

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-045-38417
3b. Phone No. (include area code)		10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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

(Continued on page 2)

*(Instructions on page 2)



Approval Date: 11/22/2024

Additional Operator Remarks

Location of Well

0. SHL: SENW / 1822 FNL / 2308 FWL / TWSP: 24N / RANGE: 8W / SECTION: 26 / LAT: 36.287483 / LONG: -107.652295 (TVD: 0 feet, MD: 0 feet)
PPP: SWNE / 2384 FNL / 2074 FEL / TWSP: 24N / RANGE: 8W / SECTION: 26 / LAT: 36.285944 / LONG: -107.649229 (TVD: 5442 feet, MD: 5927 feet)
PPP: NWNW / 0 FSL / 856 FWL / TWSP: 24N / RANGE: 8W / SECTION: 26 / LAT: 36.292484 / LONG: -107.657277 (TVD: 5607 feet, MD: 16744 feet)
PPP: SWSW / 881 FSL / 1 FWL / TWSP: 24N / RANGE: 8W / SECTION: 23 / LAT: 36.294901 / LONG: -107.660253 (TVD: 5607 feet, MD: 16744 feet)
PPP: SWSW / 1 FSL / 856 FWL / TWSP: 24N / RANGE: 8W / SECTION: 23 / LAT: 36.294901 / LONG: -107.660253 (TVD: 5607 feet, MD: 16744 feet)
PPP: SESE / 881 FSL / 0 FEL / TWSP: 24N / RANGE: 8W / SECTION: 22 / LAT: 36.294901 / LONG: -107.660253 (TVD: 5607 feet, MD: 16744 feet)
BHL: NWNW / 237 FNL / 1184 FWL / TWSP: 24N / RANGE: 8W / SECTION: 22 / LAT: 36.306334 / LONG: -107.674329 (TVD: 5607 feet, MD: 16744 feet)

BLM Point of Contact

Name: JEFFREY J TAFOYA
Title: Assistant Field Manager
Phone: (505) 564-7672
Email: JTAFOYA@BLM.GOV

CONFIDENTIAL

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

WELL LOCATION INFORMATION

API Number 30-045-38417	Pool Code 42289	Pool Name LYBROOK GALLUP
Property Code 336777	Property Name RIDGE UNIT	Well Number 135H
OGRID No. 372286	Operator Name ENDURING RESOURCES, LLC	Ground Level Elevation 6832'
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

UL F	Section 26	Township 24N	Range 8W	Lot	Feet from N/S Line 1822' NORTH	Feet from E/W Line 2308' WEST	Latitude 36.287483 °N	Longitude -107.652295 °W	County SAN JUAN
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Bottom Hole Location

UL D	Section 22	Township 24N	Range 8W	Lot	Feet from N/S Line 237' NORTH	Feet from E/W Line 1184' WEST	Latitude 36.306334 °N	Longitude -107.674329 °W	County SAN JUAN
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Dedicated Acres		Penetrated Spacing Unit:							
600.00		NW/4 NW/4, E/2 NW/4, W/2 NE/4 SE/4 NE/4, N/2 SE/4, SE/4 SE/4 - Sec 22 W/2 SW/4 - Sec 23 N/2 NW/4, SE/4 NW/4, SW/4 NE/4 - Sec 26				Infill or Defining Well	Defining Well API	Overlapping Spacing Unit <input type="checkbox"/> Yes <input type="checkbox"/> No	Consolidation Code
Order Numbers R-20594						Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

Kick Off Point (KOP)

UL F	Section 26	Township 24N	Range 8W	Lot	Feet from N/S Line 1822' NORTH	Feet from E/W Line 2308' WEST	Latitude 36.287483 °N	Longitude -107.652295 °W	County SAN JUAN
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First Take Point (FTP)

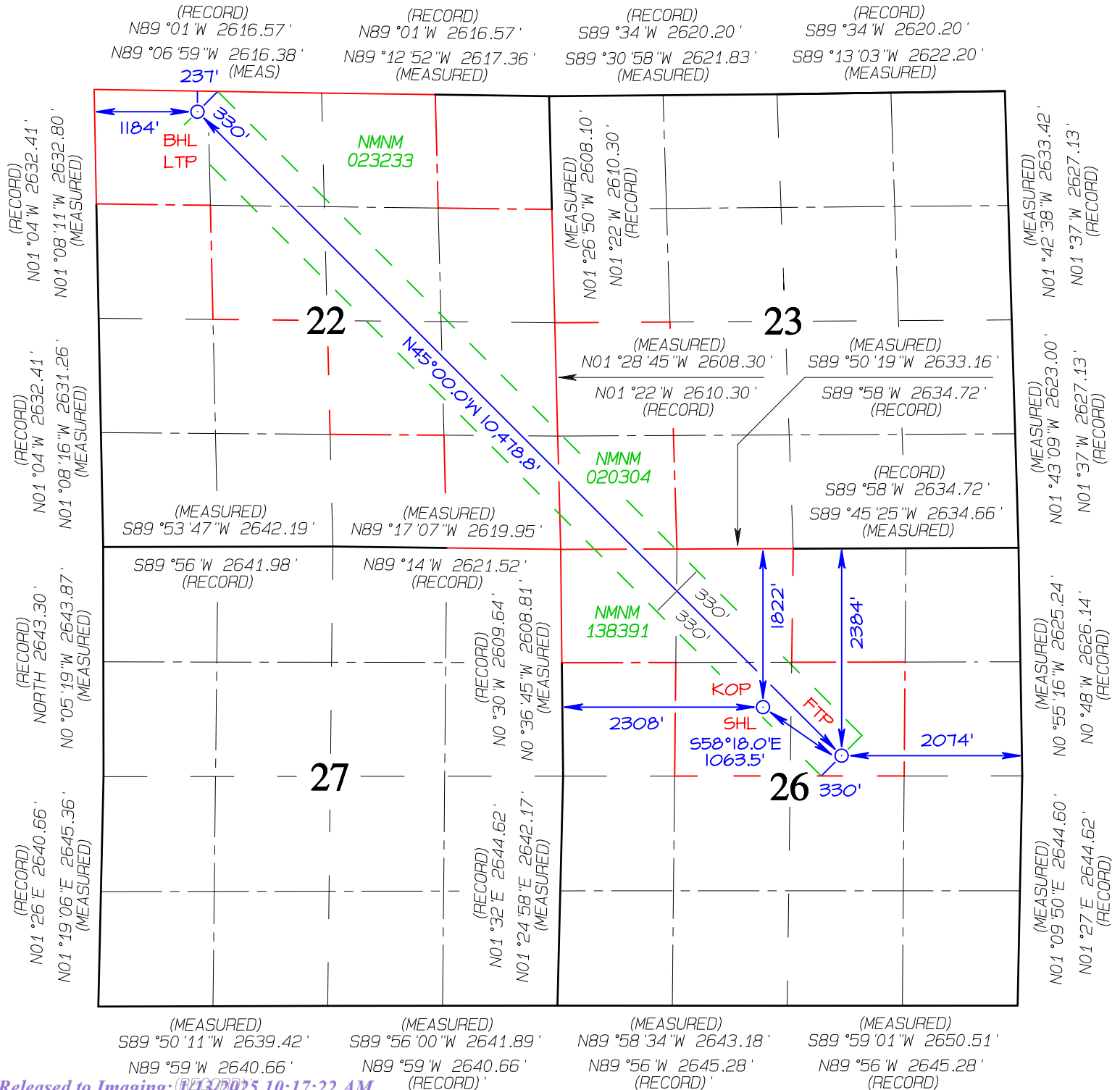
UL G	Section 26	Township 24N	Range 8W	Lot	Feet from N/S Line 2384' NORTH	Feet from E/W Line 2074' EAST	Latitude 36.285944 °N	Longitude -107.649229 °W	County SAN JUAN
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Last Take Point (LTP)

UL D	Section 22	Township 24N	Range 8W	Lot	Feet from N/S Line 237' NORTH	Feet from E/W Line 1184' WEST	Latitude 36.306334 °N	Longitude -107.674329 °W	County SAN JUAN
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Unitized Area or Area of Uniform Interest RIDGE UNIT	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical <input type="checkbox"/> Directional	Ground Floor Elevation
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<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p>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.</p> <div>Shaw-Marie Ford Signature</div> <div>12/16/2024 Date</div> <div>Shaw-Marie Ford Printed Name</div> <div>sford@enduringresources.com E-mail Address</div>	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <div></div> <div>JASON C. EDWARDS</div> <div>Signature and Seal of Professional Surveyor</div> <div>Certificate Number 15269</div> <div>Date of Survey NOVEMBER 30, 2021</div>
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State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

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

Section 1 – Plan Description
Effective May 25, 2021**I. Operator:** Enduring Resources, LLC **OGRID:** 372286 **Date:** 12 / 17 / 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
Ridge Unit 130H	TBD	F-26-24N-8W	1815 FNL x 2327 FWL	519	2075	208
Ridge Unit 135H	TBD	F-26-24N-8W	1822 FNL x 2308 FWL	510	2041	204
Ridge Unit 136H	TBD	F-26-24N-8W	1829 FNL x 2289 FWL	446	1786	179
Ridge Unit 137H	TBD	F-26-24N-8W	1835 FNL x 2270 FWL	349	1395	139
				3-year Decline	3-year Decline	3-year Decline
Ridge Unit 130H	TBD	F-26-24N-8W	1815 FNL x 2327 FWL	117	469	47
Ridge Unit 135H	TBD	F-26-24N-8W	1822 FNL x 2308 FWL	115	461	46
Ridge Unit 136H	TBD	F-26-24N-8W	1829 FNL x 2289 FWL	101	403	40
Ridge Unit 137H	TBD	F-26-24N-8W	1835 FNL x 2270 FWL	79	315	32

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
Ridge Unit 130H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
Ridge Unit 135H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
Ridge Unit 136H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
Ridge Unit 137H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

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

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

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 12/17/2024
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



Enduring Resources, LLC.
NATURAL GAS MANAGEMENT and WASTE MINIMIZATION PLAN
Ridge Unit 130H, 135H, 136H and 137H

SEPARATION EQUIPMENT

Enduring Resources, LLC (Enduring) has pulled representative pressurized samples from wells in the same producing formation. Enduring 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.



Enduring Resources, LLC.
NATURAL GAS MANAGEMENT and WASTE MINIMIZATION PLAN
Ridge Unit 130H, 135H, 136H and 137H

VENTING and FLARING

Enduring has a natural gas system available prior to startup of completion operations. Enduring 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, Enduring utilizes the following from list A-I of Section 3 for its operations to minimize flaring:

- a) Enduring 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) Enduring'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.

Enduring 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



Enduring Resources, LLC.
NATURAL GAS MANAGEMENT and WASTE MINIMIZATION PLAN
Ridge Unit 130H, 135H, 136H and 137H

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

Enduring 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

- Enduring 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, Enduring will vent natural gas in order to avoid substantial impact. Enduring 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, Enduring utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

During Production Operations Enduring 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. Enduring does not vent after the well achieves a stabilized rate and pressure.
 - b. Enduring 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. Enduring 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. Enduring receives approval from the NMOCD.
 - b. Enduring remains in compliance with the NM gas capture requirements.
 - c. Enduring 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. Enduring 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. Enduring will install a flare that designed to handle the full volume of vapors from the facility in case of the VRU failure and it its designed with an auto ignition system.
3. Flare stacks will appropriately sized and designed to ensure proper combustion efficiency.
 - a. Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.



- b. Previously installed flare stacks will be retrofitted with an automatic ignitor, continuous pilot, or technology that alerts ENDURING 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. Enduring will conduct an AVO inspection on all components for leaks and defects on a weekly basis.
5. Enduring will make and keep records of AVO inspections which will be available to the NMOCD for at least 5 years.
6. Enduring 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. Enduring will resolve emergencies as promptly as possible.

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

1. Enduring will have meters on both the low- and high-pressure sides of the flares and the volumes will be recorded in ENDURING's SCADA system.
2. Enduring 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. Enduring'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. Enduring 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. Enduring 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. Enduring will install measuring equipment whenever the NMOCD determines that metering is necessary.



Enduring Resources, LLC.
NATURAL GAS MANAGEMENT and WASTE MINIMIZATION PLAN
Ridge Unit 130H, 135H, 136H and 137H

BEST MANAGEMENT PRACTICES

Enduring utilizes the following Best Management Practices to minimize venting during active and planned maintenance.

Enduring 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.

Enduring 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.

Enduring 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.

Enduring 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.

Enduring 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.

Enduring'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.

Enduring 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 80111

DRILLING PLAN: Drill, complete, and equip single lateral in the Mancos-I formation

WELL INFORMATION:

Name: RIDGE UNIT 135H

ER Well Number: Not yet assigned

State: New Mexico

County: San Juan

Surface Elevation: 6,832 ft ASL (GL)

6,857 ft ASL (KB)

Surface Location: 26-24N-08W Sec-Twn-Rng

1,822 ft FNL

2,308 ft FWL

36.287483 ° N latitude

107.652295 ° W longitude

(NAD 83)

BH Location: 22-24N-08W Sec-Twn-Rng

237 ft FNL

1,184 ft FWL

36.306334 ° N latitude

107.674329 ° 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 42.8 miles to MM 109.0, Left (North) on CR 7997 for 1.8 miles to fork in road, Right (North-East) for 0.6 miles to fork in road, Right (Straight)(North-East) for 0.1 miles to access road, Left on access road to Ridge Unit 130H Pad. The 135H well is the second well from the East and second closest to the location entrance. From East to West: RU 130H, 135H, 136H and 137H.

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	5,623	1,234	1,235	W	normal
	Kirtland	5,500	1,357	1,359	W	normal
	Fruitland	5,280	1,577	1,586	G, W	sub
	Pictured Cliffs	4,960	1,897	1,933	G, W	sub
	Lewis	4,860	1,997	2,045	G, W	normal
	Chacra	4,545	2,312	2,397	G, W	normal
	Cliff House	3,445	3,412	3,625	G, W	sub
	Menefee	3,440	3,417	3,631	G, W	normal
	Point Lookout	2,605	4,252	4,563	G, W	normal
	Mancos	2,370	4,487	4,826	O,G	sub (~0.38)
	Gallup (MNCS_A)	2,000	4,857	5,228	O,G	sub (~0.38)
	MNCS_B	1,915	4,942	5,313	O,G	sub (~0.38)
	MNCS_C	1,795	5,062	5,434	O,G	sub (~0.38)
	MNCS_Cms	1,715	5,142	5,518	O,G	sub (~0.38)
	MNCS_D	1,640	5,217	5,601	O,G	sub (~0.38)
	MNCS_E	1,560	5,297	5,698	O,G	sub (~0.38)
	MNCS_F	1,505	5,352	5,773	O,G	sub (~0.38)
	MNCS_G	1,415	5,442	5,927	O,G	sub (~0.38)
	MNCS_H	1,375	5,482	6,009	O,G	sub (~0.38)
	MNCS_I	1,325	5,532	6,173	O,G	sub (~0.38)
	P.O.E. TARGET	1,415	5,442	5,927	O,G	sub (~0.38)
	PROJECTED TD	1,250	5,607	16,744	O,G	sub (~0.38)

Surface: Nacimiento

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

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

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

Maximum anticipated BH pressure, assuming maximum pressure gradient: 2,420 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 1,190 psi

Temperature: Maximum anticipated BHT is 140° F or less

H₂S INFORMATION:

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

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

LOGGING, CORING, AND TESTING:

Mud Logs: None planned; gas detection from drill out of 13-3/8" casing to TD; remote geo-steering from drill out of 9-5/8" casing to TD.

MWD / LWD: MWD surveys with inclination and azimuth in 100' stations (minimum) from drill out of 13-3/8" casing to TD; Gamma Ray from drill out of 9-5/8" casing to TD; Gamma Ray optional in 12-1/4" intermediate hole

Open Hole Logs: None planned

Testing: None planned

Coring: None planned

Cased Hole Logs: CBL on 5-1/2" casing from deepest free-fall depth to surface

DRILLING RIG INFORMATION:

Contractor: Aztec

Rig No.: 1000

Draw Works: E80 AC 1,500 hp

Mast: Hyduke Triple (136 ft, 600,000 lbs, 10 lines)

Top Drive: NOV IDS-350PE (350 ton)

Prime Movers: 4 - GE Jenbacher Natural Gas Generator

Pumps: 2 - RS F-1600 (7,500 psi)

BOPE 1: Cameron single & double gate rams (13-5/8", 3,000 psi)

BOPE 2: Cameron annular (13-5/8", 5,000 psi)

Choke 3", 5,000 psi

KB-GL (ft): 25

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.
- 2) 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.
- 3) 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.
- 4) 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.
- 5) 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 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 for specifics.

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: 17-1/2"**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	13.375	54.5	J-55	BTC	1,130	2,730	853,000	909,000
Loading					153	769	116,634	116,634
Min. S.F.					7.39	3.55	7.31	7.79

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: N/A Optimum: N/A Maximum: N/A

Make-up as per API Buttress Connection running procedure.

Casing Details: 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)
	TYPE III	14.6	1.39	6.686	0.6946	100%	0	364

Annular Capacity 0.6946 cuft/ft 13-3/8" casing x 17-1/2" hole annulus Csg capacity 0.8680 ft3/ft

Drake Energy Services: Calculated cement volumes assume gauge hole and the excess noted in table

	Calcium Chloride	D-CD2 .3% BWOC
ASTM Type III	2% BWOC	Dispersant/Friction .25 lbs/sx Cello
Tail Blend	Accelerator	reducer Flake - seepage

Cu Ft Slurry
505.3

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	3,798 ft (MD)	Hole Section Length:	3,448 ft
350 ft (TVD)	to	3,567 ft (TVD)	Casing Required:	3,798 ft

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	LSND	8.8 - 9.5	20	8 - 14	8 - 14	9.0 - 9.5	

Hole Size: 12-1/4"

Bit / Motor: PDC w/mud motor

MWD / Survey: MWD surveys with inclination and azimuth in 100' stations (minimum), GR optional

Logging: None

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

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	9.625	36.0	J-55	LTC	2,020	3,520	564,000	453,000
Loading					1,558	1,394	219,233	219,233
Min. S.F.					1.30	2.53	2.57	2.07

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

Casing Details: Float shoe, 1 jt casing, float collar, casing to surface

Centralizers: 1 centralizers jt stop-banded 10' from float shoe on bottom 1 jt & 1 centralizer floating on bottom joint, 1
centralizer per 3 jts to surface

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Spacer	D-Mud Breaker	8.5				0	10 bbls	
Lead	90:10 Type III:POZ	12.5	2.140	12.05	70%	0	793	1,697
Tail	Type III	14.6	1.380	6.61	20%	3,298	150	207
Displacement	290	est bbls						

Annular Capacity 0.3627 cuft/ft 9-5/8" casing x 13-3/8" casing annulus

0.3132 cuft/ft 9-5/8" casing x 12-1/4" hole annulus 9-5/8" 36# ID 8.921

0.4341 cuft/ft 9-5/8" casing vol est shoe jt ft 44

Calculated cement volumes assume gauge hole and the excess (open hole only) noted in table

Spacer	D-Mud Breaker	SAPP	D-MPA-1 .4%					
		D-CSE 1 5.0%	BWOC Fluid Loss &					
Lead	ASTM Type III 90/10 Poz	BWOC Strength Enhancer	Gas Migration Control	D-SA 1 1.4% BWOC Na Metasilicate	D-CD 2 .4% BWOC Dispersant	Cello Flace LCM .25 lb/sx	D-FP1 0.5% BWOC Defoamer	D-R1 .5% Retarder
			BWOC Fluid Loss &					
Tail	ASTM Type III Blend		Gas Migration Control		D-CD 2 .5% BWOC Dispersant	Cello Flace LCM .25 lb/sx		D-R1 .2% Retarder

Drake Intermediate Cementing Program

Cement must achieve 500 psi compressive strength before drilling out.

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.

3,798 ft (MD)	to	16,744 ft (MD)	Hole Section Length:	12,946 ft
3,567 ft (TVD)	to	5,607 ft (TVD)	Casing Required:	16,744 ft

Estimated KOP:	5,050 ft (MD)	4,688 ft (TVD)
Estimated Landing Point (P.O.E.):	5,927 ft (MD)	5,442 ft (TVD)
Estimated Lateral Length:	10,817 ft (MD)	

Fluid:	Type	MW (ppg)	WPS ppm	HTHP	YP (lb/100 sqft)	ES	OWR	Comment
	OBM	8.0 - 9.0	120,000 CaCl	NC	±6	+300	80:20	WBM as contingency

Hole Size: 8-1/2"**Bit / Motor:** PDC w/mud motor**MWD / Survey:** MWD surveys with inclination and azimuth in 100' stations (minimum) before KOP, every joint from KOP to POE, every 100' (minimum) from POE to TD; Gamma Ray from drill out of 9-5/8" shoe to TD**Logging:** MWD Gamma Ray 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.

Casing Specs:	Size (in)	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	5.500	17.0	P-110	LTC	7,460	10,640	546,000	445,000
Loading					2,770	9,025	345,625	345,625
Min. S.F.					2.69	1.18	1.58	1.29

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

MU Torque (ft lbs): Minimum: 3,400 Optimum: 4,530 Maximum: 5,660**Casing Details:** Float shoe, float collar, 1 jt casing, float collar, 20' marker joint, toe-initiation sleeve, casing to KOP with 20' marker joints spaced approximately in lateral every 2,000', floatation sub at KOP, casing to surface. The toe-initiation sleeve (last-take-point) cannot be placed closer than 330' to the unit boundary when measured perpendicular to the well path.**Centralizers:** Centralizer count and placement may be adjusted based on well conditions and as-drilled surveys.

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Spacer	IntegraGuard Star	11		31.6		0	60 bbls	
Lead	ASTM type I/II	12.4	2.370	13.40	50%	0	580	1,375
Tail	G:POZ blend	13.3	1.570	7.70	10%	4,826	1,921	3,016

Displacement 369 est bbls

Annular Capacity 0.2691 cuft/ft 5-1/2" casing x 9-5/8" casing annulus

0.2291 cuft/ft 5-1/2" casing x 8-1/2" hole annulus

0.1245 cuft/ft 5-1/2" casing vol est shoe jt ft 100

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

American Cementing Liner & Production Blend

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

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

FINISH WELL: ND BOP, NU WH, RDMO.

COMPLETION AND PRODUCTION PLAN:

Est Lateral Length: 10,717

Est Frac Inform: 45 Frac Stages 172,000 bbls slick water 13,940,000 lbs proppant

Flowback: Well will be flowed back through production tubing. An ESP may be used to assist in load water recovery.

Production: Well will produce up production tubing via gas-lift into permanent production and storage facilities.

