

Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-045-38419
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish 13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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



(Continued on page 2)

*(Instructions on page 2)

Additional Operator Remarks

Location of Well

0. SHL: SENW / 1835 FNL / 2270 FWL / TWSP: 24N / RANGE: 8W / SECTION: 26 / LAT: 36.287446 / LONG: -107.652423 (TVD: 0 feet, MD: 0 feet)
PPP: SENE / 2376 FNL / 63 FEL / TWSP: 24N / RANGE: 8W / SECTION: 27 / LAT: 36.12545 / LONG: -107.538486 (TVD: 5532 feet, MD: 6372 feet)
PPP: SWNW / 2628 FSL / 245 FWL / TWSP: 24N / RANGE: 8W / SECTION: 22 / LAT: 36.299802 / LONG: -107.677368 (TVD: 5562 feet, MD: 13499 feet)
PPP: SWSE / 1 FSL / 2444 FEL / TWSP: 24N / RANGE: 8W / SECTION: 22 / LAT: 36.292577 / LONG: -107.668472 (TVD: 5562 feet, MD: 13499 feet)
PPP: SESW / 179 FSL / 2641 FWL / TWSP: 24N / RANGE: 8W / SECTION: 22 / LAT: 36.293075 / LONG: -107.669084 (TVD: 5562 feet, MD: 13499 feet)
PPP: NWNE / 1 FNL / 2444 FEL / TWSP: 24N / RANGE: 8W / SECTION: 27 / LAT: 36.292577 / LONG: -107.668472 (TVD: 5562 feet, MD: 13499 feet)
BHL: SWNW / 2623 FNL / 238 FWL / TWSP: 24N / RANGE: 8W / SECTION: 22 / LAT: 36.299822 / LONG: -107.677392 (TVD: 5562 feet, MD: 13499 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 30-045-38419	Pool Code 42289	Pool Name LYBROOK GALLUP
Property Code 336777	Property Name RIDGE UNIT	Well Number 137H
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 checked="" type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
F	26	24N	8W		1835' NORTH	2270' WEST	36.287446 °N	-107.652423 °W	SAN JUAN

Bottom Hole Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
E	22	24N	8W		2623' NORTH	238' WEST	36.299822 °N	-107.677392 °W	SAN JUAN

Dedicated Acres Penetrated Spacing Unit:

480.00 NE/4 NW/4, NE/4 - Section 27 SW/4 NW/4 - Section 26 SW/4 NW/4, SW/4, SW/4 SE/4 - Section 22	Infill or Defining Well Defining Well API	Overlapping Spacing Unit <input type="checkbox"/> Yes <input type="checkbox"/> No	Consolidation Code UNIT
---	--	--	-----------------------------------

Order Numbers R-20594 Well setbacks are under Common Ownership: Yes No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
F	26	24N	8W		1835' NORTH	2270' WEST	36.287446 °N	-107.652423 °W	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
H	27	24N	8W		2376' NORTH	63' EAST	36.285955 °N	-107.660321 °W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
E	22	24N	8W		2623' NORTH	238' WEST	36.299822 °N	-107.677392 °W	SAN JUAN

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
---	--	------------------------

OPERATOR CERTIFICATION

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

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

Shaw-Marie Ford 12/16/2024
 Signature Date

Shaw-Marie Ford
 Printed Name

sford@enduringresources.com
 E-mail Address

SURVEYOR CERTIFICATION

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.



JASON C. EDWARDS

Signature and Seal of Professional Surveyor

Certificate Number 15269 Date of Survey NOVEMBER 30, 2021

BOTTOM HOLE LOCATION (BHL)
2623' FNL 238' FWL
SECTION 22, T24N, R8W

LAST TAKE POINT (LTP)
2623' FNL 238' FWL
SECTION 22, T24N, R8W

LAT 36.299822 °N
LONG -107.677392 °W
DATUM: NAD1983

LAT 36.299822 °N
LONG -107.677392 °W
DATUM: NAD1983

SURFACE LOCATION (SHL)
1835' FNL 2270' FWL
SECTION 26, T24N, R8W

KICK OFF POINT (KOP)
1835' FNL 2270' FWL
SECTION 26, T24N, R8W

FIRST TAKE POINT (FTP)
2376' FNL 63' FEL
SECTION 27, T24N, R8W

LAT 36.287446 °N
LONG -107.652423 °W
DATUM: NAD1983

LAT 36.287446 °N
LONG -107.652423 °W
DATUM: NAD1983

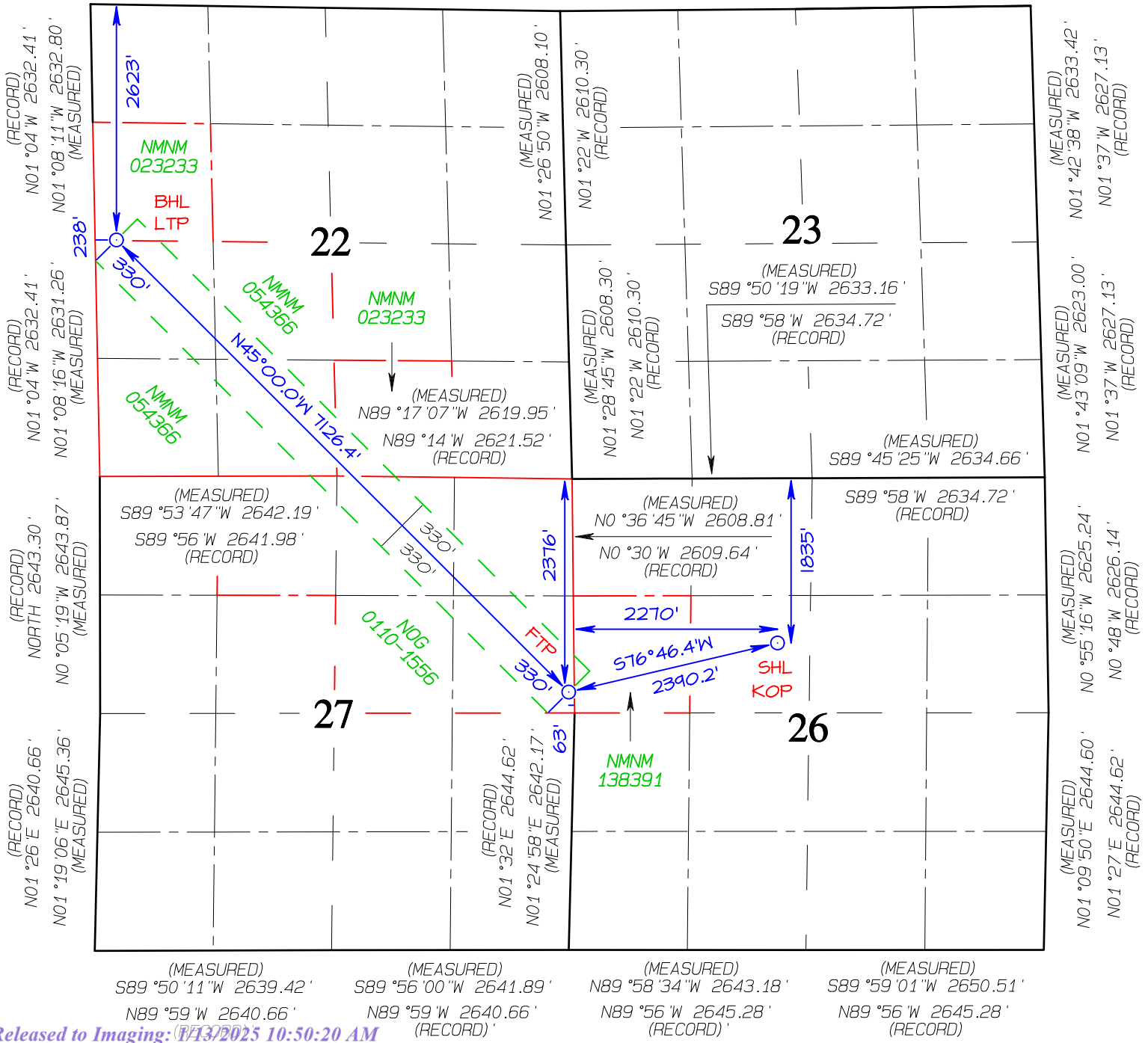
LAT 36.285955 °N
LONG -107.660321 °W
DATUM: NAD1983

(RECORD)
N89 °01' W 2616.57'
N89 °06' 59" W 2616.38'
(MEASURED)

(RECORD)
N89 °01' W 2616.57'
N89 °12' 52" W 2617.36'
(MEASURED)

(RECORD)
S89 °34' W 2620.20'
S89 °30' 58" W 2621.83'
(MEASURED)

(RECORD)
S89 °34' W 2620.20'
S89 °13' 03" W 2622.20'
(MEASURED)



State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

I. Operator: 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:

- o Scheduled maintenance for gas capturing equipment including:
 - o Vapor Recovery Tower
 - o Vapor Recovery Unit
 - o Storage tanks
 - o Pipelines
 - o 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 137H

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 1,835 ft FNL 2,270 ft FWL
 36.287446 ° N latitude 107.652423 ° W longitude (NAD 83)
BH Location: 22-24N-08W Sec-Twn-Rng 2,623 ft FNL 238 ft FWL
 36.299822 ° N latitude 107.677392 ° 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 130H well is the furthest well to the West and furthest from the location entrance. From East to West: RU 130H, 135H, 136H and 137H.

GEOLOGIC AND RESERVOIR INFORMATION:

<i>Prognosis:</i>	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	5,623	1,234	1,238	W	normal
	Kirtland	5,500	1,357	1,365	W	normal
	Fruitland	5,280	1,577	1,600	G, W	sub
	Pictured Cliffs	4,960	1,897	1,957	G, W	sub
	Lewis	4,860	1,997	2,069	G, W	normal
	Chacra	4,545	2,312	2,422	G, W	normal
	Cliff House	3,445	3,412	3,653	G, W	sub
	Menefee	3,440	3,417	3,659	G, W	normal
	Point Lookout	2,605	4,252	4,593	G, W	normal
	Mancos	2,395	4,462	4,828	O,G	sub (~0.38)
	Gallup (MNCS_A)	2,020	4,837	5,248	O,G	sub (~0.38)
	MNCS_I	1,345	5,512	6,219	O,G	sub (~0.38)
	P.O.E. TARGET	1,435	5,422	5,992	O,G	sub (~0.38)
	PROJECTED TD	1,295	5,562	13,499	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: 2,400 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 1,180 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 double gate ram (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

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

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

Cu Ft Slurry
505.3

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

350 ft (MD)	to	3,827 ft (MD)	Hole Section Length:	3,477 ft
350 ft (TVD)	to	3,567 ft (TVD)	Casing Required:	3,827 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

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	1,384	220,144	220,144
Min. S.F.					1.30	2.54	2.56	2.06

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

Stage 1	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	800	1,712
	Tail	Type III	14.6	1.380	6.61	20%	3,327	150	207
	Displacement	292	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%	BWOC Fluid Loss & Control	D-CSE 1 5.0%	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
Lead	ASTM Type III 90/10 Poz	BWOC Strength Enhancer	BWOC Fluid Loss & Control	Gas Migration Control				D-CD 2 .5% BWOC Dispersant	Cello Flace LCM .25 lb/sx		
Tail	ASTM Type III Blend		BWOC Fluid Loss & Control	Gas Migration Control							D-R1 .2% Retarder

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

3,827 ft (MD)	to	13,499 ft (MD)	Hole Section Length:	9,672 ft
3,567 ft (TVD)	to	5,562 ft (TVD)	Casing Required:	13,499 ft
Estimated KOP:		5,550 ft (MD)	5,106 ft (TVD)	
Estimated Landing Point (P.O.E.):		5,992 ft (MD)	5,422 ft (TVD)	
Estimated Lateral Length:		7,507 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

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					2,748	9,021	298,023	298,023
Min. S.F.					2.72	1.18	1.83	1.49

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

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	1,374
Tail	G:POZ blend	13.3	1.570	7.70	10%	4,828	1,400	2,198
Displacement	297	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	5-8 Silica Flour	Avis 616 viscosifier	FP24 Defoamer .5	IntegraGuard Star	Plus 3K LCM 15	SS201 Surfactant 1		
	163.7 lbs/bbl	11.6 lb/bbl	lb/bbl	lb/bbl	gal/bbl	gal/bbl		
Lead	ASTM Type I/II	BA90 Bonding Agent 5.0 lb/sx	Bentonite Viscosifier 8% BWOB	IntegraGuard	FL24 Fluid Loss .5% BWOB	GW86 Viscosifier .1% BWOB	R7C Retarder .2% BWOB	FP24 Defoamer 0.3% BWOB, Anti-Static .01 lb/sx
		Pozzolan Fly Ash Extender 50%	BA90 Bonding Agent 3.0 lb/sx	Bentonite Viscosifier 4% BWOB	IntegraGuard	FL24 Fluid Loss .4% BWOB	GW86 Viscosifier .1% BWOB	R3 Retarder .5% BWOB
Tail	Type G 50%							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: 7,407

Est Frac Inform: 31 Frac Stages 119,000 bbls slick water 9,630,000 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 7/21/2022
G Olson 8/16/2023

WELL NAME: RIDGE UNIT 137H

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

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	3,827 ft
KOP (MD)	5,550 ft
KOP (TVD)	5,106 ft
Target (TVD)	5,422 ft
Curve BUR	10 °/100 ft
POE (MD)	5,992 ft
TD (MD)	13,499 ft
Lat Len (ft)	7,507 ft

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 1,835 ft FNL 2,270 ft FWL

BH Location: 22-24N-08W Sec-Twn- Rng 2623 ft FNL 238 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 130H well is the furthest well to the West and furthest from the location entrance. From East to West: RU 130H, 135H, 136H and 137H.

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	3,827	9.625	36.0	J-55	LTC	0	3,827
Production	8.500	13,499	5.500	17.0	P-110	LTC	0	13,499

CEMENT PROPERTIES SUMMARY:

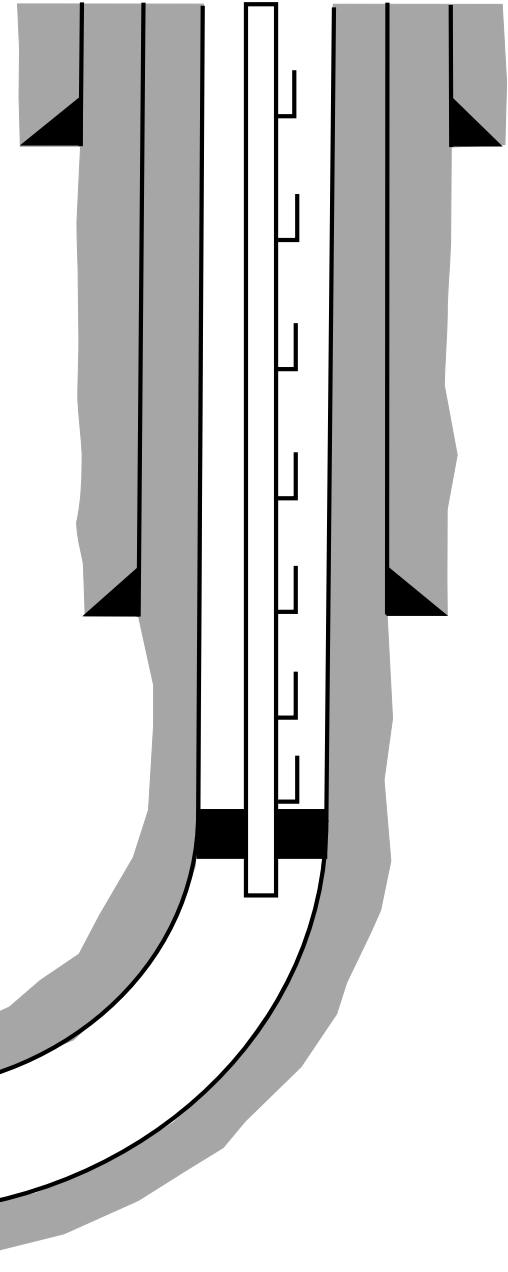
	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)	Total Cu Ft
Surface	TYPE III	14.6	1.39	6.686	0.6946	100%	0	364	505
Inter. (Lead)	90:10 Type III:POZ	12.5	2.14	12.05	0.3132	70%	0	800	1,712
Inter. (Tail)	Type III	14.6	1.38	6.61	0.3132	20%	3,327	150	207
Prod. (Lead)	ASTM type I/II	12.4	2.37	13.40	0.2291	50%	0	580	1,374
Prod. (Tail)	G:POZ blend	13.3	1.57	7.70	0.2291	10%	4,828	1,400	2,198

COMPLETION / PRODUCTION SUMMARY:

