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

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-045-38415

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.

APPROVED

Approval Date: 11/15/2024

(Continued on page 2)

*(Instructions on page 2)

Additional Operator Remarks

Location of Well

0. SHL: SWSW / 250 FSL / 414 FWL / TWSP: 24N / RANGE: 8W / SECTION: 25 / LAT: 36.278719 / LONG: -107.640956 (TVD: 0 feet, MD: 0 feet)

PPP: SWNW / 2225 FNL / 191 FWL / TWSP: 24N / RANGE: 8W / SECTION: 36 / LAT: 36.271921 / LONG: -107.641566 (TVD: 5486 feet, MD: 6564 feet)

PPP: SWNW / 2265 FNL / 0 FWL / TWSP: 24N / RANGE: 7W / SECTION: 31 / LAT: 36.271831 / LONG: -107.624248 (TVD: 5524 feet, MD: 11669 feet)

PPP: SWNE / 2245 FNL / 2620 FWL / TWSP: 24N / RANGE: 7W / SECTION: 31 / LAT: 36.271783 / LONG: -107.615361 (TVD: 5544 feet, MD: 14289 feet)

BHL: SENE / 2224 FNL / 100 FEL / TWSP: 24N / RANGE: 7W / SECTION: 31 / LAT: 36.271738 / LONG: -107.606849 (TVD: 5564 feet, MD: 16798 feet)

BLM Point of Contact

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

Santa Fe Main Office
Phone: (505) 476-3441 Fax: (55) 476-3462
General Information
Phone: (505) 629-6116

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

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

C-102
Revised July 9, 2024
Submit Electronically via OCD Permitting

Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-045-38415	98101	LYBROOK UNIT NW HZ OIL

Property Code	Property Name	Well Number
321252	NW LYBROOK UNIT	141H

OGRID No.	Operator Name	Ground Level Elevation
372286	ENDURING RESOURCES LLC	6847

Surface Owner: ☐ State ☐ Fee ☒ Tribal ☒ Federal
Mineral Owner: ☐ State ☐ Fee ☒ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	25	24N	8W		250 SOUTH	414 WEST	36.278719	-107.640956	SAN JUAN

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	31	24N	7W		2224 NORTH	100 EAST	36.271738	-107.606849	RIO ARRIBA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
S/2 N/2-Sec 31. S/2 N/2-Sec 36. 320.45 Acres			N	UNIT

Order Numbers. R-13921
Well setbacks are under Common Ownership: ☒Yes ☐No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
E	36	24N	8W		2225 NORTH	191 WEST	36.271921	-107.641566	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
E	36	24N	8W		2225 NORTH	191 WEST	36.271921	-107.641566	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	31	24N	7W		2224 NORTH	100 EAST	36.271738	-107.606849	RIO ARRIBA

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
NW LYBROOK UNIT		

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

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

Shaw-Marie Ford — Signature
12/16/2024 — Date

Shaw-Marie Ford — Printed Name
sford@enduringresources.com — Email 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

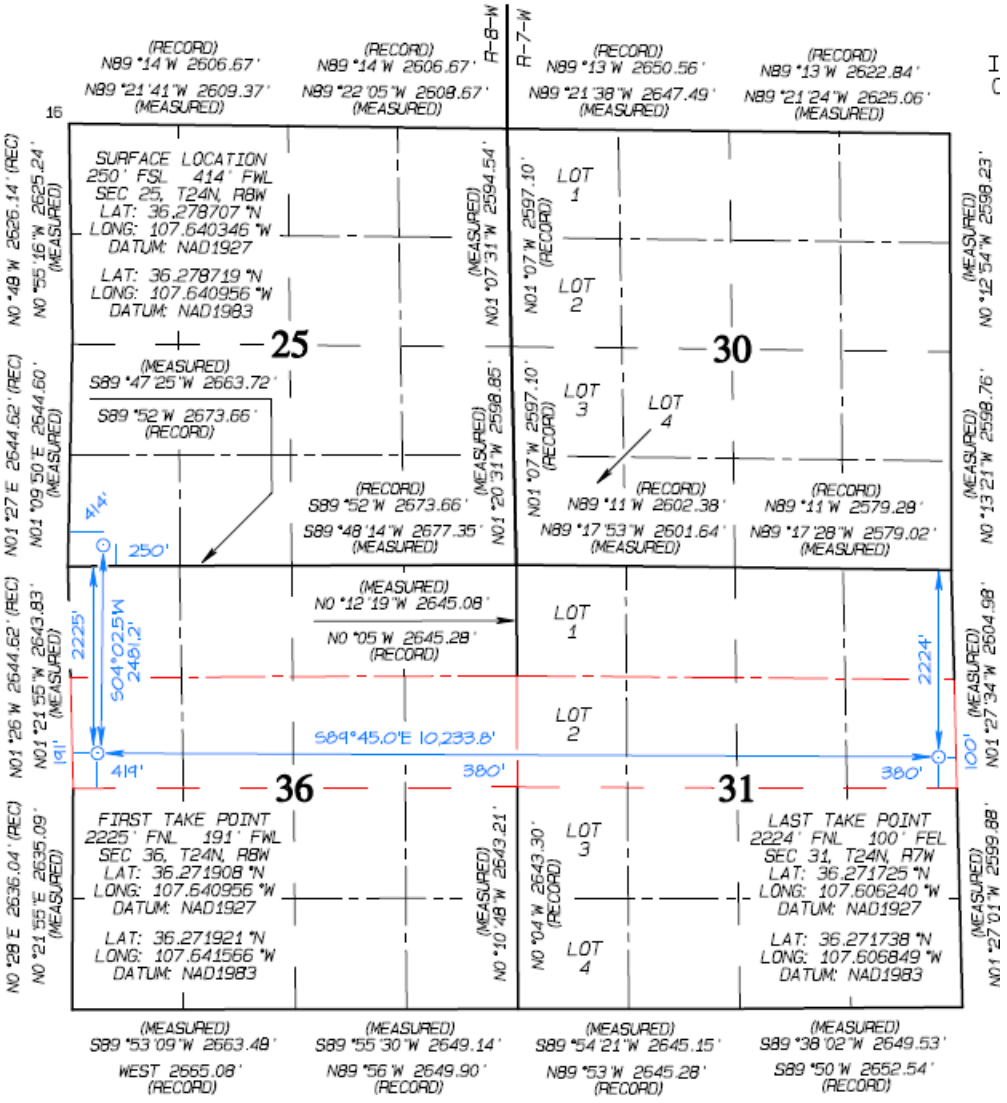
Date of Survey
FEBRUARY 4, 2023
Revised February 14, 2023

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

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



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_/_16_/_2024_

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Lybrook 2408-26 FED COM	TBD	M-25-24N-8W	266 FSL x 294 FWL	255	760	102
NW Lybrook Unit 139H	TBD	M-25-24N-8W	263 FSL x 311 FWL	276	824	111
NW Lybrook Unit 140H	TBD	M-25-24N-8W	252 FSL x 394 FWL	412	1229	165
NW Lybrook Unit 141H	TBD	M-25-24N-8W	250 FSL x 414 FWL	417	1242	167
				3-year Decline	3-year Decline	3-year Decline
Lybrook 2408-26 FED COM	TBD	M-25-24N-8W	266 FSL x 294 FWL	58	172	23
NW Lybrook Unit 139H	TBD	M-25-24N-8W	263 FSL x 311 FWL	62	186	25
NW Lybrook Unit 140H	TBD	M-25-24N-8W	252 FSL x 394 FWL	93	278	37
NW Lybrook Unit 141H	TBD	M-25-24N-8W	250 FSL x 414 FWL	94	280	38

IV. Central Delivery Point Name: _____NW Lybrook 131H CDP_____ [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
Lybrook 2408-26 FED COM 138H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
NW Lybrook Unit 139H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
NW Lybrook Unit 140H	TBD	Q3 2025	Q3 2025	Q3 2025	Q3 2025	Q3 2025
NW Lybrook Unit 141H	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:
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 12/16/2024
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
Lybrook 2408-26 FED COM 138H, NW Lybrook Unit 139H, 140H, 141H

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
Lybrook 2408-26 FED COM 138H, NW Lybrook Unit 139H, 140H, 141H

VENTING and FLARING

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

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

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

Enduring will only flare gas during the following times:

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

Enduring Resources, LLC.
NATURAL GAS MANAGEMENT and WASTE MINIMIZATION PLAN
Lybrook 2408-26 FED COM 138H, NW Lybrook Unit 139H, 140H, 141H

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 tall 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
Lybrook 2408-26 FED COM 138H, NW Lybrook Unit 139H, 140H, 141H

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, CO 80111

DRILLING PLAN: ***Drill, complete, equip single lateral Mancos formation Gallup member.***

WELL INFORMATION:

Name: **NW LYBROOK UNIT 141H**

API Number: **Not assigned yet**

State: New Mexico

County: San Juan

Surface Elevation: 6,847 ft ASL (GL) 6,872 ft ASL (KB)

Surface Location: 25-24-8 Sec-Twn-Rng 250 ft FSL 414 ft FWL
36.278719 ° N latitude 107.640956 ° W longitude (NAD 83)

BH Location: 31-24-7 Sec-Twn-Rng 2,224 ft FNL 100 ft FEL
36.271738 ° N latitude 107.606849 ° 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 43.5 mles to MM 108.3; Left (North) on County Road #7998 for 0.5 miles to fork; Left (North) continuing on Rd #7998 for 0.5 miles to T; Left (NorthWest) for 0.6 miles to acces road; Left (West) for 0.3 miles into NW Lybrook Unit 131H Pad. The 138H will be one of 4 wells to be added to an existing, 3 well pad. The 138H will be the furthest west well and furthest from the location entrance. From east to west will be NW Lybrook 141H, NW Lybrook 140H, NW Lybrook 289H (existing well). NW Lybrook 131H (existing well), Lybrook 2408 237H (existing well), NW Lybrook 139H, NW Lybrook 138H

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:

Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
Nacimiento	0	0	0	0	0
Ojo Alamo	5,650	1,222	1,240	W	normal
Kirtland	5,520	1,352	1,383	W	normal
Fruitland	5,301	1,571	1,637	G, W	sub
Pictured Cliffs	4,991	1,881	2,004	G, W	sub
Lewis	4,891	1,981	2,123	G, W	normal
Chacra A	4,582	2,290	2,490	G, W	normal
Cliff House Basal	3,489	3,383	3,788	G, W	sub
Menefee	3,484	3,388	3,794	G, W	normal
Point Lookout	2,665	4,207	4,766	G, W	normal
Mancos	2,455	4,417	5,015	O,G	normal
MNCS_A	2,096	4,776	5,442	O,G	sub (~.38)
MNCS_B	2,006	4,866	5,547	O,G	sub (~.38)
MNCS_C	1,896	4,976	5,671	O,G	sub (~.38)
MNCS_Cms	1,831	5,041	5,745	O,G	sub (~.38)
MNCS_D	1,726	5,146	5,868	O,G	sub (~.38)
MNCS_E	1,640	5,232	5,976	O,G	sub (~.38)
MNCS_F	1,580	5,292	6,061	O,G	sub (~.38)
MNCS_G	1,499	5,373	6,197	O,G	sub (~.38)
MNCS_H	1,455	5,417	6,278	O,G	sub (~.38)
MNCS I TARGET (POE)	1,402	5,470	6,433	**O,G**	sub (~.38)
FTP TARGET	1,421	5,451	6,369	**O,G**	sub (~.38)
PROJECTED WELL TD (BHL)	1,308	5,564	16,798	**O,G**	sub (~.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 125° F or less**

H_2S INFORMATION:

H_2S Zones: Encountering hydrogen-sulfide bearing zones is **NOT** anticipated.
Safety: Sensors and alarms will be placed in the substructure, on the rig floor, above the pits, and at the shakers.

LOGGING, CORING, AND TESTING:

Mud Logs: None planned; remote geo-steering from drill out of 9-5/8" casing to TD; gas detection from drillout of 13-3/8" casing to TD.
MWD surveys with inclination and azimuth in 100' stations (minimum) from drill out of 13-3/8" casing to TD;
MWD / LWD: 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 1500HP
Mast: Hyduke 600K Cantilever Triple (136 ft, 600,000 lbs)
Top Drive: NOV IDS-350PE 1000 HP
Prime Movers: 4 GE Jenbachers 1000KW 480/240 volt Nat Gas
Pumps: 2 - RS F-1600 (7,500 psi)
BOPE 1: Cameron double gate ram (13-5/8", 5,000 psi)
Int Hole 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.
3) BOP accumulator will have enough capacity to open the HCR valve, close all rams and annular preventer, and retain minimum of 200 psi above precharge on the closing manifold without the use of closing pumps. The fluid reservoir capacity shall be at least double the usable fluid volume of the accumulator system capacity, and the fluid level shall be maintained at manufacturer's recommendation. There will be two additional sources of power for the closing pumps (electric and air). Sufficient nitrogen bottles will be available and will be recharged when pressure falls below manufacturer's recommended minimum.

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

FLUIDS AND SOLIDS CONTROL PROGRAM:

Fluid Measurement:

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

Closed-Loop System: A fully, closed-loop system will be utilized. The system will consist of above-ground piping and above-ground storage tanks and bins. The system will not entail any earthen pits, below-grade storage, or drying pads. All equipment will be disassembled and removed from the site when drilling operations cease. The system will be capable of storing all fluids and generated cuttings and of preventing uncontrolled releases of the same. The system will be operated in an efficient manner to allow the recycling and reuse of as much fluid as possible and to minimimize 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 and fluid program from Newpark. Sufficient weighting agent will be on location to weight up mud system to balance the maximum expected pressure gradient.

DETAILED DRILLING PLAN:

SURFACE: *Drill vertically to casing setting depth, 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, run deviation survey after drilling

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	1,520	116,634	116,634
Min. S.F.					**7.39**	**1.80**	**7.31**	**7.79**

Assumptions: ***Collapse*** *: partially evacuated casing with 8.4 ppg fluid outside casing*
Burst *: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling intermediate hole and 8.4 ppg equivalent external pressure gradient*
Tension *: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull*

MU Torque (ft lbs): *Minumum:* *N/A* *Optimum:* *N/A* *Maximum:* *N/A*

Make-up as per API Buttress Connection running procedure.

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	Ann Cap. (cuft/ft)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)
	TYPE III	14.6	1.39	6.686	0.6946	100%	0	364

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

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

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

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

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

350 ft (MD)	to	3,977 ft (MD)	Hole Section Length:	3,627 ft
350 ft (TVD)	to	3,538 ft (TVD)	Casing Required:	3,977 ft

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	LSND (KCl)	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 with GR, inclination, and azimuth survey (every 100' at a minimum)

Logging: None

Pressure Test: NU BOPE and test (as noted above); pressure test 13-3/8" casing to **1,500** psi for 30 minutes.
Maximum anticipated surface pressure while drilling intermediate hole section is 1,350 psi

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	9.625	36.0	J55	LTC	2,020	3,520	564,000	453,000
Loading					754	1,395	211,071	211,071
Min. S.F.					**2.68**	**2.52**	**2.67**	**2.15**

Assumptions: Collapse: evacuated casing with 8.33 ppg equiv external pressure gradient, .22 psi/ft backup
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

Cement:		Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)
Stage 1	Spacer	D-Mud Breaker	8.5				0	10 bbls
	Lead	90:10 Type III:POZ	12.5	2.140	12.05	70%	0	924
	Tail	Type III	14.6	1.380	6.61	20%	3,477	150
	Displacement	304	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
	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						
Lead	ASTM Type III 90/10 Poz	D-CSE 1 5.0% BWOC Strength Enhancer	D-MPA-1 .4% BWOC Fluid Loss & Gas Migration Control	D-SA 1 1.4% BWOC Na Metasilicate	D-CD 2 .4% BWOC Dispersant	Cello Flace LCM .25 lb/sx	D-FP 1 .5% BWOC Defoamer	D-R1 .5% Retarder
Tail	ASTM Type III Blend		D-MPA-1 .4% BWOC Fluid Loss & Gas Migration Control	Cello Flace LCM .25 lb/sx				

Drake Intermediate Cementing Program

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

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

3,977	ft (MD)	to	16,798	ft (MD)	Hole Section Length: 12,821 ft
3,538	ft (TVD)	to	5,564	ft (TVD)	Casing Required: 16,798 ft

Estimated KOP:	5,500	ft (MD)	4,825	ft (TVD)
Estimated Landing Point (P.O.E.):	6,197	ft (MD)	5,470	ft (TVD)
Estimated Lateral Length:	10,601	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 with GR, inclination, and azimuth (survey every joint from KOP to Landing Point and survey every 100' minimum before KOP and after Landing Point)

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

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

Casing Specs:		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					2,749	8,128	181,621	181,621
Min. S.F.					**2.71**	**1.31**	**3.01**	**2.45**

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 Open Hole	Planned TOC (ft MD)	Total Cmt (sx)
Spacer	IntegraGuard Star	11		31.6		0	60 bbls
Lead	ASTM type I/II	12.4	2.370	13.40	50%	0	677
Tail	G:POZ blend	13.3	1.570	7.70	10%	5,015	1,899

Displacement	*370*	*est bbls*	
Annular Capacity	0.2691	cuft/ft	*5-1/2" casing x 9-5/8" casing annulus*
	0.2291	cuft/ft	*5-1/2" casing x 8-1/2" hole annulus*
	0.1245	cuft/ft	*5-1/2" casing vol* — *est shoe jt ft* 100

Calculated cement volumes assume gauge hole and the excess noted in table
American Cementing Liner & Production Blend

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

Note: This well will not be considered an unorthodox well location as definted by NMAC19.15.16.15.C.5. As defined in NMAC 19.15.16.15.C.1.a and 19.15.16.15.C.1.b, no point in the completed interval shall be closer to the unit boundary than 100' measured along the azimuth of the well or 330' measured perpendicular to the azimuth well. The boundaries of the completed interval, as defined by NMAC 19.15.16.7.B, are the last take point and first take point, as defined by NMAC 19.15.16.7.E and NMAC 19.15.16.7.J, respectively. In the case of this well, the last take point will be the bottom toe-initiation sleeve, and the first take point will be the top perforation. **Neither the toe-initiation sleeve nor the top perforation shall be closer to the unit boundary than 100' measured along the azimuth of the well or 330' measured perpendicular to the azimuth of the well.**

FINISH WELL: ***ND BOP, cap well, RDMO.***

COMPLETION AND PRODUCTION PLAN:

Est Lateral Length: 10,329

Est Frac Inform: *43 Frac Stages 166,000 bbls slick water 13,430,000 lbs proppant*

Flowback: Flow back through production tubing as pressures allow

Production: Produce through production tubing into permanent production and storage facilities

ESTIMATED START DATES:

Drilling: 2/1/2024

Completion: 5/2/2024

Production: 7/1/2024

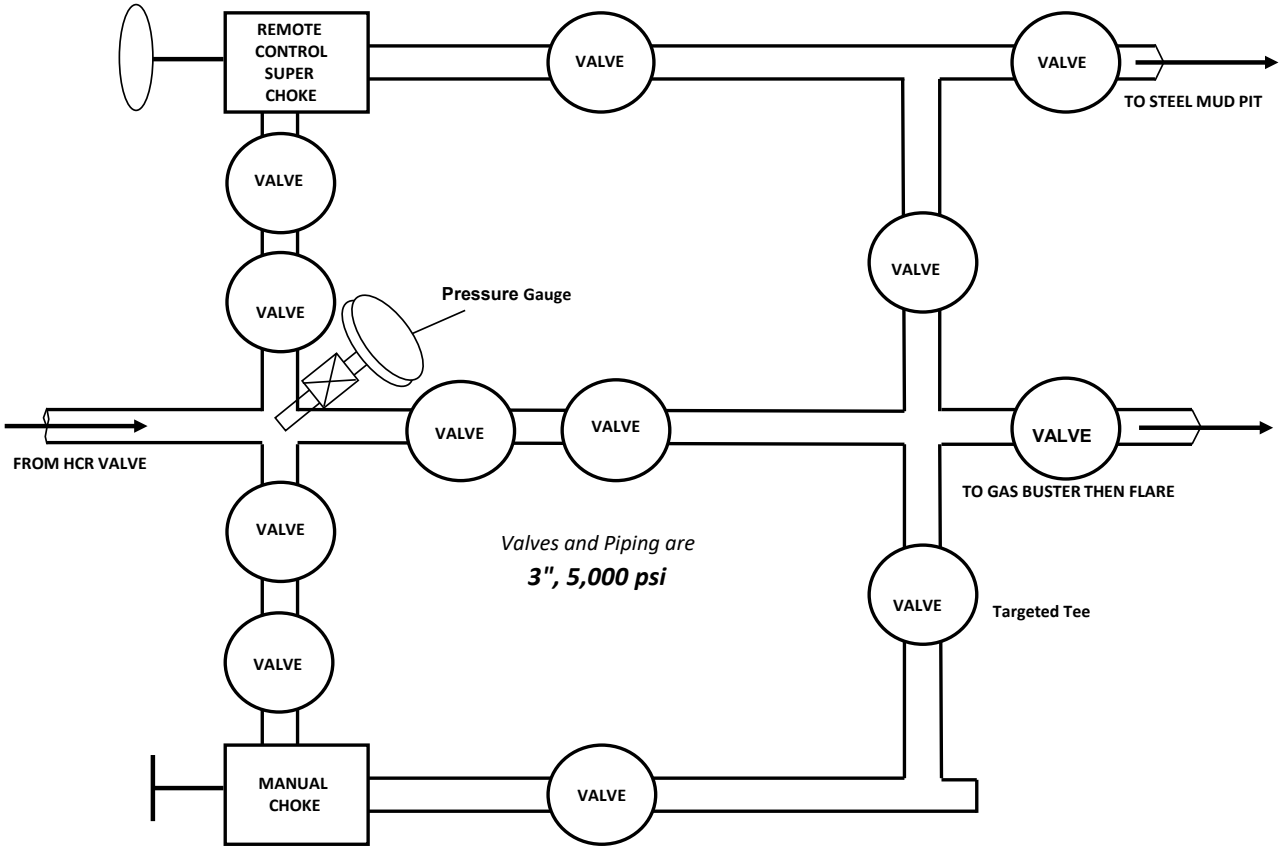
Prepared by: **Greg Olson** **8/9/2023**