ESTIMATED START DATES:

Drilling: 11/3/2023

Completion: 12/18/2023

Production: 1/17/2024

Prepared by: G Olson 7/15/2022
G Olson 8/16/2023

WELL NAME: RIDGE UNIT 135H

OBJECTIVE: Drill, complete, and equip single lateral in the Mancos-I formation

API Number: Not yet assigned

State: New Mexico

County: San Juan

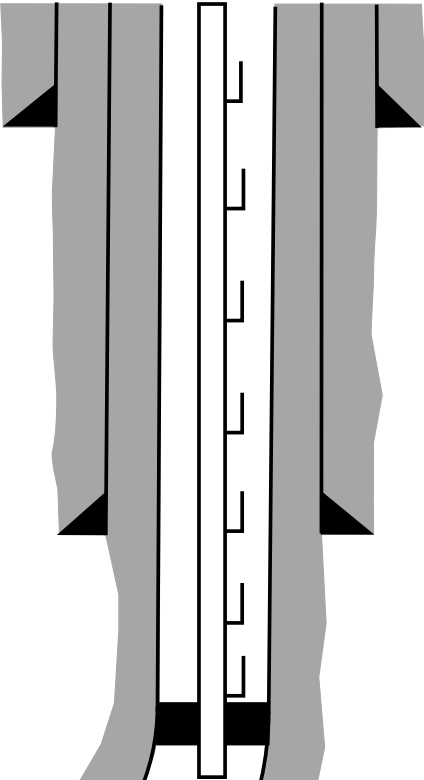
Surface Elev.: 6,832 ft ASL (GL) 6,857 ft ASL (KB)

Surface Location: 26-24N-08W Sec-Twn- Rng 1,822 ft FNL 2,308 ft FWL

BH Location: 22-24N-08W Sec-Twn- Rng 237 ft FNL 1184 ft FWL

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM: South on US Hwy 550 for 42.8 miles to MM 109.0, Left (North) on CR 7997 for 1.8 miles to fork in road, Right (North-East) for 0.6 miles to fork in road, Right (Straight)(North-East) for 0.1 miles to access road, Left on access road to Ridge Unit 130H Pad. The 135H well is the second well from the East and second closest to the location entrance. From East to West: RU 130H, 135H, 136H and 137H.

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	3,798 ft
KOP (MD)	5,050 ft
KOP (TVD)	4,688 ft
Target (TVD)	5,442 ft
Curve BUR	10 °/100 ft
POE (MD)	5,927 ft
TD (MD)	16,744 ft
Lat Len (ft)	10,817 ft



Formation Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	1234	1235
Kirtland	1357	1359
Fruitland	1577	1586
Pictured Cliffs	1897	1933
Lewis	1997	2045
Chacra	2312	2397
Cliff House	3412	3625
Menefee	3417	3631
Point Lookout	4252	4563
Mancos	4487	4826
Gallup (MNCS_A)	4857	5228
MNCS_B	4942	5313
MNCS_C	5062	5434
MNCS_Cms	5142	5518
MNCS_D	5217	5601
MNCS_E	5297	5698
MNCS_F	5352	5773
MNCS_G	5442	5927
MNCS_H	5482	6009
MNCS_I	5532	6173
P.O.E. TARGET	5442	5927
PROJECTED TD	5607	16744

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	3,798	9.625	36.0	J-55	LTC	0	3,798
Production	8.500	16,744	5.500	17.0	P-110	LTC	0	16,744

CEMENT PROPERTIES SUMMARY:

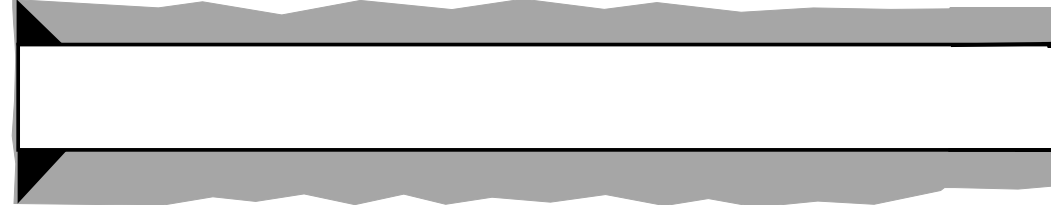
	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)	Total Cu Ft
Surface	TYPE III	14.6	1.39	6.686	0.6946	100%	0	364	505
Inter. (Lead)	90:10 Type III:POZ	12.5	2.14	12.05	0.3132	70%	0	793	1,697
Inter. (Tail)	Type III	14.6	1.38	6.61	0.3132	20%	3,298	150	207
Prod. (Lead)	ASTM type I/II	12.4	2.37	13.4	0.2291	50%	0	580	1,375
Prod. (Tail)	G:POZ blend	13.3	1.57	7.7	0.2291	10%	4,826	1,921	3,016

COMPLETION / PRODUCTION SUMMARY:

Frac: 30-stage (+/-) plug-and-perf frac with slick water and 10,000,000 lbs (+/-) proppant

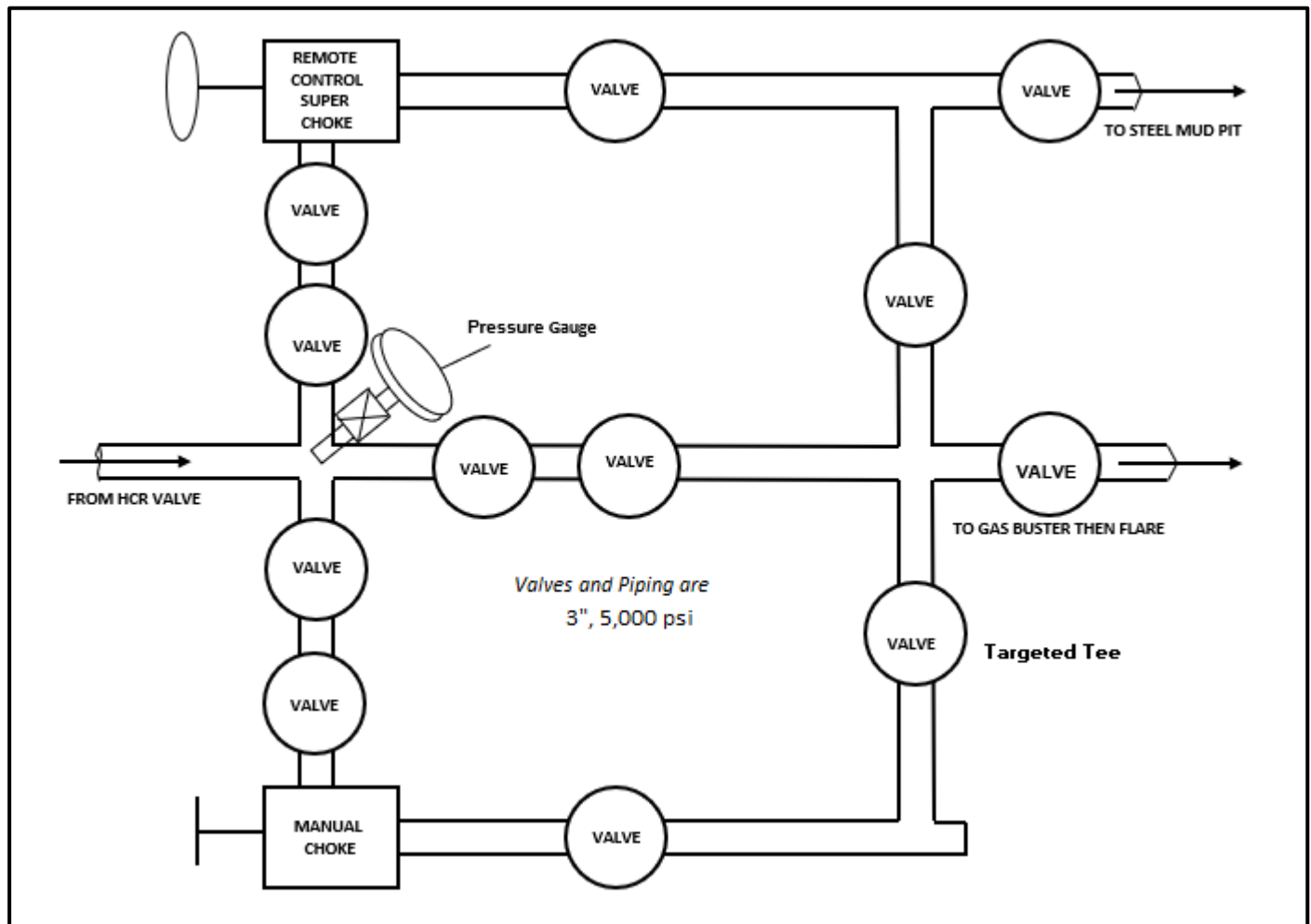
Flowback: Flow up production tubing as pressures allow (an ESP may be used to assist in load-water recovery)

Production: 2-7/8" tubing, ESP will be replaced with gas lift as well conditions dictate



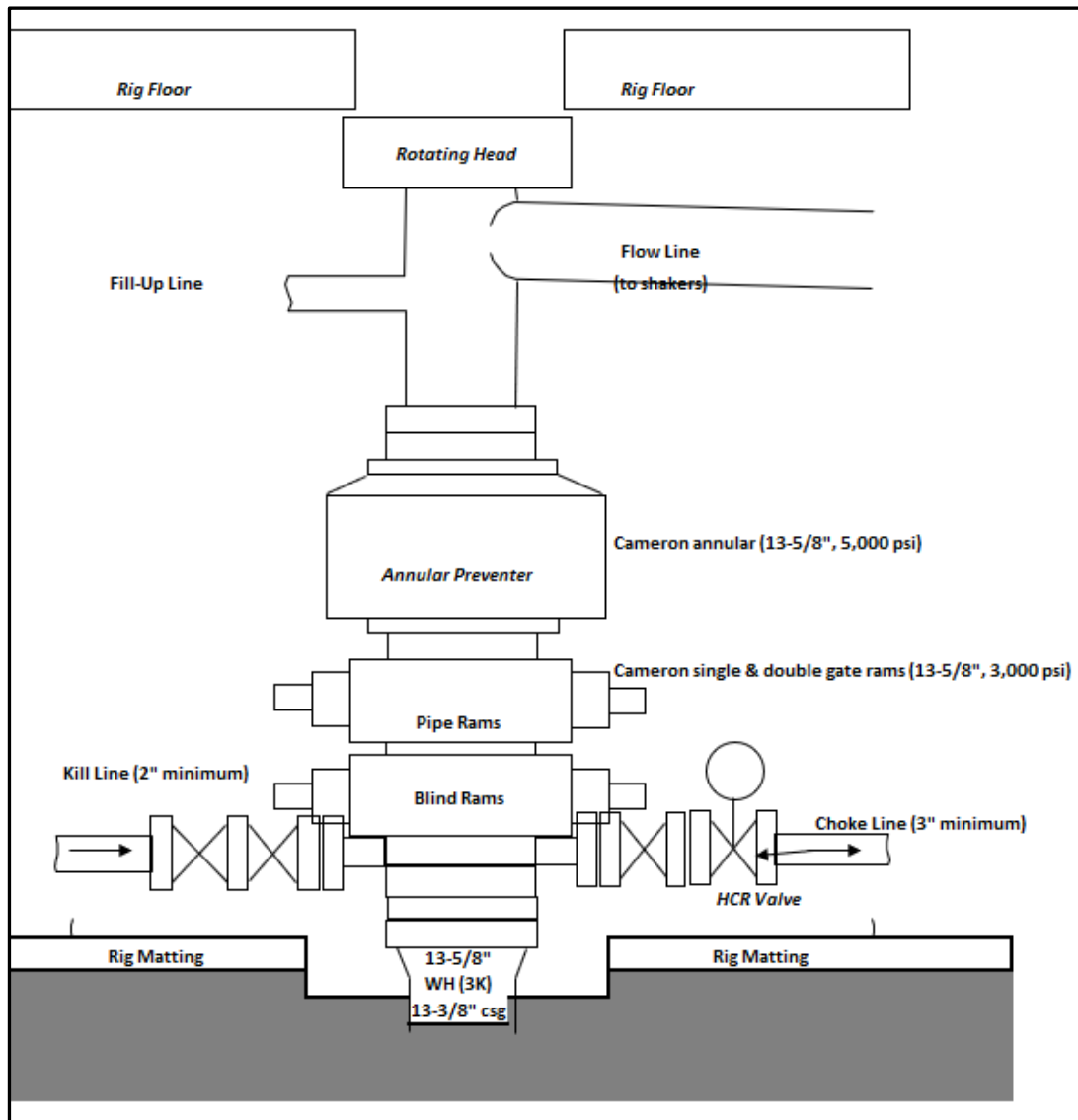


Enduring Resources IV, LLC CHOKE MANIFOLD





Enduring Resources IV, LLC BOPE Diagram

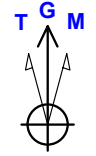




Well: Ridge Unit No. 135H
Site: Ridge Unit (130, 135, 136 & 137)
Project: San Juan County, New Mexico NAD83 NM W
Design: rev1
Rig:

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Ridge 135H FTP 2384 FNL 2074 FEL r1	5540.00	-558.53	904.65	1923434.581	2777350.169	36.285944000	-107.649229000
Ridge 135H LTP 237 FNL 1184 FWL 330 perp r1	5607.00	-558.53	-6504.94	1930843.965	2769940.596	36.306334000	-107.674329000



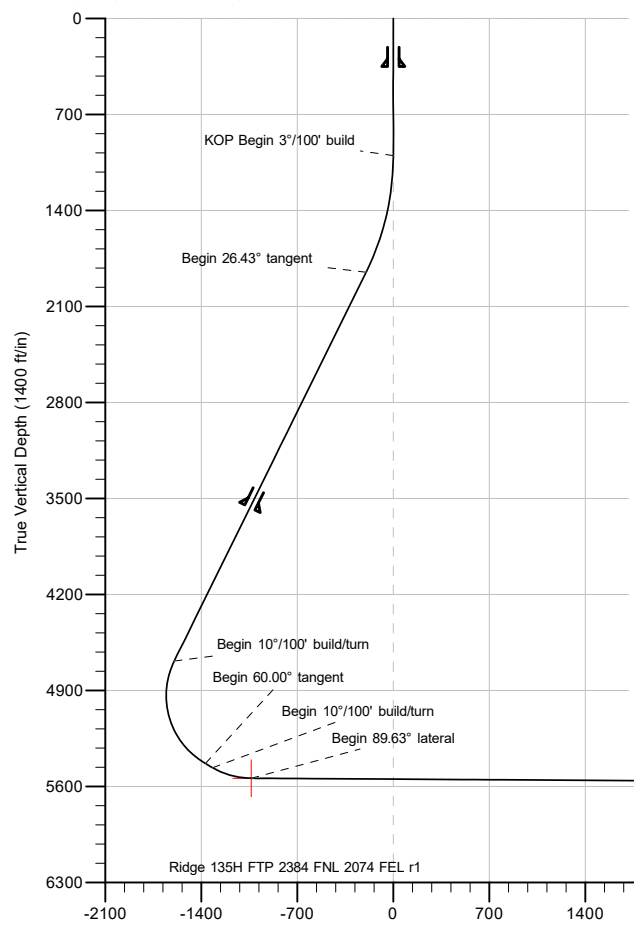
Azimuths to Grid North
True North: -0.11°
Magnetic North: 8.43°

Magnetic Field
Strength: 49131.9nT
Dip Angle: 62.77°
Date: 8/15/2023
Model: IGRF2020

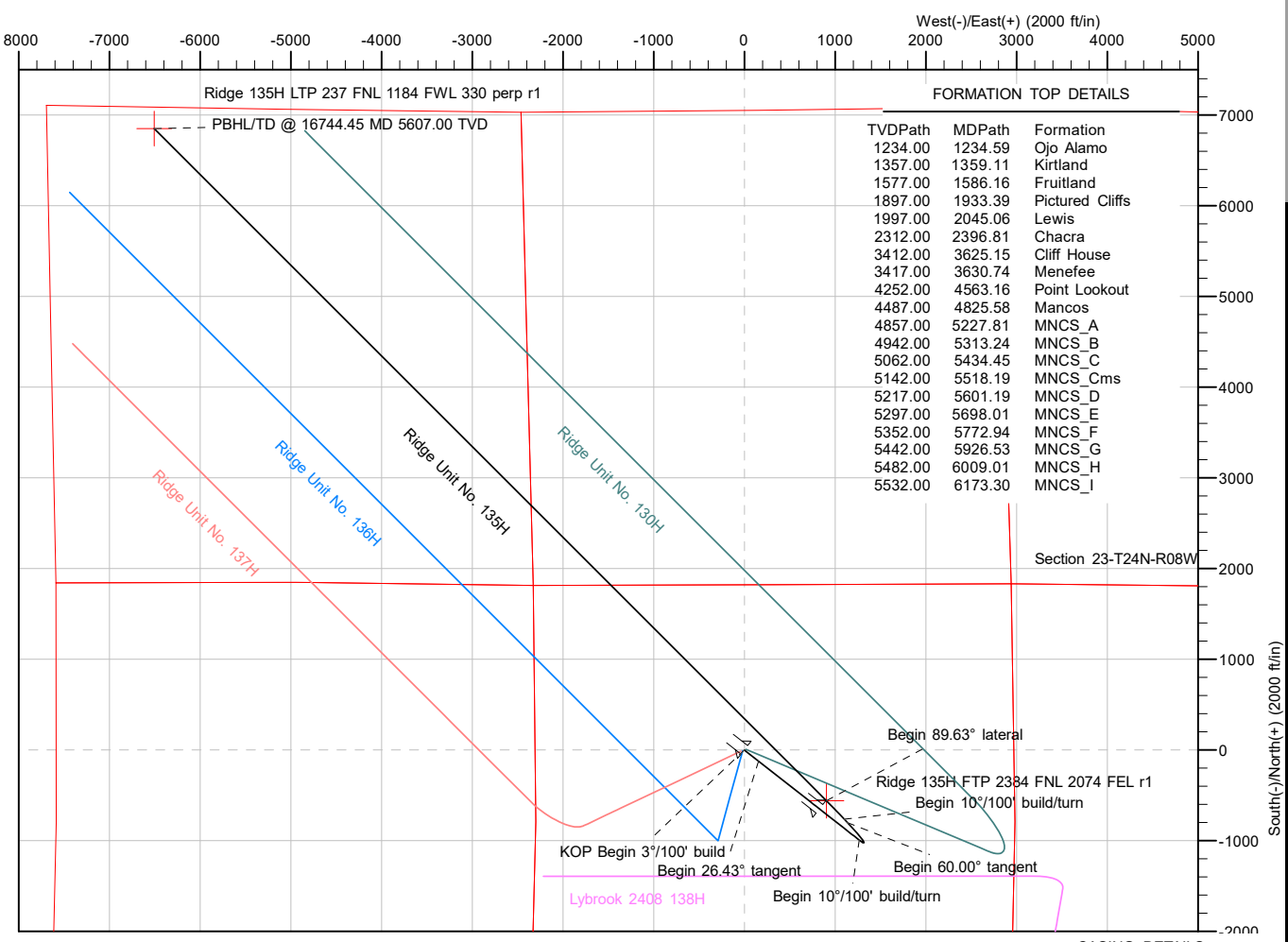
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Depth Reference: RKB=6832+25 @ 6857.00ft

Surface location:
Northing 1923993.112 Easting 2776445.521 Latitude 36.287483000 Longitude -107.652295000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 8.43°



Section Details										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
2	1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3°/100' build
3	1880.85	26.43	128.075	1849.95	-123.06	157.09	3.00	128.08	-198.10	Begin 26.43° tangent
4	5047.11	26.43	128.075	4685.38	-992.04	1266.32	0.00	0.00	-1596.91	Begin 10°/100' build/turn
5	5908.71	60.00	316.952	5433.09	-800.00	1137.29	10.00	-172.30	-1369.88	Begin 60.00° tangent
6	5968.71	60.00	316.952	5463.09	-762.03	1101.82	0.00	0.00	-1317.95	Begin 10°/100' build/turn
7	6265.63	89.63	314.999	5540.00	-558.53	904.65	10.00	-3.94	-1034.62	Begin 89.63° lateral
8	16744.45	89.63	314.999	5607.00	6850.87	-6504.94	0.00	0.00	9443.98	PBHL/TD



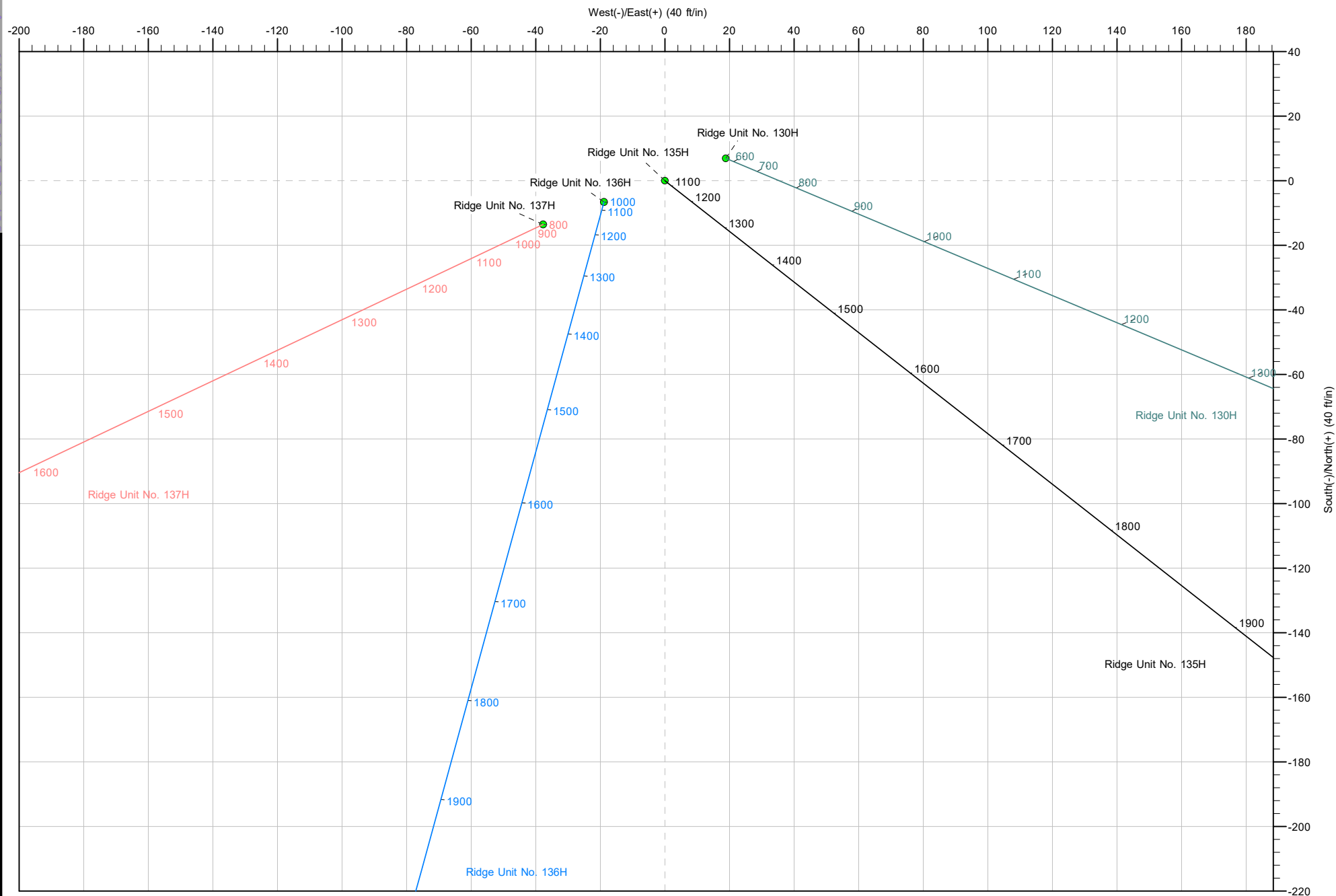
CASING DETAILS		
TVD	MD	Name
350.00	350.00	13 3/8" Csg
3567.00	3798.24	9 5/8" Csg

