

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-039-31466
3b. Phone No. (include area code)		10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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

(Continued on page 2)

*(Instructions on page 2)



Approval Date: 06/07/2024

OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT

17 OPERATOR CER Page 2 of 69
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
Signature: *Heather Huntington* Date: 10/23/23
Printed Name: Heather Huntington
E-mail Address: hhuntington@enduringresources.com

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-31466		2 Pool Code 97232	3 Pool Name BASIN MANCOS
4 Property Code 319957	5 Property Name RINCON UNIT		6 Well Number 917H
7 OGRID No. 372286	8 Operator Name ENDURING RESOURCES, LLC		9 Elevation 6538'

10 Surface Location


UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	21	27N	6W		1199	NORTH	1336	EAST	RIO ARriba

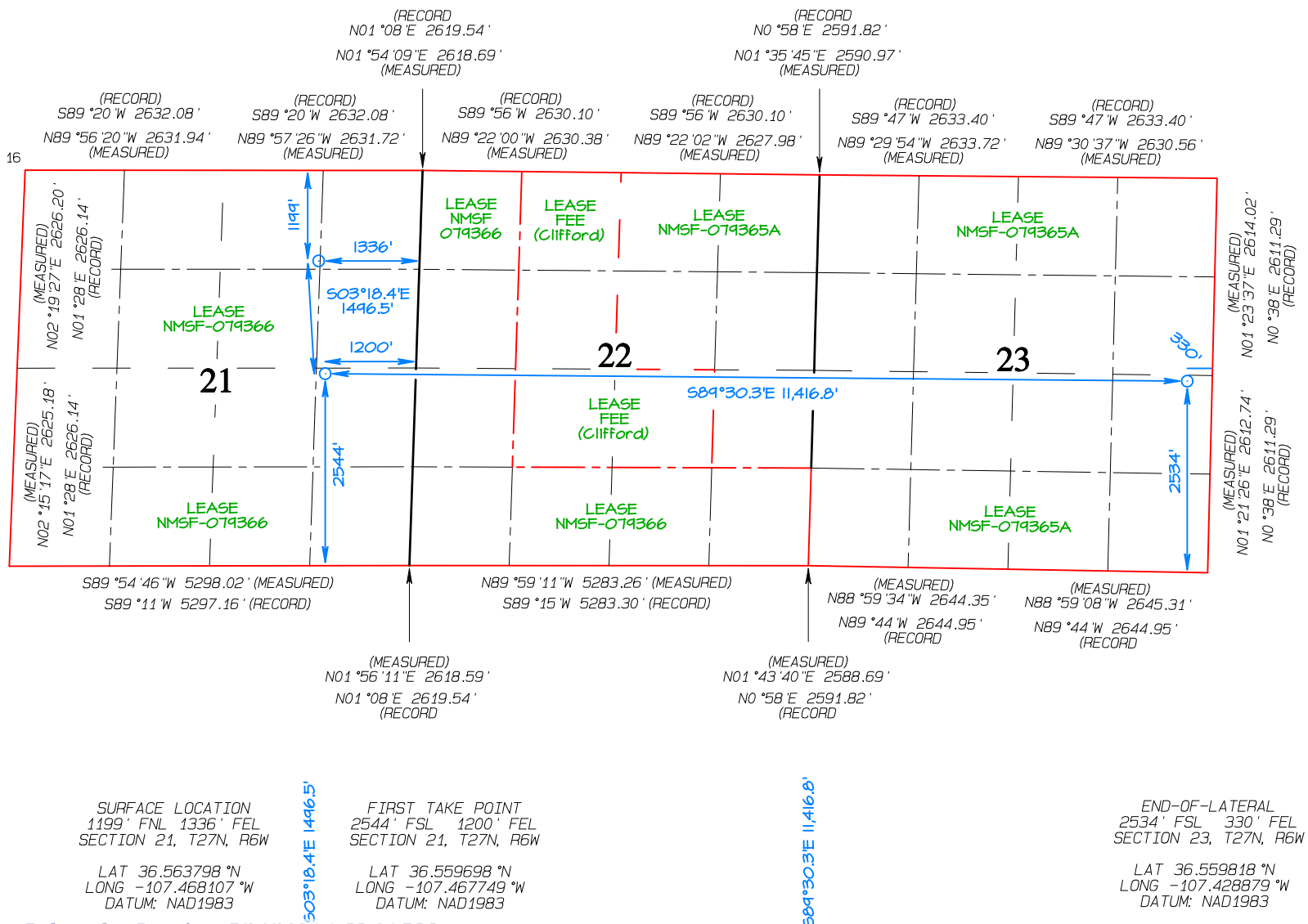
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	23	27N	6W		2534	SOUTH	330	EAST	RIO ARriba

12 Dedicated Acres 1920.00	Entire Section 21 Entire Section 22 Entire Section 23	13 Joint or Infill	14 Consolidation Code	15 Order No. R-87
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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

18 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.
Date Revised: JULY 31, 2023
Date of Survey: JUNE 17, 2018
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
Certificate Number 15269



State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

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

Section 1 – Plan Description
Effective May 25, 2021**I. Operator:** Enduring Resources, LLC **OGRID:** 372286 **Date:** 06 / 26 / 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
RINCON UNIT 815H	TBD	A-21-27N-6W	1164 FNL x 1289 FEL	30	5000	300
RINCON UNIT 817H	TBD	B-21-27N-6W	1187 FNL x 1320 DEL	30	5000	300
RINCON UNIT 915H	TBD	A-21-27N-6W	1175 FNL x 1304 FEL	30	5000	300
RINCON UNIT 917H	TBD	B-21-27N-6W	1199 FNL x 1336 FEL	30	5000	300

IV. Central Delivery Point Name: Chaco Processing Plant [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
RINCON UNIT 815H	TBD	2/1/2025	2/11/2025	3/1/2025	3/13/2025	3/23/2025
RINCON UNIT 817H	TBD	2/2/2025	2/12/2025	3/1/2025	3/13/2025	3/23/2025
RINCON UNIT 915H	TBD	2/3/2025	2/13/2025	3/1/2025	3/13/2025	3/23/2025
RINCON UNIT 917H	TBD	2/4/2025	2/14/2025	3/1/2025	3/13/2025	3/23/2025

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 06/26/2024
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.
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
Rincon Unit 815H, 817H, 915H, 917H

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.
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
Rincon Unit 815H, 817H, 915H, 917H

VENTING and FLARING

Enduring Resources, LLC (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

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

Enduring Resources, LLC (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.



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NATURAL GAS MANAGEMENT PLAN
Rincon Unit 815H, 817H, 915H, 917H

- A flare stack with a 100% capacity for expected volumes will be set on location of the facility at least 100 feet from the nearest surface hole location, well heads, and storage tanks.
- In the event of an emergency, Enduring will vent natural gas in order to avoid substantial impact. Enduring shall report the vented or flared gas to the NMOCD.

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, Enduring utilizes the following:

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

19.15.27.8 D. Venting and flaring during production operations

During Production Operations Enduring will not vent or flare natural gas except under the following circumstances:

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided:
 - a. Enduring does not vent after the well achieves a stabilized rate and pressure.
 - b. Enduring will remain present on-site during liquids unloading by manual purging and take all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time.
 - c. Enduring will optimize the system to minimize natural gas venting on any well equipped with a plunger lift or auto control system.
 - d. Best Management Practices will be used during downhole well maintenance.
3. During the first year of production from an exploratory well provided:



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NATURAL GAS MANAGEMENT PLAN
Rincon Unit 815H, 817H, 915H, 917H

- 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.



ENDURING RESOURCES, LLC.
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
Rincon Unit 815H, 817H, 915H, 917H

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.

BEST MANAGEMENT PRACTICES

Enduring Resources, LLC (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.



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Rincon Unit 815H, 817H, 915H, 917H

Enduring will isolate and attempt to route all vapors to the vapor recovery unit or ECD prior to opening any lines for maintenance to minimize venting from the equipment.

Enduring shall notify the NMOCD of venting or flaring that exceeds 50 MCF but less than 500 MCF in volume that either resulted from an emergency or malfunction, or an event lasting over eight hours or more cumulatively within any 24-hour period from a single event by filing a form C-129 no later than 15 days following the discovery or commencement of venting or flaring.

Enduring shall notify the NMOCD verbally or by e-mail within 24-hours following discovery or commencement of venting or flaring that exceeds 500 MCF in volume or otherwise qualifies as a major release as defined in 19.15.29.7 NMAC from a single event and provide the information required in form C-129 to the NMOCD no later than 15 days that verifies, updates, or corrects the verbal or e-mail notification.

Enduring will install measuring equipment to conform to industry standards such as American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.10 Measurement of Flow to Flares.

Enduring's measuring equipment shall not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

Enduring shall report the volume of vented and flared natural gas for each well or facility at which venting or flaring occurred on a monthly basis.



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

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

WELL INFORMATION:

Name: Rincon Unit 917H

API Number: Not yet assigned

AFE Number: Not yet assigned

ER Well Number: Not yet assigned

State: New Mexico

County: Rio Arriba

Surface Elevation: 6,538 ft ASL (GL) 6,563 ft ASL (KB)

Surface Location: 21-27-6 Sec-Twn-Rng 1,199 ft FNL 1,336 ft FEL

36.563798 ° N latitude 107.468107 ° W longitude (NAD 83)

BH Location: 23-27-6 Sec-Twn-Rng 2,534 ft FSL 330 ft FEL

36.559818 ° N latitude 107.428879 ° W longitude (NAD 83)

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

East on Hwy 64 for 36.8 miles to General American Road (GAR/Cty Rd 366) just past MM 101, right (S) on GAR for 1.2 miles to fork, continue right (SW) on GAR/366 for 3.4 miles to 4-way intersection, straight (S) on GAR/366 for 1.2 miles to fork, right (SW) leaving 366 follow along Munoz Wash for 4.3 miles to 4-way intersection, straight (SW) across Carrizo Wash for 0.3 mile to fork, left (SE) onto CR #492 for 1.8 miles to three way, right (N) uphill on existing

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	4,015	2,548	2,623	W	normal
	Kirtland	3,920	2,643	2,724	W	normal
	Fruitland	3,641	2,922	3,023	G, W	sub
	Pictured Cliffs	3,386	3,177	3,295	G, W	sub
	Lewis	3,121	3,442	3,579	G, W	normal
	Chacra_A	2,821	3,742	3,899	G, W	normal
	Cliff House	1,716	4,847	5,080	G, W	sub
	Menefee	1,591	4,972	5,214	G, W	sub
	Point Lookout	1,156	5,407	5,675	G, W	sub
	Mancos	746	5,817	6,090	O,G	sub
	Gallup (MNCS_A)	201	6,362	6,668	O,G	sub (~.41)
	MNCS_B	91	6,472	6,837	O,G	sub (~.41)
	MNCS_C	10	6,553	7,007	O,G	sub (~.41)
	FTP Target	10	6,553	6,767	O,G	sub (~.41)
	PROJECTED TD (BHL)	-60	6,623	18,638	O,G	sub (~.41)

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: 2,850 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 1,400 psi

Temperature: Maximum anticipated BHT is 125° F or less

H₂S INFORMATION:

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

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

LOGGING, CORING, AND TESTING:

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

MWD / LWD: Gamma Ray from drillout of 13-3/8" casing to TD

Open Hole Logs: None planned

Testing: None planned

Coring: None planned

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

DRILLING RIG INFORMATION:

Contractor: Aztec

Rig No.: 1000

Draw Works: E80 AC 1,500 hp

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

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

Prime Movers: 4 - GE Jenbacher Natural Gas Generator

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

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

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

Choke 3", 5,000 psi

KB-GL (ft): 25

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

STATE AND FEDERAL NOTIFICATIONS

BLM

State

Construction and

BLM is to be notified minimum of 48 hours prior to start of construction or reclamation.

Reclamation:

Grazing permittee is to be notified 10 days in advance.

(505) 564-7600

Spud

BLM and state are to be notified minimum of 24 hours prior to spud.

(505) 564-7750

(505) 334-6178

BOP

BLM is to be notified minimum of 24 hours prior to BOPE testing.

(505) 564-7750

see note

Casing / cementing

BLM and state are to be notified minimum of 24 hours prior to running casing and cementing.

(505) 564-7750

(505) 334-6178

Plugging

BLM and state are to be notified minimum of 24 hours prior to plugging ops.

(505) 564-7750

see note

All notifications are to be recorded in the WellView report with time, date, name or number that notifications were made to.

Note: Monica Keuhling with the OCD requests state notifications 24 hrs in advance for spud, BOP tests, casing & cementing and any plugging be given to her in both phone message and email: (505) 320-0243, monica.keuhling@emnrd.nm.gov

BOPE REQUIREMENTS:

See attached diagram for details regarding BOPE specifications and configuration.

1) Rig will be equipped with upper and lower kelly cocks with handles available.

2)

Inside BOP and TIW valves will be available to use on all sizes and threads of drill pipe used while drilling the well.

- 2) BOP accumulator will have enough capacity to open the HCR valve, close all rams and annular preventer, and retain minimum of 200 psi above precharge on the closing manifold without the use of closing pumps. The fluid reservoir capacity shall be at least double the usable fluid volume of the accumulator system capacity, and the fluid level shall be maintained at manufacturer's recommendation. There will be two additional sources of power for the closing pumps (electric and air). Sufficient nitrogen bottles will be available and will be recharged when pressure falls below manufacturer's recommended minimum.
- 3) BOP testing shall be conducted (a) when initially installed, (b) whenever any seal is broken or repaired, (c) if the time since the previous test exceeds 30 days. Tests will be conducted using a test plug. BOP ram preventers will be tested to 3,000 psig for 10 minutes, and the annular preventer will be tested to 1,500 psi for 10 minutes. Ram and annular preventers will be tested to 250 psi for 5 minutes. Additionally, BOP and casing strings will be tested to .22 psi/ft or 1,500 psi, whichever is greater but not exceeding 70% of yield strength of the casing, for 30 minutes, prior to drilling out 13-3/8" and 9-5/8" casing. Rams and hydraulically operated remote choke line valve will be function tested daily at a minimum.
- 4) Remote valve for BOP rams, HCR, and choke shall be placed in a location that is readily available to the driller. The remote BOP valve shall be capable of closing and opening the rams.
- 5) Manual locking devices (hand wheels) shall be intalled on rams. A valve will be installed on the annular preventer's closing line as close as possible to the preventer to act as a locking device. The valve will be maintained in the open position and shall only be closed when the there is no power to the accumulator.

FLUIDS AND SOLIDS CONTROL PROGRAM:

Fluid Measurement:

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

Closed-Loop System: A fully, closed-loop system will be utilized. The system will consist of above-ground piping and above-ground storage tanks and bins. The system will not entail any earthen pits, below-grade storage, or drying pads. All equipment will be disassembled and removed from the site when drilling operations cease. The system will be capable of storing all fluids and generated cuttings and of preventing uncontrolled releases of the same. The system will be operated in an efficient manner to allow the recycling and reuse of as much fluid as possible and to minimize the amount of fluids and solids that require disposal.

Fluid Disposal: Fluids that cannot be reused, recycled, or returned to the supplier will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Solids Disposal: Drilling solids will be stored (until haul-off) on-site in separate containers with no other waste, debris, or garbage products. Waste solids will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Fluid Program: See "Detailed Drilling Plan" section for additional details. Sufficient barite will be on location to weight up mud system to balance maximum anticipated pressure gradient.

DETAILED DRILLING PLAN:

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

0 ft (MD)	to	345 ft (MD)	Hole Section Length:	345 ft
0 ft (TVD)	to	345 ft (TVD)	Casing Required:	345 ft

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

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

Hole Size: 17-1/2"

Bit / Motor: Mill Tooth or PDC, no motor

MWD / Survey: No MWD, deviation survey

Logging: None

Procedure: Drill to TD. Use 12-1/4" bit and open to 17-1/2" if unable to drill with 17-1/2" bit. Run inclination survey in 100' stations from TD to surface. Condition hole and fluid for casing running as required. TOOH. Run casing. Pump cement as detailed below. Monitor returns during cement job and note cement volume to surface. Install cellar and wellhead.

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					151	1,520	116,397	116,397
Min. S.F.					7.50	1.80	7.33	7.81

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

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

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

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

Make-up as per API Buttress Connection running procedure.

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

Centralizers: 2 centralizers per jt stop-banded 10' from each collar on bottom 3 jts, 1 centralizer per 2 jts to surface

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	Hole Cap. (cuft/ft)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)
	TYPE III	14.6	1.39	6.686	0.6946	100%	0	359

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

Tail Blend

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

Cu Ft Slurry
498.4

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.

345 ft (MD)	to	6,190 ft (MD)	Hole Section Length:	5,845 ft
345 ft (TVD)	to	5,917 ft (TVD)	Casing Required:	6,190 ft

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	LSND (5% KCl)	8.8 - 9.5	20	8 - 14	8 - 14	9.0 - 9.5	No OBM

Interm Hole Mud:

Losses may occur around 5,400' TVD. Maintain minimum mud weights. Pre-treat with gilsonite and medium LCM products, 60% fibrous, 20% platey, 20% granular. If needed, reduce gpm. Losses occurred in the RINU 615H offset at 4,974' MD with completed loss of returns, but was cured by shutting in the direct producing well and spotting 30 ppb LCM. Losses occurred on the RINU 715H at 5,020' MD and were cured with 20 ppb LCM. Pretreat the mud system prior to drilling into the loss zones with constant additions of 15 ppb LCM and by-passing shakers if full losses occur. Rent a large premix pit prior to drill out of surface pipe. Have 30 ppb pill mixed and ready prior to drilling the loss zones and immediately pump once losses occur.

Hole Size: 12-1/4"

Bit / Motor: 12-1/4" PDC bit w/mud motor

Bit / Motor: MOTOR: NOV 087840 - 7/8, 4.0, stage, 0.16 rev/gal, 1.83 DEG, 900 GPM, 950 DIFF PSIG

BIT: 6-BLADE PDC w/16 mm or 19 mm cutters, TFA = 0.67 sq-in (range 0.65 - 0.90 max), **jet with 6 - 12s**

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

Logging: None

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

Procedure: Drill to TD following directional plan (**20' rat-hole past casing setting depth**). Steer as needed to keep well on plan. Keep DLS < 3 deg/100' and keep slide length < 10', when possible. Take surveys every stand, at a minimum. Target flow-rates of 750 GPM (higher if able to control return rates). Minimum desired flow-rate is 650 GPM. At TD, condition hole and fluid for casing running. TOOH. Run casing using a CRT and washing / circulating as required. Land casing. ND BOPE. Walk rig to next well. Perform off-line cement job. Pump cement as detailed below. Monitor returns during cement job and note cement volume to surface.

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
<i>Specs</i>	9.625	36.0	J-55	LTC	2,020	3,520	564,000	453,000
<i>Loading</i>					1,283	1,738	285,757	285,757
<i>Min. S.F.</i>					1.57	2.02	1.97	1.59

Assumptions:

Collapse: evacuated casing with 8.4 ppg equivalent external pressure gradient and .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

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

Casing Summary: Float shoe, 1 jt casing, float collar, casing to 5,025' MD, 9-5/8" casing packer, 10' casing pup, DV stage tool, casing to surface (**FLOAT EQUIPMENT FROM WEATHERFORD**)

Centralizers: 1 per joint in non-vertical hole; 1 per 3-joints in vertical hole

Centralizers: 1 centralizers jt stop-banded 10' from float shoe on bottom 1 jt & 1 centralizer floating on bottom joint, 1 centralizer per jt (floating) to KOP ; 1 centralizer per 3 jts (floating) to surface (**Centralizers from Scepter Supply - SLIP'N'SLIDE 9-5/8" x 11.75" SOLID BODY POLYMER**)

Casing Contingency:

Hole conditions encountered during the drilling of the 12-1/4" intermediate hole section may warrant the use of an ECP and/or a DV Tool to ensure that cement can be successfully circulated to surface. Anticipated placement tool placement is ~650' above the Point Lookout top (Lead slurry top depth is depth of DV stage cementing tool). Actual drilling conditions will determine if a tools are needed and their exact placement.

		Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Stage 1	Cement: Spacer	IntegraGuard EZ II	11		32.2		4,129	50 bbls	
	Lead	ASTM type I/II	12.5	2.220	12.5	70%	5,025	159	354.1
	Tail	Type III	14.6	1.37	6.6	20%	5,690	151	207.0
	Displacement	475	est bbls						
Stage 2	Spacer	IntegraGuard EZ II	11		32.2		0	50 bbls	
	Tail	ASTM type I/II	12.5	2.210	12.4	70%	0	1,184	2617.0
	Displacement	388	est bbls						
Annular Capacity		0.3627	cuft/ft	9-5/8" casing x 13-3/8" casing annulus					9-5/8" 36# ID
		0.3132	cuft/ft	9-5/8" casing x 12-1/4" hole annulus					8.921
		0.4341	cuft/ft	9-5/8" casing vol est shoe jt ft 44					
Calculated cement volumes assume gauge hole and the excess (open hole only) noted in table									
			IntegraGuard	ResCare CS2 Clay					
		Fly Ash 187.355	GW86 viscosifier	FP24 Defoamer .5	Inhibitor 0.1	SS201 Surfactant			
Stage 1	Spacer	lb/bbl	0.9 lb/bbl	lb/bbl	gal/bbl	0.5 gal/bbl			

Stage 2	Lead	ASTM Type I/II	BA90 Bonding Agent 5.0 lb/sx	IntegraSeal POLI LCM 0.13 lb/sx	FL66 Fluid Loss .2% BWOB	IntegraGuard GW86 Viscosifier .1% BWOB	R3 Retarder .3% BWOB	FP24 Defoamer 0.3% BWOB	KCI Clay Inhibition 3.0% BWOW
	Tail	ASTM Type I/II	Dipersant CD32A 0.0% BWOB						
	Spacer	Fly Ash 187.355 lb/bbl	GW86 viscosifier 0.9 lb/bbl	FP24 Defoamer .5 lb/bbl	ResCare CS2 Clay Inhibitor 0.1 gal/bbl	SS201 Surfactant 0.5 gal/bbl			
	Tail	ASTM Type I/II	BA90 Bonding Agent 5.0 lb/sx	IntegraSeal POLI LCM 0.13 lb/sx	FL66 Fluid Loss .2% BWOB	IntegraGuard GW86 Viscosifier .1% BWOB	R3 Retarder .3% BWOB	FP24 Defoamer 0.3% BWOB	KCI Clay Inhibition 3.0% BWOW
American Cementing Liner & Production Blend									
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.

6,190 ft (MD)	to	18,638 ft (MD)	Hole Section Length:	12,448 ft
5,917 ft (TVD)	to	6,623 ft (TVD)	Casing Required:	18,638 ft

Estimated KOP:	6,300 ft (MD)	6,027 ft (TVD)
Estimated Landing Point (FTP):	6,767 ft (MD)	0 ft (TVD)
Estimated Lateral Length:	11,871 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

Fluids / Solids Notes: Newpark OptiDrill OBM system. Ensure that drying shakers are rigged up after the rig (2nd set) of shakers. Solids control will burn retorts on cuttings samples one per tour to check % ROC. Add diesel and products as required to maintain mud in program specs. Reference Newpark's mud program for additional details. No asphalt products are to be added to the OBM system. **Any changes to the mud systems are to be discussed with engineering prior to application.**

Hole Size: 8-1/2"

Bit / Motor: 8-1/2" PDC bit w/mud motor

Bit / Motor: **MOTOR:** NOV 077857 - 6.5" 7/8, 5.0 stage, 0.23 rev/gal, 1.83 or 1.5 deg, 750 GPM, 1,580 DIFF PSIG (or similar); on demand friction breaking device(s) as required, bottom tool spaced ~3,000' behind the bit.

BIT: 5-BLADE PDC w/16 mm - 19 mm cutters, matrix body, target TFA = 1.0 - 1.5 sq-in

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.

Procedure: Drill to KOP following directional plan. Target flow-rate is 650 - 700 GPM. Target differential is pressure is 700 - 1,000 psig. Target ROP 500 - 600 ft/hr. Steer as needed to keep well on plan. Keep DLS < 3 deg/100' and keep slide length < 10' until KOP, when feasible. Take surveys every stand, at a minimum. Confirm landing target, planned BUR for curve, and KOP with Geology and Engineering. Drill curve following directional plan and updated landing target. Take survey every joint during curve. Land curve. Continue drilling in lateral section, steering as needed to keep well on plan and in the target window. Keep DLS < 2 deg/100' and keep slide length < 20', when feasible. Take surveys every stand, at a minimum. **Target rotating parameters / performance: flow-rate is 650 - 700 GPM, differential is pressure is 700 - 1,000 psig, ROP 500 - 600 ft/hr, torque 38K ft-lbs (MAX drill pipe MUT).** After reaching TD, perform no more than one clean-up cycle to condition hole for casing running unless shakers indicate additional cleaning needed. TOOH & LD drill pipe (ROOH, if required; should NOT be required with OBM system). When pumping hole cleaning sweeps, fine LCM product is to be used **-Do not use barite for sweeps.** Run casing as described below. Use CRT for casing running only if necessary (should NOT be required with OBM but check drill pipe drag at or close to TD and please **log drag daily in WellView reports**). Verify make up torque when running casing. Space out casing getting the toe sleeve as close to LTP as possible. Land casing and test pack-off. Open floatation sub, fill casing, and circulate as required. Pump cement as detailed below. Note cement volume circulated to surface. Nipple down BOPE. Clean pits. RDMO to next pad.

Casing Specs:	Size (in)	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	5.500	20.0	HCP-110	LTC	12,200	12,640	641,000	548,000
Loading					3,272	9,120	421,658	421,658
Min. S.F.					3.73	1.39	1.52	1.30

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

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

Tension: buoyed weight in 9.0 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs): Minimum: 4,270 Optimum: 5,690 Maximum: 7,110

Casing Summary: Float shoe, 1 jt casing, float collar, 20' marker joint, toe-initiation sleeve, casing to KOP with 20' marker joints spaced evenly in lateral every 2,000', floatation sub at KOP, casing to surface. The toe-initiation sleeve (last-take-point) cannot be placed closer than 330' to the unit boundary when measured perpendicular to the well path.

Casing Summary: Float shoe, 1 jt casing, float collar w/debris catcher (**Weatherford (WFT) float equipment**), 20' marker joint, toe-initiation sleeve (**WFT RD 10,500 psi**), casing to KOP with 20' marker joints spaced evenly in lateral every ~2,000', floatation sub (**NCS Air-Lock 5,500 psi from WFT**), casing to surface. **The toe-initiation sleeve shall be placed no closer to the unit boundary than 100' measured along the azimuth of the well or 330' measured perpendicular to the the azimuth of the well. Note: the LTP is the maximum depth of the toe sleeve and is noted on the Well Plan. Drill past the LTP as required for necessary rat-hole and shoe-track length to place the toe sleeve as close to (but not past) the planned LTP as possible.**

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

Lateral: 1 centralizer per 3 joints (purchase centralizers from Scepter Supply)

Top of curve to 9-5/8" shoe: 1 centralizer per 5 joints

9-5/8" shoe to surface: 1 centralizer per 5 joints

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	Open hole % Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Spacer	IntegraGuard Star	11		31.6		0	60 bbls	
Lead	ASTM type I/II	12.4	2.370	13.40	0%	0	693	1,643
Tail	G:POZ blend	13.3	1.570	7.70	10%	6,090	2,019	3,170
Displacement	412	est bbls						
Annular Capacity	0.2691	cuft/ft	5-1/2" casing x 9-5/8" casing annulus				5-1/2" 20# ID	
	0.2291	cuft/ft	5-1/2" casing x 8-1/2" hole annulus				4.778	

	0.1245	cuft/ft	5-1/2" casing vol	est shoe jt ft	65			
	Calculated cement volumes assume gauge hole and the excess noted in table							
	American Cementing Liner & Production Blend							
	S-8 Silica Flour	Avis 616 viscosifier	FP24 Defoamer .5	IntegraGuard Star	Plus 3K LCM 15	SS201 Surfactant 1		
Spacer	163.7 lbs/bbl	11.6 lb/bbl	lb/bbl	lb/bbl	lb/bbl	gal/bbl		
			Bentonite		IntegraGuard		FP24 Defoamer	
	ASTM Type I/II	BA90 Bonding Agent 5.0 lb/sx	Viscosifier 8% BWOB	FL24 Fluid Loss .5% BWOB	GW86 Viscosifier .1% BWOB	R7C Retarder .2% BWOB	0.3% BWOB, Anti-Static .01 lb/sx	
Lead								
			Bentonite		IntegraGuard		FP24 Defoamer	
	Type G 50%	Pozzolan Fly Ash Extender 50%	BA90 Bonding Agent 3.0 lb/sx	Viscosifier 4% BWOB	FL24 Fluid Loss .4% BWOB	GW86 Viscosifier .1% BWOB	R3 Retarder .5% BWOB	IntegraSeal 0.25 lb/sx
Tail								
	Calculated cement volumes assume gauge hole and the excess noted in table							

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

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

FINISH WELL: ND BOP, cap well, RDMO.

Procedure: ND BOP. Install BPV in WH if available. Install cap with pressure gauge on WH. Frac stack to be installed at later date. RDMO.