Updated by:

BOPE & CHOKE MANIFOLD DIAGRAMS

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

CHOKE MANIFOLD



BOPE & CHOKE MANIFOLD DIAGRAMS

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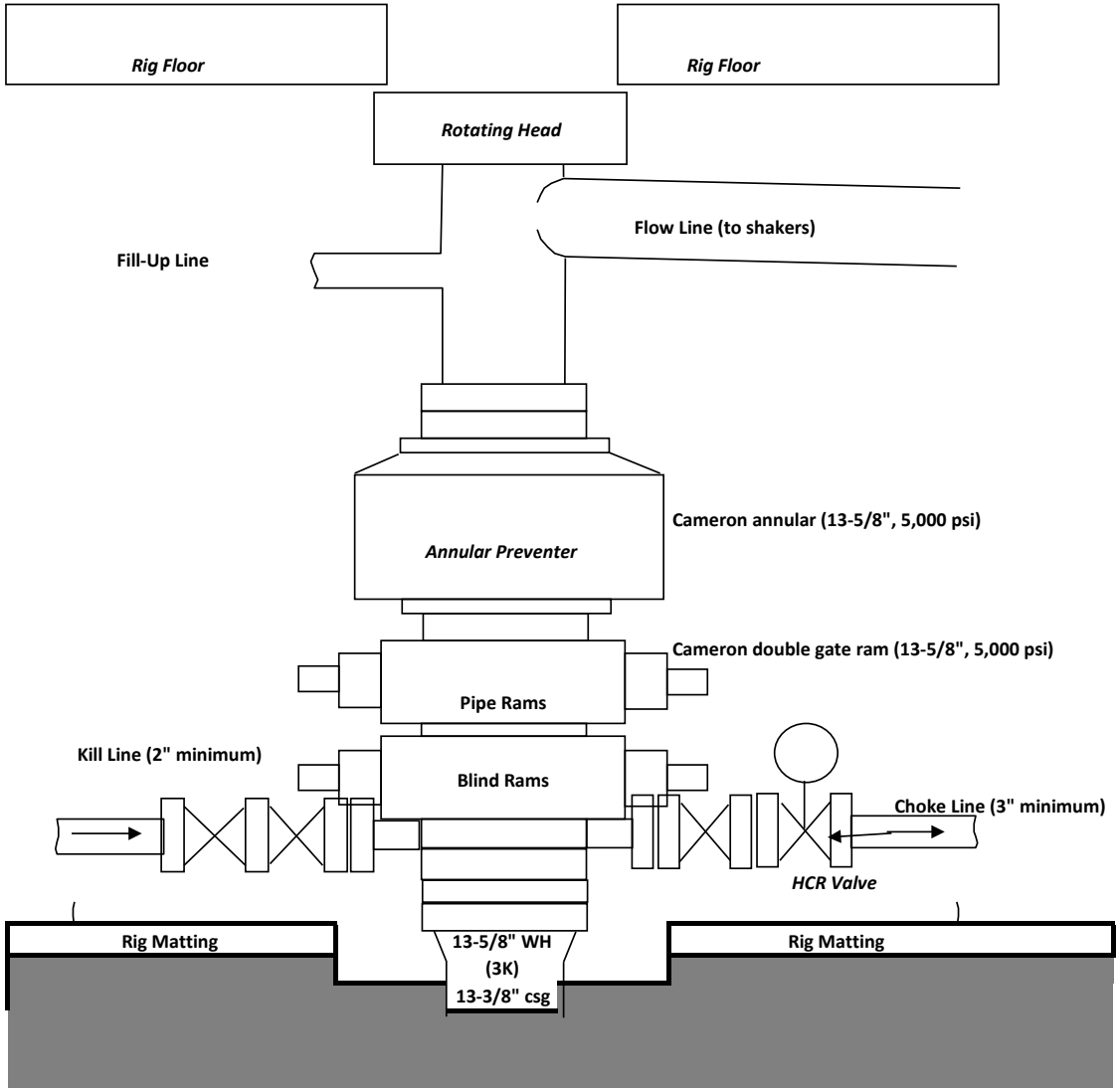
BOPE



WELL NAME: NW LYBROOK UNIT 141H

OBJECTIVE: Drill, complete, equip single lateral Mancos formation Gallup member.

API Number: Not assigned yet

State: New Mexico

County: San Juan

Surface Elev.:	6,847	ft ASL (GL)	6,872	ft ASL (KB)		
Surface Location:	25-24-8	Sec-Twn- Rng	250	ft FSL	414	ft FWL
BH Location:	31-24-7	Sec-Twn- Rng	2224	ft FNL	100	ft FEL

Driving Directions: From the intersection of US HWY 550 & US HWY 64 in Bloomfield, NM: South on US HWY 550 for 43.5 mles to MM 108.3; Left (North) on County Road #7998 for 0.5 miles to fork; Left (North) continuing on Rd #7998 for 0.5 miles to T; Left (NorthWest) for 0.6 miles to acces road; Left (West) for 0.3 miles into NW Lybrook Unit 131H Pad. The 138H will be one of 4 wells to be added to an existing, 3 well pad. The 138H will be the furthest west well and furthest from the location entrance. From east to west will be NW Lybrook 141H, NW Lybrook 140H, NW Lybrook 289H (existing well). NW Lybrook 131H (existing well), Lybrook 2408 237H (existing well), NW Lybrook 139H, NW Lybrook 138H

QUICK REFERENCE		
Sur TD (MD)	350	ft
Int TD (MD)	3,977	ft
KOP (MD)	5,500	ft
KOP (TVD)	4,825	ft
Target (TVD)	5,470	ft
Curve BUR	10	°/100 ft
POE (MD)	6,197	ft
TD (MD)	16,798	ft
Lat Len (ft)	10,601	ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	3,977	9.625	36	J55	LTC	0	3,977
Production	8.500	16,798	5.500	17.0	P-110	LTC	0	16,798

CEMENT PROPERTIES SUMMARY:

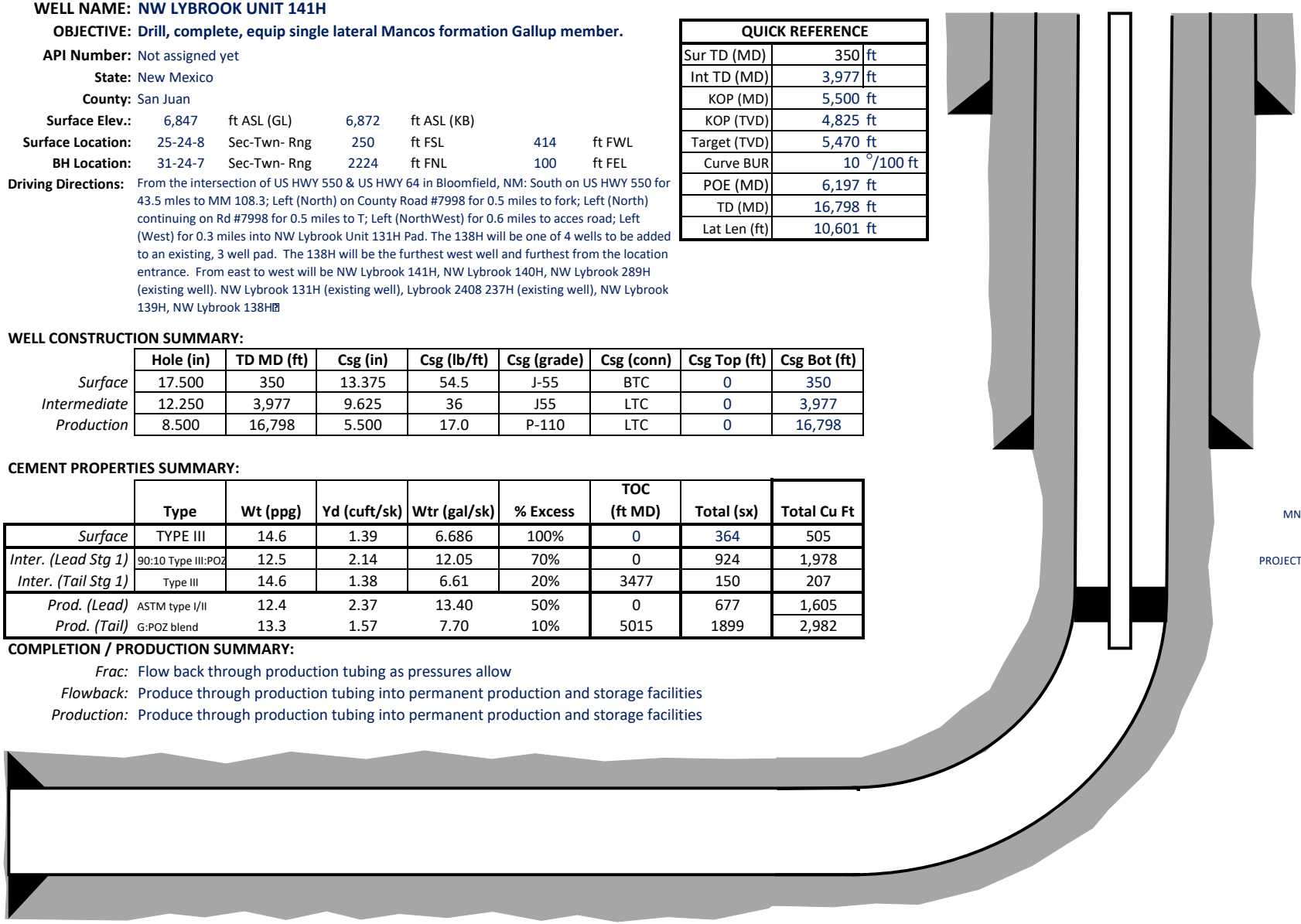
	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	% Excess	TOC (ft MD)	Total (sx)	Total Cu Ft
Surface	TYPE III	14.6	1.39	6.686	100%	0	364	505
Inter. (Lead Stg 1)	90:10 Type III:POZ	12.5	2.14	12.05	70%	0	924	1,978
Inter. (Tail Stg 1)	Type III	14.6	1.38	6.61	20%	3477	150	207
Prod. (Lead)	ASTM type I/II	12.4	2.37	13.40	50%	0	677	1,605
Prod. (Tail)	G:POZ blend	13.3	1.57	7.70	10%	5015	1899	2,982

COMPLETION / PRODUCTION SUMMARY:

Frac: Flow back through production tubing as pressures allow

Flowback: Produce through production tubing into permanent production and storage facilities

Production: Produce through production tubing into permanent production and storage facilities



Formation Tops	TVD (ft KB)	MD (ft KB)
Nacimiento	0	0
Ojo Alamo	1,222	1,240
Kirtland	1,352	1,383
Fruitland	1,571	1,637
Pictured Cliffs	1,881	2,004
Lewis	1,981	2,123
Chacra A	2,290	2,490
Cliff House Basal	3,383	3,788
Menefee	3,388	3,794
Point Lookout	4,207	4,766
Mancos	4,417	5,015
MNCS_A	4,776	5,442
MNCS_B	4,866	5,547
MNCS_C	4,976	5,671
MNCS_Cms	5,041	5,745
MNCS_D	5,146	5,868
MNCS_E	5,232	5,976
MNCS_F	5,292	6,061
MNCS_G	5,373	6,197
MNCS_H	5,417	6,278
MNCS I TARGET (POE)	5,470	6,433
FTP TARGET	5,451	6,369
PROJECTED WELL TD (BHL)	5,564	16,798

Well: NW Lybrook Unit 141H
Site: NW Lybrook (138, 139, 140 & 141)
Project: San Juan County, New Mexico NAD83 NM W
Design: rev0
Rig:

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone

System Datum: Mean Sea Level
Depth Reference: RKB=6847+25 @ 6872.00ft
Surface location:

Northing	Easting	Latitude	Longitude
1920809.237	2779793.583	36.278719000	-107.640956000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 8.47°

T G M

Azimuths to Grid North
True North: -0.11°
Magnetic North: 8.47°

Magnetic Field
Strength: 49177.6nT
Dip Angle: 62.77°
Date: 2/20/2023
Model: IGRF2020

MARKSMAN DIRECTIONAL

Section Details

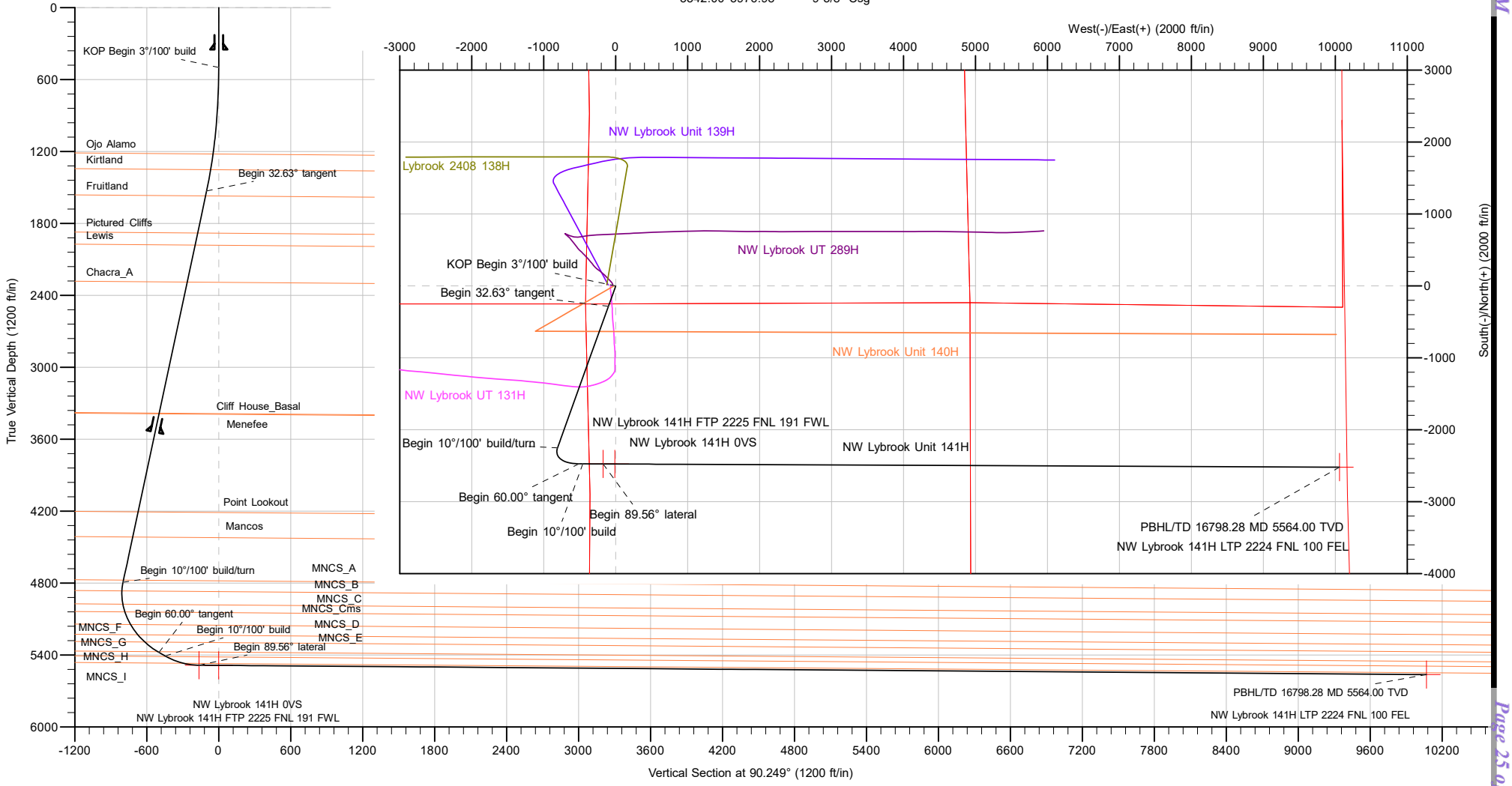
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Annotation
1	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3°/100' build
3	1587.70	32.63	199.741	1529.85	-283.74	-101.82	3.00	199.74	-100.59	Begin 32.63° tangent
4	5462.42	32.63	199.741	4792.98	-2250.30	-807.54	0.00	0.00	-797.75	Begin 10°/100' build/turn
5	6208.60	60.00	90.249	5378.99	-2473.54	-508.94	10.00	-122.14	-498.19	Begin 60.00° tangent
6	6268.60	60.00	90.249	5408.99	-2473.77	-456.98	0.00	0.00	-446.23	Begin 10°/100' build
7	6564.22	89.56	90.249	5485.74	-2475.00	-174.89	10.00	0.00	-164.13	Begin 89.56° lateral
8	16798.28	89.56	90.249	5564.00	-2519.52	10058.79	0.00	0.00	10069.64	PBHL/TD 16798.28 MD 5564.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
NW Lybrook 141H FTP 2225 FNL 191 FWL	5485.74	-2475.00	-174.89	1918334.238	2779618.690	36.271921000	-107.641566000
NW Lybrook 141H 0VS	5487.00	-2475.72	-10.77	1918333.520	2779782.810	36.271918132	-107.641009233
NW Lybrook 141H LTP 2224 FNL 100 FEL	5564.00	-2519.52	10058.79	1918289.720	2789852.349	36.271738000	-107.606849000

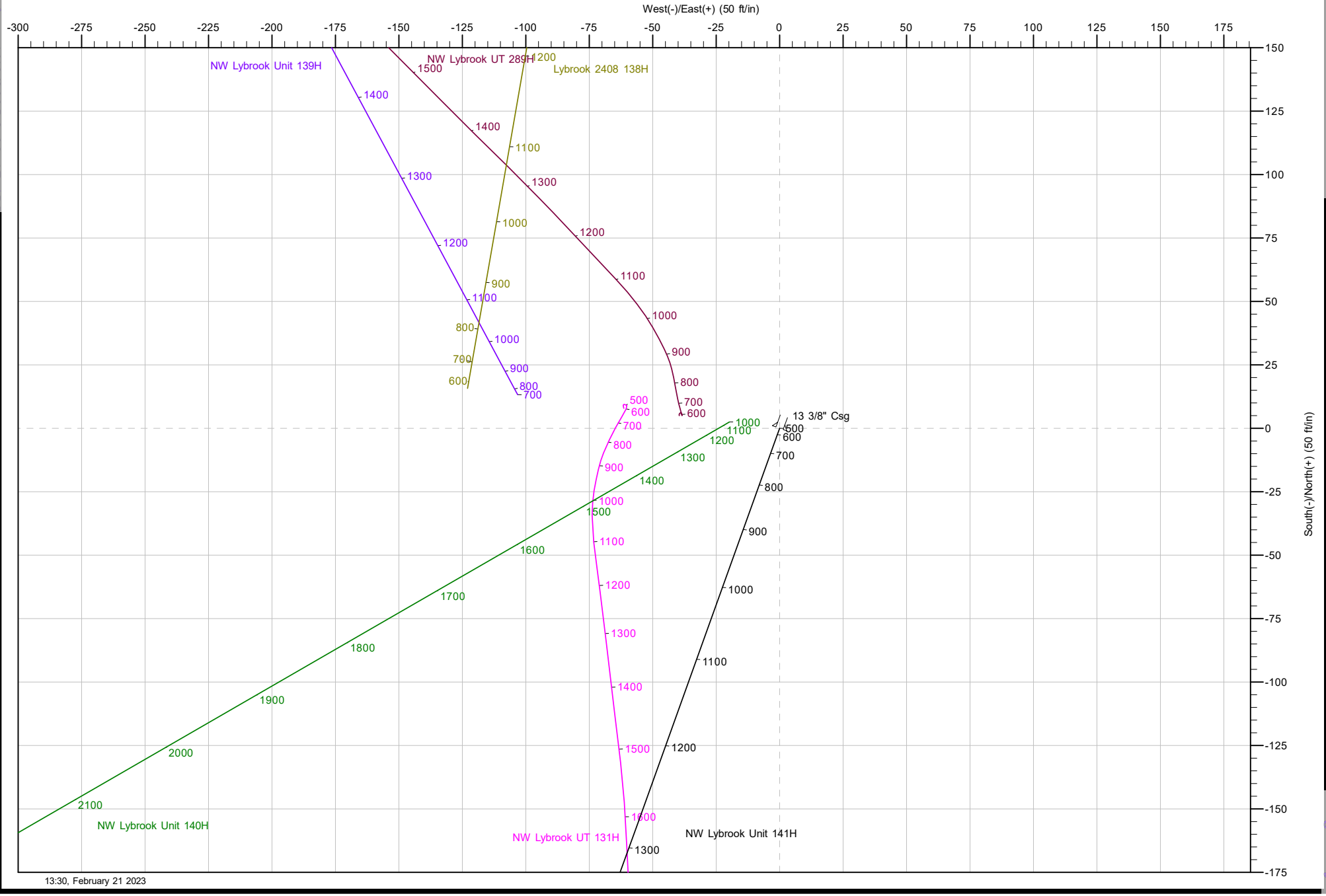
CASING DETAILS

TVD	MD	Name
350.00	350.00	13 3/8" Csg
3542.00	3976.98	9 5/8" Csg



Well: NW Lybrook Unit 141H
Site: NW Lybrook (138, 139, 140 & 141)
Project: San Juan County, New Mexico NAD83 NM W
Design: rev0
Rig:

MARKSMAN DIRECTIONAL



Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project San Juan County, New Mexico NAD83 NM W

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site NW Lybrook (138, 139, 140 & 141)

Site Position:		**Northing:**	1,920,822.501 usft	**Latitude:**	36.278756000
From:	Lat/Long	**Easting:**	2,779,690.396 usft	**Longitude:**	-107.641306000
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "		

Well NW Lybrook Unit 141H, Surf loc: 250 FSL 414 FWL Section 25-T24N-R08W

Well Position	**+N/-S**	0.00 ft	**Northing:**	1,920,809.237 usft	**Latitude:**	36.278719000
	+E/-W	0.00 ft	**Easting:**	2,779,793.583 usft	**Longitude:**	-107.640956000
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,847.00 ft
Grid Convergence:		0.11 °				

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2/20/2023	8.59	62.77	49,177.63140137