PBHL/TD @ 16744.45 MD 5607.00 TVD
Ridge 135H LTP 237 FNL 1184 FWL 330 perp r1





Well: Ridge Unit No. 135H
Site: Ridge Unit (130, 135, 136 & 137)
Project: San Juan County, New Mexico NAD83 NM W
Design: rev1
Rig:





Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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

Site	Ridge Unit (130, 135, 136 & 137)		
Site Position:		Northing:	1,924,000.063 usft
From:	Lat/Long	Easting:	2,776,464.370 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	36.287502000
		Longitude:	-107.652231000

Well	Ridge Unit No. 135H, Surf loc: 1822 FNL 2308 FWL Section 26-T24N-R08W		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
Grid Convergence:	0.11 °		
		Latitude:	36.287483000
		Longitude:	-107.652295000
		Ground Level:	6,832.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/15/2023	8.54	62.77	49,131.85829180

Design	rev1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	314.999	

Plan Survey Tool Program	Date	8/16/2023			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	16,744.45	rev1 (Original Hole)	MWD	
				OWSG MWD - Standard	

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	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,880.85	26.43	128.075	1,849.95	-123.06	157.09	3.00	3.00	0.00	128.08	
5,047.11	26.43	128.075	4,685.38	-992.04	1,266.32	0.00	0.00	0.00	0.00	
5,908.71	60.00	316.952	5,433.09	-800.00	1,137.29	10.00	3.90	-19.86	-172.30	
5,968.71	60.00	316.952	5,463.09	-762.03	1,101.82	0.00	0.00	0.00	0.00	
6,265.63	89.63	314.999	5,540.00	-558.53	904.65	10.00	9.98	-0.66	-3.94	
16,744.45	89.63	314.999	5,607.00	6,850.87	-6,504.94	0.00	0.00	0.00	0.00	Ridge 135H LTP 237



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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
13 3/8" Csg									
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
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
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	128.075	1,099.95	-1.61	2.06	-2.60	3.00	3.00	0.00
1,200.00	6.00	128.075	1,199.63	-6.45	8.24	-10.39	3.00	3.00	0.00
1,234.59	7.04	128.075	1,234.00	-8.87	11.33	-14.28	3.00	3.00	0.00
Ojo Alamo									
1,300.00	9.00	128.075	1,298.77	-14.50	18.51	-23.34	3.00	3.00	0.00
1,359.11	10.77	128.075	1,357.00	-20.76	26.50	-33.42	3.00	3.00	0.00
Kirtland									
1,400.00	12.00	128.075	1,397.08	-25.74	32.85	-41.43	3.00	3.00	0.00
1,500.00	15.00	128.075	1,494.31	-40.13	51.23	-64.60	3.00	3.00	0.00
1,586.16	17.58	128.075	1,577.00	-55.04	70.25	-88.59	3.00	3.00	0.00
Fruitland									
1,600.00	18.00	128.075	1,590.18	-57.65	73.58	-92.79	3.00	3.00	0.00
1,700.00	21.00	128.075	1,684.43	-78.23	99.86	-125.93	3.00	3.00	0.00
1,800.00	24.00	128.075	1,776.81	-101.83	129.98	-163.91	3.00	3.00	0.00
1,880.85	26.43	128.075	1,849.95	-123.06	157.09	-198.10	3.00	3.00	0.00
Begin 26.43° tangent									
1,900.00	26.43	128.075	1,867.10	-128.32	163.80	-206.56	0.00	0.00	0.00
1,933.39	26.43	128.075	1,897.00	-137.48	175.49	-221.31	0.00	0.00	0.00
Pictured Cliffs									
2,000.00	26.43	128.075	1,956.65	-155.77	198.83	-250.74	0.00	0.00	0.00
2,045.06	26.43	128.075	1,997.00	-168.13	214.61	-270.64	0.00	0.00	0.00
Lewis									
2,100.00	26.43	128.075	2,046.20	-183.21	233.86	-294.92	0.00	0.00	0.00
2,200.00	26.43	128.075	2,135.76	-210.66	268.90	-339.10	0.00	0.00	0.00
2,300.00	26.43	128.075	2,225.31	-238.10	303.93	-383.27	0.00	0.00	0.00
2,396.81	26.43	128.075	2,312.00	-264.67	337.84	-426.04	0.00	0.00	0.00
Chacra									
2,400.00	26.43	128.075	2,314.86	-265.55	338.96	-427.45	0.00	0.00	0.00
2,500.00	26.43	128.075	2,404.41	-292.99	374.00	-471.63	0.00	0.00	0.00
2,600.00	26.43	128.075	2,493.96	-320.44	409.03	-515.81	0.00	0.00	0.00
2,700.00	26.43	128.075	2,583.51	-347.88	444.06	-559.99	0.00	0.00	0.00
2,800.00	26.43	128.075	2,673.06	-375.33	479.09	-604.17	0.00	0.00	0.00
2,900.00	26.43	128.075	2,762.62	-402.77	514.13	-648.35	0.00	0.00	0.00
3,000.00	26.43	128.075	2,852.17	-430.22	549.16	-692.52	0.00	0.00	0.00
3,100.00	26.43	128.075	2,941.72	-457.66	584.19	-736.70	0.00	0.00	0.00
3,200.00	26.43	128.075	3,031.27	-485.11	619.23	-780.88	0.00	0.00	0.00
3,300.00	26.43	128.075	3,120.82	-512.55	654.26	-825.06	0.00	0.00	0.00
3,400.00	26.43	128.075	3,210.37	-540.00	689.29	-869.24	0.00	0.00	0.00
3,500.00	26.43	128.075	3,299.92	-567.44	724.33	-913.42	0.00	0.00	0.00



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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)
3,600.00	26.43	128.075	3,389.48	-594.89	759.36	-957.60	0.00	0.00	0.00
3,625.15	26.43	128.075	3,412.00	-601.79	768.17	-968.71	0.00	0.00	0.00
Cliff House									
3,630.74	26.43	128.075	3,417.00	-603.32	770.13	-971.18	0.00	0.00	0.00
Menefee									
3,700.00	26.43	128.075	3,479.03	-622.33	794.39	-1,001.78	0.00	0.00	0.00
3,798.24	26.43	128.075	3,567.00	-649.29	828.81	-1,045.18	0.00	0.00	0.00
9 5/8" Csg									
3,800.00	26.43	128.075	3,568.58	-649.78	829.42	-1,045.95	0.00	0.00	0.00
3,900.00	26.43	128.075	3,658.13	-677.22	864.46	-1,090.13	0.00	0.00	0.00
4,000.00	26.43	128.075	3,747.68	-704.67	899.49	-1,134.31	0.00	0.00	0.00
4,100.00	26.43	128.075	3,837.23	-732.11	934.52	-1,178.49	0.00	0.00	0.00
4,200.00	26.43	128.075	3,926.78	-759.56	969.56	-1,222.67	0.00	0.00	0.00
4,300.00	26.43	128.075	4,016.34	-787.00	1,004.59	-1,266.85	0.00	0.00	0.00
4,400.00	26.43	128.075	4,105.89	-814.45	1,039.62	-1,311.03	0.00	0.00	0.00
4,500.00	26.43	128.075	4,195.44	-841.89	1,074.66	-1,355.21	0.00	0.00	0.00
4,563.16	26.43	128.075	4,252.00	-859.22	1,096.78	-1,383.11	0.00	0.00	0.00
Point Lookout									
4,600.00	26.43	128.075	4,284.99	-869.34	1,109.69	-1,399.38	0.00	0.00	0.00
4,700.00	26.43	128.075	4,374.54	-896.78	1,144.72	-1,443.56	0.00	0.00	0.00
4,800.00	26.43	128.075	4,464.09	-924.23	1,179.75	-1,487.74	0.00	0.00	0.00
4,825.58	26.43	128.075	4,487.00	-931.25	1,188.72	-1,499.04	0.00	0.00	0.00
Mancos									
4,900.00	26.43	128.075	4,553.64	-951.67	1,214.79	-1,531.92	0.00	0.00	0.00
5,000.00	26.43	128.075	4,643.20	-979.12	1,249.82	-1,576.10	0.00	0.00	0.00
5,047.11	26.43	128.075	4,685.38	-992.04	1,266.32	-1,596.91	0.00	0.00	0.00
Begin 10°/100' build/turn									
5,050.00	26.14	127.987	4,687.98	-992.83	1,267.33	-1,598.18	10.00	-9.91	-3.04
5,100.00	21.20	126.118	4,733.76	-1,004.95	1,283.32	-1,618.06	10.00	-9.89	-3.74
5,150.00	16.28	123.181	4,781.09	-1,014.12	1,296.50	-1,633.86	10.00	-9.82	-5.87
5,200.00	11.45	117.824	4,829.62	-1,020.27	1,306.76	-1,645.47	10.00	-9.68	-10.71
5,227.81	8.83	112.376	4,857.00	-1,022.37	1,311.18	-1,650.07	10.00	-9.40	-19.59
MNCS_A									
5,250.00	6.84	105.128	4,878.98	-1,023.37	1,314.03	-1,652.79	10.00	-8.97	-32.67
5,300.00	3.54	60.215	4,928.79	-1,023.38	1,318.25	-1,655.78	10.00	-6.60	-89.83
5,313.24	3.44	38.401	4,942.00	-1,022.86	1,318.85	-1,655.84	10.00	-0.77	-164.77
MNCS_B									
5,350.00	5.31	354.931	4,978.66	-1,020.30	1,319.38	-1,654.41	10.00	5.09	-118.25
5,400.00	9.69	335.452	5,028.23	-1,014.17	1,317.43	-1,648.69	10.00	8.75	-38.96
5,434.45	12.97	330.008	5,062.00	-1,008.18	1,314.29	-1,642.24	10.00	9.52	-15.80
MNCS_C									
5,450.00	14.47	328.355	5,077.11	-1,005.02	1,312.40	-1,638.67	10.00	9.68	-10.63
5,500.00	19.36	324.759	5,124.93	-992.92	1,304.33	-1,624.41	10.00	9.78	-7.19
5,518.19	21.15	323.853	5,142.00	-987.81	1,300.66	-1,618.19	10.00	9.85	-4.98
MNCS_Cms									
5,550.00	24.30	322.577	5,171.34	-977.97	1,293.29	-1,606.03	10.00	9.88	-4.01
5,600.00	29.25	321.096	5,215.96	-960.29	1,279.36	-1,583.67	10.00	9.91	-2.96
5,601.19	29.37	321.067	5,217.00	-959.83	1,279.00	-1,583.09	10.00	9.93	-2.49
MNCS_D									
5,650.00	34.22	320.013	5,258.47	-939.99	1,262.64	-1,557.50	10.00	9.94	-2.16
5,698.01	39.00	319.206	5,297.00	-918.20	1,244.09	-1,528.97	10.00	9.95	-1.68
MNCS_E									
5,700.00	39.20	319.176	5,298.54	-917.25	1,243.27	-1,527.72	10.00	9.96	-1.50



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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)
5,750.00	44.17	318.500	5,335.87	-892.23	1,221.38	-1,494.56	10.00	9.96	-1.35
5,772.94	46.46	318.229	5,352.00	-880.05	1,210.55	-1,478.28	10.00	9.96	-1.18
MNCS_F									
5,800.00	49.16	317.935	5,370.18	-865.13	1,197.15	-1,458.26	10.00	9.97	-1.09
5,850.00	54.14	317.450	5,401.19	-836.14	1,170.76	-1,419.10	10.00	9.97	-0.97
5,900.00	59.13	317.022	5,428.68	-805.50	1,142.41	-1,377.38	10.00	9.97	-0.86
5,908.71	60.00	316.952	5,433.09	-800.00	1,137.29	-1,369.88	10.00	9.98	-0.80
Begin 60.00° tangent									
5,926.53	60.00	316.952	5,442.00	-788.72	1,126.76	-1,354.45	0.00	0.00	0.00
MNCS_G									
5,968.71	60.00	316.952	5,463.09	-762.03	1,101.82	-1,317.95	0.00	0.00	0.00
Begin 10°/100' build/turn									
6,000.00	63.12	316.711	5,477.99	-741.97	1,083.00	-1,290.45	10.00	9.98	-0.77
6,009.01	64.02	316.644	5,482.00	-736.10	1,077.46	-1,282.38	10.00	9.98	-0.74
MNCS_H									
6,050.00	68.11	316.351	5,498.62	-708.93	1,051.68	-1,244.94	10.00	9.98	-0.71
6,100.00	73.10	316.016	5,515.22	-674.91	1,019.03	-1,197.80	10.00	9.98	-0.67
6,150.00	78.09	315.699	5,527.66	-640.17	985.32	-1,149.40	10.00	9.98	-0.64
6,173.30	80.42	315.555	5,532.00	-623.81	969.31	-1,126.51	10.00	9.98	-0.62
MNCS_I									
6,200.00	83.08	315.392	5,535.83	-604.97	950.78	-1,100.09	10.00	9.98	-0.61
6,250.00	88.07	315.092	5,539.69	-569.59	915.69	-1,050.25	10.00	9.98	-0.60
6,265.63	89.63	314.999	5,540.00	-558.53	904.65	-1,034.62	10.00	9.98	-0.60
Begin 89.63° lateral									
6,300.00	89.63	314.999	5,540.22	-534.22	880.35	-1,000.26	0.00	0.00	0.00
6,400.00	89.63	314.999	5,540.86	-463.52	809.64	-900.26	0.00	0.00	0.00
6,500.00	89.63	314.999	5,541.50	-392.81	738.93	-800.26	0.00	0.00	0.00
6,600.00	89.63	314.999	5,542.14	-322.10	668.22	-700.26	0.00	0.00	0.00
6,700.00	89.63	314.999	5,542.78	-251.39	597.51	-600.27	0.00	0.00	0.00
6,800.00	89.63	314.999	5,543.41	-180.68	526.80	-500.27	0.00	0.00	0.00
6,900.00	89.63	314.999	5,544.05	-109.97	456.09	-400.27	0.00	0.00	0.00
7,000.00	89.63	314.999	5,544.69	-39.27	385.38	-300.27	0.00	0.00	0.00
7,100.00	89.63	314.999	5,545.33	31.44	314.67	-200.27	0.00	0.00	0.00
7,200.00	89.63	314.999	5,545.97	102.15	243.96	-100.28	0.00	0.00	0.00
7,300.00	89.63	314.999	5,546.61	172.86	173.25	-0.28	0.00	0.00	0.00
7,400.00	89.63	314.999	5,547.25	243.57	102.54	99.72	0.00	0.00	0.00
7,500.00	89.63	314.999	5,547.89	314.27	31.83	199.72	0.00	0.00	0.00
7,600.00	89.63	314.999	5,548.53	384.98	-38.89	299.72	0.00	0.00	0.00
7,700.00	89.63	314.999	5,549.17	455.69	-109.60	399.71	0.00	0.00	0.00
7,800.00	89.63	314.999	5,549.81	526.40	-180.31	499.71	0.00	0.00	0.00
7,900.00	89.63	314.999	5,550.45	597.11	-251.02	599.71	0.00	0.00	0.00
8,000.00	89.63	314.999	5,551.09	667.82	-321.73	699.71	0.00	0.00	0.00
8,100.00	89.63	314.999	5,551.73	738.52	-392.44	799.71	0.00	0.00	0.00
8,200.00	89.63	314.999	5,552.37	809.23	-463.15	899.70	0.00	0.00	0.00
8,300.00	89.63	314.999	5,553.01	879.94	-533.86	999.70	0.00	0.00	0.00
8,400.00	89.63	314.999	5,553.65	950.65	-604.57	1,099.70	0.00	0.00	0.00
8,500.00	89.63	314.999	5,554.28	1,021.36	-675.28	1,199.70	0.00	0.00	0.00
8,600.00	89.63	314.999	5,554.92	1,092.07	-745.99	1,299.70	0.00	0.00	0.00
8,700.00	89.63	314.999	5,555.56	1,162.77	-816.70	1,399.69	0.00	0.00	0.00
8,800.00	89.63	314.999	5,556.20	1,233.48	-887.41	1,499.69	0.00	0.00	0.00
8,900.00	89.63	314.999	5,556.84	1,304.19	-958.12	1,599.69	0.00	0.00	0.00
9,000.00	89.63	314.999	5,557.48	1,374.90	-1,028.83	1,699.69	0.00	0.00	0.00
9,100.00	89.63	314.999	5,558.12	1,445.61	-1,099.54	1,799.69	0.00	0.00	0.00



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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)
9,200.00	89.63	314.999	5,558.76	1,516.32	-1,170.25	1,899.68	0.00	0.00	0.00
9,300.00	89.63	314.999	5,559.40	1,587.02	-1,240.96	1,999.68	0.00	0.00	0.00
9,400.00	89.63	314.999	5,560.04	1,657.73	-1,311.67	2,099.68	0.00	0.00	0.00
9,500.00	89.63	314.999	5,560.68	1,728.44	-1,382.38	2,199.68	0.00	0.00	0.00
9,600.00	89.63	314.999	5,561.32	1,799.15	-1,453.09	2,299.68	0.00	0.00	0.00
9,700.00	89.63	314.999	5,561.96	1,869.86	-1,523.80	2,399.67	0.00	0.00	0.00
9,800.00	89.63	314.999	5,562.60	1,940.57	-1,594.51	2,499.67	0.00	0.00	0.00
9,900.00	89.63	314.999	5,563.24	2,011.27	-1,665.22	2,599.67	0.00	0.00	0.00
10,000.00	89.63	314.999	5,563.88	2,081.98	-1,735.93	2,699.67	0.00	0.00	0.00
10,100.00	89.63	314.999	5,564.52	2,152.69	-1,806.64	2,799.66	0.00	0.00	0.00
10,200.00	89.63	314.999	5,565.15	2,223.40	-1,877.35	2,899.66	0.00	0.00	0.00
10,300.00	89.63	314.999	5,565.79	2,294.11	-1,948.06	2,999.66	0.00	0.00	0.00
10,400.00	89.63	314.999	5,566.43	2,364.82	-2,018.77	3,099.66	0.00	0.00	0.00
10,500.00	89.63	314.999	5,567.07	2,435.52	-2,089.48	3,199.66	0.00	0.00	0.00
10,600.00	89.63	314.999	5,567.71	2,506.23	-2,160.19	3,299.65	0.00	0.00	0.00
10,700.00	89.63	314.999	5,568.35	2,576.94	-2,230.90	3,399.65	0.00	0.00	0.00
10,800.00	89.63	314.999	5,568.99	2,647.65	-2,301.61	3,499.65	0.00	0.00	0.00
10,900.00	89.63	314.999	5,569.63	2,718.36	-2,372.32	3,599.65	0.00	0.00	0.00
11,000.00	89.63	314.999	5,570.27	2,789.07	-2,443.03	3,699.65	0.00	0.00	0.00
11,100.00	89.63	314.999	5,570.91	2,859.77	-2,513.74	3,799.64	0.00	0.00	0.00
11,200.00	89.63	314.999	5,571.55	2,930.48	-2,584.45	3,899.64	0.00	0.00	0.00
11,300.00	89.63	314.999	5,572.19	3,001.19	-2,655.16	3,999.64	0.00	0.00	0.00
11,400.00	89.63	314.999	5,572.83	3,071.90	-2,725.87	4,099.64	0.00	0.00	0.00
11,500.00	89.63	314.999	5,573.47	3,142.61	-2,796.58	4,199.64	0.00	0.00	0.00
11,600.00	89.63	314.999	5,574.11	3,213.32	-2,867.29	4,299.63	0.00	0.00	0.00
11,700.00	89.63	314.999	5,574.75	3,284.02	-2,938.00	4,399.63	0.00	0.00	0.00
11,800.00	89.63	314.999	5,575.39	3,354.73	-3,008.71	4,499.63	0.00	0.00	0.00
11,900.00	89.63	314.999	5,576.02	3,425.44	-3,079.42	4,599.63	0.00	0.00	0.00
12,000.00	89.63	314.999	5,576.66	3,496.15	-3,150.13	4,699.63	0.00	0.00	0.00
12,100.00	89.63	314.999	5,577.30	3,566.86	-3,220.84	4,799.62	0.00	0.00	0.00
12,200.00	89.63	314.999	5,577.94	3,637.57	-3,291.55	4,899.62	0.00	0.00	0.00
12,300.00	89.63	314.999	5,578.58	3,708.27	-3,362.26	4,999.62	0.00	0.00	0.00
12,400.00	89.63	314.999	5,579.22	3,778.98	-3,432.97	5,099.62	0.00	0.00	0.00
12,500.00	89.63	314.999	5,579.86	3,849.69	-3,503.68	5,199.62	0.00	0.00	0.00
12,600.00	89.63	314.999	5,580.50	3,920.40	-3,574.39	5,299.61	0.00	0.00	0.00
12,700.00	89.63	314.999	5,581.14	3,991.11	-3,645.10	5,399.61	0.00	0.00	0.00
12,800.00	89.63	314.999	5,581.78	4,061.82	-3,715.81	5,499.61	0.00	0.00	0.00
12,900.00	89.63	314.999	5,582.42	4,132.52	-3,786.52	5,599.61	0.00	0.00	0.00
13,000.00	89.63	314.999	5,583.06	4,203.23	-3,857.23	5,699.61	0.00	0.00	0.00
13,100.00	89.63	314.999	5,583.70	4,273.94	-3,927.94	5,799.60	0.00	0.00	0.00
13,200.00	89.63	314.999	5,584.34	4,344.65	-3,998.65	5,899.60	0.00	0.00	0.00
13,300.00	89.63	314.999	5,584.98	4,415.36	-4,069.36	5,999.60	0.00	0.00	0.00
13,400.00	89.63	314.999	5,585.62	4,486.07	-4,140.07	6,099.60	0.00	0.00	0.00
13,500.00	89.63	314.999	5,586.25	4,556.77	-4,210.78	6,199.60	0.00	0.00	0.00
13,600.00	89.63	314.999	5,586.89	4,627.48	-4,281.49	6,299.59	0.00	0.00	0.00
13,700.00	89.63	314.999	5,587.53	4,698.19	-4,352.20	6,399.59	0.00	0.00	0.00
13,800.00	89.63	314.999	5,588.17	4,768.90	-4,422.92	6,499.59	0.00	0.00	0.00
13,900.00	89.63	314.999	5,588.81	4,839.61	-4,493.63	6,599.59	0.00	0.00	0.00
14,000.00	89.63	314.999	5,589.45	4,910.31	-4,564.34	6,699.59	0.00	0.00	0.00
14,100.00	89.63	314.999	5,590.09	4,981.02	-4,635.05	6,799.58	0.00	0.00	0.00
14,200.00	89.63	314.999	5,590.73	5,051.73	-4,705.76	6,899.58	0.00	0.00	0.00
14,300.00	89.63	314.999	5,591.37	5,122.44	-4,776.47	6,999.58	0.00	0.00	0.00
14,400.00	89.63	314.999	5,592.01	5,193.15	-4,847.18	7,099.58	0.00	0.00	0.00
14,500.00	89.63	314.999	5,592.65	5,263.86	-4,917.89	7,199.58	0.00	0.00	0.00



