581.42	4,503.29	30.31	18.86	9.810	490.51	346.02	854.05	818.03	36.02	23.708	
6,000.00	4,848.72	4,566.14	4,489.28	32.17	18.83	9.558	495.37	342.34	946.12	909.77	36.35	26.026	
6,100.00	4,849.48	4,550.00	4,474.32	34.08	18.79	9.300	500.18	338.70	1,039.15	1,002.55	36.60	28.393	
6,200.00	4,850.23	4,550.00	4,474.32	36.04	18.79	9.300	500.18	338.70	1,133.06	1,096.13	36.93	30.678	
6,300.00	4,850.99	4,529.80	4,455.35	38.03	18.75	8.987	505.72	334.50	1,227.42	1,190.37	37.05	33.129	
6,400.00	4,851.75	4,520.10	4,446.16	40.05	18.72	8.841	508.19	332.62	1,322.46	1,285.24	37.22	35.533	

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



## Anticollision Report

<b>Company:</b>	Enduring Resources LLC	<b>Local Co-ordinate Reference:</b>	Well Ponderosa 117H
<b>Project:</b>	San Juan County, New Mexico NAD83 NM W	<b>TVD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Reference Site:</b>	Ponderosa (99, 111,112,114-117,120,136)	<b>MD Reference:</b>	RKB=6802+25 @ 6827.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Ponderosa 117H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	<b>Database:</b>	DT_Jul1724_v17
<b>Reference Design:</b>	rev0	<b>Offset TVD Reference:</b>	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		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:		0.00 ft
Measured Depth (ft)	Vertical Reference Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
0.00	0.00	0.00	0.00	0.00	0.00	-54.676	57.88	-81.68	100.10							
100.00	100.00	100.00	100.00	0.27	0.27	-54.676	57.88	-81.68	100.10	99.57	0.54	186.169				
200.00	200.00	200.00	200.00	0.63	0.63	-54.676	57.88	-81.68	100.10	98.85	1.25	79.787				
300.00	300.00	300.00	300.00	0.99	0.99	-54.676	57.88	-81.68	100.10	98.13	1.97	50.773				
400.00	400.00	400.00	400.00	1.34	1.34	-54.676	57.88	-81.68	100.10	97.42	2.69	37.234				
500.00	500.00	500.00	500.00	1.70	1.70	-54.676	57.88	-81.68	100.10	96.70	3.41	29.395				
600.00	600.00	600.00	600.00	2.06	2.06	-54.676	57.88	-81.68	100.10	95.98	4.12	24.283				
700.00	700.00	700.00	700.00	2.42	2.42	-54.676	57.88	-81.68	100.10	95.27	4.84	20.685				
800.00	800.00	800.00	800.00	2.78	2.78	-54.676	57.88	-81.68	100.10	94.55	5.56	18.016				
900.00	900.00	900.00	900.00	3.14	3.14	-54.676	57.88	-81.68	100.10	93.83	6.27	15.957				
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-54.676	57.88	-81.68	100.10	93.11	6.99	14.321	CC, ES			
1,100.00	1,099.95	1,100.50	1,100.46	3.85	3.85	-138.325	59.87	-79.93	101.81	94.11	7.70	13.224				
1,200.00	1,199.63	1,200.79	1,200.42	4.20	4.21	-136.806	65.81	-74.73	106.96	98.56	8.40	12.729				
1,300.00	1,298.77	1,300.63	1,299.39	4.56	4.58	-134.569	75.64	-66.11	115.66	106.54	9.12	12.681	SF			
1,400.00	1,397.09	1,399.82	1,396.90	4.94	4.95	-131.959	89.24	-54.19	128.00	118.13	9.87	12.972				
1,500.00	1,495.02	1,498.25	1,492.62	5.34	5.35	-128.586	106.48	-39.08	142.08	131.44	10.64	13.348				
1,600.00	1,592.96	1,595.57	1,585.96	5.75	5.78	-124.032	127.16	-20.97	157.22	145.76	11.46	13.716				
1,700.00	1,690.89	1,691.90	1,676.94	6.18	6.24	-118.802	150.96	-0.11	174.23	161.92	12.31	14.149				
1,800.00	1,788.82	1,789.03	1,768.27	6.61	6.75	-114.127	175.82	21.68	192.83	179.63	13.20	14.604				
1,900.00	1,886.76	1,886.15	1,859.59	7.05	7.27	-110.278	200.68	43.46	212.47	198.36	14.11	15.057				