COMPLETION AND PRODUCTION PLAN:

Est Lateral Length: 18,538

Est Frac Inform: 77 Frac Stages 297,000 bbls slick water 24,100,000 lbs proppant

Flowback: Flow back through production tubing as pressures allow

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

ESTIMATED START DATES:

Drilling: 11/1/2023

Completion: 12/31/2023

Production: 2/14/2024

Prepared by: Alec Bridge 12/20/2021

Updated: Greg Olson 2/20/2023

Greg Olson 3/27/2023

G Olson 8/17/2023



Well: Rincon Unit 917H
Site: Rincon pad (613, 615, 713, 715, 815, 817, 915 & 917)
Project: Rio Arriba County, New Mexico NAD83 NM W
Design: rev1
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=6538+25 @ 6563.00ft
Surface location:

Northing: 2024734.814
Easting: 2830347.049
Latitude: 36.563798000
Longitude: -107.468107000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 8.28°



Azimuths to Grid North
True North: -0.22°
Magnetic North: 8.28°
Magnetic Field
Strength: 49320.2nT
Dip Angle: 63.03°
Date: 7/21/2023
Model: IGRF2020

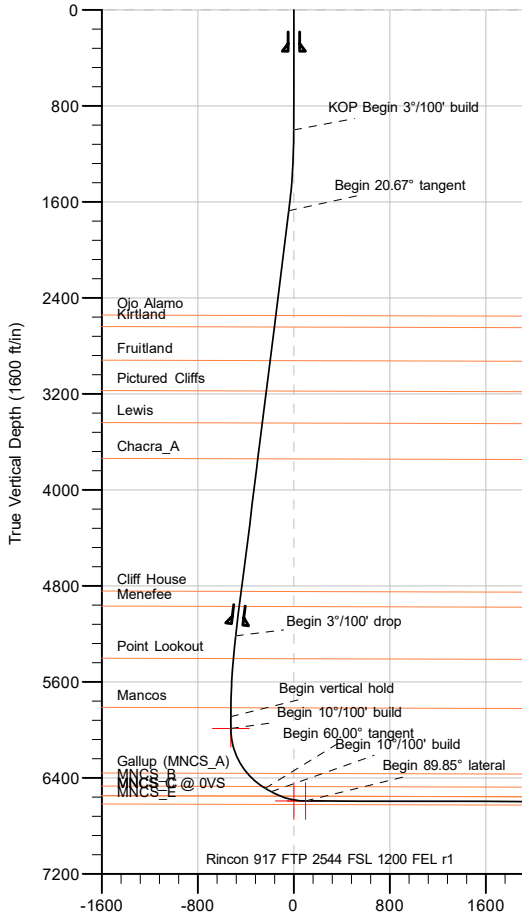
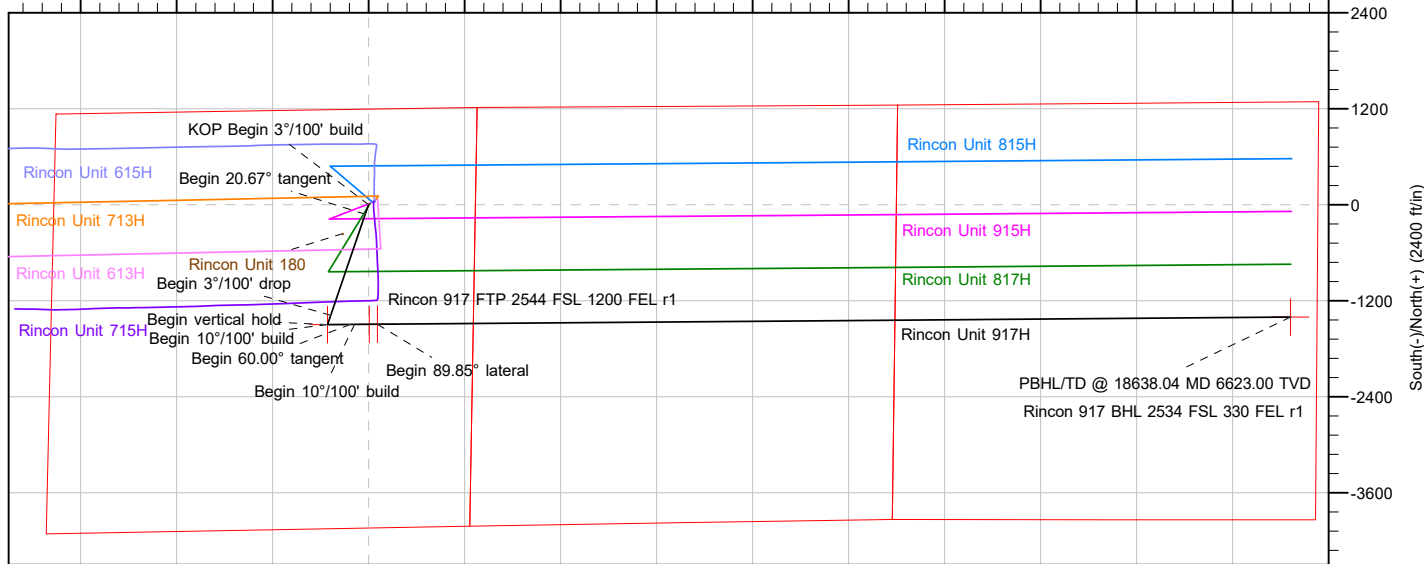


CASING DETAILS

TVD	MD	Name
345.00	345.00	13 3/8" Csg
5123.00	5375.20	9 5/8" Csg

West(-)/East(+) (2400 ft/in)

-3600 -2400 -1200 0 1200 2400 3600 4800 6000 7200 8400 9600 10800 12000



Vertical Section at 89.551° (1600 ft/in)

8:31, July 21 2023

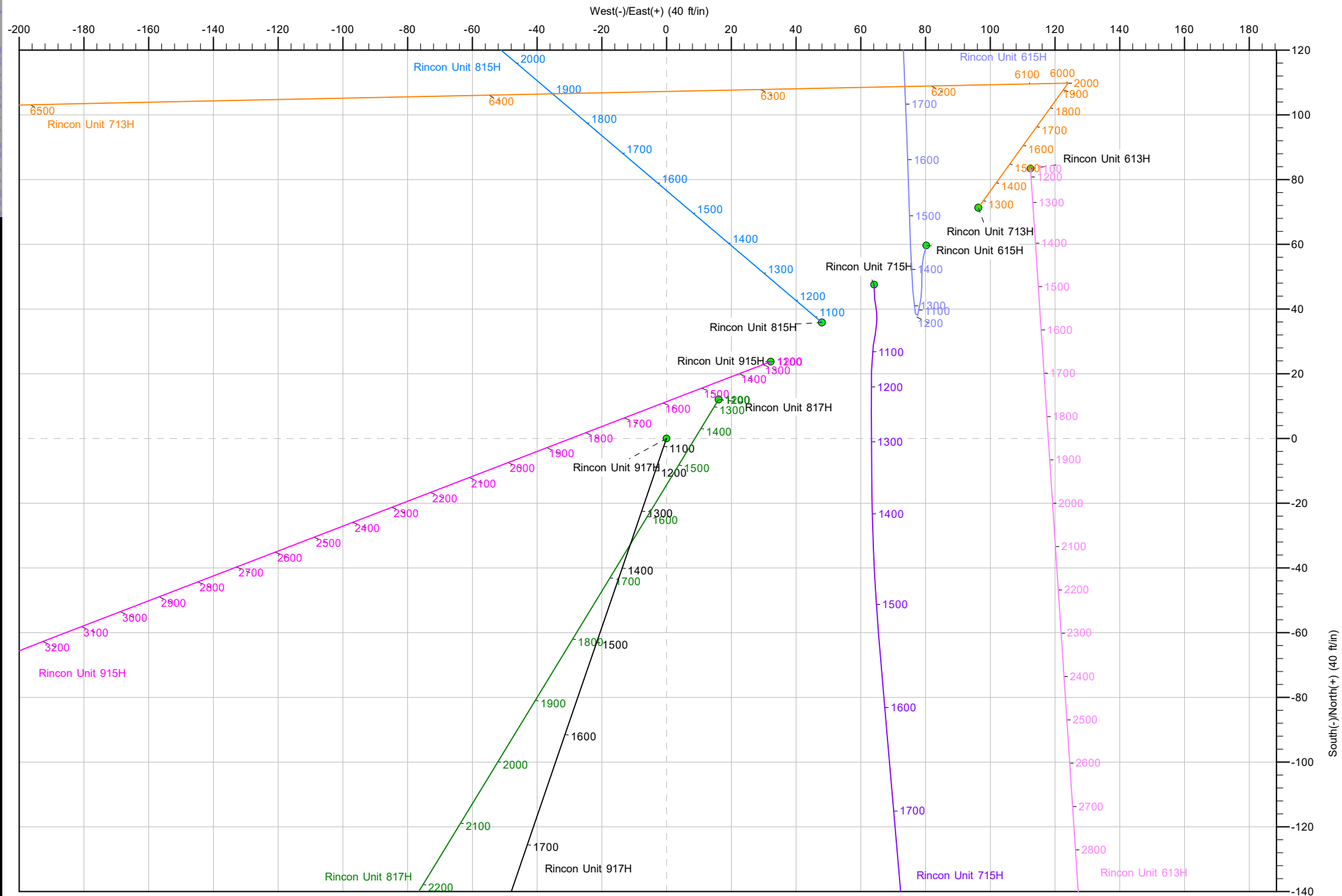
Section Details										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
2	1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3°/100' build
3	1689.10	20.67	198.901	1674.25	-116.34	-39.84	3.00	198.90	-40.75	Begin 20.67° tangent
4	5474.66	20.67	198.901	5216.05	-1380.72	-472.76	0.00	0.00	-483.57	Begin 3°/100' drop
5	6163.76	0.00	0.000	5890.30	-1497.06	-512.60	3.00	180.00	-524.32	Begin vertical hold
6	6263.76	0.00	0.000	5990.30	-1497.06	-512.60	0.00	0.00	-524.32	Begin 10°/100' build
7	6863.76	60.00	89.551	6486.50	-1494.82	-226.13	10.00	89.55	-237.84	Begin 60.00° tangent
8	6923.76	60.00	89.551	6516.50	-1494.41	-174.17	0.00	0.00	-185.88	Begin 10°/100' build
9	7222.27	89.85	89.551	6593.26	-1492.18	110.81	10.00	0.00	99.11	Begin 89.85° lateral
10	18638.04	89.85	89.551	6623.00	-1402.80	11526.19	0.00	0.00	11514.84	PBHL/TD @ 18638.04 MD 6623.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Rincon 917 BHL 2534 FSL 330 FEL r1	6623.00	-1402.80	11526.19	2023332.012	2841873.214	36.559818000	-107.428879000
Rincon 917 FTP 2544 FSL 1200 FEL r1	6593.26	-1492.18	110.81	2023242.633	2830457.856	36.559698000	-107.467749000
Rincon 917 vert r1	5990.30	-1497.06	-512.60	2023237.757	2829834.450	36.559691097	-107.469871735
Rincon 917 VS=0 r1	6593.00	-1492.95	11.70	2023241.867	2830358.749	36.559696931	-107.468086465



Well: Rincon Unit 917H
Site: Rincon pad (613, 615, 713, 715, 815, 817, 915 & 917)
Project: Rio Arriba County, New Mexico NAD83 NM W
Design: rev1
Rig:





Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Project	Rio Arriba 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		Rincon pad (613, 615, 713, 715,815,817,915 & 917)			
Site Position:		Northing:	2,024,818.244 usft	Latitude:	36.564026000
From:	Lat/Long	Easting:	2,830,459.503 usft	Longitude:	-107.467723000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	Rincon Unit 917H, Surf loc: 1199 FNL 1336 FEL Section 21-T27N-R06W					
Well Position	+N/-S	0.00 ft	Northing:	2,024,734.814 usft	Latitude:	36.563798000
	+E/-W	0.00 ft	Easting:	2,830,347.049 usft	Longitude:	-107.468107000
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,538.00 ft
Grid Convergence:		0.22 °				

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/21/2023	8.50	63.03	49,320.20117881

Design	rev1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	89.551

Plan Survey Tool Program	Date	7/21/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,638.03 rev1 (Original Hole)	MWD	
			OWSG MWD - Standard	



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,689.10	20.67	198.901	1,674.25	-116.34	-39.84	3.00	3.00	0.00	198.90	
5,474.66	20.67	198.901	5,216.05	-1,380.72	-472.76	0.00	0.00	0.00	0.00	
6,163.76	0.00	0.000	5,890.30	-1,497.06	-512.60	3.00	-3.00	0.00	180.00	
6,263.76	0.00	0.000	5,990.30	-1,497.06	-512.60	0.00	0.00	0.00	0.00	Rincon 917 vert r1
6,863.76	60.00	89.551	6,486.50	-1,494.82	-226.13	10.00	10.00	0.00	89.55	
6,923.76	60.00	89.551	6,516.50	-1,494.41	-174.17	0.00	0.00	0.00	0.00	
7,222.27	89.85	89.551	6,593.26	-1,492.18	110.81	10.00	10.00	0.00	0.00	
18,638.04	89.85	89.551	6,623.00	-1,402.80	11,526.19	0.00	0.00	0.00	0.00	Rincon 917 BHL 2534



Planning Report

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Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
345.00	0.00	0.000	345.00	0.00	0.00	0.00	0.00	0.00	0.00	
13 3/8" Csg										
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
KOP Begin 3°/100' build										
1,100.00	3.00	198.901	1,099.95	-2.48	-0.85	-0.87	3.00	3.00	0.00	
1,200.00	6.00	198.901	1,199.63	-9.90	-3.39	-3.47	3.00	3.00	0.00	
1,300.00	9.00	198.901	1,298.77	-22.25	-7.62	-7.79	3.00	3.00	0.00	
1,400.00	12.00	198.901	1,397.08	-39.48	-13.52	-13.83	3.00	3.00	0.00	
1,500.00	15.00	198.901	1,494.31	-61.57	-21.08	-21.56	3.00	3.00	0.00	
1,600.00	18.00	198.901	1,590.18	-88.43	-30.28	-30.97	3.00	3.00	0.00	
1,689.10	20.67	198.901	1,674.25	-116.34	-39.84	-40.75	3.00	3.00	0.00	
Begin 20.67° tangent										
1,700.00	20.67	198.901	1,684.44	-119.98	-41.08	-42.02	0.00	0.00	0.00	
1,800.00	20.67	198.901	1,778.00	-153.38	-52.52	-53.72	0.00	0.00	0.00	
1,900.00	20.67	198.901	1,871.57	-186.78	-63.96	-65.42	0.00	0.00	0.00	
2,000.00	20.67	198.901	1,965.13	-220.18	-75.39	-77.12	0.00	0.00	0.00	
2,100.00	20.67	198.901	2,058.69	-253.58	-86.83	-88.81	0.00	0.00	0.00	
2,200.00	20.67	198.901	2,152.25	-286.98	-98.26	-100.51	0.00	0.00	0.00	
2,300.00	20.67	198.901	2,245.81	-320.38	-109.70	-112.21	0.00	0.00	0.00	
2,400.00	20.67	198.901	2,339.37	-353.78	-121.14	-123.91	0.00	0.00	0.00	
2,500.00	20.67	198.901	2,432.93	-387.18	-132.57	-135.60	0.00	0.00	0.00	
2,600.00	20.67	198.901	2,526.49	-420.58	-144.01	-147.30	0.00	0.00	0.00	
2,622.57	20.67	198.901	2,547.61	-428.12	-146.59	-149.94	0.00	0.00	0.00	
Ojo Alamo										
2,700.00	20.67	198.901	2,620.05	-453.98	-155.45	-159.00	0.00	0.00	0.00	
2,724.07	20.67	198.901	2,642.58	-462.02	-158.20	-161.81	0.00	0.00	0.00	
Kirtland										
2,800.00	20.67	198.901	2,713.61	-487.38	-166.88	-170.70	0.00	0.00	0.00	
2,900.00	20.67	198.901	2,807.18	-520.78	-178.32	-182.39	0.00	0.00	0.00	
3,000.00	20.67	198.901	2,900.74	-554.18	-189.75	-194.09	0.00	0.00	0.00	
3,023.25	20.67	198.901	2,922.49	-561.95	-192.41	-196.81	0.00	0.00	0.00	
Fruitland										
3,100.00	20.67	198.901	2,994.30	-587.58	-201.19	-205.79	0.00	0.00	0.00	
3,200.00	20.67	198.901	3,087.86	-620.98	-212.63	-217.49	0.00	0.00	0.00	
3,295.71	20.67	198.901	3,177.40	-652.95	-223.57	-228.68	0.00	0.00	0.00	
Pictured Cliffs										
3,300.00	20.67	198.901	3,181.42	-654.38	-224.06	-229.18	0.00	0.00	0.00	
3,400.00	20.67	198.901	3,274.98	-687.78	-235.50	-240.88	0.00	0.00	0.00	
3,500.00	20.67	198.901	3,368.54	-721.18	-246.94	-252.58	0.00	0.00	0.00	
3,578.85	20.67	198.901	3,442.32	-747.52	-255.95	-261.80	0.00	0.00	0.00	
Lewis										
3,600.00	20.67	198.901	3,462.10	-754.58	-258.37	-264.28	0.00	0.00	0.00	



Planning Report

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Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,700.00	20.67	198.901	3,555.66	-787.98	-269.81	-275.98	0.00	0.00	0.00
3,800.00	20.67	198.901	3,649.22	-821.38	-281.24	-287.67	0.00	0.00	0.00
3,899.39	20.67	198.901	3,742.22	-854.58	-292.61	-299.30	0.00	0.00	0.00
Chacra_A									
3,900.00	20.67	198.901	3,742.79	-854.78	-292.68	-299.37	0.00	0.00	0.00
4,000.00	20.67	198.901	3,836.35	-888.18	-304.12	-311.07	0.00	0.00	0.00
4,100.00	20.67	198.901	3,929.91	-921.58	-315.55	-322.77	0.00	0.00	0.00
4,200.00	20.67	198.901	4,023.47	-954.98	-326.99	-334.46	0.00	0.00	0.00
4,300.00	20.67	198.901	4,117.03	-988.38	-338.43	-346.16	0.00	0.00	0.00
4,400.00	20.67	198.901	4,210.59	-1,021.78	-349.86	-357.86	0.00	0.00	0.00
4,500.00	20.67	198.901	4,304.15	-1,055.18	-361.30	-369.56	0.00	0.00	0.00
4,600.00	20.67	198.901	4,397.71	-1,088.58	-372.73	-381.25	0.00	0.00	0.00
4,700.00	20.67	198.901	4,491.27	-1,121.98	-384.17	-392.95	0.00	0.00	0.00
4,800.00	20.67	198.901	4,584.83	-1,155.38	-395.61	-404.65	0.00	0.00	0.00
4,900.00	20.67	198.901	4,678.40	-1,188.78	-407.04	-416.35	0.00	0.00	0.00
5,000.00	20.67	198.901	4,771.96	-1,222.18	-418.48	-428.04	0.00	0.00	0.00
5,080.05	20.67	198.901	4,846.86	-1,248.92	-427.64	-437.41	0.00	0.00	0.00
Cliff House									
5,100.00	20.67	198.901	4,865.52	-1,255.58	-429.92	-439.74	0.00	0.00	0.00
5,200.00	20.67	198.901	4,959.08	-1,288.98	-441.35	-451.44	0.00	0.00	0.00
5,213.61	20.67	198.901	4,971.82	-1,293.53	-442.91	-453.03	0.00	0.00	0.00
Menefee									
5,300.00	20.67	198.901	5,052.64	-1,322.38	-452.79	-463.14	0.00	0.00	0.00
5,375.20	20.67	198.901	5,123.00	-1,347.50	-461.39	-471.93	0.00	0.00	0.00
9 5/8" Csg									
5,400.00	20.67	198.901	5,146.20	-1,355.78	-464.22	-474.84	0.00	0.00	0.00
5,474.66	20.67	198.901	5,216.05	-1,380.72	-472.76	-483.57	0.00	0.00	0.00
Begin 3°/100' drop									
5,500.00	19.91	198.901	5,239.82	-1,389.03	-475.61	-486.48	3.00	-3.00	0.00
5,600.00	16.91	198.901	5,334.69	-1,418.91	-485.84	-496.95	3.00	-3.00	0.00
5,674.82	14.67	198.901	5,406.68	-1,438.17	-492.44	-503.69	3.00	-3.00	0.00
Point Lookout									
5,700.00	13.91	198.901	5,431.08	-1,444.05	-494.45	-505.75	3.00	-3.00	0.00
5,800.00	10.91	198.901	5,528.73	-1,464.38	-501.41	-512.87	3.00	-3.00	0.00
5,900.00	7.91	198.901	5,627.38	-1,479.86	-506.71	-518.29	3.00	-3.00	0.00
6,000.00	4.91	198.901	5,726.74	-1,490.42	-510.33	-521.99	3.00	-3.00	0.00
6,090.07	2.21	198.901	5,816.63	-1,495.72	-512.14	-523.84	3.00	-3.00	0.00
Mancos									
6,100.00	1.91	198.901	5,826.55	-1,496.05	-512.26	-523.96	3.00	-3.00	0.00
6,163.76	0.00	0.000	5,890.30	-1,497.06	-512.60	-524.32	3.00	-3.00	0.00
Begin vertical hold									
6,200.00	0.00	0.000	5,926.54	-1,497.06	-512.60	-524.32	0.00	0.00	0.00
6,263.76	0.00	0.000	5,990.30	-1,497.06	-512.60	-524.32	0.00	0.00	0.00
Begin 10°/100' build									
6,300.00	3.62	89.551	6,026.51	-1,497.05	-511.45	-523.17	10.00	10.00	0.00
6,350.00	8.62	89.551	6,076.21	-1,497.01	-506.12	-517.84	10.00	10.00	0.00
6,400.00	13.62	89.551	6,125.26	-1,496.93	-496.48	-508.19	10.00	10.00	0.00
6,450.00	18.62	89.551	6,173.28	-1,496.82	-482.60	-494.31	10.00	10.00	0.00
6,500.00	23.62	89.551	6,219.90	-1,496.68	-464.59	-476.30	10.00	10.00	0.00
6,550.00	28.62	89.551	6,264.78	-1,496.51	-442.58	-454.29	10.00	10.00	0.00
6,600.00	33.62	89.551	6,307.57	-1,496.31	-416.74	-428.45	10.00	10.00	0.00
6,650.00	38.62	89.551	6,347.94	-1,496.08	-387.28	-398.99	10.00	10.00	0.00



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Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,668.21	40.44	89.551	6,361.99	-1,495.99	-375.68	-387.40	10.00	10.00	0.00
Gallup (MNCS_A)									
6,700.00	43.62	89.551	6,385.60	-1,495.82	-354.40	-366.11	10.00	10.00	0.00
6,750.00	48.62	89.551	6,420.24	-1,495.54	-318.37	-330.08	10.00	10.00	0.00
6,800.00	53.62	89.551	6,451.61	-1,495.23	-279.46	-291.17	10.00	10.00	0.00
6,836.52	57.28	89.551	6,472.32	-1,495.00	-249.39	-261.10	10.00	10.00	0.00
MNCS_B									
6,850.00	58.62	89.551	6,479.47	-1,494.91	-237.96	-249.67	10.00	10.00	0.00
6,863.76	60.00	89.551	6,486.50	-1,494.82	-226.13	-237.84	10.00	10.00	0.00
Begin 60.00° tangent									
6,900.00	60.00	89.551	6,504.62	-1,494.57	-194.75	-206.45	0.00	0.00	0.00
6,923.76	60.00	89.551	6,516.50	-1,494.41	-174.17	-185.88	0.00	0.00	0.00
Begin 10°/100' build									
6,950.00	62.62	89.551	6,529.09	-1,494.23	-151.16	-162.86	10.00	10.00	0.00
7,000.00	67.62	89.551	6,550.12	-1,493.87	-105.81	-117.51	10.00	10.00	0.00
7,006.92	68.32	89.551	6,552.71	-1,493.82	-99.40	-111.10	10.00	10.00	0.00
MNCS_C - MNCS_C @ OVS									
7,050.00	72.62	89.551	6,567.11	-1,493.50	-58.81	-70.51	10.00	10.00	0.00
7,100.00	77.62	89.551	6,579.94	-1,493.13	-10.50	-22.20	10.00	10.00	0.00
7,150.00	82.62	89.551	6,588.52	-1,492.74	38.74	27.05	10.00	10.00	0.00
7,200.00	87.62	89.551	6,592.77	-1,492.35	88.55	76.85	10.00	10.00	0.00
7,222.27	89.85	89.551	6,593.26	-1,492.18	110.81	99.11	10.00	10.00	0.00
Begin 89.85° lateral									
7,300.00	89.85	89.551	6,593.46	-1,491.57	188.54	176.84	0.00	0.00	0.00
7,400.00	89.85	89.551	6,593.72	-1,490.78	288.53	276.84	0.00	0.00	0.00
7,500.00	89.85	89.551	6,593.98	-1,490.00	388.53	376.84	0.00	0.00	0.00
7,600.00	89.85	89.551	6,594.24	-1,489.22	488.53	476.84	0.00	0.00	0.00
7,700.00	89.85	89.551	6,594.50	-1,488.44	588.52	576.84	0.00	0.00	0.00
7,800.00	89.85	89.551	6,594.76	-1,487.65	688.52	676.84	0.00	0.00	0.00
7,900.00	89.85	89.551	6,595.02	-1,486.87	788.52	776.84	0.00	0.00	0.00
8,000.00	89.85	89.551	6,595.28	-1,486.09	888.51	876.84	0.00	0.00	0.00
8,100.00	89.85	89.551	6,595.54	-1,485.30	988.51	976.84	0.00	0.00	0.00
8,200.00	89.85	89.551	6,595.80	-1,484.52	1,088.51	1,076.84	0.00	0.00	0.00
8,300.00	89.85	89.551	6,596.06	-1,483.74	1,188.50	1,176.84	0.00	0.00	0.00
8,400.00	89.85	89.551	6,596.32	-1,482.96	1,288.50	1,276.84	0.00	0.00	0.00
8,500.00	89.85	89.551	6,596.59	-1,482.17	1,388.49	1,376.84	0.00	0.00	0.00
8,600.00	89.85	89.551	6,596.85	-1,481.39	1,488.49	1,476.84	0.00	0.00	0.00
8,700.00	89.85	89.551	6,597.11	-1,480.61	1,588.49	1,576.84	0.00	0.00	0.00
8,800.00	89.85	89.551	6,597.37	-1,479.82	1,688.48	1,676.84	0.00	0.00	0.00
8,900.00	89.85	89.551	6,597.63	-1,479.04	1,788.48	1,776.84	0.00	0.00	0.00
9,000.00	89.85	89.551	6,597.89	-1,478.26	1,888.48	1,876.84	0.00	0.00	0.00
9,100.00	89.85	89.551	6,598.15	-1,477.48	1,988.47	1,976.84	0.00	0.00	0.00
9,200.00	89.85	89.551	6,598.41	-1,476.69	2,088.47	2,076.83	0.00	0.00	0.00
9,300.00	89.85	89.551	6,598.67	-1,475.91	2,188.47	2,176.83	0.00	0.00	0.00
9,400.00	89.85	89.551	6,598.93	-1,475.13	2,288.46	2,276.83	0.00	0.00	0.00
9,500.00	89.85	89.551	6,599.19	-1,474.34	2,388.46	2,376.83	0.00	0.00	0.00
9,600.00	89.85	89.551	6,599.45	-1,473.56	2,488.46	2,476.83	0.00	0.00	0.00
9,700.00	89.85	89.551	6,599.71	-1,472.78	2,588.45	2,576.83	0.00	0.00	0.00
9,800.00	89.85	89.551	6,599.97	-1,472.00	2,688.45	2,676.83	0.00	0.00	0.00
9,900.00	89.85	89.551	6,600.23	-1,471.21	2,788.45	2,776.83	0.00	0.00	0.00
10,000.00	89.85	89.551	6,600.49	-1,470.43	2,888.44	2,876.83	0.00	0.00	0.00
10,100.00	89.85	89.551	6,600.75	-1,469.65	2,988.44	2,976.83	0.00	0.00	0.00



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,200.00	89.85	89.551	6,601.01	-1,468.86	3,088.44	3,076.83	0.00	0.00	0.00
10,300.00	89.85	89.551	6,601.28	-1,468.08	3,188.43	3,176.83	0.00	0.00	0.00
10,400.00	89.85	89.551	6,601.54	-1,467.30	3,288.43	3,276.83	0.00	0.00	0.00
10,500.00	89.85	89.551	6,601.80	-1,466.52	3,388.43	3,376.83	0.00	0.00	0.00
10,600.00	89.85	89.551	6,602.06	-1,465.73	3,488.42	3,476.83	0.00	0.00	0.00
10,700.00	89.85	89.551	6,602.32	-1,464.95	3,588.42	3,576.83	0.00	0.00	0.00
10,800.00	89.85	89.551	6,602.58	-1,464.17	3,688.42	3,676.83	0.00	0.00	0.00
10,900.00	89.85	89.551	6,602.84	-1,463.38	3,788.41	3,776.83	0.00	0.00	0.00
11,000.00	89.85	89.551	6,603.10	-1,462.60	3,888.41	3,876.83	0.00	0.00	0.00
11,100.00	89.85	89.551	6,603.36	-1,461.82	3,988.41	3,976.83	0.00	0.00	0.00
11,200.00	89.85	89.551	6,603.62	-1,461.04	4,088.40	4,076.83	0.00	0.00	0.00
11,300.00	89.85	89.551	6,603.88	-1,460.25	4,188.40	4,176.83	0.00	0.00	0.00
11,400.00	89.85	89.551	6,604.14	-1,459.47	4,288.40	4,276.83	0.00	0.00	0.00
11,500.00	89.85	89.551	6,604.40	-1,458.69	4,388.39	4,376.83	0.00	0.00	0.00
11,600.00	89.85	89.551	6,604.66	-1,457.90	4,488.39	4,476.83	0.00	0.00	0.00
11,700.00	89.85	89.551	6,604.92	-1,457.12	4,588.39	4,576.83	0.00	0.00	0.00
11,800.00	89.85	89.551	6,605.18	-1,456.34	4,688.38	4,676.83	0.00	0.00	0.00
11,900.00	89.85	89.551	6,605.44	-1,455.55	4,788.38	4,776.83	0.00	0.00	0.00
12,000.00	89.85	89.551	6,605.70	-1,454.77	4,888.38	4,876.83	0.00	0.00	0.00
12,100.00	89.85	89.551	6,605.97	-1,453.99	4,988.37	4,976.83	0.00	0.00	0.00
12,200.00	89.85	89.551	6,606.23	-1,453.21	5,088.37	5,076.82	0.00	0.00	0.00
12,300.00	89.85	89.551	6,606.49	-1,452.42	5,188.37	5,176.82	0.00	0.00	0.00
12,400.00	89.85	89.551	6,606.75	-1,451.64	5,288.36	5,276.82	0.00	0.00	0.00
12,500.00	89.85	89.551	6,607.01	-1,450.86	5,388.36	5,376.82	0.00	0.00	0.00
12,600.00	89.85	89.551	6,607.27	-1,450.07	5,488.36	5,476.82	0.00	0.00	0.00
12,700.00	89.85	89.551	6,607.53	-1,449.29	5,588.35	5,576.82	0.00	0.00	0.00
12,800.00	89.85	89.551	6,607.79	-1,448.51	5,688.35	5,676.82	0.00	0.00	0.00
12,900.00	89.85	89.551	6,608.05	-1,447.73	5,788.35	5,776.82	0.00	0.00	0.00
13,000.00	89.85	89.551	6,608.31	-1,446.94	5,888.34	5,876.82	0.00	0.00	0.00
13,100.00	89.85	89.551	6,608.57	-1,446.16	5,988.34	5,976.82	0.00	0.00	0.00
13,200.00	89.85	89.551	6,608.83	-1,445.38	6,088.34	6,076.82	0.00	0.00	0.00
13,300.00	89.85	89.551	6,609.09	-1,444.59	6,188.33	6,176.82	0.00	0.00	0.00
13,400.00	89.85	89.551	6,609.35	-1,443.81	6,288.33	6,276.82	0.00	0.00	0.00
13,500.00	89.85	89.551	6,609.61	-1,443.03	6,388.32	6,376.82	0.00	0.00	0.00
13,600.00	89.85	89.551	6,609.87	-1,442.25	6,488.32	6,476.82	0.00	0.00	0.00
13,700.00	89.85	89.551	6,610.13	-1,441.46	6,588.32	6,576.82	0.00	0.00	0.00
13,800.00	89.85	89.551	6,610.39	-1,440.68	6,688.31	6,676.82	0.00	0.00	0.00
13,900.00	89.85	89.551	6,610.66	-1,439.90	6,788.31	6,776.82	0.00	0.00	0.00
14,000.00	89.85	89.551	6,610.92	-1,439.11	6,888.31	6,876.82	0.00	0.00	0.00
14,100.00	89.85	89.551	6,611.18	-1,438.33	6,988.30	6,976.82	0.00	0.00	0.00
14,200.00	89.85	89.551	6,611.44	-1,437.55	7,088.30	7,076.82	0.00	0.00	0.00
14,300.00	89.85	89.551	6,611.70	-1,436.77	7,188.30	7,176.82	0.00	0.00	0.00
14,400.00	89.85	89.551	6,611.96	-1,435.98	7,288.29	7,276.82	0.00	0.00	0.00
14,500.00	89.85	89.551	6,612.22	-1,435.20	7,388.29	7,376.82	0.00	0.00	0.00
14,600.00	89.85	89.551	6,612.48	-1,434.42	7,488.29	7,476.82	0.00	0.00	0.00
14,700.00	89.85	89.551	6,612.74	-1,433.63	7,588.28	7,576.82	0.00	0.00	0.00
14,800.00	89.85	89.551	6,613.00	-1,432.85	7,688.28	7,676.82	0.00	0.00	0.00
14,900.00	89.85	89.551	6,613.26	-1,432.07	7,788.28	7,776.82	0.00	0.00	0.00
15,000.00	89.85	89.551	6,613.52	-1,431.29	7,888.27	7,876.82	0.00	0.00	0.00
15,100.00	89.85	89.551	6,613.78	-1,430.50	7,988.27	7,976.82	0.00	0.00	0.00
15,200.00	89.85	89.551	6,614.04	-1,429.72	8,088.27	8,076.81	0.00	0.00	0.00
15,300.00	89.85	89.551	6,614.30	-1,428.94	8,188.26	8,176.81	0.00	0.00	0.00
15,400.00	89.85	89.551	6,614.56	-1,428.15	8,288.26	8,276.81	0.00	0.00	0.00