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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)
14,600.00	89.63	314.999	5,593.29	5,334.56	-4,988.60	7,299.57	0.00	0.00	0.00
14,700.00	89.63	314.999	5,593.93	5,405.27	-5,059.31	7,399.57	0.00	0.00	0.00
14,800.00	89.63	314.999	5,594.57	5,475.98	-5,130.02	7,499.57	0.00	0.00	0.00
14,900.00	89.63	314.999	5,595.21	5,546.69	-5,200.73	7,599.57	0.00	0.00	0.00
15,000.00	89.63	314.999	5,595.85	5,617.40	-5,271.44	7,699.56	0.00	0.00	0.00
15,100.00	89.63	314.999	5,596.49	5,688.11	-5,342.15	7,799.56	0.00	0.00	0.00
15,200.00	89.63	314.999	5,597.12	5,758.81	-5,412.86	7,899.56	0.00	0.00	0.00
15,300.00	89.63	314.999	5,597.76	5,829.52	-5,483.57	7,999.56	0.00	0.00	0.00
15,400.00	89.63	314.999	5,598.40	5,900.23	-5,554.28	8,099.56	0.00	0.00	0.00
15,500.00	89.63	314.999	5,599.04	5,970.94	-5,624.99	8,199.55	0.00	0.00	0.00
15,600.00	89.63	314.999	5,599.68	6,041.65	-5,695.70	8,299.55	0.00	0.00	0.00
15,700.00	89.63	314.999	5,600.32	6,112.36	-5,766.41	8,399.55	0.00	0.00	0.00
15,800.00	89.63	314.999	5,600.96	6,183.06	-5,837.12	8,499.55	0.00	0.00	0.00
15,900.00	89.63	314.999	5,601.60	6,253.77	-5,907.83	8,599.55	0.00	0.00	0.00
16,000.00	89.63	314.999	5,602.24	6,324.48	-5,978.54	8,699.54	0.00	0.00	0.00
16,100.00	89.63	314.999	5,602.88	6,395.19	-6,049.25	8,799.54	0.00	0.00	0.00
16,200.00	89.63	314.999	5,603.52	6,465.90	-6,119.96	8,899.54	0.00	0.00	0.00
16,300.00	89.63	314.999	5,604.16	6,536.61	-6,190.67	8,999.54	0.00	0.00	0.00
16,400.00	89.63	314.999	5,604.80	6,607.31	-6,261.38	9,099.54	0.00	0.00	0.00
16,500.00	89.63	314.999	5,605.44	6,678.02	-6,332.09	9,199.53	0.00	0.00	0.00
16,600.00	89.63	314.999	5,606.08	6,748.73	-6,402.80	9,299.53	0.00	0.00	0.00
16,700.00	89.63	314.999	5,606.72	6,819.44	-6,473.51	9,399.53	0.00	0.00	0.00
16,744.45	89.63	314.999	5,607.00	6,850.87	-6,504.94	9,443.98	0.00	0.00	0.00
PBHL/TD @ 16744.45 MD 5607.00 TVD									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Ridge 135H FTP 2384 F - plan hits target center - Point	0.00	0.000	5,540.00	-558.53	904.65	1,923,434.580	2,777,350.169	36.285944000	-107.649229000
Ridge 135H LTP 237 FN - plan hits target center - Point	0.00	0.000	5,607.00	6,850.87	-6,504.94	1,930,843.965	2,769,940.597	36.306334000	-107.674329000

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
350.00	350.00	13 3/8" Csg	13-3/8	17-1/2	
3,798.24	3,567.00	9 5/8" Csg	9-5/8	12-1/4	



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,234.59	1,234.00	Ojo Alamo				
1,359.11	1,357.00	Kirtland				
1,586.16	1,577.00	Fruitland				
1,933.39	1,897.00	Pictured Cliffs				
2,045.06	1,997.00	Lewis				
2,396.81	2,312.00	Chacra				
3,625.15	3,412.00	Cliff House				
3,630.74	3,417.00	Menefee				
4,563.16	4,252.00	Point Lookout				
4,825.58	4,487.00	Mancos				
5,227.81	4,857.00	MNCS_A				
5,313.24	4,942.00	MNCS_B				
5,434.45	5,062.00	MNCS_C				
5,518.19	5,142.00	MNCS_Cms				
5,601.19	5,217.00	MNCS_D				
5,698.01	5,297.00	MNCS_E				
5,772.94	5,352.00	MNCS_F				
5,926.53	5,442.00	MNCS_G				
6,009.01	5,482.00	MNCS_H				
6,173.30	5,532.00	MNCS_I				

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	
1,880.85	1,849.95	-123.06	157.09	Begin 26.43° tangent	
5,047.11	4,685.38	-992.04	1,266.32	Begin 10°/100' build/turn	
5,908.71	5,433.09	-800.00	1,137.29	Begin 60.00° tangent	
5,968.71	5,463.09	-762.03	1,101.82	Begin 10°/100' build/turn	
6,265.63	5,540.00	-558.53	904.65	Begin 89.63° lateral	
16,744.45	5,607.00	6,850.87	-6,504.94	PBHL/TD @ 16744.45 MD 5607.00 TVD	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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

Site	Ridge Unit (130, 135, 136 & 137)				
Site Position:		Northing:	1,924,000.063 usft	Latitude:	36.287502000
From:	Lat/Long	Easting:	2,776,464.370 usft	Longitude:	-107.652231000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	Ridge Unit No. 135H, Surf loc: 1822 FNL 2308 FWL Section 26-T24N-R08W					
Well Position	+N/-S	0.00 ft	Northing:	1,923,993.112 usft	Latitude:	36.287483000
	+E/-W	0.00 ft	Easting:	2,776,445.521 usft	Longitude:	-107.652295000
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,832.00 ft
Grid Convergence:		0.11 °				

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/15/2023	8.54	62.77	49,131.85829180

Design	rev1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	314.999

Plan Survey Tool Program	Date	8/16/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,744.45 rev1 (Original Hole)	MWD	
			OWSG MWD - Standard	

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	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,880.85	26.43	128.075	1,849.95	-123.06	157.09	3.00	3.00	0.00	128.08	
5,047.11	26.43	128.075	4,685.38	-992.04	1,266.32	0.00	0.00	0.00	0.00	
5,908.71	60.00	316.952	5,433.09	-800.00	1,137.29	10.00	3.90	-19.86	-172.30	
5,968.71	60.00	316.952	5,463.09	-762.03	1,101.82	0.00	0.00	0.00	0.00	
6,265.63	89.63	314.999	5,540.00	-558.53	904.65	10.00	9.98	-0.66	-3.94	
16,744.45	89.63	314.999	5,607.00	6,850.87	-6,504.94	0.00	0.00	0.00	0.00	Ridge 135H LTP 237



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
100.00	0.00	0.000	100.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
200.00	0.00	0.000	200.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
300.00	0.00	0.000	300.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
350.00	0.00	0.000	350.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
13 3/8" Csg									
400.00	0.00	0.000	400.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
500.00	0.00	0.000	500.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
600.00	0.00	0.000	600.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
700.00	0.00	0.000	700.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
800.00	0.00	0.000	800.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
900.00	0.00	0.000	900.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
1,000.00	0.00	0.000	1,000.00	0.00	0.00	1,923,993.112	2,776,445.521	36.287483000	-107.652295000
KOP Begin 3"/100' build									
1,100.00	3.00	128.075	1,099.95	-1.61	2.06	1,923,991.498	2,776,447.581	36.287478556	-107.652288019
1,200.00	6.00	128.075	1,199.63	-6.45	8.24	1,923,986.660	2,776,453.757	36.287465234	-107.652267095
1,234.59	7.04	128.075	1,234.00	-8.87	11.33	1,923,984.238	2,776,456.848	36.287458565	-107.652256621
Ojo Alamo									
1,300.00	9.00	128.075	1,298.77	-14.50	18.51	1,923,978.611	2,776,464.031	36.287443071	-107.652232285
1,359.11	10.77	128.075	1,357.00	-20.76	26.50	1,923,972.352	2,776,472.020	36.287425836	-107.652205215
Kirtland									
1,400.00	12.00	128.075	1,397.08	-25.74	32.85	1,923,967.374	2,776,478.375	36.287412128	-107.652183685
1,500.00	15.00	128.075	1,494.31	-40.13	51.23	1,923,952.979	2,776,496.750	36.287372491	-107.652121429
1,586.16	17.58	128.075	1,577.00	-55.04	70.25	1,923,938.074	2,776,515.775	36.287331448	-107.652056966
Fruitland									
1,600.00	18.00	128.075	1,590.18	-57.65	73.58	1,923,935.466	2,776,519.105	36.287324266	-107.652045686
1,700.00	21.00	128.075	1,684.43	-78.23	99.86	1,923,914.883	2,776,545.379	36.287267588	-107.651956665
1,800.00	24.00	128.075	1,776.81	-101.83	129.98	1,923,891.285	2,776,575.500	36.287202610	-107.651854609
1,880.85	26.43	128.075	1,849.95	-123.06	157.09	1,923,870.048	2,776,602.609	36.287144131	-107.651762761
Begin 26.43° tangent									
1,900.00	26.43	128.075	1,867.10	-128.32	163.80	1,923,864.792	2,776,609.319	36.287129657	-107.651740027
1,933.39	26.43	128.075	1,897.00	-137.48	175.49	1,923,855.629	2,776,621.015	36.287104425	-107.651700397
Pictured Cliffs									
2,000.00	26.43	128.075	1,956.65	-155.77	198.83	1,923,837.347	2,776,644.351	36.287054084	-107.651621331
2,045.06	26.43	128.075	1,997.00	-168.13	214.61	1,923,824.982	2,776,660.136	36.287020034	-107.651567852
Lewis									
2,100.00	26.43	128.075	2,046.20	-183.21	233.86	1,923,809.902	2,776,679.384	36.286978510	-107.651502634
2,200.00	26.43	128.075	2,135.76	-210.66	268.90	1,923,782.457	2,776,714.417	36.286902937	-107.651383938
2,300.00	26.43	128.075	2,225.31	-238.10	303.93	1,923,755.012	2,776,749.450	36.286827363	-107.651265243
2,396.81	26.43	128.075	2,312.00	-264.67	337.84	1,923,728.443	2,776,783.365	36.286754202	-107.651150336
Chacra									
2,400.00	26.43	128.075	2,314.86	-265.55	338.96	1,923,727.567	2,776,784.483	36.286751789	-107.651146547
2,500.00	26.43	128.075	2,404.41	-292.99	374.00	1,923,700.122	2,776,819.516	36.286676216	-107.651027852
2,600.00	26.43	128.075	2,493.96	-320.44	409.03	1,923,672.677	2,776,854.549	36.286600642	-107.650909157
2,700.00	26.43	128.075	2,583.51	-347.88	444.06	1,923,645.232	2,776,889.582	36.286525068	-107.650790462
2,800.00	26.43	128.075	2,673.06	-375.33	479.09	1,923,617.787	2,776,924.615	36.286449494	-107.650671767
2,900.00	26.43	128.075	2,762.62	-402.77	514.13	1,923,590.342	2,776,959.648	36.286373919	-107.650553073
3,000.00	26.43	128.075	2,852.17	-430.22	549.16	1,923,562.897	2,776,994.680	36.286298345	-107.650434379
3,100.00	26.43	128.075	2,941.72	-457.66	584.19	1,923,535.452	2,777,029.713	36.286222770	-107.650315685
3,200.00	26.43	128.075	3,031.27	-485.11	619.23	1,923,508.007	2,777,064.746	36.286147196	-107.650196991
3,300.00	26.43	128.075	3,120.82	-512.55	654.26	1,923,480.563	2,777,099.779	36.286071621	-107.650078297
3,400.00	26.43	128.075	3,210.37	-540.00	689.29	1,923,453.118	2,777,134.812	36.285996046	-107.649959604
3,500.00	26.43	128.075	3,299.92	-567.44	724.33	1,923,425.673	2,777,169.845	36.285920471	-107.649840911