Design rev0

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	90.249

Plan Survey Tool Program **Date** 2/21/2023

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,798.28	rev0 (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	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,587.70	32.63	199.741	1,529.85	-283.74	-101.82	3.00	3.00	0.00	199.74	
5,462.42	32.63	199.741	4,792.98	-2,250.30	-807.54	0.00	0.00	0.00	0.00	
6,208.60	60.00	90.249	5,378.99	-2,473.54	-508.94	10.00	3.67	-14.67	-122.14	
6,268.60	60.00	90.249	5,408.99	-2,473.77	-456.98	0.00	0.00	0.00	0.00	
6,564.22	89.56	90.249	5,485.74	-2,475.00	-174.89	10.00	10.00	0.00	0.00	
16,798.28	89.56	90.249	5,564.00	-2,519.52	10,058.79	0.00	0.00	0.00	0.00	NW Lybrook 141H LT

Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
350.00	0.00	0.000	350.00	0.00	0.00	0.00	0.00	0.00	0.00
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
KOP Begin 3°/100' build									
600.00	3.00	199.741	599.95	-2.46	-0.88	-0.87	3.00	3.00	0.00
700.00	6.00	199.741	699.63	-9.85	-3.53	-3.49	3.00	3.00	0.00
800.00	9.00	199.741	798.77	-22.13	-7.94	-7.85	3.00	3.00	0.00
900.00	12.00	199.741	897.08	-39.28	-14.10	-13.93	3.00	3.00	0.00
1,000.00	15.00	199.741	994.31	-61.25	-21.98	-21.71	3.00	3.00	0.00
1,100.00	18.00	199.741	1,090.18	-87.98	-31.57	-31.19	3.00	3.00	0.00
1,200.00	21.00	199.741	1,184.43	-119.40	-42.85	-42.33	3.00	3.00	0.00
1,240.02	22.20	199.741	1,221.64	-133.26	-47.82	-47.24	3.00	3.00	0.00
Ojo Alamo									
1,300.00	24.00	199.741	1,276.81	-155.41	-55.77	-55.09	3.00	3.00	0.00
1,382.57	26.48	199.741	1,351.49	-188.55	-67.66	-66.84	3.00	3.00	0.00
Kirtland									
1,400.00	27.00	199.741	1,367.06	-195.93	-70.31	-69.46	3.00	3.00	0.00
1,500.00	30.00	199.741	1,454.93	-240.83	-86.43	-85.38	3.00	3.00	0.00
1,587.70	32.63	199.741	1,529.85	-283.74	-101.82	-100.59	3.00	3.00	0.00
Begin 32.63° tangent									
1,600.00	32.63	199.741	1,540.21	-289.98	-104.06	-102.80	0.00	0.00	0.00
1,636.76	32.63	199.741	1,571.16	-308.63	-110.76	-109.41	0.00	0.00	0.00
Fruitland									
1,700.00	32.63	199.741	1,624.42	-340.73	-122.27	-120.79	0.00	0.00	0.00
1,800.00	32.63	199.741	1,708.64	-391.48	-140.49	-138.78	0.00	0.00	0.00
1,900.00	32.63	199.741	1,792.85	-442.24	-158.70	-156.78	0.00	0.00	0.00
2,000.00	32.63	199.741	1,877.07	-492.99	-176.91	-174.77	0.00	0.00	0.00
2,004.26	32.63	199.741	1,880.66	-495.15	-177.69	-175.54	0.00	0.00	0.00
Pictured Cliffs									
2,100.00	32.63	199.741	1,961.29	-543.75	-195.13	-192.76	0.00	0.00	0.00
2,122.81	32.63	199.741	1,980.49	-555.32	-199.28	-196.87	0.00	0.00	0.00
Lewis									
2,200.00	32.63	199.741	2,045.50	-594.50	-213.34	-210.75	0.00	0.00	0.00
2,300.00	32.63	199.741	2,129.72	-645.25	-231.55	-228.75	0.00	0.00	0.00
2,400.00	32.63	199.741	2,213.93	-696.01	-249.77	-246.74	0.00	0.00	0.00
2,490.31	32.63	199.741	2,289.99	-741.84	-266.22	-262.99	0.00	0.00	0.00
Chacra_A									
2,500.00	32.63	199.741	2,298.15	-746.76	-267.98	-264.73	0.00	0.00	0.00
2,600.00	32.63	199.741	2,382.37	-797.51	-286.19	-282.72	0.00	0.00	0.00
2,700.00	32.63	199.741	2,466.58	-848.27	-304.41	-300.72	0.00	0.00	0.00
2,800.00	32.63	199.741	2,550.80	-899.02	-322.62	-318.71	0.00	0.00	0.00
2,900.00	32.63	199.741	2,635.01	-949.78	-340.83	-336.70	0.00	0.00	0.00
3,000.00	32.63	199.741	2,719.23	-1,000.53	-359.05	-354.70	0.00	0.00	0.00
3,100.00	32.63	199.741	2,803.44	-1,051.28	-377.26	-372.69	0.00	0.00	0.00
3,200.00	32.63	199.741	2,887.66	-1,102.04	-395.47	-390.68	0.00	0.00	0.00
3,300.00	32.63	199.741	2,971.88	-1,152.79	-413.69	-408.67	0.00	0.00	0.00
3,400.00	32.63	199.741	3,056.09	-1,203.55	-431.90	-426.67	0.00	0.00	0.00
3,500.00	32.63	199.741	3,140.31	-1,254.30	-450.11	-444.66	0.00	0.00	0.00

Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,600.00	32.63	199.741	3,224.52	-1,305.05	-468.33	-462.65	0.00	0.00	0.00
3,700.00	32.63	199.741	3,308.74	-1,355.81	-486.54	-480.64	0.00	0.00	0.00
3,788.42	32.63	199.741	3,383.20	-1,400.68	-502.64	-496.55	0.00	0.00	0.00
Cliff House_Basal									
3,794.35	32.63	199.741	3,388.19	-1,403.69	-503.72	-497.62	0.00	0.00	0.00
Menefee									
3,800.00	32.63	199.741	3,392.96	-1,406.56	-504.75	-498.64	0.00	0.00	0.00
3,900.00	32.63	199.741	3,477.17	-1,457.31	-522.97	-516.63	0.00	0.00	0.00
3,976.98	32.63	199.741	3,542.00	-1,496.38	-536.99	-530.48	0.00	0.00	0.00
9 5/8" Csg									
4,000.00	32.63	199.741	3,561.39	-1,508.07	-541.18	-534.62	0.00	0.00	0.00
4,100.00	32.63	199.741	3,645.60	-1,558.82	-559.39	-552.61	0.00	0.00	0.00
4,200.00	32.63	199.741	3,729.82	-1,609.58	-577.61	-570.61	0.00	0.00	0.00
4,300.00	32.63	199.741	3,814.04	-1,660.33	-595.82	-588.60	0.00	0.00	0.00
4,400.00	32.63	199.741	3,898.25	-1,711.08	-614.03	-606.59	0.00	0.00	0.00
4,500.00	32.63	199.741	3,982.47	-1,761.84	-632.25	-624.58	0.00	0.00	0.00
4,600.00	32.63	199.741	4,066.68	-1,812.59	-650.46	-642.58	0.00	0.00	0.00
4,700.00	32.63	199.741	4,150.90	-1,863.34	-668.67	-660.57	0.00	0.00	0.00
4,766.44	32.63	199.741	4,206.86	-1,897.07	-680.78	-672.52	0.00	0.00	0.00
Point Lookout									
4,800.00	32.63	199.741	4,235.12	-1,914.10	-686.89	-678.56	0.00	0.00	0.00
4,900.00	32.63	199.741	4,319.33	-1,964.85	-705.10	-696.55	0.00	0.00	0.00
5,000.00	32.63	199.741	4,403.55	-2,015.61	-723.31	-714.55	0.00	0.00	0.00
5,015.40	32.63	199.741	4,416.51	-2,023.42	-726.12	-717.32	0.00	0.00	0.00
Mancos									
5,100.00	32.63	199.741	4,487.76	-2,066.36	-741.53	-732.54	0.00	0.00	0.00
5,200.00	32.63	199.741	4,571.98	-2,117.11	-759.74	-750.53	0.00	0.00	0.00
5,300.00	32.63	199.741	4,656.20	-2,167.87	-777.95	-768.52	0.00	0.00	0.00
5,400.00	32.63	199.741	4,740.41	-2,218.62	-796.17	-786.52	0.00	0.00	0.00
5,442.17	32.63	199.741	4,775.93	-2,240.02	-803.85	-794.11	0.00	0.00	0.00
MNCS_A									
5,462.42	32.63	199.741	4,792.98	-2,250.30	-807.54	-797.75	0.00	0.00	0.00
Begin 10°/100' build/turn									
5,500.00	30.78	193.515	4,824.96	-2,269.19	-813.21	-803.34	10.00	-4.93	-16.57
5,547.10	28.93	184.803	4,865.83	-2,292.28	-816.98	-807.01	10.00	-3.93	-18.50
MNCS_B									
5,550.00	28.83	184.236	4,868.37	-2,293.67	-817.09	-807.11	10.00	-3.26	-19.57
5,600.00	27.60	173.976	4,912.45	-2,317.23	-816.76	-806.69	10.00	-2.47	-20.52
5,650.00	27.17	163.132	4,956.88	-2,339.68	-812.23	-802.06	10.00	-0.86	-21.69
5,671.38	27.24	158.457	4,975.89	-2,348.91	-809.02	-798.81	10.00	0.34	-21.87
MNCS_C									
5,700.00	27.58	152.281	5,001.31	-2,360.87	-803.53	-793.27	10.00	1.18	-21.58
5,745.01	28.64	142.991	5,041.02	-2,378.71	-792.19	-781.84	10.00	2.36	-20.64
MNCS_Cms									
5,750.00	28.80	142.004	5,045.40	-2,380.62	-790.73	-780.37	10.00	3.12	-19.77
5,800.00	30.73	132.701	5,088.83	-2,398.78	-773.91	-763.48	10.00	3.86	-18.61
5,850.00	33.25	124.535	5,131.25	-2,415.23	-753.22	-742.72	10.00	5.03	-16.33
5,868.21	34.28	121.843	5,146.39	-2,420.76	-744.75	-734.23	10.00	5.70	-14.79
MNCS_D									
5,900.00	36.23	117.480	5,172.35	-2,429.82	-728.81	-718.24	10.00	6.11	-13.72
5,950.00	39.56	111.412	5,211.82	-2,442.46	-700.86	-690.24	10.00	6.67	-12.14
5,976.34	41.44	108.559	5,231.85	-2,448.30	-684.78	-674.14	10.00	7.11	-10.83
MNCS_E									

Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,000.00	43.18	106.173	5,249.34	-2,453.05	-669.58	-658.92	10.00	7.35	-10.08
6,050.00	46.99	101.612	5,284.65	-2,461.50	-635.23	-624.52	10.00	7.64	-9.12
6,061.29	47.88	100.661	5,292.29	-2,463.10	-627.07	-616.36	10.00	7.85	-8.42
MNCS_F									
6,100.00	50.97	97.595	5,317.46	-2,467.75	-598.04	-587.31	10.00	7.99	-7.92
6,150.00	55.07	94.013	5,347.54	-2,471.75	-558.32	-547.57	10.00	8.20	-7.16
6,197.02	59.02	90.961	5,373.11	-2,473.44	-518.92	-508.16	10.00	8.39	-6.49
MNCS_G									
6,200.00	59.27	90.776	5,374.64	-2,473.48	-516.36	-505.61	10.00	8.47	-6.20
6,208.60	60.00	90.249	5,378.99	-2,473.54	-508.94	-498.19	10.00	8.49	-6.13
Begin 60.00° tangent									
6,268.60	60.00	90.249	5,408.99	-2,473.77	-456.98	-446.23	0.00	0.00	0.00
Begin 10°/100' build									
6,278.06	60.95	90.249	5,413.65	-2,473.81	-448.75	-438.00	10.00	10.00	0.00
MNCS_H									
6,300.00	63.14	90.249	5,423.94	-2,473.89	-429.37	-418.61	10.00	10.00	0.00
6,350.00	68.14	90.249	5,444.55	-2,474.09	-383.84	-373.08	10.00	10.00	0.00
6,400.00	73.14	90.249	5,461.12	-2,474.29	-336.68	-325.92	10.00	10.00	0.00
6,432.87	76.43	90.249	5,469.75	-2,474.43	-304.97	-294.21	10.00	10.00	0.00
MNCS_I									
6,450.00	78.14	90.249	5,473.52	-2,474.50	-288.26	-277.50	10.00	10.00	0.00
6,500.00	83.14	90.249	5,481.65	-2,474.72	-238.94	-228.18	10.00	10.00	0.00
6,550.00	88.14	90.249	5,485.45	-2,474.93	-189.10	-178.34	10.00	10.00	0.00
6,564.22	89.56	90.249	5,485.74	-2,475.00	-174.89	-164.13	10.00	10.00	0.00
Begin 89.56° lateral									
6,600.00	89.56	90.249	5,486.01	-2,475.15	-139.10	-128.35	0.00	0.00	0.00
6,700.00	89.56	90.249	5,486.77	-2,475.59	-39.11	-28.35	0.00	0.00	0.00
6,800.00	89.56	90.249	5,487.54	-2,476.02	60.89	71.65	0.00	0.00	0.00
6,900.00	89.56	90.249	5,488.30	-2,476.46	160.89	171.65	0.00	0.00	0.00
7,000.00	89.56	90.249	5,489.07	-2,476.89	260.88	271.64	0.00	0.00	0.00
7,100.00	89.56	90.249	5,489.83	-2,477.33	360.88	371.64	0.00	0.00	0.00
7,200.00	89.56	90.249	5,490.60	-2,477.76	460.87	471.64	0.00	0.00	0.00
7,300.00	89.56	90.249	5,491.36	-2,478.20	560.87	571.63	0.00	0.00	0.00
7,400.00	89.56	90.249	5,492.13	-2,478.63	660.87	671.63	0.00	0.00	0.00
7,500.00	89.56	90.249	5,492.89	-2,479.07	760.86	771.63	0.00	0.00	0.00
7,600.00	89.56	90.249	5,493.66	-2,479.50	860.86	871.63	0.00	0.00	0.00
7,700.00	89.56	90.249	5,494.42	-2,479.94	960.85	971.62	0.00	0.00	0.00
7,800.00	89.56	90.249	5,495.19	-2,480.37	1,060.85	1,071.62	0.00	0.00	0.00
7,900.00	89.56	90.249	5,495.95	-2,480.81	1,160.85	1,171.62	0.00	0.00	0.00
8,000.00	89.56	90.249	5,496.72	-2,481.24	1,260.84	1,271.61	0.00	0.00	0.00
8,100.00	89.56	90.249	5,497.48	-2,481.68	1,360.84	1,371.61	0.00	0.00	0.00
8,200.00	89.56	90.249	5,498.24	-2,482.11	1,460.83	1,471.61	0.00	0.00	0.00
8,300.00	89.56	90.249	5,499.01	-2,482.55	1,560.83	1,571.61	0.00	0.00	0.00
8,400.00	89.56	90.249	5,499.77	-2,482.98	1,660.83	1,671.60	0.00	0.00	0.00
8,500.00	89.56	90.249	5,500.54	-2,483.42	1,760.82	1,771.60	0.00	0.00	0.00
8,600.00	89.56	90.249	5,501.30	-2,483.85	1,860.82	1,871.60	0.00	0.00	0.00
8,700.00	89.56	90.249	5,502.07	-2,484.29	1,960.82	1,971.59	0.00	0.00	0.00
8,800.00	89.56	90.249	5,502.83	-2,484.72	2,060.81	2,071.59	0.00	0.00	0.00
8,900.00	89.56	90.249	5,503.60	-2,485.16	2,160.81	2,171.59	0.00	0.00	0.00
9,000.00	89.56	90.249	5,504.36	-2,485.59	2,260.80	2,271.58	0.00	0.00	0.00
9,100.00	89.56	90.249	5,505.13	-2,486.03	2,360.80	2,371.58	0.00	0.00	0.00
9,200.00	89.56	90.249	5,505.89	-2,486.46	2,460.80	2,471.58	0.00	0.00	0.00
9,300.00	89.56	90.249	5,506.66	-2,486.90	2,560.79	2,571.58	0.00	0.00	0.00

Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,400.00	89.56	90.249	5,507.42	-2,487.33	2,660.79	2,671.57	0.00	0.00	0.00
9,500.00	89.56	90.249	5,508.19	-2,487.77	2,760.78	2,771.57	0.00	0.00	0.00
9,600.00	89.56	90.249	5,508.95	-2,488.20	2,860.78	2,871.57	0.00	0.00	0.00
9,700.00	89.56	90.249	5,509.72	-2,488.64	2,960.78	2,971.56	0.00	0.00	0.00
9,800.00	89.56	90.249	5,510.48	-2,489.07	3,060.77	3,071.56	0.00	0.00	0.00
9,900.00	89.56	90.249	5,511.25	-2,489.51	3,160.77	3,171.56	0.00	0.00	0.00
10,000.00	89.56	90.249	5,512.01	-2,489.94	3,260.77	3,271.56	0.00	0.00	0.00
10,100.00	89.56	90.249	5,512.78	-2,490.38	3,360.76	3,371.55	0.00	0.00	0.00
10,200.00	89.56	90.249	5,513.54	-2,490.82	3,460.76	3,471.55	0.00	0.00	0.00
10,300.00	89.56	90.249	5,514.30	-2,491.25	3,560.75	3,571.55	0.00	0.00	0.00
10,400.00	89.56	90.249	5,515.07	-2,491.69	3,660.75	3,671.54	0.00	0.00	0.00
10,500.00	89.56	90.249	5,515.83	-2,492.12	3,760.75	3,771.54	0.00	0.00	0.00
10,600.00	89.56	90.249	5,516.60	-2,492.56	3,860.74	3,871.54	0.00	0.00	0.00
10,700.00	89.56	90.249	5,517.36	-2,492.99	3,960.74	3,971.53	0.00	0.00	0.00
10,800.00	89.56	90.249	5,518.13	-2,493.43	4,060.73	4,071.53	0.00	0.00	0.00
10,900.00	89.56	90.249	5,518.89	-2,493.86	4,160.73	4,171.53	0.00	0.00	0.00
11,000.00	89.56	90.249	5,519.66	-2,494.30	4,260.73	4,271.53	0.00	0.00	0.00
11,100.00	89.56	90.249	5,520.42	-2,494.73	4,360.72	4,371.52	0.00	0.00	0.00
11,200.00	89.56	90.249	5,521.19	-2,495.17	4,460.72	4,471.52	0.00	0.00	0.00
11,300.00	89.56	90.249	5,521.95	-2,495.60	4,560.71	4,571.52	0.00	0.00	0.00
11,400.00	89.56	90.249	5,522.72	-2,496.04	4,660.71	4,671.51	0.00	0.00	0.00
11,500.00	89.56	90.249	5,523.48	-2,496.47	4,760.71	4,771.51	0.00	0.00	0.00
11,600.00	89.56	90.249	5,524.25	-2,496.91	4,860.70	4,871.51	0.00	0.00	0.00
11,700.00	89.56	90.249	5,525.01	-2,497.34	4,960.70	4,971.51	0.00	0.00	0.00
11,800.00	89.56	90.249	5,525.78	-2,497.78	5,060.70	5,071.50	0.00	0.00	0.00
11,900.00	89.56	90.249	5,526.54	-2,498.21	5,160.69	5,171.50	0.00	0.00	0.00
12,000.00	89.56	90.249	5,527.31	-2,498.65	5,260.69	5,271.50	0.00	0.00	0.00
12,100.00	89.56	90.249	5,528.07	-2,499.08	5,360.68	5,371.49	0.00	0.00	0.00
12,200.00	89.56	90.249	5,528.83	-2,499.52	5,460.68	5,471.49	0.00	0.00	0.00
12,300.00	89.56	90.249	5,529.60	-2,499.95	5,560.68	5,571.49	0.00	0.00	0.00
12,400.00	89.56	90.249	5,530.36	-2,500.39	5,660.67	5,671.49	0.00	0.00	0.00
12,500.00	89.56	90.249	5,531.13	-2,500.82	5,760.67	5,771.48	0.00	0.00	0.00
12,600.00	89.56	90.249	5,531.89	-2,501.26	5,860.66	5,871.48	0.00	0.00	0.00
12,700.00	89.56	90.249	5,532.66	-2,501.69	5,960.66	5,971.48	0.00	0.00	0.00
12,800.00	89.56	90.249	5,533.42	-2,502.13	6,060.66	6,071.47	0.00	0.00	0.00
12,900.00	89.56	90.249	5,534.19	-2,502.56	6,160.65	6,171.47	0.00	0.00	0.00
13,000.00	89.56	90.249	5,534.95	-2,503.00	6,260.65	6,271.47	0.00	0.00	0.00
13,100.00	89.56	90.249	5,535.72	-2,503.43	6,360.65	6,371.46	0.00	0.00	0.00
13,200.00	89.56	90.249	5,536.48	-2,503.87	6,460.64	6,471.46	0.00	0.00	0.00
13,300.00	89.56	90.249	5,537.25	-2,504.30	6,560.64	6,571.46	0.00	0.00	0.00
13,400.00	89.56	90.249	5,538.01	-2,504.74	6,660.63	6,671.46	0.00	0.00	0.00
13,500.00	89.56	90.249	5,538.78	-2,505.17	6,760.63	6,771.45	0.00	0.00	0.00
13,600.00	89.56	90.249	5,539.54	-2,505.61	6,860.63	6,871.45	0.00	0.00	0.00
13,700.00	89.56	90.249	5,540.31	-2,506.04	6,960.62	6,971.45	0.00	0.00	0.00
13,800.00	89.56	90.249	5,541.07	-2,506.48	7,060.62	7,071.44	0.00	0.00	0.00
13,900.00	89.56	90.249	5,541.84	-2,506.91	7,160.61	7,171.44	0.00	0.00	0.00
14,000.00	89.56	90.249	5,542.60	-2,507.35	7,260.61	7,271.44	0.00	0.00	0.00
14,100.00	89.56	90.249	5,543.37	-2,507.78	7,360.61	7,371.44	0.00	0.00	0.00
14,200.00	89.56	90.249	5,544.13	-2,508.22	7,460.60	7,471.43	0.00	0.00	0.00
14,300.00	89.56	90.249	5,544.89	-2,508.65	7,560.60	7,571.43	0.00	0.00	0.00
14,400.00	89.56	90.249	5,545.66	-2,509.09	7,660.60	7,671.43	0.00	0.00	0.00
14,500.00	89.56	90.249	5,546.42	-2,509.52	7,760.59	7,771.42	0.00	0.00	0.00
14,600.00	89.56	90.249	5,547.19	-2,509.96	7,860.59	7,871.42	0.00	0.00	0.00
14,700.00	89.56	90.249	5,547.95	-2,510.39	7,960.58	7,971.42	0.00	0.00	0.00

Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,800.00	89.56	90.249	5,548.72	-2,510.83	8,060.58	8,071.42	0.00	0.00	0.00
14,900.00	89.56	90.249	5,549.48	-2,511.26	8,160.58	8,171.41	0.00	0.00	0.00
15,000.00	89.56	90.249	5,550.25	-2,511.70	8,260.57	8,271.41	0.00	0.00	0.00
15,100.00	89.56	90.249	5,551.01	-2,512.13	8,360.57	8,371.41	0.00	0.00	0.00
15,200.00	89.56	90.249	5,551.78	-2,512.57	8,460.56	8,471.40	0.00	0.00	0.00
15,300.00	89.56	90.249	5,552.54	-2,513.00	8,560.56	8,571.40	0.00	0.00	0.00
15,400.00	89.56	90.249	5,553.31	-2,513.44	8,660.56	8,671.40	0.00	0.00	0.00
15,500.00	89.56	90.249	5,554.07	-2,513.87	8,760.55	8,771.39	0.00	0.00	0.00
15,600.00	89.56	90.249	5,554.84	-2,514.31	8,860.55	8,871.39	0.00	0.00	0.00
15,700.00	89.56	90.249	5,555.60	-2,514.74	8,960.54	8,971.39	0.00	0.00	0.00
15,800.00	89.56	90.249	5,556.37	-2,515.18	9,060.54	9,071.39	0.00	0.00	0.00
15,900.00	89.56	90.249	5,557.13	-2,515.61	9,160.54	9,171.38	0.00	0.00	0.00
16,000.00	89.56	90.249	5,557.90	-2,516.05	9,260.53	9,271.38	0.00	0.00	0.00
16,100.00	89.56	90.249	5,558.66	-2,516.48	9,360.53	9,371.38	0.00	0.00	0.00
16,200.00	89.56	90.249	5,559.42	-2,516.92	9,460.53	9,471.37	0.00	0.00	0.00
16,300.00	89.56	90.249	5,560.19	-2,517.35	9,560.52	9,571.37	0.00	0.00	0.00
16,400.00	89.56	90.249	5,560.95	-2,517.79	9,660.52	9,671.37	0.00	0.00	0.00
16,500.00	89.56	90.249	5,561.72	-2,518.22	9,760.51	9,771.37	0.00	0.00	0.00
16,600.00	89.56	90.249	5,562.48	-2,518.66	9,860.51	9,871.36	0.00	0.00	0.00
16,700.00	89.56	90.249	5,563.25	-2,519.09	9,960.51	9,971.36	0.00	0.00	0.00
16,798.28	89.56	90.249	5,564.00	-2,519.52	10,058.79	10,069.64	0.00	0.00	0.00
PBHL/TD 16798.28 MD 5564.00 TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
NW Lybrook 141H 0VS	0.00	0.000	5,487.00	-2,475.72	-10.77	1,918,333.520	2,779,782.810	36.271918132	-107.641009234
- plan misses target center by 0.02ft at 6728.33ft MD (5486.99 TVD, -2475.71 N, -10.77 E)									
- Point									
NW Lybrook 141H FTP 1	0.00	0.000	5,485.74	-2,475.00	-174.89	1,918,334.238	2,779,618.690	36.271921000	-107.641566000
- plan misses target center by 0.01ft at 6564.21ft MD (5485.73 TVD, -2475.00 N, -174.89 E)									
- Point									
NW Lybrook 141H LTP 1	0.00	0.000	5,564.00	-2,519.52	10,058.79	1,918,289.720	2,789,852.349	36.271738000	-107.606849000
- plan hits target center									
- Point									

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
3,976.98	3,542.00	9 5/8" Csg	9-5/8	12-1/4

Planning Report

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,240.02	1,221.64	Ojo Alamo		0.44	90.249
1,382.57	1,351.49	Kirtland		0.44	90.249
1,636.76	1,571.16	Fruitland		0.44	90.249
2,004.26	1,880.66	Pictured Cliffs		0.44	90.249
2,122.81	1,980.49	Lewis		0.44	90.249
2,490.31	2,289.99	Chacra_A		0.44	90.249
3,788.42	3,383.20	Cliff House_Basal		0.44	90.249
3,794.35	3,388.19	Menefee		0.44	90.249
4,766.44	4,206.86	Point Lookout		0.44	90.249
5,015.40	4,416.51	Mancos		0.44	90.249
5,442.17	4,775.93	MNCS_A		0.44	90.249
5,547.10	4,865.83	MNCS_B		0.44	90.249
5,671.38	4,975.89	MNCS_C		0.44	90.249
5,745.01	5,041.02	MNCS_Cms		0.44	90.249
5,868.21	5,146.39	MNCS_D		0.44	90.249
5,976.34	5,231.85	MNCS_E		0.44	90.249
6,061.29	5,292.29	MNCS_F		0.44	90.249
6,197.02	5,373.11	MNCS_G		0.44	90.249
6,278.06	5,413.65	MNCS_H		0.44	90.249
6,432.87	5,469.75	MNCS_I		0.44	90.249

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
500.00	500.00	0.00	0.00	KOP Begin 3°/100' build
1,587.70	1,529.85	-283.74	-101.82	Begin 32.63° tangent
5,462.42	4,792.98	-2,250.30	-807.54	Begin 10°/100' build/turn
6,208.60	5,378.99	-2,473.54	-508.94	Begin 60.00° tangent
6,268.60	5,408.99	-2,473.77	-456.98	Begin 10°/100' build
6,564.22	5,485.74	-2,475.00	-174.89	Begin 89.56° lateral
16,798.28	5,564.00	-2,519.52	10,058.79	PBHL/TD 16798.28 MD 5564.00 TVD

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project San Juan County, New Mexico NAD83 NM W

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site NW Lybrook (138, 139, 140 & 141)

Site Position:		**Northing:**	1,920,822.501 usft	**Latitude:**	36.278756000
From:	Lat/Long	**Easting:**	2,779,690.396 usft	**Longitude:**	-107.641306000
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "		

Well NW Lybrook Unit 141H, Surf loc: 250 FSL 414 FWL Section 25-T24N-R08W

Well Position	**+N/-S**	0.00 ft	**Northing:**	1,920,809.237 usft	**Latitude:**	36.278719000
	+E/-W	0.00 ft	**Easting:**	2,779,793.583 usft	**Longitude:**	-107.640956000
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,847.00 ft
Grid Convergence:		0.11 °				

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2/20/2023	8.59	62.77	49,177.63140137

Design rev0

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	90.249

Plan Survey Tool Program **Date** 2/21/2023

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,798.28	rev0 (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	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,587.70	32.63	199.741	1,529.85	-283.74	-101.82	3.00	3.00	0.00	199.74	
5,462.42	32.63	199.741	4,792.98	-2,250.30	-807.54	0.00	0.00	0.00	0.00	
6,208.60	60.00	90.249	5,378.99	-2,473.54	-508.94	10.00	3.67	-14.67	-122.14	
6,268.60	60.00	90.249	5,408.99	-2,473.77	-456.98	0.00	0.00	0.00	0.00	
6,564.22	89.56	90.249	5,485.74	-2,475.00	-174.89	10.00	10.00	0.00	0.00	
16,798.28	89.56	90.249	5,564.00	-2,519.52	10,058.79	0.00	0.00	0.00	0.00	NW Lybrook 141H LT

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.000	0.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
100.00	0.00	0.000	100.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
200.00	0.00	0.000	200.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
300.00	0.00	0.000	300.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
350.00	0.00	0.000	350.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
13 3/8" Csg									
400.00	0.00	0.000	400.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
500.00	0.00	0.000	500.00	0.00	0.00	1,920,809.237	2,779,793.583	36.278719000	-107.640956000
KOP Begin 3°/100' build									
600.00	3.00	199.741	599.95	-2.46	-0.88	1,920,806.773	2,779,792.699	36.278712237	-107.640959016
700.00	6.00	199.741	699.63	-9.85	-3.53	1,920,799.390	2,779,790.049	36.278691968	-107.640968056
800.00	9.00	199.741	798.77	-22.13	-7.94	1,920,787.105	2,779,785.641	36.278658247	-107.640983095
900.00	12.00	199.741	897.08	-39.28	-14.10	1,920,769.955	2,779,779.487	36.278611167	-107.641004092
1,000.00	15.00	199.741	994.31	-61.25	-21.98	1,920,747.985	2,779,771.603	36.278550857	-107.641030989
1,100.00	18.00	199.741	1,090.18	-87.98	-31.57	1,920,721.256	2,779,762.011	36.278477483	-107.641063712
1,200.00	21.00	199.741	1,184.43	-119.40	-42.85	1,920,689.840	2,779,750.737	36.278391245	-107.641102172
1,240.02	22.20	199.741	1,221.64	-133.26	-47.82	1,920,675.975	2,779,745.761	36.278353183	-107.641119147
Ojo Alamo									
1,300.00	24.00	199.741	1,276.81	-155.41	-55.77	1,920,653.825	2,779,737.813	36.278292380	-107.641146263
1,382.57	26.48	199.741	1,351.49	-188.55	-67.66	1,920,620.692	2,779,725.922	36.278201425	-107.641186827
Kirtland									
1,400.00	27.00	199.741	1,367.06	-195.93	-70.31	1,920,613.309	2,779,723.273	36.278181159	-107.641195865
1,500.00	30.00	199.741	1,454.93	-240.83	-86.43	1,920,568.403	2,779,707.158	36.278057887	-107.641250841
1,587.70	32.63	199.741	1,529.85	-283.74	-101.82	1,920,525.501	2,779,691.763	36.277940118	-107.641303362
Begin 32.63° tangent									
1,600.00	32.63	199.741	1,540.21	-289.98	-104.06	1,920,519.260	2,779,689.523	36.277922987	-107.641311003
1,636.76	32.63	199.741	1,571.16	-308.63	-110.76	1,920,500.603	2,779,682.828	36.277871771	-107.641333843
Fruitland									
1,700.00	32.63	199.741	1,624.42	-340.73	-122.27	1,920,468.507	2,779,671.310	36.277783663	-107.641373137
1,800.00	32.63	199.741	1,708.64	-391.48	-140.49	1,920,417.753	2,779,653.097	36.277644339	-107.641435271
1,900.00	32.63	199.741	1,792.85	-442.24	-158.70	1,920,366.999	2,779,634.883	36.277505015	-107.641497405
2,000.00	32.63	199.741	1,877.07	-492.99	-176.91	1,920,316.246	2,779,616.670	36.277365692	-107.641559538
2,004.26	32.63	199.741	1,880.66	-495.15	-177.69	1,920,314.083	2,779,615.894	36.277359755	-107.641562186
Pictured Cliffs									
2,100.00	32.63	199.741	1,961.29	-543.75	-195.13	1,920,265.492	2,779,598.457	36.277226368	-107.641621671
2,122.81	32.63	199.741	1,980.49	-555.32	-199.28	1,920,253.915	2,779,594.302	36.277194588	-107.641635844
Lewis									
2,200.00	32.63	199.741	2,045.50	-594.50	-213.34	1,920,214.738	2,779,580.244	36.277087044	-107.641683804
2,300.00	32.63	199.741	2,129.72	-645.25	-231.55	1,920,163.985	2,779,562.030	36.276947720	-107.641745937
2,400.00	32.63	199.741	2,213.93	-696.01	-249.77	1,920,113.231	2,779,543.817	36.276808396	-107.641808070
2,490.31	32.63	199.741	2,289.99	-741.84	-266.22	1,920,067.395	2,779,527.368	36.276682572	-107.641864182
Chacra_A									
2,500.00	32.63	199.741	2,298.15	-746.76	-267.98	1,920,062.478	2,779,525.604	36.276669072	-107.641870202
2,600.00	32.63	199.741	2,382.37	-797.51	-286.19	1,920,011.724	2,779,507.390	36.276529748	-107.641932334
2,700.00	32.63	199.741	2,466.58	-848.27	-304.41	1,919,960.970	2,779,489.177	36.276390424	-107.641994466
2,800.00	32.63	199.741	2,550.80	-899.02	-322.62	1,919,910.217	2,779,470.964	36.276251099	-107.642056598
2,900.00	32.63	199.741	2,635.01	-949.78	-340.83	1,919,859.463	2,779,452.750	36.276111775	-107.642118730
3,000.00	32.63	199.741	2,719.23	-1,000.53	-359.05	1,919,808.709	2,779,434.537	36.275972451	-107.642180861
3,100.00	32.63	199.741	2,803.44	-1,051.28	-377.26	1,919,757.956	2,779,416.324	36.275833127	-107.642242992
3,200.00	32.63	199.741	2,887.66	-1,102.04	-395.47	1,919,707.202	2,779,398.111	36.275693802	-107.642305123
3,300.00	32.63	199.741	2,971.88	-1,152.79	-413.69	1,919,656.448	2,779,379.897	36.275554478	-107.642367254
3,400.00	32.63	199.741	3,056.09	-1,203.55	-431.90	1,919,605.695	2,779,361.684	36.275415154	-107.642429384
3,500.00	32.63	199.741	3,140.31	-1,254.30	-450.11	1,919,554.941	2,779,343.471	36.275275829	-107.642491514

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,600.00	32.63	199.741	3,224.52	-1,305.05	-468.33	1,919,504.187	2,779,325.257	36.275136505	-107.642553644
3,700.00	32.63	199.741	3,308.74	-1,355.81	-486.54	1,919,453.434	2,779,307.044	36.274997180	-107.642615774
3,788.42	32.63	199.741	3,383.20	-1,400.68	-502.64	1,919,408.558	2,779,290.940	36.274873992	-107.642670708
Cliff House_Basal									
3,794.35	32.63	199.741	3,388.19	-1,403.69	-503.72	1,919,405.550	2,779,289.861	36.274865734	-107.642674390
Menefee									
3,800.00	32.63	199.741	3,392.96	-1,406.56	-504.75	1,919,402.680	2,779,288.831	36.274857856	-107.642677903
3,900.00	32.63	199.741	3,477.17	-1,457.31	-522.97	1,919,351.926	2,779,270.618	36.274718531	-107.642740033
3,976.98	32.63	199.741	3,542.00	-1,496.38	-536.99	1,919,312.857	2,779,256.597	36.274611283	-107.642787858
9 5/8" Csg									
4,000.00	32.63	199.741	3,561.39	-1,508.07	-541.18	1,919,301.173	2,779,252.404	36.274579207	-107.642802162
4,100.00	32.63	199.741	3,645.60	-1,558.82	-559.39	1,919,250.419	2,779,234.191	36.274439882	-107.642864291
4,200.00	32.63	199.741	3,729.82	-1,609.58	-577.61	1,919,199.665	2,779,215.978	36.274300557	-107.642926419
4,300.00	32.63	199.741	3,814.04	-1,660.33	-595.82	1,919,148.912	2,779,197.764	36.274161233	-107.642988548
4,400.00	32.63	199.741	3,898.25	-1,711.08	-614.03	1,919,098.158	2,779,179.551	36.274021908	-107.643050676
4,500.00	32.63	199.741	3,982.47	-1,761.84	-632.25	1,919,047.404	2,779,161.338	36.273882583	-107.643112804
4,600.00	32.63	199.741	4,066.68	-1,812.59	-650.46	1,918,996.651	2,779,143.125	36.273743258	-107.643174932
4,700.00	32.63	199.741	4,150.90	-1,863.34	-668.67	1,918,945.897	2,779,124.911	36.273603934	-107.643237059
4,766.44	32.63	199.741	4,206.86	-1,897.07	-680.78	1,918,912.174	2,779,112.809	36.273511360	-107.643278339
Point Lookout									
4,800.00	32.63	199.741	4,235.12	-1,914.10	-686.89	1,918,895.143	2,779,106.698	36.273464609	-107.643299186
4,900.00	32.63	199.741	4,319.33	-1,964.85	-705.10	1,918,844.390	2,779,088.485	36.273325284	-107.643361314
5,000.00	32.63	199.741	4,403.55	-2,015.61	-723.31	1,918,793.636	2,779,070.271	36.273185959	-107.643423440
5,015.40	32.63	199.741	4,416.51	-2,023.42	-726.12	1,918,785.821	2,779,067.467	36.273164507	-107.643433006
Mancos									
5,100.00	32.63	199.741	4,487.76	-2,066.36	-741.53	1,918,742.882	2,779,052.058	36.273046634	-107.643485567
5,200.00	32.63	199.741	4,571.98	-2,117.11	-759.74	1,918,692.129	2,779,033.845	36.272907309	-107.643547693
5,300.00	32.63	199.741	4,656.20	-2,167.87	-777.95	1,918,641.375	2,779,015.631	36.272767984	-107.643609820
5,400.00	32.63	199.741	4,740.41	-2,218.62	-796.17	1,918,590.621	2,778,997.418	36.272628659	-107.643671946
5,442.17	32.63	199.741	4,775.93	-2,240.02	-803.85	1,918,569.217	2,778,989.737	36.272569903	-107.643698145
MNCS_A									
5,462.42	32.63	199.741	4,792.98	-2,250.30	-807.54	1,918,558.940	2,778,986.049	36.272541689	-107.643710726
Begin 10°/100' build/turn									
5,500.00	30.78	193.515	4,824.96	-2,269.19	-813.21	1,918,540.048	2,778,980.378	36.272489824	-107.643730090
5,547.10	28.93	184.803	4,865.83	-2,292.28	-816.98	1,918,516.965	2,778,976.605	36.272426434	-107.643743042
MNCS_B									
5,550.00	28.83	184.236	4,868.37	-2,293.67	-817.09	1,918,515.570	2,778,976.495	36.272422602	-107.643743425
5,600.00	27.60	173.976	4,912.45	-2,317.23	-816.76	1,918,492.014	2,778,976.820	36.272357890	-107.643742479
5,650.00	27.17	163.132	4,956.88	-2,339.68	-812.23	1,918,469.559	2,778,981.351	36.272296181	-107.643727259
5,671.38	27.24	158.457	4,975.89	-2,348.91	-809.02	1,918,460.337	2,778,984.564	36.272270829	-107.643716420
MNCS_C									
5,700.00	27.58	152.281	5,001.31	-2,360.87	-803.53	1,918,448.376	2,778,990.052	36.272237943	-107.643697881
5,745.01	28.64	142.991	5,041.02	-2,378.71	-792.19	1,918,430.530	2,779,001.397	36.272188858	-107.643659512
MNCS_Cms									
5,750.00	28.80	142.004	5,045.40	-2,380.62	-790.73	1,918,428.627	2,779,002.858	36.272183621	-107.643654569
5,800.00	30.73	132.701	5,088.83	-2,398.78	-773.91	1,918,410.461	2,779,019.671	36.272133628	-107.643597651
5,850.00	33.25	124.535	5,131.25	-2,415.23	-753.22	1,918,394.016	2,779,040.363	36.272088343	-107.643527562
5,868.21	34.28	121.843	5,146.39	-2,420.76	-744.75	1,918,388.481	2,779,048.831	36.272073092	-107.643498871
MNCS_D									
5,900.00	36.23	117.480	5,172.35	-2,429.82	-728.81	1,918,379.419	2,779,064.777	36.272048113	-107.643444835
5,950.00	39.56	111.412	5,211.82	-2,442.46	-700.86	1,918,366.780	2,779,092.727	36.272013242	-107.643350100
5,976.34	41.44	108.559	5,231.85	-2,448.30	-684.78	1,918,360.943	2,779,108.802	36.271997119	-107.643295605
MNCS_E									