2,000.00	1,984.69	1,983.28	1,950.92	7.50	7.81	-107.082	225.54	65.25	232.89	217.86	15.03	15.494				
2,100.00	2,082.62	2,080.40	2,042.25	7.96	8.37	-104.401	250.40	87.03	253.90	237.94	15.96	15.907				
2,200.00	2,180.56	2,177.53	2,133.58	8.41	8.94	-102.129	275.26	108.82	275.36	258.46	16.90	16.295				
2,300.00	2,278.49	2,274.65	2,224.90	8.87	9.52	-100.185	300.12	130.60	297.18	279.34	17.84	16.656				
2,400.00	2,376.42	2,371.77	2,316.23	9.34	10.10	-98.506	324.98	152.38	319.29	300.50	18.79	16.992				
2,500.00	2,474.36	2,468.90	2,407.56	9.81	10.70	-97.045	349.84	174.17	341.62	321.88	19.74	17.304				
2,600.00	2,572.29	2,566.02	2,498.89	10.27	11.29	-95.762	374.70	195.95	364.14	343.45	20.70	17.594				
2,700.00	2,670.22	2,663.15	2,590.21	10.75	11.90	-94.628	399.55	217.74	386.82	365.16	21.65	17.863				
2,800.00	2,768.16	2,760.27	2,681.54	11.22	12.51	-93.619	424.41	239.52	409.62	387.01	22.61	18.113				
2,900.00	2,866.09	2,857.40	2,772.87	11.69	13.12	-92.717	449.27	261.31	432.53	408.96	23.58	18.346				
3,000.00	2,964.02	2,954.52	2,864.19	12.17	13.73	-91.905	474.13	283.09	455.54	431.00	24.54	18.563				
3,100.00	3,061.96	3,051.65	2,955.52	12.65	14.35	-91.171	498.99	304.88	478.62	453.12	25.50	18.766				
3,200.00	3,159.89	3,148.77	3,046.85	13.12	14.97	-90.505	523.85	326.66	501.77	475.30	26.47	18.956				
3,300.00	3,257.82	3,245.90	3,138.18	13.60	15.59	-89.897	548.71	348.45	524.98	497.54	27.44	19.134				
3,400.00	3,355.76	3,343.02	3,229.50	14.08	16.21	-89.340	573.57	370.23	548.24	519.83	28.41	19.300				
3,500.00	3,453.69	3,440.15	3,320.83	14.56	16.83	-88.829	598.43	392.01	571.54	542.17	29.38	19.457				
3,600.00	3,551.62	3,537.27	3,412.16	15.04	17.46	-88.358	623.29	413.80	594.89	564.54	30.35	19.604				
3,700.00	3,649.56	3,634.40	3,503.49	15.53	18.09	-87.922	648.15	435.58	618.27	586.95	31.32	19.742				
3,800.00	3,747.49	3,731.52	3,594.81	16.01	18.72	-87.518	673.01	457.37	641.68	609.39	32.29	19.873				
3,900.00	3,845.65	3,828.57	3,686.07	16.48	19.35	-87.528	697.85	479.14	665.17	631.93	33.24	20.011				
4,000.00	3,944.63	3,925.17	3,776.90	16.90	19.97	-87.395	722.57	500.80	688.97	654.87	34.10	20.202				
4,100.00	4,044.22	4,021.04	3,867.05	17.28	20.60	-86.916	747.11	522.31	713.23	678.36	34.87	20.451				
4,200.00	4,144.14	4,357.93	4,172.92	17.61	22.78	-78.120	784.10	647.57	730.77	694.19	36.59	19.973				
4,300.00	4,244.14	4,637.58	4,364.65	17.91	24.58	21.951	712.03	833.75	715.34	679.21	36.13	19.799				
4,400.00	4,343.89	4,775.71	4,423.06	18.18	25.57	67.978	646.38	939.81	697.21	660.55	36.66	19.017				
4,500.00	4,441.25	4,801.24	4,430.73	18.41	25.77	71.313	632.27	959.66	684.32	646.85	37.48	18.260				
4,598.88	4,532.28	4,786.40	4,426.39	18.58	25.65	70.473	640.55	948.13	680.08	642.47	37.62	18.079				
4,600.00	4,533.27	4,786.13	4,426.31	18.58	25.65	70.450	640.70	947.92	680.08	642.47	37.61	18.081				
4,700.00	4,617.15	4,756.91	4,416.81	18.72	25.43	67.673	656.36	925.16	684.08	647.10	36.98	18.498				
4,800.00	4,690.34	4,726.14	4,405.44	18.81	25.20	64.247	672.02	901.25	694.83	658.95	35.88	19.364				
4,900.00	4,750.63	4,691.40	4,390.90	18.86	24.95	60.240	688.70	874.46	710.45	675.79	34.67	20.494				
5,000.00	4,796.16	4,650.00	4,371.31	18.89	24.66	55.765	707.08	842.98	728.91	695.29	33.62	21.683				