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
3,600.00	26.43	128.075	3,389.48	-594.89	759.36	1,923,398.228	2,777,204.878	36.285844896	-107.649722218	
3,625.15	26.43	128.075	3,412.00	-601.79	768.17	1,923,391.325	2,777,213.689	36.285825887	-107.649692364	
Cliff House										
3,630.74	26.43	128.075	3,417.00	-603.32	770.13	1,923,389.792	2,777,215.645	36.285821667	-107.649685737	
Menefee										
3,700.00	26.43	128.075	3,479.03	-622.33	794.39	1,923,370.783	2,777,239.911	36.285769321	-107.649603526	
3,798.24	26.43	128.075	3,567.00	-649.29	828.81	1,923,343.822	2,777,274.326	36.285695078	-107.649486926	
9 5/8" Csg										
3,800.00	26.43	128.075	3,568.58	-649.78	829.42	1,923,343.338	2,777,274.944	36.285693745	-107.649484833	
3,900.00	26.43	128.075	3,658.13	-677.22	864.46	1,923,315.893	2,777,309.977	36.285618170	-107.649366141	
4,000.00	26.43	128.075	3,747.68	-704.67	899.49	1,923,288.448	2,777,345.009	36.285542594	-107.649247449	
4,100.00	26.43	128.075	3,837.23	-732.11	934.52	1,923,261.003	2,777,380.042	36.285467019	-107.649128758	
4,200.00	26.43	128.075	3,926.78	-759.56	969.56	1,923,233.558	2,777,415.075	36.285391443	-107.649010066	
4,300.00	26.43	128.075	4,016.34	-787.00	1,004.59	1,923,206.113	2,777,450.108	36.285315867	-107.648891375	
4,400.00	26.43	128.075	4,105.89	-814.45	1,039.62	1,923,178.668	2,777,485.141	36.285240291	-107.648772684	
4,500.00	26.43	128.075	4,195.44	-841.89	1,074.66	1,923,151.223	2,777,520.174	36.285164715	-107.648653993	
4,563.16	26.43	128.075	4,252.00	-859.22	1,096.78	1,923,133.889	2,777,542.301	36.285116980	-107.648579028	
Point Lookout										
4,600.00	26.43	128.075	4,284.99	-869.34	1,109.69	1,923,123.778	2,777,555.207	36.285089139	-107.648535303	
4,700.00	26.43	128.075	4,374.54	-896.78	1,144.72	1,923,096.333	2,777,590.240	36.285013562	-107.648416612	
4,800.00	26.43	128.075	4,464.09	-924.23	1,179.75	1,923,068.888	2,777,625.273	36.284937986	-107.648297922	
4,825.58	26.43	128.075	4,487.00	-931.25	1,188.72	1,923,061.868	2,777,634.234	36.284918653	-107.648267562	
Mancos										
4,900.00	26.43	128.075	4,553.64	-951.67	1,214.79	1,923,041.443	2,777,660.305	36.284862409	-107.648179234	
5,000.00	26.43	128.075	4,643.20	-979.12	1,249.82	1,923,013.998	2,777,695.338	36.284786832	-107.648060544	
5,047.11	26.43	128.075	4,685.38	-992.04	1,266.32	1,923,001.069	2,777,711.842	36.284751228	-107.648004630	
Begin 10°/100' build/turn										
5,050.00	26.14	127.987	4,687.98	-992.83	1,267.33	1,923,000.281	2,777,712.850	36.284749057	-107.648001214	
5,100.00	21.20	126.118	4,733.76	-1,004.95	1,283.32	1,922,988.166	2,777,728.842	36.284715694	-107.647947032	
5,150.00	16.28	123.181	4,781.09	-1,014.12	1,296.50	1,922,978.996	2,777,742.019	36.284690434	-107.647902384	
5,200.00	11.45	117.824	4,829.62	-1,020.27	1,306.76	1,922,972.841	2,777,752.279	36.284673470	-107.647867609	
5,227.81	8.83	112.376	4,857.00	-1,022.37	1,311.18	1,922,970.739	2,777,756.695	36.284667675	-107.647852639	
MNCS_A										
5,250.00	6.84	105.128	4,878.98	-1,023.37	1,314.03	1,922,969.746	2,777,759.546	36.284664931	-107.647842972	
5,300.00	3.54	60.215	4,928.79	-1,023.38	1,318.25	1,922,969.736	2,777,763.764	36.284664881	-107.647828662	
5,313.24	3.44	38.401	4,942.00	-1,022.86	1,318.85	1,922,970.250	2,777,764.366	36.284666291	-107.647826617	
MNCS_B										
5,350.00	5.31	354.931	4,978.66	-1,020.30	1,319.38	1,922,972.810	2,777,764.900	36.284673321	-107.647824786	
5,400.00	9.69	335.452	5,028.23	-1,014.17	1,317.43	1,922,978.946	2,777,762.947	36.284690187	-107.647831374	
5,434.45	12.97	330.008	5,062.00	-1,008.18	1,314.29	1,922,984.931	2,777,759.810	36.284706643	-107.647841977	
MNCS_C										
5,450.00	14.47	328.355	5,077.11	-1,005.02	1,312.40	1,922,988.097	2,777,757.918	36.284715350	-107.647848376	
5,500.00	19.36	324.759	5,124.93	-992.92	1,304.33	1,923,000.192	2,777,749.853	36.284748619	-107.647875663	
5,518.19	21.15	323.853	5,142.00	-987.81	1,300.66	1,923,005.306	2,777,746.177	36.284762687	-107.647888105	
MNCS_Cms										
5,550.00	24.30	322.577	5,171.34	-977.97	1,293.29	1,923,015.140	2,777,738.813	36.284789741	-107.647913027	
5,600.00	29.25	321.096	5,215.96	-960.29	1,279.36	1,923,032.828	2,777,724.881	36.284838402	-107.647960184	
5,601.19	29.37	321.067	5,217.00	-959.83	1,279.00	1,923,033.282	2,777,724.514	36.284839651	-107.647961425	
MNCS_D										
5,650.00	34.22	320.013	5,258.47	-939.99	1,262.64	1,923,053.120	2,777,708.163	36.284894233	-107.648016775	
5,698.01	39.00	319.206	5,297.00	-918.20	1,244.09	1,923,074.912	2,777,689.608	36.284954195	-107.648079592	
MNCS_E										
5,700.00	39.20	319.176	5,298.54	-917.25	1,243.27	1,923,075.862	2,777,688.788	36.284956808	-107.648082369	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,750.00	44.17	318.500	5,335.87	-892.23	1,221.38	1,923,100.881	2,777,666.902	36.285025652	-107.648156467	
5,772.94	46.46	318.229	5,352.00	-880.05	1,210.55	1,923,113.067	2,777,656.067	36.285059186	-107.648193149	
MNCS_F										
5,800.00	49.16	317.935	5,370.18	-865.13	1,197.15	1,923,127.986	2,777,642.672	36.285100239	-107.648238504	
5,850.00	54.14	317.450	5,401.19	-836.14	1,170.76	1,923,156.972	2,777,616.282	36.285180003	-107.648327858	
5,900.00	59.13	317.022	5,428.68	-805.50	1,142.41	1,923,187.618	2,777,587.933	36.285264337	-107.648423847	
5,908.71	60.00	316.952	5,433.09	-800.00	1,137.29	1,923,193.111	2,777,582.808	36.285279454	-107.648441201	
Begin 60.00° tangent										
5,926.53	60.00	316.952	5,442.00	-788.72	1,126.76	1,923,204.389	2,777,572.274	36.285310490	-107.648476871	
MNCS_G										
5,968.71	60.00	316.952	5,463.09	-762.03	1,101.82	1,923,231.083	2,777,547.339	36.285383952	-107.648561304	
Begin 10°/100' build/turn										
6,000.00	63.12	316.711	5,477.99	-741.97	1,083.00	1,923,251.145	2,777,528.519	36.285439162	-107.648625031	
6,009.01	64.02	316.644	5,482.00	-736.10	1,077.46	1,923,257.018	2,777,522.980	36.285455323	-107.648643786	
MNCS_H										
6,050.00	68.11	316.351	5,498.62	-708.93	1,051.68	1,923,284.183	2,777,497.197	36.285530083	-107.648731094	
6,100.00	73.10	316.016	5,515.22	-674.91	1,019.03	1,923,318.202	2,777,464.553	36.285623705	-107.648841638	
6,150.00	78.09	315.699	5,527.66	-640.17	985.32	1,923,352.942	2,777,430.835	36.285719315	-107.648955821	
6,173.30	80.42	315.555	5,532.00	-623.81	969.31	1,923,369.305	2,777,414.827	36.285764347	-107.649010033	
MNCS_I										
6,200.00	83.08	315.392	5,535.83	-604.97	950.78	1,923,388.140	2,777,396.300	36.285816186	-107.649072774	
6,250.00	88.07	315.092	5,539.69	-569.59	915.69	1,923,423.527	2,777,361.210	36.285913580	-107.649191608	
6,265.63	89.63	314.999	5,540.00	-558.53	904.65	1,923,434.587	2,777,350.168	36.285944019	-107.649229003	
Begin 89.63° lateral										
6,300.00	89.63	314.999	5,540.22	-534.22	880.35	1,923,458.888	2,777,325.866	36.286010902	-107.649311304	
6,400.00	89.63	314.999	5,540.86	-463.52	809.64	1,923,529.596	2,777,255.156	36.286205510	-107.649550773	
6,500.00	89.63	314.999	5,541.50	-392.81	738.93	1,923,600.304	2,777,184.446	36.286400117	-107.649790244	
6,600.00	89.63	314.999	5,542.14	-322.10	668.22	1,923,671.013	2,777,113.736	36.286594724	-107.650029716	
6,700.00	89.63	314.999	5,542.78	-251.39	597.51	1,923,741.721	2,777,043.026	36.286789330	-107.650269189	
6,800.00	89.63	314.999	5,543.41	-180.68	526.80	1,923,812.429	2,776,972.316	36.286983936	-107.650508664	
6,900.00	89.63	314.999	5,544.05	-109.97	456.09	1,923,883.137	2,776,901.606	36.287178542	-107.650748139	
7,000.00	89.63	314.999	5,544.69	-39.27	385.38	1,923,953.845	2,776,830.896	36.287373147	-107.650987616	
7,100.00	89.63	314.999	5,545.33	31.44	314.67	1,924,024.553	2,776,760.186	36.287567751	-107.651227094	
7,200.00	89.63	314.999	5,545.97	102.15	243.96	1,924,095.262	2,776,689.476	36.287762355	-107.651466573	
7,300.00	89.63	314.999	5,546.61	172.86	173.25	1,924,165.970	2,776,618.766	36.287956958	-107.651706053	
7,400.00	89.63	314.999	5,547.25	243.57	102.54	1,924,236.678	2,776,548.056	36.288151561	-107.651945534	
7,500.00	89.63	314.999	5,547.89	314.27	31.83	1,924,307.386	2,776,477.346	36.288346164	-107.652185017	
7,600.00	89.63	314.999	5,548.53	384.98	-38.89	1,924,378.094	2,776,406.636	36.288540766	-107.652424501	
7,700.00	89.63	314.999	5,549.17	455.69	-109.60	1,924,448.802	2,776,335.926	36.288735367	-107.652663986	
7,800.00	89.63	314.999	5,549.81	526.40	-180.31	1,924,519.510	2,776,265.216	36.288929968	-107.652903472	
7,900.00	89.63	314.999	5,550.45	597.11	-251.02	1,924,590.219	2,776,194.506	36.289124569	-107.653142960	
8,000.00	89.63	314.999	5,551.09	667.82	-321.73	1,924,660.927	2,776,123.796	36.289319169	-107.653382448	
8,100.00	89.63	314.999	5,551.73	738.52	-392.44	1,924,731.635	2,776,053.086	36.289513769	-107.653621938	
8,200.00	89.63	314.999	5,552.37	809.23	-463.15	1,924,802.343	2,775,982.376	36.289708368	-107.653861429	
8,300.00	89.63	314.999	5,553.01	879.94	-533.86	1,924,873.051	2,775,911.666	36.289902966	-107.654100921	
8,400.00	89.63	314.999	5,553.65	950.65	-604.57	1,924,943.759	2,775,840.956	36.290097564	-107.654340414	
8,500.00	89.63	314.999	5,554.28	1,021.36	-675.28	1,925,014.468	2,775,770.246	36.290292162	-107.654579909	
8,600.00	89.63	314.999	5,554.92	1,092.07	-745.99	1,925,085.176	2,775,699.536	36.290486759	-107.654819405	
8,700.00	89.63	314.999	5,555.56	1,162.77	-816.70	1,925,155.884	2,775,628.826	36.290681356	-107.655058902	
8,800.00	89.63	314.999	5,556.20	1,233.48	-887.41	1,925,226.592	2,775,558.116	36.290875952	-107.655298400	
8,900.00	89.63	314.999	5,556.84	1,304.19	-958.12	1,925,297.300	2,775,487.406	36.291070548	-107.655537899	
9,000.00	89.63	314.999	5,557.48	1,374.90	-1,028.83	1,925,368.008	2,775,416.696	36.291265143	-107.655777400	
9,100.00	89.63	314.999	5,558.12	1,445.61	-1,099.54	1,925,438.717	2,775,345.986	36.291459738	-107.656016901	
9,200.00	89.63	314.999	5,558.76	1,516.32	-1,170.25	1,925,509.425	2,775,275.276	36.291654332	-107.656256404	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,300.00	89.63	314.999	5,559.40	1,587.02	-1,240.96	1,925,580.133	2,775,204.566	36.291848926	-107.656495908	
9,400.00	89.63	314.999	5,560.04	1,657.73	-1,311.67	1,925,650.841	2,775,133.856	36.292043519	-107.656735413	
9,500.00	89.63	314.999	5,560.68	1,728.44	-1,382.38	1,925,721.549	2,775,063.146	36.292238112	-107.656974920	
9,600.00	89.63	314.999	5,561.32	1,799.15	-1,453.09	1,925,792.257	2,774,992.436	36.292432705	-107.657214427	
9,700.00	89.63	314.999	5,561.96	1,869.86	-1,523.80	1,925,862.966	2,774,921.726	36.292627296	-107.657453936	
9,800.00	89.63	314.999	5,562.60	1,940.57	-1,594.51	1,925,933.674	2,774,851.016	36.292821888	-107.657693446	
9,900.00	89.63	314.999	5,563.24	2,011.27	-1,665.22	1,926,004.382	2,774,780.306	36.293016479	-107.657932957	
10,000.00	89.63	314.999	5,563.88	2,081.98	-1,735.93	1,926,075.090	2,774,709.596	36.293211069	-107.658172470	
10,100.00	89.63	314.999	5,564.52	2,152.69	-1,806.64	1,926,145.798	2,774,638.886	36.293405659	-107.658411983	
10,200.00	89.63	314.999	5,565.15	2,223.40	-1,877.35	1,926,216.506	2,774,568.176	36.293600249	-107.658651498	
10,300.00	89.63	314.999	5,565.79	2,294.11	-1,948.06	1,926,287.215	2,774,497.466	36.293794838	-107.658891014	
10,400.00	89.63	314.999	5,566.43	2,364.82	-2,018.77	1,926,357.923	2,774,426.756	36.293989426	-107.659130531	
10,500.00	89.63	314.999	5,567.07	2,435.52	-2,089.48	1,926,428.632	2,774,356.046	36.294184014	-107.659370050	
10,600.00	89.63	314.999	5,567.71	2,506.23	-2,160.19	1,926,499.340	2,774,285.336	36.294378602	-107.659609569	
10,700.00	89.63	314.999	5,568.35	2,576.94	-2,230.90	1,926,570.048	2,774,214.626	36.294573189	-107.659849090	
10,800.00	89.63	314.999	5,568.99	2,647.65	-2,301.61	1,926,640.756	2,774,143.916	36.294767775	-107.660088612	
10,900.00	89.63	314.999	5,569.63	2,718.36	-2,372.32	1,926,711.464	2,774,073.206	36.294962361	-107.660328135	
11,000.00	89.63	314.999	5,570.27	2,789.07	-2,443.03	1,926,782.173	2,774,002.496	36.295156947	-107.660567659	
11,100.00	89.63	314.999	5,570.91	2,859.77	-2,513.74	1,926,852.881	2,773,931.786	36.295351531	-107.660807185	
11,200.00	89.63	314.999	5,571.55	2,930.48	-2,584.45	1,926,923.589	2,773,861.076	36.295546116	-107.661046711	
11,300.00	89.63	314.999	5,572.19	3,001.19	-2,655.16	1,926,994.297	2,773,790.366	36.295740700	-107.661286239	
11,400.00	89.63	314.999	5,572.83	3,071.90	-2,725.87	1,927,065.005	2,773,719.656	36.295935283	-107.661525768	
11,500.00	89.63	314.999	5,573.47	3,142.61	-2,796.58	1,927,135.713	2,773,648.946	36.296129867	-107.661765298	
11,600.00	89.63	314.999	5,574.11	3,213.32	-2,867.29	1,927,206.422	2,773,578.236	36.296324449	-107.662004830	
11,700.00	89.63	314.999	5,574.75	3,284.02	-2,938.00	1,927,277.130	2,773,507.526	36.296519031	-107.662244362	
11,800.00	89.63	314.999	5,575.39	3,354.73	-3,008.71	1,927,347.838	2,773,436.816	36.296713613	-107.662483896	
11,900.00	89.63	314.999	5,576.02	3,425.44	-3,079.42	1,927,418.546	2,773,366.106	36.296908194	-107.662723431	
12,000.00	89.63	314.999	5,576.66	3,496.15	-3,150.13	1,927,489.254	2,773,295.395	36.297102775	-107.662962967	
12,100.00	89.63	314.999	5,577.30	3,566.86	-3,220.84	1,927,559.962	2,773,224.685	36.297297355	-107.663202505	
12,200.00	89.63	314.999	5,577.94	3,637.57	-3,291.55	1,927,630.671	2,773,153.975	36.297491935	-107.663442043	
12,300.00	89.63	314.999	5,578.58	3,708.27	-3,362.26	1,927,701.379	2,773,083.265	36.297686515	-107.663681583	
12,400.00	89.63	314.999	5,579.22	3,778.98	-3,432.97	1,927,772.087	2,773,012.555	36.297881093	-107.663921124	
12,500.00	89.63	314.999	5,579.86	3,849.69	-3,503.68	1,927,842.795	2,772,941.845	36.298075672	-107.664160666	
12,600.00	89.63	314.999	5,580.50	3,920.40	-3,574.39	1,927,913.503	2,772,871.135	36.298270250	-107.664400209	
12,700.00	89.63	314.999	5,581.14	3,991.11	-3,645.10	1,927,984.211	2,772,800.425	36.298464827	-107.664639754	
12,800.00	89.63	314.999	5,581.78	4,061.82	-3,715.81	1,928,054.920	2,772,729.715	36.298659404	-107.664879299	
12,900.00	89.63	314.999	5,582.42	4,132.52	-3,786.52	1,928,125.628	2,772,659.005	36.298853980	-107.665118846	
13,000.00	89.63	314.999	5,583.06	4,203.23	-3,857.23	1,928,196.336	2,772,588.295	36.299048556	-107.665358394	
13,100.00	89.63	314.999	5,583.70	4,273.94	-3,927.94	1,928,267.044	2,772,517.585	36.299243132	-107.665597944	
13,200.00	89.63	314.999	5,584.34	4,344.65	-3,998.65	1,928,337.752	2,772,446.875	36.299437707	-107.665837494	
13,300.00	89.63	314.999	5,584.98	4,415.36	-4,069.36	1,928,408.460	2,772,376.165	36.299632281	-107.666077046	
13,400.00	89.63	314.999	5,585.62	4,486.07	-4,140.07	1,928,479.169	2,772,305.455	36.299826855	-107.666316599	
13,500.00	89.63	314.999	5,586.25	4,556.77	-4,210.78	1,928,549.877	2,772,234.745	36.300021429	-107.666556153	
13,600.00	89.63	314.999	5,586.89	4,627.48	-4,281.49	1,928,620.585	2,772,164.035	36.300216002	-107.666795708	
13,700.00	89.63	314.999	5,587.53	4,698.19	-4,352.20	1,928,691.293	2,772,093.325	36.300410574	-107.667035264	
13,800.00	89.63	314.999	5,588.17	4,768.90	-4,422.92	1,928,762.001	2,772,022.615	36.300605146	-107.667274822	
13,900.00	89.63	314.999	5,588.81	4,839.61	-4,493.63	1,928,832.709	2,771,951.905	36.300799718	-107.667514381	
14,000.00	89.63	314.999	5,589.45	4,910.31	-4,564.34	1,928,903.417	2,771,881.195	36.300994289	-107.667753941	
14,100.00	89.63	314.999	5,590.09	4,981.02	-4,635.05	1,928,974.126	2,771,810.485	36.301188860	-107.667993502	
14,200.00	89.63	314.999	5,590.73	5,051.73	-4,705.76	1,929,044.834	2,771,739.775	36.301383430	-107.668233064	
14,300.00	89.63	314.999	5,591.37	5,122.44	-4,776.47	1,929,115.542	2,771,669.065	36.301577999	-107.668472628	
14,400.00	89.63	314.999	5,592.01	5,193.15	-4,847.18	1,929,186.250	2,771,598.355	36.301772569	-107.668712192	
14,500.00	89.63	314.999	5,592.65	5,263.86	-4,917.89	1,929,256.958	2,771,527.645	36.301967137	-107.668951758	
14,600.00	89.63	314.999	5,593.29	5,334.56	-4,988.60	1,929,327.666	2,771,456.935	36.302161705	-107.669191325	
14,700.00	89.63	314.999	5,593.93	5,405.27	-5,059.31	1,929,398.375	2,771,386.225	36.302356273	-107.669430894	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,800.00	89.63	314.999	5,594.57	5,475.98	-5,130.02	1,929,469.083	2,771,315.515	36.302550840	-107.669670463
14,900.00	89.63	314.999	5,595.21	5,546.69	-5,200.73	1,929,539.791	2,771,244.805	36.302745407	-107.669910034
15,000.00	89.63	314.999	5,595.85	5,617.40	-5,271.44	1,929,610.499	2,771,174.095	36.302939973	-107.670149606
15,100.00	89.63	314.999	5,596.49	5,688.11	-5,342.15	1,929,681.207	2,771,103.385	36.303134539	-107.670389179
15,200.00	89.63	314.999	5,597.12	5,758.81	-5,412.86	1,929,751.915	2,771,032.675	36.303329104	-107.670628753
15,300.00	89.63	314.999	5,597.76	5,829.52	-5,483.57	1,929,822.624	2,770,961.965	36.303523669	-107.670868329
15,400.00	89.63	314.999	5,598.40	5,900.23	-5,554.28	1,929,893.332	2,770,891.255	36.303718234	-107.671107905
15,500.00	89.63	314.999	5,599.04	5,970.94	-5,624.99	1,929,964.040	2,770,820.545	36.303912797	-107.671347483
15,600.00	89.63	314.999	5,599.68	6,041.65	-5,695.70	1,930,034.748	2,770,749.835	36.304107361	-107.671587062
15,700.00	89.63	314.999	5,600.32	6,112.36	-5,766.41	1,930,105.456	2,770,679.125	36.304301924	-107.671826642
15,800.00	89.63	314.999	5,600.96	6,183.06	-5,837.12	1,930,176.164	2,770,608.415	36.304496486	-107.672066224
15,900.00	89.63	314.999	5,601.60	6,253.77	-5,907.83	1,930,246.873	2,770,537.705	36.304691048	-107.672305806
16,000.00	89.63	314.999	5,602.24	6,324.48	-5,978.54	1,930,317.581	2,770,466.995	36.304885609	-107.672545390
16,100.00	89.63	314.999	5,602.88	6,395.19	-6,049.25	1,930,388.289	2,770,396.285	36.305080170	-107.672784975
16,200.00	89.63	314.999	5,603.52	6,465.90	-6,119.96	1,930,458.997	2,770,325.575	36.305274731	-107.673024561
16,300.00	89.63	314.999	5,604.16	6,536.61	-6,190.67	1,930,529.705	2,770,254.865	36.305469291	-107.673264148
16,400.00	89.63	314.999	5,604.80	6,607.31	-6,261.38	1,930,600.413	2,770,184.155	36.305663850	-107.673503737
16,500.00	89.63	314.999	5,605.44	6,678.02	-6,332.09	1,930,671.122	2,770,113.445	36.305858409	-107.673743327
16,600.00	89.63	314.999	5,606.08	6,748.73	-6,402.80	1,930,741.830	2,770,042.735	36.306052968	-107.673982918
16,700.00	89.63	314.999	5,606.72	6,819.44	-6,473.51	1,930,812.538	2,769,972.025	36.306247526	-107.674222510
16,744.45	89.63	314.999	5,607.00	6,850.87	-6,504.94	1,930,843.965	2,769,940.597	36.306334000	-107.674329000
PBHL/TD @ 16744.45 MD 5607.00 TVD									

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Ridge 135H FTP 2384 F - plan hits target center - Point	0.00	0.000	5,540.00	-558.53	904.65	1,923,434.580	2,777,350.169	36.285944000	-107.649229000	
Ridge 135H LTP 237 FN - plan hits target center - Point	0.00	0.000	5,607.00	6,850.87	-6,504.94	1,930,843.965	2,769,940.597	36.306334000	-107.674329000	

Casing Points							Casing Diameter (")	Hole Diameter (")
Measured Depth (ft)	Vertical Depth (ft)	Name						
350.00	350.00	13 3/8" Csg					13-3/8	17-1/2
3,798.24	3,567.00	9 5/8" Csg					9-5/8	12-1/4



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6832+25 @ 6857.00ft
Project:	San Juan County, New Mexico NAD83 NM W	MD Reference:	RKB=6832+25 @ 6857.00ft
Site:	Ridge Unit (130, 135, 136 & 137)	North Reference:	Grid
Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,234.59	1,234.00	Ojo Alamo				
1,359.11	1,357.00	Kirtland				
1,586.16	1,577.00	Fruitland				
1,933.39	1,897.00	Pictured Cliffs				
2,045.06	1,997.00	Lewis				
2,396.81	2,312.00	Chacra				
3,625.15	3,412.00	Cliff House				
3,630.74	3,417.00	Menefee				
4,563.16	4,252.00	Point Lookout				
4,825.58	4,487.00	Mancos				
5,227.81	4,857.00	MNCS_A				
5,313.24	4,942.00	MNCS_B				
5,434.45	5,062.00	MNCS_C				
5,518.19	5,142.00	MNCS_Cms				
5,601.19	5,217.00	MNCS_D				
5,698.01	5,297.00	MNCS_E				
5,772.94	5,352.00	MNCS_F				
5,926.53	5,442.00	MNCS_G				
6,009.01	5,482.00	MNCS_H				
6,173.30	5,532.00	MNCS_I				

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	
1,880.85	1,849.95	-123.06	157.09	Begin 26.43° tangent	
5,047.11	4,685.38	-992.04	1,266.32	Begin 10°/100' build/turn	
5,908.71	5,433.09	-800.00	1,137.29	Begin 60.00° tangent	
5,968.71	5,463.09	-762.03	1,101.82	Begin 10°/100' build/turn	
6,265.63	5,540.00	-558.53	904.65	Begin 89.63° lateral	
16,744.45	5,607.00	6,850.87	-6,504.94	PBHL/TD @ 16744.45 MD 5607.00 TVD	



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Reference	rev1		
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 1,874.49ft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	8/16/2023		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	16,744.45	rev1 (Original Hole)	MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NW Lybrook (138, 139, 140 & 141)						
Lybrook 2408 138H - Original Hole - rev0	5,672.76	7,880.16	529.68	451.04	6.736	CC
Lybrook 2408 138H - Original Hole - rev0	5,700.00	7,890.93	530.77	450.24	6.591	ES
Lybrook 2408 138H - Original Hole - rev0	5,800.00	7,936.72	552.15	466.16	6.421	SF
Ridge Unit (130, 135, 136 & 137)						
Ridge Unit No. 130H - Original Hole - rev1	500.00	500.00	20.09	16.95	6.405	CC, ES
Ridge Unit No. 130H - Original Hole - rev1	15,600.00	17,410.95	1,157.74	678.77	2.417	SF
Ridge Unit No. 136H - Original Hole - rev1	1,000.00	1,000.00	19.97	13.25	2.971	CC, ES
Ridge Unit No. 136H - Original Hole - rev1	16,744.89	15,364.49	1,156.71	684.52	2.450	SF
Ridge Unit No. 137H - Original Hole - rev1	800.00	800.00	40.06	34.77	7.576	CC, ES
Ridge Unit No. 137H - Original Hole - rev1	900.00	897.87	42.61	36.63	7.124	SF

Offset Design: NW Lybrook (138, 139, 140 & 141) - Lybrook 2408 138H - Original Hole - rev0													Offset Site Error: 0.00 ft		
Survey Program: 0-MWD		Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error: 0.00 ft	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
4,100.00	3,837.23	8,205.77	5,550.28	25.59	67.37	127.12	-1,391.77	927.64	1,821.70	1,775.23	46.47	39.202			
4,200.00	3,926.78	8,170.37	5,550.43	26.46	66.56	126.51	-1,391.76	963.04	1,728.43	1,681.89	46.54	37.139			
4,300.00	4,016.34	8,134.98	5,550.58	27.33	65.75	125.83	-1,391.74	998.44	1,635.19	1,588.57	46.62	35.072			
4,400.00	4,105.89	8,099.58	5,550.73	28.20	64.94	125.08	-1,391.73	1,033.84	1,541.99	1,495.26	46.73	32.995			
4,500.00	4,195.44	8,064.18	5,550.88	29.07	64.13	124.23	-1,391.71	1,069.23	1,448.83	1,401.97	46.87	30.914			
4,600.00	4,284.99	8,028.78	5,551.03	29.95	63.33	123.27	-1,391.69	1,104.63	1,355.72	1,308.69	47.03	28.826			
4,700.00	4,374.54	7,993.38	5,551.18	30.82	62.53	122.18	-1,391.68	1,140.03	1,262.68	1,215.44	47.23	26.732			
4,800.00	4,464.09	7,957.98	5,551.33	31.70	61.73	120.93	-1,391.66	1,175.43	1,169.70	1,122.23	47.48	24.636			
4,900.00	4,553.64	7,922.58	5,551.48	32.57	60.94	119.48	-1,391.65	1,210.83	1,076.83	1,029.05	47.78	22.536			
5,000.00	4,643.20	7,887.18	5,551.63	33.45	60.15	117.79	-1,391.63	1,246.23	984.08	935.92	48.16	20.435			
5,100.00	4,733.76	7,853.31	5,551.77	34.29	59.40	104.32	-1,391.62	1,280.10	891.27	842.52	48.74	18.285			
5,200.00	4,829.62	7,829.47	5,551.87	34.88	58.87	85.31	-1,391.60	1,303.94	798.81	748.51	50.30	15.880			
5,300.00	4,928.79	7,817.57	5,551.92	35.21	58.60	124.91	-1,391.60	1,315.84	710.93	657.65	53.28	13.342			
5,400.00	5,028.23	7,817.96	5,551.92	35.32	58.61	-159.45	-1,391.60	1,315.45	633.43	575.31	58.11	10.900			
5,500.00	5,124.93	7,830.64	5,551.87	35.31	58.89	-152.42	-1,391.61	1,302.77	573.27	508.34	64.93	8.829			
5,600.00	5,215.96	7,855.21	5,551.76	35.21	59.44	-148.81	-1,391.62	1,278.20	537.55	464.56	72.99	7.364			
5,672.76	5,277.04	7,880.16	5,551.66	35.12	59.99	-145.52	-1,391.63	1,253.25	529.68	451.04	78.64	6.736	CC		

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - Lybrook 2408 138H - Original Hole - rev0											Offset Site Error:	0.00 ft
Survey Program: 0-MWD											Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
5,700.00	5,298.54	7,890.93	5,551.61	35.09	60.23	-144.04	-1,391.63	1,242.48	530.77	450.24	80.53	6.591 ES
5,800.00	5,370.18	7,936.72	5,551.42	34.98	61.26	-137.19	-1,391.65	1,196.69	552.15	466.16	85.99	6.421 SF
5,900.00	5,428.68	7,991.19	5,551.19	34.94	62.48	-127.99	-1,391.68	1,142.22	595.96	506.65	89.31	6.673
6,000.00	5,477.99	8,050.37	5,550.94	35.00	63.82	-120.80	-1,391.70	1,083.05	652.32	560.91	91.40	7.137
6,100.00	5,515.22	8,114.14	5,550.67	35.16	65.27	-108.81	-1,391.73	1,019.27	717.11	624.09	93.03	7.709
6,200.00	5,535.83	8,182.28	5,550.38	35.44	66.83	-96.92	-1,391.76	951.14	786.79	692.10	94.69	8.309
6,300.00	5,540.22	8,252.66	5,550.08	35.82	68.45	-89.88	-1,391.79	880.75	857.59	761.04	96.55	8.883
6,400.00	5,540.86	8,323.34	5,549.79	36.34	70.09	-89.84	-1,391.83	810.08	928.33	829.83	98.50	9.424
6,500.00	5,541.50	8,394.01	5,549.49	36.98	71.73	-89.80	-1,391.86	739.40	999.07	898.53	100.54	9.937
6,600.00	5,542.14	8,464.69	5,549.19	37.76	73.39	-89.76	-1,391.89	668.73	1,069.82	967.16	102.66	10.421
6,700.00	5,542.78	8,535.36	5,548.89	38.66	75.05	-89.74	-1,391.92	598.06	1,140.56	1,035.70	104.86	10.877
6,800.00	5,543.41	8,606.04	5,548.59	39.67	76.71	-89.71	-1,391.95	527.38	1,211.31	1,104.18	107.13	11.307
6,900.00	5,544.05	8,676.71	5,548.29	40.79	78.39	-89.69	-1,391.98	456.71	1,282.06	1,172.58	109.47	11.711
7,000.00	5,544.69	8,747.39	5,547.99	42.00	80.06	-89.67	-1,392.02	386.03	1,352.80	1,240.92	111.88	12.091
7,100.00	5,545.33	8,818.06	5,547.69	43.31	81.75	-89.65	-1,392.05	315.36	1,423.55	1,309.19	114.36	12.448
7,200.00	5,545.97	8,888.74	5,547.40	44.69	83.43	-89.63	-1,392.08	244.68	1,494.29	1,377.40	116.89	12.784
7,300.00	5,546.61	8,959.41	5,547.10	46.15	85.13	-89.61	-1,392.11	174.01	1,565.04	1,445.56	119.48	13.099
7,400.00	5,547.25	9,030.09	5,546.80	47.67	86.82	-89.60	-1,392.14	103.33	1,635.78	1,513.66	122.12	13.395
7,500.00	5,547.89	9,100.76	5,546.50	49.25	88.52	-89.59	-1,392.18	32.66	1,706.53	1,581.72	124.81	13.673
7,600.00	5,548.53	9,171.44	5,546.20	50.89	90.23	-89.58	-1,392.21	-38.01	1,777.27	1,649.73	127.54	13.935
7,700.00	5,549.17	9,242.11	5,545.90	52.58	91.94	-89.57	-1,392.24	-108.69	1,848.02	1,717.70	130.32	14.181