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

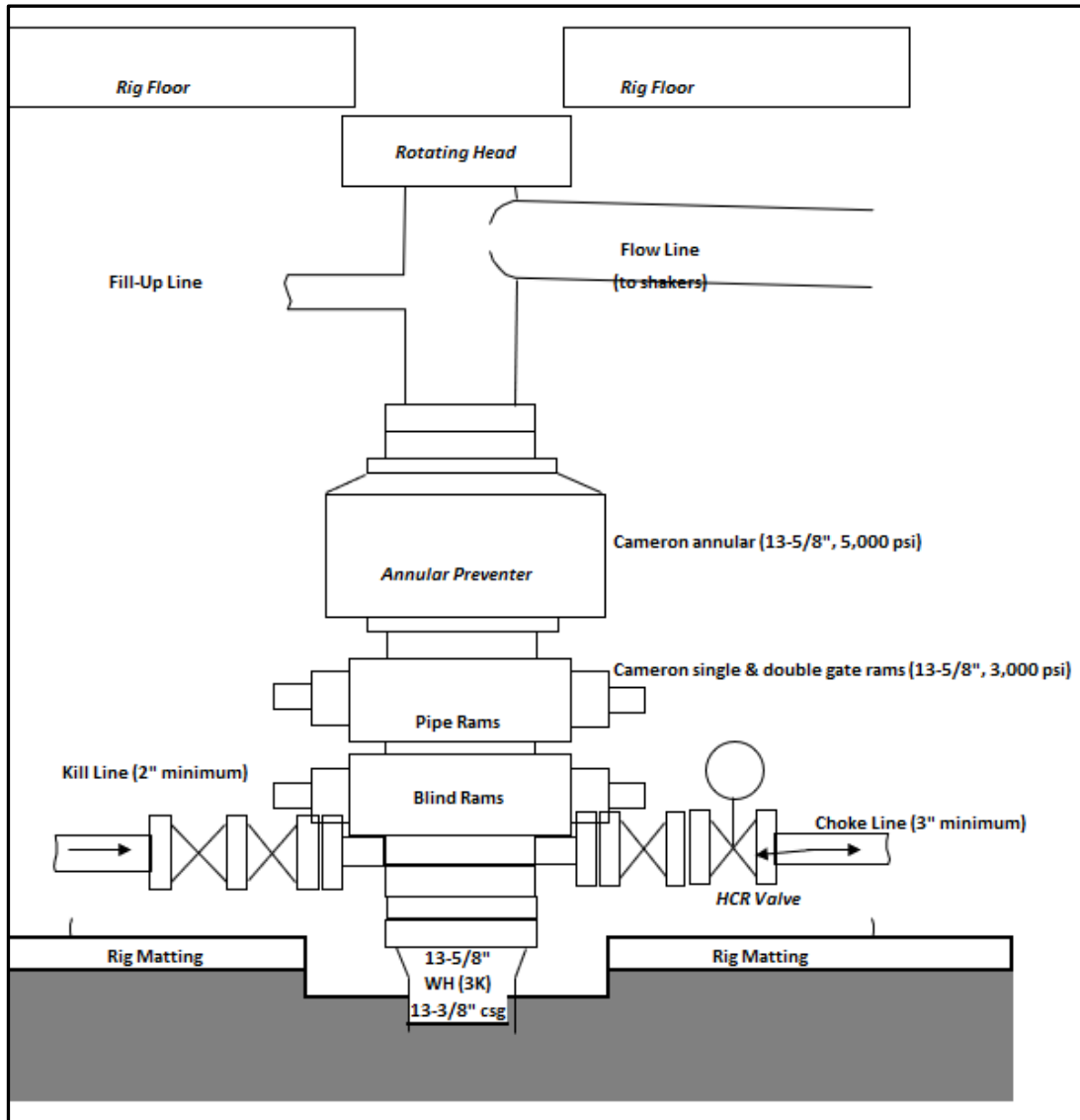
Flowback: Flow up production tubing as pressures allow (an ESP may be used to assist in load-water recovery)

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



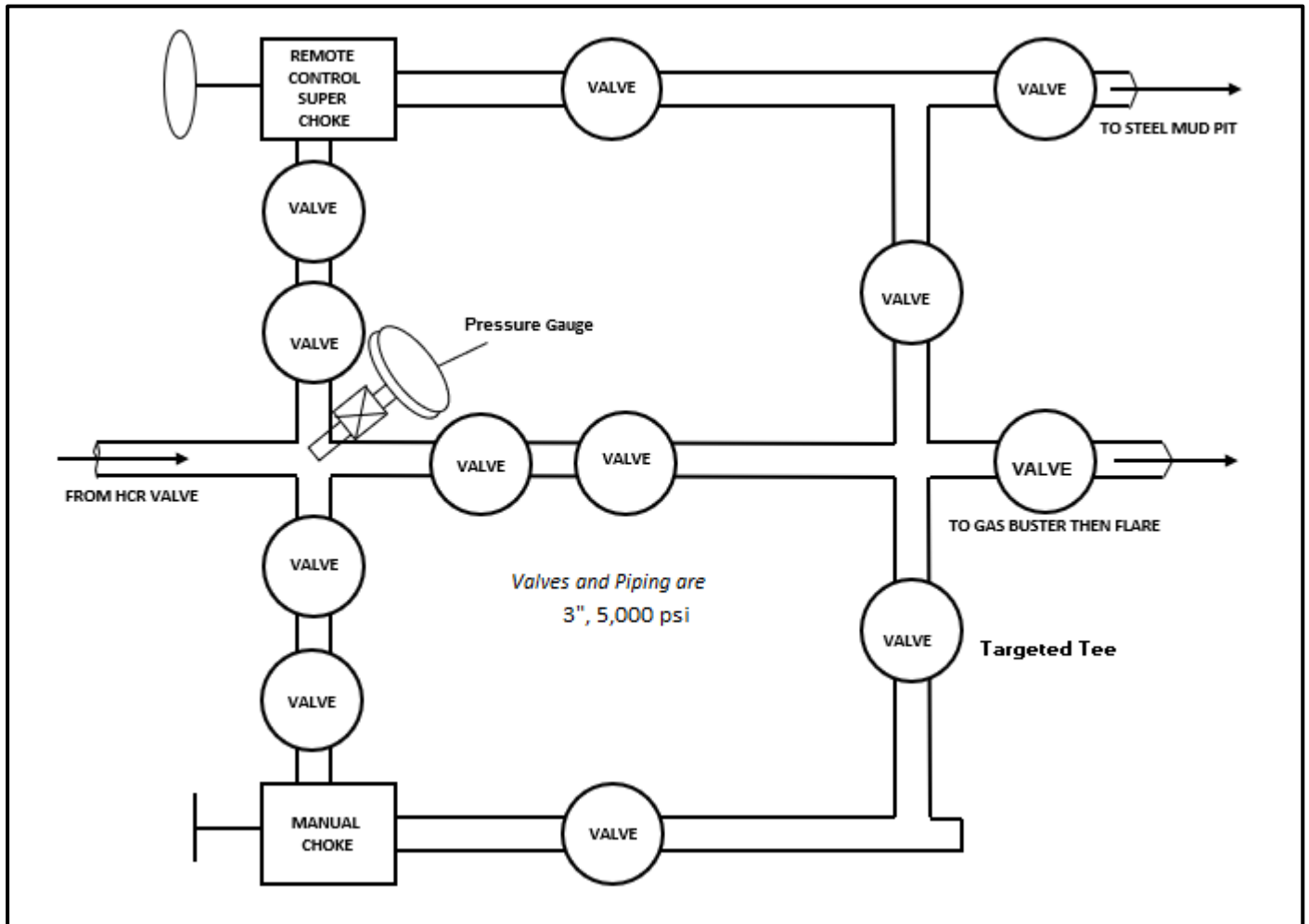


Enduring Resources IV, LLC BOPE Diagram





Enduring Resources IV, LLC CHOKE MANIFOLD





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

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
1	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
2	800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3"/100' build
3	1689.77	26.69	244.656	1657.93	-87.13	-183.95	3.00	244.66	68.46	Begin 26.69° tangent
4	5501.61	26.69	244.656	5063.53	-820.09	-1731.46	0.00	0.00	644.41	Begin 10"/100' build/turn
5	5974.71	60.00	298.170	5413.24	-765.74	-2024.95	10.00	71.32	890.36	Begin 60.00° tangent
6	6034.71	60.00	298.170	5443.24	-741.21	-2070.76	0.00	0.00	940.10	Begin 10"/100' build/turn
7	6372.59	89.75	315.001	5531.00	-547.02	-2326.66	10.00	31.38	1258.36	Begin 89.75° lateral
8	13499.34	89.75	315.001	5562.00	4492.39	-7365.90	0.00	0.00	8385.04	PBHL/TD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Ridge 137H FTP 2376 FNL 63 FEL r1	5532.00	-547.02	-2326.66	1923432.556	2774081.168	36.285955000	-107.660321000
Ridge 137H LTP 2623 FNL 238 FEL 330 perp r1	5562.00	4492.39	-7365.90	1928471.955	2769041.935	36.299822000	-107.677392000

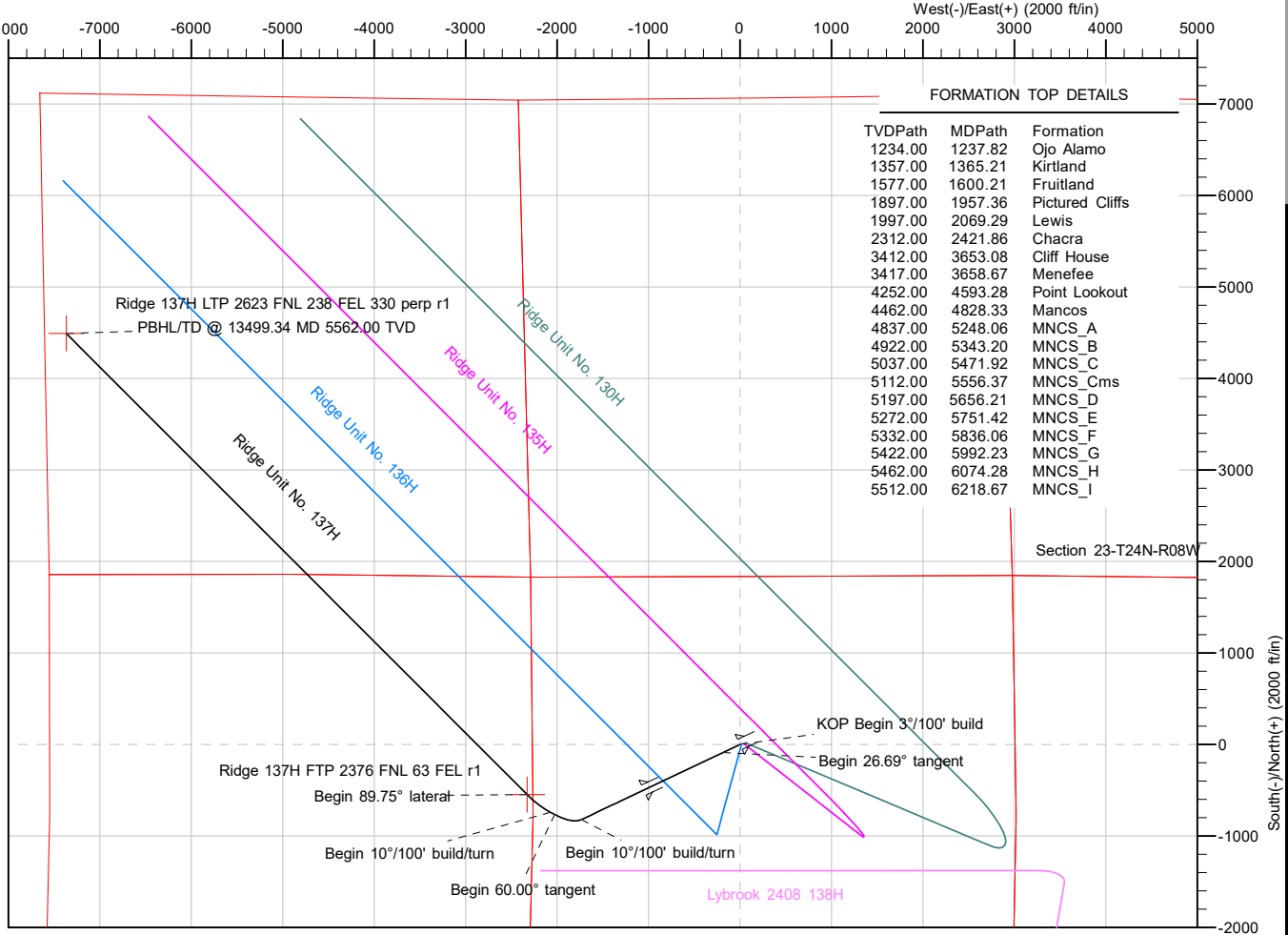
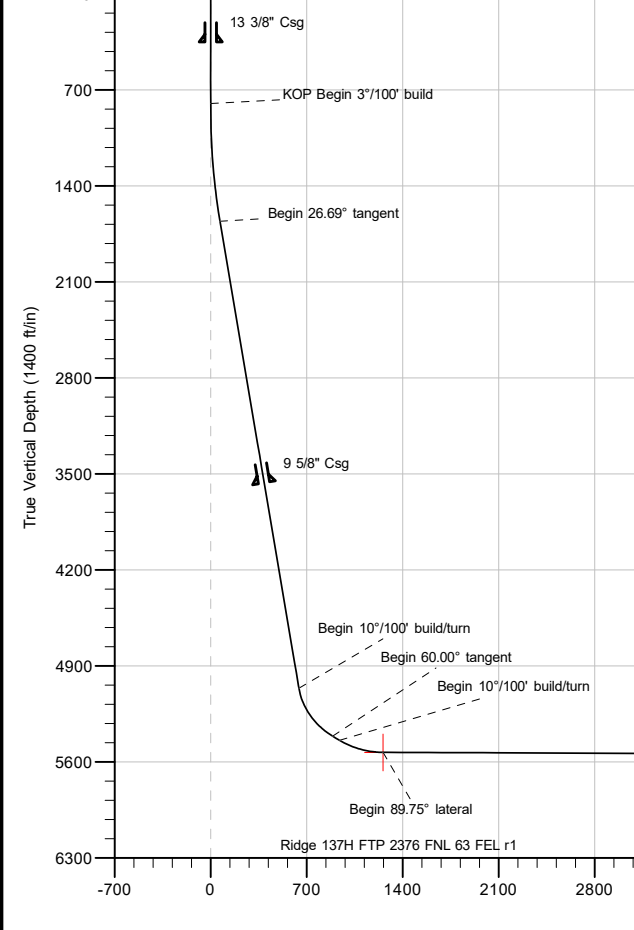


Azimuths to Grid North
 True North: -0.11°
 Magnetic North: 8.43°
 Magnetic Field Strength: 49131.9nT
 Dip Angle: 62.77°
 Date: 8/15/2023
 Model: IGRF2020

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: 1923979.573
 Easting: 2776407.823
 Latitude: 36.287446000
 Longitude: -107.652423000