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 120H - Original Hole - rev0													<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	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	4,826.22	4,615.39	4,353.10	19.04	24.43	52.547	721.14	817.14	750.64	717.46	33.18	22.620		
5,200.00	4,841.27	4,574.69	4,329.64	19.86	24.16	48.096	736.10	787.43	778.65	745.33	33.32	23.371		
5,300.00	4,843.44	4,533.77	4,303.97	20.95	23.90	44.783	749.32	758.46	811.30	777.31	33.99	23.865		
5,400.00	4,844.19	4,500.00	4,281.28	22.21	23.68	43.068	758.82	735.33	850.93	815.91	35.02	24.300		
5,500.00	4,844.95	4,465.96	4,257.12	23.62	23.47	41.302	767.06	712.81	897.49	861.43	36.06	24.887		
5,600.00	4,845.70	4,450.00	4,245.38	25.15	23.37	40.465	770.46	702.55	950.57	913.11	37.46	25.373		
5,700.00	4,846.46	4,400.00	4,206.97	26.79	23.05	37.830	779.14	671.77	1,009.25	971.27	37.97	26.578		
5,800.00	4,847.21	4,400.00	4,206.97	28.51	23.05	37.830	779.14	671.77	1,072.67	1,033.23	39.45	27.194		
5,900.00	4,847.97	4,373.55	4,185.73	30.31	22.88	36.438	782.51	656.36	1,140.54	1,100.36	40.18	28.385		
6,000.00	4,848.72	4,350.00	4,166.35	32.17	22.74	35.208	784.79	643.19	1,212.26	1,171.42	40.84	29.681		
6,100.00	4,849.48	4,350.00	4,166.35	34.08	22.74	35.208	784.79	643.19	1,287.19	1,245.38	41.81	30.789		
6,200.00	4,850.23	4,327.81	4,147.69	36.04	22.59	34.060	786.31	631.28	1,364.77	1,322.53	42.24	32.313		