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 130H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Rule Assigned:												Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	69.75	6.95	18.85	20.09				
100.00	100.00	100.00	100.00	0.13	0.13	69.75	6.95	18.85	20.09	19.82	0.27	74.723	
200.00	200.00	200.00	200.00	0.49	0.49	69.75	6.95	18.85	20.09	19.10	0.99	20.379	
300.00	300.00	300.00	300.00	0.85	0.85	69.75	6.95	18.85	20.09	18.39	1.70	11.798	
400.00	400.00	400.00	400.00	1.21	1.21	69.75	6.95	18.85	20.09	17.67	2.42	8.303	
500.00	500.00	500.00	500.00	1.57	1.57	69.75	6.95	18.85	20.09	16.95	3.14	6.405 CC, ES	
600.00	600.00	599.15	599.10	1.93	1.91	74.32	5.95	21.22	22.06	18.22	3.84	5.745	
700.00	700.00	697.76	697.41	2.29	2.26	83.97	2.99	28.28	28.55	24.02	4.53	6.299	
800.00	800.00	795.33	794.16	2.64	2.62	92.70	-1.88	39.86	40.33	35.11	5.22	7.729	
900.00	900.00	891.38	888.64	3.00	3.00	98.71	-8.53	55.69	57.47	51.59	5.89	9.764	
1,000.00	1,000.00	985.45	980.24	3.36	3.41	102.57	-16.82	75.42	79.76	73.22	6.54	12.203	
1,100.00	1,099.95	1,077.86	1,069.08	3.71	3.87	-23.23	-26.66	98.83	104.62	97.47	7.15	14.635	
1,200.00	1,199.63	1,169.16	1,155.55	4.04	4.37	-22.34	-38.00	125.82	129.48	121.75	7.73	16.744	
1,300.00	1,298.77	1,259.40	1,239.55	4.39	4.93	-22.16	-50.77	156.21	154.22	145.91	8.31	18.564	
1,400.00	1,397.08	1,348.62	1,320.97	4.77	5.56	-22.37	-64.89	189.82	178.79	169.89	8.90	20.099	
1,500.00	1,494.31	1,436.84	1,399.72	5.17	6.24	-22.83	-80.29	226.47	203.14	193.66	9.49	21.409	
1,600.00	1,590.18	1,524.11	1,475.73	5.62	7.00	-23.44	-96.90	265.97	227.27	217.17	10.10	22.504	
1,700.00	1,684.43	1,610.46	1,548.94	6.13	7.82	-24.15	-114.63	308.18	251.16	240.42	10.74	23.392	
1,800.00	1,776.81	1,700.00	1,622.59	6.70	8.75	-24.99	-134.35	355.12	274.83	263.33	11.50	23.901	
1,900.00	1,867.10	1,780.55	1,686.74	7.35	9.68	-25.82	-153.22	400.02	298.25	286.10	12.14	24.559	
2,000.00	1,956.65	1,867.96	1,754.11	8.05	10.74	-26.80	-174.80	451.35	324.27	311.27	13.01	24.926	
2,100.00	2,046.20	1,964.09	1,827.60	8.79	11.96	-27.68	-198.81	508.49	351.36	337.24	14.12	24.892	
2,200.00	2,135.76	2,060.23	1,901.09	9.55	13.21	-28.43	-222.82	565.63	378.50	363.24	15.26	24.808	
2,300.00	2,225.31	2,156.36	1,974.58	10.33	14.46	-29.08	-246.82	622.76	405.70	389.27	16.43	24.693	
2,400.00	2,314.86	2,252.50	2,048.07	11.13	15.73	-29.65	-270.83	679.90	432.94	415.31	17.63	24.559	
2,500.00	2,404.41	2,348.63	2,121.56	11.94	17.01	-30.16	-294.84	737.03	460.22	441.37	18.85	24.416	
2,600.00	2,493.96	2,444.76	2,195.05	12.76	18.29	-30.60	-318.85	794.17	487.53	467.44	20.09	24.271	
2,700.00	2,583.51	2,540.90	2,268.54	13.59	19.58	-31.00	-342.86	851.30	514.86	493.52	21.34	24.126	
2,800.00	2,673.06	2,637.03	2,342.03	14.42	20.87	-31.36	-366.87	908.44	542.21	519.60	22.61	23.984	
2,900.00	2,762.62	2,733.17	2,415.52	15.26	22.17	-31.69	-390.88	965.57	569.58	545.69	23.89	23.846	
3,000.00	2,852.17	2,829.30	2,489.01	16.11	23.47	-31.98	-414.89	1,022.71	596.96	571.79	25.17	23.714	
3,100.00	2,941.72	2,925.43	2,562.50	16.96	24.77	-32.25	-438.90	1,079.84	624.36	597.89	26.47	23.588	
3,200.00	3,031.27	3,021.57	2,635.99	17.81	26.08	-32.50	-462.91	1,136.98	651.77	624.00	27.77	23.468	
3,300.00	3,120.82	3,117.70	2,709.48	18.67	27.38	-32.73	-486.92	1,194.11	679.19	650.11	29.08	23.354	
3,400.00	3,210.37	3,213.83	2,782.97	19.53	28.69	-32.93	-510.93	1,251.25	706.62	676.22	30.40	23.245	
3,500.00	3,299.92	3,309.97	2,856.46	20.39	30.00	-33.13	-534.94	1,308.39	734.06	702.34	31.72	23.142	
3,600.00	3,389.48	3,406.10	2,929.95	21.25	31.31	-33.31	-558.95	1,365.52	761.50	728.46	33.05	23.044	
3,700.00	3,479.03	3,502.24	3,003.44	22.11	32.62	-33.47	-582.96	1,422.66	788.95	754.58	34.38	22.951	
3,800.00	3,568.58	3,598.37	3,076.93	22.98	33.94	-33.63	-606.97	1,479.79	816.41	780.70	35.71	22.863	
3,900.00	3,658.13	3,694.50	3,150.42	23.85	35.25	-33.78	-630.98	1,536.93	843.87	806.83	37.05	22.779	
4,000.00	3,747.68	3,790.64	3,223.91	24.72	36.57	-33.91	-654.99	1,594.06	871.34	832.95	38.39	22.699	
4,100.00	3,837.23	3,886.77	3,297.40	25.59	37.88	-34.04	-679.00	1,651.20	898.81	859.08	39.73	22.624	
4,200.00	3,926.78	3,982.91	3,370.89	26.46	39.20	-34.16	-703.01	1,708.33	926.28	885.21	41.07	22.552	
4,300.00	4,016.34	4,079.04	3,444.38	27.33	40.51	-34.28	-727.01	1,765.47	953.76	911.34	42.42	22.483	
4,400.00	4,105.89	4,175.17	3,517.87	28.20	41.83	-34.38	-751.02	1,822.60	981.25	937.47	43.77	22.418	
4,500.00	4,195.44	4,271.31	3,591.36	29.07	43.15	-34.48	-775.03	1,879.74	1,008.73	963.61	45.12	22.356	
4,600.00	4,284.99	4,367.44	3,664.85	29.95	44.47	-34.58	-799.04	1,936.87	1,036.22	989.74	46.47	22.297	
4,700.00	4,374.54	4,463.58	3,738.34	30.82	45.79	-34.67	-823.05	1,994.01	1,063.71	1,015.88	47.83	22.240	
4,800.00	4,464.09	4,559.71	3,811.83	31.70	47.10	-34.76	-847.06	2,051.15	1,091.20	1,042.02	49.18	22.186	
4,900.00	4,553.64	4,655.84	3,885.32	32.57	48.42	-34.84	-871.07	2,108.28	1,118.69	1,068.15	50.54	22.134	
5,000.00	4,643.20	4,751.98	3,958.82	33.45	49.74	-34.92	-895.08	2,165.42	1,146.19	1,094.29	51.90	22.084	
5,100.00	4,733.76	4,847.57	4,031.89	34.29	51.06	-34.29	-918.96	2,222.23	1,175.39	1,122.21	53.18	22.101	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 130H - Original Hole - rev1													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,200.00	4,829.62	4,938.61	4,101.49	34.88	52.31	-28.82	-941.69	2,276.34	1,215.09	1,161.12	53.96	22.518	
5,300.00	4,928.79	5,022.02	4,165.25	35.21	53.45	25.23	-962.52	2,325.91	1,265.73	1,211.53	54.20	23.354	
5,400.00	5,028.23	7,505.89	5,547.66	35.32	67.26	74.05	-177.49	2,159.11	1,295.48	1,206.56	88.92	14.569	
5,500.00	5,124.93	7,530.83	5,547.83	35.31	67.43	87.74	-159.86	2,141.48	1,254.45	1,162.74	91.71	13.679	
5,600.00	5,215.96	7,572.18	5,548.11	35.21	67.70	92.71	-130.62	2,112.24	1,221.62	1,127.43	94.19	12.969	
5,700.00	5,298.54	7,628.69	5,548.49	35.09	68.09	94.56	-90.66	2,072.28	1,197.08	1,100.75	96.33	12.426	
5,800.00	5,370.18	7,698.65	5,548.97	34.98	68.59	94.76	-41.19	2,022.82	1,180.07	1,081.91	98.15	12.023	
5,900.00	5,428.68	7,779.91	5,549.52	34.94	69.24	94.09	16.27	1,965.36	1,169.25	1,069.49	99.76	11.721	
6,000.00	5,477.99	7,867.18	5,550.11	35.00	69.97	92.41	77.98	1,903.65	1,162.32	1,061.04	101.28	11.476	
6,100.00	5,515.22	7,960.08	5,550.75	35.16	70.81	91.39	143.66	1,837.97	1,158.44	1,055.65	102.79	11.270	
6,200.00	5,535.83	8,057.93	5,551.41	35.44	71.75	90.72	212.86	1,768.77	1,156.81	1,052.47	104.34	11.087	
6,295.28	5,542.14	8,152.99	5,552.06	35.81	72.72	90.49	280.07	1,701.56	1,156.41	1,050.53	105.88	10.922	
6,300.00	5,540.22	8,157.79	5,552.09	35.82	72.77	90.59	283.47	1,698.17	1,156.54	1,050.60	105.94	10.917	
6,400.00	5,540.86	8,257.79	5,552.77	36.34	73.85	90.59	354.18	1,627.46	1,156.54	1,048.83	107.71	10.737	
6,500.00	5,541.50	8,357.79	5,553.45	36.98	74.99	90.59	424.89	1,556.75	1,156.55	1,046.88	109.67	10.546	
6,600.00	5,542.14	8,457.79	5,554.13	37.76	76.19	90.59	495.60	1,486.04	1,156.55	1,044.75	111.80	10.345	
6,700.00	5,542.78	8,557.79	5,554.81	38.66	77.44	90.60	566.30	1,415.33	1,156.55	1,042.45	114.10	10.136	
6,800.00	5,543.41	8,657.79	5,555.49	39.67	78.74	90.60	637.01	1,344.62	1,156.55	1,040.00	116.55	9.923	
6,900.00	5,544.05	8,757.79	5,556.17	40.79	80.09	90.60	707.72	1,273.92	1,156.56	1,037.40	119.15	9.706	
7,000.00	5,544.69	8,857.79	5,556.85	42.00	81.48	90.60	778.43	1,203.21	1,156.56	1,034.67	121.88	9.489	
7,100.00	5,545.33	8,957.79	5,557.53	43.31	82.92	90.60	849.14	1,132.50	1,156.56	1,031.82	124.74	9.272	
7,200.00	5,545.97	9,057.79	5,558.21	44.69	84.40	90.61	919.85	1,061.79	1,156.56	1,028.85	127.71	9.056	
7,300.00	5,546.61	9,157.79	5,558.89	46.15	85.93	90.61	990.56	991.08	1,156.57	1,025.78	130.79	8.843	
7,400.00	5,547.25	9,257.79	5,559.57	47.67	87.48	90.61	1,061.27	920.37	1,156.57	1,022.61	133.96	8.634	
7,500.00	5,547.89	9,357.79	5,560.25	49.25	89.08	90.61	1,131.98	849.67	1,156.57	1,019.35	137.22	8.429	
7,600.00	5,548.53	9,457.79	5,560.93	50.89	90.71	90.61	1,202.69	778.96	1,156.58	1,016.02	140.56	8.228	
7,700.00	5,549.17	9,557.79	5,561.61	52.58	92.37	90.62	1,273.40	708.25	1,156.58	1,012.60	143.98	8.033	
7,800.00	5,549.81	9,657.79	5,562.29	54.31	94.05	90.62	1,344.11	637.54	1,156.58	1,009.12	147.46	7.843	
7,900.00	5,550.45	9,757.79	5,562.97	56.08	95.77	90.62	1,414.82	566.83	1,156.58	1,005.57	151.01	7.659	
8,000.00	5,551.09	9,857.79	5,563.65	57.89	97.51	90.62	1,485.53	496.12	1,156.59	1,001.97	154.62	7.480	
8,100.00	5,551.73	9,957.79	5,564.33	59.74	99.28	90.62	1,556.24	425.41	1,156.59	998.31	158.28	7.307	
8,200.00	5,552.37	10,057.79	5,565.01	61.61	101.07	90.63	1,626.95	354.71	1,156.59	994.60	161.99	7.140	
8,300.00	5,553.01	10,157.79	5,565.69	63.51	102.88	90.63	1,697.66	284.00	1,156.59	990.85	165.75	6.978	
8,400.00	5,553.65	10,257.79	5,566.37	65.44	104.72	90.63	1,768.37	213.29	1,156.60	987.05	169.55	6.822	
8,500.00	5,554.28	10,357.79	5,567.05	67.39	106.57	90.63	1,839.08	142.58	1,156.60	983.21	173.38	6.671	
8,600.00	5,554.92	10,457.79	5,567.73	69.36	108.44	90.63	1,909.79	71.87	1,156.60	979.34	177.26	6.525	
8,700.00	5,555.56	10,557.79	5,568.41	71.35	110.33	90.64	1,980.50	1.16	1,156.60	975.43	181.17	6.384	
8,800.00	5,556.20	10,657.79	5,569.09	73.36	112.23	90.64	2,051.21	-69.54	1,156.61	971.50	185.11	6.248	
8,900.00	5,556.84	10,757.79	5,569.77	75.39	114.15	90.64	2,121.92	-140.25	1,156.61	967.53	189.08	6.117	
9,000.00	5,557.48	10,857.79	5,570.45	77.43	116.09	90.64	2,192.63	-210.96	1,156.61	963.53	193.08	5.990	
9,100.00	5,558.12	10,957.79	5,571.13	79.48	118.04	90.64	2,263.34	-281.67	1,156.61	959.51	197.10	5.868	
9,200.00	5,558.76	11,057.79	5,571.81	81.55	120.00	90.65	2,334.05	-352.38	1,156.62	955.46	201.15	5.750	
9,300.00	5,559.40	11,157.79	5,572.49	83.62	121.97	90.65	2,404.76	-423.09	1,156.62	951.39	205.23	5.636	
9,400.00	5,560.04	11,257.79	5,573.17	85.71	123.96	90.65	2,475.47	-493.79	1,156.62	947.30	209.32	5.526	
9,500.00	5,560.68	11,357.79	5,573.85	87.81	125.96	90.65	2,546.18	-564.50	1,156.63	943.19	213.43	5.419	
9,600.00	5,561.32	11,457.79	5,574.53	89.92	127.97	90.65	2,616.88	-635.21	1,156.63	939.06	217.56	5.316	
9,700.00	5,561.96	11,557.79	5,575.21	92.04	129.98	90.66	2,687.59	-705.92	1,156.63	934.92	221.71	5.217	
9,800.00	5,562.60	11,657.79	5,575.89	94.17	132.01	90.66	2,758.30	-776.63	1,156.63	930.75	225.88	5.121	
9,900.00	5,563.24	11,757.79	5,576.57	96.30	134.05	90.66	2,829.01	-847.34	1,156.64	926.57	230.07	5.027	
10,000.00	5,563.88	11,857.79	5,577.25	98.44	136.10	90.66	2,899.72	-918.05	1,156.64	922.38	234.26	4.937	
10,100.00	5,564.52	11,957.79	5,577.93	100.59	138.15	90.66	2,970.43	-988.75	1,156.64	918.17	238.48	4.850	
10,200.00	5,565.15	12,057.79	5,578.61	102.75	140.21	90.67	3,041.14	-1,059.46	1,156.64	913.94	242.70	4.766	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 130H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	5,565.79	12,157.79	5,579.29	104.91	142.28	90.67	3,111.85	-1,130.17	1,156.65	909.71	246.94	4.684	
10,400.00	5,566.43	12,257.79	5,579.96	107.07	144.36	90.67	3,182.56	-1,200.88	1,156.65	905.46	251.19	4.605	
10,500.00	5,567.07	12,357.79	5,580.64	109.25	146.44	90.67	3,253.27	-1,271.59	1,156.65	901.20	255.45	4.528	
10,600.00	5,567.71	12,457.79	5,581.32	111.42	148.53	90.67	3,323.98	-1,342.30	1,156.65	896.93	259.73	4.453	
10,700.00	5,568.35	12,557.79	5,582.00	113.60	150.63	90.68	3,394.69	-1,413.00	1,156.66	892.65	264.01	4.381	
10,800.00	5,568.99	12,657.79	5,582.68	115.79	152.73	90.68	3,465.40	-1,483.71	1,156.66	888.36	268.30	4.311	
10,900.00	5,569.63	12,757.79	5,583.36	117.98	154.84	90.68	3,536.11	-1,554.42	1,156.66	884.06	272.60	4.243	
11,000.00	5,570.27	12,857.79	5,584.04	120.17	156.95	90.68	3,606.82	-1,625.13	1,156.67	879.75	276.92	4.177	
11,100.00	5,570.91	12,957.79	5,584.72	122.37	159.07	90.68	3,677.53	-1,695.84	1,156.67	875.43	281.24	4.113	
11,200.00	5,571.55	13,057.79	5,585.40	124.57	161.19	90.69	3,748.24	-1,766.55	1,156.67	871.11	285.56	4.050	
11,300.00	5,572.19	13,157.79	5,586.08	126.77	163.32	90.69	3,818.95	-1,837.25	1,156.67	866.77	289.90	3.990	
11,400.00	5,572.83	13,257.79	5,586.76	128.98	165.45	90.69	3,889.66	-1,907.96	1,156.68	862.43	294.24	3.931	
11,500.00	5,573.47	13,357.79	5,587.44	131.19	167.59	90.69	3,960.37	-1,978.67	1,156.68	858.08	298.59	3.874	
11,600.00	5,574.11	13,457.79	5,588.12	133.40	169.73	90.69	4,031.08	-2,049.38	1,156.68	853.73	302.95	3.818	
11,700.00	5,574.75	13,557.79	5,588.80	135.62	171.88	90.70	4,101.79	-2,120.09	1,156.68	849.37	307.32	3.764	
11,800.00	5,575.39	13,657.79	5,589.48	137.84	174.03	90.70	4,172.50	-2,190.80	1,156.69	845.00	311.69	3.711	
11,900.00	5,576.02	13,757.79	5,590.16	140.06	176.18	90.70	4,243.21	-2,261.51	1,156.69	840.63	316.06	3.660	
12,000.00	5,576.66	13,857.79	5,590.84	142.28	178.34	90.70	4,313.92	-2,332.21	1,156.69	836.25	320.44	3.610	
12,100.00	5,577.30	13,957.79	5,591.52	144.51	180.50	90.70	4,384.63	-2,402.92	1,156.69	831.86	324.83	3.561	
12,200.00	5,577.94	14,057.79	5,592.20	146.74	182.66	90.71	4,455.34	-2,473.63	1,156.70	827.47	329.23	3.513	
12,300.00	5,578.58	14,157.79	5,592.88	148.97	184.83	90.71	4,526.05	-2,544.34	1,156.70	823.08	333.62	3.467	
12,400.00	5,579.22	14,257.79	5,593.56	151.20	187.00	90.71	4,596.76	-2,615.05	1,156.70	818.68	338.03	3.422	
12,500.00	5,579.86	14,357.79	5,594.24	153.43	189.18	90.71	4,667.46	-2,685.76	1,156.71	814.27	342.43	3.378	
12,600.00	5,580.50	14,457.79	5,594.92	155.67	191.35	90.71	4,738.17	-2,756.46	1,156.71	809.86	346.85	3.335	
12,700.00	5,581.14	14,557.79	5,595.60	157.90	193.53	90.72	4,808.88	-2,827.17	1,156.71	805.45	351.26	3.293	
12,800.00	5,581.78	14,657.79	5,596.28	160.14	195.71	90.72	4,879.59	-2,897.88	1,156.71	801.03	355.68	3.252	
12,900.00	5,582.42	14,757.79	5,596.96	162.38	197.90	90.72	4,950.30	-2,968.59	1,156.72	796.61	360.11	3.212	
13,000.00	5,583.06	14,857.79	5,597.64	164.62	200.09	90.72	5,021.01	-3,039.30	1,156.72	792.18	364.54	3.173	
13,100.00	5,583.70	14,957.79	5,598.32	166.87	202.27	90.72	5,091.72	-3,110.01	1,156.72	787.75	368.97	3.135	
13,200.00	5,584.34	15,057.79	5,599.00	169.11	204.47	90.73	5,162.43	-3,180.71	1,156.72	783.32	373.41	3.098	
13,300.00	5,584.98	15,157.79	5,599.68	171.36	206.66	90.73	5,233.14	-3,251.42	1,156.73	778.88	377.85	3.061	
13,400.00	5,585.62	15,257.79	5,600.36	173.60	208.86	90.73	5,303.85	-3,322.13	1,156.73	774.44	382.29	3.026	
13,500.00	5,586.25	15,357.79	5,601.04	175.85	211.06	90.73	5,374.56	-3,392.84	1,156.73	770.00	386.74	2.991	
13,600.00	5,586.89	15,457.79	5,601.72	178.10	213.26	90.73	5,445.27	-3,463.55	1,156.73	765.55	391.19	2.957	
13,700.00	5,587.53	15,557.79	5,602.40	180.35	215.46	90.74	5,515.98	-3,534.26	1,156.74	761.10	395.64	2.924	
13,800.00	5,588.17	15,657.79	5,603.08	182.60	217.66	90.74	5,586.69	-3,604.97	1,156.74	756.65	400.09	2.891	
13,900.00	5,588.81	15,757.79	5,603.76	184.86	219.87	90.74	5,657.40	-3,675.67	1,156.74	752.19	404.55	2.859	
14,000.00	5,589.45	15,857.79	5,604.44	187.11	222.08	90.74	5,728.11	-3,746.38	1,156.75	747.73	409.01	2.828	
14,100.00	5,590.09	15,957.79	5,605.12	189.37	224.29	90.74	5,798.82	-3,817.09	1,156.75	743.27	413.48	2.798	
14,200.00	5,590.73	16,057.79	5,605.80	191.62	226.50	90.75	5,869.53	-3,887.80	1,156.75	738.81	417.94	2.768	
14,300.00	5,591.37	16,157.79	5,606.48	193.88	228.71	90.75	5,940.24	-3,958.51	1,156.75	734.34	422.41	2.738	
14,400.00	5,592.01	16,257.79	5,607.16	196.14	230.93	90.75	6,010.95	-4,029.22	1,156.76	729.87	426.88	2.710	
14,500.00	5,592.65	16,357.79	5,607.84	198.40	233.14	90.75	6,081.66	-4,099.92	1,156.76	725.40	431.36	2.682	
14,600.00	5,593.29	16,457.79	5,608.52	200.65	235.36	90.75	6,152.37	-4,170.63	1,156.76	720.93	435.83	2.654	
14,700.00	5,593.93	16,557.79	5,609.20	202.91	237.58	90.76	6,223.08	-4,241.34	1,156.76	716.45	440.31	2.627	
14,800.00	5,594.57	16,657.79	5,609.88	205.18	239.80	90.76	6,293.79	-4,312.05	1,156.77	711.98	444.79	2.601	
14,900.00	5,595.21	16,757.79	5,610.56	207.44	242.02	90.76	6,364.50	-4,382.76	1,156.77	707.50	449.27	2.575	
15,000.00	5,595.85	16,857.79	5,611.24	209.70	244.25	90.76	6,435.21	-4,453.47	1,156.77	703.01	453.76	2.549	
15,100.00	5,596.49	16,957.79	5,611.92	211.96	246.47	90.76	6,505.92	-4,524.17	1,156.78	698.53	458.25	2.524	
15,200.00	5,597.12	17,057.79	5,612.60	214.23	248.70	90.77	6,576.63	-4,594.88	1,156.78	694.04	462.73	2.500	
15,300.00	5,597.76	17,157.79	5,613.28	216.49	250.93	90.77	6,647.34	-4,665.59	1,156.78	689.56	467.22	2.476	
15,400.00	5,598.40	17,257.79	5,613.96	218.76	253.16	90.77	6,718.05	-4,736.30	1,156.78	685.07	471.72	2.452	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 130H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
15,500.00	5,599.04	17,357.79	5,614.64	221.02	255.39	90.77	6,788.75	-4,807.01	1,156.79	680.58	476.21	2.429		
15,501.62	5,599.05	17,359.41	5,614.65	221.06	255.42	90.77	6,789.90	-4,808.15	1,156.79	680.50	476.28	2.429		
15,600.00	5,599.68	17,410.95	5,615.00	223.29	256.57	90.77	6,826.34	-4,844.59	1,157.74	678.77	478.97	2.417 SF		
15,700.00	5,600.32	17,410.95	5,615.00	225.55	256.57	90.77	6,826.34	-4,844.59	1,166.07	690.61	475.47	2.452		
15,800.00	5,600.96	17,410.95	5,615.00	227.82	256.57	90.77	6,826.34	-4,844.59	1,182.84	716.20	466.64	2.535		
15,900.00	5,601.60	17,410.95	5,615.00	230.09	256.57	90.77	6,826.34	-4,844.59	1,207.68	754.14	453.54	2.663		
16,000.00	5,602.24	17,410.95	5,615.00	232.36	256.57	90.77	6,826.34	-4,844.59	1,240.10	802.68	437.42	2.835		
16,100.00	5,602.88	17,410.95	5,615.00	234.63	256.57	90.77	6,826.34	-4,844.59	1,279.54	860.03	419.51	3.050		
16,200.00	5,603.52	17,410.95	5,615.00	236.90	256.57	90.77	6,826.34	-4,844.59	1,325.37	924.55	400.82	3.307		
16,300.00	5,604.16	17,410.95	5,615.00	239.17	256.57	90.77	6,826.34	-4,844.59	1,376.95	994.86	382.09	3.604		
16,400.00	5,604.80	17,410.95	5,615.00	241.44	256.57	90.77	6,826.34	-4,844.59	1,433.65	1,069.79	363.86	3.940		
16,500.00	5,605.44	17,410.95	5,615.00	243.71	256.57	90.77	6,826.34	-4,844.59	1,494.90	1,148.46	346.44	4.315		
16,600.00	5,606.08	17,410.95	5,615.00	245.98	256.57	90.77	6,826.34	-4,844.59	1,560.16	1,230.15	330.01	4.728		
16,700.00	5,606.72	17,410.95	5,615.00	248.25	256.57	90.77	6,826.34	-4,844.59	1,628.95	1,314.29	314.66	5.177		
16,744.89	5,607.00	17,410.95	5,615.00	249.27	256.57	90.77	6,826.34	-4,844.59	1,660.86	1,352.74	308.12	5.390		