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



CASING DETAILS

TVD	MD	Name
350.00	350.00	13 3/8" Csg
3567.00	3826.57	9 5/8" Csg

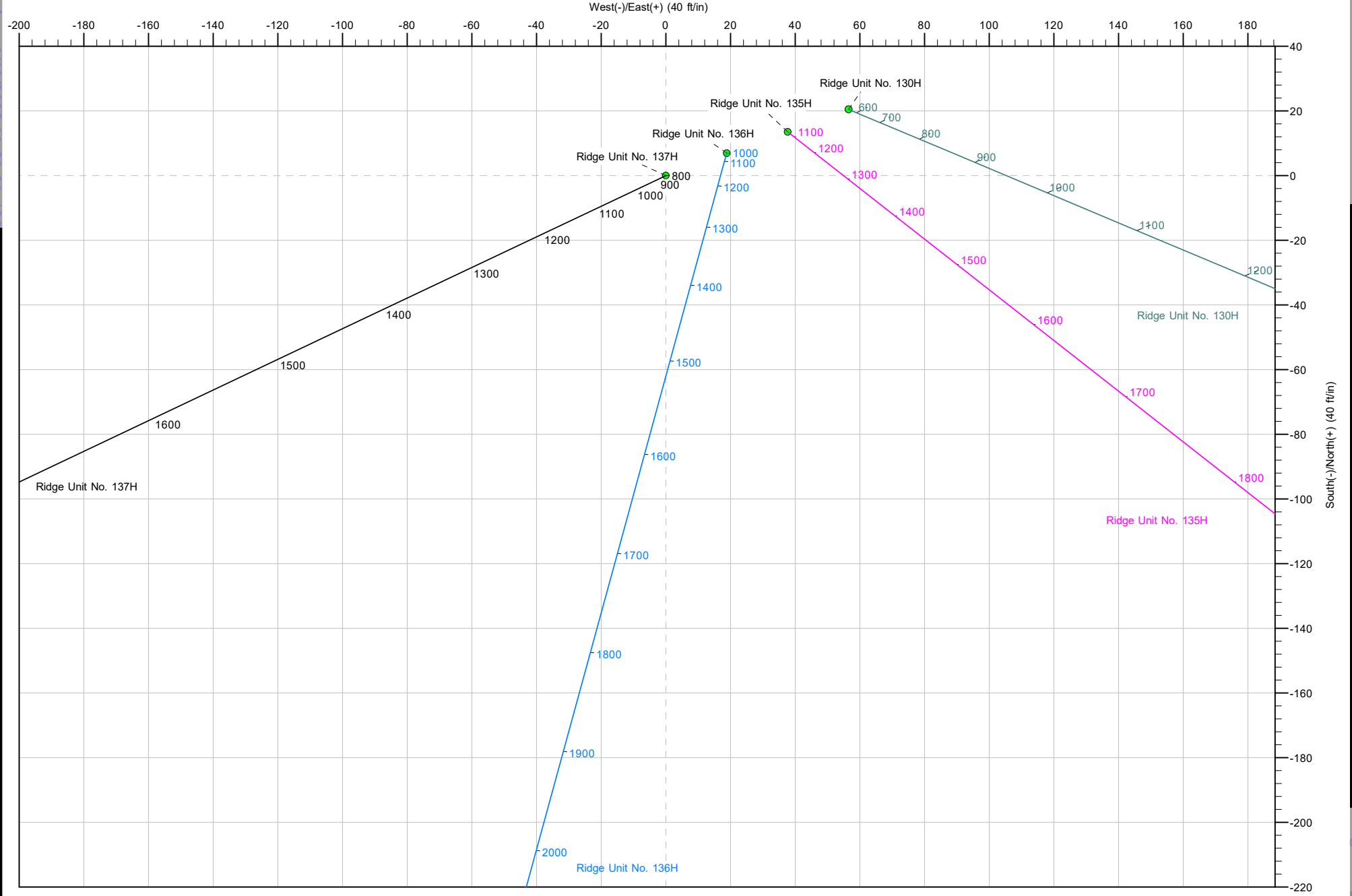
PBHL/TD @ 13499.34 MD 5562.00 TVD
 Ridge 137H LTP 2623 FNL 238 FEL 330 perp r1



Vertical Section at 315.001° (1400 ft/in)



Well: Ridge Unit No. 137H
 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. 137H
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. 137H	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. 137H, Surf loc: 1835 FNL 2270 FWL Section 26-T24N-R08W					
Well Position	+N/-S	0.00 ft	Northing:	1,923,979.572 usft	Latitude:	36.287446000
	+E/-W	0.00 ft	Easting:	2,776,407.823 usft	Longitude:	-107.652423000
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	49,131.91448360

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	315.001	

Plan Survey Tool Program	Date	8/16/2023			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	13,499.34 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	
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,689.77	26.69	244.656	1,657.93	-87.13	-183.95	3.00	3.00	0.00	244.66	
5,501.61	26.69	244.656	5,063.53	-820.09	-1,731.46	0.00	0.00	0.00	0.00	
5,974.71	60.00	298.170	5,413.24	-765.74	-2,024.95	10.00	7.04	11.31	71.32	
6,034.71	60.00	298.170	5,443.24	-741.21	-2,070.76	0.00	0.00	0.00	0.00	
6,372.59	89.75	315.001	5,531.00	-547.02	-2,326.66	10.00	8.80	4.98	31.38	
13,499.34	89.75	315.001	5,562.00	4,492.39	-7,365.90	0.00	0.00	0.00	0.00	Ridge 137H LTP 2623



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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
KOP Begin 3°/100' build									
900.00	3.00	244.656	899.95	-1.12	-2.37	0.88	3.00	3.00	0.00
1,000.00	6.00	244.656	999.63	-4.48	-9.46	3.52	3.00	3.00	0.00
1,100.00	9.00	244.656	1,098.77	-10.07	-21.25	7.91	3.00	3.00	0.00
1,200.00	12.00	244.656	1,197.08	-17.86	-37.72	14.04	3.00	3.00	0.00
1,237.82	13.13	244.656	1,234.00	-21.39	-45.16	16.81	3.00	3.00	0.00
Ojo Alamo									
1,300.00	15.00	244.656	1,294.31	-27.86	-58.81	21.89	3.00	3.00	0.00
1,365.21	16.96	244.656	1,357.00	-35.54	-75.04	27.93	3.00	3.00	0.00
Kirtland									
1,400.00	18.00	244.656	1,390.18	-40.01	-84.48	31.44	3.00	3.00	0.00
1,500.00	21.00	244.656	1,484.43	-54.30	-114.64	42.67	3.00	3.00	0.00
1,600.00	24.00	244.656	1,576.81	-70.68	-149.22	55.54	3.00	3.00	0.00
1,600.21	24.00	244.656	1,577.00	-70.71	-149.30	55.57	0.00	0.00	0.00
Fruitland									
1,689.77	26.69	244.656	1,657.93	-87.13	-183.95	68.46	3.01	3.01	0.00
Begin 26.69° tangent									
1,700.00	26.69	244.656	1,667.07	-89.09	-188.11	70.01	0.00	0.00	0.00
1,800.00	26.69	244.656	1,756.41	-108.32	-228.70	85.12	0.00	0.00	0.00
1,900.00	26.69	244.656	1,845.76	-127.55	-269.30	100.23	0.00	0.00	0.00
1,957.36	26.69	244.656	1,897.00	-138.58	-292.59	108.89	0.00	0.00	0.00
Pictured Cliffs									
2,000.00	26.69	244.656	1,935.10	-146.78	-309.90	115.34	0.00	0.00	0.00
2,069.29	26.69	244.656	1,997.00	-160.10	-338.03	125.80	0.00	0.00	0.00
Lewis									
2,100.00	26.69	244.656	2,024.44	-166.01	-350.50	130.45	0.00	0.00	0.00
2,200.00	26.69	244.656	2,113.78	-185.24	-391.09	145.55	0.00	0.00	0.00
2,300.00	26.69	244.656	2,203.13	-204.47	-431.69	160.66	0.00	0.00	0.00
2,400.00	26.69	244.656	2,292.47	-223.69	-472.29	175.77	0.00	0.00	0.00
2,421.86	26.69	244.656	2,312.00	-227.90	-481.16	179.08	0.00	0.00	0.00
Chacra									
2,500.00	26.69	244.656	2,381.81	-242.92	-512.88	190.88	0.00	0.00	0.00
2,600.00	26.69	244.656	2,471.15	-262.15	-553.48	205.99	0.00	0.00	0.00
2,700.00	26.69	244.656	2,560.50	-281.38	-594.08	221.10	0.00	0.00	0.00
2,800.00	26.69	244.656	2,649.84	-300.61	-634.68	236.21	0.00	0.00	0.00
2,900.00	26.69	244.656	2,739.18	-319.84	-675.27	251.32	0.00	0.00	0.00
3,000.00	26.69	244.656	2,828.52	-339.07	-715.87	266.43	0.00	0.00	0.00
3,100.00	26.69	244.656	2,917.87	-358.29	-756.47	281.54	0.00	0.00	0.00
3,200.00	26.69	244.656	3,007.21	-377.52	-797.07	296.65	0.00	0.00	0.00
3,300.00	26.69	244.656	3,096.55	-396.75	-837.66	311.76	0.00	0.00	0.00
3,400.00	26.69	244.656	3,185.90	-415.98	-878.26	326.87	0.00	0.00	0.00
3,500.00	26.69	244.656	3,275.24	-435.21	-918.86	341.98	0.00	0.00	0.00



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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	26.69	244.656	3,364.58	-454.44	-959.46	357.09	0.00	0.00	0.00
3,653.08	26.69	244.656	3,412.00	-464.64	-981.00	365.10	0.00	0.00	0.00
Cliff House									
3,658.67	26.69	244.656	3,417.00	-465.72	-983.28	365.95	0.00	0.00	0.00
Menefee									
3,700.00	26.69	244.656	3,453.92	-473.67	-1,000.05	372.19	0.00	0.00	0.00
3,800.00	26.69	244.656	3,543.27	-492.89	-1,040.65	387.30	0.00	0.00	0.00
3,826.57	26.69	244.656	3,567.00	-498.00	-1,051.44	391.32	0.00	0.00	0.00
9 5/8" Csg									
3,900.00	26.69	244.656	3,632.61	-512.12	-1,081.25	402.41	0.00	0.00	0.00
4,000.00	26.69	244.656	3,721.95	-531.35	-1,121.85	417.52	0.00	0.00	0.00
4,100.00	26.69	244.656	3,811.29	-550.58	-1,162.44	432.63	0.00	0.00	0.00
4,200.00	26.69	244.656	3,900.64	-569.81	-1,203.04	447.74	0.00	0.00	0.00
4,300.00	26.69	244.656	3,989.98	-589.04	-1,243.64	462.85	0.00	0.00	0.00
4,400.00	26.69	244.656	4,079.32	-608.27	-1,284.24	477.96	0.00	0.00	0.00
4,500.00	26.69	244.656	4,168.66	-627.49	-1,324.83	493.07	0.00	0.00	0.00
4,593.28	26.69	244.656	4,252.00	-645.43	-1,362.70	507.16	0.00	0.00	0.00
Point Lookout									
4,600.00	26.69	244.656	4,258.01	-646.72	-1,365.43	508.18	0.00	0.00	0.00
4,700.00	26.69	244.656	4,347.35	-665.95	-1,406.03	523.29	0.00	0.00	0.00
4,800.00	26.69	244.656	4,436.69	-685.18	-1,446.63	538.40	0.00	0.00	0.00
4,828.33	26.69	244.656	4,462.00	-690.63	-1,458.13	542.68	0.00	0.00	0.00
Mancos									
4,900.00	26.69	244.656	4,526.04	-704.41	-1,487.22	553.51	0.00	0.00	0.00
5,000.00	26.69	244.656	4,615.38	-723.64	-1,527.82	568.62	0.00	0.00	0.00
5,100.00	26.69	244.656	4,704.72	-742.87	-1,568.42	583.73	0.00	0.00	0.00
5,200.00	26.69	244.656	4,794.06	-762.09	-1,609.02	598.84	0.00	0.00	0.00
5,248.06	26.69	244.656	4,837.00	-771.34	-1,628.53	606.10	0.00	0.00	0.00
MNCS_A									
5,300.00	26.69	244.656	4,883.41	-781.32	-1,649.61	613.94	0.00	0.00	0.00
5,343.20	26.69	244.656	4,922.00	-789.63	-1,667.15	620.47	0.00	0.00	0.00
MNCS_B									
5,400.00	26.69	244.656	4,972.75	-800.55	-1,690.21	629.05	0.00	0.00	0.00
5,471.92	26.69	244.656	5,037.00	-814.38	-1,719.41	639.92	0.00	0.00	0.00
MNCS_C									
5,501.61	26.69	244.656	5,063.53	-820.09	-1,731.46	644.41	0.00	0.00	0.00
Begin 10°/100' build/turn									
5,550.00	28.59	254.270	5,106.42	-827.89	-1,752.44	653.73	10.00	3.91	19.87
5,556.37	28.88	255.442	5,112.00	-828.68	-1,755.39	655.25	10.00	4.65	18.41
MNCS_Cms									
5,600.00	31.16	262.884	5,149.79	-832.73	-1,776.81	667.53	10.00	5.23	17.06
5,650.00	34.23	270.204	5,191.88	-834.29	-1,803.72	685.46	10.00	6.14	14.64
5,656.21	34.64	271.031	5,197.00	-834.25	-1,807.24	687.97	10.00	6.59	13.31
MNCS_D									
5,700.00	37.67	276.398	5,232.36	-832.53	-1,832.99	707.40	10.00	6.92	12.26
5,750.00	41.38	281.665	5,270.93	-827.49	-1,864.38	733.16	10.00	7.43	10.54
5,751.42	41.49	281.804	5,272.00	-827.29	-1,865.30	733.95	10.00	7.66	9.72
MNCS_E									
5,800.00	45.30	286.192	5,307.30	-819.18	-1,897.65	762.56	10.00	7.85	9.03
5,836.06	48.23	289.086	5,332.00	-811.21	-1,922.67	785.89	10.00	8.11	8.03
MNCS_F									
5,850.00	49.38	290.134	5,341.18	-807.69	-1,932.55	795.36	10.00	8.25	7.52



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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)	
5,900.00	53.57	293.616	5,372.32	-793.09	-1,968.82	831.33	10.00	8.39	6.96	
5,950.00	57.86	296.737	5,400.49	-775.50	-2,006.18	870.19	10.00	8.57	6.24	
5,974.71	60.00	298.170	5,413.24	-765.74	-2,024.95	890.36	10.00	8.68	5.80	
Begin 60.00° tangent										
5,992.23	60.00	298.170	5,422.00	-758.58	-2,038.33	904.89	0.00	0.00	0.00	
MNCS_G										
6,000.00	60.00	298.170	5,425.89	-755.40	-2,044.26	911.33	0.00	0.00	0.00	
6,034.71	60.00	298.170	5,443.24	-741.21	-2,070.76	940.10	0.00	0.00	0.00	
Begin 10°/100' build/turn										
6,050.00	61.31	299.078	5,450.74	-734.82	-2,082.46	952.89	10.00	8.56	5.93	
6,074.28	63.40	300.473	5,462.00	-724.14	-2,101.12	973.64	10.00	8.61	5.75	
MNCS_H										
6,100.00	65.63	301.897	5,473.07	-712.12	-2,120.99	996.19	10.00	8.66	5.53	
6,150.00	69.99	304.528	5,491.95	-686.75	-2,159.70	1,041.49	10.00	8.73	5.26	
6,200.00	74.40	307.017	5,507.24	-658.92	-2,198.30	1,088.47	10.00	8.81	4.98	
6,218.67	76.05	307.917	5,512.00	-647.94	-2,212.63	1,106.36	10.00	8.85	4.82	
MNCS_I										
6,250.00	78.83	309.400	5,518.81	-628.84	-2,236.50	1,136.75	10.00	8.87	4.73	
6,300.00	83.28	311.712	5,526.59	-596.73	-2,274.01	1,185.98	10.00	8.90	4.62	
6,350.00	87.73	313.982	5,530.51	-562.84	-2,310.55	1,235.78	10.00	8.92	4.54	
6,372.59	89.75	315.001	5,531.00	-547.02	-2,326.66	1,258.36	10.00	8.93	4.51	
Begin 89.75° lateral										
6,400.00	89.75	315.001	5,531.12	-527.64	-2,346.04	1,285.77	0.00	0.00	0.00	
6,500.00	89.75	315.001	5,531.56	-456.92	-2,416.75	1,385.77	0.00	0.00	0.00	
6,600.00	89.75	315.001	5,531.99	-386.21	-2,487.45	1,485.77	0.00	0.00	0.00	
6,700.00	89.75	315.001	5,532.43	-315.50	-2,558.16	1,585.76	0.00	0.00	0.00	
6,800.00	89.75	315.001	5,532.86	-244.79	-2,628.87	1,685.76	0.00	0.00	0.00	
6,900.00	89.75	315.001	5,533.30	-174.08	-2,699.58	1,785.76	0.00	0.00	0.00	
7,000.00	89.75	315.001	5,533.73	-103.37	-2,770.29	1,885.76	0.00	0.00	0.00	
7,100.00	89.75	315.001	5,534.17	-32.66	-2,841.00	1,985.76	0.00	0.00	0.00	
7,200.00	89.75	315.001	5,534.60	38.05	-2,911.71	2,085.76	0.00	0.00	0.00	
7,300.00	89.75	315.001	5,535.04	108.76	-2,982.42	2,185.76	0.00	0.00	0.00	
7,400.00	89.75	315.001	5,535.47	179.48	-3,053.12	2,285.76	0.00	0.00	0.00	
7,500.00	89.75	315.001	5,535.91	250.19	-3,123.83	2,385.76	0.00	0.00	0.00	
7,600.00	89.75	315.001	5,536.34	320.90	-3,194.54	2,485.76	0.00	0.00	0.00	
7,700.00	89.75	315.001	5,536.78	391.61	-3,265.25	2,585.76	0.00	0.00	0.00	
7,800.00	89.75	315.001	5,537.21	462.32	-3,335.96	2,685.75	0.00	0.00	0.00	
7,900.00	89.75	315.001	5,537.65	533.03	-3,406.67	2,785.75	0.00	0.00	0.00	
8,000.00	89.75	315.001	5,538.08	603.74	-3,477.38	2,885.75	0.00	0.00	0.00	
8,100.00	89.75	315.001	5,538.52	674.45	-3,548.09	2,985.75	0.00	0.00	0.00	
8,200.00	89.75	315.001	5,538.95	745.16	-3,618.80	3,085.75	0.00	0.00	0.00	
8,300.00	89.75	315.001	5,539.39	815.88	-3,689.50	3,185.75	0.00	0.00	0.00	
8,400.00	89.75	315.001	5,539.82	886.59	-3,760.21	3,285.75	0.00	0.00	0.00	
8,500.00	89.75	315.001	5,540.26	957.30	-3,830.92	3,385.75	0.00	0.00	0.00	
8,600.00	89.75	315.001	5,540.69	1,028.01	-3,901.63	3,485.75	0.00	0.00	0.00	
8,700.00	89.75	315.001	5,541.13	1,098.72	-3,972.34	3,585.75	0.00	0.00	0.00	
8,800.00	89.75	315.001	5,541.56	1,169.43	-4,043.05	3,685.74	0.00	0.00	0.00	
8,900.00	89.75	315.001	5,542.00	1,240.14	-4,113.76	3,785.74	0.00	0.00	0.00	
9,000.00	89.75	315.001	5,542.43	1,310.85	-4,184.47	3,885.74	0.00	0.00	0.00	
9,100.00	89.75	315.001	5,542.87	1,381.56	-4,255.18	3,985.74	0.00	0.00	0.00	
9,200.00	89.75	315.001	5,543.30	1,452.28	-4,325.88	4,085.74	0.00	0.00	0.00	
9,300.00	89.75	315.001	5,543.74	1,522.99	-4,396.59	4,185.74	0.00	0.00	0.00	
9,400.00	89.75	315.001	5,544.17	1,593.70	-4,467.30	4,285.74	0.00	0.00	0.00	