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,500.00	89.85	89.551	6,614.82	-1,427.37	8,388.26	8,376.81	0.00	0.00	0.00
15,600.00	89.85	89.551	6,615.08	-1,426.59	8,488.25	8,476.81	0.00	0.00	0.00
15,700.00	89.85	89.551	6,615.34	-1,425.81	8,588.25	8,576.81	0.00	0.00	0.00
15,800.00	89.85	89.551	6,615.61	-1,425.02	8,688.25	8,676.81	0.00	0.00	0.00
15,900.00	89.85	89.551	6,615.87	-1,424.24	8,788.24	8,776.81	0.00	0.00	0.00
16,000.00	89.85	89.551	6,616.13	-1,423.46	8,888.24	8,876.81	0.00	0.00	0.00
16,100.00	89.85	89.551	6,616.39	-1,422.67	8,988.24	8,976.81	0.00	0.00	0.00
16,200.00	89.85	89.551	6,616.65	-1,421.89	9,088.23	9,076.81	0.00	0.00	0.00
16,300.00	89.85	89.551	6,616.91	-1,421.11	9,188.23	9,176.81	0.00	0.00	0.00
16,400.00	89.85	89.551	6,617.17	-1,420.33	9,288.23	9,276.81	0.00	0.00	0.00
16,500.00	89.85	89.551	6,617.43	-1,419.54	9,388.22	9,376.81	0.00	0.00	0.00
16,600.00	89.85	89.551	6,617.69	-1,418.76	9,488.22	9,476.81	0.00	0.00	0.00
16,700.00	89.85	89.551	6,617.95	-1,417.98	9,588.22	9,576.81	0.00	0.00	0.00
16,800.00	89.85	89.551	6,618.21	-1,417.19	9,688.21	9,676.81	0.00	0.00	0.00
16,900.00	89.85	89.551	6,618.47	-1,416.41	9,788.21	9,776.81	0.00	0.00	0.00
17,000.00	89.85	89.551	6,618.73	-1,415.63	9,888.21	9,876.81	0.00	0.00	0.00
17,100.00	89.85	89.551	6,618.99	-1,414.85	9,988.20	9,976.81	0.00	0.00	0.00
17,200.00	89.85	89.551	6,619.25	-1,414.06	10,088.20	10,076.81	0.00	0.00	0.00
17,300.00	89.85	89.551	6,619.51	-1,413.28	10,188.20	10,176.81	0.00	0.00	0.00
17,400.00	89.85	89.551	6,619.77	-1,412.50	10,288.19	10,276.81	0.00	0.00	0.00
17,500.00	89.85	89.551	6,620.03	-1,411.71	10,388.19	10,376.81	0.00	0.00	0.00
17,600.00	89.85	89.551	6,620.30	-1,410.93	10,488.19	10,476.81	0.00	0.00	0.00
17,700.00	89.85	89.551	6,620.56	-1,410.15	10,588.18	10,576.81	0.00	0.00	0.00
17,800.00	89.85	89.551	6,620.82	-1,409.37	10,688.18	10,676.81	0.00	0.00	0.00
17,900.00	89.85	89.551	6,621.08	-1,408.58	10,788.18	10,776.81	0.00	0.00	0.00
18,000.00	89.85	89.551	6,621.34	-1,407.80	10,888.17	10,876.81	0.00	0.00	0.00
18,100.00	89.85	89.551	6,621.60	-1,407.02	10,988.17	10,976.80	0.00	0.00	0.00
18,200.00	89.85	89.551	6,621.86	-1,406.23	11,088.16	11,076.80	0.00	0.00	0.00
18,300.00	89.85	89.551	6,622.12	-1,405.45	11,188.16	11,176.80	0.00	0.00	0.00
18,400.00	89.85	89.551	6,622.38	-1,404.67	11,288.16	11,276.80	0.00	0.00	0.00
18,500.00	89.85	89.551	6,622.64	-1,403.89	11,388.15	11,376.80	0.00	0.00	0.00
18,600.00	89.85	89.551	6,622.90	-1,403.10	11,488.15	11,476.80	0.00	0.00	0.00
18,638.04	89.85	89.551	6,623.00	-1,402.80	11,526.19	11,514.84	0.00	0.00	0.00
PBHL/TD @ 18638.04 MD 6623.00 TVD									



Planning Report

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

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
Rincon 917 vert r1 - plan hits target center - Point	0.00	0.000	5,990.30	-1,497.06	-512.60	2,023,237.757	2,829,834.450	36.559691097	-107.469871736
Rincon 917 VS=0 r1 - plan misses target center by 8.51ft at 7124.12ft MD (6584.61 TVD, -1492.94 N, 13.16 E) - Point	0.00	0.000	6,593.00	-1,492.95	11.70	2,023,241.867	2,830,358.749	36.559696931	-107.468086465
Rincon 917 FTP 2544 F: - plan misses target center by 0.01ft at 7222.27ft MD (6593.26 TVD, -1492.18 N, 110.81 E) - Point	0.00	0.000	6,593.26	-1,492.18	110.81	2,023,242.633	2,830,457.856	36.559698000	-107.467749000
Rincon 917 BHL 2534 F: - plan hits target center - Point	0.00	0.000	6,623.00	-1,402.80	11,526.19	2,023,332.012	2,841,873.214	36.559818000	-107.428879000

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
345.00	345.00	13 3/8" Csg	13-3/8	17-1/2	
5,375.20	5,123.00	9 5/8" Csg	9-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,622.57	2,547.61	Ojo Alamo		0.15	89.581	
2,724.07	2,642.58	Kirtland		0.15	89.581	
3,023.25	2,922.49	Fruitland		0.15	89.581	
3,295.71	3,177.40	Pictured Cliffs		0.15	89.581	
3,578.85	3,442.32	Lewis		0.15	89.581	
3,899.39	3,742.22	Chacra_A		0.15	89.581	
5,080.05	4,846.86	Cliff House		0.15	89.581	
5,213.61	4,971.82	Menefee		0.15	89.581	
5,674.82	5,406.68	Point Lookout		0.15	89.581	
6,090.07	5,816.63	Mancos		0.15	89.581	
6,668.21	6,361.99	Gallup (MNCS_A)		0.15	89.581	
6,836.52	6,472.32	MNCS_B		0.15	89.581	
7,006.92	6,552.71	MNCS_C		0.15	89.581	
7,006.92	6,552.71	MNCS_C @ 0VS		0.15	89.581	



Planning Report

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Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.00	1,000.00	0.00	0.00	KOP Begin 3°/100' build
1,689.10	1,674.25	-116.34	-39.84	Begin 20.67° tangent
5,474.66	5,216.05	-1,380.72	-472.76	Begin 3°/100' drop
6,163.76	5,890.30	-1,497.06	-512.60	Begin vertical hold
6,263.76	5,990.30	-1,497.06	-512.60	Begin 10°/100' build
6,863.76	6,486.50	-1,494.82	-226.13	Begin 60.00° tangent
6,923.76	6,516.50	-1,494.41	-174.17	Begin 10°/100' build
7,222.27	6,593.26	-1,492.18	110.81	Begin 89.85° lateral
18,638.04	6,623.00	-1,402.80	11,526.19	PBHL/TD @ 18638.04 MD 6623.00 TVD



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Project	Rio Arriba 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	Rincon pad (613, 615, 713, 715,815,817,915 & 917)				
Site Position:		Northing:	2,024,818.244 usft	Latitude:	36.564026000
From:	Lat/Long	Easting:	2,830,459.503 usft	Longitude:	-107.467723000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	Rincon Unit 917H, Surf loc: 1199 FNL 1336 FEL Section 21-T27N-R06W						
Well Position	+N/-S	0.00 ft	Northing:	2,024,734.814	usft	Latitude:	36.563798000
	+E/-W	0.00 ft	Easting:	2,830,347.049	usft	Longitude:	-107.468107000
Position Uncertainty		0.00 ft	Wellhead Elevation:		ft	Ground Level:	6,538.00 ft
Grid Convergence:		0.22 °					

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/21/2023	8.50	63.03	49,320.20117881

Design	rev1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	89.551	

Plan Survey Tool Program	Date	7/21/2023			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,638.03 rev1 (Original Hole)	MWD		
			OWSG MWD - Standard		



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,689.10	20.67	198.901	1,674.25	-116.34	-39.84	3.00	3.00	0.00	198.90	
5,474.66	20.67	198.901	5,216.05	-1,380.72	-472.76	0.00	0.00	0.00	0.00	
6,163.76	0.00	0.000	5,890.30	-1,497.06	-512.60	3.00	-3.00	0.00	180.00	
6,263.76	0.00	0.000	5,990.30	-1,497.06	-512.60	0.00	0.00	0.00	0.00	Rincon 917 vert r1
6,863.76	60.00	89.551	6,486.50	-1,494.82	-226.13	10.00	10.00	0.00	89.55	
6,923.76	60.00	89.551	6,516.50	-1,494.41	-174.17	0.00	0.00	0.00	0.00	
7,222.27	89.85	89.551	6,593.26	-1,492.18	110.81	10.00	10.00	0.00	0.00	
18,638.04	89.85	89.551	6,623.00	-1,402.80	11,526.19	0.00	0.00	0.00	0.00	Rincon 917 BHL 2534



Planning Report - Geographic

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Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.000	0.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
100.00	0.00	0.000	100.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
200.00	0.00	0.000	200.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
300.00	0.00	0.000	300.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
345.00	0.00	0.000	345.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
13 3/8" Csg									
400.00	0.00	0.000	400.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
500.00	0.00	0.000	500.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
600.00	0.00	0.000	600.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
700.00	0.00	0.000	700.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
800.00	0.00	0.000	800.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
900.00	0.00	0.000	900.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
1,000.00	0.00	0.000	1,000.00	0.00	0.00	2,024,734.814	2,830,347.049	36.563798000	-107.468107000
KOP Begin 3°/100' build									
1,100.00	3.00	198.901	1,099.95	-2.48	-0.85	2,024,732.338	2,830,346.201	36.563791207	-107.468109920
1,200.00	6.00	198.901	1,199.63	-9.90	-3.39	2,024,724.916	2,830,343.660	36.563770846	-107.468118669
1,300.00	9.00	198.901	1,298.77	-22.25	-7.62	2,024,712.568	2,830,339.432	36.563736974	-107.468133225
1,400.00	12.00	198.901	1,397.08	-39.48	-13.52	2,024,695.329	2,830,333.529	36.563689682	-107.468153547
1,500.00	15.00	198.901	1,494.31	-61.57	-21.08	2,024,673.246	2,830,325.968	36.563629101	-107.468179580
1,600.00	18.00	198.901	1,590.18	-88.43	-30.28	2,024,646.379	2,830,316.769	36.563555397	-107.468211253
1,689.10	20.67	198.901	1,674.25	-116.34	-39.84	2,024,618.469	2,830,307.212	36.563478832	-107.468244154
Begin 20.67° tangent									
1,700.00	20.67	198.901	1,684.44	-119.98	-41.08	2,024,614.830	2,830,305.966	36.563468847	-107.468248445
1,800.00	20.67	198.901	1,778.00	-153.38	-52.52	2,024,581.430	2,830,294.530	36.563377221	-107.468287818
1,900.00	20.67	198.901	1,871.57	-186.78	-63.96	2,024,548.030	2,830,283.093	36.563285595	-107.468327192
2,000.00	20.67	198.901	1,965.13	-220.18	-75.39	2,024,514.630	2,830,271.657	36.563193969	-107.468366565
2,100.00	20.67	198.901	2,058.69	-253.58	-86.83	2,024,481.231	2,830,260.221	36.563102343	-107.468405938
2,200.00	20.67	198.901	2,152.25	-286.98	-98.26	2,024,447.831	2,830,248.785	36.563010717	-107.468445311
2,300.00	20.67	198.901	2,245.81	-320.38	-109.70	2,024,414.431	2,830,237.348	36.562919091	-107.468484685
2,400.00	20.67	198.901	2,339.37	-353.78	-121.14	2,024,381.031	2,830,225.912	36.562827464	-107.468524057
2,500.00	20.67	198.901	2,432.93	-387.18	-132.57	2,024,347.631	2,830,214.476	36.562735838	-107.468563430
2,600.00	20.67	198.901	2,526.49	-420.58	-144.01	2,024,314.232	2,830,203.040	36.562644212	-107.468602803
2,622.57	20.67	198.901	2,547.61	-428.12	-146.59	2,024,306.694	2,830,200.459	36.562623533	-107.468611689
Ojo Alamo									
2,700.00	20.67	198.901	2,620.05	-453.98	-155.45	2,024,280.832	2,830,191.604	36.562552586	-107.468642176
2,724.07	20.67	198.901	2,642.58	-462.02	-158.20	2,024,272.791	2,830,188.850	36.562530528	-107.468651654
Kirtland									
2,800.00	20.67	198.901	2,713.61	-487.38	-166.88	2,024,247.432	2,830,180.167	36.562460960	-107.468681548
2,900.00	20.67	198.901	2,807.18	-520.78	-178.32	2,024,214.032	2,830,168.731	36.562369334	-107.468720921
3,000.00	20.67	198.901	2,900.74	-554.18	-189.75	2,024,180.632	2,830,157.295	36.562277708	-107.468760293
3,023.25	20.67	198.901	2,922.49	-561.95	-192.41	2,024,172.868	2,830,154.636	36.562256408	-107.468769446
Fruitland									
3,100.00	20.67	198.901	2,994.30	-587.58	-201.19	2,024,147.233	2,830,145.859	36.562186081	-107.468799665
3,200.00	20.67	198.901	3,087.86	-620.98	-212.63	2,024,113.833	2,830,134.422	36.562094455	-107.468839038
3,295.71	20.67	198.901	3,177.40	-652.95	-223.57	2,024,081.867	2,830,123.477	36.562006763	-107.468876719
Pictured Cliffs									
3,300.00	20.67	198.901	3,181.42	-654.38	-224.06	2,024,080.433	2,830,122.986	36.562002829	-107.468878410
3,400.00	20.67	198.901	3,274.98	-687.78	-235.50	2,024,047.033	2,830,111.550	36.561911203	-107.468917782
3,500.00	20.67	198.901	3,368.54	-721.18	-246.94	2,024,013.633	2,830,100.114	36.561819577	-107.468957154
3,578.85	20.67	198.901	3,442.32	-747.52	-255.95	2,023,987.297	2,830,091.096	36.561747328	-107.468988199
Lewis									
3,600.00	20.67	198.901	3,462.10	-754.58	-258.37	2,023,980.234	2,830,088.677	36.561727950	-107.468996525
3,700.00	20.67	198.901	3,555.66	-787.98	-269.81	2,023,946.834	2,830,077.241	36.561636324	-107.469035897



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,800.00	20.67	198.901	3,649.22	-821.38	-281.24	2,023,913.434	2,830,065.805	36.561544698	-107.469075269
3,899.39	20.67	198.901	3,742.22	-854.58	-292.61	2,023,880.237	2,830,054.438	36.561453628	-107.469114401
Chacra_A									
3,900.00	20.67	198.901	3,742.79	-854.78	-292.68	2,023,880.034	2,830,054.369	36.561453071	-107.469114640
4,000.00	20.67	198.901	3,836.35	-888.18	-304.12	2,023,846.634	2,830,042.932	36.561361445	-107.469154012
4,100.00	20.67	198.901	3,929.91	-921.58	-315.55	2,023,813.235	2,830,031.496	36.561269819	-107.469193383
4,200.00	20.67	198.901	4,023.47	-954.98	-326.99	2,023,779.835	2,830,020.060	36.561178192	-107.469232754
4,300.00	20.67	198.901	4,117.03	-988.38	-338.43	2,023,746.435	2,830,008.624	36.561086566	-107.469272125
4,400.00	20.67	198.901	4,210.59	-1,021.78	-349.86	2,023,713.035	2,829,997.187	36.560994940	-107.469311496
4,500.00	20.67	198.901	4,304.15	-1,055.18	-361.30	2,023,679.635	2,829,985.751	36.560903313	-107.469350867
4,600.00	20.67	198.901	4,397.71	-1,088.58	-372.73	2,023,646.236	2,829,974.315	36.560811687	-107.469390238
4,700.00	20.67	198.901	4,491.27	-1,121.98	-384.17	2,023,612.836	2,829,962.879	36.560720060	-107.469429609
4,800.00	20.67	198.901	4,584.83	-1,155.38	-395.61	2,023,579.436	2,829,951.443	36.560628434	-107.469468980
4,900.00	20.67	198.901	4,678.40	-1,188.78	-407.04	2,023,546.036	2,829,940.006	36.560536808	-107.469508350
5,000.00	20.67	198.901	4,771.96	-1,222.18	-418.48	2,023,512.637	2,829,928.570	36.560445181	-107.469547721
5,080.05	20.67	198.901	4,846.86	-1,248.92	-427.64	2,023,485.898	2,829,919.415	36.560371830	-107.469579239
Cliff House									
5,100.00	20.67	198.901	4,865.52	-1,255.58	-429.92	2,023,479.237	2,829,917.134	36.560353555	-107.469587091
5,200.00	20.67	198.901	4,959.08	-1,288.98	-441.35	2,023,445.837	2,829,905.698	36.560261928	-107.469626462
5,213.61	20.67	198.901	4,971.82	-1,293.53	-442.91	2,023,441.290	2,829,904.141	36.560249454	-107.469631821
Menefee									
5,300.00	20.67	198.901	5,052.64	-1,322.38	-452.79	2,023,412.437	2,829,894.261	36.560170302	-107.469665832
5,375.20	20.67	198.901	5,123.00	-1,347.50	-461.39	2,023,387.320	2,829,885.661	36.560101396	-107.469695439
9 5/8" Csg									
5,400.00	20.67	198.901	5,146.20	-1,355.78	-464.22	2,023,379.037	2,829,882.825	36.560078675	-107.469705202
5,474.66	20.67	198.901	5,216.05	-1,380.72	-472.76	2,023,354.101	2,829,874.287	36.560010267	-107.469734595
Begin 3"/100' drop									
5,500.00	19.91	198.901	5,239.82	-1,389.03	-475.61	2,023,345.787	2,829,871.440	36.559987457	-107.469744396
5,600.00	16.91	198.901	5,334.69	-1,418.91	-485.84	2,023,315.907	2,829,861.209	36.559905488	-107.469779617
5,674.82	14.67	198.901	5,406.68	-1,438.17	-492.44	2,023,296.646	2,829,854.614	36.559852648	-107.469802321
Point Lookout									
5,700.00	13.91	198.901	5,431.08	-1,444.05	-494.45	2,023,290.766	2,829,852.601	36.559836518	-107.469809252
5,800.00	10.91	198.901	5,528.73	-1,464.38	-501.41	2,023,270.432	2,829,845.638	36.559780735	-107.469833220
5,900.00	7.91	198.901	5,627.38	-1,479.86	-506.71	2,023,254.961	2,829,840.341	36.559738293	-107.469851457
6,000.00	4.91	198.901	5,726.74	-1,490.42	-510.33	2,023,244.395	2,829,836.723	36.559709308	-107.469863911
6,090.07	2.21	198.901	5,816.63	-1,495.72	-512.14	2,023,239.102	2,829,834.910	36.559694786	-107.469870150
Mancos									
6,100.00	1.91	198.901	5,826.55	-1,496.05	-512.26	2,023,238.764	2,829,834.795	36.559693859	-107.469870549
6,163.76	0.00	0.000	5,890.30	-1,497.06	-512.60	2,023,237.757	2,829,834.450	36.559691097	-107.469871736
Begin vertical hold									
6,200.00	0.00	0.000	5,926.54	-1,497.06	-512.60	2,023,237.757	2,829,834.450	36.559691097	-107.469871736
6,263.76	0.00	0.000	5,990.30	-1,497.06	-512.60	2,023,237.757	2,829,834.450	36.559691097	-107.469871736
Begin 10"/100' build									
6,300.00	3.62	89.551	6,026.51	-1,497.05	-511.45	2,023,237.766	2,829,835.596	36.559691110	-107.469867835
6,350.00	8.62	89.551	6,076.21	-1,497.01	-506.12	2,023,237.808	2,829,840.928	36.559691169	-107.469849679
6,400.00	13.62	89.551	6,125.26	-1,496.93	-496.48	2,023,237.883	2,829,850.571	36.559691276	-107.469816844
6,450.00	18.62	89.551	6,173.28	-1,496.82	-482.60	2,023,237.992	2,829,864.452	36.559691431	-107.469769578
6,500.00	23.62	89.551	6,219.90	-1,496.68	-464.59	2,023,238.133	2,829,882.465	36.559691632	-107.469708243
6,550.00	28.62	89.551	6,264.78	-1,496.51	-442.58	2,023,238.306	2,829,904.472	36.559691877	-107.469633305
6,600.00	33.62	89.551	6,307.57	-1,496.31	-416.74	2,023,238.508	2,829,930.308	36.559692165	-107.469545334
6,650.00	38.62	89.551	6,347.94	-1,496.08	-387.28	2,023,238.739	2,829,959.774	36.559692493	-107.469444999



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Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,668.21	40.44	89.551	6,361.99	-1,495.99	-375.68	2,023,238.830	2,829,971.366	36.559692622	-107.469405529
Gallup (MNCS_A)									
6,700.00	43.62	89.551	6,385.60	-1,495.82	-354.40	2,023,238.997	2,829,992.647	36.559692859	-107.469333065
6,750.00	48.62	89.551	6,420.24	-1,495.54	-318.37	2,023,239.279	2,830,028.676	36.559693260	-107.469210383
6,800.00	53.62	89.551	6,451.61	-1,495.23	-279.46	2,023,239.584	2,830,067.588	36.559693693	-107.469077886
6,836.52	57.28	89.551	6,472.32	-1,495.00	-249.39	2,023,239.820	2,830,097.659	36.559694027	-107.468975492
MNCS_B									
6,850.00	58.62	89.551	6,479.47	-1,494.91	-237.96	2,023,239.909	2,830,109.086	36.559694154	-107.468936584
6,863.76	60.00	89.551	6,486.50	-1,494.82	-226.13	2,023,240.002	2,830,120.920	36.559694286	-107.468896289
Begin 60.00° tangent									
6,900.00	60.00	89.551	6,504.62	-1,494.57	-194.75	2,023,240.248	2,830,152.302	36.559694635	-107.468789431
6,923.76	60.00	89.551	6,516.50	-1,494.41	-174.17	2,023,240.409	2,830,172.879	36.559694864	-107.468719363
Begin 10°/100' build									
6,950.00	62.62	89.551	6,529.09	-1,494.23	-151.16	2,023,240.589	2,830,195.894	36.559695119	-107.468640997
7,000.00	67.62	89.551	6,550.12	-1,493.87	-105.81	2,023,240.945	2,830,241.239	36.559695623	-107.468486594
7,006.92	68.32	89.551	6,552.71	-1,493.82	-99.40	2,023,240.995	2,830,247.651	36.559695694	-107.468464761
MNCS_C - MNCS_C @ 0VS									
7,050.00	72.62	89.551	6,567.11	-1,493.50	-58.81	2,023,241.313	2,830,288.244	36.559696145	-107.468326539
7,100.00	77.62	89.551	6,579.94	-1,493.13	-10.50	2,023,241.691	2,830,336.551	36.559696680	-107.468162050
7,150.00	82.62	89.551	6,588.52	-1,492.74	38.74	2,023,242.077	2,830,385.793	36.559697226	-107.467994378
7,200.00	87.62	89.551	6,592.77	-1,492.35	88.55	2,023,242.467	2,830,435.595	36.559697777	-107.467824801
7,222.27	89.85	89.551	6,593.26	-1,492.18	110.81	2,023,242.641	2,830,457.856	36.559698024	-107.467748999
Begin 89.85° lateral									
7,300.00	89.85	89.551	6,593.46	-1,491.57	188.54	2,023,243.250	2,830,535.584	36.559698883	-107.467484330
7,400.00	89.85	89.551	6,593.72	-1,490.78	288.53	2,023,244.033	2,830,635.581	36.559699989	-107.467143836
7,500.00	89.85	89.551	6,593.98	-1,490.00	388.53	2,023,244.815	2,830,735.577	36.559701093	-107.466803342
7,600.00	89.85	89.551	6,594.24	-1,489.22	488.53	2,023,245.598	2,830,835.574	36.559702196	-107.466462848
7,700.00	89.85	89.551	6,594.50	-1,488.44	588.52	2,023,246.381	2,830,935.570	36.559703299	-107.466122354
7,800.00	89.85	89.551	6,594.76	-1,487.65	688.52	2,023,247.164	2,831,035.566	36.559704400	-107.465781860
7,900.00	89.85	89.551	6,595.02	-1,486.87	788.52	2,023,247.947	2,831,135.563	36.559705500	-107.465441367
8,000.00	89.85	89.551	6,595.28	-1,486.09	888.51	2,023,248.730	2,831,235.559	36.559706600	-107.465100873
8,100.00	89.85	89.551	6,595.54	-1,485.30	988.51	2,023,249.513	2,831,335.555	36.559707698	-107.464760379
8,200.00	89.85	89.551	6,595.80	-1,484.52	1,088.51	2,023,250.296	2,831,435.552	36.559708796	-107.464419885
8,300.00	89.85	89.551	6,596.06	-1,483.74	1,188.50	2,023,251.078	2,831,535.548	36.559709892	-107.464079391
8,400.00	89.85	89.551	6,596.32	-1,482.96	1,288.50	2,023,251.861	2,831,635.545	36.559710988	-107.463738897
8,500.00	89.85	89.551	6,596.59	-1,482.17	1,388.49	2,023,252.644	2,831,735.542	36.559712082	-107.463398403
8,600.00	89.85	89.551	6,596.85	-1,481.39	1,488.49	2,023,253.427	2,831,835.538	36.559713176	-107.463057909
8,700.00	89.85	89.551	6,597.11	-1,480.61	1,588.49	2,023,254.210	2,831,935.535	36.559714268	-107.462717415
8,800.00	89.85	89.551	6,597.37	-1,479.82	1,688.48	2,023,254.993	2,832,035.531	36.559715360	-107.462376921
8,900.00	89.85	89.551	6,597.63	-1,479.04	1,788.48	2,023,255.776	2,832,135.528	36.559716450	-107.462036428
9,000.00	89.85	89.551	6,597.89	-1,478.26	1,888.48	2,023,256.559	2,832,235.524	36.559717540	-107.461695934
9,100.00	89.85	89.551	6,598.15	-1,477.48	1,988.47	2,023,257.341	2,832,335.520	36.559718629	-107.461355440
9,200.00	89.85	89.551	6,598.41	-1,476.69	2,088.47	2,023,258.124	2,832,435.517	36.559719717	-107.461014946
9,300.00	89.85	89.551	6,598.67	-1,475.91	2,188.47	2,023,258.907	2,832,535.513	36.559720803	-107.460674452
9,400.00	89.85	89.551	6,598.93	-1,475.13	2,288.46	2,023,259.690	2,832,635.510	36.559721889	-107.460333958
9,500.00	89.85	89.551	6,599.19	-1,474.34	2,388.46	2,023,260.473	2,832,735.506	36.559722974	-107.459993464
9,600.00	89.85	89.551	6,599.45	-1,473.56	2,488.46	2,023,261.256	2,832,835.502	36.559724058	-107.459652970
9,700.00	89.85	89.551	6,599.71	-1,472.78	2,588.45	2,023,262.039	2,832,935.499	36.559725141	-107.459312476
9,800.00	89.85	89.551	6,599.97	-1,472.00	2,688.45	2,023,262.822	2,833,035.495	36.559726223	-107.458971982
9,900.00	89.85	89.551	6,600.23	-1,471.21	2,788.45	2,023,263.604	2,833,135.492	36.559727303	-107.458631488
10,000.00	89.85	89.551	6,600.49	-1,470.43	2,888.44	2,023,264.387	2,833,235.488	36.559728383	-107.458290995
10,100.00	89.85	89.551	6,600.75	-1,469.65	2,988.44	2,023,265.170	2,833,335.484	36.559729462	-107.457950501
10,200.00	89.85	89.551	6,601.01	-1,468.86	3,088.44	2,023,265.953	2,833,435.481	36.559730540	-107.457610007



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,300.00	89.85	89.551	6,601.28	-1,468.08	3,188.43	2,023,266.736	2,833,535.477	36.559731617	-107.457269513
10,400.00	89.85	89.551	6,601.54	-1,467.30	3,288.43	2,023,267.519	2,833,635.473	36.559732693	-107.456929019
10,500.00	89.85	89.551	6,601.80	-1,466.52	3,388.43	2,023,268.302	2,833,735.470	36.559733769	-107.456588525
10,600.00	89.85	89.551	6,602.06	-1,465.73	3,488.42	2,023,269.085	2,833,835.466	36.559734843	-107.456248031
10,700.00	89.85	89.551	6,602.32	-1,464.95	3,588.42	2,023,269.867	2,833,935.463	36.559735916	-107.455907537
10,800.00	89.85	89.551	6,602.58	-1,464.17	3,688.42	2,023,270.650	2,834,035.459	36.559736988	-107.455567043
10,900.00	89.85	89.551	6,602.84	-1,463.38	3,788.41	2,023,271.433	2,834,135.455	36.559738059	-107.455226549
11,000.00	89.85	89.551	6,603.10	-1,462.60	3,888.41	2,023,272.216	2,834,235.452	36.559739129	-107.454886055
11,100.00	89.85	89.551	6,603.36	-1,461.82	3,988.41	2,023,272.999	2,834,335.448	36.559740199	-107.454545561
11,200.00	89.85	89.551	6,603.62	-1,461.04	4,088.40	2,023,273.782	2,834,435.445	36.559741267	-107.454205068
11,300.00	89.85	89.551	6,603.88	-1,460.25	4,188.40	2,023,274.565	2,834,535.441	36.559742334	-107.453864574
11,400.00	89.85	89.551	6,604.14	-1,459.47	4,288.40	2,023,275.348	2,834,635.437	36.559743401	-107.453524080
11,500.00	89.85	89.551	6,604.40	-1,458.69	4,388.39	2,023,276.130	2,834,735.434	36.559744466	-107.453183586
11,600.00	89.85	89.551	6,604.66	-1,457.90	4,488.39	2,023,276.913	2,834,835.430	36.559745530	-107.452843092
11,700.00	89.85	89.551	6,604.92	-1,457.12	4,588.39	2,023,277.696	2,834,935.427	36.559746594	-107.452502598
11,800.00	89.85	89.551	6,605.18	-1,456.34	4,688.38	2,023,278.479	2,835,035.423	36.559747656	-107.452162104
11,900.00	89.85	89.551	6,605.44	-1,455.55	4,788.38	2,023,279.262	2,835,135.419	36.559748718	-107.451821610
12,000.00	89.85	89.551	6,605.70	-1,454.77	4,888.38	2,023,280.045	2,835,235.416	36.559749778	-107.451481116
12,100.00	89.85	89.551	6,605.97	-1,453.99	4,988.37	2,023,280.828	2,835,335.412	36.559750838	-107.451140622
12,200.00	89.85	89.551	6,606.23	-1,453.21	5,088.37	2,023,281.611	2,835,435.409	36.559751896	-107.450800128
12,300.00	89.85	89.551	6,606.49	-1,452.42	5,188.37	2,023,282.393	2,835,535.405	36.559752954	-107.450459634
12,400.00	89.85	89.551	6,606.75	-1,451.64	5,288.36	2,023,283.176	2,835,635.401	36.559754010	-107.450119140
12,500.00	89.85	89.551	6,607.01	-1,450.86	5,388.36	2,023,283.959	2,835,735.398	36.559755066	-107.449778646
12,600.00	89.85	89.551	6,607.27	-1,450.07	5,488.36	2,023,284.742	2,835,835.394	36.559756121	-107.449438152
12,700.00	89.85	89.551	6,607.53	-1,449.29	5,588.35	2,023,285.525	2,835,935.390	36.559757174	-107.449097659
12,800.00	89.85	89.551	6,607.79	-1,448.51	5,688.35	2,023,286.308	2,836,035.387	36.559758227	-107.448757165
12,900.00	89.85	89.551	6,608.05	-1,447.73	5,788.35	2,023,287.091	2,836,135.383	36.559759279	-107.448416671
13,000.00	89.85	89.551	6,608.31	-1,446.94	5,888.34	2,023,287.873	2,836,235.380	36.559760330	-107.448076177
13,100.00	89.85	89.551	6,608.57	-1,446.16	5,988.34	2,023,288.656	2,836,335.376	36.559761380	-107.447735683
13,200.00	89.85	89.551	6,608.83	-1,445.38	6,088.34	2,023,289.439	2,836,435.372	36.559762428	-107.447395189
13,300.00	89.85	89.551	6,609.09	-1,444.59	6,188.33	2,023,290.222	2,836,535.369	36.559763476	-107.447054695
13,400.00	89.85	89.551	6,609.35	-1,443.81	6,288.33	2,023,291.005	2,836,635.365	36.559764523	-107.446714201
13,500.00	89.85	89.551	6,609.61	-1,443.03	6,388.32	2,023,291.788	2,836,735.362	36.559765569	-107.446373707
13,600.00	89.85	89.551	6,609.87	-1,442.25	6,488.32	2,023,292.571	2,836,835.358	36.559766614	-107.446033213
13,700.00	89.85	89.551	6,610.13	-1,441.46	6,588.32	2,023,293.354	2,836,935.354	36.559767658	-107.445692719
13,800.00	89.85	89.551	6,610.39	-1,440.68	6,688.31	2,023,294.136	2,837,035.351	36.559768701	-107.445352225
13,900.00	89.85	89.551	6,610.66	-1,439.90	6,788.31	2,023,294.919	2,837,135.347	36.559769743	-107.445011731
14,000.00	89.85	89.551	6,610.92	-1,439.11	6,888.31	2,023,295.702	2,837,235.344	36.559770784	-107.444671237
14,100.00	89.85	89.551	6,611.18	-1,438.33	6,988.30	2,023,296.485	2,837,335.340	36.559771824	-107.444330743
14,200.00	89.85	89.551	6,611.44	-1,437.55	7,088.30	2,023,297.268	2,837,435.336	36.559772863	-107.443990249
14,300.00	89.85	89.551	6,611.70	-1,436.77	7,188.30	2,023,298.051	2,837,535.333	36.559773901	-107.443649756
14,400.00	89.85	89.551	6,611.96	-1,435.98	7,288.29	2,023,298.834	2,837,635.329	36.559774939	-107.443309262
14,500.00	89.85	89.551	6,612.22	-1,435.20	7,388.29	2,023,299.617	2,837,735.326	36.559775975	-107.442968768
14,600.00	89.85	89.551	6,612.48	-1,434.42	7,488.29	2,023,300.399	2,837,835.322	36.559777010	-107.442628274
14,700.00	89.85	89.551	6,612.74	-1,433.63	7,588.28	2,023,301.182	2,837,935.318	36.559778044	-107.442287780
14,800.00	89.85	89.551	6,613.00	-1,432.85	7,688.28	2,023,301.965	2,838,035.315	36.559779077	-107.441947286
14,900.00	89.85	89.551	6,613.26	-1,432.07	7,788.28	2,023,302.748	2,838,135.311	36.559780110	-107.441606792
15,000.00	89.85	89.551	6,613.52	-1,431.29	7,888.27	2,023,303.531	2,838,235.307	36.559781141	-107.441266298
15,100.00	89.85	89.551	6,613.78	-1,430.50	7,988.27	2,023,304.314	2,838,335.304	36.559782171	-107.440925804
15,200.00	89.85	89.551	6,614.04	-1,429.72	8,088.27	2,023,305.097	2,838,435.300	36.559783201	-107.440585310
15,300.00	89.85	89.551	6,614.30	-1,428.94	8,188.26	2,023,305.880	2,838,535.297	36.559784229	-107.440244816
15,400.00	89.85	89.551	6,614.56	-1,428.15	8,288.26	2,023,306.662	2,838,635.293	36.559785257	-107.439904322
15,500.00	89.85	89.551	6,614.82	-1,427.37	8,388.26	2,023,307.445	2,838,735.289	36.559786283	-107.439563828
15,600.00	89.85	89.551	6,615.08	-1,426.59	8,488.25	2,023,308.228	2,838,835.286	36.559787309	-107.439223334