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,000.00	43.18	106.173	5,249.34	-2,453.05	-669.58	1,918,356.196	2,779,124.000	36.271983997	-107.643244077
6,050.00	46.99	101.612	5,284.65	-2,461.50	-635.23	1,918,347.746	2,779,158.359	36.271960599	-107.643127573
6,061.29	47.88	100.661	5,292.29	-2,463.10	-627.07	1,918,346.140	2,779,166.518	36.271956144	-107.643099902
MNCS_F									
6,100.00	50.97	97.595	5,317.46	-2,467.75	-598.04	1,918,341.495	2,779,195.541	36.271943227	-107.643001475
6,150.00	55.07	94.013	5,347.54	-2,471.75	-558.32	1,918,337.491	2,779,235.264	36.271932014	-107.642866743
6,197.02	59.02	90.961	5,373.11	-2,473.44	-518.92	1,918,335.803	2,779,274.665	36.271927164	-107.642733085
MNCS_G									
6,200.00	59.27	90.776	5,374.64	-2,473.48	-516.36	1,918,335.764	2,779,277.225	36.271927043	-107.642724402
6,208.60	60.00	90.249	5,378.99	-2,473.54	-508.94	1,918,335.698	2,779,284.643	36.271926821	-107.642699236
Begin 60.00° tangent									
6,268.60	60.00	90.249	5,408.99	-2,473.77	-456.98	1,918,335.472	2,779,336.604	36.271925920	-107.642522961
Begin 10°/100' build									
6,278.06	60.95	90.249	5,413.65	-2,473.81	-448.75	1,918,335.436	2,779,344.833	36.271925777	-107.642495046
MNCS_H									
6,300.00	63.14	90.249	5,423.94	-2,473.89	-429.37	1,918,335.352	2,779,364.215	36.271925441	-107.642429292
6,350.00	68.14	90.249	5,444.55	-2,474.09	-383.84	1,918,335.154	2,779,409.749	36.271924650	-107.642274822
6,400.00	73.14	90.249	5,461.12	-2,474.29	-336.68	1,918,334.949	2,779,456.906	36.271923831	-107.642114843
6,432.87	76.43	90.249	5,469.75	-2,474.43	-304.97	1,918,334.811	2,779,488.618	36.271923280	-107.642007263
MNCS_I									
6,450.00	78.14	90.249	5,473.52	-2,474.50	-288.26	1,918,334.739	2,779,505.328	36.271922990	-107.641950575
6,500.00	83.14	90.249	5,481.65	-2,474.72	-238.94	1,918,334.524	2,779,554.646	36.271922133	-107.641783266
6,550.00	88.14	90.249	5,485.45	-2,474.93	-189.10	1,918,334.307	2,779,604.485	36.271921266	-107.641614190
6,564.22	89.56	90.249	5,485.74	-2,475.00	-174.89	1,918,334.245	2,779,618.698	36.271921019	-107.641565973
Begin 89.56° lateral									
6,600.00	89.56	90.249	5,486.01	-2,475.15	-139.10	1,918,334.090	2,779,654.480	36.271920397	-107.641444584
6,700.00	89.56	90.249	5,486.77	-2,475.59	-39.11	1,918,333.655	2,779,754.476	36.271918657	-107.641105354
6,800.00	89.56	90.249	5,487.54	-2,476.02	60.89	1,918,333.220	2,779,854.472	36.271916916	-107.640766123
6,900.00	89.56	90.249	5,488.30	-2,476.46	160.89	1,918,332.784	2,779,954.468	36.271915174	-107.640426893
7,000.00	89.56	90.249	5,489.07	-2,476.89	260.88	1,918,332.349	2,780,054.464	36.271913431	-107.640087663
7,100.00	89.56	90.249	5,489.83	-2,477.33	360.88	1,918,331.914	2,780,154.460	36.271911688	-107.639748432
7,200.00	89.56	90.249	5,490.60	-2,477.76	460.87	1,918,331.479	2,780,254.456	36.271909943	-107.639409202
7,300.00	89.56	90.249	5,491.36	-2,478.20	560.87	1,918,331.044	2,780,354.452	36.271908197	-107.639069971
7,400.00	89.56	90.249	5,492.13	-2,478.63	660.87	1,918,330.609	2,780,454.448	36.271906451	-107.638730741
7,500.00	89.56	90.249	5,492.89	-2,479.07	760.86	1,918,330.174	2,780,554.444	36.271904703	-107.638391511
7,600.00	89.56	90.249	5,493.66	-2,479.50	860.86	1,918,329.739	2,780,654.440	36.271902954	-107.638052280
7,700.00	89.56	90.249	5,494.42	-2,479.94	960.85	1,918,329.304	2,780,754.436	36.271901205	-107.637713050
7,800.00	89.56	90.249	5,495.19	-2,480.37	1,060.85	1,918,328.869	2,780,854.431	36.271899454	-107.637373820
7,900.00	89.56	90.249	5,495.95	-2,480.81	1,160.85	1,918,328.434	2,780,954.427	36.271897703	-107.637034589
8,000.00	89.56	90.249	5,496.72	-2,481.24	1,260.84	1,918,327.999	2,781,054.423	36.271895950	-107.636695359
8,100.00	89.56	90.249	5,497.48	-2,481.68	1,360.84	1,918,327.564	2,781,154.419	36.271894197	-107.636356129
8,200.00	89.56	90.249	5,498.24	-2,482.11	1,460.83	1,918,327.129	2,781,254.415	36.271892443	-107.636016899
8,300.00	89.56	90.249	5,499.01	-2,482.55	1,560.83	1,918,326.693	2,781,354.411	36.271890687	-107.635677669
8,400.00	89.56	90.249	5,499.77	-2,482.98	1,660.83	1,918,326.258	2,781,454.407	36.271888931	-107.635338438
8,500.00	89.56	90.249	5,500.54	-2,483.42	1,760.82	1,918,325.823	2,781,554.403	36.271887174	-107.634999208
8,600.00	89.56	90.249	5,501.30	-2,483.85	1,860.82	1,918,325.388	2,781,654.399	36.271885416	-107.634659978
8,700.00	89.56	90.249	5,502.07	-2,484.29	1,960.82	1,918,324.953	2,781,754.395	36.271883656	-107.634320748
8,800.00	89.56	90.249	5,502.83	-2,484.72	2,060.81	1,918,324.518	2,781,854.391	36.271881896	-107.633981518
8,900.00	89.56	90.249	5,503.60	-2,485.16	2,160.81	1,918,324.083	2,781,954.387	36.271880135	-107.633642288
9,000.00	89.56	90.249	5,504.36	-2,485.59	2,260.80	1,918,323.648	2,782,054.383	36.271878373	-107.633303058
9,100.00	89.56	90.249	5,505.13	-2,486.03	2,360.80	1,918,323.213	2,782,154.378	36.271876610	-107.632963828
9,200.00	89.56	90.249	5,505.89	-2,486.46	2,460.80	1,918,322.778	2,782,254.374	36.271874846	-107.632624598
9,300.00	89.56	90.249	5,506.66	-2,486.90	2,560.79	1,918,322.343	2,782,354.370	36.271873081	-107.632285368
9,400.00	89.56	90.249	5,507.42	-2,487.33	2,660.79	1,918,321.908	2,782,454.366	36.271871315	-107.631946138

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,500.00	89.56	90.249	5,508.19	-2,487.77	2,760.78	1,918,321.473	2,782,554.362	36.271869548	-107.631606908
9,600.00	89.56	90.249	5,508.95	-2,488.20	2,860.78	1,918,321.038	2,782,654.358	36.271867781	-107.631267678
9,700.00	89.56	90.249	5,509.72	-2,488.64	2,960.78	1,918,320.602	2,782,754.354	36.271866012	-107.630928448
9,800.00	89.56	90.249	5,510.48	-2,489.07	3,060.77	1,918,320.167	2,782,854.350	36.271864242	-107.630589218
9,900.00	89.56	90.249	5,511.25	-2,489.51	3,160.77	1,918,319.732	2,782,954.346	36.271862471	-107.630249988
10,000.00	89.56	90.249	5,512.01	-2,489.94	3,260.77	1,918,319.297	2,783,054.342	36.271860700	-107.629910759
10,100.00	89.56	90.249	5,512.78	-2,490.38	3,360.76	1,918,318.862	2,783,154.338	36.271858927	-107.629571529
10,200.00	89.56	90.249	5,513.54	-2,490.82	3,460.76	1,918,318.427	2,783,254.334	36.271857153	-107.629232299
10,300.00	89.56	90.249	5,514.30	-2,491.25	3,560.75	1,918,317.992	2,783,354.330	36.271855379	-107.628893069
10,400.00	89.56	90.249	5,515.07	-2,491.69	3,660.75	1,918,317.557	2,783,454.325	36.271853603	-107.628553839
10,500.00	89.56	90.249	5,515.83	-2,492.12	3,760.75	1,918,317.122	2,783,554.321	36.271851827	-107.628214610
10,600.00	89.56	90.249	5,516.60	-2,492.56	3,860.74	1,918,316.687	2,783,654.317	36.271850049	-107.627875380
10,700.00	89.56	90.249	5,517.36	-2,492.99	3,960.74	1,918,316.252	2,783,754.313	36.271848271	-107.627536150
10,800.00	89.56	90.249	5,518.13	-2,493.43	4,060.73	1,918,315.817	2,783,854.309	36.271846492	-107.627196921
10,900.00	89.56	90.249	5,518.89	-2,493.86	4,160.73	1,918,315.382	2,783,954.305	36.271844711	-107.626857691
11,000.00	89.56	90.249	5,519.66	-2,494.30	4,260.73	1,918,314.946	2,784,054.301	36.271842930	-107.626518461
11,100.00	89.56	90.249	5,520.42	-2,494.73	4,360.72	1,918,314.511	2,784,154.297	36.271841148	-107.626179232
11,200.00	89.56	90.249	5,521.19	-2,495.17	4,460.72	1,918,314.076	2,784,254.293	36.271839364	-107.625840002
11,300.00	89.56	90.249	5,521.95	-2,495.60	4,560.71	1,918,313.641	2,784,354.289	36.271837580	-107.625500772
11,400.00	89.56	90.249	5,522.72	-2,496.04	4,660.71	1,918,313.206	2,784,454.285	36.271835795	-107.625161543
11,500.00	89.56	90.249	5,523.48	-2,496.47	4,760.71	1,918,312.771	2,784,554.281	36.271834009	-107.624822313
11,600.00	89.56	90.249	5,524.25	-2,496.91	4,860.70	1,918,312.336	2,784,654.277	36.271832222	-107.624483084
11,700.00	89.56	90.249	5,525.01	-2,497.34	4,960.70	1,918,311.901	2,784,754.273	36.271830434	-107.624143854
11,800.00	89.56	90.249	5,525.78	-2,497.78	5,060.70	1,918,311.466	2,784,854.268	36.271828645	-107.623804625
11,900.00	89.56	90.249	5,526.54	-2,498.21	5,160.69	1,918,311.031	2,784,954.264	36.271826855	-107.623465395
12,000.00	89.56	90.249	5,527.31	-2,498.65	5,260.69	1,918,310.596	2,785,054.260	36.271825064	-107.623126166
12,100.00	89.56	90.249	5,528.07	-2,499.08	5,360.68	1,918,310.161	2,785,154.256	36.271823272	-107.622786936
12,200.00	89.56	90.249	5,528.83	-2,499.52	5,460.68	1,918,309.726	2,785,254.252	36.271821479	-107.622447707
12,300.00	89.56	90.249	5,529.60	-2,499.95	5,560.68	1,918,309.291	2,785,354.248	36.271819685	-107.622108478
12,400.00	89.56	90.249	5,530.36	-2,500.39	5,660.67	1,918,308.855	2,785,454.244	36.271817891	-107.621769248
12,500.00	89.56	90.249	5,531.13	-2,500.82	5,760.67	1,918,308.420	2,785,554.240	36.271816095	-107.621430019
12,600.00	89.56	90.249	5,531.89	-2,501.26	5,860.66	1,918,307.985	2,785,654.236	36.271814298	-107.621090790
12,700.00	89.56	90.249	5,532.66	-2,501.69	5,960.66	1,918,307.550	2,785,754.232	36.271812501	-107.620751560
12,800.00	89.56	90.249	5,533.42	-2,502.13	6,060.66	1,918,307.115	2,785,854.228	36.271810702	-107.620412331
12,900.00	89.56	90.249	5,534.19	-2,502.56	6,160.65	1,918,306.680	2,785,954.224	36.271808902	-107.620073102
13,000.00	89.56	90.249	5,534.95	-2,503.00	6,260.65	1,918,306.245	2,786,054.220	36.271807102	-107.619733873
13,100.00	89.56	90.249	5,535.72	-2,503.43	6,360.65	1,918,305.810	2,786,154.215	36.271805300	-107.619394643
13,200.00	89.56	90.249	5,536.48	-2,503.87	6,460.64	1,918,305.375	2,786,254.211	36.271803498	-107.619055414
13,300.00	89.56	90.249	5,537.25	-2,504.30	6,560.64	1,918,304.940	2,786,354.207	36.271801694	-107.618716185
13,400.00	89.56	90.249	5,538.01	-2,504.74	6,660.63	1,918,304.505	2,786,454.203	36.271799890	-107.618376956
13,500.00	89.56	90.249	5,538.78	-2,505.17	6,760.63	1,918,304.070	2,786,554.199	36.271798085	-107.618037727
13,600.00	89.56	90.249	5,539.54	-2,505.61	6,860.63	1,918,303.635	2,786,654.195	36.271796278	-107.617698498
13,700.00	89.56	90.249	5,540.31	-2,506.04	6,960.62	1,918,303.200	2,786,754.191	36.271794471	-107.617359269
13,800.00	89.56	90.249	5,541.07	-2,506.48	7,060.62	1,918,302.764	2,786,854.187	36.271792663	-107.617020039
13,900.00	89.56	90.249	5,541.84	-2,506.91	7,160.61	1,918,302.329	2,786,954.183	36.271790854	-107.616680810
14,000.00	89.56	90.249	5,542.60	-2,507.35	7,260.61	1,918,301.894	2,787,054.179	36.271789044	-107.616341581
14,100.00	89.56	90.249	5,543.37	-2,507.78	7,360.61	1,918,301.459	2,787,154.175	36.271787232	-107.616002352
14,200.00	89.56	90.249	5,544.13	-2,508.22	7,460.60	1,918,301.024	2,787,254.171	36.271785420	-107.615663123
14,300.00	89.56	90.249	5,544.89	-2,508.65	7,560.60	1,918,300.589	2,787,354.167	36.271783607	-107.615323894
14,400.00	89.56	90.249	5,545.66	-2,509.09	7,660.60	1,918,300.154	2,787,454.162	36.271781793	-107.614984665
14,500.00	89.56	90.249	5,546.42	-2,509.52	7,760.59	1,918,299.719	2,787,554.158	36.271779978	-107.614645436
14,600.00	89.56	90.249	5,547.19	-2,509.96	7,860.59	1,918,299.284	2,787,654.154	36.271778162	-107.614306208
14,700.00	89.56	90.249	5,547.95	-2,510.39	7,960.58	1,918,298.849	2,787,754.150	36.271776345	-107.613966979
14,800.00	89.56	90.249	5,548.72	-2,510.83	8,060.58	1,918,298.414	2,787,854.146	36.271774528	-107.613627750
14,900.00	89.56	90.249	5,549.48	-2,511.26	8,160.58	1,918,297.979	2,787,954.142	36.271772709	-107.613288521

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,000.00	89.56	90.249	5,550.25	-2,511.70	8,260.57	1,918,297.544	2,788,054.138	36.271770889	-107.612949292
15,100.00	89.56	90.249	5,551.01	-2,512.13	8,360.57	1,918,297.108	2,788,154.134	36.271769068	-107.612610064
15,200.00	89.56	90.249	5,551.78	-2,512.57	8,460.56	1,918,296.673	2,788,254.130	36.271767246	-107.612270836
15,300.00	89.56	90.249	5,552.54	-2,513.00	8,560.56	1,918,296.238	2,788,354.126	36.271765424	-107.611931607
15,400.00	89.56	90.249	5,553.31	-2,513.44	8,660.56	1,918,295.803	2,788,454.122	36.271763600	-107.611592378
15,500.00	89.56	90.249	5,554.07	-2,513.87	8,760.55	1,918,295.368	2,788,554.118	36.271761776	-107.611253149
15,600.00	89.56	90.249	5,554.84	-2,514.31	8,860.55	1,918,294.933	2,788,654.114	36.271759950	-107.610913921
15,700.00	89.56	90.249	5,555.60	-2,514.74	8,960.54	1,918,294.498	2,788,754.109	36.271758124	-107.610574692
15,800.00	89.56	90.249	5,556.37	-2,515.18	9,060.54	1,918,294.063	2,788,854.105	36.271756296	-107.610235463
15,900.00	89.56	90.249	5,557.13	-2,515.61	9,160.54	1,918,293.628	2,788,954.101	36.271754468	-107.609896235
16,000.00	89.56	90.249	5,557.90	-2,516.05	9,260.53	1,918,293.193	2,789,054.097	36.271752638	-107.609557006
16,100.00	89.56	90.249	5,558.66	-2,516.48	9,360.53	1,918,292.758	2,789,154.093	36.271750808	-107.609217777
16,200.00	89.56	90.249	5,559.42	-2,516.92	9,460.53	1,918,292.323	2,789,254.089	36.271748976	-107.608878549
16,300.00	89.56	90.249	5,560.19	-2,517.35	9,560.52	1,918,291.888	2,789,354.085	36.271747144	-107.608539320
16,400.00	89.56	90.249	5,560.95	-2,517.79	9,660.52	1,918,291.453	2,789,454.081	36.271745311	-107.608200092
16,500.00	89.56	90.249	5,561.72	-2,518.22	9,760.51	1,918,291.017	2,789,554.077	36.271743477	-107.607860863
16,600.00	89.56	90.249	5,562.48	-2,518.66	9,860.51	1,918,290.582	2,789,654.074	36.271741642	-107.607521635
16,700.00	89.56	90.249	5,563.25	-2,519.09	9,960.51	1,918,290.147	2,789,754.070	36.271739805	-107.607182406
16,798.28	89.56	90.249	5,564.00	-2,519.52	10,058.79	1,918,289.720	2,789,852.349	36.271738000	-107.606849000
PBHL/TD 16798.28 MD 5564.00 TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
NW Lybrook 141H 0VS	0.00	0.000	5,487.00	-2,475.72	-10.77	1,918,333.520	2,779,782.810	36.271918132	-107.641009234
- plan misses target center by 0.02ft at 6728.33ft MD (5486.99 TVD, -2475.71 N, -10.77 E)									
- Point									
NW Lybrook 141H FTP 2	0.00	0.000	5,485.74	-2,475.00	-174.89	1,918,334.238	2,779,618.690	36.271921000	-107.641566000
- plan misses target center by 0.01ft at 6564.21ft MD (5485.73 TVD, -2475.00 N, -174.89 E)									
- Point									
NW Lybrook 141H LTP 2	0.00	0.000	5,564.00	-2,519.52	10,058.79	1,918,289.720	2,789,852.349	36.271738000	-107.606849000
- plan hits target center									
- Point									

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
3,976.98	3,542.00	9 5/8" Csg	9-5/8	12-1/4

Planning Report - Geographic

Database:	DB_Decv0422v16	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Project:	San Juan County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site:	NW Lybrook (138, 139, 140 & 141)	**North Reference:**	Grid
Well:	NW Lybrook Unit 141H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,240.02	1,221.64	Ojo Alamo		0.44	90.249
1,382.57	1,351.49	Kirtland		0.44	90.249
1,636.76	1,571.16	Fruitland		0.44	90.249
2,004.26	1,880.66	Pictured Cliffs		0.44	90.249
2,122.81	1,980.49	Lewis		0.44	90.249
2,490.31	2,289.99	Chacra_A		0.44	90.249
3,788.42	3,383.20	Cliff House_Basal		0.44	90.249
3,794.35	3,388.19	Menefee		0.44	90.249
4,766.44	4,206.86	Point Lookout		0.44	90.249
5,015.40	4,416.51	Mancos		0.44	90.249
5,442.17	4,775.93	MNCS_A		0.44	90.249
5,547.10	4,865.83	MNCS_B		0.44	90.249
5,671.38	4,975.89	MNCS_C		0.44	90.249
5,745.01	5,041.02	MNCS_Cms		0.44	90.249
5,868.21	5,146.39	MNCS_D		0.44	90.249
5,976.34	5,231.85	MNCS_E		0.44	90.249
6,061.29	5,292.29	MNCS_F		0.44	90.249
6,197.02	5,373.11	MNCS_G		0.44	90.249
6,278.06	5,413.65	MNCS_H		0.44	90.249
6,432.87	5,469.75	MNCS_I		0.44	90.249

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
500.00	500.00	0.00	0.00	KOP Begin 3°/100' build
1,587.70	1,529.85	-283.74	-101.82	Begin 32.63° tangent
5,462.42	4,792.98	-2,250.30	-807.54	Begin 10°/100' build/turn
6,208.60	5,378.99	-2,473.54	-508.94	Begin 60.00° tangent
6,268.60	5,408.99	-2,473.77	-456.98	Begin 10°/100' build
6,564.22	5,485.74	-2,475.00	-174.89	Begin 89.56° lateral
16,798.28	5,564.00	-2,519.52	10,058.79	PBHL/TD 16798.28 MD 5564.00 TVD

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Reference rev0

Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.00ft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,879.83ft	**Error Surface:**	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 2/21/2023