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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)	
9,500.00	89.75	315.001	5,544.61	1,664.41	-4,538.01	4,385.74	0.00	0.00	0.00	
9,600.00	89.75	315.001	5,545.04	1,735.12	-4,608.72	4,485.74	0.00	0.00	0.00	
9,700.00	89.75	315.001	5,545.48	1,805.83	-4,679.43	4,585.74	0.00	0.00	0.00	
9,800.00	89.75	315.001	5,545.91	1,876.54	-4,750.14	4,685.74	0.00	0.00	0.00	
9,900.00	89.75	315.001	5,546.35	1,947.25	-4,820.85	4,785.73	0.00	0.00	0.00	
10,000.00	89.75	315.001	5,546.78	2,017.97	-4,891.56	4,885.73	0.00	0.00	0.00	
10,100.00	89.75	315.001	5,547.22	2,088.68	-4,962.26	4,985.73	0.00	0.00	0.00	
10,200.00	89.75	315.001	5,547.65	2,159.39	-5,032.97	5,085.73	0.00	0.00	0.00	
10,300.00	89.75	315.001	5,548.09	2,230.10	-5,103.68	5,185.73	0.00	0.00	0.00	
10,400.00	89.75	315.001	5,548.52	2,300.81	-5,174.39	5,285.73	0.00	0.00	0.00	
10,500.00	89.75	315.001	5,548.96	2,371.52	-5,245.10	5,385.73	0.00	0.00	0.00	
10,600.00	89.75	315.001	5,549.39	2,442.23	-5,315.81	5,485.73	0.00	0.00	0.00	
10,700.00	89.75	315.001	5,549.83	2,512.94	-5,386.52	5,585.73	0.00	0.00	0.00	
10,800.00	89.75	315.001	5,550.26	2,583.65	-5,457.23	5,685.73	0.00	0.00	0.00	
10,900.00	89.75	315.001	5,550.70	2,654.37	-5,527.94	5,785.73	0.00	0.00	0.00	
11,000.00	89.75	315.001	5,551.13	2,725.08	-5,598.64	5,885.72	0.00	0.00	0.00	
11,100.00	89.75	315.001	5,551.57	2,795.79	-5,669.35	5,985.72	0.00	0.00	0.00	
11,200.00	89.75	315.001	5,552.00	2,866.50	-5,740.06	6,085.72	0.00	0.00	0.00	
11,300.00	89.75	315.001	5,552.43	2,937.21	-5,810.77	6,185.72	0.00	0.00	0.00	
11,400.00	89.75	315.001	5,552.87	3,007.92	-5,881.48	6,285.72	0.00	0.00	0.00	
11,500.00	89.75	315.001	5,553.30	3,078.63	-5,952.19	6,385.72	0.00	0.00	0.00	
11,600.00	89.75	315.001	5,553.74	3,149.34	-6,022.90	6,485.72	0.00	0.00	0.00	
11,700.00	89.75	315.001	5,554.17	3,220.05	-6,093.61	6,585.72	0.00	0.00	0.00	
11,800.00	89.75	315.001	5,554.61	3,290.77	-6,164.32	6,685.72	0.00	0.00	0.00	
11,900.00	89.75	315.001	5,555.04	3,361.48	-6,235.02	6,785.72	0.00	0.00	0.00	
12,000.00	89.75	315.001	5,555.48	3,432.19	-6,305.73	6,885.71	0.00	0.00	0.00	
12,100.00	89.75	315.001	5,555.91	3,502.90	-6,376.44	6,985.71	0.00	0.00	0.00	
12,200.00	89.75	315.001	5,556.35	3,573.61	-6,447.15	7,085.71	0.00	0.00	0.00	
12,300.00	89.75	315.001	5,556.78	3,644.32	-6,517.86	7,185.71	0.00	0.00	0.00	
12,400.00	89.75	315.001	5,557.22	3,715.03	-6,588.57	7,285.71	0.00	0.00	0.00	
12,500.00	89.75	315.001	5,557.65	3,785.74	-6,659.28	7,385.71	0.00	0.00	0.00	
12,600.00	89.75	315.001	5,558.09	3,856.46	-6,729.99	7,485.71	0.00	0.00	0.00	
12,700.00	89.75	315.001	5,558.52	3,927.17	-6,800.70	7,585.71	0.00	0.00	0.00	
12,800.00	89.75	315.001	5,558.96	3,997.88	-6,871.40	7,685.71	0.00	0.00	0.00	
12,900.00	89.75	315.001	5,559.39	4,068.59	-6,942.11	7,785.71	0.00	0.00	0.00	
13,000.00	89.75	315.001	5,559.83	4,139.30	-7,012.82	7,885.71	0.00	0.00	0.00	
13,100.00	89.75	315.001	5,560.26	4,210.01	-7,083.53	7,985.70	0.00	0.00	0.00	
13,200.00	89.75	315.001	5,560.70	4,280.72	-7,154.24	8,085.70	0.00	0.00	0.00	
13,300.00	89.75	315.001	5,561.13	4,351.43	-7,224.95	8,185.70	0.00	0.00	0.00	
13,400.00	89.75	315.001	5,561.57	4,422.14	-7,295.66	8,285.70	0.00	0.00	0.00	
13,499.34	89.75	315.001	5,562.00	4,492.39	-7,365.90	8,385.05	0.00	0.00	0.00	
PBHL/TD @ 13499.34 MD 5562.00 TVD										



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Ridge 137H FTP 2376 F	0.00	0.000	5,532.00	-547.02	-2,326.66	1,923,432.555	2,774,081.168	36.285955000	-107.660321000
- plan misses target center by 1.00ft at 6372.60ft MD (5531.00 TVD, -547.01 N, -2326.66 E)									
- Point									
Ridge 137H LTP 2623 F	0.00	0.000	5,562.00	4,492.39	-7,365.90	1,928,471.956	2,769,041.936	36.299822000	-107.677392000
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(")	(")	
350.00	350.00	13 3/8" Csg	13-3/8	17-1/2	
3,826.57	3,567.00	9 5/8" Csg	9-5/8	12-1/4	

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,237.82	1,234.00	Ojo Alamo				
1,365.21	1,357.00	Kirtland				
1,600.21	1,577.00	Fruitland				
1,957.36	1,897.00	Pictured Cliffs				
2,069.29	1,997.00	Lewis				
2,421.86	2,312.00	Chacra				
3,653.08	3,412.00	Cliff House				
3,658.67	3,417.00	Menefee				
4,593.28	4,252.00	Point Lookout				
4,828.33	4,462.00	Mancos				
5,248.06	4,837.00	MNCS_A				
5,343.20	4,922.00	MNCS_B				
5,471.92	5,037.00	MNCS_C				
5,556.37	5,112.00	MNCS_Cms				
5,656.21	5,197.00	MNCS_D				
5,751.42	5,272.00	MNCS_E				
5,836.06	5,332.00	MNCS_F				
5,992.23	5,422.00	MNCS_G				
6,074.28	5,462.00	MNCS_H				
6,218.67	5,512.00	MNCS_I				



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
800.00	800.00	0.00	0.00	KOP Begin 3°/100' build	
1,689.77	1,657.93	-87.13	-183.95	Begin 26.69° tangent	
5,501.61	5,063.53	-820.09	-1,731.46	Begin 10°/100' build/turn	
5,974.71	5,413.24	-765.74	-2,024.95	Begin 60.00° tangent	
6,034.71	5,443.24	-741.21	-2,070.76	Begin 10°/100' build/turn	
6,372.59	5,531.00	-547.02	-2,326.66	Begin 89.75° lateral	
13,499.34	5,562.00	4,492.39	-7,365.90	PBHL/TD @ 13499.34 MD 5562.00 TVD	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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. 137H, Surf loc: 1835 FNL 2270 FWL Section 26-T24N-R08W					
Well Position	+N/-S	0.00 ft	Northing:	1,923,979.572 usft	Latitude:	36.287446000
	+E/-W	0.00 ft	Easting:	2,776,407.823 usft	Longitude:	-107.652423000
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	49,131.91448360

Design	rev1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	315.001

Plan Survey Tool Program	Date	8/16/2023		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0.00	13,499.34 rev1 (Original Hole)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.00	0.00	0.000	0.00	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	
1,689.77	26.69	244.656	1,657.93	-87.13	-183.95	3.00	3.00	0.00	244.66	
5,501.61	26.69	244.656	5,063.53	-820.09	-1,731.46	0.00	0.00	0.00	0.00	
5,974.71	60.00	298.170	5,413.24	-765.74	-2,024.95	10.00	7.04	11.31	71.32	
6,034.71	60.00	298.170	5,443.24	-741.21	-2,070.76	0.00	0.00	0.00	0.00	
6,372.59	89.75	315.001	5,531.00	-547.02	-2,326.66	10.00	8.80	4.98	31.38	
13,499.34	89.75	315.001	5,562.00	4,492.39	-7,365.90	0.00	0.00	0.00	0.00	Ridge 137H LTP 2623