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,700.00	89.85	89.551	6,615.34	-1,425.81	8,588.25	2,023,309.011	2,838,935.282	36.559788333	-107.438882840
15,800.00	89.85	89.551	6,615.61	-1,425.02	8,688.25	2,023,309.794	2,839,035.279	36.559789357	-107.438542346
15,900.00	89.85	89.551	6,615.87	-1,424.24	8,788.24	2,023,310.577	2,839,135.275	36.559790379	-107.438201852
16,000.00	89.85	89.551	6,616.13	-1,423.46	8,888.24	2,023,311.360	2,839,235.271	36.559791401	-107.437861359
16,100.00	89.85	89.551	6,616.39	-1,422.67	8,988.24	2,023,312.143	2,839,335.268	36.559792422	-107.437520865
16,200.00	89.85	89.551	6,616.65	-1,421.89	9,088.23	2,023,312.925	2,839,435.264	36.559793441	-107.437180371
16,300.00	89.85	89.551	6,616.91	-1,421.11	9,188.23	2,023,313.708	2,839,535.261	36.559794460	-107.436839877
16,400.00	89.85	89.551	6,617.17	-1,420.33	9,288.23	2,023,314.491	2,839,635.257	36.559795478	-107.436499383
16,500.00	89.85	89.551	6,617.43	-1,419.54	9,388.22	2,023,315.274	2,839,735.253	36.559796494	-107.436158889
16,600.00	89.85	89.551	6,617.69	-1,418.76	9,488.22	2,023,316.057	2,839,835.250	36.559797510	-107.435818396
16,700.00	89.85	89.551	6,617.95	-1,417.98	9,588.22	2,023,316.840	2,839,935.246	36.559798525	-107.435477902
16,800.00	89.85	89.551	6,618.21	-1,417.19	9,688.21	2,023,317.623	2,840,035.243	36.559799539	-107.435137408
16,900.00	89.85	89.551	6,618.47	-1,416.41	9,788.21	2,023,318.406	2,840,135.239	36.559800552	-107.434796914
17,000.00	89.85	89.551	6,618.73	-1,415.63	9,888.21	2,023,319.188	2,840,235.235	36.559801563	-107.434456420
17,100.00	89.85	89.551	6,618.99	-1,414.85	9,988.20	2,023,319.971	2,840,335.232	36.559802574	-107.434115926
17,200.00	89.85	89.551	6,619.25	-1,414.06	10,088.20	2,023,320.754	2,840,435.228	36.559803584	-107.433775432
17,300.00	89.85	89.551	6,619.51	-1,413.28	10,188.20	2,023,321.537	2,840,535.224	36.559804593	-107.433434938
17,400.00	89.85	89.551	6,619.77	-1,412.50	10,288.19	2,023,322.320	2,840,635.221	36.559805601	-107.433094444
17,500.00	89.85	89.551	6,620.03	-1,411.71	10,388.19	2,023,323.103	2,840,735.217	36.559806608	-107.432753950
17,600.00	89.85	89.551	6,620.30	-1,410.93	10,488.19	2,023,323.886	2,840,835.214	36.559807614	-107.432413457
17,700.00	89.85	89.551	6,620.56	-1,410.15	10,588.18	2,023,324.669	2,840,935.210	36.559808619	-107.432072963
17,800.00	89.85	89.551	6,620.82	-1,409.37	10,688.18	2,023,325.451	2,841,035.206	36.559809623	-107.431732469
17,900.00	89.85	89.551	6,621.08	-1,408.58	10,788.18	2,023,326.234	2,841,135.203	36.559810627	-107.431391975
18,000.00	89.85	89.551	6,621.34	-1,407.80	10,888.17	2,023,327.017	2,841,235.199	36.559811629	-107.431051481
18,100.00	89.85	89.551	6,621.60	-1,407.02	10,988.17	2,023,327.800	2,841,335.196	36.559812630	-107.430710987
18,200.00	89.85	89.551	6,621.86	-1,406.23	11,088.16	2,023,328.583	2,841,435.192	36.559813630	-107.430370493
18,300.00	89.85	89.551	6,622.12	-1,405.45	11,188.16	2,023,329.366	2,841,535.188	36.559814629	-107.430029999
18,400.00	89.85	89.551	6,622.38	-1,404.67	11,288.16	2,023,330.149	2,841,635.185	36.559815628	-107.429689505
18,500.00	89.85	89.551	6,622.64	-1,403.89	11,388.15	2,023,330.931	2,841,735.181	36.559816625	-107.429349011
18,600.00	89.85	89.551	6,622.90	-1,403.10	11,488.15	2,023,331.714	2,841,835.178	36.559817621	-107.429008517
18,638.04	89.85	89.551	6,623.00	-1,402.80	11,526.19	2,023,332.012	2,841,873.214	36.559818000	-107.428879000
PBHL/TD @ 18638.04 MD 6623.00 TVD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Rincon 917 vert r1 - hit/miss target - Shape - Point	0.00	0.000	5,990.30	-1,497.06	-512.60	2,023,237.757	2,829,834.450	36.559691097	-107.469871736
Rincon 917 VS=0 r1 - plan misses target center by 8.51ft at 7124.12ft MD (6584.61 TVD, -1492.94 N, 13.16 E) - Point	0.00	0.000	6,593.00	-1,492.95	11.70	2,023,241.867	2,830,358.749	36.559696931	-107.468086465
Rincon 917 FTP 2544 F: - plan misses target center by 0.01ft at 7222.27ft MD (6593.26 TVD, -1492.18 N, 110.81 E) - Point	0.00	0.000	6,593.26	-1,492.18	110.81	2,023,242.633	2,830,457.856	36.559698000	-107.467749000
Rincon 917 BHL 2534 F: - plan hits target center - Point	0.00	0.000	6,623.00	-1,402.80	11,526.19	2,023,332.012	2,841,873.214	36.559818000	-107.428879000



Planning Report - Geographic

Database:	DB_Decv0422v16	Local Co-ordinate Reference:	Well Rincon Unit 917H
Company:	Enduring Resources LLC	TVD Reference:	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	MD Reference:	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	North Reference:	Grid
Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
345.00	345.00	13 3/8" Csg	13-3/8	17-1/2	
5,375.20	5,123.00	9 5/8" Csg	9-5/8	12-1/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,622.57	2,547.61	Ojo Alamo		0.15	89.581
2,724.07	2,642.58	Kirtland		0.15	89.581
3,023.25	2,922.49	Fruitland		0.15	89.581
3,295.71	3,177.40	Pictured Cliffs		0.15	89.581
3,578.85	3,442.32	Lewis		0.15	89.581
3,899.39	3,742.22	Chacra_A		0.15	89.581
5,080.05	4,846.86	Cliff House		0.15	89.581
5,213.61	4,971.82	Menefee		0.15	89.581
5,674.82	5,406.68	Point Lookout		0.15	89.581
6,090.07	5,816.63	Mancos		0.15	89.581
6,668.21	6,361.99	Gallup (MNCS_A)		0.15	89.581
6,836.52	6,472.32	MNCS_B		0.15	89.581
7,006.92	6,552.71	MNCS_C		0.15	89.581
7,006.92	6,552.71	MNCS_C @ 0VS		0.15	89.581

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	KOP Begin 3°/100' build	
1,689.10	1,674.25	-116.34	-39.84	Begin 20.67° tangent	
5,474.66	5,216.05	-1,380.72	-472.76	Begin 3°/100' drop	
6,163.76	5,890.30	-1,497.06	-512.60	Begin vertical hold	
6,263.76	5,990.30	-1,497.06	-512.60	Begin 10°/100' build	
6,863.76	6,486.50	-1,494.82	-226.13	Begin 60.00° tangent	
6,923.76	6,516.50	-1,494.41	-174.17	Begin 10°/100' build	
7,222.27	6,593.26	-1,492.18	110.81	Begin 89.85° lateral	
18,638.04	6,623.00	-1,402.80	11,526.19	PBHL/TD @ 18638.04 MD 6623.00 TVD	



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Reference	rev1		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2,063.80ft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	7/21/2023		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	18,638.03	rev1 (Original Hole)	MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Rincon pad (613, 615, 713, 715,815,817,915 & 917)						
Rincon Unit 613H - Original Hole - rev0	1,000.00	1,000.00	140.02	133.30	20.833	CC, ES
Rincon Unit 613H - Original Hole - rev0	1,400.00	1,410.41	161.69	152.23	17.098	SF
Rincon Unit 615H - Original Hole - Surveys Original Hole	1,041.50	1,031.10	88.71	82.21	13.649	CC, ES
Rincon Unit 615H - Original Hole - Surveys Original Hole	1,200.00	1,188.47	93.63	86.05	12.339	SF
Rincon Unit 713H - Original Hole - rev0	1,000.00	1,000.00	119.89	113.17	17.838	CC, ES
Rincon Unit 713H - Original Hole - rev0	1,200.00	1,199.63	128.65	120.54	15.864	SF
Rincon Unit 715H - Original Hole - Surveys Original Hole	1,114.03	1,105.16	70.73	63.72	10.082	CC, ES
Rincon Unit 715H - Original Hole - Surveys Original Hole	6,886.61	6,773.14	290.94	242.54	6.012	SF
Rincon Unit 815H - Original Hole - rev1	1,000.00	1,000.00	59.94	53.22	8.917	CC, ES
Rincon Unit 815H - Original Hole - rev1	18,638.04	18,607.81	1,996.30	1,398.52	3.340	SF
Rincon Unit 817H - Original Hole - rev1	1,000.00	1,000.00	20.13	13.41	2.995	CC, ES
Rincon Unit 817H - Original Hole - rev1	18,638.04	18,687.84	703.98	195.23	1.384	Level 2<1.50, SF
Rincon Unit 915H - Original Hole - rev1	1,000.00	1,000.00	40.04	33.32	5.958	CC, ES
Rincon Unit 915H - Original Hole - rev1	18,638.04	18,365.34	1,320.06	716.19	2.186	SF
Section 21-T27N-R06W						
Rincon Unit 180 - Original Hole - Inc only surveys	2,594.55	2,517.67	187.74	-8.84	0.955	Level 1<1.00, CC
Rincon Unit 180 - Original Hole - Inc only surveys	2,700.00	2,616.50	191.32	-14.03	0.932	Level 1<1.00, ES, SF

Offset Design:	Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 613H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program:	0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance			Rule Assigned:		Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	53.43	83.43	112.45	140.02					
100.00	100.00	100.00	100.00	0.13	0.13	53.43	83.43	112.45	140.02	139.75	0.27	520.815		
200.00	200.00	200.00	200.00	0.49	0.49	53.43	83.43	112.45	140.02	139.04	0.99	142.041		
300.00	300.00	300.00	300.00	0.85	0.85	53.43	83.43	112.45	140.02	138.32	1.70	82.234		
400.00	400.00	400.00	400.00	1.21	1.21	53.43	83.43	112.45	140.02	137.60	2.42	57.868		
500.00	500.00	500.00	500.00	1.57	1.57	53.43	83.43	112.45	140.02	136.89	3.14	44.641		
600.00	600.00	600.00	600.00	1.93	1.93	53.43	83.43	112.45	140.02	136.17	3.85	36.336		
700.00	700.00	700.00	700.00	2.29	2.29	53.43	83.43	112.45	140.02	135.45	4.57	30.636		
800.00	800.00	800.00	800.00	2.64	2.64	53.43	83.43	112.45	140.02	134.74	5.29	26.482		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 613H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
900.00	900.00	900.00	900.00	3.00	3.00	53.43	83.43	112.45	140.02	134.02	6.00	23.320	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	53.43	83.43	112.45	140.02	133.30	6.72	20.833	CC, ES
1,100.00	1,099.95	1,099.95	1,099.95	3.70	3.72	-146.03	83.43	112.45	142.19	134.77	7.42	19.160	
1,200.00	1,199.63	1,204.20	1,204.15	4.03	4.07	-146.81	80.59	112.64	147.22	139.11	8.10	18.171	
1,300.00	1,298.77	1,308.63	1,308.22	4.37	4.42	-146.86	72.07	113.20	153.57	144.79	8.77	17.508	
1,400.00	1,397.08	1,410.41	1,409.16	4.74	4.76	-146.52	59.12	114.06	161.69	152.23	9.46	17.098	SF
1,500.00	1,494.31	1,509.63	1,507.50	5.13	5.11	-146.95	45.95	114.92	173.87	163.71	10.16	17.110	
1,600.00	1,590.18	1,608.14	1,605.13	5.57	5.47	-148.08	32.88	115.78	190.46	179.58	10.88	17.498	
1,700.00	1,684.44	1,705.66	1,701.79	6.06	5.83	-149.70	19.94	116.64	211.55	199.93	11.62	18.200	
1,800.00	1,778.00	1,802.72	1,797.99	6.59	6.20	-151.51	7.06	117.49	234.61	222.25	12.36	18.979	
1,900.00	1,871.57	1,899.78	1,894.19	7.14	6.57	-153.00	-5.82	118.33	257.86	244.75	13.11	19.669	
2,000.00	1,965.13	1,996.84	1,990.39	7.72	6.94	-154.24	-18.70	119.18	281.24	267.37	13.87	20.283	
2,100.00	2,058.69	2,093.90	2,086.59	8.31	7.32	-155.29	-31.58	120.03	304.72	290.09	14.63	20.830	
2,200.00	2,152.25	2,190.97	2,182.79	8.92	7.71	-156.19	-44.46	120.88	328.29	312.89	15.40	21.321	
2,300.00	2,245.81	2,288.03	2,278.99	9.54	8.09	-156.98	-57.34	121.73	351.93	335.76	16.17	21.762	
2,400.00	2,339.37	2,385.09	2,375.18	10.17	8.48	-157.66	-70.22	122.58	375.62	358.67	16.95	22.162	
2,500.00	2,432.93	2,482.15	2,471.38	10.80	8.87	-158.26	-83.10	123.43	399.35	381.62	17.73	22.525	
2,600.00	2,526.49	2,579.21	2,567.58	11.44	9.26	-158.79	-95.98	124.28	423.13	404.61	18.51	22.855	
2,700.00	2,620.05	2,676.28	2,663.78	12.09	9.65	-159.27	-108.85	125.12	446.93	427.63	19.30	23.157	
2,800.00	2,713.61	2,773.34	2,759.98	12.74	10.05	-159.70	-121.73	125.97	470.76	450.67	20.09	23.434	
2,900.00	2,807.18	2,870.40	2,856.18	13.39	10.44	-160.09	-134.61	126.82	494.61	473.73	20.88	23.689	
3,000.00	2,900.74	2,967.46	2,952.38	14.05	10.84	-160.44	-147.49	127.67	518.48	496.81	21.67	23.924	
3,100.00	2,994.30	3,064.52	3,048.58	14.71	11.24	-160.76	-160.37	128.52	542.37	519.90	22.47	24.142	
3,200.00	3,087.86	3,161.59	3,144.78	15.37	11.63	-161.05	-173.25	129.37	566.27	543.01	23.26	24.343	
3,300.00	3,181.42	3,258.65	3,240.98	16.04	12.03	-161.33	-186.13	130.22	590.19	566.13	24.06	24.531	
3,400.00	3,274.98	3,355.71	3,337.18	16.70	12.43	-161.57	-199.01	131.06	614.11	589.26	24.86	24.706	
3,500.00	3,368.54	3,452.77	3,433.38	17.37	12.83	-161.80	-211.89	131.91	638.05	612.39	25.66	24.869	
3,600.00	3,462.10	3,549.83	3,529.58	18.04	13.24	-162.02	-224.77	132.76	662.00	635.54	26.46	25.022	
3,700.00	3,555.66	3,646.90	3,625.78	18.71	13.64	-162.22	-237.65	133.61	685.95	658.69	27.26	25.166	
3,800.00	3,649.22	3,743.96	3,721.98	19.38	14.04	-162.40	-250.53	134.46	709.91	681.85	28.06	25.300	
3,900.00	3,742.79	3,841.02	3,818.18	20.05	14.44	-162.58	-263.41	135.31	733.88	705.02	28.86	25.427	
4,000.00	3,836.35	3,938.08	3,914.38	20.73	14.85	-162.74	-276.29	136.16	757.86	728.19	29.67	25.546	
4,100.00	3,929.91	4,035.14	4,010.58	21.40	15.25	-162.89	-289.17	137.01	781.83	751.36	30.47	25.659	
4,200.00	4,023.47	4,132.21	4,106.78	22.08	15.65	-163.03	-302.05	137.85	805.82	774.54	31.27	25.766	
4,300.00	4,117.03	4,229.27	4,202.98	22.75	16.06	-163.17	-314.93	138.70	829.81	797.73	32.08	25.867	
4,400.00	4,210.59	4,326.33	4,299.18	23.43	16.46	-163.30	-327.81	139.55	853.80	820.91	32.89	25.962	
4,500.00	4,304.15	4,423.39	4,395.38	24.11	16.87	-163.42	-340.68	140.40	877.80	844.10	33.69	26.053	
4,600.00	4,397.71	4,520.45	4,491.58	24.79	17.27	-163.53	-353.56	141.25	901.80	867.30	34.50	26.139	
4,700.00	4,491.27	4,617.52	4,587.78	25.47	17.68	-163.64	-366.44	142.10	925.80	890.49	35.31	26.221	
4,800.00	4,584.83	4,714.58	4,683.98	26.14	18.08	-163.74	-379.32	142.95	949.81	913.69	36.11	26.300	
4,900.00	4,678.40	4,811.64	4,780.18	26.82	18.49	-163.84	-392.20	143.79	973.82	936.89	36.92	26.374	
5,000.00	4,771.96	4,908.70	4,876.38	27.50	18.89	-163.93	-405.08	144.64	997.83	960.10	37.73	26.445	
5,100.00	4,865.52	5,005.76	4,972.58	28.18	19.30	-164.02	-417.96	145.49	1,021.84	983.30	38.54	26.513	
5,200.00	4,959.08	5,102.83	5,068.78	28.86	19.71	-164.11	-430.84	146.34	1,045.86	1,006.51	39.35	26.578	
5,300.00	5,052.64	5,199.89	5,164.98	29.54	20.11	-164.19	-443.72	147.19	1,069.88	1,029.72	40.16	26.641	
5,400.00	5,146.20	5,296.95	5,261.18	30.23	20.52	-164.26	-456.60	148.04	1,093.90	1,052.93	40.97	26.700	
5,500.00	5,239.82	5,394.05	5,357.42	30.90	20.93	-164.39	-469.48	148.89	1,117.76	1,075.98	41.78	26.754	
5,600.00	5,334.69	5,491.95	5,454.45	31.54	21.34	-164.57	-482.48	149.74	1,138.08	1,095.49	42.59	26.724	
5,700.00	5,431.08	5,590.75	5,552.37	32.11	21.75	-164.64	-495.59	150.61	1,153.43	1,110.04	43.39	26.584	
5,800.00	5,528.73	5,690.17	5,650.91	32.61	22.17	-164.60	-508.78	151.48	1,163.78	1,119.59	44.18	26.341	
5,900.00	5,627.38	5,789.94	5,749.80	33.04	22.59	-164.45	-522.02	152.35	1,169.10	1,124.14	44.97	26.000	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 613H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,000.00	5,726.74	5,883.75	5,842.78	33.41	22.98	-164.22	-534.42	153.17	1,169.45	1,123.76	45.69	25.593	
6,100.00	5,826.55	5,951.24	5,909.86	33.71	23.25	-164.02	-541.76	153.65	1,166.64	1,120.45	46.19	25.257	
6,200.00	5,926.54	6,018.85	5,977.28	33.93	23.50	35.05	-546.73	153.98	1,161.91	1,115.30	46.61	24.927	
6,300.00	6,026.51	6,100.00	6,058.38	34.12	23.79	-54.60	-549.54	154.16	1,158.37	1,111.28	47.09	24.600	
6,400.00	6,125.26	7,235.37	6,786.93	34.28	28.99	-100.42	-563.75	-520.07	1,144.20	1,094.79	49.41	23.158	
6,500.00	6,219.90	7,202.88	6,787.13	34.39	28.58	-104.51	-563.08	-487.59	1,092.66	1,042.15	50.51	21.634	
6,600.00	6,307.57	6,983.34	6,751.80	34.43	26.51	-97.28	-558.60	-272.30	1,047.62	998.48	49.14	21.321	
6,700.00	6,385.60	6,891.31	6,713.15	34.43	26.03	-96.14	-556.86	-188.90	1,008.13	958.64	49.50	20.367	
6,800.00	6,451.61	6,855.86	6,695.45	34.38	25.90	-97.29	-556.22	-158.19	977.71	927.70	50.01	19.552	
6,900.00	6,504.62	6,800.42	6,667.25	34.30	25.73	-95.78	-555.23	-110.48	957.03	906.82	50.21	19.060	
7,000.00	6,550.12	6,738.62	6,631.25	34.22	25.56	-93.34	-554.18	-60.29	944.28	894.03	50.26	18.789	
7,100.00	6,579.94	6,680.99	6,593.00	34.12	25.42	-90.77	-553.29	-17.23	939.95	889.62	50.34	18.673	
7,104.81	6,580.95	6,678.28	6,591.10	34.12	25.42	-90.63	-553.25	-15.30	939.94	889.60	50.35	18.669	
7,200.00	6,592.77	6,625.37	6,552.16	34.03	25.29	-87.68	-552.50	20.49	943.18	892.64	50.54	18.661	
7,300.00	6,593.46	6,574.36	6,511.65	33.97	25.16	-85.05	-551.86	51.45	953.17	902.24	50.93	18.714	
7,400.00	6,593.72	6,533.58	6,477.38	33.97	25.05	-82.98	-551.40	73.54	970.67	919.15	51.52	18.842	
7,500.00	6,593.98	6,500.00	6,448.04	34.08	24.97	-81.23	-551.06	89.86	996.05	943.82	52.23	19.070	
7,600.00	6,594.24	6,473.79	6,424.50	34.47	24.89	-79.84	-550.82	101.39	1,029.21	976.16	53.06	19.398	
7,700.00	6,594.50	6,450.00	6,402.71	35.39	24.83	-78.56	-550.62	110.91	1,069.76	1,015.91	53.86	19.862	
7,800.00	6,594.76	6,432.66	6,386.58	36.80	24.78	-77.62	-550.49	117.28	1,117.11	1,062.42	54.69	20.424	
7,900.00	6,595.02	6,416.67	6,371.54	38.46	24.73	-76.75	-550.37	122.71	1,170.58	1,115.13	55.45	21.110	
8,000.00	6,595.28	6,400.00	6,355.71	40.28	24.69	-75.84	-550.27	127.93	1,229.49	1,173.40	56.09	21.920	
8,100.00	6,595.54	6,400.00	6,355.71	42.19	24.69	-75.84	-550.27	127.93	1,293.22	1,236.36	56.86	22.744	
8,200.00	6,595.80	6,380.53	6,337.03	44.18	24.63	-74.78	-550.15	133.44	1,360.94	1,303.68	57.26	23.766	
8,300.00	6,596.06	6,371.30	6,328.12	46.22	24.60	-74.27	-550.10	135.83	1,432.34	1,374.62	57.72	24.815	
8,400.00	6,596.32	6,350.00	6,307.41	48.32	24.54	-73.11	-550.00	140.79	1,507.02	1,449.07	57.96	26.002	
8,500.00	6,596.59	6,350.00	6,307.41	50.46	24.54	-73.11	-550.00	140.79	1,584.09	1,525.72	58.37	27.137	
8,600.00	6,596.85	6,350.00	6,307.41	52.64	24.54	-73.11	-550.00	140.79	1,663.60	1,604.88	58.72	28.329	
8,700.00	6,597.11	6,350.00	6,307.41	54.84	24.54	-73.11	-550.00	140.79	1,745.22	1,686.21	59.01	29.574	
8,800.00	6,597.37	6,350.00	6,307.41	57.08	24.54	-73.11	-550.00	140.79	1,828.67	1,769.41	59.25	30.862	
8,900.00	6,597.63	6,350.00	6,307.41	59.34	24.54	-73.11	-550.00	140.79	1,913.70	1,854.24	59.46	32.187	
9,000.00	6,597.89	6,328.38	6,286.21	61.63	24.47	-71.94	-549.91	145.03	1,999.64	1,940.18	59.47	33.626	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 615H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 385-MWD, 4923-MWD, 16695-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Offset		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.00	0.00	0.00	53.38	59.65	80.24	100.70				
100.00	100.00	88.32	88.32	0.13	0.15	53.44	59.47	80.20	99.84	99.55	0.29	346.529	
200.00	200.00	188.68	188.68	0.49	0.33	53.68	58.83	80.04	99.33	98.51	0.82	121.005	
300.00	300.00	289.04	289.03	0.85	0.50	54.10	57.74	79.76	98.47	97.11	1.35	72.742	
400.00	400.00	389.36	389.34	1.21	0.69	54.71	56.18	79.37	97.25	95.35	1.89	51.332	
500.00	500.00	489.47	489.43	1.57	1.05	55.60	54.15	79.08	95.85	93.24	2.61	36.682	
600.00	600.00	589.40	589.33	1.93	1.41	56.77	51.68	78.89	94.32	90.99	3.33	28.312	
700.00	700.00	689.26	689.16	2.29	1.77	57.98	49.33	78.88	93.05	89.00	4.05	22.975	
800.00	800.00	789.23	789.10	2.64	2.13	59.20	47.01	78.87	91.82	87.05	4.77	19.254	
900.00	900.00	889.44	889.29	3.00	2.49	60.40	44.72	78.71	90.54	85.05	5.49	16.495	
1,000.00	1,000.00	989.57	989.38	3.36	2.85	61.67	42.24	78.36	89.03	82.82	6.21	14.341	
1,041.50	1,041.49	1,031.10	1,030.90	3.50	3.00	-136.90	41.20	78.18	88.71	82.21	6.50	13.649 CC, ES	
1,100.00	1,099.95	1,089.68	1,089.46	3.70	3.22	-137.06	39.68	77.91	89.34	82.43	6.91	12.929	
1,200.00	1,199.63	1,188.47	1,188.23	4.03	3.57	-139.21	37.54	77.33	93.63	86.05	7.59	12.339 SF	
1,300.00	1,298.77	1,283.42	1,283.10	4.37	3.88	-145.14	40.64	76.59	105.16	96.92	8.24	12.764	
1,400.00	1,397.08	1,374.38	1,373.53	4.74	4.18	-153.03	50.24	75.80	127.13	118.27	8.86	14.355	
1,500.00	1,494.31	1,463.26	1,461.29	5.13	4.47	-160.19	64.26	75.18	159.82	150.36	9.46	16.892	
1,600.00	1,590.18	1,552.88	1,549.60	5.57	4.79	-165.57	79.53	74.74	200.15	190.06	10.09	19.835	
1,700.00	1,684.44	1,640.98	1,636.42	6.06	5.11	-169.42	94.49	74.22	246.16	235.42	10.73	22.934	
1,800.00	1,778.00	1,728.01	1,722.20	6.59	5.43	-172.34	109.16	73.64	294.55	283.20	11.35	25.948	
1,900.00	1,871.57	1,815.54	1,808.50	7.14	5.77	-174.44	123.73	73.06	343.22	331.23	11.98	28.639	
2,000.00	1,965.13	1,904.74	1,896.52	7.72	6.12	-176.02	138.18	72.44	391.77	379.13	12.64	30.992	
2,100.00	2,058.69	1,993.97	1,984.65	8.31	6.47	-177.24	152.17	71.71	440.02	426.72	13.31	33.071	
2,200.00	2,152.25	2,077.06	2,066.69	8.92	6.80	-178.16	165.33	71.06	488.54	474.61	13.93	35.079	
2,300.00	2,245.81	2,163.91	2,152.37	9.54	7.15	-178.94	179.52	70.63	537.63	523.05	14.59	36.862	
2,400.00	2,339.37	2,255.88	2,243.18	10.17	7.52	-179.60	194.11	70.24	586.43	571.14	15.29	38.352	
2,500.00	2,432.93	2,338.37	2,324.67	10.80	7.86	179.92	206.82	70.03	634.94	619.02	15.92	39.877	
2,600.00	2,526.49	2,421.69	2,406.88	11.44	8.20	179.53	220.46	70.34	684.44	667.88	16.57	41.317	
2,700.00	2,620.05	2,511.39	2,495.37	12.09	8.57	179.17	235.05	70.72	733.90	716.64	17.26	42.508	
2,800.00	2,713.61	2,603.29	2,586.14	12.74	8.95	178.86	249.48	71.03	782.88	764.90	17.98	43.531	
2,900.00	2,807.18	2,695.60	2,677.40	13.39	9.33	178.61	263.33	71.49	831.33	812.62	18.71	44.435	
3,000.00	2,900.74	2,790.19	2,771.00	14.05	9.72	178.38	276.97	71.75	879.24	859.79	19.45	45.199	
3,100.00	2,994.30	2,879.24	2,859.22	14.71	10.08	178.19	289.12	71.81	926.43	906.28	20.15	45.967	
3,200.00	3,087.86	2,959.69	2,938.83	15.37	10.41	178.04	300.70	72.10	974.35	953.56	20.79	46.865	
3,300.00	3,181.42	3,052.51	3,030.72	16.04	10.79	177.88	313.79	72.34	1,021.99	1,000.46	21.53	47.476	
3,400.00	3,274.98	3,130.00	3,107.33	16.70	11.11	177.76	325.45	72.76	1,070.47	1,048.32	22.14	48.343	
3,500.00	3,368.54	3,209.34	3,185.66	17.37	11.45	177.65	338.00	73.47	1,119.70	1,096.92	22.78	49.162	
3,600.00	3,462.10	3,302.92	3,278.12	18.04	11.84	177.54	352.40	74.31	1,168.62	1,145.10	23.52	49.678	
3,700.00	3,555.66	3,405.27	3,379.37	18.71	12.27	177.42	367.33	74.92	1,216.79	1,192.45	24.34	49.989	
3,800.00	3,649.22	3,518.74	3,491.88	19.38	12.73	177.31	382.10	75.08	1,263.51	1,238.27	25.24	50.064	
3,900.00	3,742.79	3,579.43	3,552.02	20.05	12.98	177.24	390.24	75.10	1,310.46	1,284.72	25.74	50.920	
4,000.00	3,836.35	3,665.70	3,637.37	20.73	13.33	177.15	402.81	75.11	1,358.46	1,332.03	26.43	51.399	
4,100.00	3,929.91	3,763.25	3,733.95	21.40	13.74	177.03	416.56	74.68	1,405.96	1,378.75	27.21	51.665	
4,200.00	4,023.47	3,869.61	3,839.35	22.08	14.17	176.89	430.75	73.56	1,452.69	1,424.63	28.06	51.766	
4,300.00	4,117.03	3,934.97	3,904.14	22.75	14.44	176.81	439.37	72.78	1,499.30	1,470.70	28.60	52.423	
4,400.00	4,210.59	4,000.52	3,968.94	23.43	14.72	176.74	449.22	72.60	1,547.60	1,518.46	29.14	53.117	
4,500.00	4,304.15	4,086.63	4,054.03	24.11	15.08	176.66	462.43	72.55	1,596.27	1,566.43	29.83	53.503	
4,600.00	4,397.71	4,151.78	4,118.33	24.79	15.36	176.61	472.92	72.78	1,645.68	1,615.31	30.37	54.196	
4,700.00	4,491.27	4,234.39	4,199.74	25.47	15.72	176.55	486.91	73.36	1,695.88	1,664.84	31.04	54.638	
4,800.00	4,584.83	4,334.92	4,298.87	26.14	16.16	176.48	503.64	73.94	1,745.82	1,713.96	31.86	54.799	
4,900.00	4,678.40	4,406.83	4,369.82	26.82	16.47	176.44	515.36	74.43	1,795.51	1,763.07	32.45	55.338	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design:	Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 615H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program:	385-MWD, 4923-MWD, 16695-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Distance		Minimum Separation		Separation Factor		Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,771.96	4,480.80	4,442.64	27.50	16.79	176.40	528.26	75.24	1,846.21	1,813.16	33.05	55.861		
5,100.00	4,865.52	4,582.39	4,542.73	28.18	17.24	176.35	545.67	76.42	1,896.70	1,862.81	33.88	55.979		
5,200.00	4,959.08	4,700.96	4,659.77	28.86	17.75	176.31	564.62	77.72	1,946.23	1,911.39	34.85	55.854		
5,300.00	5,052.64	4,796.26	4,754.04	29.54	18.15	176.29	578.55	78.65	1,994.52	1,958.90	35.62	55.995		
5,400.00	5,146.20	4,890.20	4,846.98	30.23	18.44	176.28	592.13	80.00	2,042.80	2,006.53	36.27	56.326		