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 136H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-109.26	-6.59	-18.85	19.97				
100.00	100.00	100.00	100.00	0.13	0.13	-109.26	-6.59	-18.85	19.97	19.70	0.27	74.268	
200.00	200.00	200.00	200.00	0.49	0.49	-109.26	-6.59	-18.85	19.97	18.98	0.99	20.255	
300.00	300.00	300.00	300.00	0.85	0.85	-109.26	-6.59	-18.85	19.97	18.26	1.70	11.727	
400.00	400.00	400.00	400.00	1.21	1.21	-109.26	-6.59	-18.85	19.97	17.55	2.42	8.252	
500.00	500.00	500.00	500.00	1.57	1.57	-109.26	-6.59	-18.85	19.97	16.83	3.14	6.366	
600.00	600.00	600.00	600.00	1.93	1.93	-109.26	-6.59	-18.85	19.97	16.11	3.85	5.182	
700.00	700.00	700.00	700.00	2.29	2.29	-109.26	-6.59	-18.85	19.97	15.40	4.57	4.369	
800.00	800.00	800.00	800.00	2.64	2.64	-109.26	-6.59	-18.85	19.97	14.68	5.29	3.776	
900.00	900.00	900.00	900.00	3.00	3.00	-109.26	-6.59	-18.85	19.97	13.96	6.00	3.325	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-109.26	-6.59	-18.85	19.97	13.25	6.72	2.971	CC, ES
1,100.00	1,099.95	1,099.33	1,099.28	3.71	3.70	122.74	-9.08	-19.53	22.85	15.45	7.40	3.088	
1,200.00	1,199.63	1,198.16	1,197.81	4.04	4.03	122.86	-16.50	-21.55	31.49	23.43	8.06	3.909	
1,300.00	1,298.77	1,296.03	1,294.85	4.39	4.36	122.86	-28.68	-24.88	45.82	37.09	8.72	5.252	
1,400.00	1,397.08	1,392.47	1,389.72	4.77	4.71	122.72	-45.35	-29.43	65.72	56.31	9.41	6.984	
1,500.00	1,494.31	1,487.09	1,481.83	5.17	5.08	122.46	-66.18	-35.12	91.05	80.93	10.12	8.994	
1,600.00	1,590.18	1,579.51	1,570.66	5.62	5.47	122.08	-90.75	-41.83	121.65	110.77	10.87	11.187	
1,700.00	1,684.43	1,673.00	1,659.77	6.13	5.91	122.27	-118.03	-49.28	156.32	144.59	11.72	13.334	
1,800.00	1,776.81	1,765.53	1,747.96	6.70	6.36	123.35	-145.04	-56.66	193.73	181.10	12.63	15.336	
1,900.00	1,867.10	1,856.63	1,834.79	7.35	6.82	125.00	-171.64	-63.92	234.04	220.45	13.59	17.217	
2,000.00	1,956.65	1,947.20	1,921.11	8.05	7.30	127.10	-198.08	-71.14	275.57	260.99	14.58	18.906	
2,100.00	2,046.20	2,037.77	2,007.44	8.79	7.78	128.66	-224.52	-78.36	317.32	301.74	15.58	20.365	
2,200.00	2,135.76	2,128.34	2,093.77	9.55	8.28	129.85	-250.96	-85.58	359.22	342.61	16.61	21.628	
2,300.00	2,225.31	2,218.92	2,180.09	10.33	8.78	130.80	-277.40	-92.80	401.22	383.57	17.65	22.727	
2,400.00	2,314.86	2,309.49	2,266.42	11.13	9.28	131.56	-303.84	-100.02	443.30	424.59	18.71	23.689	
2,500.00	2,404.41	2,400.06	2,352.74	11.94	9.80	132.19	-330.28	-107.24	485.43	465.65	19.79	24.534	
2,600.00	2,493.96	2,490.63	2,439.07	12.76	10.32	132.73	-356.72	-114.46	527.61	506.74	20.87	25.281	
2,700.00	2,583.51	2,581.20	2,525.39	13.59	10.84	133.18	-383.16	-121.68	569.81	547.85	21.96	25.946	
2,800.00	2,673.06	2,671.78	2,611.72	14.42	11.36	133.57	-409.60	-128.90	612.04	588.98	23.06	26.539	
2,900.00	2,762.62	2,762.35	2,698.04	15.26	11.89	133.91	-436.04	-136.12	654.29	630.12	24.17	27.072	
3,000.00	2,852.17	2,852.92	2,784.37	16.11	12.42	134.21	-462.48	-143.34	696.56	671.27	25.28	27.552	
3,100.00	2,941.72	2,943.49	2,870.69	16.96	12.96	134.48	-488.92	-150.56	738.84	712.44	26.40	27.987	
3,200.00	3,031.27	3,034.06	2,957.02	17.81	13.49	134.71	-515.36	-157.78	781.13	753.61	27.52	28.382	
3,300.00	3,120.82	3,124.64	3,043.35	18.67	14.03	134.93	-541.80	-165.00	823.43	794.78	28.65	28.742	
3,400.00	3,210.37	3,215.21	3,129.67	19.53	14.57	135.12	-568.24	-172.22	865.74	835.96	29.78	29.072	
3,500.00	3,299.92	3,305.78	3,216.00	20.39	15.11	135.29	-594.68	-179.44	908.06	877.14	30.91	29.374	
3,600.00	3,389.48	3,396.35	3,302.32	21.25	15.65	135.45	-621.12	-186.66	950.38	918.33	32.05	29.653	
3,700.00	3,479.03	3,486.92	3,388.65	22.11	16.19	135.59	-647.56	-193.88	992.71	959.52	33.19	29.910	
3,800.00	3,568.58	3,577.50	3,474.97	22.98	16.74	135.73	-674.00	-201.09	1,035.05	1,000.71	34.33	30.149	
3,900.00	3,658.13	3,668.07	3,561.30	23.85	17.28	135.85	-700.43	-208.31	1,077.38	1,041.91	35.48	30.370	
4,000.00	3,747.68	3,758.64	3,647.62	24.72	17.82	135.96	-726.87	-215.53	1,119.73	1,083.10	36.62	30.576	
4,100.00	3,837.23	3,849.21	3,733.95	25.59	18.37	136.07	-753.31	-222.75	1,162.07	1,124.30	37.77	30.768	
4,200.00	3,926.78	3,939.78	3,820.28	26.46	18.92	136.17	-779.75	-229.97	1,204.42	1,165.50	38.92	30.947	
4,300.00	4,016.34	4,030.36	3,906.60	27.33	19.46	136.26	-806.19	-237.19	1,246.77	1,206.70	40.07	31.115	
4,400.00	4,105.89	4,120.93	3,992.93	28.20	20.01	136.34	-832.63	-244.41	1,289.12	1,247.90	41.22	31.273	
4,500.00	4,195.44	4,211.50	4,079.25	29.07	20.56	136.42	-859.07	-251.63	1,331.48	1,289.10	42.37	31.421	
4,600.00	4,284.99	4,302.07	4,165.58	29.95	21.11	136.50	-885.51	-258.85	1,373.84	1,330.31	43.53	31.561	
4,700.00	4,374.54	4,392.64	4,251.90	30.82	21.66	136.57	-911.95	-266.07	1,416.20	1,371.51	44.69	31.692	
4,800.00	4,464.09	4,507.37	4,362.17	31.70	22.32	136.78	-942.44	-274.40	1,457.83	1,411.75	46.08	31.634	
4,900.00	4,553.64	4,623.83	4,475.84	32.57	22.90	137.27	-966.81	-281.05	1,497.94	1,450.57	47.37	31.623	
5,000.00	4,643.20	4,740.26	4,590.81	33.45	23.41	138.00	-984.44	-285.87	1,536.59	1,488.07	48.52	31.672	
5,100.00	4,733.76	4,856.99	4,706.97	34.29	23.84	142.08	-995.30	-288.83	1,572.41	1,522.91	49.51	31.762	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 136H - Original Hole - rev1													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,200.00	4,829.62	4,978.82	4,828.71	34.88	24.19	152.46	-999.31	-289.93	1,596.83	1,546.54	50.29	31.752	
5,300.00	4,928.79	5,078.89	4,928.79	35.21	24.42	-149.31	-999.32	-289.93	1,608.35	1,557.57	50.79	31.668	
5,400.00	5,028.23	5,100.00	4,949.89	35.32	24.47	-64.80	-999.14	-290.10	1,609.51	1,558.70	50.81	31.676	
5,500.00	5,124.93	5,150.00	4,999.74	35.31	24.57	-55.20	-996.56	-292.68	1,601.92	1,551.02	50.90	31.469	
5,600.00	5,215.96	5,180.16	5,029.59	35.21	24.62	-53.23	-993.53	-295.72	1,586.42	1,535.58	50.84	31.207	
5,700.00	5,298.54	5,200.00	5,049.09	35.09	24.66	-53.60	-990.92	-298.32	1,563.38	1,512.67	50.71	30.827	
5,800.00	5,370.18	5,250.00	5,097.55	34.98	24.72	-55.92	-982.26	-306.99	1,533.13	1,482.27	50.86	30.143	
5,900.00	5,428.68	5,272.02	5,118.51	34.94	24.75	-58.98	-977.51	-311.74	1,496.78	1,445.82	50.97	29.368	
6,000.00	5,477.99	5,300.00	5,144.76	35.00	24.77	-60.85	-970.65	-318.60	1,458.71	1,407.45	51.25	28.460	
6,100.00	5,515.22	5,329.57	5,171.94	35.16	24.79	-65.19	-962.42	-326.82	1,418.39	1,366.64	51.75	27.408	
6,200.00	5,535.83	5,350.00	5,190.35	35.44	24.80	-70.04	-956.17	-333.08	1,375.13	1,322.68	52.46	26.214	
6,300.00	5,540.22	5,378.51	5,215.50	35.82	24.81	-74.15	-946.67	-342.58	1,330.83	1,277.38	53.45	24.899	
6,400.00	5,540.86	5,400.00	5,233.99	36.34	24.81	-75.00	-938.93	-350.32	1,290.61	1,236.08	54.53	23.666	
6,500.00	5,541.50	5,432.33	5,261.01	36.98	24.81	-76.25	-926.38	-362.87	1,255.92	1,200.15	55.76	22.523	
6,600.00	5,542.14	5,466.01	5,288.05	37.76	24.80	-77.51	-912.18	-377.07	1,226.94	1,169.88	57.05	21.505	
6,700.00	5,542.78	5,500.00	5,314.08	38.66	24.79	-78.74	-896.74	-392.51	1,203.70	1,145.32	58.38	20.617	
6,800.00	5,543.41	5,550.00	5,349.93	39.67	24.75	-80.45	-872.11	-417.14	1,185.97	1,126.18	59.79	19.837	
6,900.00	5,544.05	5,606.51	5,386.61	40.79	24.70	-82.21	-841.73	-447.52	1,173.36	1,112.15	61.21	19.170	
7,000.00	5,544.69	5,670.33	5,422.71	42.00	24.63	-83.96	-804.55	-484.70	1,165.15	1,102.49	62.67	18.593	
7,100.00	5,545.33	5,750.00	5,462.63	43.31	24.53	-85.90	-755.80	-533.45	1,160.13	1,095.89	64.24	18.059	
7,200.00	5,545.97	5,833.30	5,498.00	44.69	24.43	-87.62	-702.53	-586.72	1,157.52	1,091.56	65.95	17.551	
7,300.00	5,546.61	5,923.57	5,523.57	46.15	24.31	-88.86	-641.39	-647.87	1,156.62	1,088.74	67.87	17.041	
7,400.00	5,547.25	6,020.02	5,535.54	47.67	24.20	-89.42	-573.80	-715.47	1,156.44	1,086.37	70.06	16.506	
7,419.61	5,547.38	6,039.24	5,535.99	47.98	24.18	-89.44	-560.21	-729.05	1,156.43	1,085.91	70.52	16.398	
7,500.00	5,547.89	6,119.61	5,536.39	49.25	24.10	-89.43	-503.38	-785.88	1,156.43	1,083.85	72.59	15.931	
7,600.00	5,548.53	6,219.61	5,536.87	50.89	24.69	-89.42	-432.67	-856.59	1,156.44	1,081.29	75.15	15.389	
7,700.00	5,549.17	6,319.61	5,537.36	52.58	25.91	-89.41	-361.97	-927.30	1,156.44	1,078.30	78.14	14.799	
7,800.00	5,549.81	6,419.61	5,537.84	54.31	27.32	-89.41	-291.26	-998.02	1,156.44	1,075.19	81.25	14.233	
7,900.00	5,550.45	6,519.61	5,538.33	56.08	28.84	-89.40	-220.55	-1,068.73	1,156.44	1,071.93	84.51	13.684	
8,000.00	5,551.09	6,619.61	5,538.81	57.89	30.45	-89.39	-149.84	-1,139.44	1,156.44	1,068.53	87.91	13.154	
8,100.00	5,551.73	6,719.61	5,539.30	59.74	32.14	-89.38	-79.13	-1,210.15	1,156.45	1,065.01	91.43	12.648	
8,200.00	5,552.37	6,819.61	5,539.78	61.61	33.90	-89.38	-8.42	-1,280.86	1,156.45	1,061.39	95.06	12.166	
8,300.00	5,553.01	6,919.61	5,540.27	63.51	35.72	-89.37	62.29	-1,351.57	1,156.45	1,057.68	98.77	11.708	
8,400.00	5,553.65	7,019.61	5,540.75	65.44	37.58	-89.36	132.99	-1,422.28	1,156.45	1,053.89	102.57	11.275	
8,500.00	5,554.28	7,119.61	5,541.24	67.39	39.49	-89.35	203.70	-1,492.99	1,156.46	1,050.03	106.43	10.866	
8,600.00	5,554.92	7,219.61	5,541.72	69.36	41.44	-89.35	274.41	-1,563.70	1,156.46	1,046.11	110.35	10.480	
8,700.00	5,555.56	7,319.61	5,542.21	71.35	43.42	-89.34	345.12	-1,634.41	1,156.46	1,042.14	114.32	10.116	
8,800.00	5,556.20	7,419.61	5,542.69	73.36	45.43	-89.33	415.83	-1,705.13	1,156.46	1,038.12	118.35	9.772	
8,900.00	5,556.84	7,519.61	5,543.18	75.39	47.46	-89.32	486.54	-1,775.84	1,156.46	1,034.05	122.41	9.447	
9,000.00	5,557.48	7,619.61	5,543.66	77.43	49.52	-89.32	557.25	-1,846.55	1,156.47	1,029.95	126.51	9.141	
9,100.00	5,558.12	7,719.61	5,544.15	79.48	51.59	-89.31	627.95	-1,917.26	1,156.47	1,025.82	130.65	8.852	
9,200.00	5,558.76	7,819.61	5,544.63	81.55	53.68	-89.30	698.66	-1,987.97	1,156.47	1,021.66	134.81	8.578	
9,300.00	5,559.40	7,919.61	5,545.12	83.62	55.79	-89.29	769.37	-2,058.68	1,156.47	1,017.47	139.01	8.319	
9,400.00	5,560.04	8,019.61	5,545.60	85.71	57.91	-89.28	840.08	-2,129.39	1,156.48	1,013.25	143.23	8.075	
9,500.00	5,560.68	8,119.61	5,546.08	87.81	60.04	-89.28	910.79	-2,200.10	1,156.48	1,009.01	147.47	7.842	
9,600.00	5,561.32	8,219.61	5,546.57	89.92	62.19	-89.27	981.50	-2,270.81	1,156.48	1,004.75	151.73	7.622	
9,700.00	5,561.96	8,319.60	5,547.05	92.04	64.34	-89.26	1,052.21	-2,341.52	1,156.48	1,000.48	156.01	7.413	
9,800.00	5,562.60	8,419.60	5,547.54	94.17	66.51	-89.25	1,122.91	-2,412.24	1,156.49	996.18	160.30	7.214	
9,900.00	5,563.24	8,519.60	5,548.02	96.30	68.68	-89.25	1,193.62	-2,482.95	1,156.49	991.87	164.62	7.025	
10,000.00	5,563.88	8,619.60	5,548.51	98.44	70.86	-89.24	1,264.33	-2,553.66	1,156.49	987.55	168.94	6.845	
10,100.00	5,564.52	8,719.60	5,548.99	100.59	73.04	-89.23	1,335.04	-2,624.37	1,156.49	983.21	173.28	6.674	
10,200.00	5,565.15	8,819.60	5,549.48	102.75	75.24	-89.22	1,405.75	-2,695.08	1,156.50	978.86	177.64	6.510	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 136H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,300.00	5,565.79	8,919.60	5,549.96	104.91	77.43	-89.22	1,476.46	-2,765.79	1,156.50	974.50	182.00	6.354	
10,400.00	5,566.43	9,019.60	5,550.45	107.07	79.64	-89.21	1,547.17	-2,836.50	1,156.50	970.12	186.38	6.205	
10,500.00	5,567.07	9,119.60	5,550.93	109.25	81.85	-89.20	1,617.87	-2,907.21	1,156.50	965.74	190.76	6.063	
10,600.00	5,567.71	9,219.60	5,551.42	111.42	84.06	-89.19	1,688.58	-2,977.92	1,156.51	961.35	195.16	5.926	
10,700.00	5,568.35	9,319.60	5,551.90	113.60	86.28	-89.19	1,759.29	-3,048.63	1,156.51	956.95	199.56	5.795	
10,800.00	5,568.99	9,419.60	5,552.39	115.79	88.50	-89.18	1,830.00	-3,119.35	1,156.51	952.54	203.97	5.670	
10,900.00	5,569.63	9,519.60	5,552.87	117.98	90.72	-89.17	1,900.71	-3,190.06	1,156.51	948.12	208.39	5.550	
11,000.00	5,570.27	9,619.60	5,553.36	120.17	92.95	-89.16	1,971.42	-3,260.77	1,156.52	943.70	212.82	5.434	
11,100.00	5,570.91	9,719.60	5,553.84	122.37	95.18	-89.15	2,042.12	-3,331.48	1,156.52	939.27	217.25	5.323	
11,200.00	5,571.55	9,819.60	5,554.33	124.57	97.42	-89.15	2,112.83	-3,402.19	1,156.52	934.83	221.69	5.217	
11,300.00	5,572.19	9,919.60	5,554.81	126.77	99.65	-89.14	2,183.54	-3,472.90	1,156.52	930.39	226.13	5.114	
11,400.00	5,572.83	10,019.60	5,555.30	128.98	101.89	-89.13	2,254.25	-3,543.61	1,156.53	925.95	230.58	5.016	
11,500.00	5,573.47	10,119.60	5,555.78	131.19	104.13	-89.12	2,324.96	-3,614.32	1,156.53	921.49	235.04	4.921	
11,600.00	5,574.11	10,219.60	5,556.27	133.40	106.38	-89.12	2,395.67	-3,685.03	1,156.53	917.04	239.50	4.829	
11,700.00	5,574.75	10,319.60	5,556.75	135.62	108.62	-89.11	2,466.38	-3,755.74	1,156.54	912.57	243.96	4.741	
11,800.00	5,575.39	10,419.60	5,557.24	137.84	110.87	-89.10	2,537.08	-3,826.46	1,156.54	908.11	248.43	4.655	
11,900.00	5,576.02	10,519.60	5,557.72	140.06	113.12	-89.09	2,607.79	-3,897.17	1,156.54	903.64	252.91	4.573	
12,000.00	5,576.66	10,619.60	5,558.21	142.28	115.37	-89.09	2,678.50	-3,967.88	1,156.54	899.16	257.38	4.493	
12,100.00	5,577.30	10,719.60	5,558.69	144.51	117.63	-89.08	2,749.21	-4,038.59	1,156.55	894.68	261.86	4.417	
12,200.00	5,577.94	10,819.60	5,559.18	146.74	119.88	-89.07	2,819.92	-4,109.30	1,156.55	890.20	266.35	4.342	
12,300.00	5,578.58	10,919.60	5,559.66	148.97	122.14	-89.06	2,890.63	-4,180.01	1,156.55	885.72	270.84	4.270	
12,400.00	5,579.22	11,019.60	5,560.15	151.20	124.39	-89.06	2,961.34	-4,250.72	1,156.56	881.23	275.33	4.201	
12,500.00	5,579.86	11,119.60	5,560.63	153.43	126.65	-89.05	3,032.04	-4,321.43	1,156.56	876.74	279.82	4.133	
12,600.00	5,580.50	11,219.60	5,561.12	155.67	128.91	-89.04	3,102.75	-4,392.14	1,156.56	872.24	284.32	4.068	
12,700.00	5,581.14	11,319.60	5,561.60	157.90	131.17	-89.03	3,173.46	-4,462.85	1,156.57	867.75	288.82	4.004	
12,800.00	5,581.78	11,419.60	5,562.09	160.14	133.44	-89.02	3,244.17	-4,533.57	1,156.57	863.25	293.32	3.943	
12,900.00	5,582.42	11,519.60	5,562.57	162.38	135.70	-89.02	3,314.88	-4,604.28	1,156.57	858.75	297.82	3.883	
13,000.00	5,583.06	11,619.60	5,563.06	164.62	137.97	-89.01	3,385.59	-4,674.99	1,156.57	854.24	302.33	3.826	
13,100.00	5,583.70	11,719.60	5,563.54	166.87	140.23	-89.00	3,456.30	-4,745.70	1,156.58	849.74	306.84	3.769	
13,200.00	5,584.34	11,819.60	5,564.03	169.11	142.50	-88.99	3,527.00	-4,816.41	1,156.58	845.23	311.35	3.715	
13,300.00	5,584.98	11,919.60	5,564.51	171.36	144.76	-88.99	3,597.71	-4,887.12	1,156.58	840.72	315.87	3.662	
13,400.00	5,585.62	12,019.60	5,565.00	173.60	147.03	-88.98	3,668.42	-4,957.83	1,156.59	836.20	320.38	3.610	
13,500.00	5,586.25	12,119.60	5,565.48	175.85	149.30	-88.97	3,739.13	-5,028.54	1,156.59	831.69	324.90	3.560	
13,600.00	5,586.89	12,219.60	5,565.97	178.10	151.57	-88.96	3,809.84	-5,099.25	1,156.59	827.17	329.42	3.511	
13,700.00	5,587.53	12,319.60	5,566.45	180.35	153.84	-88.96	3,880.55	-5,169.96	1,156.60	822.65	333.94	3.463	
13,800.00	5,588.17	12,419.60	5,566.94	182.60	156.11	-88.95	3,951.25	-5,240.68	1,156.60	818.13	338.47	3.417	
13,900.00	5,588.81	12,519.60	5,567.42	184.86	158.38	-88.94	4,021.96	-5,311.39	1,156.60	813.61	342.99	3.372	
14,000.00	5,589.45	12,619.60	5,567.91	187.11	160.66	-88.93	4,092.67	-5,382.10	1,156.61	809.09	347.52	3.328	
14,100.00	5,590.09	12,719.60	5,568.39	189.37	162.93	-88.93	4,163.38	-5,452.81	1,156.61	804.57	352.04	3.285	
14,200.00	5,590.73	12,819.60	5,568.88	191.62	165.20	-88.92	4,234.09	-5,523.52	1,156.61	800.04	356.57	3.244	
14,300.00	5,591.37	12,919.60	5,569.36	193.88	167.48	-88.91	4,304.80	-5,594.23	1,156.62	795.51	361.10	3.203	
14,400.00	5,592.01	13,019.60	5,569.85	196.14	169.75	-88.90	4,375.51	-5,664.94	1,156.62	790.99	365.63	3.163	
14,500.00	5,592.65	13,119.60	5,570.33	198.40	172.03	-88.89	4,446.21	-5,735.65	1,156.62	786.46	370.17	3.125	
14,600.00	5,593.29	13,219.60	5,570.82	200.65	174.30	-88.89	4,516.92	-5,806.36	1,156.63	781.92	374.70	3.087	
14,700.00	5,593.93	13,319.60	5,571.30	202.91	176.58	-88.88	4,587.63	-5,877.07	1,156.63	777.39	379.24	3.050	
14,800.00	5,594.57	13,419.60	5,571.79	205.18	178.86	-88.87	4,658.34	-5,947.79	1,156.63	772.86	383.77	3.014	
14,900.00	5,595.21	13,519.60	5,572.27	207.44	181.13	-88.86	4,729.05	-6,018.50	1,156.64	768.33	388.31	2.979	
15,000.00	5,595.85	13,619.60	5,572.76	209.70	183.41	-88.86	4,799.76	-6,089.21	1,156.64	763.79	392.85	2.944	
15,100.00	5,596.49	13,719.60	5,573.24	211.96	185.69	-88.85	4,870.47	-6,159.92	1,156.64	759.25	397.39	2.911	
15,200.00	5,597.12	13,819.60	5,573.73	214.23	187.97	-88.84	4,941.17	-6,230.63	1,156.65	754.72	401.93	2.878	
15,300.00	5,597.76	13,919.60	5,574.21	216.49	190.25	-88.83	5,011.88	-6,301.34	1,156.65	750.18	406.47	2.846	
15,400.00	5,598.40	14,019.60	5,574.70	218.76	192.53	-88.83	5,082.59	-6,372.05	1,156.66	745.64	411.02	2.814	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 136H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)		Warning	
15,500.00	5,599.04	14,119.60	5,575.18	221.02	194.81	-88.82	5,153.30	-6,442.76	1,156.66	741.10	415.56	2.783	
15,600.00	5,599.68	14,219.60	5,575.67	223.29	197.09	-88.81	5,224.01	-6,513.47	1,156.66	736.56	420.10	2.753	
15,700.00	5,600.32	14,319.60	5,576.15	225.55	199.37	-88.80	5,294.72	-6,584.18	1,156.67	732.02	424.65	2.724	
15,800.00	5,600.96	14,419.60	5,576.64	227.82	201.65	-88.80	5,365.43	-6,654.90	1,156.67	727.47	429.19	2.695	
15,900.00	5,601.60	14,519.60	5,577.12	230.09	203.93	-88.79	5,436.13	-6,725.61	1,156.67	722.93	433.74	2.667	
16,000.00	5,602.24	14,619.60	5,577.61	232.36	206.21	-88.78	5,506.84	-6,796.32	1,156.68	718.39	438.29	2.639	
16,100.00	5,602.88	14,719.60	5,578.09	234.63	208.49	-88.77	5,577.55	-6,867.03	1,156.68	713.84	442.84	2.612	
16,200.00	5,603.52	14,819.60	5,578.58	236.90	210.77	-88.76	5,648.26	-6,937.74	1,156.68	709.30	447.39	2.585	
16,300.00	5,604.16	14,919.60	5,579.06	239.17	213.06	-88.76	5,718.97	-7,008.45	1,156.69	704.75	451.94	2.559	
16,400.00	5,604.80	15,019.60	5,579.55	241.44	215.34	-88.75	5,789.68	-7,079.16	1,156.69	700.21	456.48	2.534	
16,500.00	5,605.44	15,119.60	5,580.03	243.71	217.62	-88.74	5,860.39	-7,149.87	1,156.70	695.66	461.04	2.509	
16,600.00	5,606.08	15,219.60	5,580.52	245.98	219.90	-88.73	5,931.09	-7,220.58	1,156.70	691.11	465.59	2.484	
16,700.00	5,606.72	15,319.60	5,581.00	248.25	222.19	-88.73	6,001.80	-7,291.29	1,156.70	686.57	470.14	2.460	
16,744.89	5,607.00	15,364.49	5,581.22	249.27	223.21	-88.72	6,033.54	-7,323.04	1,156.71	684.52	472.18	2.450 SF	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Ridge Unit (130, 135, 136 & 137) - Ridge Unit No. 137H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.00	0.00	0.00	-109.76	-13.54	-37.70	40.06				
100.00	100.00	100.00	100.00	0.13	0.13	-109.76	-13.54	-37.70	40.06	39.79	0.27	148.986	
200.00	200.00	200.00	200.00	0.49	0.49	-109.76	-13.54	-37.70	40.06	39.07	0.99	40.633	
300.00	300.00	300.00	300.00	0.85	0.85	-109.76	-13.54	-37.70	40.06	38.35	1.70	23.524	
400.00	400.00	400.00	400.00	1.21	1.21	-109.76	-13.54	-37.70	40.06	37.64	2.42	16.554	
500.00	500.00	500.00	500.00	1.57	1.57	-109.76	-13.54	-37.70	40.06	36.92	3.14	12.770	
600.00	600.00	600.00	600.00	1.93	1.93	-109.76	-13.54	-37.70	40.06	36.20	3.85	10.394	
700.00	700.00	700.00	700.00	2.29	2.29	-109.76	-13.54	-37.70	40.06	35.49	4.57	8.764	
800.00	800.00	800.00	800.00	2.64	2.64	-109.76	-13.54	-37.70	40.06	34.77	5.29	7.576 CC, ES	
900.00	900.00	897.87	897.83	3.00	2.98	-110.08	-14.61	-39.96	42.61	36.63	5.98	7.124 SF	
1,000.00	1,000.00	995.23	994.89	3.36	3.32	-110.87	-17.81	-46.71	50.25	43.60	6.65	7.553	
1,100.00	1,099.95	1,091.36	1,090.23	3.71	3.66	121.79	-23.03	-57.74	64.26	56.97	7.30	8.808	
1,200.00	1,199.63	1,185.22	1,182.61	4.04	4.02	124.48	-30.11	-72.69	86.01	78.10	7.92	10.866	
1,300.00	1,298.77	1,275.85	1,270.94	4.39	4.39	127.30	-38.78	-91.00	115.57	107.04	8.53	13.555	
1,400.00	1,397.08	1,362.48	1,354.38	4.77	4.78	129.57	-48.74	-112.01	152.77	143.64	9.13	16.730	
1,500.00	1,494.31	1,444.47	1,432.31	5.17	5.19	131.19	-59.64	-135.04	197.28	187.57	9.72	20.306	
1,600.00	1,590.18	1,521.38	1,504.35	5.62	5.61	132.21	-71.17	-159.37	248.63	238.32	10.30	24.128	
1,700.00	1,684.43	1,592.91	1,570.33	6.13	6.04	132.71	-82.99	-184.33	306.27	295.39	10.89	28.136	
1,800.00	1,776.81	1,658.90	1,630.24	6.70	6.48	132.75	-94.83	-209.32	369.67	358.21	11.46	32.247	
1,900.00	1,867.10	1,725.48	1,689.84	7.35	6.94	132.97	-107.53	-236.15	437.96	425.84	12.12	36.126	
2,000.00	1,956.65	1,796.55	1,753.33	8.05	7.47	134.64	-121.20	-265.00	507.62	494.75	12.86	39.461	
2,100.00	2,046.20	1,867.61	1,816.82	8.79	8.01	135.91	-134.86	-293.85	577.44	563.81	13.63	42.378	
2,200.00	2,135.76	1,938.67	1,880.31	9.55	8.56	136.91	-148.53	-322.70	647.38	632.97	14.40	44.942	
2,300.00	2,225.31	2,009.73	1,943.79	10.33	9.12	137.71	-162.19	-351.55	717.40	702.20	15.20	47.201	
2,400.00	2,314.86	2,080.80	2,007.28	11.13	9.69	138.37	-175.86	-380.40	787.48	771.47	16.01	49.197	
2,500.00	2,404.41	2,151.86	2,070.77	11.94	10.27	138.93	-189.52	-409.25	857.61	840.78	16.83	50.968	
2,600.00	2,493.96	2,222.92	2,134.26	12.76	10.85	139.40	-203.18	-438.10	927.77	910.11	17.66	52.548	
2,700.00	2,583.51	2,293.98	2,197.75	13.59	11.44	139.81	-216.85	-466.95	997.96	979.46	18.49	53.962	
2,800.00	2,673.06	2,365.05	2,261.24	14.42	12.04	140.16	-230.51	-495.79	1,068.17	1,048.83	19.34	55.231	
2,900.00	2,762.62	2,436.11	2,324.73	15.26	12.63	140.47	-244.18	-524.64	1,138.40	1,118.20	20.19	56.376	
3,000.00	2,852.17	2,507.17	2,388.22	16.11	13.23	140.74	-257.84	-553.49	1,208.64	1,187.59	21.05	57.412	
3,100.00	2,941.72	2,578.23	2,451.71	16.96	13.83	140.99	-271.51	-582.34	1,278.90	1,256.98	21.92	58.353	
3,200.00	3,031.27	2,649.30	2,515.20	17.81	14.44	141.20	-285.17	-611.19	1,349.16	1,326.38	22.79	59.211	
3,300.00	3,120.82	2,720.36	2,578.68	18.67	15.05	141.40	-298.83	-640.04	1,419.44	1,395.78	23.66	59.996	
3,400.00	3,210.37	2,791.42	2,642.17	19.53	15.65	141.58	-312.50	-668.89	1,489.72	1,465.18	24.54	60.715	
3,500.00	3,299.92	2,862.48	2,705.66	20.39	16.26	141.74	-326.16	-697.74	1,560.01	1,534.59	25.42	61.376	
3,600.00	3,389.48	2,933.55	2,769.15	21.25	16.88	141.89	-339.83	-726.59	1,630.31	1,604.01	26.30	61.985	
3,700.00	3,479.03	3,004.61	2,832.64	22.11	17.49	142.03	-353.49	-755.44	1,700.61	1,673.42	27.19	62.549	
3,800.00	3,568.58	3,075.67	2,896.13	22.98	18.10	142.15	-367.16	-784.29	1,770.91	1,742.84	28.08	63.070	
3,900.00	3,658.13	3,146.73	2,959.62	23.85	18.72	142.27	-380.82	-813.14	1,841.22	1,812.25	28.97	63.555	