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
100.00	0.00	0.000	100.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
200.00	0.00	0.000	200.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
300.00	0.00	0.000	300.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
350.00	0.00	0.000	350.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
13 3/8" Csg										
400.00	0.00	0.000	400.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
500.00	0.00	0.000	500.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
600.00	0.00	0.000	600.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
700.00	0.00	0.000	700.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
800.00	0.00	0.000	800.00	0.00	0.00	1,923,979.572	2,776,407.823	36.287446000	-107.652423000	
KOP Begin 3"/100' build										
900.00	3.00	244.656	899.95	-1.12	-2.37	1,923,978.452	2,776,405.458	36.287442935	-107.652431033	
1,000.00	6.00	244.656	999.63	-4.48	-9.46	1,923,975.094	2,776,398.368	36.287433746	-107.652455112	
1,100.00	9.00	244.656	1,098.77	-10.07	-21.25	1,923,969.507	2,776,386.573	36.287418460	-107.652495169	
1,200.00	12.00	244.656	1,197.08	-17.86	-37.72	1,923,961.707	2,776,370.105	36.287397118	-107.652551096	
1,237.82	13.13	244.656	1,234.00	-21.39	-45.16	1,923,958.184	2,776,362.667	36.287387479	-107.652576356	
Ojo Alamo										
1,300.00	15.00	244.656	1,294.31	-27.86	-58.81	1,923,951.716	2,776,349.010	36.287369779	-107.652622738	
1,365.21	16.96	244.656	1,357.00	-35.54	-75.04	1,923,944.032	2,776,332.787	36.287348754	-107.652677834	
Kirtland										
1,400.00	18.00	244.656	1,390.18	-40.01	-84.48	1,923,939.560	2,776,323.345	36.287336518	-107.652709900	
1,500.00	21.00	244.656	1,484.43	-54.30	-114.64	1,923,925.273	2,776,293.181	36.287297425	-107.652812343	
1,600.00	24.00	244.656	1,576.81	-70.68	-149.22	1,923,908.894	2,776,258.599	36.287252608	-107.652929785	
1,600.21	24.00	244.656	1,577.00	-70.71	-149.30	1,923,908.858	2,776,258.523	36.287252509	-107.652930045	
Fruitland										
1,689.77	26.69	244.656	1,657.93	-87.13	-183.95	1,923,892.446	2,776,223.873	36.287207603	-107.653047720	
Begin 26.69° tangent										
1,700.00	26.69	244.656	1,667.07	-89.09	-188.11	1,923,890.478	2,776,219.719	36.287202219	-107.653061830	
1,800.00	26.69	244.656	1,756.41	-108.32	-228.70	1,923,871.250	2,776,179.121	36.287149605	-107.653199704	
1,900.00	26.69	244.656	1,845.76	-127.55	-269.30	1,923,852.021	2,776,138.524	36.287096990	-107.653337577	
1,957.36	26.69	244.656	1,897.00	-138.58	-292.59	1,923,840.992	2,776,115.238	36.287066812	-107.653416657	
Pictured Cliffs										
2,000.00	26.69	244.656	1,935.10	-146.78	-309.90	1,923,832.793	2,776,097.926	36.287044376	-107.653475451	
2,069.29	26.69	244.656	1,997.00	-160.10	-338.03	1,923,819.470	2,776,069.798	36.287007921	-107.653570977	
Lewis										
2,100.00	26.69	244.656	2,024.44	-166.01	-350.50	1,923,813.564	2,776,057.329	36.286991761	-107.653613324	
2,200.00	26.69	244.656	2,113.78	-185.24	-391.09	1,923,794.336	2,776,016.732	36.286939146	-107.653751197	
2,300.00	26.69	244.656	2,203.13	-204.47	-431.69	1,923,775.107	2,775,976.134	36.286886532	-107.653889070	
2,400.00	26.69	244.656	2,292.47	-223.69	-472.29	1,923,755.879	2,775,935.537	36.286833916	-107.654026943	
2,421.86	26.69	244.656	2,312.00	-227.90	-481.16	1,923,751.675	2,775,926.662	36.286822414	-107.654057083	
Chacra										
2,500.00	26.69	244.656	2,381.81	-242.92	-512.88	1,923,736.650	2,775,894.940	36.286781301	-107.654164815	
2,600.00	26.69	244.656	2,471.15	-262.15	-553.48	1,923,717.421	2,775,854.342	36.286728686	-107.654302687	
2,700.00	26.69	244.656	2,560.50	-281.38	-594.08	1,923,698.193	2,775,813.745	36.286676070	-107.654440560	
2,800.00	26.69	244.656	2,649.84	-300.61	-634.68	1,923,678.964	2,775,773.147	36.286623454	-107.654578432	
2,900.00	26.69	244.656	2,739.18	-319.84	-675.27	1,923,659.736	2,775,732.550	36.286570838	-107.654716303	
3,000.00	26.69	244.656	2,828.52	-339.07	-715.87	1,923,640.507	2,775,691.953	36.286518222	-107.654854175	
3,100.00	26.69	244.656	2,917.87	-358.29	-756.47	1,923,621.279	2,775,651.355	36.286465606	-107.654992046	
3,200.00	26.69	244.656	3,007.21	-377.52	-797.07	1,923,602.050	2,775,610.758	36.286412990	-107.655129918	
3,300.00	26.69	244.656	3,096.55	-396.75	-837.66	1,923,582.822	2,775,570.161	36.286360373	-107.655267789	
3,400.00	26.69	244.656	3,185.90	-415.98	-878.26	1,923,563.593	2,775,529.563	36.286307757	-107.655405660	
3,500.00	26.69	244.656	3,275.24	-435.21	-918.86	1,923,544.365	2,775,488.966	36.286255140	-107.655543530	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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	26.69	244.656	3,364.58	-454.44	-959.46	1,923,525.136	2,775,448.368	36.286202523	-107.655681401	
3,653.08	26.69	244.656	3,412.00	-464.64	-981.00	1,923,514.930	2,775,426.821	36.286174596	-107.655754577	
Cliff House										
3,658.67	26.69	244.656	3,417.00	-465.72	-983.28	1,923,513.854	2,775,424.549	36.286171651	-107.655762292	
Menefee										
3,700.00	26.69	244.656	3,453.92	-473.67	-1,000.05	1,923,505.908	2,775,407.771	36.286149905	-107.655819271	
3,800.00	26.69	244.656	3,543.27	-492.89	-1,040.65	1,923,486.679	2,775,367.174	36.286097288	-107.655957141	
3,826.57	26.69	244.656	3,567.00	-498.00	-1,051.44	1,923,481.571	2,775,356.389	36.286083310	-107.655993767	
9 5/8" Csg										
3,900.00	26.69	244.656	3,632.61	-512.12	-1,081.25	1,923,467.450	2,775,326.576	36.286044671	-107.656095011	
4,000.00	26.69	244.656	3,721.95	-531.35	-1,121.85	1,923,448.222	2,775,285.979	36.285992053	-107.656232881	
4,100.00	26.69	244.656	3,811.29	-550.58	-1,162.44	1,923,428.993	2,775,245.382	36.285939435	-107.656370750	
4,200.00	26.69	244.656	3,900.64	-569.81	-1,203.04	1,923,409.765	2,775,204.784	36.285886817	-107.656508620	
4,300.00	26.69	244.656	3,989.98	-589.04	-1,243.64	1,923,390.536	2,775,164.187	36.285834199	-107.656646489	
4,400.00	26.69	244.656	4,079.32	-608.27	-1,284.24	1,923,371.308	2,775,123.589	36.285781581	-107.656784358	
4,500.00	26.69	244.656	4,168.66	-627.49	-1,324.83	1,923,352.079	2,775,082.992	36.285728962	-107.656922227	
4,593.28	26.69	244.656	4,252.00	-645.43	-1,362.70	1,923,334.144	2,775,045.124	36.285679881	-107.657050826	
Point Lookout										
4,600.00	26.69	244.656	4,258.01	-646.72	-1,365.43	1,923,332.851	2,775,042.395	36.285676344	-107.657060096	
4,700.00	26.69	244.656	4,347.35	-665.95	-1,406.03	1,923,313.622	2,775,001.797	36.285623725	-107.657197964	
4,800.00	26.69	244.656	4,436.69	-685.18	-1,446.63	1,923,294.394	2,774,961.200	36.285571106	-107.657335832	
4,828.33	26.69	244.656	4,462.00	-690.63	-1,458.13	1,923,288.947	2,774,949.700	36.285556201	-107.657374886	
Mancos										
4,900.00	26.69	244.656	4,526.04	-704.41	-1,487.22	1,923,275.165	2,774,920.603	36.285518487	-107.657473700	
5,000.00	26.69	244.656	4,615.38	-723.64	-1,527.82	1,923,255.937	2,774,880.005	36.285465867	-107.657611568	
5,100.00	26.69	244.656	4,704.72	-742.87	-1,568.42	1,923,236.708	2,774,839.408	36.285413248	-107.657749436	
5,200.00	26.69	244.656	4,794.06	-762.09	-1,609.02	1,923,217.480	2,774,798.810	36.285360628	-107.657887304	
5,248.06	26.69	244.656	4,837.00	-771.34	-1,628.53	1,923,208.239	2,774,779.300	36.285335340	-107.657953561	
MNCS_A										
5,300.00	26.69	244.656	4,883.41	-781.32	-1,649.61	1,923,198.251	2,774,758.213	36.285308009	-107.658025171	
5,343.20	26.69	244.656	4,922.00	-789.63	-1,667.15	1,923,189.945	2,774,740.676	36.285285278	-107.658084727	
MNCS_B										
5,400.00	26.69	244.656	4,972.75	-800.55	-1,690.21	1,923,179.022	2,774,717.616	36.285255389	-107.658163038	
5,471.92	26.69	244.656	5,037.00	-814.38	-1,719.41	1,923,165.194	2,774,688.420	36.285217546	-107.658262187	
MNCS_C										
5,501.61	26.69	244.656	5,063.53	-820.09	-1,731.46	1,923,159.484	2,774,676.364	36.285201921	-107.658303126	
Begin 10°/100' build/turn										
5,550.00	28.59	254.270	5,106.42	-827.89	-1,752.44	1,923,151.689	2,774,655.387	36.285180611	-107.658374352	
5,556.37	28.88	255.442	5,112.00	-828.68	-1,755.39	1,923,150.889	2,774,652.432	36.285178429	-107.658384382	
MNCS_Cms										
5,600.00	31.16	262.884	5,149.79	-832.73	-1,776.81	1,923,146.840	2,774,631.020	36.285167413	-107.658457059	
5,650.00	34.23	270.204	5,191.88	-834.29	-1,803.72	1,923,145.287	2,774,604.102	36.285163279	-107.658548401	
5,656.21	34.64	271.031	5,197.00	-834.25	-1,807.24	1,923,145.325	2,774,600.591	36.285163401	-107.658560316	
MNCS_D										
5,700.00	37.67	276.398	5,232.36	-832.53	-1,832.99	1,923,147.041	2,774,574.839	36.285168241	-107.658647684	
5,750.00	41.38	281.665	5,270.93	-827.49	-1,864.38	1,923,152.088	2,774,543.451	36.285182262	-107.658754152	
5,751.42	41.49	281.804	5,272.00	-827.29	-1,865.30	1,923,152.279	2,774,542.530	36.285182792	-107.658757278	
MNCS_E										
5,800.00	45.30	286.192	5,307.30	-819.18	-1,897.65	1,923,160.390	2,774,510.179	36.285205234	-107.658866994	
5,836.06	48.23	289.086	5,332.00	-811.21	-1,922.67	1,923,168.363	2,774,485.157	36.285227260	-107.658951848	
MNCS_F										
5,850.00	49.38	290.134	5,341.18	-807.69	-1,932.55	1,923,171.885	2,774,475.276	36.285236982	-107.658985352	
5,900.00	53.57	293.616	5,372.32	-793.09	-1,968.82	1,923,186.484	2,774,439.007	36.285277266	-107.659108325	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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	
5,950.00	57.86	296.737	5,400.49	-775.50	-2,006.18	1,923,204.076	2,774,401.649	36.285325778	-107.659234978	
5,974.71	60.00	298.170	5,413.24	-765.74	-2,024.95	1,923,213.833	2,774,382.874	36.285352674	-107.659298621	
Begin 60.00° tangent										
5,992.23	60.00	298.170	5,422.00	-758.58	-2,038.33	1,923,220.996	2,774,369.499	36.285372417	-107.659343962	
MNCS_G										
6,000.00	60.00	298.170	5,425.89	-755.40	-2,044.26	1,923,224.175	2,774,363.563	36.285381178	-107.659364081	
6,034.71	60.00	298.170	5,443.24	-741.21	-2,070.76	1,923,238.364	2,774,337.068	36.285420287	-107.659453896	
Begin 10°/100' build/turn										
6,050.00	61.31	299.078	5,450.74	-734.82	-2,082.46	1,923,244.751	2,774,325.366	36.285437890	-107.659493562	
6,074.28	63.40	300.473	5,462.00	-724.14	-2,101.12	1,923,255.431	2,774,306.703	36.285467322	-107.659556822	
MNCS_H										
6,100.00	65.63	301.897	5,473.07	-712.12	-2,120.99	1,923,267.456	2,774,286.842	36.285500451	-107.659624139	
6,150.00	69.99	304.528	5,491.95	-686.75	-2,159.70	1,923,292.819	2,774,248.130	36.285570317	-107.659755334	
6,200.00	74.40	307.017	5,507.24	-658.92	-2,198.30	1,923,320.649	2,774,209.527	36.285646956	-107.659886149	
6,218.67	76.05	307.917	5,512.00	-647.94	-2,212.63	1,923,331.630	2,774,195.200	36.285677193	-107.659934695	
MNCS_I										
6,250.00	78.83	309.400	5,518.81	-628.84	-2,236.50	1,923,350.732	2,774,171.325	36.285729784	-107.660015588	
6,300.00	83.28	311.712	5,526.59	-596.73	-2,274.01	1,923,382.840	2,774,133.815	36.285818172	-107.660142667	
6,350.00	87.73	313.982	5,530.51	-562.84	-2,310.55	1,923,416.729	2,774,097.283	36.285911446	-107.660266418	
6,372.59	89.75	315.001	5,531.00	-547.02	-2,326.66	1,923,432.557	2,774,081.172	36.285955005	-107.660320989	
Begin 89.75° lateral										
6,400.00	89.75	315.001	5,531.12	-527.64	-2,346.04	1,923,451.937	2,774,061.792	36.286008338	-107.660386628	
6,500.00	89.75	315.001	5,531.56	-456.92	-2,416.75	1,923,522.648	2,773,991.083	36.286202932	-107.660626121	
6,600.00	89.75	315.001	5,531.99	-386.21	-2,487.45	1,923,593.359	2,773,920.375	36.286397525	-107.660865615	
6,700.00	89.75	315.001	5,532.43	-315.50	-2,558.16	1,923,664.070	2,773,849.666	36.286592118	-107.661105110	
6,800.00	89.75	315.001	5,532.86	-244.79	-2,628.87	1,923,734.781	2,773,778.957	36.286786710	-107.661344607	
6,900.00	89.75	315.001	5,533.30	-174.08	-2,699.58	1,923,805.492	2,773,708.248	36.286981301	-107.661584104	
7,000.00	89.75	315.001	5,533.73	-103.37	-2,770.29	1,923,876.203	2,773,637.540	36.287175892	-107.661823603	
7,100.00	89.75	315.001	5,534.17	-32.66	-2,841.00	1,923,946.914	2,773,566.831	36.287370483	-107.662063103	
7,200.00	89.75	315.001	5,534.60	38.05	-2,911.71	1,924,017.625	2,773,496.122	36.287565073	-107.662302604	
7,300.00	89.75	315.001	5,535.04	108.76	-2,982.42	1,924,088.336	2,773,425.413	36.287759663	-107.662542106	
7,400.00	89.75	315.001	5,535.47	179.48	-3,053.12	1,924,159.047	2,773,354.705	36.287954252	-107.662781610	
7,500.00	89.75	315.001	5,535.91	250.19	-3,123.83	1,924,229.758	2,773,283.996	36.288148840	-107.663021114	
7,600.00	89.75	315.001	5,536.34	320.90	-3,194.54	1,924,300.469	2,773,213.287	36.288343428	-107.663260620	
7,700.00	89.75	315.001	5,536.78	391.61	-3,265.25	1,924,371.180	2,773,142.579	36.288538016	-107.663500127	
7,800.00	89.75	315.001	5,537.21	462.32	-3,335.96	1,924,441.891	2,773,071.870	36.288732603	-107.663739635	
7,900.00	89.75	315.001	5,537.65	533.03	-3,406.67	1,924,512.602	2,773,001.161	36.288927190	-107.663979145	
8,000.00	89.75	315.001	5,538.08	603.74	-3,477.38	1,924,583.313	2,772,930.452	36.289121776	-107.664218655	
8,100.00	89.75	315.001	5,538.52	674.45	-3,548.09	1,924,654.024	2,772,859.744	36.289316362	-107.664458167	
8,200.00	89.75	315.001	5,538.95	745.16	-3,618.80	1,924,724.735	2,772,789.035	36.289510947	-107.664697680	
8,300.00	89.75	315.001	5,539.39	815.88	-3,689.50	1,924,795.446	2,772,718.326	36.289705532	-107.664937194	
8,400.00	89.75	315.001	5,539.82	886.59	-3,760.21	1,924,866.157	2,772,647.617	36.289900117	-107.665176710	
8,500.00	89.75	315.001	5,540.26	957.30	-3,830.92	1,924,936.868	2,772,576.909	36.290094700	-107.665416226	
8,600.00	89.75	315.001	5,540.69	1,028.01	-3,901.63	1,925,007.579	2,772,506.200	36.290289284	-107.665655744	
8,700.00	89.75	315.001	5,541.13	1,098.72	-3,972.34	1,925,078.290	2,772,435.491	36.290483867	-107.665895263	
8,800.00	89.75	315.001	5,541.56	1,169.43	-4,043.05	1,925,149.001	2,772,364.783	36.290678449	-107.666134783	
8,900.00	89.75	315.001	5,542.00	1,240.14	-4,113.76	1,925,219.712	2,772,294.074	36.290873031	-107.666374304	
9,000.00	89.75	315.001	5,542.43	1,310.85	-4,184.47	1,925,290.423	2,772,223.365	36.291067612	-107.666613827	
9,100.00	89.75	315.001	5,542.87	1,381.56	-4,255.18	1,925,361.134	2,772,152.656	36.291262193	-107.666853351	
9,200.00	89.75	315.001	5,543.30	1,452.28	-4,325.88	1,925,431.845	2,772,081.948	36.291456774	-107.667092875	
9,300.00	89.75	315.001	5,543.74	1,522.99	-4,396.59	1,925,502.556	2,772,011.239	36.291651354	-107.667332402	
9,400.00	89.75	315.001	5,544.17	1,593.70	-4,467.30	1,925,573.267	2,771,940.530	36.291845933	-107.667571929	
9,500.00	89.75	315.001	5,544.61	1,664.41	-4,538.01	1,925,643.978	2,771,869.821	36.292040512	-107.667811457	
9,600.00	89.75	315.001	5,545.04	1,735.12	-4,608.72	1,925,714.689	2,771,799.113	36.292235091	-107.668050987	



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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	
9,700.00	89.75	315.001	5,545.48	1,805.83	-4,679.43	1,925,785.400	2,771,728.404	36.292429669	-107.668290518	
9,800.00	89.75	315.001	5,545.91	1,876.54	-4,750.14	1,925,856.111	2,771,657.695	36.292624246	-107.668530050	
9,900.00	89.75	315.001	5,546.35	1,947.25	-4,820.85	1,925,926.822	2,771,586.986	36.292818823	-107.668769583	
10,000.00	89.75	315.001	5,546.78	2,017.97	-4,891.56	1,925,997.533	2,771,516.278	36.293013400	-107.669009117	
10,100.00	89.75	315.001	5,547.22	2,088.68	-4,962.26	1,926,068.244	2,771,445.569	36.293207976	-107.669248653	
10,200.00	89.75	315.001	5,547.65	2,159.39	-5,032.97	1,926,138.955	2,771,374.860	36.293402552	-107.669488190	
10,300.00	89.75	315.001	5,548.09	2,230.10	-5,103.68	1,926,209.666	2,771,304.152	36.293597127	-107.669727728	
10,400.00	89.75	315.001	5,548.52	2,300.81	-5,174.39	1,926,280.377	2,771,233.443	36.293791701	-107.669967267	
10,500.00	89.75	315.001	5,548.96	2,371.52	-5,245.10	1,926,351.088	2,771,162.734	36.293986276	-107.670206807	
10,600.00	89.75	315.001	5,549.39	2,442.23	-5,315.81	1,926,421.800	2,771,092.025	36.294180849	-107.670446349	
10,700.00	89.75	315.001	5,549.83	2,512.94	-5,386.52	1,926,492.511	2,771,021.317	36.294375422	-107.670685891	
10,800.00	89.75	315.001	5,550.26	2,583.65	-5,457.23	1,926,563.222	2,770,950.608	36.294569995	-107.670925435	
10,900.00	89.75	315.001	5,550.70	2,654.37	-5,527.94	1,926,633.933	2,770,879.899	36.294764567	-107.671164980	
11,000.00	89.75	315.001	5,551.13	2,725.08	-5,598.64	1,926,704.644	2,770,809.190	36.294959139	-107.671404527	
11,100.00	89.75	315.001	5,551.57	2,795.79	-5,669.35	1,926,775.355	2,770,738.482	36.295153710	-107.671644074	
11,200.00	89.75	315.001	5,552.00	2,866.50	-5,740.06	1,926,846.066	2,770,667.773	36.295348280	-107.671883623	
11,300.00	89.75	315.001	5,552.43	2,937.21	-5,810.77	1,926,916.777	2,770,597.064	36.295542850	-107.672123173	
11,400.00	89.75	315.001	5,552.87	3,007.92	-5,881.48	1,926,987.488	2,770,526.356	36.295737420	-107.672362724	
11,500.00	89.75	315.001	5,553.30	3,078.63	-5,952.19	1,927,058.199	2,770,455.647	36.295931990	-107.672602276	
11,600.00	89.75	315.001	5,553.74	3,149.34	-6,022.90	1,927,128.910	2,770,384.938	36.296126558	-107.672841829	
11,700.00	89.75	315.001	5,554.17	3,220.05	-6,093.61	1,927,199.621	2,770,314.229	36.296321127	-107.673081384	
11,800.00	89.75	315.001	5,554.61	3,290.77	-6,164.32	1,927,270.332	2,770,243.521	36.296515695	-107.673320940	
11,900.00	89.75	315.001	5,555.04	3,361.48	-6,235.02	1,927,341.043	2,770,172.812	36.296710262	-107.673560497	
12,000.00	89.75	315.001	5,555.48	3,432.19	-6,305.73	1,927,411.754	2,770,102.103	36.296904829	-107.673800055	
12,100.00	89.75	315.001	5,555.91	3,502.90	-6,376.44	1,927,482.465	2,770,031.394	36.297099396	-107.674039614	
12,200.00	89.75	315.001	5,556.35	3,573.61	-6,447.15	1,927,553.176	2,769,960.686	36.297293961	-107.674279175	
12,300.00	89.75	315.001	5,556.78	3,644.32	-6,517.86	1,927,623.887	2,769,889.977	36.297488527	-107.674518737	
12,400.00	89.75	315.001	5,557.22	3,715.03	-6,588.57	1,927,694.598	2,769,819.268	36.297683092	-107.674758300	
12,500.00	89.75	315.001	5,557.65	3,785.74	-6,659.28	1,927,765.309	2,769,748.560	36.297877656	-107.674997864	
12,600.00	89.75	315.001	5,558.09	3,856.46	-6,729.99	1,927,836.020	2,769,677.851	36.298072220	-107.675237429	
12,700.00	89.75	315.001	5,558.52	3,927.17	-6,800.70	1,927,906.731	2,769,607.142	36.298266784	-107.675476996	
12,800.00	89.75	315.001	5,558.96	3,997.88	-6,871.40	1,927,977.442	2,769,536.433	36.298461347	-107.675716563	
12,900.00	89.75	315.001	5,559.39	4,068.59	-6,942.11	1,928,048.153	2,769,465.725	36.298655910	-107.675956132	
13,000.00	89.75	315.001	5,559.83	4,139.30	-7,012.82	1,928,118.864	2,769,395.016	36.298850472	-107.676195702	
13,100.00	89.75	315.001	5,560.26	4,210.01	-7,083.53	1,928,189.575	2,769,324.307	36.299045033	-107.676435274	
13,200.00	89.75	315.001	5,560.70	4,280.72	-7,154.24	1,928,260.286	2,769,253.598	36.299239594	-107.676674846	
13,300.00	89.75	315.001	5,561.13	4,351.43	-7,224.95	1,928,330.997	2,769,182.890	36.299434155	-107.676914420	
13,400.00	89.75	315.001	5,561.57	4,422.14	-7,295.66	1,928,401.708	2,769,112.181	36.299628715	-107.677153995	
13,499.34	89.75	315.001	5,562.00	4,492.39	-7,365.90	1,928,471.956	2,769,041.936	36.299822000	-107.677392000	