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 713H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
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	53.48	71.36	96.35	119.89				
100.00	100.00	100.00	100.00	0.13	0.13	53.48	71.36	96.35	119.89	119.62	0.27	445.944	
200.00	200.00	200.00	200.00	0.49	0.49	53.48	71.36	96.35	119.89	118.91	0.99	121.621	
300.00	300.00	300.00	300.00	0.85	0.85	53.48	71.36	96.35	119.89	118.19	1.70	70.412	
400.00	400.00	400.00	400.00	1.21	1.21	53.48	71.36	96.35	119.89	117.47	2.42	49.549	
500.00	500.00	500.00	500.00	1.57	1.57	53.48	71.36	96.35	119.89	116.76	3.14	38.224	
600.00	600.00	600.00	600.00	1.93	1.93	53.48	71.36	96.35	119.89	116.04	3.85	31.112	
700.00	700.00	700.00	700.00	2.29	2.29	53.48	71.36	96.35	119.89	115.32	4.57	26.232	
800.00	800.00	800.00	800.00	2.64	2.64	53.48	71.36	96.35	119.89	114.61	5.29	22.675	
900.00	900.00	900.00	900.00	3.00	3.00	53.48	71.36	96.35	119.89	113.89	6.00	19.968	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	53.48	71.36	96.35	119.89	113.17	6.72	17.838	CC, ES
1,100.00	1,099.95	1,099.95	1,099.95	3.70	3.72	-146.09	71.36	96.35	122.06	114.64	7.42	16.448	
1,200.00	1,199.63	1,199.63	1,199.63	4.03	4.08	-147.93	71.36	96.35	128.65	120.54	8.11	15.864	SF
1,300.00	1,298.77	1,292.10	1,292.06	4.37	4.41	-150.58	73.16	97.65	142.22	133.45	8.77	16.208	
1,400.00	1,397.08	1,385.71	1,385.47	4.74	4.74	-153.74	78.16	101.25	164.76	155.32	9.44	17.446	
1,500.00	1,494.31	1,481.10	1,480.61	5.13	5.08	-156.76	83.67	105.22	192.96	182.83	10.13	19.045	
1,600.00	1,590.18	1,574.79	1,574.06	5.57	5.42	-159.38	89.09	109.12	226.29	215.48	10.82	20.919	
1,700.00	1,684.44	1,666.54	1,665.58	6.06	5.75	-161.64	94.40	112.95	264.65	253.15	11.51	23.003	
1,800.00	1,778.00	1,757.45	1,756.26	6.59	6.08	-163.72	99.66	116.73	305.20	293.03	12.17	25.075	
1,900.00	1,871.57	1,848.37	1,846.95	7.14	6.41	-165.32	104.91	120.52	346.01	333.17	12.84	26.940	
2,000.00	1,965.13	1,957.92	1,956.35	7.72	6.81	-166.83	109.43	123.78	385.22	371.58	13.63	28.255	
2,100.00	2,058.69	2,060.26	2,058.69	8.31	7.17	-168.02	109.84	124.07	420.18	405.80	14.38	29.222	
2,200.00	2,152.25	2,153.83	2,152.25	8.92	7.51	-168.94	109.84	124.07	454.86	439.78	15.08	30.153	
2,300.00	2,245.81	2,247.39	2,245.81	9.54	7.84	-169.73	109.84	124.07	489.63	473.83	15.79	31.001	
2,400.00	2,339.37	2,340.95	2,339.37	10.17	8.17	-170.42	109.84	124.07	524.47	507.96	16.51	31.773	
2,500.00	2,432.93	2,434.51	2,432.93	10.80	8.51	-171.02	109.84	124.07	559.37	542.15	17.22	32.480	
2,600.00	2,526.49	2,528.07	2,526.49	11.44	8.84	-171.55	109.84	124.07	594.31	576.38	17.94	33.129	
2,700.00	2,620.05	2,621.63	2,620.05	12.09	9.18	-172.02	109.84	124.07	629.30	610.64	18.66	33.726	
2,800.00	2,713.61	2,715.19	2,713.61	12.74	9.51	-172.45	109.84	124.07	664.32	644.94	19.38	34.276	
2,900.00	2,807.18	2,808.75	2,807.18	13.39	9.84	-172.83	109.84	124.07	699.37	679.26	20.11	34.785	
3,000.00	2,900.74	2,902.31	2,900.74	14.05	10.18	-173.17	109.84	124.07	734.44	713.61	20.83	35.257	
3,100.00	2,994.30	2,995.87	2,994.30	14.71	10.51	-173.48	109.84	124.07	769.54	747.98	21.56	35.696	
3,200.00	3,087.86	3,089.44	3,087.86	15.37	10.85	-173.77	109.84	124.07	804.65	782.36	22.29	36.104	
3,300.00	3,181.42	3,183.00	3,181.42	16.04	11.18	-174.03	109.84	124.07	839.78	816.76	23.02	36.486	
3,400.00	3,274.98	3,276.56	3,274.98	16.70	11.52	-174.27	109.84	124.07	874.92	851.17	23.75	36.843	
3,500.00	3,368.54	3,370.12	3,368.54	17.37	11.85	-174.49	109.84	124.07	910.07	885.59	24.48	37.177	
3,600.00	3,462.10	3,463.68	3,462.10	18.04	12.19	-174.70	109.84	124.07	945.24	920.03	25.21	37.491	
3,700.00	3,555.66	3,557.24	3,555.66	18.71	12.52	-174.89	109.84	124.07	980.42	954.47	25.95	37.787	
3,800.00	3,649.22	3,650.80	3,649.22	19.38	12.86	-175.06	109.84	124.07	1,015.60	988.92	26.68	38.066	
3,900.00	3,742.79	3,744.36	3,742.79	20.05	13.19	-175.23	109.84	124.07	1,050.79	1,023.38	27.42	38.328	
4,000.00	3,836.35	3,837.92	3,836.35	20.73	13.52	-175.38	109.84	124.07	1,085.99	1,057.84	28.15	38.577	
4,100.00	3,929.91	3,931.48	3,929.91	21.40	13.86	-175.53	109.84	124.07	1,121.20	1,092.31	28.89	38.812	
4,200.00	4,023.47	4,025.05	4,023.47	22.08	14.19	-175.67	109.84	124.07	1,156.41	1,126.79	29.63	39.034	
4,300.00	4,117.03	4,118.61	4,117.03	22.75	14.53	-175.79	109.84	124.07	1,191.63	1,161.27	30.36	39.245	
4,400.00	4,210.59	4,212.17	4,210.59	23.43	14.86	-175.91	109.84	124.07	1,226.85	1,195.75	31.10	39.446	
4,500.00	4,304.15	4,305.73	4,304.15	24.11	15.20	-176.03	109.84	124.07	1,262.08	1,230.24	31.84	39.637	
4,600.00	4,397.71	4,399.29	4,397.71	24.79	15.53	-176.14	109.84	124.07	1,297.31	1,264.73	32.58	39.819	
4,700.00	4,491.27	4,492.85	4,491.27	25.47	15.87	-176.24	109.84	124.07	1,332.55	1,299.23	33.32	39.992	
4,800.00	4,584.83	4,586.41	4,584.83	26.14	16.20	-176.34	109.84	124.07	1,367.78	1,333.72	34.06	40.157	
4,900.00	4,678.40	4,679.97	4,678.40	26.82	16.54	-176.43	109.84	124.07	1,403.03	1,368.22	34.80	40.315	
5,000.00	4,771.96	4,773.53	4,771.96	27.50	16.87	-176.52	109.84	124.07	1,438.27	1,402.73	35.54	40.465	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 713H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.00	4,865.52	4,867.09	4,865.52	28.18	17.21	-176.60	109.84	124.07	1,473.52	1,437.23	36.28	40.610		
5,200.00	4,959.08	4,960.66	4,959.08	28.86	17.54	-176.68	109.84	124.07	1,508.77	1,471.74	37.03	40.748		
5,300.00	5,052.64	5,054.22	5,052.64	29.54	17.88	-176.75	109.84	124.07	1,544.02	1,506.25	37.77	40.880		
5,400.00	5,146.20	5,147.78	5,146.20	30.23	18.21	-176.83	109.84	124.07	1,579.28	1,540.77	38.51	41.007		
5,500.00	5,239.82	5,241.40	5,239.82	30.90	18.55	-176.91	109.84	124.07	1,614.38	1,575.12	39.25	41.126		
5,600.00	5,334.69	5,336.27	5,334.69	31.54	18.89	-177.02	109.84	124.07	1,645.92	1,605.93	39.99	41.154		
5,700.00	5,431.08	5,432.66	5,431.08	32.11	19.23	-177.11	109.84	124.07	1,672.46	1,631.73	40.73	41.064		
5,800.00	5,528.73	5,530.31	5,528.73	32.61	19.58	-177.18	109.84	124.07	1,693.93	1,652.48	41.45	40.863		
5,900.00	5,627.38	5,628.95	5,627.38	33.04	19.94	-177.23	109.84	124.07	1,710.26	1,668.10	42.17	40.558		
6,000.00	5,726.74	5,728.32	5,726.74	33.41	20.29	-177.27	109.84	124.07	1,721.42	1,678.55	42.87	40.155		
6,100.00	5,826.55	5,828.13	5,826.55	33.71	20.65	-177.28	109.84	124.07	1,727.36	1,683.81	43.55	39.661		
6,200.00	5,926.54	6,994.80	6,586.69	33.93	27.83	-1.34	95.80	-549.90	1,724.64	1,673.68	50.96	33.844		
6,300.00	6,026.51	6,993.03	6,586.70	34.12	27.81	-92.14	95.84	-548.13	1,688.92	1,637.10	51.82	32.593		
6,400.00	6,125.26	6,977.43	6,586.80	34.28	27.60	-94.72	96.16	-532.54	1,659.00	1,606.66	52.34	31.698		
6,500.00	6,219.90	6,937.37	6,586.93	34.39	27.08	-95.77	97.00	-492.48	1,635.63	1,583.33	52.31	31.269		
6,600.00	6,307.57	6,847.43	6,578.60	34.43	26.00	-94.60	98.86	-403.04	1,618.08	1,566.67	51.41	31.472		
6,700.00	6,385.60	6,776.28	6,562.15	34.43	25.24	-93.51	100.30	-333.88	1,605.98	1,555.19	50.79	31.619		
6,800.00	6,451.61	6,713.04	6,540.43	34.38	24.65	-92.19	101.53	-274.54	1,599.24	1,548.95	50.29	31.802		
6,888.18	6,500.34	6,662.94	6,518.66	34.31	24.22	-90.76	102.47	-229.43	1,597.41	1,547.42	49.99	31.957		
6,900.00	6,504.62	6,654.87	6,514.79	34.30	24.16	-90.59	102.62	-222.36	1,597.46	1,547.53	49.93	31.992		
7,000.00	6,550.12	6,600.42	6,487.63	34.22	23.76	-88.70	103.60	-175.17	1,600.20	1,550.47	49.73	32.177		
7,100.00	6,579.94	6,543.57	6,457.89	34.12	23.40	-86.53	104.61	-126.76	1,606.60	1,556.90	49.70	32.323		
7,200.00	6,592.77	6,489.34	6,425.33	34.03	23.10	-84.26	105.51	-83.42	1,615.79	1,565.87	49.92	32.365		
7,300.00	6,593.46	6,438.14	6,390.96	33.97	22.85	-82.81	106.30	-45.51	1,627.57	1,577.21	50.35	32.323		
7,400.00	6,593.72	6,400.00	6,363.23	33.97	22.68	-81.83	106.85	-19.34	1,643.27	1,592.24	51.03	32.203		
7,500.00	6,593.98	6,350.00	6,324.35	34.08	22.47	-80.47	107.50	12.07	1,663.26	1,611.60	51.66	32.198		
7,600.00	6,594.24	6,325.79	6,304.58	34.47	22.38	-79.78	107.79	26.03	1,687.68	1,635.08	52.59	32.089		
7,700.00	6,594.50	6,300.00	6,282.88	35.39	22.29	-79.03	108.08	39.97	1,716.65	1,663.13	53.52	32.072		
7,800.00	6,594.76	6,275.12	6,261.38	36.80	22.20	-78.29	108.35	52.48	1,750.11	1,695.66	54.45	32.140		
7,900.00	6,595.02	6,250.00	6,239.14	38.46	22.11	-77.53	108.59	64.15	1,787.97	1,732.62	55.35	32.303		
8,000.00	6,595.28	6,250.00	6,239.14	40.28	22.11	-77.53	108.59	64.15	1,830.14	1,773.70	56.44	32.428		
8,100.00	6,595.54	6,220.96	6,212.82	42.19	22.01	-76.64	108.84	76.41	1,876.09	1,818.88	57.20	32.797		
8,200.00	6,595.80	6,200.00	6,193.46	44.18	21.94	-75.98	109.01	84.43	1,925.98	1,868.00	57.98	33.217		
8,300.00	6,596.06	6,200.00	6,193.46	46.22	21.94	-75.98	109.01	84.43	1,979.37	1,920.50	58.87	33.620		
8,400.00	6,596.32	6,200.00	6,193.46	48.32	21.94	-75.98	109.01	84.43	2,036.28	1,976.59	59.69	34.114		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design:		Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 715H - Original Hole - Surveys Original Hole												Offset Site Error:		0.00 ft	
Survey Program:		385-MWD, 6028-MWD, 16578-MWD						Rule Assigned:				Offset Well Error:		0.00 ft			
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor					
0.00	0.00	0.00	0.00	0.00	0.00	53.43	47.57	64.13	80.75								
100.00	100.00	88.22	88.21	0.13	0.15	53.56	47.36	64.14	79.73	79.44	0.29	276.678					
200.00	200.00	188.45	188.45	0.49	0.33	54.01	46.60	64.17	79.31	78.49	0.82	96.587					
300.00	300.00	288.68	288.67	0.85	0.50	54.80	45.31	64.22	78.60	77.25	1.35	58.046					
400.00	400.00	388.86	388.83	1.21	0.68	55.94	43.46	64.30	77.61	75.72	1.89	40.975					
500.00	500.00	488.79	488.74	1.57	1.05	57.37	41.36	64.59	76.70	74.09	2.61	29.356					
600.00	600.00	588.77	588.69	1.93	1.41	58.97	39.04	64.90	75.74	72.41	3.33	22.731					
700.00	700.00	688.90	688.80	2.29	1.77	60.39	36.93	65.00	74.76	70.71	4.05	18.454					
800.00	800.00	788.90	788.78	2.64	2.13	61.62	35.03	64.83	73.69	68.92	4.77	15.451					
900.00	900.00	888.79	888.66	3.00	2.49	62.73	33.31	64.63	72.72	67.23	5.49	13.252					
1,000.00	1,000.00	989.28	989.13	3.36	2.85	63.88	31.60	64.43	71.77	65.56	6.21	11.561					
1,100.00	1,099.95	1,090.97	1,090.68	3.70	3.22	-133.24	26.61	63.59	70.75	63.83	6.92	10.228					
1,114.03	1,113.96	1,105.16	1,104.83	3.75	3.28	-132.88	25.45	63.50	70.73	63.72	7.02	10.082	CC, ES				
1,200.00	1,199.63	1,192.20	1,191.28	4.03	3.61	-129.80	15.46	63.31	71.45	63.82	7.63	9.368					
1,300.00	1,298.77	1,293.17	1,290.80	4.37	4.02	-125.25	-1.53	63.30	73.99	65.62	8.37	8.839					
1,400.00	1,397.08	1,393.43	1,388.63	4.74	4.46	-120.58	-23.43	63.59	78.84	69.67	9.17	8.598					
1,500.00	1,494.31	1,492.56	1,484.09	5.13	4.93	-116.02	-50.07	64.76	86.62	76.59	10.04	8.632					
1,600.00	1,590.18	1,591.35	1,578.23	5.57	5.43	-112.84	-79.94	67.13	97.78	86.81	10.97	8.914					
1,700.00	1,684.44	1,690.45	1,672.56	6.06	5.96	-112.60	-110.17	69.76	111.27	99.31	11.97	9.300					
1,800.00	1,778.00	1,789.29	1,766.77	6.59	6.50	-113.72	-139.98	72.31	125.55	112.55	13.00	9.659					
1,900.00	1,871.57	1,888.07	1,861.05	7.14	7.05	-114.80	-169.30	74.94	140.00	125.94	14.06	9.959					
2,000.00	1,965.13	1,986.92	1,955.60	7.72	7.60	-115.91	-198.05	77.56	154.57	139.43	15.13	10.215					
2,100.00	2,058.69	2,085.33	2,049.89	8.31	8.15	-117.04	-226.08	80.21	169.32	153.11	16.21	10.445					
2,200.00	2,152.25	2,184.22	2,144.78	8.92	8.71	-118.12	-253.81	82.95	184.28	166.98	17.30	10.653					
2,300.00	2,245.81	2,283.22	2,239.88	9.54	9.26	-119.18	-281.16	85.53	199.22	180.83	18.39	10.834					
2,400.00	2,339.37	2,381.85	2,334.83	10.17	9.81	-120.26	-307.79	87.94	214.21	194.74	19.47	11.002					
2,500.00	2,432.93	2,479.75	2,429.21	10.80	10.35	-121.34	-333.64	90.45	229.51	208.98	20.54	11.175					
2,600.00	2,526.49	2,577.75	2,523.88	11.44	10.89	-122.42	-358.88	93.16	245.24	223.64	21.60	11.356					
2,700.00	2,620.05	2,676.40	2,619.28	12.09	11.43	-123.49	-383.82	95.85	261.15	238.50	22.65	11.529					
2,800.00	2,713.61	2,775.02	2,714.79	12.74	11.96	-124.53	-408.28	98.45	277.18	253.48	23.70	11.697					
2,900.00	2,807.18	2,875.62	2,812.33	13.39	12.50	-125.59	-432.78	100.68	293.05	268.30	24.75	11.840					
3,000.00	2,900.74	2,978.08	2,911.21	14.05	13.07	-126.26	-459.57	102.26	307.78	281.93	25.85	11.908					
3,100.00	2,994.30	3,079.12	3,008.60	14.71	13.63	-126.82	-486.46	103.19	321.81	294.87	26.94	11.944					
3,200.00	3,087.86	3,179.30	3,104.89	15.37	14.20	-127.18	-514.11	103.72	335.17	307.12	28.05	11.950					
3,300.00	3,181.42	3,279.30	3,201.06	16.04	14.78	-127.54	-541.52	104.14	348.50	319.35	29.16	11.953					
3,400.00	3,274.98	3,379.04	3,296.33	16.70	15.37	-127.52	-571.03	104.90	361.41	331.10	30.31	11.924					
3,500.00	3,368.54	3,476.46	3,389.40	17.37	15.94	-127.51	-599.77	105.83	374.52	343.07	31.45	11.909					
3,600.00	3,462.10	3,573.33	3,482.40	18.04	16.50	-127.71	-626.85	106.79	388.20	355.65	32.55	11.927					
3,700.00	3,555.66	3,674.03	3,579.21	18.71	17.09	-127.97	-654.54	107.84	402.10	368.43	33.67	11.941					
3,800.00	3,649.22	3,770.98	3,672.04	19.38	17.65	-128.02	-682.50	109.09	415.77	380.97	34.80	11.948					
3,900.00	3,742.79	3,865.71	3,763.11	20.05	18.20	-128.21	-708.52	110.72	430.31	394.44	35.87	11.996					
4,000.00	3,836.35	3,968.60	3,862.11	20.73	18.79	-128.44	-736.49	112.62	445.09	408.08	37.02	12.024					
4,100.00	3,929.91	4,066.69	3,956.13	21.40	19.36	-128.50	-764.37	114.27	459.27	421.12	38.15	12.039					
4,200.00	4,023.47	4,160.35	4,046.27	22.08	19.90	-128.69	-789.72	116.06	474.15	434.95	39.20	12.095					
4,300.00	4,117.03	4,265.23	4,147.32	22.75	20.49	-128.95	-817.73	117.96	489.08	448.73	40.35	12.120					
4,400.00	4,210.59	4,368.13	4,246.09	23.43	21.09	-129.06	-846.60	119.12	502.88	461.36	41.52	12.113					
4,500.00	4,304.15	4,466.33	4,340.38	24.11	21.67	-129.18	-874.02	119.92	516.45	473.82	42.63	12.115					
4,600.00	4,397.71	4,565.58	4,435.88	24.79	22.23	-129.38	-901.05	120.49	530.06	486.33	43.73	12.121					
4,700.00	4,491.27	4,665.31	4,532.01	25.47	22.80	-129.65	-927.56	120.79	543.67	498.85	44.82	12.131					
4,800.00	4,584.83	4,765.53	4,628.28	26.14	23.38	-129.78	-955.44	121.22	556.92	510.98	45.94	12.123					
4,900.00	4,678.40	4,861.88	4,720.95	26.82	23.93	-129.94	-981.83	121.78	570.50	523.48	47.02	12.134					