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	16,798.28	rev0 (Original Hole)	MWD	OWSG MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
NW Lybrook (138, 139, 140 & 141)						
Lybrook 2408 138H - Original Hole - rev0	676.69	675.71	122.89	118.52	28.133	CC
Lybrook 2408 138H - Original Hole - rev0	700.00	698.42	122.97	118.44	27.153	ES
Lybrook 2408 138H - Original Hole - rev0	900.00	884.53	139.08	133.11	23.281	SF
NW Lybrook Unit 139H - Original Hole - rev0	729.50	727.93	102.11	97.37	21.547	CC, ES
NW Lybrook Unit 139H - Original Hole - rev0	900.00	887.76	111.83	105.88	18.799	SF
NW Lybrook Unit 140H - Original Hole - rev0	628.29	628.19	19.44	15.41	4.820	CC, ES
NW Lybrook Unit 140H - Original Hole - rev0	16,798.28	16,606.25	1,845.20	1,298.83	3.377	SF
NW Lybrook UT 131H - Original Hole - MWD	594.45	581.91	60.40	56.60	15.894	CC
NW Lybrook UT 131H - Original Hole - MWD	1,100.00	1,089.65	60.87	53.29	8.027	ES
NW Lybrook UT 131H - Original Hole - MWD	1,200.00	1,188.33	65.72	57.42	7.921	SF
NW Lybrook UT 289H - Original Hole - Gyro & MWD	586.40	574.10	38.50	35.19	11.647	CC
NW Lybrook UT 289H - Original Hole - Gyro & MWD	600.00	587.57	38.52	35.15	11.438	ES
NW Lybrook UT 289H - Original Hole - Gyro & MWD	700.00	686.00	41.21	37.33	10.632	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 **Rule Assigned:** **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-82.69	15.77	-122.94	123.95				
100.00	100.00	100.00	100.00	0.13	0.13	-82.69	15.77	-122.94	123.95	123.68	0.27	461.023	
200.00	200.00	200.00	200.00	0.49	0.49	-82.69	15.77	-122.94	123.95	122.96	0.99	125.734	
300.00	300.00	300.00	300.00	0.85	0.85	-82.69	15.77	-122.94	123.95	122.25	1.70	72.793	
400.00	400.00	400.00	400.00	1.21	1.21	-82.69	15.77	-122.94	123.95	121.53	2.42	51.225	
500.00	500.00	500.00	500.00	1.57	1.57	-82.69	15.77	-122.94	123.95	120.81	3.14	39.516	
600.00	599.95	600.02	599.97	1.91	1.93	79.99	18.35	-122.49	123.38	119.54	3.84	32.162	
676.69	676.44	675.71	675.46	2.17	2.21	85.05	23.73	-121.56	122.89	118.52	4.37	28.133	CC
700.00	699.63	698.42	698.06	2.25	2.29	87.11	25.92	-121.18	122.97	118.44	4.53	27.153	ES
800.00	798.77	793.69	792.54	2.61	2.64	98.12	37.98	-119.08	126.51	121.26	5.24	24.126	
900.00	897.08	884.53	881.94	3.00	3.00	110.90	53.78	-116.34	139.08	133.11	5.97	23.281	SF
1,000.00	994.31	969.88	965.15	3.44	3.36	122.77	72.43	-113.09	164.39	157.71	6.68	24.612	
1,100.00	1,090.18	1,048.95	1,041.42	3.92	3.73	132.18	92.97	-109.53	202.97	195.65	7.32	27.725	
1,200.00	1,184.43	1,121.26	1,110.36	4.47	4.08	139.01	114.45	-105.79	253.25	245.35	7.90	32.072	
1,300.00	1,276.81	1,186.56	1,171.87	5.09	4.43	143.75	136.05	-102.04	313.22	304.81	8.40	37.279	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - Lybrook 2408 138H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
1,400.00	1,367.06	1,244.97	1,226.22	5.78	4.76	146.93	157.12	-98.38	381.13	372.27	8.86	42.994	
1,500.00	1,454.93	1,308.19	1,284.69	6.54	5.14	149.69	180.80	-94.26	454.77	445.37	9.40	48.374	
1,600.00	1,540.21	1,367.50	1,339.55	7.37	5.51	151.79	203.02	-90.40	532.44	522.52	9.93	53.630	
1,700.00	1,624.42	1,425.19	1,392.91	8.24	5.87	154.73	224.63	-86.65	611.97	601.55	10.42	58.725	
1,800.00	1,708.64	1,482.88	1,446.26	9.14	6.23	157.04	246.25	-82.89	692.00	681.08	10.92	63.369	
1,900.00	1,792.85	1,540.57	1,499.62	10.04	6.61	158.89	267.86	-79.14	772.37	760.94	11.43	67.595	
2,000.00	1,877.07	1,598.26	1,552.98	10.96	6.98	160.42	289.47	-75.38	852.99	841.05	11.94	71.447	
2,100.00	1,961.29	1,655.95	1,606.33	11.89	7.36	161.69	311.08	-71.63	933.80	921.34	12.46	74.960	
2,200.00	2,045.50	1,713.64	1,659.69	12.82	7.74	162.77	332.70	-67.87	1,014.74	1,001.76	12.98	78.172	
2,300.00	2,129.72	1,771.33	1,713.05	13.76	8.12	163.69	354.31	-64.11	1,095.80	1,082.29	13.51	81.114	
2,400.00	2,213.93	1,829.02	1,766.40	14.70	8.51	164.49	375.92	-60.36	1,176.94	1,162.90	14.04	83.815	
2,500.00	2,298.15	1,886.71	1,819.76	15.64	8.90	165.19	397.54	-56.60	1,258.15	1,243.58	14.58	86.301	
2,600.00	2,382.37	1,944.40	1,873.12	16.58	9.28	165.80	419.15	-52.85	1,339.42	1,324.30	15.12	88.593	
2,700.00	2,466.58	2,002.09	1,926.47	17.53	9.67	166.35	440.76	-49.09	1,420.74	1,405.08	15.66	90.713	
2,800.00	2,550.80	2,059.78	1,979.83	18.48	10.07	166.84	462.37	-45.34	1,502.09	1,485.89	16.21	92.675	
2,900.00	2,635.01	2,117.47	2,033.19	19.43	10.46	167.27	483.99	-41.58	1,583.48	1,566.73	16.76	94.497	
3,000.00	2,719.23	2,175.16	2,086.54	20.39	10.85	167.67	505.60	-37.83	1,664.90	1,647.59	17.31	96.191	
3,100.00	2,803.44	2,232.85	2,139.90	21.34	11.25	168.03	527.21	-34.07	1,746.34	1,728.48	17.86	97.769	
3,200.00	2,887.66	2,290.54	2,193.26	22.30	11.64	168.36	548.83	-30.31	1,827.81	1,809.39	18.42	99.242	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook Unit 139H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-82.68	13.26	-103.19	104.04				
100.00	100.00	100.00	100.00	0.13	0.13	-82.68	13.26	-103.19	104.04	103.77	0.27	386.962	
200.00	200.00	200.00	200.00	0.49	0.49	-82.68	13.26	-103.19	104.04	103.05	0.99	105.535	
300.00	300.00	300.00	300.00	0.85	0.85	-82.68	13.26	-103.19	104.04	102.33	1.70	61.099	
400.00	400.00	400.00	400.00	1.21	1.21	-82.68	13.26	-103.19	104.04	101.62	2.42	42.996	
500.00	500.00	500.00	500.00	1.57	1.57	-82.68	13.26	-103.19	104.04	100.90	3.14	33.168	
600.00	599.95	599.95	599.95	1.91	1.93	79.01	13.26	-103.19	103.51	99.67	3.84	26.978	
700.00	699.63	699.63	699.63	2.25	2.28	83.35	13.26	-103.19	102.30	97.77	4.53	22.574	
729.50	728.95	727.93	727.93	2.36	2.39	85.21	13.44	-103.28	102.11	97.37	4.74	21.547	CC, ES
800.00	798.77	794.90	794.86	2.61	2.63	91.15	15.34	-104.30	103.46	98.23	5.23	19.778	
900.00	897.08	887.76	887.46	3.00	2.96	101.97	21.39	-107.54	111.83	105.88	5.95	18.799	SF
1,000.00	994.31	977.14	976.17	3.44	3.29	113.04	30.96	-112.66	130.60	123.93	6.67	19.585	
1,100.00	1,090.18	1,062.16	1,059.99	3.92	3.61	122.24	43.44	-119.35	160.90	153.54	7.36	21.854	
1,200.00	1,184.43	1,142.09	1,138.15	4.47	3.94	128.98	58.17	-127.24	201.97	193.95	8.02	25.184	
1,300.00	1,276.81	1,216.42	1,210.15	5.09	4.26	133.60	74.44	-135.95	252.39	243.75	8.64	29.213	
1,400.00	1,367.06	1,284.85	1,275.75	5.78	4.58	136.60	91.59	-145.14	310.81	301.58	9.23	33.688	
1,500.00	1,454.93	1,347.22	1,334.90	6.54	4.90	138.40	109.01	-154.47	376.07	366.30	9.77	38.485	
1,600.00	1,540.21	1,400.00	1,384.43	7.37	5.17	139.38	125.09	-163.08	447.24	436.98	10.27	43.568	
1,700.00	1,624.42	1,457.02	1,437.35	8.24	5.50	141.80	143.79	-173.10	521.87	511.07	10.80	48.323	
1,800.00	1,708.64	1,519.15	1,494.67	9.14	5.87	143.79	164.94	-184.43	597.77	586.36	11.41	52.392	
1,900.00	1,792.85	1,582.89	1,553.46	10.04	6.27	145.39	186.63	-196.05	673.93	661.88	12.05	55.930	
2,000.00	1,877.07	1,646.62	1,612.25	10.96	6.67	146.68	208.32	-207.67	750.28	737.58	12.70	59.075	
2,100.00	1,961.29	1,710.36	1,671.05	11.89	7.08	147.73	230.01	-219.28	826.76	813.40	13.36	61.885	
2,200.00	2,045.50	1,774.09	1,729.84	12.82	7.50	148.61	251.70	-230.90	903.33	889.31	14.03	64.399	
2,300.00	2,129.72	1,837.82	1,788.63	13.76	7.93	149.35	273.39	-242.52	979.99	965.29	14.70	66.658	
2,400.00	2,213.93	1,901.56	1,847.42	14.70	8.35	149.99	295.08	-254.14	1,056.70	1,041.32	15.38	68.698	
2,500.00	2,298.15	1,965.29	1,906.21	15.64	8.79	150.54	316.78	-265.76	1,133.46	1,117.39	16.07	70.539	
2,600.00	2,382.37	2,029.02	1,965.01	16.58	9.23	151.02	338.47	-277.38	1,210.25	1,193.50	16.76	72.212	
2,700.00	2,466.58	2,092.76	2,023.80	17.53	9.67	151.45	360.16	-288.99	1,287.08	1,269.63	17.46	73.737	
2,800.00	2,550.80	2,156.49	2,082.59	18.48	10.11	151.83	381.85	-300.61	1,363.94	1,345.78	18.15	75.128	
2,900.00	2,635.01	2,220.22	2,141.38	19.43	10.56	152.16	403.54	-312.23	1,440.81	1,421.96	18.86	76.404	
3,000.00	2,719.23	2,283.96	2,200.18	20.39	11.00	152.47	425.23	-323.85	1,517.71	1,498.14	19.56	77.576	
3,100.00	2,803.44	2,347.69	2,258.97	21.34	11.45	152.74	446.92	-335.47	1,594.62	1,574.34	20.27	78.655	
3,200.00	2,887.66	2,411.43	2,317.76	22.30	11.90	152.99	468.61	-347.08	1,671.54	1,650.56	20.99	79.653	
3,300.00	2,971.88	2,475.16	2,376.55	23.25	12.36	153.22	490.30	-358.70	1,748.48	1,726.78	21.70	80.575	
3,400.00	3,056.09	2,538.89	2,435.35	24.21	12.81	153.43	511.99	-370.32	1,825.42	1,803.01	22.42	81.432	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook Unit 140H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: 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	-82.76	2.51	-19.75	19.91				
100.00	100.00	100.00	100.00	0.13	0.13	-82.76	2.51	-19.75	19.91	19.64	0.27	74.061	
200.00	200.00	200.00	200.00	0.49	0.49	-82.76	2.51	-19.75	19.91	18.93	0.99	20.198	
300.00	300.00	300.00	300.00	0.85	0.85	-82.76	2.51	-19.75	19.91	18.21	1.70	11.694	
400.00	400.00	400.00	400.00	1.21	1.21	-82.76	2.51	-19.75	19.91	17.49	2.42	8.229	
500.00	500.00	500.00	500.00	1.57	1.57	-82.76	2.51	-19.75	19.91	16.77	3.14	6.348	
600.00	599.95	599.95	599.95	1.91	1.93	85.03	2.51	-19.75	19.51	15.68	3.84	5.086	
628.29	628.19	628.19	628.19	2.01	2.03	89.99	2.51	-19.75	19.44	15.41	4.03	4.820	CC, ES
700.00	699.63	699.63	699.63	2.25	2.28	107.47	2.51	-19.75	20.39	15.86	4.53	4.498	
800.00	798.77	798.77	798.77	2.61	2.64	134.29	2.51	-19.75	27.32	22.08	5.25	5.208	
900.00	897.08	897.08	897.08	3.00	2.99	152.03	2.51	-19.75	42.17	36.21	5.96	7.071	
1,000.00	994.31	994.31	994.31	3.44	3.34	161.68	2.51	-19.75	63.80	57.12	6.68	9.551	
1,100.00	1,090.18	1,092.80	1,092.77	3.92	3.68	166.02	1.38	-21.71	89.94	82.55	7.39	12.171	
1,200.00	1,184.43	1,191.95	1,191.63	4.47	4.02	166.88	-2.31	-28.10	118.23	110.13	8.10	14.589	
1,300.00	1,276.81	1,291.47	1,290.34	5.09	4.37	166.14	-8.59	-38.98	148.39	139.55	8.84	16.780	
1,400.00	1,367.06	1,391.21	1,388.48	5.78	4.74	164.60	-17.46	-54.33	180.46	170.84	9.62	18.758	
1,500.00	1,454.93	1,490.99	1,485.60	6.54	5.14	162.62	-28.88	-74.11	214.51	204.06	10.45	20.525	
1,600.00	1,540.21	1,590.69	1,581.32	7.37	5.58	160.46	-42.81	-98.23	250.63	239.27	11.36	22.064	
1,700.00	1,624.42	1,691.17	1,676.19	8.24	6.09	158.29	-59.36	-126.88	286.13	273.78	12.35	23.175	
1,800.00	1,708.64	1,789.01	1,766.93	9.14	6.63	155.91	-77.64	-158.52	319.72	306.29	13.44	23.794	
1,900.00	1,792.85	1,882.55	1,853.41	10.04	7.19	153.95	-95.48	-189.41	353.35	338.77	14.58	24.243	
2,000.00	1,877.07	1,976.10	1,939.89	10.96	7.77	152.33	-113.31	-220.29	387.28	371.52	15.76	24.578	
2,100.00	1,961.29	2,069.65	2,026.37	11.89	8.38	150.97	-131.15	-251.18	421.44	404.47	16.97	24.830	
2,200.00	2,045.50	2,163.19	2,112.85	12.82	8.99	149.81	-148.99	-282.07	455.78	437.56	18.22	25.018	
2,300.00	2,129.72	2,256.74	2,199.33	13.76	9.63	148.82	-166.83	-312.95	490.27	470.78	19.49	25.159	
2,400.00	2,213.93	2,350.28	2,285.81	14.70	10.27	147.95	-184.67	-343.84	524.87	504.09	20.77	25.265	
2,500.00	2,298.15	2,443.83	2,372.29	15.64	10.92	147.19	-202.51	-374.72	559.56	537.48	22.08	25.345	
2,600.00	2,382.37	2,537.38	2,458.77	16.58	11.57	146.52	-220.34	-405.61	594.33	570.93	23.40	25.404	
2,700.00	2,466.58	2,630.92	2,545.25	17.53	12.23	145.92	-238.18	-436.49	629.16	604.44	24.72	25.448	
2,800.00	2,550.80	2,724.47	2,631.73	18.48	12.90	145.39	-256.02	-467.38	664.05	637.98	26.06	25.480	
2,900.00	2,635.01	2,818.01	2,718.21	19.43	13.57	144.91	-273.86	-498.27	698.98	671.57	27.41	25.503	
3,000.00	2,719.23	2,911.56	2,804.69	20.39	14.25	144.47	-291.70	-529.15	733.95	705.19	28.76	25.519	
3,100.00	2,803.44	3,005.11	2,891.17	21.34	14.93	144.08	-309.54	-560.04	768.96	738.84	30.12	25.530	
3,200.00	2,887.66	3,098.65	2,977.65	22.30	15.61	143.72	-327.37	-590.92	803.99	772.51	31.48	25.537	
3,300.00	2,971.88	3,192.20	3,064.13	23.25	16.29	143.38	-345.21	-621.81	839.05	806.20	32.85	25.540	
3,400.00	3,056.09	3,285.75	3,150.61	24.21	16.98	143.08	-363.05	-652.70	874.14	839.91	34.23	25.540	
3,500.00	3,140.31	3,379.29	3,237.09	25.17	17.66	142.80	-380.89	-683.58	909.24	873.64	35.60	25.538	
3,600.00	3,224.52	3,472.84	3,323.57	26.13	18.35	142.54	-398.73	-714.47	944.36	907.38	36.98	25.535	
3,700.00	3,308.74	3,566.38	3,410.05	27.09	19.04	142.29	-416.57	-745.35	979.50	941.13	38.37	25.530	
3,800.00	3,392.96	3,659.93	3,496.53	28.05	19.73	142.07	-434.41	-776.24	1,014.65	974.90	39.75	25.525	
3,900.00	3,477.17	3,753.48	3,583.01	29.01	20.43	141.86	-452.24	-807.13	1,049.82	1,008.68	41.14	25.519	
4,000.00	3,561.39	3,847.02	3,669.48	29.97	21.12	141.66	-470.08	-838.01	1,084.99	1,042.46	42.53	25.512	
4,100.00	3,645.60	3,940.57	3,755.96	30.93	21.81	141.48	-487.92	-868.90	1,120.18	1,076.26	43.92	25.505	
4,200.00	3,729.82	4,034.11	3,842.44	31.89	22.51	141.31	-505.76	-899.78	1,155.38	1,110.06	45.31	25.497	
4,300.00	3,814.04	4,127.66	3,928.92	32.85	23.21	141.14	-523.60	-930.67	1,190.58	1,143.87	46.71	25.490	
4,400.00	3,898.25	4,221.21	4,015.40	33.81	23.90	140.99	-541.44	-961.55	1,225.79	1,177.69	48.10	25.482	
4,500.00	3,982.47	4,312.59	4,099.90	34.77	24.58	140.85	-558.84	-991.69	1,261.03	1,211.56	49.47	25.493	
4,600.00	4,066.68	4,392.63	4,174.71	35.73	25.15	140.83	-573.07	-1,016.32	1,296.90	1,246.29	50.61	25.624	
4,700.00	4,150.90	4,471.93	4,249.94	36.70	25.66	140.97	-585.60	-1,038.02	1,333.74	1,282.09	51.65	25.825	
4,800.00	4,235.12	4,550.22	4,325.16	37.66	26.12	141.24	-596.43	-1,056.78	1,371.56	1,318.98	52.58	26.088	
4,900.00	4,319.33	4,627.26	4,400.00	38.62	26.53	141.62	-605.58	-1,072.62	1,410.39	1,356.99	53.40	26.411	
5,000.00	4,403.55	4,700.00	4,471.28	39.59	26.88	142.08	-612.82	-1,085.16	1,450.28	1,396.19	54.10	26.810	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook Unit 140H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	4,487.76	4,776.78	4,547.06	40.55	27.20	142.67	-618.99	-1,095.84	1,491.28	1,436.55	54.73	27.246	
5,200.00	4,571.98	4,848.91	4,618.64	41.51	27.47	143.31	-623.39	-1,103.46	1,533.47	1,478.22	55.25	27.756	
5,300.00	4,656.20	4,919.09	4,688.57	42.48	27.70	144.01	-626.38	-1,108.62	1,576.89	1,521.22	55.67	28.324	
5,400.00	4,740.41	4,987.24	4,756.63	43.44	27.89	144.74	-628.04	-1,111.51	1,621.62	1,565.61	56.01	28.952	
5,500.00	4,824.96	5,055.58	4,824.96	44.39	28.05	152.77	-628.50	-1,112.30	1,667.73	1,611.45	56.29	29.629	
5,600.00	4,912.45	5,143.07	4,912.45	45.22	28.23	175.60	-628.50	-1,112.30	1,714.39	1,657.66	56.73	30.220	
5,700.00	5,001.31	5,330.41	5,096.65	45.87	28.42	-159.81	-628.62	-1,083.04	1,757.24	1,700.00	57.24	30.701	
5,800.00	5,088.83	5,519.34	5,262.96	46.34	28.37	-137.61	-628.99	-995.22	1,792.05	1,735.42	56.63	31.642	
5,900.00	5,172.35	5,693.01	5,383.21	46.64	28.34	-120.34	-629.51	-870.83	1,818.17	1,762.49	55.68	32.655	
6,000.00	5,249.34	5,807.41	5,442.53	46.79	28.44	-108.46	-629.92	-773.08	1,836.25	1,780.96	55.29	33.209	
6,100.00	5,317.46	5,951.63	5,498.03	46.81	28.80	-99.98	-630.48	-640.38	1,846.61	1,791.50	55.11	33.508	
6,200.00	5,374.64	6,078.12	5,518.14	46.71	29.37	-94.22	-631.00	-515.75	1,848.06	1,792.66	55.40	33.358	
6,300.00	5,423.94	6,171.59	5,519.29	46.55	29.96	-92.66	-631.39	-422.30	1,844.98	1,788.89	56.09	32.895	
6,400.00	5,461.12	6,264.53	5,519.92	46.39	30.72	-91.76	-631.78	-329.36	1,843.46	1,786.27	57.19	32.233	
6,500.00	5,481.65	6,362.41	5,520.59	46.23	31.71	-91.20	-632.19	-231.48	1,842.95	1,784.15	58.81	31.340	
6,592.79	5,487.93	6,454.99	5,521.21	46.09	32.81	-91.04	-632.58	-138.91	1,842.86	1,782.13	60.73	30.347	
6,600.00	5,486.01	6,462.27	5,521.26	46.08	32.91	-91.10	-632.61	-131.62	1,842.90	1,782.00	60.90	30.261	
6,700.00	5,486.77	6,562.27	5,521.94	45.95	34.28	-91.09	-633.03	-31.63	1,842.91	1,779.56	63.35	29.091	
6,800.00	5,487.54	6,662.27	5,522.62	45.85	35.79	-91.09	-633.45	68.37	1,842.92	1,776.83	66.10	27.881	
6,900.00	5,488.30	6,762.27	5,523.29	45.79	37.44	-91.09	-633.87	168.37	1,842.94	1,773.82	69.12	26.665	
7,000.00	5,489.07	6,862.27	5,523.97	45.76	39.19	-91.09	-634.28	268.36	1,842.95	1,770.59	72.36	25.468	
7,100.00	5,489.83	6,962.27	5,524.65	45.78	41.04	-91.08	-634.70	368.36	1,842.97	1,767.16	75.81	24.309	
7,200.00	5,490.60	7,062.27	5,525.33	45.87	42.96	-91.08	-635.12	468.36	1,842.98	1,763.54	79.44	23.199	
7,300.00	5,491.36	7,162.27	5,526.01	46.06	44.96	-91.08	-635.54	568.35	1,843.00	1,759.78	83.22	22.145	
7,400.00	5,492.13	7,262.27	5,526.68	46.42	47.00	-91.07	-635.96	668.35	1,843.01	1,755.87	87.14	21.150	
7,500.00	5,492.89	7,362.27	5,527.36	47.04	49.10	-91.07	-636.38	768.35	1,843.03	1,751.86	91.17	20.215	
7,600.00	5,493.66	7,462.27	5,528.04	47.99	51.24	-91.07	-636.80	868.34	1,843.04	1,747.74	95.30	19.339	
7,700.00	5,494.42	7,562.27	5,528.72	49.30	53.42	-91.07	-637.22	968.34	1,843.06	1,743.53	99.52	18.519	
7,800.00	5,495.19	7,662.27	5,529.39	50.90	55.63	-91.06	-637.64	1,068.34	1,843.07	1,739.25	103.82	17.752	
7,900.00	5,495.95	7,762.27	5,530.07	52.71	57.87	-91.06	-638.05	1,168.33	1,843.08	1,734.89	108.19	17.035	
8,000.00	5,496.72	7,862.27	5,530.75	54.66	60.13	-91.06	-638.47	1,268.33	1,843.10	1,730.47	112.62	16.365	
8,100.00	5,497.48	7,962.27	5,531.43	56.70	62.42	-91.06	-638.89	1,368.33	1,843.11	1,726.00	117.11	15.738	
8,200.00	5,498.24	8,062.27	5,532.10	58.81	64.72	-91.05	-639.31	1,468.33	1,843.13	1,721.49	121.64	15.152	
8,300.00	5,499.01	8,162.27	5,532.78	60.97	67.04	-91.05	-639.73	1,568.32	1,843.14	1,716.93	126.22	14.603	
8,400.00	5,499.77	8,262.27	5,533.46	63.17	69.38	-91.05	-640.15	1,668.32	1,843.16	1,712.33	130.83	14.089	
8,500.00	5,500.54	8,362.27	5,534.14	65.40	71.73	-91.04	-640.57	1,768.32	1,843.17	1,707.70	135.47	13.606	
8,600.00	5,501.30	8,462.27	5,534.81	67.66	74.10	-91.04	-640.99	1,868.31	1,843.19	1,703.04	140.15	13.152	
8,700.00	5,502.07	8,562.27	5,535.49	69.94	76.48	-91.04	-641.41	1,968.31	1,843.20	1,698.35	144.85	12.725	
8,800.00	5,502.83	8,662.27	5,536.17	72.24	78.86	-91.04	-641.82	2,068.31	1,843.22	1,693.63	149.58	12.322	
8,900.00	5,503.60	8,762.27	5,536.85	74.56	81.26	-91.03	-642.24	2,168.30	1,843.23	1,688.90	154.33	11.943	
9,000.00	5,504.36	8,862.27	5,537.52	76.89	83.67	-91.03	-642.66	2,268.30	1,843.25	1,684.14	159.11	11.585	
9,100.00	5,505.13	8,962.27	5,538.20	79.24	86.08	-91.03	-643.08	2,368.30	1,843.26	1,679.36	163.90	11.246	
9,200.00	5,505.89	9,062.27	5,538.88	81.60	88.50	-91.03	-643.50	2,468.29	1,843.27	1,674.57	168.71	10.926	
9,300.00	5,506.66	9,162.27	5,539.56	83.97	90.93	-91.02	-643.92	2,568.29	1,843.29	1,669.76	173.53	10.622	
9,400.00	5,507.42	9,262.27	5,540.24	86.35	93.36	-91.02	-644.34	2,668.29	1,843.30	1,664.93	178.37	10.334	
9,500.00	5,508.19	9,362.27	5,540.91	88.74	95.80	-91.02	-644.76	2,768.28	1,843.32	1,660.09	183.22	10.060	
9,600.00	5,508.95	9,462.27	5,541.59	91.14	98.24	-91.01	-645.18	2,868.28	1,843.33	1,655.24	188.09	9.800	
9,700.00	5,509.72	9,562.27	5,542.27	93.54	100.69	-91.01	-645.60	2,968.28	1,843.35	1,650.38	192.96	9.553	
9,800.00	5,510.48	9,662.27	5,542.95	95.95	103.15	-91.01	-646.01	3,068.27	1,843.36	1,645.51	197.85	9.317	
9,900.00	5,511.25	9,762.27	5,543.62	98.37	105.61	-91.01	-646.43	3,168.27	1,843.38	1,640.63	202.75	9.092	
10,000.00	5,512.01	9,862.27	5,544.30	100.80	108.07	-91.00	-646.85	3,268.27	1,843.39	1,635.74	207.65	8.877	
10,100.00	5,512.78	9,962.27	5,544.98	103.23	110.53	-91.00	-647.27	3,368.26	1,843.41	1,630.84	212.57	8.672	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook Unit 140H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Rule Assigned: Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.00	5,513.54	10,062.27	5,545.66	105.66	113.00	-91.00	-647.69	3,468.26	1,843.42	1,625.93	217.49	8.476	
10,300.00	5,514.30	10,162.27	5,546.33	108.10	115.48	-91.00	-648.11	3,568.26	1,843.44	1,621.01	222.42	8.288	
10,400.00	5,515.07	10,262.27	5,547.01	110.55	117.95	-90.99	-648.53	3,668.25	1,843.45	1,616.09	227.36	8.108	
10,500.00	5,515.83	10,362.27	5,547.69	112.99	120.43	-90.99	-648.95	3,768.25	1,843.46	1,611.17	232.30	7.936	
10,600.00	5,516.60	10,462.27	5,548.37	115.45	122.91	-90.99	-649.37	3,868.25	1,843.48	1,606.23	237.25	7.770	
10,700.00	5,517.36	10,562.27	5,549.04	117.90	125.39	-90.98	-649.78	3,968.24	1,843.49	1,601.29	242.20	7.611	
10,800.00	5,518.13	10,662.27	5,549.72	120.36	127.88	-90.98	-650.20	4,068.24	1,843.51	1,596.35	247.16	7.459	
10,900.00	5,518.89	10,762.27	5,550.40	122.83	130.37	-90.98	-650.62	4,168.24	1,843.52	1,591.40	252.13	7.312	
11,000.00	5,519.66	10,862.27	5,551.08	125.29	132.86	-90.98	-651.04	4,268.24	1,843.54	1,586.44	257.09	7.171	
11,100.00	5,520.42	10,962.27	5,551.76	127.76	135.35	-90.97	-651.46	4,368.23	1,843.55	1,581.48	262.07	7.035	
11,200.00	5,521.19	11,062.27	5,552.43	130.23	137.84	-90.97	-651.88	4,468.23	1,843.57	1,576.52	267.05	6.904	
11,300.00	5,521.95	11,162.27	5,553.11	132.71	140.34	-90.97	-652.30	4,568.23	1,843.58	1,571.55	272.03	6.777	
11,400.00	5,522.72	11,262.27	5,553.79	135.18	142.84	-90.97	-652.72	4,668.22	1,843.60	1,566.58	277.01	6.655	
11,500.00	5,523.48	11,362.27	5,554.47	137.66	145.34	-90.96	-653.14	4,768.22	1,843.61	1,561.61	282.00	6.538	
11,600.00	5,524.25	11,462.27	5,555.14	140.14	147.84	-90.96	-653.55	4,868.22	1,843.63	1,556.63	287.00	6.424	
11,700.00	5,525.01	11,562.27	5,555.82	142.63	150.34	-90.96	-653.97	4,968.21	1,843.64	1,551.65	291.99	6.314	
11,800.00	5,525.78	11,662.27	5,556.50	145.11	152.84	-90.95	-654.39	5,068.21	1,843.66	1,546.67	296.99	6.208	
11,900.00	5,526.54	11,762.27	5,557.18	147.60	155.35	-90.95	-654.81	5,168.21	1,843.67	1,541.68	301.99	6.105	
12,000.00	5,527.31	11,862.27	5,557.85	150.09	157.85	-90.95	-655.23	5,268.20	1,843.69	1,536.69	307.00	6.006	
12,100.00	5,528.07	11,962.27	5,558.53	152.58	160.36	-90.95	-655.65	5,368.20	1,843.70	1,531.70	312.00	5.909	
12,200.00	5,528.83	12,062.27	5,559.21	155.07	162.87	-90.94	-656.07	5,468.20	1,843.71	1,526.70	317.01	5.816	
12,300.00	5,529.60	12,162.27	5,559.89	157.57	165.38	-90.94	-656.49	5,568.19	1,843.73	1,521.70	322.02	5.725	
12,400.00	5,530.36	12,262.27	5,560.56	160.06	167.89	-90.94	-656.91	5,668.19	1,843.74	1,516.70	327.04	5.638	
12,500.00	5,531.13	12,362.27	5,561.24	162.56	170.40	-90.94	-657.32	5,768.19	1,843.76	1,511.70	332.06	5.553	
12,600.00	5,531.89	12,462.27	5,561.92	165.06	172.91	-90.93	-657.74	5,868.18	1,843.77	1,506.70	337.07	5.470	
12,700.00	5,532.66	12,562.27	5,562.60	167.56	175.42	-90.93	-658.16	5,968.18	1,843.79	1,501.69	342.09	5.390	
12,800.00	5,533.42	12,662.27	5,563.27	170.06	177.94	-90.93	-658.58	6,068.18	1,843.80	1,496.69	347.12	5.312	
12,900.00	5,534.19	12,762.27	5,563.95	172.56	180.45	-90.93	-659.00	6,168.17	1,843.82	1,491.68	352.14	5.236	
13,000.00	5,534.95	12,862.27	5,564.63	175.06	182.97	-90.92	-659.42	6,268.17	1,843.83	1,486.67	357.17	5.162	
13,100.00	5,535.72	12,962.27	5,565.31	177.57	185.48	-90.92	-659.84	6,368.17	1,843.85	1,481.65	362.19	5.091	
13,200.00	5,536.48	13,062.27	5,565.99	180.07	188.00	-90.92	-660.26	6,468.16	1,843.86	1,476.64	367.22	5.021	
13,300.00	5,537.25	13,162.27	5,566.66	182.58	190.52	-90.91	-660.68	6,568.16	1,843.88	1,471.62	372.25	4.953	
13,400.00	5,538.01	13,262.27	5,567.34	185.08	193.03	-90.91	-661.09	6,668.16	1,843.89	1,466.60	377.29	4.887	
13,500.00	5,538.78	13,362.27	5,568.02	187.59	195.55	-90.91	-661.51	6,768.16	1,843.91	1,461.59	382.32	4.823	
13,600.00	5,539.54	13,462.27	5,568.70	190.10	198.07	-90.91	-661.93	6,868.15	1,843.92	1,456.57	387.36	4.760	
13,700.00	5,540.31	13,562.27	5,569.37	192.61	200.59	-90.90	-662.35	6,968.15	1,843.94	1,451.54	392.39	4.699	
13,800.00	5,541.07	13,662.27	5,570.05	195.12	203.11	-90.90	-662.77	7,068.15	1,843.95	1,446.52	397.43	4.640	
13,900.00	5,541.84	13,762.27	5,570.73	197.63	205.63	-90.90	-663.19	7,168.14	1,843.97	1,441.50	402.47	4.582	
14,000.00	5,542.60	13,862.27	5,571.41	200.15	208.16	-90.90	-663.61	7,268.14	1,843.98	1,436.47	407.51	4.525	
14,100.00	5,543.37	13,962.27	5,572.08	202.66	210.68	-90.89	-664.03	7,368.14	1,844.00	1,431.45	412.55	4.470	
14,200.00	5,544.13	14,062.27	5,572.76	205.17	213.20	-90.89	-664.45	7,468.13	1,844.01	1,426.42	417.59	4.416	
14,300.00	5,544.89	14,162.27	5,573.44	207.69	215.72	-90.89	-664.86	7,568.13	1,844.03	1,421.39	422.63	4.363	
14,400.00	5,545.66	14,262.27	5,574.12	210.20	218.25	-90.88	-665.28	7,668.13	1,844.04	1,416.36	427.68	4.312	
14,500.00	5,546.42	14,362.27	5,574.79	212.72	220.77	-90.88	-665.70	7,768.12	1,844.05	1,411.33	432.72	4.262	
14,600.00	5,547.19	14,462.27	5,575.47	215.23	223.30	-90.88	-666.12	7,868.12	1,844.07	1,406.30	437.77	4.212	
14,700.00	5,547.95	14,562.27	5,576.15	217.75	225.82	-90.88	-666.54	7,968.12	1,844.08	1,401.27	442.81	4.164	
14,800.00	5,548.72	14,662.27	5,576.83	220.27	228.35	-90.87	-666.96	8,068.11	1,844.10	1,396.24	447.86	4.118	
14,900.00	5,549.48	14,762.27	5,577.50	222.79	230.87	-90.87	-667.38	8,168.11	1,844.11	1,391.20	452.91	4.072	
15,000.00	5,550.25	14,862.27	5,578.18	225.30	233.40	-90.87	-667.80	8,268.11	1,844.13	1,386.17	457.96	4.027	
15,100.00	5,551.01	14,962.27	5,578.86	227.82	235.93	-90.87	-668.22	8,368.10	1,844.14	1,381.13	463.01	3.983	
15,200.00	5,551.78	15,062.27	5,579.54	230.34	238.45	-90.86	-668.63	8,468.10	1,844.16	1,376.10	468.06	3.940	
15,300.00	5,552.54	15,162.27	5,580.22	232.86	240.98	-90.86	-669.05	8,568.10	1,844.17	1,371.06	473.11	3.898	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook Unit 140H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,400.00	5,553.31	15,262.27	5,580.89	235.38	243.51	-90.86	-669.47	8,668.09	1,844.19	1,366.02	478.16	3.857	
15,500.00	5,554.07	15,362.27	5,581.57	237.90	246.03	-90.85	-669.89	8,768.09	1,844.20	1,360.99	483.22	3.817	
15,600.00	5,554.84	15,462.27	5,582.25	240.43	248.56	-90.85	-670.31	8,868.09	1,844.22	1,355.95	488.27	3.777	
15,700.00	5,555.60	15,562.27	5,582.93	242.95	251.09	-90.85	-670.73	8,968.08	1,844.23	1,350.91	493.32	3.738	
15,800.00	5,556.37	15,662.27	5,583.60	245.47	253.62	-90.85	-671.15	9,068.08	1,844.25	1,345.87	498.38	3.700	
15,900.00	5,557.13	15,762.27	5,584.28	247.99	256.15	-90.84	-671.57	9,168.08	1,844.26	1,340.83	503.43	3.663	
16,000.00	5,557.90	15,862.27	5,584.96	250.52	258.68	-90.84	-671.99	9,268.07	1,844.28	1,335.79	508.49	3.627	
16,100.00	5,558.66	15,962.27	5,585.64	253.04	261.21	-90.84	-672.40	9,368.07	1,844.29	1,330.75	513.55	3.591	
16,200.00	5,559.42	16,062.27	5,586.31	255.56	263.74	-90.84	-672.82	9,468.07	1,844.31	1,325.70	518.60	3.556	
16,300.00	5,560.19	16,162.27	5,586.99	258.09	266.27	-90.83	-673.24	9,568.07	1,844.32	1,320.66	523.66	3.522	
16,400.00	5,560.95	16,262.27	5,587.67	260.61	268.80	-90.83	-673.66	9,668.06	1,844.34	1,315.62	528.72	3.488	
16,500.00	5,561.72	16,362.27	5,588.35	263.14	271.33	-90.83	-674.08	9,768.06	1,844.35	1,310.57	533.78	3.455	
16,600.00	5,562.48	16,462.27	5,589.02	265.66	273.86	-90.82	-674.50	9,868.06	1,844.37	1,305.53	538.84	3.423	
16,700.00	5,563.25	16,562.27	5,589.70	268.19	276.39	-90.82	-674.92	9,968.05	1,844.38	1,300.48	543.90	3.391	
16,700.41	5,563.25	16,562.68	5,589.70	268.20	276.40	-90.82	-674.92	9,968.46	1,844.38	1,300.46	543.92	3.391	
16,798.28	5,564.00	16,606.25	5,590.00	270.67	277.50	-90.82	-675.10	10,012.03	1,845.20	1,298.83	546.36	3.377 SF	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook UT 131H - Original Hole - MWD