PBHL/TD @ 13499.34 MD 5562.00 TVD

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Ridge 137H FTP 2376 F	0.00	0.000	5,532.00	-547.02	-2,326.66	1,923,432.555	2,774,081.168	36.285955000	-107.660321000	
- plan misses target center by 1.00ft at 6372.60ft MD (5531.00 TVD, -547.01 N, -2326.66 E)										
- Point										
Ridge 137H LTP 2623 F	0.00	0.000	5,562.00	4,492.39	-7,365.90	1,928,471.956	2,769,041.936	36.299822000	-107.677392000	
- plan hits target center										
- Point										



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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	
3,826.57	3,567.00	9 5/8" Csg	9-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,237.82	1,234.00	Ojo Alamo				
1,365.21	1,357.00	Kirtland				
1,600.21	1,577.00	Fruitland				
1,957.36	1,897.00	Pictured Cliffs				
2,069.29	1,997.00	Lewis				
2,421.86	2,312.00	Chacra				
3,653.08	3,412.00	Cliff House				
3,658.67	3,417.00	Menefee				
4,593.28	4,252.00	Point Lookout				
4,828.33	4,462.00	Mancos				
5,248.06	4,837.00	MNCS_A				
5,343.20	4,922.00	MNCS_B				
5,471.92	5,037.00	MNCS_C				
5,556.37	5,112.00	MNCS_Cms				
5,656.21	5,197.00	MNCS_D				
5,751.42	5,272.00	MNCS_E				
5,836.06	5,332.00	MNCS_F				
5,992.23	5,422.00	MNCS_G				
6,074.28	5,462.00	MNCS_H				
6,218.67	5,512.00	MNCS_I				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
800.00	800.00	0.00	0.00	KOP Begin 3°/100' build	
1,689.77	1,657.93	-87.13	-183.95	Begin 26.69° tangent	
5,501.61	5,063.53	-820.09	-1,731.46	Begin 10°/100' build/turn	
5,974.71	5,413.24	-765.74	-2,024.95	Begin 60.00° tangent	
6,034.71	5,443.24	-741.21	-2,070.76	Begin 10°/100' build/turn	
6,372.59	5,531.00	-547.02	-2,326.66	Begin 89.75° lateral	
13,499.34	5,562.00	4,492.39	-7,365.90	PBHL/TD @ 13499.34 MD 5562.00 TVD	



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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 1,549.93ft	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	13,499.34	rev1 (Original Hole)	MWD	OWSG MWD - Standard

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	5,828.42	11,089.01	599.51	432.63	3.593	CC
Lybrook 2408 138H - Original Hole - rev0	5,900.00	11,140.33	605.48	431.93	3.489	ES, SF
Ridge Unit (130, 135, 136 & 137)						
Ridge Unit No. 130H - Original Hole - rev1	500.00	500.00	60.14	57.01	19.175	CC, ES
Ridge Unit No. 130H - Original Hole - rev1	700.00	694.80	68.00	63.47	15.029	SF
Ridge Unit No. 135H - Original Hole - rev1	800.00	800.00	40.06	34.77	7.576	CC, ES
Ridge Unit No. 135H - Original Hole - rev1	900.00	899.95	42.66	36.67	7.119	SF
Ridge Unit No. 136H - Original Hole - rev1	800.00	800.00	20.09	14.80	3.800	CC, ES
Ridge Unit No. 136H - Original Hole - rev1	13,499.34	14,322.06	1,156.40	769.77	2.991	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										Offset Well Error:	0.00 ft	
Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,600.00	4,258.01	10,541.59	5,540.41	31.44	123.80	-113.37	-1,379.28	-1,370.46	1,463.89	1,375.59	88.29	16.580	
4,700.00	4,347.35	10,581.82	5,540.24	32.32	124.80	-111.45	-1,379.30	-1,410.69	1,377.06	1,286.02	91.04	15.126	
4,800.00	4,436.69	10,622.05	5,540.07	33.20	125.80	-109.38	-1,379.32	-1,450.92	1,290.89	1,196.81	94.08	13.721	
4,900.00	4,526.04	10,662.28	5,539.90	34.08	126.79	-107.12	-1,379.34	-1,491.14	1,205.52	1,108.04	97.48	12.367	
5,000.00	4,615.38	10,702.51	5,539.73	34.97	127.79	-104.68	-1,379.35	-1,531.37	1,121.11	1,019.81	101.30	11.067	
5,100.00	4,704.72	10,742.73	5,539.56	35.85	128.79	-102.03	-1,379.37	-1,571.60	1,037.92	932.27	105.65	9.824	
5,200.00	4,794.06	10,782.96	5,539.39	36.73	129.79	-99.16	-1,379.39	-1,611.83	956.26	845.62	110.64	8.643	
5,300.00	4,883.41	10,823.19	5,539.22	37.61	130.79	-96.05	-1,379.41	-1,652.05	876.56	760.14	116.41	7.530	
5,400.00	4,972.75	10,863.42	5,539.05	38.49	131.78	-92.70	-1,379.43	-1,692.28	799.39	676.25	123.14	6.492	
5,500.00	5,062.09	10,903.65	5,538.88	39.38	132.78	-89.10	-1,379.44	-1,732.51	725.58	594.58	131.01	5.538	
5,600.00	5,149.79	10,949.28	5,538.68	40.31	133.92	-103.92	-1,379.47	-1,778.14	662.35	521.64	140.71	4.707	
5,700.00	5,232.36	11,005.11	5,538.45	41.33	135.31	-112.51	-1,379.49	-1,833.97	619.59	467.35	152.25	4.070	
5,800.00	5,307.30	11,069.45	5,538.18	42.42	136.91	-116.03	-1,379.52	-1,898.31	600.48	436.63	163.85	3.665	
5,828.42	5,326.88	11,089.01	5,538.09	42.73	137.39	-116.31	-1,379.53	-1,917.88	599.51	432.63	166.88	3.593	CC
5,900.00	5,372.32	11,140.33	5,537.88	43.53	138.67	-115.85	-1,379.55	-1,969.19	605.48	431.93	173.55	3.489	ES, SF
6,000.00	5,425.89	11,215.53	5,537.56	44.67	140.54	-112.77	-1,379.58	-2,044.39	631.63	451.08	180.55	3.498	
6,100.00	5,473.07	11,292.03	5,537.23	45.83	142.45	-108.57	-1,379.62	-2,120.89	669.31	483.80	185.51	3.608	
6,200.00	5,507.24	11,347.47	5,537.00	46.98	143.83	-103.56	-1,379.64	-2,176.33	721.20	532.88	188.33	3.830	

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. 137H
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. 137H	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	
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
6,300.00	5,526.59	11,347.47	5,537.00	48.08	143.83	-97.13	-1,379.64	-2,176.33	788.99	601.80	187.19	4.215	
6,400.00	5,531.12	11,347.47	5,537.00	49.12	143.83	-89.29	-1,379.64	-2,176.33	868.79	683.68	185.12	4.693	
6,500.00	5,531.56	11,347.47	5,537.00	50.20	143.83	-89.29	-1,379.64	-2,176.33	953.57	770.78	182.79	5.217	
6,600.00	5,531.99	11,347.47	5,537.00	51.34	143.83	-89.29	-1,379.64	-2,176.33	1,041.06	860.63	180.43	5.770	
6,700.00	5,532.43	11,347.47	5,537.00	52.56	143.83	-89.29	-1,379.64	-2,176.33	1,130.62	952.46	178.16	6.346	
6,800.00	5,532.86	11,347.47	5,537.00	53.85	143.83	-89.29	-1,379.64	-2,176.33	1,221.80	1,045.76	176.04	6.941	
6,900.00	5,533.30	11,347.47	5,537.00	55.20	143.83	-89.29	-1,379.64	-2,176.33	1,314.27	1,140.18	174.09	7.550	
7,000.00	5,533.73	11,347.47	5,537.00	56.62	143.83	-89.29	-1,379.64	-2,176.33	1,407.76	1,235.46	172.30	8.170	
7,100.00	5,534.17	11,347.47	5,537.00	58.09	143.83	-89.29	-1,379.64	-2,176.33	1,502.10	1,331.42	170.68	8.801	

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. 137H
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. 137H	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													Rule Assigned:		Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning			
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)						
0.00	0.00	0.00	0.00	0.00	0.00	70.08	20.49	56.55	60.14							
100.00	100.00	100.00	100.00	0.13	0.13	70.08	20.49	56.55	60.14	59.88	0.27	223.708				
200.00	200.00	200.00	200.00	0.49	0.49	70.08	20.49	56.55	60.14	59.16	0.99	61.011				
300.00	300.00	300.00	300.00	0.85	0.85	70.08	20.49	56.55	60.14	58.44	1.70	35.322				
400.00	400.00	400.00	400.00	1.21	1.21	70.08	20.49	56.55	60.14	57.73	2.42	24.856				
500.00	500.00	500.00	500.00	1.57	1.57	70.08	20.49	56.55	60.14	57.01	3.14	19.175	CC, ES			
600.00	600.00	597.65	597.61	1.93	1.91	71.65	19.52	58.85	62.05	58.21	3.83	16.181				
700.00	700.00	694.80	694.46	2.29	2.25	75.78	16.65	65.70	68.00	63.47	4.52	15.029	SF			
800.00	800.00	790.94	789.82	2.64	2.60	81.19	11.92	76.94	78.52	73.31	5.21	15.070				
900.00	899.95	885.25	882.64	2.99	2.97	-158.42	5.49	92.25	96.41	90.53	5.88	16.401				
1,000.00	999.63	976.46	971.53	3.33	3.37	-154.92	-2.41	111.05	123.76	117.23	6.53	18.951				
1,100.00	1,098.77	1,063.61	1,055.47	3.69	3.80	-152.68	-11.49	132.66	159.89	152.73	7.17	22.311				
1,200.00	1,197.08	1,145.93	1,133.69	4.07	4.24	-151.19	-21.42	156.29	204.13	196.35	7.79	26.214				
1,300.00	1,294.31	1,222.85	1,205.71	4.49	4.70	-150.09	-31.87	181.16	255.84	247.46	8.37	30.560				
1,400.00	1,390.18	1,300.00	1,276.81	4.96	5.20	-149.18	-43.48	208.77	314.42	305.40	9.01	34.887				
1,500.00	1,484.43	1,359.15	1,330.47	5.49	5.63	-148.21	-53.12	231.72	379.04	369.54	9.50	39.901				
1,600.00	1,576.81	1,418.29	1,383.32	6.08	6.09	-147.18	-63.40	256.18	449.27	439.24	10.03	44.794				
1,700.00	1,667.07	1,471.50	1,430.14	6.76	6.53	-146.17	-73.19	279.47	524.42	513.87	10.55	49.721				
1,800.00	1,756.41	1,520.61	1,472.72	7.49	6.96	-146.73	-82.66	302.03	602.34	591.32	11.02	54.675				
1,900.00	1,845.76	1,566.97	1,512.33	8.26	7.40	-147.10	-92.00	324.24	681.71	670.23	11.47	59.411				
2,000.00	1,935.10	1,600.00	1,540.18	9.04	7.71	-147.29	-98.87	340.60	762.50	750.72	11.78	64.737				
2,100.00	2,024.44	1,652.10	1,583.48	9.85	8.25	-147.49	-110.10	367.31	844.28	831.93	12.35	68.371				
2,200.00	2,113.78	1,700.00	1,622.59	10.66	8.75	-147.60	-120.82	392.81	927.33	914.45	12.87	72.026				
2,300.00	2,203.13	1,728.20	1,645.27	11.49	9.07	-147.63	-127.30	408.25	1,011.26	998.09	13.17	76.803				
2,400.00	2,292.47	1,763.22	1,673.11	12.33	9.48	-147.64	-135.54	427.85	1,096.18	1,082.63	13.56	80.856				
2,500.00	2,381.81	1,800.00	1,701.91	13.17	9.90	-147.62	-144.40	448.93	1,181.97	1,167.99	13.98	84.559				
2,600.00	2,471.15	1,827.90	1,723.47	14.02	10.24	-147.59	-151.26	465.26	1,268.53	1,254.24	14.29	88.740				
2,700.00	2,560.50	1,870.67	1,756.18	14.87	10.78	-147.54	-161.93	490.66	1,355.68	1,340.85	14.82	91.458				
2,800.00	2,649.84	1,919.64	1,793.62	15.73	11.40	-147.48	-174.16	519.77	1,442.86	1,427.42	15.44	93.425				
2,900.00	2,739.18	1,968.62	1,831.06	16.59	12.02	-147.43	-186.40	548.87	1,530.05	1,513.97	16.07	95.197				