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 715H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 385-MWD, 6028-MWD, 16578-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,771.96	4,962.52	4,818.10	27.50	24.50	-130.23	-1,008.06	122.04	584.29	536.19	48.09	12.149	
5,100.00	4,865.52	5,064.67	4,916.55	28.18	25.08	-130.47	-1,035.32	121.81	597.40	548.21	49.19	12.144	
5,200.00	4,959.08	5,160.50	5,009.17	28.86	25.61	-130.79	-1,059.91	121.20	610.57	560.37	50.20	12.162	
5,300.00	5,052.64	5,253.76	5,099.80	29.54	26.10	-131.26	-1,081.86	120.60	624.60	573.47	51.13	12.216	
5,400.00	5,146.20	5,347.57	5,191.30	30.23	26.58	-131.83	-1,102.55	120.26	639.54	587.52	52.02	12.295	
5,500.00	5,239.82	5,443.30	5,284.99	30.90	27.05	-132.57	-1,122.20	119.91	655.06	602.19	52.87	12.389	
5,600.00	5,334.69	5,539.27	5,379.20	31.54	27.51	-133.40	-1,140.48	119.22	668.44	614.74	53.71	12.446	
5,700.00	5,431.08	5,635.55	5,473.95	32.11	27.95	-133.92	-1,157.55	118.52	678.84	624.30	54.54	12.447	
5,800.00	5,528.73	5,723.87	5,561.32	32.61	28.32	-134.31	-1,170.31	117.26	686.46	631.23	55.22	12.431	
5,900.00	5,627.38	5,812.76	5,649.85	33.04	28.63	-134.79	-1,177.96	115.42	692.37	636.60	55.77	12.414	
6,000.00	5,726.74	5,906.95	5,743.87	33.41	28.93	-135.17	-1,183.19	113.26	695.77	639.47	56.30	12.358	
6,100.00	5,826.55	6,004.30	5,841.11	33.71	29.15	-135.29	-1,187.28	110.98	696.03	639.26	56.77	12.261	
6,200.00	5,926.54	6,102.64	5,939.37	33.93	29.21	63.70	-1,190.20	108.36	693.09	636.02	57.07	12.144	
6,300.00	6,026.51	6,201.42	6,065.55	34.12	31.09	-95.54	-1,211.89	-506.51	620.47	584.81	35.65	17.403	
6,400.00	6,125.26	6,300.40	6,165.22	34.28	31.01	-109.56	-1,211.50	-493.49	534.56	496.37	38.19	13.998	
6,500.00	6,219.90	6,393.94	6,263.24	34.39	30.74	-113.77	-1,210.05	-449.11	456.80	415.77	41.04	11.132	
6,600.00	6,307.57	6,486.44	6,355.73	34.43	30.36	-109.75	-1,207.42	-372.43	389.30	345.08	44.22	8.804	
6,700.00	6,385.60	6,568.25	6,435.31	34.43	30.10	-104.57	-1,205.71	-306.56	335.56	288.14	47.43	7.075	
6,800.00	6,451.61	6,636.63	6,511.79	34.38	29.91	-97.67	-1,204.60	-249.66	300.94	251.91	49.03	6.138	
6,886.61	6,499.54	6,773.14	6,649.81	34.31	29.80	-90.75	-1,203.78	-211.60	290.94	242.54	48.40	6.012 SF	
6,900.00	6,504.62	6,784.67	6,664.47	34.30	29.79	-89.67	-1,203.63	-204.32	291.16	243.03	48.14	6.049	
7,000.00	6,550.12	6,833.00	6,703.54	34.22	29.68	-79.73	-1,202.89	-160.23	306.28	260.81	45.47	6.736	
7,100.00	6,579.94	6,867.72	6,733.71	34.12	29.60	-69.79	-1,202.03	-123.07	339.75	295.41	44.34	7.662	
7,200.00	6,592.77	6,880.93	6,746.40	34.03	29.52	-59.87	-1,200.78	-87.47	384.00	339.05	44.94	8.544	
7,300.00	6,593.46	6,881.52	6,747.11	33.97	29.46	-54.31	-1,199.53	-54.16	434.77	388.29	46.47	9.355	
7,400.00	6,593.72	6,881.00	6,746.80	33.97	29.42	-50.57	-1,198.87	-27.98	494.37	445.97	48.40	10.215	
7,500.00	6,593.98	6,881.00	6,746.80	34.08	29.39	-47.84	-1,198.41	-9.23	561.23	510.69	50.54	11.105	
7,600.00	6,594.24	6,881.00	6,746.80	34.47	29.36	-45.15	-1,198.02	8.71	633.88	581.76	52.12	12.161	
7,700.00	6,594.50	6,881.00	6,746.80	35.39	29.34	-42.69	-1,197.64	24.66	711.22	657.84	53.38	13.324	
7,800.00	6,594.76	6,881.00	6,746.80	36.80	29.33	-41.31	-1,197.30	33.49	792.17	737.38	54.79	14.459	
7,900.00	6,595.02	6,881.00	6,746.80	38.46	29.32	-40.41	-1,197.02	39.22	876.06	820.03	56.03	15.635	
8,000.00	6,595.28	6,881.00	6,746.80	40.28	29.30	-38.23	-1,196.11	52.83	962.15	905.66	56.49	17.031	
8,100.00	6,595.54	6,881.00	6,746.80	42.19	29.30	-38.23	-1,196.11	52.83	1,050.05	992.49	57.56	18.242	
8,200.00	6,595.80	6,881.00	6,746.80	44.18	29.29	-36.23	-1,195.09	65.02	1,139.41	1,081.60	57.81	19.710	
8,300.00	6,596.06	6,881.00	6,746.80	46.22	29.29	-36.23	-1,195.09	65.02	1,229.92	1,171.38	58.54	21.010	
8,400.00	6,596.32	6,881.00	6,746.80	48.32	29.28	-35.19	-1,194.54	71.18	1,321.48	1,262.60	58.88	22.442	
8,500.00	6,596.59	6,881.00	6,746.80	50.46	29.27	-34.43	-1,194.16	75.53	1,413.91	1,354.69	59.22	23.876	
8,600.00	6,596.85	6,881.00	6,746.80	52.64	29.27	-33.87	-1,193.89	78.71	1,507.06	1,447.52	59.54	25.310	
8,700.00	6,597.11	6,881.00	6,746.80	54.84	29.26	-33.28	-1,193.63	81.98	1,600.82	1,541.01	59.81	26.764	
8,800.00	6,597.37	6,881.00	6,746.80	57.08	29.26	-32.75	-1,193.42	84.88	1,695.12	1,635.07	60.05	28.229	
8,900.00	6,597.63	6,881.00	6,746.80	59.34	29.26	-32.75	-1,193.42	84.88	1,789.95	1,729.62	60.33	29.670	
9,000.00	6,597.89	6,881.00	6,746.80	61.63	29.25	-32.04	-1,193.16	88.66	1,885.11	1,824.63	60.48	31.169	
9,100.00	6,598.15	6,881.00	6,746.80	63.93	29.25	-31.19	-1,192.89	92.91	1,980.85	1,920.25	60.60	32.687	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 815H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
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	53.25	35.86	48.03	59.94				
100.00	100.00	100.00	100.00	0.13	0.13	53.25	35.86	48.03	59.94	59.67	0.27	222.934	
200.00	200.00	200.00	200.00	0.49	0.49	53.25	35.86	48.03	59.94	58.95	0.99	60.800	
300.00	300.00	300.00	300.00	0.85	0.85	53.25	35.86	48.03	59.94	58.23	1.70	35.200	
400.00	400.00	400.00	400.00	1.21	1.21	53.25	35.86	48.03	59.94	57.52	2.42	24.771	
500.00	500.00	500.00	500.00	1.57	1.57	53.25	35.86	48.03	59.94	56.80	3.14	19.109	
600.00	600.00	600.00	600.00	1.93	1.93	53.25	35.86	48.03	59.94	56.08	3.85	15.554	
700.00	700.00	700.00	700.00	2.29	2.29	53.25	35.86	48.03	59.94	55.37	4.57	13.114	
800.00	800.00	800.00	800.00	2.64	2.64	53.25	35.86	48.03	59.94	54.65	5.29	11.336	
900.00	900.00	900.00	900.00	3.00	3.00	53.25	35.86	48.03	59.94	53.93	6.00	9.982	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	53.25	35.86	48.03	59.94	53.22	6.72	8.917	CC, ES
1,100.00	1,099.95	1,100.52	1,100.47	3.70	3.72	-149.40	37.57	46.01	61.64	54.22	7.42	8.308	
1,200.00	1,199.63	1,199.91	1,199.54	4.03	4.07	-159.20	42.62	40.06	68.16	60.06	8.11	8.409	
1,300.00	1,298.77	1,297.35	1,296.17	4.37	4.43	-171.13	50.70	30.55	82.37	73.56	8.80	9.359	
1,400.00	1,397.08	1,393.73	1,391.58	4.74	4.79	-179.87	59.54	20.14	104.73	95.23	9.50	11.025	
1,500.00	1,494.31	1,488.76	1,485.66	5.13	5.15	-174.22	68.25	9.87	133.74	123.54	10.20	13.112	
1,600.00	1,590.18	1,582.20	1,578.15	5.57	5.52	-170.76	76.82	-0.22	168.40	157.50	10.90	15.448	
1,700.00	1,684.44	1,673.79	1,668.81	6.06	5.88	-168.67	85.22	-10.12	208.12	196.51	11.61	17.926	
1,800.00	1,778.00	1,764.57	1,758.69	6.59	6.24	-167.50	93.55	-19.92	249.82	237.52	12.30	20.308	
1,900.00	1,871.57	1,855.36	1,848.56	7.14	6.60	-166.66	101.87	-29.73	291.59	278.58	13.01	22.420	
2,000.00	1,965.13	1,946.15	1,938.43	7.72	6.97	-166.03	110.20	-39.54	333.39	319.67	13.72	24.300	
2,100.00	2,058.69	2,036.94	2,028.31	8.31	7.33	-165.54	118.52	-49.34	375.22	360.78	14.44	25.979	
2,200.00	2,152.25	2,127.73	2,118.18	8.92	7.70	-165.15	126.85	-59.15	417.07	401.90	15.17	27.485	
2,300.00	2,245.81	2,218.52	2,208.05	9.54	8.07	-164.83	135.18	-68.96	458.93	443.02	15.91	28.842	
2,400.00	2,339.37	2,309.31	2,297.93	10.17	8.45	-164.57	143.50	-78.77	500.80	484.15	16.66	30.069	
2,500.00	2,432.93	2,400.10	2,387.80	10.80	8.82	-164.34	151.83	-88.57	542.68	525.28	17.40	31.182	
2,600.00	2,526.49	2,490.89	2,477.67	11.44	9.19	-164.15	160.15	-98.38	584.57	566.41	18.16	32.197	
2,700.00	2,620.05	2,581.68	2,567.55	12.09	9.57	-163.99	168.48	-108.19	626.46	607.55	18.91	33.123	
2,800.00	2,713.61	2,672.47	2,657.42	12.74	9.95	-163.84	176.80	-117.99	668.35	648.68	19.67	33.973	
2,900.00	2,807.18	2,763.26	2,747.29	13.39	10.32	-163.71	185.13	-127.80	710.25	689.81	20.44	34.755	
3,000.00	2,900.74	2,854.05	2,837.16	14.05	10.70	-163.60	193.46	-137.61	752.15	730.95	21.20	35.476	
3,100.00	2,994.30	2,944.84	2,927.04	14.71	11.08	-163.49	201.78	-147.41	794.05	772.08	21.97	36.144	
3,200.00	3,087.86	3,035.63	3,016.91	15.37	11.46	-163.40	210.11	-157.22	835.95	813.21	22.74	36.763	
3,300.00	3,181.42	3,126.41	3,106.78	16.04	11.84	-163.32	218.43	-167.03	877.86	854.35	23.51	37.338	
3,400.00	3,274.98	3,217.20	3,196.66	16.70	12.22	-163.24	226.76	-176.84	919.76	895.48	24.28	37.874	
3,500.00	3,368.54	3,307.99	3,286.53	17.37	12.60	-163.17	235.09	-186.64	961.67	936.61	25.06	38.374	
3,600.00	3,462.10	3,398.78	3,376.40	18.04	12.98	-163.11	243.41	-196.45	1,003.58	977.74	25.84	38.842	
3,700.00	3,555.66	3,489.57	3,466.28	18.71	13.36	-163.05	251.74	-206.26	1,045.49	1,018.87	26.62	39.281	
3,800.00	3,649.22	3,580.36	3,556.15	19.38	13.74	-163.00	260.06	-216.06	1,087.40	1,060.00	27.40	39.693	
3,900.00	3,742.79	3,671.15	3,646.02	20.05	14.12	-162.95	268.39	-225.87	1,129.31	1,101.13	28.18	40.081	
4,000.00	3,836.35	3,761.94	3,735.90	20.73	14.50	-162.90	276.72	-235.68	1,171.22	1,142.26	28.96	40.446	
4,100.00	3,929.91	3,852.73	3,825.77	21.40	14.88	-162.86	285.04	-245.49	1,213.13	1,183.39	29.74	40.790	
4,200.00	4,023.47	3,943.52	3,915.64	22.08	15.26	-162.82	293.37	-255.29	1,255.05	1,224.52	30.52	41.116	
4,300.00	4,117.03	4,034.31	4,005.52	22.75	15.65	-162.78	301.69	-265.10	1,296.96	1,265.65	31.31	41.424	
4,400.00	4,210.59	4,125.10	4,095.39	23.43	16.03	-162.75	310.02	-274.91	1,338.87	1,306.78	32.09	41.716	
4,500.00	4,304.15	4,215.89	4,185.26	24.11	16.41	-162.72	318.35	-284.71	1,380.79	1,347.91	32.88	41.993	
4,600.00	4,397.71	4,306.68	4,275.14	24.79	16.79	-162.68	326.67	-294.52	1,422.70	1,389.03	33.67	42.257	
4,700.00	4,491.27	4,397.47	4,365.01	25.47	17.18	-162.65	335.00	-304.33	1,464.62	1,430.16	34.46	42.507	
4,800.00	4,584.83	4,488.25	4,454.88	26.14	17.56	-162.63	343.32	-314.14	1,506.53	1,471.29	35.24	42.746	
4,900.00	4,678.40	4,579.04	4,544.76	26.82	17.94	-162.60	351.65	-323.94	1,548.45	1,512.41	36.03	42.973	
5,000.00	4,771.96	4,669.83	4,634.63	27.50	18.32	-162.58	359.98	-333.75	1,590.36	1,553.54	36.82	43.190	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 815H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Reference	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.00	4,865.52	4,760.62	4,724.50	28.18	18.71	162.55	368.30	-343.56	1,632.28	1,594.67	37.61	43.397		
5,200.00	4,959.08	4,851.41	4,814.38	28.86	19.09	162.53	376.63	-353.36	1,674.19	1,635.79	38.40	43.595		
5,300.00	5,052.64	4,942.20	4,904.25	29.54	19.47	162.51	384.95	-363.17	1,716.11	1,676.92	39.19	43.784		
5,400.00	5,146.20	5,032.99	4,994.12	30.23	19.86	162.49	393.28	-372.98	1,758.03	1,718.04	39.99	43.965		
5,500.00	5,239.82	5,123.85	5,084.06	30.90	20.24	162.57	401.61	-382.79	1,799.80	1,759.02	40.78	44.136		
5,600.00	5,334.69	5,216.12	5,175.41	31.54	20.63	162.88	410.07	-392.76	1,838.26	1,796.70	41.57	44.224		
5,700.00	5,431.08	5,310.17	5,268.50	32.11	21.03	163.09	418.70	-402.92	1,872.07	1,829.72	42.35	44.202		
5,800.00	5,528.73	5,405.72	5,363.09	32.61	21.43	163.21	427.46	-413.24	1,901.13	1,858.00	43.13	44.078		
5,900.00	5,627.38	5,502.52	5,458.92	33.04	21.84	163.23	436.34	-423.70	1,925.37	1,881.47	43.90	43.858		
6,000.00	5,726.74	5,600.30	5,555.71	33.41	22.25	163.17	445.31	-434.26	1,944.76	1,900.10	44.66	43.550		
6,100.00	5,826.55	5,698.80	5,653.21	33.71	22.67	163.02	454.34	-444.90	1,959.24	1,913.84	45.40	43.159		
6,200.00	5,926.54	5,797.72	5,751.14	33.93	23.09	1.67	463.41	-455.59	1,969.13	1,923.02	46.11	42.709		
6,300.00	6,026.51	5,934.33	5,886.48	34.12	23.66	-88.08	475.38	-469.69	1,977.84	1,930.74	47.10	41.994		
6,400.00	6,125.26	6,173.55	6,125.26	34.28	24.50	-89.07	483.13	-478.81	1,980.14	1,931.53	48.61	40.737		
6,500.00	6,219.90	6,268.20	6,219.90	34.39	24.80	-89.97	483.13	-478.81	1,979.86	1,930.73	49.13	40.296		
6,503.19	6,222.82	6,271.12	6,222.82	34.39	24.81	-90.00	483.13	-478.81	1,979.86	1,930.72	49.15	40.283		
6,600.00	6,307.57	6,361.76	6,313.22	34.43	25.06	-91.08	483.17	-473.50	1,980.30	1,930.70	49.60	39.927		
6,700.00	6,385.60	6,463.04	6,411.83	34.43	25.27	-92.22	483.35	-450.97	1,981.70	1,931.68	50.02	39.620		
6,800.00	6,451.61	6,574.28	6,513.69	34.38	25.43	-93.36	483.69	-406.69	1,983.98	1,933.55	50.43	39.339		
6,900.00	6,504.62	6,698.60	6,614.98	34.30	25.54	-94.56	484.26	-335.05	1,986.86	1,935.95	50.91	39.024		
7,000.00	6,550.12	6,839.74	6,708.18	34.22	25.66	-95.41	485.08	-229.53	1,989.11	1,937.51	51.59	38.552		
7,100.00	6,579.94	6,956.84	6,768.04	34.12	25.88	-95.93	485.87	-128.93	1,991.44	1,938.85	52.59	37.870		
7,200.00	6,592.77	7,117.89	6,824.60	34.03	26.62	-96.73	487.05	21.29	1,994.06	1,939.79	54.27	36.741		
7,300.00	6,593.46	7,269.78	6,838.45	33.97	27.87	-97.05	488.23	172.17	1,994.97	1,938.45	56.52	35.297		
7,400.00	6,593.72	7,369.78	6,838.80	33.97	28.97	-97.06	489.01	272.16	1,994.98	1,936.22	58.75	33.955		
7,500.00	6,593.98	7,469.78	6,839.15	34.08	30.23	-97.06	489.80	372.16	1,994.99	1,933.67	61.32	32.536		
7,600.00	6,594.24	7,569.78	6,839.50	34.47	31.66	-97.06	490.58	472.16	1,995.00	1,930.82	64.18	31.086		
7,700.00	6,594.50	7,669.78	6,839.84	35.39	33.23	-97.06	491.37	572.15	1,995.01	1,927.71	67.30	29.644		
7,800.00	6,594.76	7,769.78	6,840.19	36.80	34.91	-97.07	492.15	672.15	1,995.02	1,924.38	70.65	28.239		
7,900.00	6,595.02	7,869.78	6,840.54	38.46	36.69	-97.07	492.93	772.14	1,995.04	1,920.85	74.19	26.891		
8,000.00	6,595.28	7,969.78	6,840.89	40.28	38.56	-97.07	493.72	872.14	1,995.05	1,917.15	77.90	25.610		
8,100.00	6,595.54	8,069.78	6,841.23	42.19	40.51	-97.07	494.50	972.14	1,995.06	1,913.30	81.76	24.402		
8,200.00	6,595.80	8,169.78	6,841.58	44.18	42.51	-97.08	495.28	1,072.13	1,995.07	1,909.33	85.74	23.269		
8,300.00	6,596.06	8,269.78	6,841.93	46.22	44.58	-97.08	496.07	1,172.13	1,995.08	1,905.25	89.83	22.209		
8,400.00	6,596.32	8,369.78	6,842.28	48.32	46.69	-97.08	496.85	1,272.13	1,995.09	1,901.07	94.02	21.220		
8,500.00	6,596.59	8,469.78	6,842.63	50.46	48.84	-97.08	497.64	1,372.12	1,995.11	1,896.82	98.29	20.298		
8,600.00	6,596.85	8,569.78	6,842.97	52.64	51.03	-97.09	498.42	1,472.12	1,995.12	1,892.49	102.63	19.440		
8,700.00	6,597.11	8,669.78	6,843.32	54.84	53.25	-97.09	499.20	1,572.12	1,995.13	1,888.09	107.04	18.640		
8,800.00	6,597.37	8,769.78	6,843.67	57.08	55.50	-97.09	499.99	1,672.11	1,995.14	1,883.64	111.50	17.894		
8,900.00	6,597.63	8,869.78	6,844.02	59.34	57.77	-97.09	500.77	1,772.11	1,995.15	1,879.14	116.01	17.198		
9,000.00	6,597.89	8,969.78	6,844.37	61.63	60.07	-97.10	501.55	1,872.10	1,995.16	1,874.60	120.56	16.549		
9,100.00	6,598.15	9,069.78	6,844.71	63.93	62.39	-97.10	502.34	1,972.10	1,995.17	1,870.02	125.16	15.942		
9,200.00	6,598.41	9,169.78	6,845.06	66.25	64.72	-97.10	503.12	2,072.10	1,995.19	1,865.40	129.78	15.373		
9,300.00	6,598.67	9,269.78	6,845.41	68.59	67.07	-97.10	503.91	2,172.09	1,995.20	1,860.76	134.44	14.841		
9,400.00	6,598.93	9,369.78	6,845.76	70.94	69.44	-97.11	504.69	2,272.09	1,995.21	1,856.08	139.13	14.341		
9,500.00	6,599.19	9,469.78	6,846.10	73.31	71.82	-97.11	505.47	2,372.09	1,995.22	1,851.38	143.84	13.871		
9,600.00	6,599.45	9,569.78	6,846.45	75.69	74.20	-97.11	506.26	2,472.08	1,995.23	1,846.66	148.58	13.429		
9,700.00	6,599.71	9,669.78	6,846.80	78.07	76.60	-97.11	507.04	2,572.08	1,995.24	1,841.91	153.33	13.012		
9,800.00	6,599.97	9,769.78	6,847.15	80.47	79.01	-97.12	507.82	2,672.07	1,995.26	1,837.15	158.11	12.619		
9,900.00	6,600.23	9,869.78	6,847.50	82.88	81.43	-97.12	508.61	2,772.07	1,995.27	1,832.36	162.90	12.248		
10,000.00	6,600.49	9,969.78	6,847.84	85.29	83.86	-97.12	509.39	2,872.07	1,995.28	1,827.57	167.71	11.897		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 815H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,100.00	6,600.75	10,069.78	6,848.19	87.72	86.29	-97.12		510.17	2,972.06	1,995.29	1,822.76	172.54	11.565	
10,200.00	6,601.01	10,169.78	6,848.54	90.15	88.73	-97.13		510.96	3,072.06	1,995.30	1,817.93	177.37	11.249	
10,300.00	6,601.28	10,269.78	6,848.89	92.58	91.17	-97.13		511.74	3,172.06	1,995.31	1,813.10	182.22	10.950	
10,400.00	6,601.54	10,369.78	6,849.23	95.02	93.63	-97.13		512.53	3,272.05	1,995.33	1,808.25	187.07	10.666	
10,500.00	6,601.80	10,469.78	6,849.58	97.47	96.08	-97.13		513.31	3,372.05	1,995.34	1,803.40	191.94	10.396	
10,600.00	6,602.06	10,569.78	6,849.93	99.92	98.54	-97.14		514.09	3,472.04	1,995.35	1,798.53	196.82	10.138	
10,700.00	6,602.32	10,669.78	6,850.28	102.38	101.01	-97.14		514.88	3,572.04	1,995.36	1,793.65	201.71	9.892	
10,800.00	6,602.58	10,769.78	6,850.63	104.84	103.48	-97.14		515.66	3,672.04	1,995.37	1,788.77	206.60	9.658	
10,900.00	6,602.84	10,869.78	6,850.97	107.31	105.95	-97.14		516.44	3,772.03	1,995.38	1,783.88	211.50	9.434	
11,000.00	6,603.10	10,969.78	6,851.32	109.78	108.43	-97.15		517.23	3,872.03	1,995.40	1,778.98	216.41	9.220	
11,100.00	6,603.36	11,069.78	6,851.67	112.25	110.91	-97.15		518.01	3,972.03	1,995.41	1,774.08	221.33	9.016	
11,200.00	6,603.62	11,169.78	6,852.02	114.73	113.40	-97.15		518.80	4,072.02	1,995.42	1,769.17	226.25	8.819	
11,300.00	6,603.88	11,269.78	6,852.37	117.21	115.88	-97.15		519.58	4,172.02	1,995.43	1,764.25	231.18	8.631	
11,400.00	6,604.14	11,369.78	6,852.71	119.69	118.37	-97.16		520.36	4,272.01	1,995.44	1,759.33	236.11	8.451	
11,500.00	6,604.40	11,469.78	6,853.06	122.18	120.87	-97.16		521.15	4,372.01	1,995.45	1,754.40	241.05	8.278	
11,600.00	6,604.66	11,569.78	6,853.41	124.67	123.36	-97.16		521.93	4,472.01	1,995.47	1,749.47	245.99	8.112	
11,700.00	6,604.92	11,669.78	6,853.76	127.16	125.86	-97.16		522.71	4,572.00	1,995.48	1,744.54	250.94	7.952	
11,800.00	6,605.18	11,769.78	6,854.10	129.65	128.36	-97.17		523.50	4,672.00	1,995.49	1,739.60	255.89	7.798	
11,900.00	6,605.44	11,869.78	6,854.45	132.14	130.86	-97.17		524.28	4,772.00	1,995.50	1,734.66	260.84	7.650	
12,000.00	6,605.70	11,969.78	6,854.80	134.64	133.36	-97.17		525.07	4,871.99	1,995.51	1,729.71	265.80	7.508	
12,100.00	6,605.97	12,069.78	6,855.15	137.14	135.87	-97.17		525.85	4,971.99	1,995.53	1,724.76	270.76	7.370	
12,200.00	6,606.23	12,169.78	6,855.50	139.64	138.38	-97.18		526.63	5,071.99	1,995.54	1,719.81	275.73	7.237	
12,300.00	6,606.49	12,269.78	6,855.84	142.15	140.88	-97.18		527.42	5,171.98	1,995.55	1,714.85	280.70	7.109	
12,400.00	6,606.75	12,369.77	6,856.19	144.65	143.39	-97.18		528.20	5,271.98	1,995.56	1,709.89	285.67	6.986	
12,500.00	6,607.01	12,469.77	6,856.54	147.16	145.91	-97.18		528.98	5,371.97	1,995.57	1,704.93	290.64	6.866	
12,600.00	6,607.27	12,569.77	6,856.89	149.66	148.42	-97.19		529.77	5,471.97	1,995.58	1,699.97	295.61	6.751	
12,700.00	6,607.53	12,669.77	6,857.23	152.17	150.93	-97.19		530.55	5,571.97	1,995.60	1,695.00	300.59	6.639	
12,800.00	6,607.79	12,769.77	6,857.58	154.69	153.45	-97.19		531.34	5,671.96	1,995.61	1,690.04	305.57	6.531	
12,900.00	6,608.05	12,869.77	6,857.93	157.20	155.97	-97.19		532.12	5,771.96	1,995.62	1,685.07	310.55	6.426	
13,000.00	6,608.31	12,969.77	6,858.28	159.71	158.48	-97.20		532.90	5,871.96	1,995.63	1,680.10	315.54	6.325	
13,100.00	6,608.57	13,069.77	6,858.63	162.22	161.00	-97.20		533.69	5,971.95	1,995.64	1,675.12	320.52	6.226	
13,200.00	6,608.83	13,169.77	6,858.97	164.74	163.52	-97.20		534.47	6,071.95	1,995.65	1,670.15	325.51	6.131	
13,300.00	6,609.09	13,269.77	6,859.32	167.26	166.04	-97.20		535.25	6,171.94	1,995.67	1,665.17	330.50	6.038	
13,400.00	6,609.35	13,369.77	6,859.67	169.78	168.57	-97.21		536.04	6,271.94	1,995.68	1,660.19	335.49	5.949	
13,500.00	6,609.61	13,469.77	6,860.02	172.29	171.09	-97.21		536.82	6,371.94	1,995.69	1,655.21	340.48	5.861	
13,600.00	6,609.87	13,569.77	6,860.37	174.81	173.61	-97.21		537.60	6,471.93	1,995.70	1,650.23	345.47	5.777	
13,700.00	6,610.13	13,669.77	6,860.71	177.33	176.14	-97.21		538.39	6,571.93	1,995.71	1,645.24	350.47	5.694	
13,800.00	6,610.39	13,769.77	6,861.06	179.86	178.66	-97.22		539.17	6,671.93	1,995.73	1,640.26	355.47	5.614	
13,900.00	6,610.66	13,869.77	6,861.41	182.38	181.19	-97.22		539.96	6,771.92	1,995.74	1,635.27	360.46	5.537	
14,000.00	6,610.92	13,969.77	6,861.76	184.90	183.71	-97.22		540.74	6,871.92	1,995.75	1,630.29	365.46	5.461	
14,100.00	6,611.18	14,069.77	6,862.10	187.43	186.24	-97.22		541.52	6,971.91	1,995.76	1,625.30	370.46	5.387	
14,200.00	6,611.44	14,169.77	6,862.45	189.95	188.77	-97.23		542.31	7,071.91	1,995.77	1,620.31	375.46	5.316	
14,300.00	6,611.70	14,269.77	6,862.80	192.48	191.30	-97.23		543.09	7,171.91	1,995.78	1,615.32	380.46	5.246	
14,400.00	6,611.96	14,369.77	6,863.15	195.00	193.83	-97.23		543.87	7,271.90	1,995.80	1,610.33	385.46	5.178	
14,500.00	6,612.22	14,469.77	6,863.50	197.53	196.36	-97.23		544.66	7,371.90	1,995.81	1,605.34	390.47	5.111	
14,600.00	6,612.48	14,569.77	6,863.84	200.06	198.89	-97.24		545.44	7,471.90	1,995.82	1,600.35	395.47	5.047	
14,700.00	6,612.74	14,669.77	6,864.19	202.58	201.42	-97.24		546.23	7,571.89	1,995.83	1,595.36	400.47	4.984	
14,800.00	6,613.00	14,769.77	6,864.54	205.11	203.95	-97.24		547.01	7,671.89	1,995.84	1,590.36	405.48	4.922	
14,900.00	6,613.26	14,869.77	6,864.89	207.64	206.48	-97.24		547.79	7,771.88	1,995.86	1,585.37	410.49	4.862	
15,000.00	6,613.52	14,969.77	6,865.24	210.17	209.02	-97.25		548.58	7,871.88	1,995.87	1,580.38	415.49	4.804	
15,100.00	6,613.78	15,069.77	6,865.58	212.70	211.55	-97.25		549.36	7,971.88	1,995.88	1,575.38	420.50	4.746	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 815H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (ft)		Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,200.00	6,614.04	15,169.77	6,865.93	215.23	214.08	-97.25	550.14	8,071.87	1,995.89	1,570.39	425.51	4.691		
15,300.00	6,614.30	15,269.77	6,866.28	217.76	216.62	-97.25	550.93	8,171.87	1,995.90	1,565.39	430.51	4.636		
15,400.00	6,614.56	15,369.77	6,866.63	220.30	219.15	-97.26	551.71	8,271.87	1,995.91	1,560.39	435.52	4.583		
15,500.00	6,614.82	15,469.77	6,866.97	222.83	221.69	-97.26	552.50	8,371.86	1,995.93	1,555.40	440.53	4.531		
15,600.00	6,615.08	15,569.77	6,867.32	225.36	224.22	-97.26	553.28	8,471.86	1,995.94	1,550.40	445.54	4.480		
15,700.00	6,615.34	15,669.77	6,867.67	227.89	226.76	-97.26	554.06	8,571.86	1,995.95	1,545.40	450.55	4.430		
15,800.00	6,615.61	15,769.77	6,868.02	230.43	229.29	-97.27	554.85	8,671.85	1,995.96	1,540.40	455.56	4.381		
15,900.00	6,615.87	15,869.77	6,868.37	232.96	231.83	-97.27	555.63	8,771.85	1,995.97	1,535.40	460.57	4.334		
16,000.00	6,616.13	15,969.77	6,868.71	235.50	234.37	-97.27	556.41	8,871.84	1,995.99	1,530.41	465.58	4.287		
16,100.00	6,616.39	16,069.77	6,869.06	238.03	236.90	-97.27	557.20	8,971.84	1,996.00	1,525.41	470.59	4.241		
16,200.00	6,616.65	16,169.77	6,869.41	240.57	239.44	-97.28	557.98	9,071.84	1,996.01	1,520.41	475.60	4.197		
16,300.00	6,616.91	16,269.77	6,869.76	243.10	241.98	-97.28	558.76	9,171.83	1,996.02	1,515.41	480.61	4.153		
16,400.00	6,617.17	16,369.77	6,870.10	245.64	244.52	-97.28	559.55	9,271.83	1,996.03	1,510.41	485.62	4.110		
16,500.00	6,617.43	16,469.77	6,870.45	248.17	247.06	-97.28	560.33	9,371.83	1,996.04	1,505.41	490.63	4.068		
16,600.00	6,617.69	16,569.77	6,870.80	250.71	249.59	-97.29	561.12	9,471.82	1,996.06	1,500.41	495.65	4.027		
16,700.00	6,617.95	16,669.77	6,871.15	253.25	252.13	-97.29	561.90	9,571.82	1,996.07	1,495.41	500.66	3.987		
16,800.00	6,618.21	16,769.77	6,871.50	255.78	254.67	-97.29	562.68	9,671.81	1,996.08	1,490.41	505.67	3.947		
16,900.00	6,618.47	16,869.77	6,871.84	258.32	257.21	-97.29	563.47	9,771.81	1,996.09	1,485.41	510.68	3.909		
17,000.00	6,618.73	16,969.77	6,872.19	260.86	259.75	-97.29	564.25	9,871.81	1,996.10	1,480.41	515.69	3.871		
17,100.00	6,618.99	17,069.77	6,872.54	263.40	262.29	-97.30	565.03	9,971.80	1,996.12	1,475.41	520.70	3.833		
17,200.00	6,619.25	17,169.77	6,872.89	265.93	264.83	-97.30	565.82	10,071.80	1,996.13	1,470.41	525.72	3.797		
17,300.00	6,619.51	17,269.77	6,873.24	268.47	267.37	-97.30	566.60	10,171.80	1,996.14	1,465.41	530.73	3.761		
17,400.00	6,619.77	17,369.77	6,873.58	271.01	269.91	-97.30	567.39	10,271.79	1,996.15	1,460.41	535.74	3.726		
17,500.00	6,620.03	17,469.77	6,873.93	273.55	272.45	-97.31	568.17	10,371.79	1,996.16	1,455.41	540.75	3.691		
17,600.00	6,620.30	17,569.77	6,874.28	276.09	274.99	-97.31	568.95	10,471.78	1,996.18	1,450.41	545.76	3.658		
17,700.00	6,620.56	17,669.77	6,874.63	278.63	277.54	-97.31	569.74	10,571.78	1,996.19	1,445.41	550.77	3.624		
17,800.00	6,620.82	17,769.77	6,874.97	281.17	280.08	-97.31	570.52	10,671.78	1,996.20	1,440.41	555.79	3.592		
17,900.00	6,621.08	17,869.77	6,875.32	283.71	282.62	-97.32	571.30	10,771.77	1,996.21	1,435.41	560.80	3.560		
18,000.00	6,621.34	17,969.77	6,875.67	286.25	285.16	-97.32	572.09	10,871.77	1,996.22	1,430.42	565.81	3.528		
18,100.00	6,621.60	18,069.77	6,876.02	288.79	287.70	-97.32	572.87	10,971.77	1,996.24	1,425.42	570.82	3.497		
18,200.00	6,621.86	18,169.77	6,876.37	291.33	290.25	-97.32	573.66	11,071.76	1,996.25	1,420.42	575.83	3.467		
18,300.00	6,622.12	18,269.77	6,876.71	293.87	292.79	-97.33	574.44	11,171.76	1,996.26	1,415.42	580.84	3.437		
18,400.00	6,622.38	18,369.77	6,877.06	296.41	295.33	-97.33	575.22	11,271.76	1,996.27	1,410.42	585.85	3.407		
18,500.00	6,622.64	18,469.77	6,877.41	298.95	297.87	-97.33	576.01	11,371.75	1,996.28	1,405.42	590.86	3.379		
18,600.00	6,622.90	18,569.77	6,877.76	301.49	300.42	-97.33	576.79	11,471.75	1,996.30	1,400.42	595.87	3.350		
18,638.04	6,623.00	18,607.81	6,877.89	302.46	301.38	-97.34	577.09	11,509.78	1,996.30	1,398.52	597.78	3.340 SF		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 817H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
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	53.14	12.07	16.11	20.13				
100.00	100.00	100.00	100.00	0.13	0.13	53.14	12.07	16.11	20.13	19.86	0.27	74.873	
200.00	200.00	200.00	200.00	0.49	0.49	53.14	12.07	16.11	20.13	19.14	0.99	20.420	
300.00	300.00	300.00	300.00	0.85	0.85	53.14	12.07	16.11	20.13	18.43	1.70	11.822	
400.00	400.00	400.00	400.00	1.21	1.21	53.14	12.07	16.11	20.13	17.71	2.42	8.319	
500.00	500.00	500.00	500.00	1.57	1.57	53.14	12.07	16.11	20.13	16.99	3.14	6.418	
600.00	600.00	600.00	600.00	1.93	1.93	53.14	12.07	16.11	20.13	16.28	3.85	5.224	
700.00	700.00	700.00	700.00	2.29	2.29	53.14	12.07	16.11	20.13	15.56	4.57	4.404	
800.00	800.00	800.00	800.00	2.64	2.64	53.14	12.07	16.11	20.13	14.84	5.29	3.807	
900.00	900.00	900.00	900.00	3.00	3.00	53.14	12.07	16.11	20.13	14.13	6.00	3.353	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	53.14	12.07	16.11	20.13	13.41	6.72	2.995 CC, ES	
1,100.00	1,099.95	1,099.95	1,099.95	3.70	3.72	-149.51	12.07	16.11	22.34	14.92	7.42	3.011	
1,200.00	1,199.63	1,199.63	1,199.63	4.03	4.08	-157.21	12.07	16.11	29.37	21.27	8.11	3.622	
1,300.00	1,298.77	1,300.88	1,300.83	4.37	4.42	-163.97	9.80	14.72	39.12	30.34	8.78	4.456	
1,400.00	1,397.08	1,402.65	1,402.27	4.74	4.76	-169.35	2.90	10.52	49.00	39.58	9.42	5.202	
1,500.00	1,494.31	1,504.93	1,503.64	5.13	5.11	-174.05	-8.67	3.47	59.06	49.01	10.05	5.876	
1,600.00	1,590.18	1,607.71	1,604.62	5.57	5.48	-178.35	-24.95	-6.45	69.33	58.66	10.67	6.496	
1,700.00	1,684.44	1,707.12	1,701.68	6.06	5.86	178.12	-43.32	-17.64	82.00	70.61	11.38	7.203	
1,800.00	1,778.00	1,805.93	1,798.14	6.59	6.26	175.65	-61.61	-28.78	96.91	84.80	12.11	8.001	
1,900.00	1,871.57	1,904.74	1,894.60	7.14	6.67	173.84	-79.89	-39.91	111.96	99.11	12.86	8.709	
2,000.00	1,965.13	2,003.55	1,991.06	7.72	7.10	172.45	-98.17	-51.05	127.09	113.48	13.61	9.336	
2,100.00	2,058.69	2,102.35	2,087.52	8.31	7.53	171.37	-116.45	-62.19	142.28	127.90	14.38	9.893	
2,200.00	2,152.25	2,201.16	2,183.98	8.92	7.97	170.49	-134.73	-73.32	157.51	142.35	15.16	10.388	
2,300.00	2,245.81	2,299.97	2,280.44	9.54	8.42	169.77	-153.01	-84.46	172.77	156.82	15.95	10.830	
2,400.00	2,339.37	2,398.78	2,376.91	10.17	8.88	169.16	-171.30	-95.59	188.05	171.30	16.75	11.227	
2,500.00	2,432.93	2,497.59	2,473.37	10.80	9.34	168.65	-189.58	-106.73	203.35	185.80	17.55	11.584	
2,600.00	2,526.49	2,596.39	2,569.83	11.44	9.80	168.20	-207.86	-117.87	218.66	200.30	18.36	11.907	
2,700.00	2,620.05	2,695.20	2,666.29	12.09	10.27	167.82	-226.14	-129.00	233.99	214.80	19.18	12.199	
2,800.00	2,713.61	2,794.01	2,762.75	12.74	10.74	167.48	-244.42	-140.14	249.32	229.32	20.00	12.465	
2,900.00	2,807.18	2,892.82	2,859.21	13.39	11.21	167.18	-262.70	-151.27	264.66	243.83	20.83	12.708	
3,000.00	2,900.74	2,991.62	2,955.67	14.05	11.69	166.92	-280.99	-162.41	280.00	258.35	21.66	12.930	
3,100.00	2,994.30	3,090.43	3,052.13	14.71	12.17	166.68	-299.27	-173.55	295.36	272.87	22.49	13.134	
3,200.00	3,087.86	3,189.24	3,148.59	15.37	12.65	166.46	-317.55	-184.68	310.71	287.39	23.32	13.322	
3,300.00	3,181.42	3,288.05	3,245.05	16.04	13.13	166.27	-335.83	-195.82	326.07	301.91	24.16	13.496	
3,400.00	3,274.98	3,386.85	3,341.51	16.70	13.61	166.09	-354.11	-206.96	341.43	316.43	25.00	13.657	
3,500.00	3,368.54	3,485.66	3,437.98	17.37	14.10	165.93	-372.39	-218.09	356.80	330.96	25.84	13.807	
3,600.00	3,462.10	3,584.47	3,534.44	18.04	14.59	165.78	-390.67	-229.23	372.17	345.48	26.69	13.946	
3,700.00	3,555.66	3,683.28	3,630.90	18.71	15.07	165.65	-408.96	-240.36	387.54	360.01	27.53	14.075	
3,800.00	3,649.22	3,782.08	3,727.36	19.38	15.56	165.52	-427.24	-251.50	402.91	374.53	28.38	14.197	
3,900.00	3,742.79	3,880.89	3,823.82	20.05	16.05	165.40	-445.52	-262.64	418.29	389.06	29.23	14.310	
4,000.00	3,836.35	3,979.70	3,920.28	20.73	16.54	165.30	-463.80	-273.77	433.66	403.58	30.08	14.416	
4,100.00	3,929.91	4,078.51	4,016.74	21.40	17.03	165.19	-482.08	-284.91	449.04	418.11	30.93	14.516	
4,200.00	4,023.47	4,177.31	4,113.20	22.08	17.52	165.10	-500.36	-296.05	464.42	432.63	31.79	14.610	
4,300.00	4,117.03	4,276.12	4,209.66	22.75	18.02	165.01	-518.65	-307.18	479.80	447.16	32.64	14.699	
4,400.00	4,210.59	4,374.93	4,306.12	23.43	18.51	164.93	-536.93	-318.32	495.18	461.68	33.50	14.783	
4,500.00	4,304.15	4,473.74	4,402.58	24.11	19.00	164.85	-555.21	-329.45	510.56	476.21	34.35	14.862	
4,600.00	4,397.71	4,572.54	4,499.05	24.79	19.50	164.78	-573.49	-340.59	525.95	490.74	35.21	14.937	
4,700.00	4,491.27	4,671.35	4,595.51	25.47	19.99	164.71	-591.77	-351.73	541.33	505.26	36.07	15.009	
4,800.00	4,584.83	4,770.16	4,691.97	26.14	20.49	164.64	-610.05	-362.86	556.71	519.79	36.93	15.076	
4,900.00	4,678.40	4,868.97	4,788.43	26.82	20.98	164.58	-628.34	-374.00	572.10	534.31	37.79	15.140	
5,000.00	4,771.96	4,967.77	4,884.89	27.50	21.48	164.52	-646.62	-385.13	587.48	548.84	38.65	15.202	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 817H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	4,865.52	5,066.58	4,981.35	28.18	21.97	164.47	-664.90	-396.27	602.87	563.36	39.51	15.260	
5,200.00	4,959.08	5,165.39	5,077.81	28.86	22.47	164.41	-683.18	-407.41	618.26	577.89	40.37	15.315	
5,300.00	5,052.64	5,264.20	5,174.27	29.54	22.97	164.36	-701.46	-418.54	633.65	592.42	41.23	15.369	
5,400.00	5,146.20	5,363.00	5,270.73	30.23	23.46	164.32	-719.74	-429.68	649.03	606.94	42.09	15.419	
5,500.00	5,239.82	5,461.84	5,367.22	30.90	23.96	164.30	-738.03	-440.82	664.26	621.31	42.96	15.464	
5,600.00	5,334.69	5,561.13	5,464.16	31.54	24.46	164.26	-756.40	-452.01	675.89	632.07	43.82	15.424	
5,700.00	5,431.08	5,660.86	5,561.51	32.11	24.96	164.06	-774.85	-463.25	682.50	637.82	44.69	15.273	
5,800.00	5,528.73	5,760.74	5,659.02	32.61	25.47	163.71	-793.33	-474.51	684.11	638.56	45.56	15.017	
5,900.00	5,627.38	5,843.09	5,739.59	33.04	25.87	163.32	-807.89	-483.37	681.67	635.38	46.29	14.726	
6,000.00	5,726.74	5,919.22	5,814.62	33.41	26.21	162.96	-818.84	-490.05	677.61	630.70	46.91	14.446	
6,100.00	5,826.55	6,000.00	5,894.73	33.71	26.55	162.59	-827.66	-495.42	672.07	624.58	47.49	14.152	
6,200.00	5,926.54	6,071.98	5,966.43	33.93	26.82	1.20	-833.07	-498.72	665.33	617.46	47.87	13.899	
6,300.00	6,026.51	6,148.78	6,043.13	34.12	27.06	-88.71	-836.30	-500.68	661.04	612.83	48.22	13.710	
6,400.00	6,125.26	6,230.92	6,125.26	34.28	27.30	-89.95	-837.00	-501.10	659.95	611.20	48.76	13.536	
6,402.30	6,127.49	6,233.15	6,127.49	34.28	27.31	-90.00	-837.00	-501.10	659.95	611.18	48.77	13.531	
6,500.00	6,219.90	6,325.56	6,219.90	34.39	27.55	-92.49	-837.00	-501.10	660.70	610.95	49.75	13.281	
6,600.00	6,307.57	6,425.54	6,319.45	34.43	27.78	-95.72	-836.93	-493.33	663.91	612.96	50.95	13.029	
6,700.00	6,385.60	6,534.77	6,424.84	34.43	27.96	-98.92	-836.71	-465.27	669.52	617.46	52.06	12.861	
6,800.00	6,451.61	6,655.04	6,532.39	34.38	28.07	-102.02	-836.30	-411.92	676.95	624.13	52.83	12.814	
6,900.00	6,504.62	6,788.81	6,635.98	34.30	28.11	-105.07	-835.64	-327.77	684.94	631.80	53.14	12.890	
7,000.00	6,550.12	6,937.25	6,724.66	34.22	28.06	-106.76	-834.71	-209.25	689.68	636.48	53.20	12.963	
7,100.00	6,579.94	7,058.50	6,781.80	34.12	28.00	-108.10	-833.87	-102.41	695.57	641.67	53.89	12.906	
7,200.00	6,592.77	7,222.73	6,824.28	34.03	27.94	-109.40	-832.63	55.64	699.93	644.86	55.07	12.709	
7,300.00	6,593.46	7,349.80	6,828.56	33.97	28.20	-109.61	-831.64	182.55	700.58	643.52	57.06	12.278	
7,400.00	6,593.72	7,449.80	6,828.90	33.97	29.19	-109.61	-830.86	282.55	700.61	641.36	59.25	11.825	
7,500.00	6,593.98	7,549.80	6,829.25	34.08	30.51	-109.62	-830.07	382.54	700.64	638.90	61.74	11.349	
7,600.00	6,594.24	7,649.80	6,829.60	34.47	32.00	-109.63	-829.29	482.54	700.67	636.18	64.49	10.866	
7,700.00	6,594.50	7,749.80	6,829.95	35.39	33.63	-109.63	-828.51	582.54	700.70	633.24	67.46	10.387	
7,800.00	6,594.76	7,849.80	6,830.29	36.80	35.36	-109.64	-827.72	682.53	700.73	630.09	70.64	9.920	
7,900.00	6,595.02	7,949.80	6,830.64	38.46	37.18	-109.65	-826.94	782.53	700.76	626.77	73.99	9.471	
8,000.00	6,595.28	8,049.80	6,830.99	40.28	39.08	-109.65	-826.16	882.52	700.79	623.30	77.48	9.044	
8,100.00	6,595.54	8,149.80	6,831.34	42.19	41.06	-109.66	-825.37	982.52	700.82	619.70	81.11	8.640	
8,200.00	6,595.80	8,249.80	6,831.68	44.18	43.09	-109.67	-824.59	1,082.52	700.85	615.99	84.85	8.260	
8,300.00	6,596.06	8,349.80	6,832.03	46.22	45.17	-109.67	-823.81	1,182.51	700.88	612.19	88.69	7.903	
8,400.00	6,596.32	8,449.80	6,832.38	48.32	47.30	-109.68	-823.02	1,282.51	700.90	608.30	92.61	7.568	
8,500.00	6,596.59	8,549.80	6,832.73	50.46	49.46	-109.69	-822.24	1,382.51	700.93	604.33	96.60	7.256	
8,600.00	6,596.85	8,649.80	6,833.07	52.64	51.66	-109.69	-821.46	1,482.50	700.96	600.30	100.66	6.964	
8,700.00	6,597.11	8,749.80	6,833.42	54.84	53.90	-109.70	-820.67	1,582.50	700.99	596.22	104.78	6.690	
8,800.00	6,597.37	8,849.80	6,833.77	57.08	56.15	-109.71	-819.89	1,682.49	701.02	592.08	108.94	6.435	
8,900.00	6,597.63	8,949.80	6,834.12	59.34	58.44	-109.71	-819.11	1,782.49	701.05	587.91	113.15	6.196	
9,000.00	6,597.89	9,049.80	6,834.46	61.63	60.74	-109.72	-818.32	1,882.49	701.08	583.69	117.39	5.972	
9,100.00	6,598.15	9,149.80	6,834.81	63.93	63.06	-109.73	-817.54	1,982.48	701.11	579.45	121.66	5.763	
9,200.00	6,598.41	9,249.80	6,835.16	66.25	65.40	-109.73	-816.76	2,082.48	701.14	575.17	125.97	5.566	
9,300.00	6,598.67	9,349.80	6,835.51	68.59	67.75	-109.74	-815.98	2,182.48	701.17	570.87	130.30	5.381	
9,400.00	6,598.93	9,449.80	6,835.85	70.94	70.12	-109.75	-815.19	2,282.47	701.20	566.55	134.65	5.208	
9,500.00	6,599.19	9,549.80	6,836.20	73.31	72.50	-109.75	-814.41	2,382.47	701.23	562.21	139.02	5.044	
9,600.00	6,599.45	9,649.80	6,836.55	75.69	74.89	-109.76	-813.63	2,482.46	701.26	557.85	143.41	4.890	
9,700.00	6,599.71	9,749.80	6,836.90	78.07	77.29	-109.77	-812.84	2,582.46	701.29	553.48	147.81	4.745	
9,800.00	6,599.97	9,849.80	6,837.24	80.47	79.70	-109.77	-812.06	2,682.46	701.32	549.09	152.23	4.607	
9,900.00	6,600.23	9,949.80	6,837.59	82.88	82.12	-109.78	-811.28	2,782.45	701.35	544.70	156.65	4.477	
10,000.00	6,600.49	10,049.80	6,837.94	85.29	84.55	-109.79	-810.49	2,882.45	701.38	540.29	161.09	4.354	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design:		Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 817H - Original Hole - rev1										Offset Site Error:		0.00 ft			
Survey Program:		0-MWD								Rule Assigned:				Offset Well Error:		0.00 ft	
Measured Depth (ft)	Vertical Reference Depth (ft)	Measured Depth (ft)	Vertical Offset Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning				
10,100.00	6,600.75	10,149.80	6,838.29	87.72	86.98	-109.79	-809.71	2,982.45	701.41	535.88	165.53	4.237					
10,200.00	6,601.01	10,249.80	6,838.63	90.15	89.42	-109.80	-808.93	3,082.44	701.44	531.46	169.98	4.127					
10,300.00	6,601.28	10,349.80	6,838.98	92.58	91.87	-109.81	-808.14	3,182.44	701.47	527.04	174.43	4.021					
10,400.00	6,601.54	10,449.80	6,839.33	95.02	94.32	-109.81	-807.36	3,282.44	701.50	522.61	178.89	3.921					
10,500.00	6,601.80	10,549.80	6,839.68	97.47	96.78	-109.82	-806.58	3,382.43	701.53	518.18	183.35	3.826					
10,600.00	6,602.06	10,649.80	6,840.03	99.92	99.24	-109.83	-805.79	3,482.43	701.56	513.74	187.82	3.735					
10,700.00	6,602.32	10,749.80	6,840.37	102.38	101.71	-109.83	-805.01	3,582.42	701.59	509.31	192.28	3.649					
10,800.00	6,602.58	10,849.80	6,840.72	104.84	104.18	-109.84	-804.23	3,682.42	701.62	504.87	196.75	3.566					
10,900.00	6,602.84	10,949.80	6,841.07	107.31	106.65	-109.85	-803.44	3,782.42	701.65	500.43	201.21	3.487					
11,000.00	6,603.10	11,049.80	6,841.42	109.78	109.13	-109.85	-802.66	3,882.41	701.68	496.00	205.68	3.412					
11,100.00	6,603.36	11,149.80	6,841.76	112.25	111.61	-109.86	-801.88	3,982.41	701.71	491.56	210.14	3.339					
11,200.00	6,603.62	11,249.80	6,842.11	114.73	114.09	-109.87	-801.10	4,082.41	701.74	487.13	214.60	3.270					
11,300.00	6,603.88	11,349.80	6,842.46	117.21	116.58	-109.87	-800.31	4,182.40	701.77	482.70	219.06	3.203					
11,400.00	6,604.14	11,449.80	6,842.81	119.69	119.07	-109.88	-799.53	4,282.40	701.80	478.28	223.52	3.140					
11,500.00	6,604.40	11,549.80	6,843.15	122.18	121.56	-109.89	-798.75	4,382.39	701.83	473.86	227.97	3.079					
11,600.00	6,604.66	11,649.80	6,843.50	124.67	124.06	-109.90	-797.96	4,482.39	701.86	469.44	232.42	3.020					
11,700.00	6,604.92	11,749.80	6,843.85	127.16	126.55	-109.90	-797.18	4,582.39	701.89	465.03	236.86	2.963					
11,800.00	6,605.18	11,849.80	6,844.20	129.65	129.05	-109.91	-796.40	4,682.38	701.92	460.62	241.30	2.909					
11,900.00	6,605.44	11,949.80	6,844.54	132.14	131.55	-109.92	-795.61	4,782.38	701.95	456.22	245.73	2.857					
12,000.00	6,605.70	12,049.80	6,844.89	134.64	134.06	-109.92	-794.83	4,882.38	701.98	451.82	250.15	2.806					
12,100.00	6,605.97	12,149.80	6,845.24	137.14	136.56	-109.93	-794.05	4,982.37	702.01	447.43	254.57	2.758					
12,200.00	6,606.23	12,249.80	6,845.59	139.64	139.07	-109.94	-793.26	5,082.37	702.04	443.05	258.98	2.711					
12,300.00	6,606.49	12,349.80	6,845.93	142.15	141.58	-109.94	-792.48	5,182.36	702.07	438.68	263.39	2.666					
12,400.00	6,606.75	12,449.80	6,846.28	144.65	144.09	-109.95	-791.70	5,282.36	702.10	434.31	267.78	2.622					
12,500.00	6,607.01	12,549.80	6,846.63	147.16	146.60	-109.96	-790.91	5,382.36	702.13	429.96	272.17	2.580					
12,600.00	6,607.27	12,649.80	6,846.98	149.66	149.11	-109.96	-790.13	5,482.35	702.16	425.61	276.55	2.539					
12,700.00	6,607.53	12,749.80	6,847.32	152.17	151.62	-109.97	-789.35	5,582.35	702.19	421.27	280.92	2.500					
12,800.00	6,607.79	12,849.80	6,847.67	154.69	154.14	-109.98	-788.56	5,682.35	702.22	416.94	285.28	2.462					
12,900.00	6,608.05	12,949.80	6,848.02	157.20	156.66	-109.98	-787.78	5,782.34	702.25	412.62	289.63	2.425					
13,000.00	6,608.31	13,049.80	6,848.37	159.71	159.17	-109.99	-787.00	5,882.34	702.28	408.31	293.97	2.389					
13,100.00	6,608.57	13,149.80	6,848.71	162.22	161.69	-110.00	-786.22	5,982.34	702.31	404.01	298.29	2.354					
13,200.00	6,608.83	13,249.80	6,849.06	164.74	164.21	-110.00	-785.43	6,082.33	702.34	399.73	302.61	2.321					
13,300.00	6,609.09	13,349.80	6,849.41	167.26	166.73	-110.01	-784.65	6,182.33	702.37	395.45	306.91	2.288					
13,400.00	6,609.35	13,449.80	6,849.76	169.78	169.25	-110.01	-783.87	6,282.32	702.40	391.19	311.21	2.257					
13,500.00	6,609.61	13,549.80	6,850.10	172.29	171.78	-110.02	-783.08	6,382.32	702.43	386.94	315.49	2.226					
13,600.00	6,609.87	13,649.80	6,850.45	174.81	174.30	-110.03	-782.30	6,482.32	702.46	382.70	319.76	2.197					
13,700.00	6,610.13	13,749.80	6,850.80	177.33	176.82	-110.03	-781.52	6,582.31	702.49	378.47	324.01	2.168					
13,800.00	6,610.39	13,849.80	6,851.15	179.86	179.35	-110.04	-780.73	6,682.31	702.52	374.26	328.25	2.140					
13,900.00	6,610.66	13,949.80	6,851.49	182.38	181.87	-110.05	-779.95	6,782.31	702.55	370.07	332.48	2.113					
14,000.00	6,610.92	14,049.80	6,851.84	184.90	184.40	-110.05	-779.17	6,882.30	702.58	365.89	336.69	2.087					
14,100.00	6,611.18	14,149.80	6,852.19	187.43	186.93	-110.06	-778.38	6,982.30	702.61	361.72	340.89	2.061					
14,200.00	6,611.44	14,249.80	6,852.54	189.95	189.45	-110.07	-777.60	7,082.29	702.64	357.57	345.07	2.036					
14,300.00	6,611.70	14,349.80	6,852.88	192.48	191.98	-110.07	-776.82	7,182.29	702.67	353.43	349.24	2.012					
14,400.00	6,611.96	14,449.80	6,853.23	195.00	194.51	-110.08	-776.03	7,282.29	702.70	349.31	353.38	1.988 Level 3<2.00					
14,500.00	6,612.22	14,549.80	6,853.58	197.53	197.04	-110.09	-775.25	7,382.28	702.73	345.21	357.52	1.966 Level 3<2.00					
14,600.00	6,612.48	14,649.80	6,853.93	200.06	199.57	-110.09	-774.47	7,482.28	702.76	341.12	361.63	1.943 Level 3<2.00					
14,700.00	6,612.74	14,749.80	6,854.28	202.58	202.10	-110.10	-773.68	7,582.28	702.79	337.05	365.73	1.922 Level 3<2.00					
14,800.00	6,613.00	14,849.80	6,854.62	205.11	204.63	-110.11	-772.90	7,682.27	702.82	333.00	369.81	1.900 Level 3<2.00					
14,900.00	6,613.26	14,949.80	6,854.97	207.64	207.17	-110.11	-772.12	7,782.27	702.85	328.97	373.87	1.880 Level 3<2.00					
15,000.00	6,613.52	15,049.80	6,855.32	210.17	209.70	-110.12	-771.34	7,882.26	702.88	324.96	377.92	1.860 Level 3<2.00					
15,100.00	6,613.78	15,149.80	6,855.67	212.70	212.23	-110.13	-770.55	7,982.26	702.91	320.97	381.94	1.840 Level 3<2.00					