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



## Anticollision Report

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

<b>Offset Design:</b> Ponderosa (99, 111,112,114-117,120,136) - Ponderosa 136H - Original Hole - rev0												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 0-MWD												<b>Offset Well Error:</b>	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
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 CC, ES	
600.00	600.00	597.42	597.37	2.06	2.04	-56.082	34.58	-51.43	62.03	57.93	4.11	15.109	
700.00	700.00	694.33	693.99	2.42	2.39	-59.549	34.58	-58.82	68.50	63.70	4.80	14.280 SF	
800.00	800.00	790.04	788.93	2.78	2.74	-63.781	34.92	-70.90	79.80	74.32	5.48	14.566	
900.00	900.00	884.31	881.73	3.14	3.12	-67.617	35.98	-87.37	96.24	90.09	6.15	15.660	
1,000.00	1,000.00	976.73	971.82	3.50	3.52	-70.723	37.73	-107.89	117.72	110.93	6.79	17.331	
1,100.00	1,099.95	1,066.20	1,057.98	3.85	3.95	-157.312	40.09	-131.83	146.35	138.94	7.41	19.738	
1,200.00	1,199.63	1,151.18	1,138.70	4.20	4.41	-159.401	42.93	-158.23	184.13	176.12	8.01	22.986	
1,300.00	1,298.77	1,230.80	1,213.19	4.56	4.88	-161.015	46.12	-186.16	230.54	221.98	8.56	26.925	
1,400.00	1,397.09	1,300.00	1,276.93	4.94	5.33	-162.138	49.30	-212.90	284.93	275.89	9.04	31.523	
1,500.00	1,495.02	1,373.42	1,343.45	5.34	5.86	-163.537	53.08	-243.75	344.11	334.55	9.56	35.994	
1,600.00	1,592.96	1,438.77	1,401.60	5.75	6.38	-164.445	56.79	-273.31	406.23	396.22	10.00	40.606	
1,700.00	1,690.89	1,500.00	1,455.14	6.18	6.89	-165.095	60.57	-302.77	470.97	460.56	10.42	45.208	
1,800.00	1,788.82	1,559.19	1,505.97	6.61	7.44	-165.586	64.49	-332.85	538.13	527.30	10.83	49.690	
1,900.00	1,886.76	1,614.57	1,552.65	7.05	7.97	-165.952	68.40	-362.38	607.48	596.27	11.21	54.180	
2,000.00	1,984.69	1,683.34	1,609.96	7.50	8.67	-166.317	73.41	-400.06	678.09	666.31	11.78	57.576	
2,100.00	2,082.62	1,754.07	1,668.91	7.96	9.40	-166.623	78.58	-438.82	748.73	736.35	12.38	60.501	
2,200.00	2,180.56	1,824.80	1,727.85	8.41	10.15	-166.876	83.74	-477.57	819.38	806.40	12.98	63.124	
2,300.00	2,278.49	1,895.54	1,786.79	8.87	10.91	-167.089	88.90	-516.33	890.03	876.44	13.59	65.485	
2,400.00	2,376.42	1,966.27	1,845.73	9.34	11.68	-167.271	94.06	-555.09	960.69	946.48	14.21	67.619	
2,500.00	2,474.36	2,037.00	1,904.67	9.81	12.45	-167.428	99.22	-593.85	1,031.35	1,016.52	14.83	69.555	
2,600.00	2,572.29	2,107.73	1,963.61	10.27	13.22	-167.565	104.39	-632.61	1,102.02	1,086.56	15.45	71.317	
2,700.00	2,670.22	2,178.46	2,022.56	10.75	14.01	-167.685	109.55	-671.37	1,172.69	1,156.60	16.08	72.924	
2,800.00	2,768.16	2,249.20	2,081.50	11.22	14.79	-167.791	114.71	-710.13	1,243.36	1,226.64	16.71	74.395	
2,900.00	2,866.09	2,319.93	2,140.44	11.69	15.58	-167.887	119.87	-748.89	1,314.03	1,296.68	17.35	75.747	