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. 137H
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. 137H	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. 135H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Reference Depth (ft)	Vertical Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	70.24	13.54	37.70	40.06					
100.00	100.00	100.00	100.00	0.13	0.13	70.24	13.54	37.70	40.06	39.79	0.27	148.986		
200.00	200.00	200.00	200.00	0.49	0.49	70.24	13.54	37.70	40.06	39.07	0.99	40.633		
300.00	300.00	300.00	300.00	0.85	0.85	70.24	13.54	37.70	40.06	38.35	1.70	23.524		
400.00	400.00	400.00	400.00	1.21	1.21	70.24	13.54	37.70	40.06	37.64	2.42	16.554		
500.00	500.00	500.00	500.00	1.57	1.57	70.24	13.54	37.70	40.06	36.92	3.14	12.770		
600.00	600.00	600.00	600.00	1.93	1.93	70.24	13.54	37.70	40.06	36.20	3.85	10.394		
700.00	700.00	700.00	700.00	2.29	2.29	70.24	13.54	37.70	40.06	35.49	4.57	8.764		
800.00	800.00	800.00	800.00	2.64	2.64	70.24	13.54	37.70	40.06	34.77	5.29	7.576 CC, ES		
900.00	899.95	899.95	899.95	2.99	3.00	-174.75	13.54	37.70	42.66	36.67	5.99	7.119 SF		
1,000.00	999.63	999.63	999.63	3.33	3.36	-175.54	13.54	37.70	50.48	43.79	6.69	7.543		
1,100.00	1,098.77	1,097.06	1,097.02	3.69	3.70	-174.50	12.02	39.64	64.79	57.42	7.38	8.783		
1,200.00	1,197.08	1,192.39	1,192.06	4.07	4.02	-171.40	7.57	45.32	86.99	78.94	8.05	10.812		
1,300.00	1,294.31	1,284.61	1,283.56	4.49	4.34	-168.04	0.49	54.36	117.16	108.46	8.70	13.460		
1,400.00	1,390.18	1,372.88	1,370.51	4.96	4.66	-165.05	-8.84	66.26	155.18	145.83	9.35	16.593		
1,500.00	1,484.43	1,456.51	1,452.17	5.49	4.99	-162.54	-19.95	80.44	200.70	190.71	9.99	20.096		
1,600.00	1,576.81	1,534.98	1,528.01	6.08	5.33	-160.39	-32.37	96.30	253.24	242.63	10.61	23.878		
1,700.00	1,667.07	1,607.95	1,597.74	6.76	5.66	-158.59	-45.63	113.23	312.25	301.03	11.22	27.842		
1,800.00	1,756.41	1,676.80	1,662.72	7.49	6.01	-157.61	-59.64	131.11	374.99	363.20	11.79	31.806		
1,900.00	1,845.76	1,742.57	1,724.00	8.26	6.37	-156.64	-74.37	149.91	439.76	427.40	12.36	35.574		
2,000.00	1,935.10	1,800.00	1,776.81	9.04	6.70	-155.78	-88.29	167.68	506.51	493.66	12.85	39.411		
2,100.00	2,024.44	1,865.13	1,835.84	9.85	7.12	-154.80	-105.25	189.32	575.04	561.56	13.48	42.658		
2,200.00	2,113.78	1,932.64	1,896.33	10.66	7.58	-153.86	-123.74	212.93	644.91	630.74	14.17	45.516		
2,300.00	2,203.13	2,003.71	1,959.97	11.49	8.08	-153.05	-143.24	237.83	714.93	700.00	14.93	47.895		
2,400.00	2,292.47	2,074.77	2,023.61	12.33	8.60	-152.38	-162.75	262.72	785.01	769.30	15.71	49.980		
2,500.00	2,381.81	2,145.83	2,087.25	13.17	9.14	-151.82	-182.25	287.62	855.13	838.63	16.50	51.824		
2,600.00	2,471.15	2,216.89	2,150.88	14.02	9.68	-151.35	-201.75	312.51	925.29	907.99	17.31	53.461		
2,700.00	2,560.50	2,287.96	2,214.52	14.87	10.24	-150.94	-221.25	337.41	995.48	977.35	18.13	54.918		
2,800.00	2,649.84	2,359.02	2,278.16	15.73	10.80	-150.58	-240.76	362.30	1,065.69	1,046.74	18.96	56.217		
2,900.00	2,739.18	2,430.08	2,341.80	16.59	11.37	-150.27	-260.26	387.20	1,135.92	1,116.13	19.79	57.385		
3,000.00	2,828.52	2,501.14	2,405.43	17.45	11.95	-150.00	-279.76	412.09	1,206.16	1,185.52	20.64	58.438		
3,100.00	2,917.87	2,572.21	2,469.07	18.32	12.53	-149.75	-299.27	436.99	1,276.42	1,254.93	21.49	59.387		
3,200.00	3,007.21	2,643.27	2,532.71	19.18	13.12	-149.53	-318.77	461.88	1,346.69	1,324.33	22.35	60.249		
3,300.00	3,096.55	2,714.33	2,596.35	20.05	13.71	-149.34	-338.27	486.78	1,416.96	1,393.75	23.22	61.034		
3,400.00	3,185.90	2,785.39	2,659.98	20.92	14.30	-149.16	-357.78	511.67	1,487.24	1,463.16	24.08	61.750		

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. 137H
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. 137H	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
Rule Assigned:														
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
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		
600.00	600.00	600.00	600.00	1.93	1.93	69.75	6.95	18.85	20.09	16.24	3.85	5.213		
700.00	700.00	700.00	700.00	2.29	2.29	69.75	6.95	18.85	20.09	15.52	4.57	4.396		
800.00	800.00	800.00	800.00	2.64	2.64	69.75	6.95	18.85	20.09	14.80	5.29	3.800	CC, ES	
900.00	899.95	899.95	899.95	2.99	3.00	-175.48	6.95	18.85	22.70	16.71	5.99	3.788		
1,000.00	999.63	999.63	999.63	3.33	3.36	-176.63	6.95	18.85	30.52	23.83	6.69	4.561		
1,100.00	1,098.77	1,100.09	1,100.05	3.69	3.70	-174.80	4.42	18.16	42.01	34.63	7.38	5.695		
1,200.00	1,197.08	1,200.43	1,200.07	4.07	4.04	-169.81	-3.18	16.08	55.85	47.79	8.05	6.937		
1,300.00	1,294.31	1,300.38	1,299.14	4.49	4.37	-164.00	-15.79	12.64	72.63	63.88	8.75	8.302		
1,400.00	1,390.18	1,399.64	1,396.73	4.96	4.73	-158.35	-33.24	7.87	92.83	83.34	9.49	9.784		
1,500.00	1,484.43	1,497.98	1,492.36	5.49	5.12	-153.24	-55.32	1.84	116.76	106.47	10.29	11.348		
1,600.00	1,576.81	1,595.03	1,585.46	6.08	5.54	-148.76	-81.73	-5.37	144.54	133.37	11.17	12.944		
1,700.00	1,667.07	1,689.53	1,675.53	6.76	5.99	-145.85	-109.32	-12.90	176.57	164.46	12.11	14.583		
1,800.00	1,756.41	1,783.54	1,765.12	7.49	6.45	-144.53	-136.76	-20.39	210.42	197.34	13.08	16.091		
1,900.00	1,845.76	1,877.54	1,854.72	8.26	6.93	-143.58	-164.20	-27.89	244.34	230.26	14.09	17.345		
2,000.00	1,935.10	1,971.54	1,944.32	9.04	7.43	-142.85	-191.64	-35.38	278.31	263.18	15.13	18.393		
2,100.00	2,024.44	2,065.55	2,033.91	9.85	7.93	-142.29	-219.09	-42.87	312.31	296.11	16.20	19.276		
2,200.00	2,113.78	2,159.55	2,123.51	10.66	8.45	-141.83	-246.53	-50.37	346.33	329.04	17.29	20.026		
2,300.00	2,203.13	2,253.55	2,213.10	11.49	8.97	-141.46	-273.97	-57.86	380.37	361.96	18.40	20.667		
2,400.00	2,292.47	2,347.56	2,302.70	12.33	9.50	-141.15	-301.41	-65.35	414.41	394.88	19.53	21.220		
2,500.00	2,381.81	2,441.56	2,392.30	13.17	10.04	-140.88	-328.85	-72.85	448.47	427.80	20.67	21.699		
2,600.00	2,471.15	2,535.56	2,481.89	14.02	10.58	-140.66	-356.29	-80.34	482.54	460.72	21.82	22.119		
2,700.00	2,560.50	2,629.57	2,571.49	14.87	11.12	-140.46	-383.73	-87.83	516.61	493.63	22.97	22.487		
2,800.00	2,649.84	2,723.57	2,661.08	15.73	11.67	-140.29	-411.18	-95.33	550.68	526.54	24.14	22.814		
2,900.00	2,739.18	2,817.57	2,750.68	16.59	12.22	-140.13	-438.62	-102.82	584.76	559.45	25.31	23.104		
3,000.00	2,828.52	2,911.58	2,840.27	17.45	12.77	-140.00	-466.06	-110.31	618.84	592.35	26.49	23.363		
3,100.00	2,917.87	3,005.58	2,929.87	18.32	13.32	-139.88	-493.50	-117.81	652.93	625.26	27.67	23.597		
3,200.00	3,007.21	3,099.58	3,019.47	19.18	13.88	-139.77	-520.94	-125.30	687.01	658.16	28.86	23.807		
3,300.00	3,096.55	3,193.59	3,109.06	20.05	14.44	-139.67	-548.38	-132.79	721.10	691.06	30.05	23.998		
3,400.00	3,185.90	3,287.59	3,198.66	20.92	15.00	-139.58	-575.83	-140.29	755.20	723.95	31.24	24.172		
3,500.00	3,275.24	3,381.59	3,288.25	21.79	15.56	-139.49	-603.27	-147.78	789.29	756.85	32.44	24.330		
3,600.00	3,364.58	3,475.60	3,377.85	22.67	16.12	-139.42	-630.71	-155.27	823.38	789.74	33.64	24.475		
3,700.00	3,453.92	3,569.60	3,467.45	23.54	16.69	-139.35	-658.15	-162.77	857.48	822.63	34.84	24.609		
3,800.00	3,543.27	3,663.60	3,557.04	24.42	17.25	-139.28	-685.59	-170.26	891.57	855.52	36.05	24.732		
3,900.00	3,632.61	3,757.60	3,646.64	25.29	17.82	-139.22	-713.03	-177.75	925.67	888.41	37.26	24.846		
4,000.00	3,721.95	3,851.61	3,736.23	26.17	18.39	-139.17	-740.47	-185.25	959.77	921.30	38.47	24.951		
4,100.00	3,811.29	3,945.61	3,825.83	27.05	18.95	-139.12	-767.92	-192.74	993.87	954.19	39.68	25.049		
4,200.00	3,900.64	4,039.61	3,915.42	27.92	19.52	-139.07	-795.36	-200.23	1,027.97	987.08	40.89	25.141		
4,300.00	3,989.98	4,133.62	4,005.02	28.80	20.09	-139.02	-822.80	-207.73	1,062.07	1,019.96	42.10	25.226		
4,400.00	4,079.32	4,227.62	4,094.62	29.68	20.66	-138.98	-850.24	-215.22	1,096.17	1,052.85	43.32	25.306		
4,500.00	4,168.66	4,321.62	4,184.21	30.56	21.23	-138.94	-877.68	-222.71	1,130.27	1,085.73	44.53	25.380		
4,600.00	4,258.01	4,415.10	4,273.34	31.44	21.79	-138.91	-904.88	-230.14	1,164.37	1,118.63	45.74	25.457		
4,700.00	4,347.35	4,506.44	4,361.27	32.32	22.31	-139.03	-928.68	-236.64	1,198.62	1,151.76	46.86	25.581		
4,800.00	4,436.69	4,597.19	4,449.71	33.20	22.78	-139.36	-948.28	-241.99	1,233.10	1,185.23	47.87	25.760		
4,900.00	4,526.04	4,685.57	4,538.16	34.08	23.31	167.75	-231.07	-1,006.96	1,261.18	1,177.44	38.74	31.393		
5,000.00	4,615.38	4,773.95	4,626.50	34.97	23.85	166.91	-220.08	-1,017.95	1,289.26	1,168.42	41.25	28.324		
5,100.00	4,704.72	4,862.86	4,715.63	35.85	24.39	166.07	-209.09	-1,028.95	1,317.34	1,155.29	43.83	25.723		

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. 137H
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. 137H	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													Rule Assigned:		Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning			
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)						
5,200.00	4,794.06	6,532.21	5,538.39	36.73	29.04	165.23	-198.10	-1,039.94	1,093.60	1,047.21	46.39	23.573				
5,300.00	4,883.41	6,547.75	5,538.46	37.61	29.28	164.39	-187.11	-1,050.93	1,067.99	1,019.13	48.86	21.858				
5,400.00	4,972.75	6,563.29	5,538.54	38.49	29.53	163.55	-176.12	-1,061.92	1,051.09	999.95	51.13	20.555				
5,500.00	5,062.09	6,578.84	5,538.61	39.38	29.78	162.70	-165.13	-1,072.91	1,043.30	990.18	53.12	19.640				
5,532.52	5,091.00	6,584.79	5,538.64	39.68	29.88	156.66	-160.92	-1,077.12	1,042.79	989.07	53.72	19.411				
5,600.00	5,149.79	6,602.63	5,538.73	40.31	30.17	145.28	-148.30	-1,089.73	1,044.89	989.97	54.91	19.029				
5,700.00	5,232.36	6,642.90	5,538.92	41.33	30.84	131.08	-119.83	-1,118.21	1,054.91	998.22	56.69	18.607				
5,800.00	5,307.30	6,698.42	5,539.19	42.42	31.78	119.59	-80.57	-1,157.47	1,071.07	1,012.52	58.55	18.294				
5,900.00	5,372.32	6,767.51	5,539.53	43.53	32.98	110.16	-31.72	-1,206.33	1,090.43	1,029.85	60.59	17.998				
6,000.00	5,425.89	6,847.77	5,539.92	44.67	34.41	103.76	25.03	-1,263.08	1,110.10	1,047.20	62.90	17.648				
6,100.00	5,473.07	6,932.86	5,540.33	45.83	35.96	98.64	85.19	-1,323.24	1,129.88	1,064.48	65.40	17.277				
6,200.00	5,507.24	7,025.30	5,540.78	46.98	37.69	93.79	150.56	-1,388.61	1,145.42	1,077.18	68.24	16.785				
6,300.00	5,526.59	7,122.91	5,541.25	48.08	39.56	91.11	219.58	-1,457.63	1,154.58	1,083.15	71.43	16.164				
6,400.00	5,531.12	7,222.72	5,541.74	49.12	41.50	90.53	290.15	-1,528.21	1,156.61	1,081.73	74.88	15.447				
6,500.00	5,531.56	7,322.72	5,542.22	50.20	43.48	90.53	360.86	-1,598.92	1,156.60	1,078.14	78.47	14.740				
6,600.00	5,531.99	7,422.72	5,542.71	51.34	45.49	90.53	431.57	-1,669.63	1,156.60	1,074.44	82.16	14.078				
6,700.00	5,532.43	7,522.72	5,543.19	52.56	47.53	90.53	502.28	-1,740.34	1,156.60	1,070.66	85.93	13.459				
6,800.00	5,532.86	7,622.72	5,543.68	53.85	49.58	90.54	572.99	-1,811.05	1,156.59	1,066.80	89.79	12.881				
6,900.00	5,533.30	7,722.72	5,544.16	55.20	51.66	90.54	643.69	-1,881.76	1,156.59	1,062.88	93.72	12.342				
7,000.00	5,533.73	7,822.72	5,544.65	56.62	53.75	90.54	714.40	-1,952.47	1,156.59	1,058.89	97.70	11.838				
7,100.00	5,534.17	7,922.72	5,545.13	58.09	55.86	90.54	785.11	-2,023.18	1,156.58	1,054.85	101.73	11.369				
7,200.00	5,534.60	8,022.72	5,545.62	59.62	57.98	90.55	855.82	-2,093.89	1,156.58	1,050.77	105.82	10.930				
7,300.00	5,535.04	8,122.72	5,546.10	61.20	60.11	90.55	926.53	-2,164.60	1,156.58	1,046.64	109.94	10.520				
7,400.00	5,535.47	8,222.72	5,546.59	62.82	62.25	90.55	997.24	-2,235.32	1,156.58	1,042.48	114.10	10.137				
7,500.00	5,535.91	8,322.72	5,547.07	64.49	64.41	90.55	1,067.95	-2,306.03	1,156.57	1,038.28	118.29	9.777				
7,600.00	5,536.34	8,422.72	5,547.55	66.20	66.57	90.56	1,138.65	-2,376.74	1,156.57	1,034.06	122.51	9.440				
7,700.00	5,536.78	8,522.72	5,548.04	67.94	68.75	90.56	1,209.36	-2,447.45	1,156.57	1,029.81	126.76	9.124				
7,800.00	5,537.21	8,622.72	5,548.52	69.72	70.93	90.56	1,280.07	-2,518.16	1,156.56	1,025.53	131.03	8.827				
7,900.00	5,537.65	8,722.72	5,549.01	71.54	73.11	90.56	1,350.78	-2,588.87	1,156.56	1,021.24	135.32	8.547				
8,000.00	5,538.08	8,822.72	5,549.49	73.38	75.30	90.57	1,421.49	-2,659.58	1,156.56	1,016.92	139.63	8.283				
8,100.00	5,538.52	8,922.72	5,549.98	75.24	77.50	90.57	1,492.20	-2,730.29	1,156.56	1,012.59	143.96	8.034				
8,200.00	5,538.95	9,022.72	5,550.46	77.14	79.71	90.57	1,562.91	-2,801.00	1,156.55	1,008.25	148.31	7.798				
8,300.00	5,539.39	9,122.72	5,550.95	79.05	81.92	90.57	1,633.61	-2,871.72	1,156.55	1,003.89	152.67	7.576				
8,400.00	5,539.82	9,222.72	5,551.43	80.99	84.13	90.58	1,704.32	-2,942.43	1,156.55	999.51	157.04	7.365				
8,500.00	5,540.26	9,322.72	5,551.92	82.94	86.35	90.58	1,775.03	-3,013.14	1,156.54	995.12	161.42	7.165				
8,600.00	5,540.69	9,422.72	5,552.40	84.92	88.57	90.58	1,845.74	-3,083.85	1,156.54	990.72	165.82	6.975				
8,700.00	5,541.13	9,522.72	5,552.89	86.91	90.79	90.58	1,916.45	-3,154.56	1,156.54	986.32	170.22	6.794				
8,800.00	5,541.56	9,622.72	5,553.37	88.92	93.02	90.59	1,987.16	-3,225.27	1,156.54	981.90	174.64	6.622				
8,900.00	5,542.00	9,722.72	5,553.86	90.94	95.25	90.59	2,057.87	-3,295.98	1,156.53	977.47	179.06	6.459				
9,000.00	5,542.43	9,822.72	5,554.34	92.98	97.49	90.59	2,128.57	-3,366.69	1,156.53	973.04	183.50	6.303				
9,100.00	5,542.87	9,922.72	5,554.83	95.02	99.72	90.59	2,199.28	-3,437.40	1,156.53	968.59	187.94	6.154				
9,200.00	5,543.30	10,022.72	5,555.31	97.08	101.96	90.60	2,269.99	-3,508.12	1,156.52	964.14	192.38	6.012				
9,300.00	5,543.74	10,122.72	5,555.80	99.16	104.20	90.60	2,340.70	-3,578.83	1,156.52	959.69	196.83	5.876				
9,400.00	5,544.17	10,222.72	5,556.28	101.24	106.45	90.60	2,411.41	-3,649.54	1,156.52	955.23	201.29	5.745				
9,500.00	5,544.61	10,322.72	5,556.77	103.33	108.69	90.60	2,482.12	-3,720.25	1,156.52	950.76	205.76	5.621				
9,600.00	5,545.04	10,422.72	5,557.25	105.43	110.94	90.61	2,552.83	-3,790.96	1,156.51	946.29	210.23	5.501				
9,700.00	5,545.48	10,522.72	5,557.74	107.54	113.19	90.61	2,623.53	-3,861.67	1,156.51	941.81	214.70	5.387				
9,800.00	5,545.91	10,622.72	5,558.22	109.65	115.44	90.61	2,694.24	-3,932.38	1,156.51	937.33	219.18	5.276				
9,900.00	5,546.35	10,722.72	5,558.71	111.78	117.70	90.61	2,764.95	-4,003.09	1,156.51	932.84	223.67	5.171				
10,000.00	5,546.78	10,822.72	5,559.19	113.91	119.95	90.62	2,835.66	-4,073.80	1,156.50	928.35	228.15	5.069				
10,100.00	5,547.22	10,922.72	5,559.68	116.05	122.21	90.62	2,906.37	-4,144.52	1,156.50	923.85	232.65	4.971				
10,200.00	5,547.65	11,022.72	5,560.16	118.19	124.46	90.62	2,977.08	-4,215.23	1,156.50	919.36	237.14	4.877				