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 817H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	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	
15,200.00	6,614.04	15,249.80	6,856.01	215.23	214.76	-110.13	-769.77	8,082.26	702.94	316.99	385.95	1.821	Level 3<2.00	
15,300.00	6,614.30	15,349.80	6,856.36	217.76	217.30	-110.14	-768.99	8,182.25	702.97	313.04	389.93	1.803	Level 3<2.00	
15,400.00	6,614.56	15,449.80	6,856.71	220.30	219.83	-110.15	-768.20	8,282.25	703.00	309.11	393.89	1.785	Level 3<2.00	
15,500.00	6,614.82	15,549.80	6,857.06	222.83	222.37	-110.15	-767.42	8,382.25	703.03	305.19	397.83	1.767	Level 3<2.00	
15,600.00	6,615.08	15,649.80	6,857.40	225.36	224.90	-110.16	-766.64	8,482.24	703.06	301.30	401.76	1.750	Level 3<2.00	
15,700.00	6,615.34	15,749.80	6,857.75	227.89	227.44	-110.17	-765.85	8,582.24	703.09	297.43	405.65	1.733	Level 3<2.00	
15,800.00	6,615.61	15,849.80	6,858.10	230.43	229.97	-110.17	-765.07	8,682.24	703.12	293.59	409.53	1.717	Level 3<2.00	
15,900.00	6,615.87	15,949.80	6,858.45	232.96	232.51	-110.18	-764.29	8,782.23	703.15	289.77	413.38	1.701	Level 3<2.00	
16,000.00	6,616.13	16,049.80	6,858.79	235.50	235.05	-110.19	-763.50	8,882.23	703.18	285.97	417.21	1.685	Level 3<2.00	
16,100.00	6,616.39	16,149.80	6,859.14	238.03	237.58	-110.19	-762.72	8,982.22	703.21	282.19	421.02	1.670	Level 3<2.00	
16,200.00	6,616.65	16,249.80	6,859.49	240.57	240.12	-110.20	-761.94	9,082.22	703.24	278.44	424.80	1.655	Level 3<2.00	
16,300.00	6,616.91	16,349.80	6,859.84	243.10	242.66	-110.21	-761.15	9,182.22	703.27	274.71	428.56	1.641	Level 3<2.00	
16,400.00	6,617.17	16,449.80	6,860.18	245.64	245.20	-110.21	-760.37	9,282.21	703.30	271.01	432.29	1.627	Level 3<2.00	
16,500.00	6,617.43	16,549.80	6,860.53	248.17	247.73	-110.22	-759.59	9,382.21	703.33	267.33	436.00	1.613	Level 3<2.00	
16,600.00	6,617.69	16,649.80	6,860.88	250.71	250.27	-110.23	-758.80	9,482.21	703.36	263.68	439.68	1.600	Level 3<2.00	
16,700.00	6,617.95	16,749.80	6,861.23	253.25	252.81	-110.23	-758.02	9,582.20	703.39	260.05	443.34	1.587	Level 3<2.00	
16,800.00	6,618.21	16,849.80	6,861.57	255.78	255.35	-110.24	-757.24	9,682.20	703.42	256.45	446.97	1.574	Level 3<2.00	
16,900.00	6,618.47	16,949.80	6,861.92	258.32	257.89	-110.25	-756.46	9,782.19	703.45	252.88	450.57	1.561	Level 3<2.00	
17,000.00	6,618.73	17,049.80	6,862.27	260.86	260.43	-110.25	-755.67	9,882.19	703.48	249.33	454.15	1.549	Level 3<2.00	
17,100.00	6,618.99	17,149.80	6,862.62	263.40	262.97	-110.26	-754.89	9,982.19	703.51	245.81	457.70	1.537	Level 3<2.00	
17,200.00	6,619.25	17,249.80	6,862.96	265.93	265.51	-110.27	-754.11	10,082.18	703.54	242.32	461.22	1.525	Level 3<2.00	
17,300.00	6,619.51	17,349.80	6,863.31	268.47	268.05	-110.27	-753.32	10,182.18	703.57	238.86	464.72	1.514	Level 3<2.00	
17,400.00	6,619.77	17,449.80	6,863.66	271.01	270.59	-110.28	-752.54	10,282.18	703.60	235.42	468.18	1.503	Level 3<2.00	
17,500.00	6,620.03	17,549.80	6,864.01	273.55	273.13	-110.29	-751.76	10,382.17	703.64	232.01	471.62	1.492	Level 2<1.50	
17,600.00	6,620.30	17,649.80	6,864.35	276.09	275.67	-110.29	-750.97	10,482.17	703.67	228.63	475.03	1.481	Level 2<1.50	
17,700.00	6,620.56	17,749.80	6,864.70	278.63	278.21	-110.30	-750.19	10,582.16	703.70	225.28	478.41	1.471	Level 2<1.50	
17,800.00	6,620.82	17,849.80	6,865.05	281.17	280.75	-110.31	-749.41	10,682.16	703.73	221.96	481.77	1.461	Level 2<1.50	
17,900.00	6,621.08	17,949.80	6,865.40	283.71	283.29	-110.31	-748.62	10,782.16	703.76	218.66	485.09	1.451	Level 2<1.50	
18,000.00	6,621.34	18,049.80	6,865.74	286.25	285.83	-110.32	-747.84	10,882.15	703.79	215.40	488.39	1.441	Level 2<1.50	
18,100.00	6,621.60	18,149.80	6,866.09	288.79	288.38	-110.33	-747.06	10,982.15	703.82	212.16	491.66	1.432	Level 2<1.50	
18,200.00	6,621.86	18,249.80	6,866.44	291.33	290.92	-110.33	-746.27	11,082.15	703.85	208.95	494.90	1.422	Level 2<1.50	
18,300.00	6,622.12	18,349.80	6,866.79	293.87	293.46	-110.34	-745.49	11,182.14	703.88	205.77	498.11	1.413	Level 2<1.50	
18,400.00	6,622.38	18,449.80	6,867.14	296.41	296.00	-110.35	-744.71	11,282.14	703.91	202.62	501.29	1.404	Level 2<1.50	
18,500.00	6,622.64	18,549.80	6,867.48	298.95	298.55	-110.35	-743.92	11,382.14	703.94	199.50	504.44	1.395	Level 2<1.50	
18,600.00	6,622.90	18,649.80	6,867.83	301.49	301.09	-110.36	-743.14	11,482.13	703.97	196.40	507.57	1.387	Level 2<1.50	
18,638.04	6,623.00	18,687.84	6,867.96	302.46	302.06	-110.36	-742.84	11,520.17	703.98	195.23	508.75	1.384	Level 2<1.50, SF	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 915H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
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	53.56	23.79	32.21	40.04				
100.00	100.00	100.00	100.00	0.13	0.13	53.56	23.79	32.21	40.04	39.77	0.27	148.942	
200.00	200.00	200.00	200.00	0.49	0.49	53.56	23.79	32.21	40.04	39.06	0.99	40.620	
300.00	300.00	300.00	300.00	0.85	0.85	53.56	23.79	32.21	40.04	38.34	1.70	23.517	
400.00	400.00	400.00	400.00	1.21	1.21	53.56	23.79	32.21	40.04	37.62	2.42	16.549	
500.00	500.00	500.00	500.00	1.57	1.57	53.56	23.79	32.21	40.04	36.91	3.14	12.766	
600.00	600.00	600.00	600.00	1.93	1.93	53.56	23.79	32.21	40.04	36.19	3.85	10.391	
700.00	700.00	700.00	700.00	2.29	2.29	53.56	23.79	32.21	40.04	35.47	4.57	8.761	
800.00	800.00	800.00	800.00	2.64	2.64	53.56	23.79	32.21	40.04	34.76	5.29	7.573	
900.00	900.00	900.00	900.00	3.00	3.00	53.56	23.79	32.21	40.04	34.04	6.00	6.669	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	53.56	23.79	32.21	40.04	33.32	6.72	5.958	CC, ES
1,100.00	1,099.95	1,099.95	1,099.95	3.70	3.72	-147.33	23.79	32.21	42.22	34.80	7.42	5.690	
1,200.00	1,199.63	1,199.63	1,199.63	4.03	4.08	-152.19	23.79	32.21	49.01	40.90	8.11	6.044	
1,300.00	1,298.77	1,301.53	1,301.48	4.37	4.43	-159.19	22.82	29.70	58.57	49.78	8.79	6.663	
1,400.00	1,397.08	1,403.30	1,402.92	4.74	4.78	-167.88	19.90	22.12	69.51	60.05	9.46	7.350	
1,500.00	1,494.31	1,502.81	1,501.67	5.13	5.13	-176.45	15.51	10.70	83.70	73.55	10.15	8.247	
1,600.00	1,590.18	1,600.22	1,598.29	5.57	5.48	177.50	11.06	-0.87	104.06	93.21	10.86	9.584	
1,700.00	1,684.44	1,696.44	1,693.73	6.06	5.83	173.66	6.66	-12.30	130.20	118.62	11.58	11.245	
1,800.00	1,778.00	1,792.13	1,788.63	6.59	6.19	171.25	2.29	-23.67	158.68	146.38	12.29	12.906	
1,900.00	1,871.57	1,887.81	1,883.54	7.14	6.55	169.57	-2.09	-35.04	187.33	174.30	13.02	14.382	
2,000.00	1,965.13	1,983.50	1,978.45	7.72	6.92	168.34	-6.46	-46.41	216.09	202.32	13.77	15.696	
2,100.00	2,058.69	2,079.18	2,073.35	8.31	7.29	167.40	-10.83	-57.77	244.92	230.40	14.52	16.867	
2,200.00	2,152.25	2,174.87	2,168.26	8.92	7.66	166.66	-15.21	-69.14	273.80	258.52	15.28	17.915	
2,300.00	2,245.81	2,270.55	2,263.17	9.54	8.04	166.06	-19.58	-80.51	302.71	286.66	16.05	18.856	
2,400.00	2,339.37	2,366.24	2,358.07	10.17	8.42	165.56	-23.95	-91.87	331.65	314.82	16.83	19.704	
2,500.00	2,432.93	2,461.92	2,452.98	10.80	8.79	165.14	-28.33	-103.24	360.61	342.99	17.62	20.471	
2,600.00	2,526.49	2,557.61	2,547.89	11.44	9.18	164.79	-32.70	-114.61	389.58	371.18	18.41	21.167	
2,700.00	2,620.05	2,653.29	2,642.79	12.09	9.56	164.48	-37.07	-125.98	418.57	399.37	19.20	21.801	
2,800.00	2,713.61	2,748.98	2,737.70	12.74	9.94	164.22	-41.45	-137.34	447.56	427.56	20.00	22.381	
2,900.00	2,807.18	2,844.66	2,832.61	13.39	10.33	163.98	-45.82	-148.71	476.56	455.76	20.80	22.913	
3,000.00	2,900.74	2,940.35	2,927.51	14.05	10.71	163.78	-50.19	-160.08	505.57	483.97	21.60	23.401	
3,100.00	2,994.30	3,036.03	3,022.42	14.71	11.10	163.59	-54.57	-171.45	534.58	512.17	22.41	23.852	
3,200.00	3,087.86	3,131.72	3,117.33	15.37	11.49	163.42	-58.94	-182.81	563.60	540.38	23.22	24.269	
3,300.00	3,181.42	3,227.40	3,212.24	16.04	11.88	163.28	-63.31	-194.18	592.62	568.59	24.04	24.656	
3,400.00	3,274.98	3,323.09	3,307.14	16.70	12.26	163.14	-67.69	-205.55	621.65	596.80	24.85	25.015	
3,500.00	3,368.54	3,418.78	3,402.05	17.37	12.65	163.02	-72.06	-216.91	650.68	625.01	25.67	25.350	
3,600.00	3,462.10	3,514.46	3,496.96	18.04	13.04	162.90	-76.43	-228.28	679.71	653.22	26.49	25.662	
3,700.00	3,555.66	3,610.15	3,591.86	18.71	13.44	162.80	-80.81	-239.65	708.74	681.43	27.31	25.954	
3,800.00	3,649.22	3,705.83	3,686.77	19.38	13.83	162.70	-85.18	-251.02	737.78	709.65	28.13	26.228	
3,900.00	3,742.79	3,801.52	3,781.68	20.05	14.22	162.62	-89.55	-262.38	766.81	737.86	28.95	26.485	
4,000.00	3,836.35	3,897.20	3,876.58	20.73	14.61	162.53	-93.93	-273.75	795.85	766.08	29.78	26.727	
4,100.00	3,929.91	3,992.89	3,971.49	21.40	15.00	162.46	-98.30	-285.12	824.89	794.29	30.60	26.955	
4,200.00	4,023.47	4,088.57	4,066.40	22.08	15.40	162.39	-102.67	-296.49	853.93	822.50	31.43	27.170	
4,300.00	4,117.03	4,184.26	4,161.30	22.75	15.79	162.32	-107.05	-307.85	882.97	850.72	32.26	27.374	
4,400.00	4,210.59	4,279.94	4,256.21	23.43	16.18	162.26	-111.42	-319.22	912.02	878.93	33.08	27.566	
4,500.00	4,304.15	4,375.63	4,351.12	24.11	16.58	162.20	-115.79	-330.59	941.06	907.15	33.91	27.749	
4,600.00	4,397.71	4,471.31	4,446.02	24.79	16.97	162.15	-120.17	-341.95	970.11	935.36	34.74	27.922	
4,700.00	4,491.27	4,567.00	4,540.93	25.47	17.36	162.10	-124.54	-353.32	999.15	963.58	35.57	28.086	
4,800.00	4,584.83	4,662.68	4,635.84	26.14	17.76	162.05	-128.91	-364.69	1,028.20	991.79	36.41	28.243	
4,900.00	4,678.40	4,758.37	4,730.74	26.82	18.15	162.00	-133.29	-376.06	1,057.24	1,020.01	37.24	28.392	
5,000.00	4,771.96	4,854.05	4,825.65	27.50	18.55	161.96	-137.66	-387.42	1,086.29	1,048.22	38.07	28.534	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 915H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.00	4,865.52	4,949.74	4,920.56	28.18	18.94	161.92	-142.03	-398.79	1,115.34	1,076.44	38.90	28.669		
5,200.00	4,959.08	5,045.42	5,015.46	28.86	19.34	161.88	-146.41	-410.16	1,144.39	1,104.65	39.74	28.799		
5,300.00	5,052.64	5,141.11	5,110.37	29.54	19.73	161.84	-150.78	-421.53	1,173.44	1,132.87	40.57	28.922		
5,400.00	5,146.20	5,236.79	5,205.28	30.23	20.13	161.80	-155.15	-432.89	1,202.49	1,161.08	41.41	29.041		
5,500.00	5,239.82	5,332.52	5,300.23	30.90	20.52	161.84	-159.53	-444.27	1,231.38	1,189.14	42.24	29.151		
5,600.00	5,334.69	5,429.20	5,396.12	31.54	20.92	161.99	-163.95	-455.75	1,256.83	1,213.75	43.07	29.178		
5,700.00	5,431.08	5,526.98	5,493.11	32.11	21.33	162.03	-168.42	-467.37	1,277.43	1,233.53	43.90	29.096		
5,800.00	5,528.73	5,618.61	5,584.01	32.61	21.70	161.97	-172.53	-478.07	1,293.24	1,248.58	44.67	28.954		
5,900.00	5,627.38	5,700.00	5,665.05	33.04	22.02	161.96	-175.22	-485.05	1,305.36	1,260.06	45.30	28.816		
6,000.00	5,726.74	5,776.80	5,741.75	33.41	22.29	162.00	-176.62	-488.68	1,314.07	1,268.24	45.83	28.674		
6,100.00	5,826.55	5,861.61	5,826.55	33.71	22.57	162.08	-176.93	-489.51	1,319.31	1,272.96	46.36	28.460		
6,200.00	5,926.54	5,961.60	5,926.54	33.93	22.89	1.00	-176.93	-489.51	1,320.33	1,273.37	46.96	28.118		
6,300.00	6,026.51	6,059.55	6,024.47	34.12	23.18	-88.55	-176.93	-488.43	1,320.33	1,272.81	47.52	27.785		
6,400.00	6,125.26	6,154.08	6,117.92	34.28	23.41	-88.58	-176.82	-474.92	1,320.31	1,272.37	47.94	27.538		
6,500.00	6,219.90	6,250.00	6,209.16	34.39	23.59	-88.65	-176.59	-445.71	1,320.27	1,272.01	48.26	27.356		
6,600.00	6,307.57	6,343.78	6,292.46	34.43	23.72	-88.76	-176.26	-402.83	1,320.21	1,271.71	48.50	27.220		
6,700.00	6,385.60	6,439.23	6,368.90	34.43	23.84	-88.91	-175.81	-345.85	1,320.14	1,271.40	48.75	27.083		
6,800.00	6,451.61	6,535.26	6,435.19	34.38	23.99	-89.08	-175.27	-276.55	1,320.07	1,270.98	49.09	26.890		
6,900.00	6,504.62	6,632.21	6,489.50	34.30	24.22	-89.24	-174.64	-196.36	1,320.02	1,270.37	49.65	26.588		
7,000.00	6,550.12	6,730.88	6,537.18	34.22	24.62	-89.38	-173.96	-110.02	1,319.98	1,269.46	50.52	26.126		
7,100.00	6,579.94	6,828.75	6,571.37	34.12	25.19	-89.61	-173.24	-18.45	1,319.93	1,268.16	51.77	25.496		
7,200.00	6,592.77	6,927.54	6,589.58	34.03	25.97	-89.86	-172.48	78.52	1,319.91	1,266.52	53.39	24.722		
7,260.60	6,594.56	6,987.90	6,592.43	33.98	26.53	-89.91	-172.01	138.78	1,319.91	1,265.37	54.54	24.200		
7,300.00	6,593.46	7,027.32	6,592.58	33.97	26.95	-89.96	-171.70	178.20	1,319.91	1,264.56	55.35	23.846		
7,400.00	6,593.72	7,127.32	6,592.98	33.97	28.11	-89.97	-170.92	278.19	1,319.91	1,262.24	57.66	22.889		
7,500.00	6,593.98	7,227.31	6,593.38	34.08	29.45	-89.97	-170.14	378.19	1,319.91	1,259.58	60.32	21.880		
7,600.00	6,594.24	7,327.31	6,593.78	34.47	30.94	-89.98	-169.35	478.19	1,319.91	1,256.62	63.28	20.857		
7,700.00	6,594.50	7,427.31	6,594.18	35.39	32.57	-89.99	-168.57	578.18	1,319.91	1,253.41	66.50	19.848		
7,800.00	6,594.76	7,527.31	6,594.58	36.80	34.31	-89.99	-167.78	678.18	1,319.91	1,249.96	69.94	18.871		
7,900.00	6,595.02	7,627.31	6,594.98	38.46	36.15	-90.00	-167.00	778.17	1,319.91	1,246.33	73.58	17.938		
8,000.00	6,595.28	7,727.31	6,595.38	40.28	38.07	-90.00	-166.22	878.17	1,319.91	1,242.53	77.38	17.057		
8,100.00	6,595.54	7,827.31	6,595.78	42.19	40.06	-90.01	-165.43	978.17	1,319.91	1,238.58	81.33	16.229		
8,200.00	6,595.80	7,927.31	6,596.18	44.18	42.11	-90.02	-164.65	1,078.16	1,319.91	1,234.51	85.40	15.456		
8,300.00	6,596.06	8,027.31	6,596.58	46.22	44.21	-90.02	-163.87	1,178.16	1,319.91	1,230.34	89.57	14.736		
8,400.00	6,596.32	8,127.31	6,596.98	48.32	46.36	-90.03	-163.08	1,278.15	1,319.91	1,226.07	93.84	14.066		
8,500.00	6,596.59	8,227.31	6,597.38	50.46	48.55	-90.03	-162.30	1,378.15	1,319.91	1,221.73	98.18	13.443		
8,600.00	6,596.85	8,327.31	6,597.78	52.64	50.77	-90.04	-161.52	1,478.15	1,319.91	1,217.31	102.60	12.865		
8,700.00	6,597.11	8,427.31	6,598.18	54.84	53.02	-90.05	-160.73	1,578.14	1,319.91	1,212.84	107.08	12.327		
8,800.00	6,597.37	8,527.31	6,598.58	57.08	55.30	-90.05	-159.95	1,678.14	1,319.92	1,208.31	111.61	11.826		
8,900.00	6,597.63	8,627.31	6,598.98	59.34	57.60	-90.06	-159.17	1,778.13	1,319.92	1,203.73	116.19	11.360		
9,000.00	6,597.89	8,727.31	6,599.38	61.63	59.92	-90.06	-158.38	1,878.13	1,319.92	1,199.11	120.81	10.926		
9,100.00	6,598.15	8,827.31	6,599.78	63.93	62.26	-90.07	-157.60	1,978.13	1,319.92	1,194.45	125.47	10.520		
9,200.00	6,598.41	8,927.31	6,600.18	66.25	64.62	-90.08	-156.82	2,078.12	1,319.92	1,189.76	130.16	10.141		
9,300.00	6,598.67	9,027.31	6,600.58	68.59	66.99	-90.08	-156.03	2,178.12	1,319.92	1,185.04	134.88	9.786		
9,400.00	6,598.93	9,127.31	6,600.98	70.94	69.37	-90.09	-155.25	2,278.11	1,319.92	1,180.29	139.63	9.453		
9,500.00	6,599.19	9,227.31	6,601.38	73.31	71.77	-90.10	-154.47	2,378.11	1,319.92	1,175.52	144.40	9.140		
9,600.00	6,599.45	9,327.31	6,601.78	75.69	74.17	-90.10	-153.68	2,478.11	1,319.92	1,170.72	149.20	8.847		
9,700.00	6,599.71	9,427.31	6,602.18	78.07	76.59	-90.11	-152.90	2,578.10	1,319.92	1,165.91	154.01	8.570		
9,800.00	6,599.97	9,527.31	6,602.58	80.47	79.01	-90.11	-152.12	2,678.10	1,319.92	1,161.08	158.85	8.309		
9,900.00	6,600.23	9,627.31	6,602.98	82.88	81.44	-90.12	-151.33	2,778.10	1,319.92	1,156.23	163.70	8.063		
10,000.00	6,600.49	9,727.31	6,603.38	85.29	83.88	-90.13	-150.55	2,878.09	1,319.92	1,151.36	168.56	7.831		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design:		Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 915H - Original Hole - rev1											Offset Site Error:		0.00 ft	
Survey Program:		0-MWD								Rule Assigned:				Offset Well Error:		0.00 ft
Measured Depth (ft)	Vertical Reference Depth (ft)	Measured Depth (ft)	Vertical Offset Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
10,100.00	6,600.75	9,827.31	6,603.78	87.72	86.32	-90.13	-149.76	2,978.09	1,319.93	1,146.49	173.44	7.610				
10,200.00	6,601.01	9,927.31	6,604.18	90.15	88.78	-90.14	-148.98	3,078.08	1,319.93	1,141.60	178.33	7.402				
10,300.00	6,601.28	10,027.31	6,604.58	92.58	91.23	-90.14	-148.20	3,178.08	1,319.93	1,136.70	183.23	7.204				
10,400.00	6,601.54	10,127.31	6,604.98	95.02	93.69	-90.15	-147.41	3,278.08	1,319.93	1,131.78	188.15	7.015				
10,500.00	6,601.80	10,227.31	6,605.38	97.47	96.16	-90.16	-146.63	3,378.07	1,319.93	1,126.86	193.07	6.837				
10,600.00	6,602.06	10,327.31	6,605.78	99.92	98.63	-90.16	-145.85	3,478.07	1,319.93	1,121.93	198.00	6.666				
10,700.00	6,602.32	10,427.31	6,606.18	102.38	101.11	-90.17	-145.06	3,578.06	1,319.93	1,116.99	202.94	6.504				
10,800.00	6,602.58	10,527.31	6,606.58	104.84	103.58	-90.17	-144.28	3,678.06	1,319.93	1,112.04	207.89	6.349				
10,900.00	6,602.84	10,627.31	6,606.98	107.31	106.07	-90.18	-143.50	3,778.06	1,319.93	1,107.08	212.85	6.201				
11,000.00	6,603.10	10,727.31	6,607.38	109.78	108.55	-90.19	-142.71	3,878.05	1,319.93	1,102.12	217.81	6.060				
11,100.00	6,603.36	10,827.31	6,607.78	112.25	111.04	-90.19	-141.93	3,978.05	1,319.94	1,097.15	222.78	5.925				
11,200.00	6,603.62	10,927.31	6,608.18	114.73	113.53	-90.20	-141.15	4,078.04	1,319.94	1,092.18	227.76	5.795				
11,300.00	6,603.88	11,027.31	6,608.58	117.21	116.02	-90.20	-140.36	4,178.04	1,319.94	1,087.20	232.74	5.671				
11,400.00	6,604.14	11,127.31	6,608.98	119.69	118.52	-90.21	-139.58	4,278.04	1,319.94	1,082.21	237.73	5.552				
11,500.00	6,604.40	11,227.31	6,609.38	122.18	121.02	-90.22	-138.80	4,378.03	1,319.94	1,077.22	242.72	5.438				
11,600.00	6,604.66	11,327.31	6,609.78	124.67	123.52	-90.22	-138.01	4,478.03	1,319.94	1,072.23	247.71	5.329				
11,700.00	6,604.92	11,427.31	6,610.18	127.16	126.02	-90.23	-137.23	4,578.02	1,319.94	1,067.23	252.71	5.223				
11,800.00	6,605.18	11,527.31	6,610.58	129.65	128.53	-90.23	-136.45	4,678.02	1,319.94	1,062.23	257.72	5.122				
11,900.00	6,605.44	11,627.31	6,610.98	132.14	131.04	-90.24	-135.66	4,778.02	1,319.94	1,057.22	262.72	5.024				
12,000.00	6,605.70	11,727.31	6,611.38	134.64	133.54	-90.25	-134.88	4,878.01	1,319.95	1,052.21	267.74	4.930				
12,100.00	6,605.97	11,827.31	6,611.78	137.14	136.05	-90.25	-134.10	4,978.01	1,319.95	1,047.20	272.75	4.839				
12,200.00	6,606.23	11,927.31	6,612.18	139.64	138.57	-90.26	-133.31	5,078.00	1,319.95	1,042.18	277.77	4.752				
12,300.00	6,606.49	12,027.31	6,612.58	142.15	141.08	-90.26	-132.53	5,178.00	1,319.95	1,037.16	282.79	4.668				
12,400.00	6,606.75	12,127.31	6,612.98	144.65	143.59	-90.27	-131.75	5,278.00	1,319.95	1,032.14	287.82	4.586				
12,500.00	6,607.01	12,227.31	6,613.38	147.16	146.11	-90.28	-130.96	5,377.99	1,319.95	1,027.11	292.84	4.507				
12,600.00	6,607.27	12,327.31	6,613.78	149.66	148.63	-90.28	-130.18	5,477.99	1,319.95	1,022.08	297.87	4.431				
12,700.00	6,607.53	12,427.31	6,614.17	152.17	151.14	-90.29	-129.39	5,577.98	1,319.95	1,017.05	302.91	4.358				
12,800.00	6,607.79	12,527.31	6,614.57	154.69	153.66	-90.29	-128.61	5,677.98	1,319.96	1,012.02	307.94	4.286				
12,900.00	6,608.05	12,627.31	6,614.97	157.20	156.18	-90.30	-127.83	5,777.98	1,319.96	1,006.98	312.98	4.217				
13,000.00	6,608.31	12,727.31	6,615.37	159.71	158.71	-90.31	-127.04	5,877.97	1,319.96	1,001.94	318.02	4.151				
13,100.00	6,608.57	12,827.31	6,615.77	162.22	161.23	-90.31	-126.26	5,977.97	1,319.96	996.90	323.06	4.086				
13,200.00	6,608.83	12,927.31	6,616.17	164.74	163.75	-90.32	-125.48	6,077.96	1,319.96	991.86	328.10	4.023				
13,300.00	6,609.09	13,027.31	6,616.57	167.26	166.28	-90.32	-124.69	6,177.96	1,319.96	986.82	333.15	3.962				
13,400.00	6,609.35	13,127.31	6,616.97	169.78	168.80	-90.33	-123.91	6,277.96	1,319.96	981.77	338.19	3.903				
13,500.00	6,609.61	13,227.31	6,617.37	172.29	171.33	-90.34	-123.13	6,377.95	1,319.97	976.73	343.24	3.846				
13,600.00	6,609.87	13,327.31	6,617.77	174.81	173.85	-90.34	-122.34	6,477.95	1,319.97	971.68	348.29	3.790				
13,700.00	6,610.13	13,427.31	6,618.17	177.33	176.38	-90.35	-121.56	6,577.94	1,319.97	966.63	353.34	3.736				
13,800.00	6,610.39	13,527.31	6,618.57	179.86	178.91	-90.36	-120.78	6,677.94	1,319.97	961.57	358.40	3.683				
13,900.00	6,610.66	13,627.31	6,618.97	182.38	181.44	-90.36	-119.99	6,777.94	1,319.97	956.52	363.45	3.632				
14,000.00	6,610.92	13,727.31	6,619.37	184.90	183.97	-90.37	-119.21	6,877.93	1,319.97	951.47	368.51	3.582				
14,100.00	6,611.18	13,827.31	6,619.77	187.43	186.50	-90.37	-118.43	6,977.93	1,319.97	946.41	373.56	3.533				
14,200.00	6,611.44	13,927.31	6,620.17	189.95	189.03	-90.38	-117.64	7,077.92	1,319.98	941.35	378.62	3.486				
14,300.00	6,611.70	14,027.31	6,620.57	192.48	191.56	-90.39	-116.86	7,177.92	1,319.98	936.30	383.68	3.440				
14,400.00	6,611.96	14,127.31	6,620.97	195.00	194.09	-90.39	-116.08	7,277.92	1,319.98	931.24	388.74	3.396				
14,500.00	6,612.22	14,227.31	6,621.37	197.53	196.62	-90.40	-115.29	7,377.91	1,319.98	926.18	393.80	3.352				
14,600.00	6,612.48	14,327.31	6,621.77	200.06	199.16	-90.40	-114.51	7,477.91	1,319.98	921.11	398.87	3.309				
14,700.00	6,612.74	14,427.31	6,622.17	202.58	201.69	-90.41	-113.73	7,577.90	1,319.98	916.05	403.93	3.268				
14,800.00	6,613.00	14,527.31	6,622.57	205.11	204.22	-90.42	-112.94	7,677.90	1,319.99	910.99	409.00	3.227				
14,900.00	6,613.26	14,627.31	6,622.97	207.64	206.76	-90.42	-112.16	7,777.90	1,319.99	905.92	414.06	3.188				
15,000.00	6,613.52	14,727.31	6,623.37	210.17	209.29	-90.43	-111.37	7,877.89	1,319.99	900.86	419.13	3.149				
15,100.00	6,613.78	14,827.31	6,623.77	212.70	211.83	-90.43	-110.59	7,977.89	1,319.99	895.79	424.20	3.112				