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



## Anticollision Report

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

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

Offset Depths are relative to Offset Datum

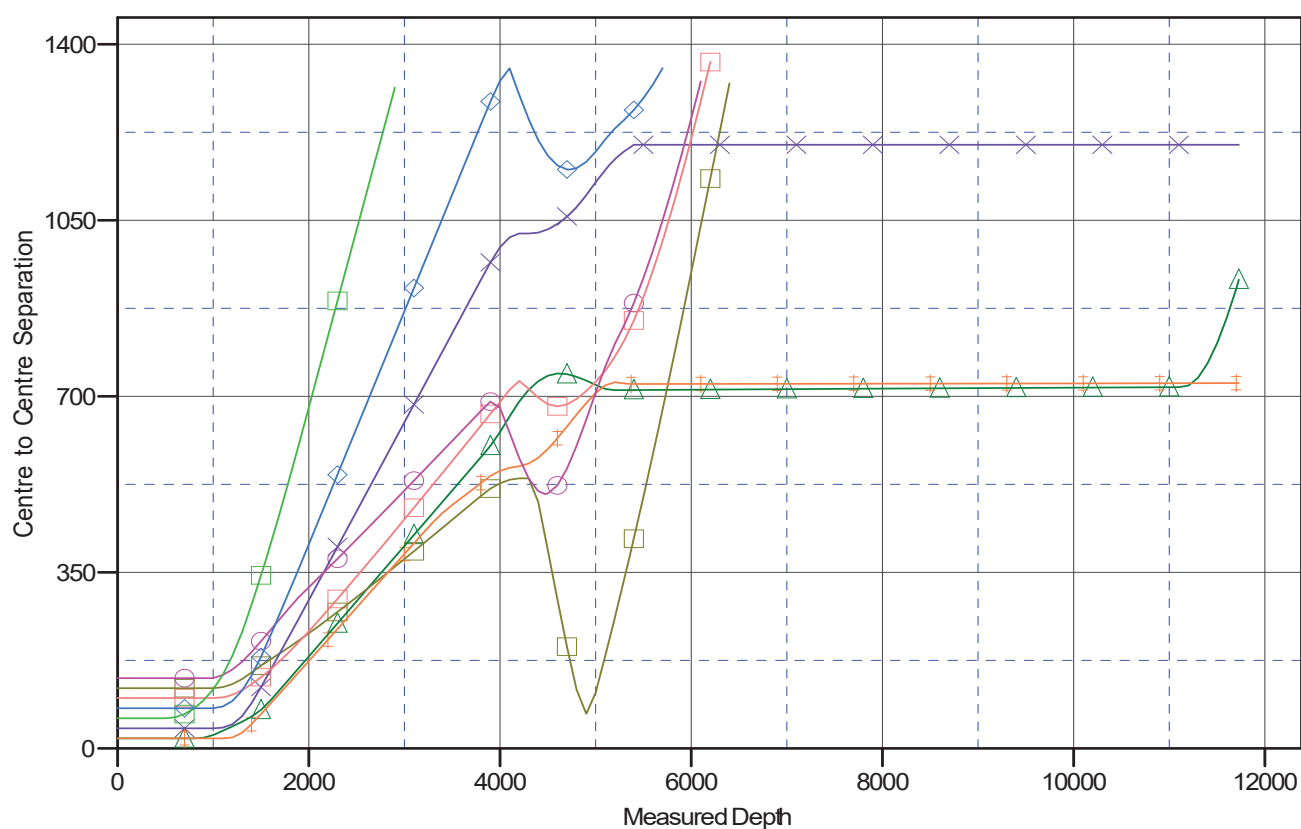
Central Meridian is -107.83333333

Coordinates are relative to: Ponderosa 117H

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 120H Original Hole rev0/0		Ponderosa 136H Original Hole rev0/0
	Ponderosa 116H Original Hole rev0/0		Ponderosa 111H Original Hole rev0/0		Ponderosa 114H Original Hole rev0/0
	Ponderosa 112H 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