Offset Site Error: 0.00 ft

Survey Program: 64-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: 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	-82.67	7.89	-61.32	62.98				
100.00	100.00	87.81	87.80	0.13	0.18	-82.28	8.33	-61.50	62.06	61.75	0.31	200.453	
200.00	200.00	187.95	187.95	0.49	0.53	-81.68	9.01	-61.57	62.23	61.20	1.03	60.625	
300.00	300.00	288.19	288.18	0.85	0.89	-81.35	9.34	-61.39	62.09	60.36	1.74	35.706	
400.00	400.00	388.28	388.28	1.21	1.24	-81.14	9.51	-61.03	61.77	59.32	2.45	25.233	
500.00	500.00	488.50	488.49	1.57	1.59	-81.23	9.32	-60.43	61.14	57.99	3.16	19.372	
594.45	594.41	581.91	581.88	1.89	1.91	79.82	7.85	-60.35	60.40	56.60	3.80	15.894	CC
600.00	599.95	587.00	586.97	1.91	1.93	79.88	7.67	-60.43	60.41	56.57	3.84	15.745	
700.00	699.63	686.34	686.10	2.25	2.27	81.55	2.24	-63.51	61.20	56.69	4.51	13.559	
800.00	798.77	786.48	785.89	2.61	2.62	86.02	-5.25	-67.44	61.85	56.62	5.23	11.830	
900.00	897.08	887.21	886.13	3.00	2.99	93.92	-14.51	-70.95	62.02	56.04	5.99	10.356	
1,000.00	994.31	988.66	986.61	3.44	3.38	103.54	-28.16	-73.54	61.41	54.62	6.79	9.041	
1,076.91	1,068.17	1,066.51	1,063.47	3.81	3.69	113.79	-40.58	-73.63	60.76	53.35	7.41	8.199	
1,100.00	1,090.18	1,089.65	1,086.28	3.92	3.78	117.51	-44.40	-73.29	60.87	53.29	7.58	8.027	ES
1,200.00	1,184.43	1,188.33	1,183.51	4.47	4.18	135.00	-61.10	-71.10	65.72	57.42	8.30	7.921	SF
1,300.00	1,276.81	1,286.73	1,280.18	5.09	4.60	150.61	-79.32	-68.93	78.73	69.78	8.95	8.794	
1,400.00	1,367.06	1,385.21	1,376.56	5.78	5.04	162.48	-99.45	-66.49	98.92	89.30	9.63	10.277	
1,500.00	1,454.93	1,483.58	1,472.17	6.54	5.50	171.02	-122.38	-63.70	124.11	113.76	10.36	11.985	
1,600.00	1,540.21	1,581.00	1,566.37	7.37	5.99	176.90	-147.08	-61.20	154.00	142.84	11.15	13.807	
1,700.00	1,624.42	1,681.90	1,663.09	8.24	6.52	-178.97	-175.74	-59.70	183.59	171.61	11.98	15.329	
1,800.00	1,708.64	1,775.04	1,751.96	9.14	7.03	-175.92	-203.55	-57.71	212.68	199.81	12.87	16.530	
1,900.00	1,792.85	1,868.95	1,841.69	10.04	7.55	-173.35	-231.07	-54.46	243.22	229.44	13.79	17.641	
2,000.00	1,877.07	1,967.32	1,935.47	10.96	8.10	-171.23	-260.58	-51.22	273.45	258.70	14.75	18.540	
2,100.00	1,961.29	2,059.43	2,023.48	11.89	8.62	-169.89	-287.69	-49.36	303.84	288.15	15.69	19.360	
2,200.00	2,045.50	2,151.31	2,111.56	12.82	9.14	-168.84	-313.76	-47.19	335.43	318.79	16.64	20.158	
2,300.00	2,129.72	2,253.75	2,209.74	13.76	9.72	-167.99	-342.96	-45.77	366.56	348.92	17.64	20.776	
2,400.00	2,213.93	2,352.95	2,304.44	14.70	10.30	-167.40	-372.50	-45.88	395.90	377.26	18.63	21.248	
2,500.00	2,298.15	2,446.19	2,393.32	15.64	10.84	-166.83	-400.68	-45.51	425.15	405.54	19.61	21.683	
2,600.00	2,382.37	2,538.39	2,481.29	16.58	11.39	-166.27	-428.25	-44.29	455.17	434.58	20.59	22.107	
2,700.00	2,466.58	2,633.19	2,571.76	17.53	11.95	-165.70	-456.48	-42.44	485.65	464.05	21.60	22.483	
2,800.00	2,550.80	2,730.96	2,664.86	18.48	12.53	-165.10	-486.26	-40.09	515.84	493.18	22.65	22.771	
2,900.00	2,635.01	2,821.72	2,751.37	19.43	13.08	-164.61	-513.61	-37.74	546.43	522.77	23.66	23.098	
3,000.00	2,719.23	2,914.48	2,839.84	20.39	13.63	-164.17	-541.39	-35.33	577.22	552.54	24.68	23.390	
3,100.00	2,803.44	3,004.73	2,925.94	21.34	14.17	-163.70	-568.21	-31.94	608.84	583.15	25.69	23.698	
3,200.00	2,887.66	3,099.00	3,016.02	22.30	14.73	-163.28	-595.74	-28.19	641.05	614.30	26.74	23.971	
3,300.00	2,971.88	3,210.73	3,122.60	23.25	15.40	-162.92	-629.17	-25.65	671.73	643.80	27.93	24.048	
3,400.00	3,056.09	3,307.13	3,214.39	24.21	15.98	-162.70	-658.62	-24.69	701.26	672.28	28.98	24.197	
3,500.00	3,140.31	3,397.89	3,300.73	25.17	16.54	-162.45	-686.53	-23.14	731.02	701.03	30.00	24.369	
3,600.00	3,224.52	3,503.24	3,400.81	26.13	17.19	-162.14	-719.35	-20.90	760.72	729.56	31.16	24.416	
3,700.00	3,308.74	3,596.69	3,489.75	27.09	17.76	-161.99	-748.01	-20.20	790.03	757.85	32.19	24.546	
3,800.00	3,392.96	3,704.18	3,591.51	28.05	18.44	-161.72	-782.62	-18.98	818.30	784.93	33.36	24.526	
3,900.00	3,477.17	3,793.56	3,676.04	29.01	19.00	-161.49	-811.64	-17.69	846.56	812.16	34.40	24.610	
4,000.00	3,561.39	3,880.62	3,758.63	29.97	19.55	-161.31	-839.14	-16.44	875.55	840.15	35.40	24.734	
4,100.00	3,645.60	3,969.97	3,843.60	30.93	20.10	-161.15	-866.73	-14.75	905.39	868.98	36.41	24.863	
4,200.00	3,729.82	4,054.05	3,923.80	31.89	20.61	-161.00	-891.87	-12.59	936.36	898.98	37.37	25.054	
4,300.00	3,814.04	4,155.10	4,020.23	32.85	21.22	-160.85	-921.97	-9.96	967.48	928.98	38.50	25.129	
4,400.00	3,898.25	4,269.61	4,129.28	33.81	21.92	-160.67	-956.78	-7.30	998.08	958.32	39.76	25.102	
4,500.00	3,982.47	4,390.13	4,243.70	34.77	22.67	-160.59	-994.62	-7.68	1,026.34	985.31	41.02	25.019	
4,600.00	4,066.68	4,491.33	4,339.35	35.73	23.32	-160.55	-1,027.65	-9.34	1,052.71	1,010.60	42.11	24.996	
4,700.00	4,150.90	4,573.11	4,416.71	36.70	23.83	-160.53	-1,054.12	-10.87	1,079.22	1,036.18	43.04	25.073	
4,800.00	4,235.12	4,647.00	4,486.92	37.66	24.29	-160.50	-1,077.15	-11.10	1,107.60	1,063.70	43.90	25.231	
4,900.00	4,319.33	4,723.92	4,560.23	38.62	24.76	-160.44	-1,100.41	-10.06	1,137.68	1,092.90	44.78	25.408	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook UT 131H - Original Hole - MWD