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 Ridge Unit No. 135H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6832+25 @ 6857.00ft
Reference Site:	Ridge Unit (130, 135, 136 & 137)	MD Reference:	RKB=6832+25 @ 6857.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Ridge Unit No. 135H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6832+25 @ 6857.00ft

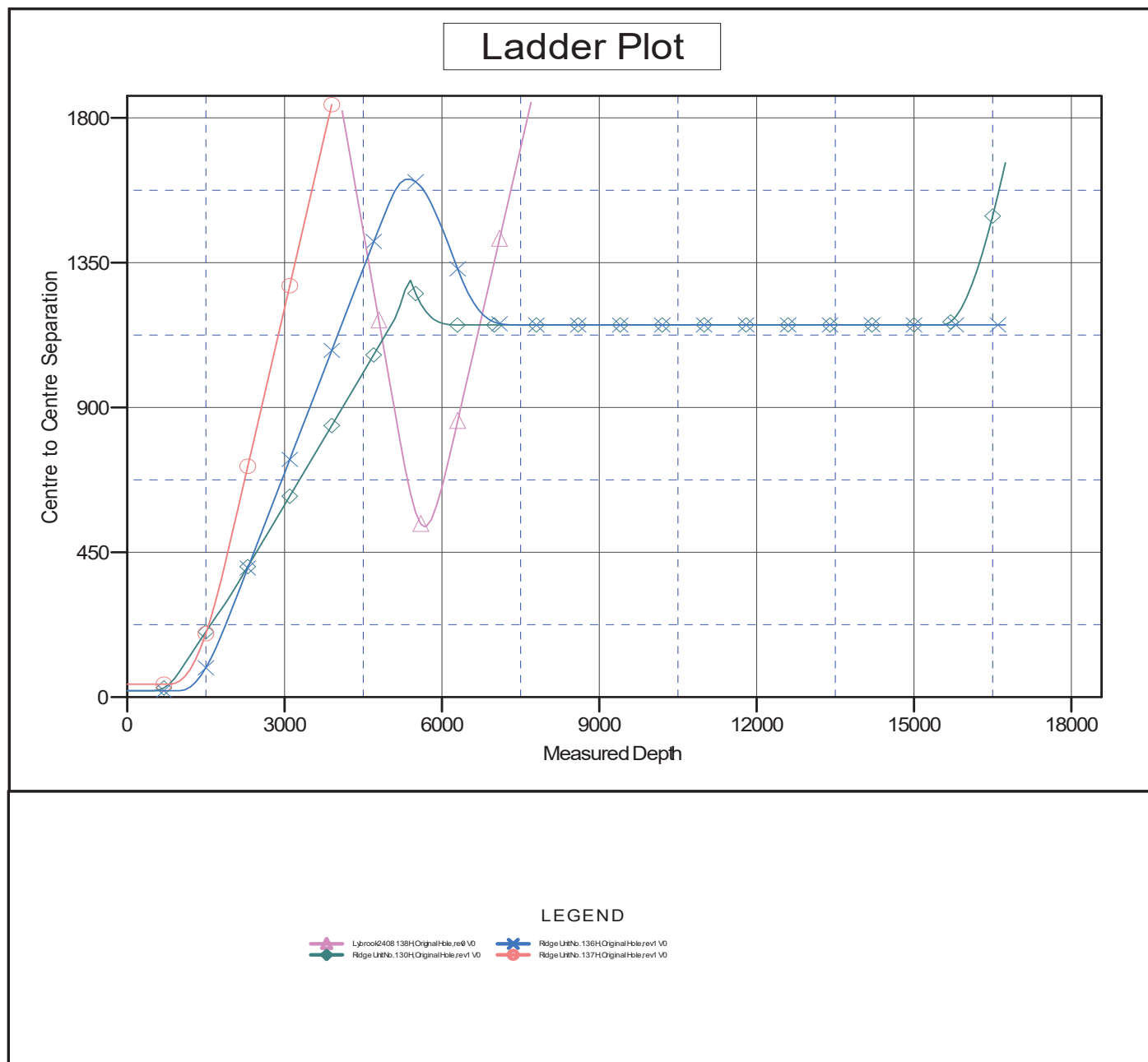
Offset Depths are relative to Offset Datum

Central Meridian is -107.833333333

Coordinates are relative to: Ridge Unit No. 135H

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

Grid Convergence at Surface is: 0.11°



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



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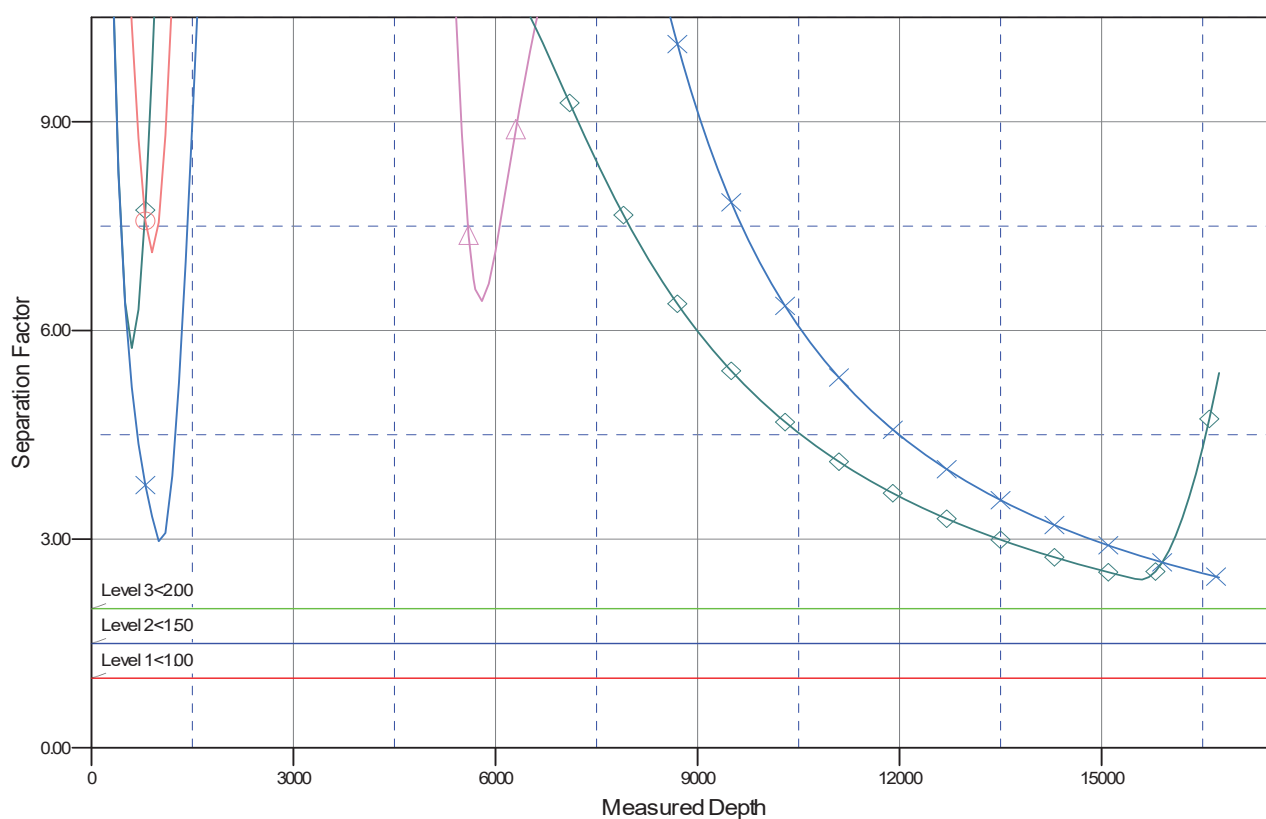
Central Meridian is -107.83333333

Coordinates are relative to: Ridge Unit No. 135H

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

Grid Convergence at Surface is: 0.11°

Separation Factor Plot



LEGEND

Lybrook2408138H Original Hole rev1 V0
 Ridge Unit No. 136H Original Hole rev1 V0
 Ridge Unit No. 130H Original Hole rev1 V0
 Ridge Unit No. 137H Original Hole rev1 V0

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)

* ENDURING RESOURCES LLC

#135H RIDGE UNIT

Lease: NMNM138391 Agreement: NMNM140471X

SH: SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 26, T. 24N., R. 8W.

San Juan County, New Mexico

BH: NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 22, T. 24N., R. 8W.

San Juan County, New Mexico

***Above Data Required on Well Sign**

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

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

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

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

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

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

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oecd/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 413046

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID: 372286
	Action Number: 413046
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
sford	Cement is required to circulate on both surface and intermediate1 strings of casing.	12/17/2024
sford	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	12/17/2024
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	1/13/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	1/13/2025
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.	1/13/2025
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.	1/13/2025