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

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

Offset Depths are relative to Offset Datum

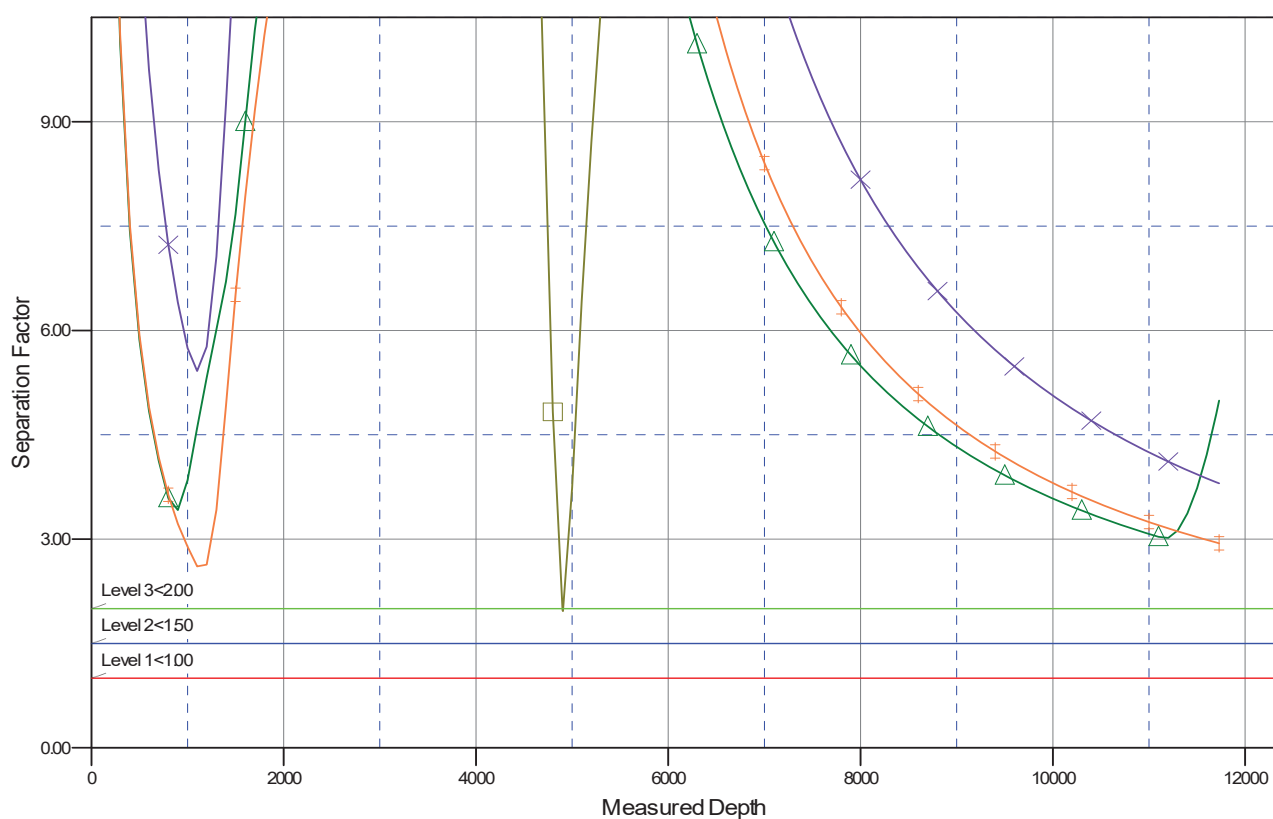
Central Meridian is -107.8333333

Coordinates are relative to: Ponderosa 117H

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 120H Original Hole rev0/0		Ponderosa 136H Original Hole rev0/0
	Ponderosa 116H Original Hole rev0/0		Ponderosa 111H Original Hole rev0/0		Ponderosa 114H Original Hole rev0/0
	Ponderosa 112H 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





# 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  
#117H PONDEROSA UNIT  
Lease: NMNM135984 Agreement: NMNM106318743  
  
SH: NENW 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 5<sup>th</sup> business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

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

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

### **IV. GAS FLARING**

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

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

### **V. SAFETY**

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

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

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

**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/oed/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 424164

**CONDITIONS**

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 424164
	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