Offset Site Error: 0.00 ft

Survey Program: 64-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Rule Assigned: Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,403.55	4,804.68	4,637.62	39.59	25.24	-160.40	-1,123.43	-8.46	1,169.42	1,123.75	45.67	25.607	
5,100.00	4,487.76	4,904.18	4,733.50	40.55	25.81	-160.49	-1,149.99	-8.53	1,201.43	1,154.75	46.69	25.734	
5,200.00	4,571.98	6,063.62	5,503.09	41.51	31.82	173.09	-1,395.71	-644.19	1,193.00	1,150.00	42.99	27.749	
5,300.00	4,656.20	6,082.57	5,503.41	42.48	31.92	172.13	-1,393.21	-662.97	1,162.57	1,117.20	45.37	25.623	
5,400.00	4,740.41	6,097.09	5,503.53	43.44	31.99	171.39	-1,391.24	-677.35	1,139.95	1,092.38	47.58	23.960	
5,500.00	4,824.96	6,109.56	5,503.59	44.39	32.05	175.61	-1,389.53	-689.70	1,125.18	1,075.64	49.54	22.715	
5,600.00	4,912.45	6,106.26	5,503.58	45.22	32.03	-168.18	-1,389.98	-686.43	1,113.79	1,062.84	50.95	21.862	
5,700.00	5,001.31	6,085.31	5,503.44	45.87	31.93	-148.69	-1,392.84	-665.68	1,104.72	1,053.03	51.69	21.374	
5,800.00	5,088.83	6,058.02	5,502.93	46.34	31.80	-130.86	-1,396.40	-638.63	1,097.56	1,045.56	52.00	21.105	
5,900.00	5,172.35	6,026.45	5,501.43	46.64	31.65	-117.18	-1,399.81	-607.28	1,091.80	1,039.82	51.98	21.005	
6,000.00	5,249.34	5,989.83	5,498.41	46.79	31.51	-107.31	-1,402.82	-570.92	1,086.68	1,035.02	51.66	21.033	
6,100.00	5,317.46	5,948.28	5,492.25	46.81	31.33	-100.19	-1,404.78	-529.89	1,081.40	1,030.20	51.21	21.119	
6,200.00	5,374.64	5,913.31	5,484.37	46.71	31.18	-95.43	-1,405.19	-495.83	1,075.40	1,024.38	51.02	21.077	
6,291.41	5,418.90	5,885.83	5,476.96	46.56	31.07	-94.27	-1,404.39	-469.38	1,072.63	1,021.46	51.16	20.965	
6,300.00	5,423.94	5,883.65	5,476.34	46.55	31.06	-94.10	-1,404.28	-467.29	1,072.21	1,021.05	51.16	20.956	
6,400.00	5,461.12	5,852.53	5,467.17	46.39	30.92	-92.56	-1,402.02	-437.65	1,077.16	1,025.56	51.61	20.873	
6,500.00	5,481.65	5,809.00	5,453.03	46.23	30.71	-90.16	-1,396.73	-396.82	1,089.61	1,037.53	52.08	20.922	
6,600.00	5,486.01	5,777.00	5,441.54	46.08	30.56	-88.38	-1,391.48	-367.43	1,107.95	1,054.65	53.29	20.789	
6,700.00	5,486.77	5,731.53	5,422.41	45.95	30.33	-87.37	-1,382.71	-327.14	1,131.41	1,077.24	54.17	20.887	
6,800.00	5,487.54	5,683.00	5,397.61	45.85	30.09	-86.10	-1,372.18	-286.80	1,159.93	1,104.96	54.97	21.102	
6,900.00	5,488.30	5,652.00	5,379.48	45.79	29.93	-85.18	-1,364.98	-262.72	1,193.40	1,137.07	56.33	21.186	
7,000.00	5,489.07	5,620.00	5,359.19	45.76	29.77	-84.18	-1,357.14	-239.25	1,232.02	1,174.41	57.61	21.385	
7,100.00	5,489.83	5,588.00	5,337.67	45.78	29.61	-83.13	-1,349.02	-217.02	1,275.42	1,216.59	58.82	21.683	
7,200.00	5,490.60	5,558.00	5,316.33	45.87	29.46	-82.10	-1,341.38	-197.37	1,323.24	1,263.24	60.01	22.052	
7,300.00	5,491.36	5,526.00	5,292.34	46.06	29.30	-80.97	-1,333.38	-177.77	1,375.20	1,314.16	61.04	22.530	
7,400.00	5,492.13	5,495.00	5,268.12	46.42	29.15	-79.85	-1,325.70	-160.02	1,431.10	1,369.10	62.00	23.082	
7,500.00	5,492.89	5,478.48	5,254.92	47.04	29.07	-79.25	-1,321.48	-151.02	1,490.84	1,427.65	63.19	23.594	
7,600.00	5,493.66	5,463.00	5,242.38	47.99	28.99	-78.69	-1,317.32	-142.96	1,554.21	1,489.95	64.26	24.187	
7,700.00	5,494.42	5,443.58	5,226.44	49.30	28.89	-77.99	-1,311.95	-133.25	1,620.74	1,555.62	65.12	24.888	
7,800.00	5,495.19	5,432.00	5,216.85	50.90	28.83	-77.57	-1,308.71	-127.64	1,690.04	1,624.02	66.02	25.599	
7,900.00	5,495.95	5,400.00	5,189.82	52.71	28.67	-76.40	-1,299.86	-112.98	1,761.76	1,695.30	66.46	26.509	
8,000.00	5,496.72	5,400.00	5,189.82	54.66	28.67	-76.40	-1,299.86	-112.98	1,835.76	1,768.41	67.35	27.257	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: NW Lybrook (138, 139, 140 & 141) - NW Lybrook UT 289H - Original Hole - Gyro & MWD

Offset Site Error: 0.00 ft

Survey Program: 64-GYRO-NS, 464-MWD

Offset Well Error: 0.00 ft

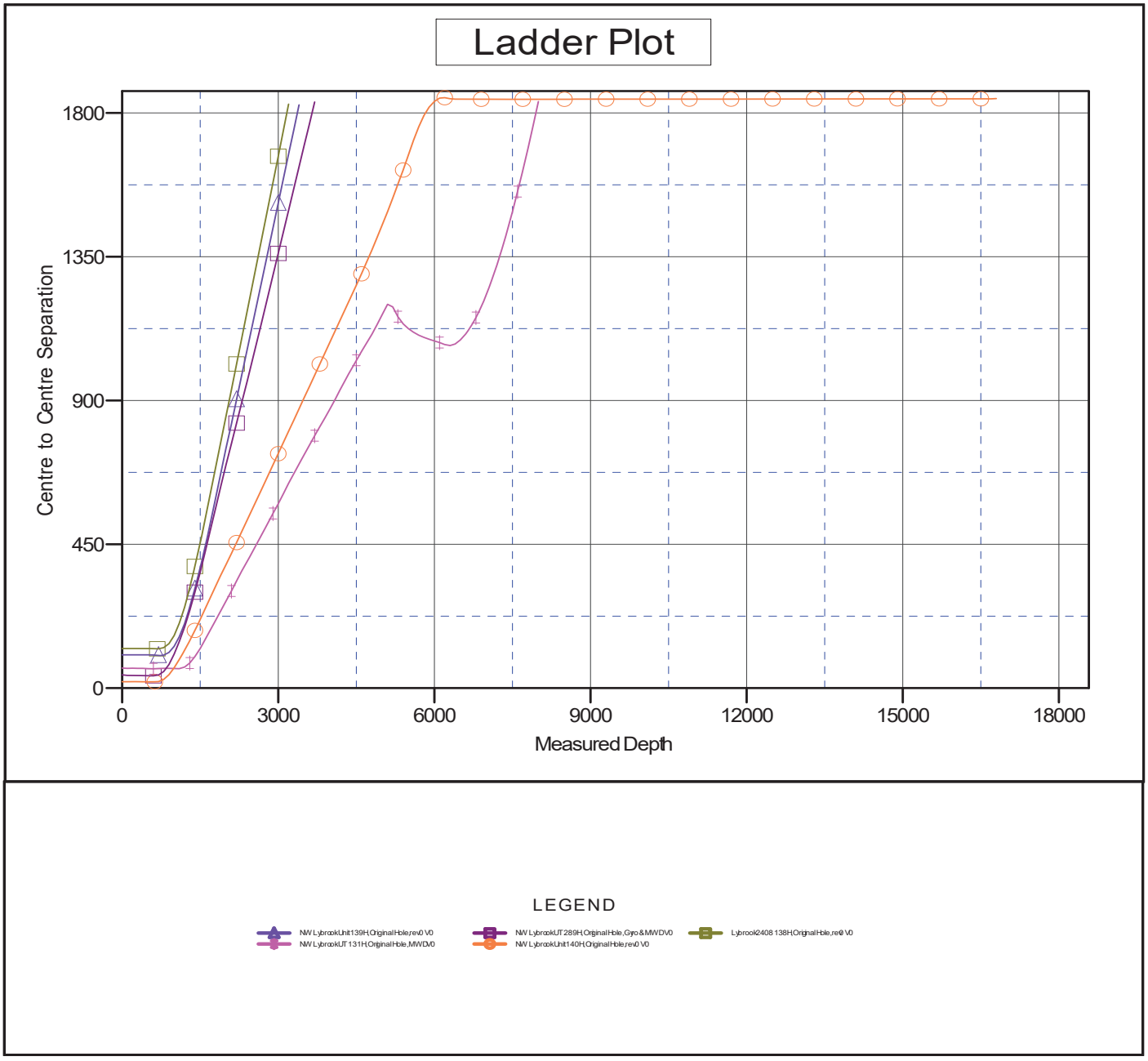
Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Rule Assigned: Distance Between Ellipses (ft)	Rule Assigned: Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-82.76	5.02	-39.51	41.59				
100.00	100.00	87.95	87.95	0.13	0.17	-82.45	5.24	-39.57	39.91	39.61	0.31	130.533	
200.00	200.00	188.09	188.08	0.49	0.52	-81.72	5.75	-39.48	39.89	38.88	1.01	39.335	
300.00	300.00	288.18	288.18	0.85	0.87	-81.16	6.07	-39.04	39.51	37.79	1.72	22.944	
400.00	400.00	388.14	388.13	1.21	1.20	-81.26	5.94	-38.64	39.10	36.69	2.41	16.223	
500.00	500.00	488.09	488.09	1.57	1.36	-82.03	5.38	-38.43	38.81	35.88	2.93	13.262	
586.40	586.37	574.10	574.09	1.87	1.44	80.81	5.22	-38.50	38.50	35.19	3.31	11.647 CC	
600.00	599.95	587.57	587.56	1.91	1.46	82.12	5.46	-38.57	38.52	35.15	3.37	11.438 ES	
700.00	699.63	686.00	685.88	2.25	1.63	98.40	9.76	-39.74	41.21	37.33	3.88	10.632 SF	
800.00	798.77	782.84	782.41	2.61	1.85	119.17	17.35	-41.21	51.82	47.36	4.46	11.629	
900.00	897.08	876.42	875.37	3.00	2.11	134.49	27.61	-43.87	73.86	68.79	5.07	14.555	
1,000.00	994.31	966.91	964.82	3.44	2.41	142.26	39.82	-50.02	106.34	100.63	5.70	18.642	
1,100.00	1,090.18	1,056.28	1,052.67	3.92	2.73	145.95	53.19	-59.53	146.15	139.79	6.36	22.967	
1,200.00	1,184.43	1,141.75	1,136.17	4.47	3.08	147.47	66.58	-71.84	191.68	184.65	7.04	27.247	
1,300.00	1,276.81	1,222.20	1,214.26	5.09	3.43	148.24	80.71	-85.10	243.25	235.54	7.71	31.557	
1,400.00	1,367.06	1,298.86	1,288.11	5.78	3.80	148.50	95.46	-99.35	300.39	291.99	8.39	35.790	
1,500.00	1,454.93	1,372.55	1,358.53	6.54	4.18	148.37	110.78	-114.76	362.71	353.63	9.09	39.914	
1,600.00	1,540.21	1,445.20	1,427.73	7.37	4.58	148.33	126.30	-130.48	429.05	419.23	9.82	43.694	
1,700.00	1,624.42	1,513.95	1,493.10	8.24	4.96	149.31	141.42	-145.51	497.24	486.73	10.51	47.321	
1,800.00	1,708.64	1,585.14	1,560.60	9.14	5.38	150.04	157.50	-161.41	565.97	554.73	11.24	50.354	
1,900.00	1,792.85	1,669.91	1,640.92	10.04	5.88	150.61	176.07	-181.15	634.34	622.21	12.13	52.283	
2,000.00	1,877.07	1,764.81	1,731.21	10.96	6.44	150.99	194.05	-204.17	700.49	687.34	13.15	53.286	
2,100.00	1,961.29	1,847.18	1,809.96	11.89	6.91	151.30	208.33	-223.62	765.41	751.37	14.04	54.531	
2,200.00	2,045.50	1,928.17	1,887.82	12.82	7.37	151.67	221.72	-241.46	829.60	814.69	14.91	55.645	
2,300.00	2,129.72	2,004.00	1,960.91	13.76	7.78	152.04	234.22	-257.34	893.71	877.99	15.73	56.828	
2,400.00	2,213.93	2,065.00	2,019.81	14.70	8.12	152.38	244.86	-269.11	958.52	942.13	16.39	58.485	
2,500.00	2,298.15	2,129.46	2,081.93	15.64	8.48	152.72	257.04	-281.25	1,024.45	1,007.37	17.08	59.969	
2,600.00	2,382.37	2,206.36	2,156.04	16.58	8.91	153.09	271.62	-295.66	1,090.44	1,072.54	17.90	60.903	
2,700.00	2,466.58	2,263.82	2,211.39	17.53	9.23	153.37	283.05	-306.04	1,157.16	1,138.64	18.52	62.467	
2,800.00	2,550.80	2,325.09	2,270.34	18.48	9.57	153.69	296.18	-316.36	1,224.99	1,205.82	19.18	63.881	
2,900.00	2,635.01	2,407.73	2,349.87	19.43	10.04	154.07	313.78	-330.34	1,292.78	1,272.73	20.05	64.477	
3,000.00	2,719.23	2,475.35	2,414.93	20.39	10.42	154.33	327.99	-342.07	1,360.40	1,339.62	20.77	65.484	
3,100.00	2,803.44	2,546.96	2,483.69	21.34	10.83	154.56	343.39	-354.84	1,428.40	1,406.85	21.55	66.294	
3,200.00	2,887.66	2,628.96	2,562.44	22.30	11.30	154.79	360.75	-369.68	1,496.17	1,473.74	22.43	66.698	
3,300.00	2,971.88	2,705.31	2,635.76	23.25	11.75	154.96	376.59	-383.91	1,563.64	1,540.37	23.26	67.211	
3,400.00	3,056.09	2,772.92	2,700.61	24.21	12.14	155.09	390.67	-396.84	1,631.18	1,607.17	24.01	67.937	
3,500.00	3,140.31	2,848.86	2,773.34	25.17	12.59	155.21	406.71	-411.66	1,698.95	1,674.10	24.85	68.369	
3,600.00	3,224.52	2,917.00	2,838.59	26.13	12.99	155.29	420.99	-425.16	1,766.61	1,741.00	25.61	68.981	
3,700.00	3,308.74	2,990.13	2,908.52	27.09	13.43	155.37	436.55	-439.87	1,834.51	1,808.09	26.43	69.414	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=6847+25 @ 6872.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -107.833333333

Coordinates are relative to: NW Lybrook Unit 141H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.11°



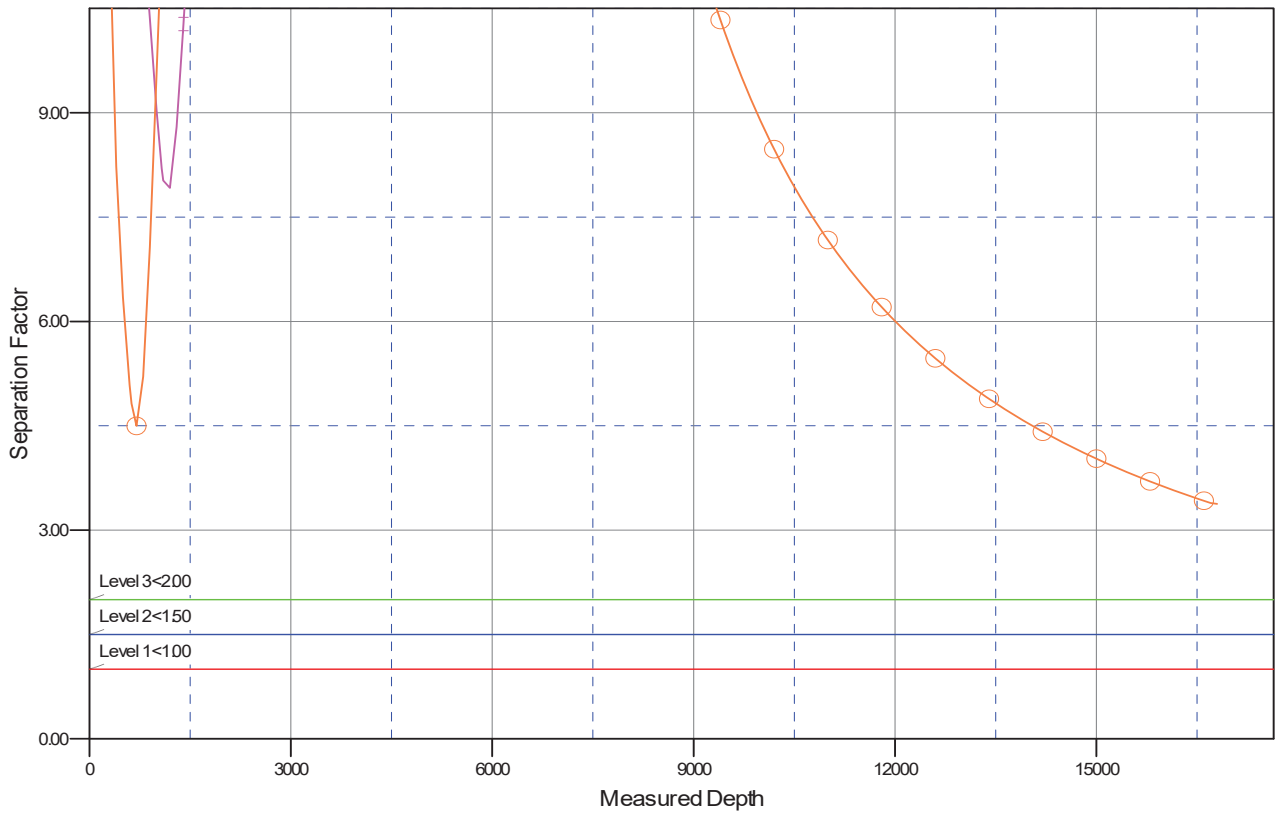
Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well NW Lybrook Unit 141H
Project:	San Juan County, New Mexico NAD83 NM W	**TVD Reference:**	RKB=6847+25 @ 6872.00ft
Reference Site:	NW Lybrook (138, 139, 140 & 141)	**MD Reference:**	RKB=6847+25 @ 6872.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	NW Lybrook Unit 141H	**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:	rev0	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=6847+25 @ 6872.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -107.833333333

Coordinates are relative to: NW Lybrook Unit 141H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.11°

Separation Factor Plot



LEGEND

NW LybrookUnit139H,OriginalHole,rev0 V0
NW LybrookUT131H,OriginalHole,MWDV0
NW LybrookUT289H,OriginalHole,Gyro &MWDV0
NW LybrookUnit140H,OriginalHole,rev0 V0
Lybrook2408 138H,OriginalHole,rev0 V0

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

#141H NW LYBROOK UNIT

Lease: NOG13121849 Agreement: NMNM133482A
SH: SW¼SW¼ Section 25, T. 24N., R. 8W.
San Juan County, New Mexico
BH: SE¼NE¼ Section 31, T. 24N., R. 7W.
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.

I. GENERAL

A. Full compliance with all applicable laws and regulations, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).

C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.

E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).

F. BOP equipment (except the annular preventer) shall be tested utilizing a test plug to full working pressure for 10 minutes. No bleed-off of pressure is acceptable. (See 43 CFR 3172.6(b)(9)(ii)).

G. The operator shall have sufficient weighting materials and lost circulation materials on location in the event of a pressure kick or in the event of lost circulation. (See 43 CFR 3172.8(a)).

H. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare. (See 43 CFR 3172.8(b)(7)).

I. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a Notice of Intent sundry within three business days. **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to Virgil Lucero at 505-793-1836.**

J. The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.

K. Unless drilling operations are commenced within three years according to 43 CFR 3171.14, approval of the Application for Permit to Drill will expire. No extensions will be granted.

L. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

M. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

N. **Commingling**: No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office. (See 43 CFR 3173.14)

II. REPORTING REQUIREMENTS

A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.

B. The following reports shall be filed with the BLM-Authorized Officer online through AFMSS 2 within 30 days after the work is completed.

1. Provide complete information concerning.

a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.

b. Intervals tested, perforated (include size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.

c. Subsequent Report of Abandonment, show the way the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.

2. Well Completion Report will be submitted with 30 days after well has been completed.

a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.

3. Submit a cement evaluation log if cement is not circulated to surface.

C. Production Startup Notification is required no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

A. All rig heating stoves are to be of the explosion-proof type.

B. Rig safety lines are to be installed.

C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

A. Any changes of plans required to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.I.

B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.I. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.

C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

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General Information
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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 412590

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID: 372286
	Action Number: 412590
	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.	12/16/2024
sford	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	12/16/2024
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	1/12/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	1/12/2025
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.	1/12/2025
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.	1/12/2025