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. 137H
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. 137H	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													Rule Assigned:		Offset Well Error:	0.00 ft
Measured Reference Depth (ft)	Vertical Depth (ft)	Measured Offset Depth (ft)	Vertical Offset Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
10,300.00	5,548.09	11,122.72	5,560.65	120.34	126.72	90.62	3,047.79	-4,285.94	1,156.49	914.85	241.64	4.786				
10,400.00	5,548.52	11,222.72	5,561.13	122.50	128.98	90.62	3,118.49	-4,356.65	1,156.49	910.35	246.14	4.698				
10,500.00	5,548.96	11,322.72	5,561.62	124.66	131.25	90.63	3,189.20	-4,427.36	1,156.49	905.84	250.65	4.614				
10,600.00	5,549.39	11,422.72	5,562.10	126.82	133.51	90.63	3,259.91	-4,498.07	1,156.49	901.33	255.16	4.532				
10,700.00	5,549.83	11,522.72	5,562.59	128.99	135.77	90.63	3,330.62	-4,568.78	1,156.48	896.82	259.67	4.454				
10,800.00	5,550.26	11,622.72	5,563.07	131.17	138.04	90.63	3,401.33	-4,639.49	1,156.48	892.30	264.18	4.378				
10,900.00	5,550.70	11,722.72	5,563.56	133.35	140.30	90.64	3,472.04	-4,710.20	1,156.48	887.78	268.70	4.304				
11,000.00	5,551.13	11,822.72	5,564.04	135.53	142.57	90.64	3,542.75	-4,780.91	1,156.47	883.26	273.21	4.233				
11,100.00	5,551.57	11,922.72	5,564.53	137.72	144.84	90.64	3,613.46	-4,851.63	1,156.47	878.74	277.73	4.164				
11,200.00	5,552.00	12,022.72	5,565.01	139.91	147.10	90.64	3,684.16	-4,922.34	1,156.47	874.21	282.26	4.097				
11,300.00	5,552.43	12,122.72	5,565.50	142.10	149.37	90.65	3,754.87	-4,993.05	1,156.47	869.69	286.78	4.033				
11,400.00	5,552.87	12,222.72	5,565.98	144.30	151.64	90.65	3,825.58	-5,063.76	1,156.46	865.16	291.31	3.970				
11,500.00	5,553.30	12,322.72	5,566.47	146.50	153.91	90.65	3,896.29	-5,134.47	1,156.46	860.63	295.83	3.909				
11,600.00	5,553.74	12,422.72	5,566.95	148.70	156.18	90.65	3,967.00	-5,205.18	1,156.46	856.09	300.36	3.850				
11,700.00	5,554.17	12,522.72	5,567.44	150.91	158.46	90.66	4,037.71	-5,275.89	1,156.45	851.56	304.89	3.793				
11,800.00	5,554.61	12,622.72	5,567.92	153.12	160.73	90.66	4,108.42	-5,346.60	1,156.45	847.03	309.43	3.737				
11,900.00	5,555.04	12,722.72	5,568.41	155.33	163.00	90.66	4,179.12	-5,417.31	1,156.45	842.49	313.96	3.683				
12,000.00	5,555.48	12,822.72	5,568.89	157.54	165.27	90.66	4,249.83	-5,488.03	1,156.45	837.95	318.50	3.631				
12,100.00	5,555.91	12,922.72	5,569.38	159.76	167.55	90.67	4,320.54	-5,558.74	1,156.44	833.41	323.03	3.580				
12,200.00	5,556.35	13,022.72	5,569.86	161.98	169.82	90.67	4,391.25	-5,629.45	1,156.44	828.87	327.57	3.530				
12,300.00	5,556.78	13,122.72	5,570.35	164.20	172.10	90.67	4,461.96	-5,700.16	1,156.44	824.33	332.11	3.482				
12,400.00	5,557.22	13,222.72	5,570.83	166.42	174.38	90.67	4,532.67	-5,770.87	1,156.44	819.78	336.65	3.435				
12,500.00	5,557.65	13,322.72	5,571.32	168.64	176.65	90.68	4,603.38	-5,841.58	1,156.43	815.24	341.19	3.389				
12,600.00	5,558.09	13,422.72	5,571.80	170.87	178.93	90.68	4,674.08	-5,912.29	1,156.43	810.69	345.74	3.345				
12,700.00	5,558.52	13,522.72	5,572.29	173.10	181.21	90.68	4,744.79	-5,983.00	1,156.43	806.15	350.28	3.301				
12,800.00	5,558.96	13,622.72	5,572.77	175.33	183.48	90.68	4,815.50	-6,053.71	1,156.42	801.60	354.83	3.259				
12,900.00	5,559.39	13,722.72	5,573.26	177.56	185.76	90.69	4,886.21	-6,124.43	1,156.42	797.05	359.37	3.218				
13,000.00	5,559.83	13,822.72	5,573.74	179.80	188.04	90.69	4,956.92	-6,195.14	1,156.42	792.50	363.92	3.178				
13,100.00	5,560.26	13,922.72	5,574.23	182.03	190.32	90.69	5,027.63	-6,265.85	1,156.42	787.95	368.47	3.138				
13,200.00	5,560.70	14,022.72	5,574.71	184.27	192.60	90.69	5,098.34	-6,336.56	1,156.41	783.40	373.01	3.100				
13,300.00	5,561.13	14,122.72	5,575.20	186.51	194.88	90.70	5,169.04	-6,407.27	1,156.41	778.85	377.56	3.063				
13,400.00	5,561.57	14,222.72	5,575.68	188.75	197.16	90.70	5,239.75	-6,477.98	1,156.41	774.30	382.11	3.026				
13,499.34	5,562.00	14,322.06	5,576.17	190.97	199.42	90.70	5,310.00	-6,548.23	1,156.40	769.77	386.63	2.991 SF				

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

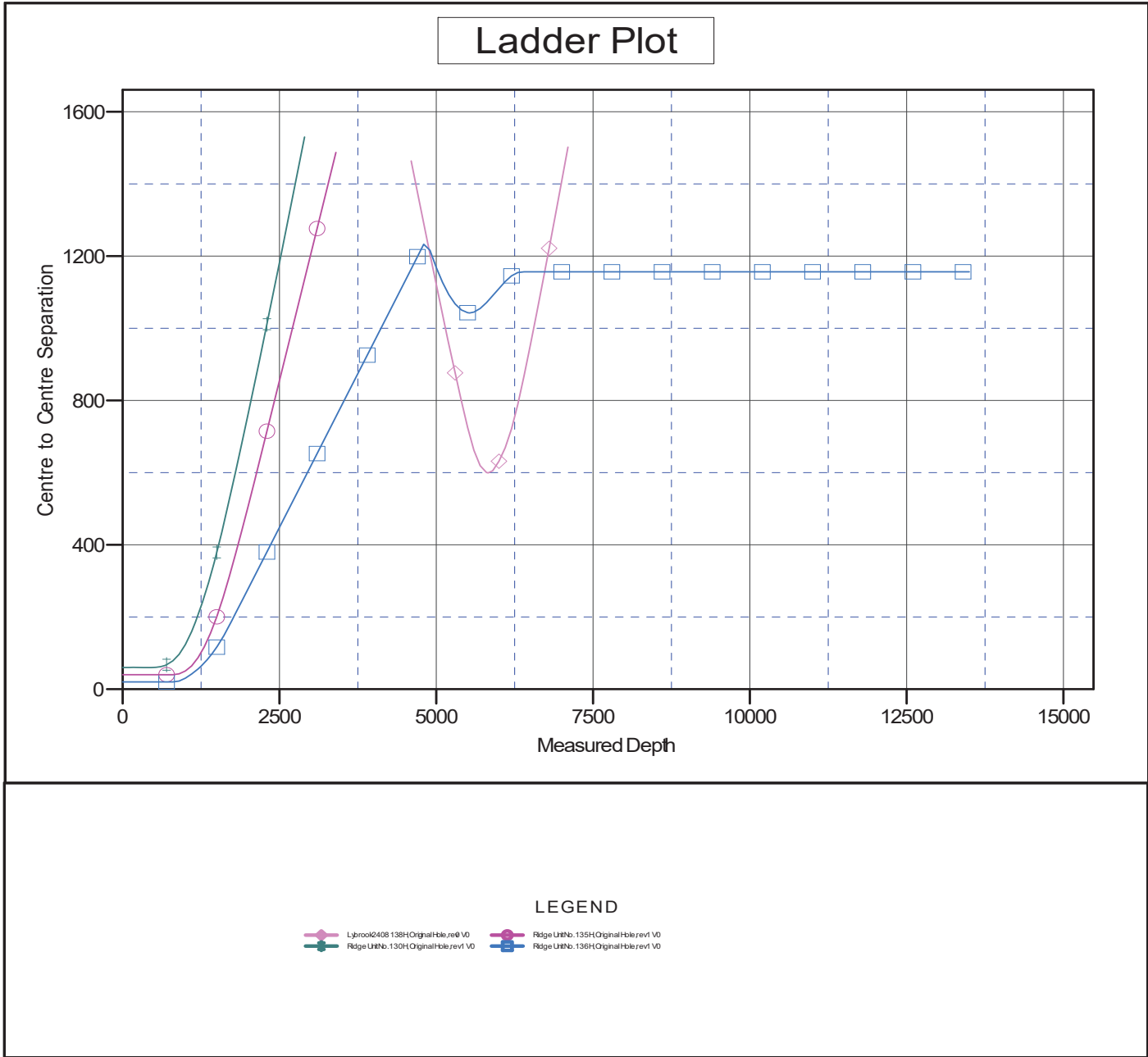


Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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. 137H
 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

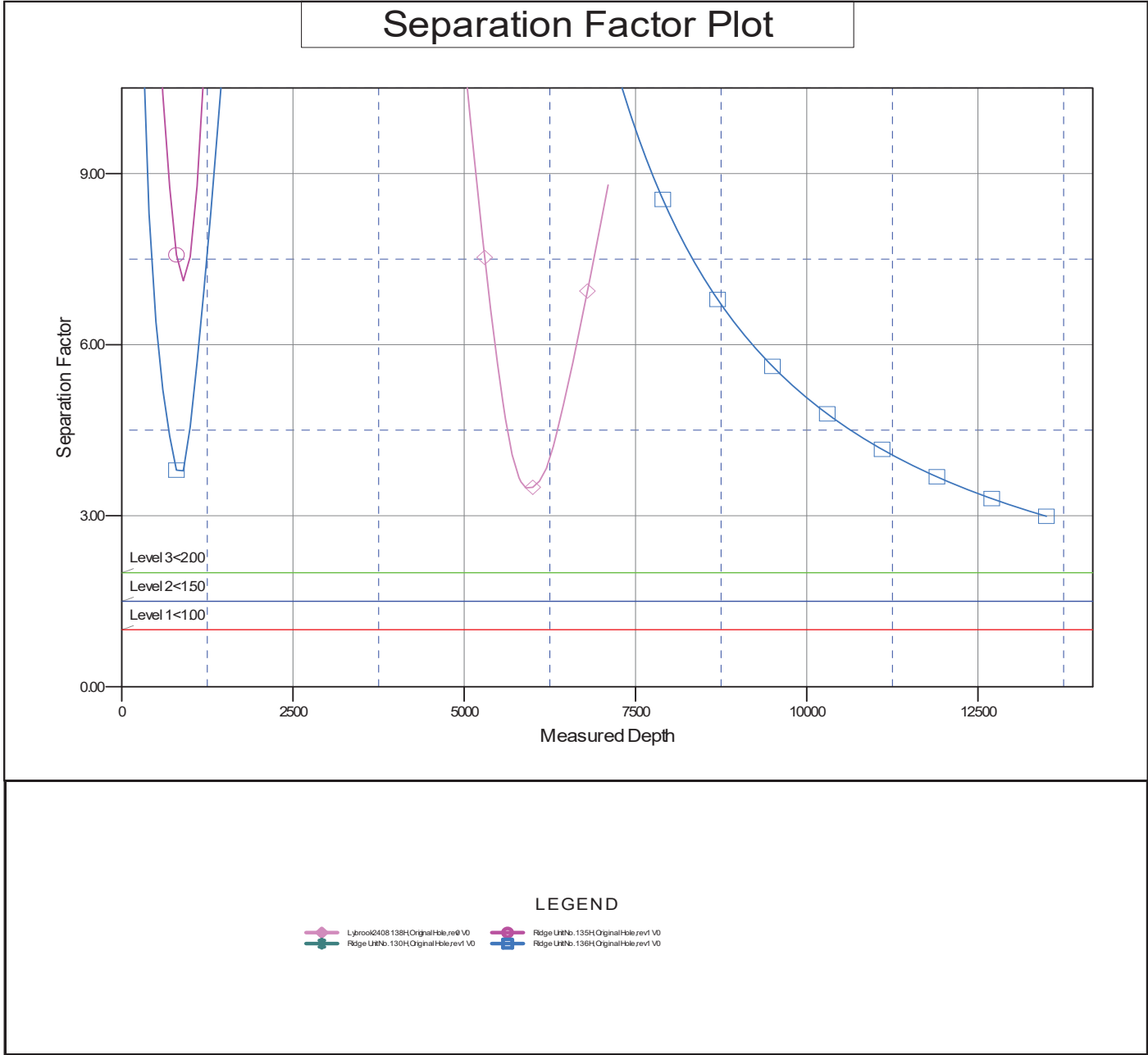


Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Ridge Unit No. 137H
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. 137H	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. 137H
 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



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
#137H RIDGE UNIT
Lease: NOG01101556 Agreement: NMNM140471X
SH: SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 26, T. 24N., R. 8W.
San Juan County, New Mexico
BH: SW $\frac{1}{4}$ 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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 413051

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID: 372286
	Action Number: 413051
	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