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Rincon pad (613, 615, 713, 715,815,817,915 & 917) - Rincon Unit 915H - Original Hole - rev1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,200.00	6,614.04	14,927.31	6,624.17	215.23	214.36	-90.44	-109.81	8,077.88	1,319.99	890.73	429.27	3.075	
15,300.00	6,614.30	15,027.31	6,624.57	217.76	216.90	-90.45	-109.02	8,177.88	1,319.99	885.66	434.33	3.039	
15,400.00	6,614.56	15,127.31	6,624.97	220.30	219.44	-90.45	-108.24	8,277.88	1,320.00	880.59	439.40	3.004	
15,500.00	6,614.82	15,227.31	6,625.37	222.83	221.97	-90.46	-107.46	8,377.87	1,320.00	875.52	444.48	2.970	
15,600.00	6,615.08	15,327.31	6,625.77	225.36	224.51	-90.46	-106.67	8,477.87	1,320.00	870.45	449.55	2.936	
15,700.00	6,615.34	15,427.31	6,626.17	227.89	227.05	-90.47	-105.89	8,577.87	1,320.00	865.38	454.62	2.904	
15,800.00	6,615.61	15,527.31	6,626.57	230.43	229.59	-90.48	-105.11	8,677.86	1,320.00	860.31	459.69	2.871	
15,900.00	6,615.87	15,627.31	6,626.97	232.96	232.12	-90.48	-104.32	8,777.86	1,320.00	855.24	464.77	2.840	
16,000.00	6,616.13	15,727.31	6,627.37	235.50	234.66	-90.49	-103.54	8,877.85	1,320.01	850.17	469.84	2.809	
16,100.00	6,616.39	15,827.31	6,627.77	238.03	237.20	-90.49	-102.76	8,977.85	1,320.01	845.09	474.91	2.779	
16,200.00	6,616.65	15,927.31	6,628.17	240.57	239.74	-90.50	-101.97	9,077.85	1,320.01	840.02	479.99	2.750	
16,300.00	6,616.91	16,027.31	6,628.57	243.10	242.28	-90.51	-101.19	9,177.84	1,320.01	834.94	485.07	2.721	
16,400.00	6,617.17	16,127.31	6,628.97	245.64	244.82	-90.51	-100.41	9,277.84	1,320.01	829.87	490.14	2.693	
16,500.00	6,617.43	16,227.31	6,629.37	248.17	247.36	-90.52	-99.62	9,377.83	1,320.01	824.80	495.22	2.666	
16,600.00	6,617.69	16,327.31	6,629.77	250.71	249.90	-90.52	-98.84	9,477.83	1,320.02	819.72	500.30	2.638	
16,700.00	6,617.95	16,427.31	6,630.17	253.25	252.44	-90.53	-98.06	9,577.83	1,320.02	814.64	505.37	2.612	
16,800.00	6,618.21	16,527.31	6,630.57	255.78	254.98	-90.54	-97.27	9,677.82	1,320.02	809.57	510.45	2.586	
16,900.00	6,618.47	16,627.31	6,630.97	258.32	257.52	-90.54	-96.49	9,777.82	1,320.02	804.49	515.53	2.561	
17,000.00	6,618.73	16,727.31	6,631.37	260.86	260.06	-90.55	-95.71	9,877.81	1,320.02	799.41	520.61	2.536	
17,100.00	6,618.99	16,827.31	6,631.77	263.40	262.60	-90.55	-94.92	9,977.81	1,320.03	794.33	525.69	2.511	
17,200.00	6,619.25	16,927.31	6,632.17	265.93	265.14	-90.56	-94.14	10,077.81	1,320.03	789.26	530.77	2.487	
17,300.00	6,619.51	17,027.31	6,632.57	268.47	267.68	-90.57	-93.36	10,177.80	1,320.03	784.18	535.85	2.463	
17,400.00	6,619.77	17,127.31	6,632.97	271.01	270.23	-90.57	-92.57	10,277.80	1,320.03	779.10	540.93	2.440	
17,500.00	6,620.03	17,227.31	6,633.37	273.55	272.77	-90.58	-91.79	10,377.79	1,320.03	774.02	546.02	2.418	
17,600.00	6,620.30	17,327.31	6,633.77	276.09	275.31	-90.58	-91.00	10,477.79	1,320.04	768.94	551.10	2.395	
17,700.00	6,620.56	17,427.31	6,634.17	278.63	277.85	-90.59	-90.22	10,577.79	1,320.04	763.86	556.18	2.373	
17,800.00	6,620.82	17,527.31	6,634.57	281.17	280.40	-90.60	-89.44	10,677.78	1,320.04	758.78	561.26	2.352	
17,900.00	6,621.08	17,627.31	6,634.97	283.71	282.94	-90.60	-88.65	10,777.78	1,320.04	753.70	566.34	2.331	
18,000.00	6,621.34	17,727.30	6,635.37	286.25	285.48	-90.61	-87.87	10,877.77	1,320.04	748.62	571.43	2.310	
18,100.00	6,621.60	17,827.30	6,635.77	288.79	288.02	-90.61	-87.09	10,977.77	1,320.05	743.54	576.51	2.290	
18,200.00	6,621.86	17,927.30	6,636.17	291.33	290.57	-90.62	-86.30	11,077.77	1,320.05	738.45	581.59	2.270	
18,300.00	6,622.12	18,027.30	6,636.57	293.87	293.11	-90.63	-85.52	11,177.76	1,320.05	733.37	586.68	2.250	
18,400.00	6,622.38	18,127.30	6,636.97	296.41	295.66	-90.63	-84.74	11,277.76	1,320.05	728.29	591.76	2.231	
18,500.00	6,622.64	18,227.30	6,637.37	298.95	298.20	-90.64	-83.95	11,377.75	1,320.06	723.21	596.85	2.212	
18,600.00	6,622.90	18,327.30	6,637.77	301.49	300.74	-90.65	-83.17	11,477.75	1,320.06	718.13	601.93	2.193	
18,638.04	6,623.00	18,365.34	6,637.92	302.46	301.71	-90.65	-82.87	11,515.79	1,320.06	716.19	603.87	2.186 SF	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design:		Section 21-T27N-R06W - Rincon Unit 180 - Original Hole - Inc only surveys											Offset Site Error:		0.00 ft
Survey Program:		335-INC-ONLY				Rule Assigned:				Offset Well Error:		0.00 ft			
Reference		Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Warning			
Measured Depth	Vertical	Measured Depth	Vertical	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
0.00	0.00	0.00	0.00	0.00	0.00	-138.16	-358.24	-320.81	480.91						
100.00	100.00	96.00	96.00	0.13	1.25	-138.16	-358.24	-320.81	480.89	479.51	1.39	346.721			
200.00	200.00	196.00	196.00	0.49	2.56	-138.16	-358.24	-320.81	480.89	477.84	3.05	157.661			
300.00	300.00	296.00	296.00	0.85	3.86	-138.16	-358.24	-320.81	480.89	476.18	4.71	102.027			
400.00	400.00	396.00	396.00	1.21	9.42	-138.16	-358.24	-320.81	480.89	470.26	10.63	45.223			
500.00	500.00	496.00	496.00	1.57	17.71	-138.16	-358.24	-320.81	480.89	461.62	19.28	24.948			
600.00	600.00	596.00	596.00	1.93	25.99	-138.16	-358.24	-320.81	480.89	452.98	27.92	17.226			
700.00	700.00	696.00	696.00	2.29	34.27	-138.16	-358.24	-320.81	480.89	444.33	36.56	13.154			
800.00	800.00	796.00	796.00	2.64	42.56	-138.16	-358.24	-320.81	480.89	435.69	45.20	10.639			
900.00	900.00	896.00	896.00	3.00	50.84	-138.16	-358.24	-320.81	480.89	427.05	53.84	8.931			
1,000.00	1,000.00	996.00	996.00	3.36	59.12	-138.16	-358.24	-320.81	480.89	418.41	62.48	7.696			
1,100.00	1,099.95	1,095.96	1,095.95	3.70	67.40	23.09	-358.24	-320.81	478.48	407.38	71.11	6.729			
1,200.00	1,199.63	1,195.64	1,195.63	4.03	75.66	23.55	-358.24	-320.81	471.28	391.58	79.69	5.914			
1,300.00	1,298.77	1,294.77	1,294.77	4.37	83.87	24.35	-358.24	-320.81	459.33	371.09	88.24	5.205			
1,400.00	1,397.08	1,393.09	1,393.08	4.74	92.02	25.54	-358.24	-320.81	442.76	346.03	96.73	4.577			
1,500.00	1,494.31	1,490.31	1,490.31	5.13	100.07	27.19	-358.24	-320.81	421.73	316.59	105.14	4.011			
1,600.00	1,590.18	1,586.13	1,586.12	5.57	108.01	29.71	-355.64	-320.81	394.72	281.27	113.45	3.479			
1,700.00	1,684.44	1,680.33	1,680.31	6.06	115.81	32.69	-355.67	-320.81	365.78	244.13	121.65	3.007			
1,800.00	1,778.00	1,773.84	1,773.82	6.59	123.55	35.86	-355.74	-320.81	336.04	206.23	129.82	2.589			
1,900.00	1,871.57	1,867.38	1,867.36	7.14	131.30	39.60	-355.83	-320.81	307.49	169.47	138.02	2.228			
2,000.00	1,965.13	1,960.94	1,960.92	7.72	139.05	44.04	-355.96	-320.81	280.47	134.19	146.29	1.917	Level 3<2.00		
2,100.00	2,058.69	2,054.52	2,054.50	8.31	146.80	49.31	-356.12	-320.81	255.46	100.85	154.61	1.652	Level 3<2.00		
2,200.00	2,152.25	2,148.13	2,148.10	8.92	154.56	55.58	-356.32	-320.81	233.10	70.08	163.02	1.430	Level 2<1.50		
2,300.00	2,245.81	2,241.75	2,241.73	9.54	162.31	62.95	-356.54	-320.81	214.18	42.69	171.50	1.249	Level 2<1.50		
2,400.00	2,339.37	2,335.41	2,335.38	10.17	170.07	71.42	-356.80	-320.81	199.70	19.66	180.03	1.109	Level 2<1.50		
2,500.00	2,432.93	2,429.08	2,429.05	10.80	177.83	80.82	-357.09	-320.81	190.63	2.06	188.57	1.011	Level 2<1.50		
2,594.55	2,521.39	2,517.67	2,517.64	11.41	185.17	90.19	-357.39	-320.81	187.74	-8.84	196.58	0.955	Level 1<1.00, CC		
2,600.00	2,526.49	2,522.78	2,522.75	11.44	185.59	90.74	-357.41	-320.81	187.75	-9.29	197.03	0.953	Level 1<1.00		
2,700.00	2,620.05	2,616.50	2,616.47	12.09	193.35	100.62	-357.77	-320.81	191.32	-14.03	205.35	0.932	Level 1<1.00, ES, SF		
2,800.00	2,713.61	2,710.25	2,710.21	12.74	201.12	109.92	-358.15	-320.81	200.98	-12.53	213.51	0.941	Level 1<1.00		
2,900.00	2,807.18	2,803.48	2,803.18	13.39	203.81	118.24	-358.24	-320.81	216.15	-0.22	216.37	0.999	Level 1<1.00		
3,000.00	2,900.74	2,897.04	2,896.74	14.05	204.97	125.50	-358.24	-320.81	235.73	17.90	217.83	1.082	Level 2<1.50		
3,100.00	2,994.30	2,991.65	2,991.33	14.71	206.15	131.80	-357.41	-320.81	259.40	40.19	219.21	1.183	Level 2<1.50		
3,200.00	3,087.86	3,086.89	3,086.56	15.37	207.34	136.97	-358.11	-320.81	284.28	63.69	220.59	1.289	Level 2<1.50		
3,300.00	3,181.42	3,177.81	3,177.42	16.04	209.12	141.16	-358.24	-320.81	311.54	88.98	222.56	1.400	Level 2<1.50		
3,400.00	3,274.98	3,271.37	3,270.98	16.70	211.06	144.81	-358.24	-320.81	340.40	115.66	224.74	1.515	Level 3<2.00		
3,500.00	3,368.54	3,364.93	3,364.54	17.37	213.00	147.90	-358.24	-320.81	370.38	143.44	226.94	1.632	Level 3<2.00		
3,600.00	3,462.10	3,458.49	3,458.10	18.04	214.94	150.54	-358.24	-320.81	401.23	172.07	229.15	1.751	Level 3<2.00		
3,700.00	3,555.66	3,552.05	3,551.66	18.71	216.89	152.81	-358.24	-320.81	432.75	201.36	231.39	1.870	Level 3<2.00		
3,800.00	3,649.22	3,645.61	3,645.22	19.38	218.83	154.78	-358.24	-320.81	464.82	231.19	233.64	1.990	Level 3<2.00		
3,900.00	3,742.79	3,739.17	3,738.79	20.05	220.77	156.49	-358.24	-320.81	497.33	261.43	235.90	2.108			
4,000.00	3,836.35	3,832.73	3,832.35	20.73	222.71	158.00	-358.24	-320.81	530.20	292.02	238.17	2.226			
4,100.00	3,929.91	3,926.30	3,925.91	21.40	224.66	159.34	-358.24	-320.81	563.36	322.90	240.46	2.343			
4,200.00	4,023.47	4,020.59	4,020.15	22.08	226.61	160.53	-353.77	-320.81	601.24	358.47	242.77	2.477			
4,300.00	4,117.03	4,115.00	4,114.55	22.75	228.57	161.59	-353.94	-320.81	634.68	389.59	245.09	2.590			
4,400.00	4,210.59	4,209.50	4,209.04	23.43	230.54	162.55	-354.23	-320.81	668.18	420.76	247.42	2.701			
4,500.00	4,304.15	4,304.09	4,303.62	24.11	232.50	163.42	-354.64	-320.81	701.72	451.96	249.76	2.810			
4,600.00	4,397.71	4,398.76	4,398.29	24.79	234.46	164.21	-355.16	-320.81	735.27	483.17	252.10	2.917			
4,700.00	4,491.27	4,493.52	4,493.03	25.47	236.43	164.94	-355.81	-320.81	768.81	514.37	254.45	3.022			
4,800.00	4,584.83	4,588.36	4,587.87	26.14	238.40	165.60	-356.57	-320.81	802.34	545.54	256.80	3.124			
4,900.00	4,678.40	4,683.30	4,682.79	26.82	240.37	166.21	-357.45	-320.81	835.83	576.68	259.15	3.225			

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Offset Design: Section 21-T27N-R06W - Rincon Unit 180 - Original Hole - Inc only surveys												Offset Site Error:	0.00 ft
Survey Program: 335-INC-ONLY												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,771.96	4,768.55	4,767.96	27.50	242.03	166.72	-358.24	-320.81	869.44	608.29	261.15	3.329	
5,100.00	4,865.52	4,862.20	4,861.60	28.18	242.79	167.23	-358.03	-320.81	904.16	641.86	262.30	3.447	
5,200.00	4,959.08	4,959.73	4,959.13	28.86	243.59	167.73	-358.24	-320.81	938.52	675.02	263.50	3.562	
5,300.00	5,052.64	5,050.30	5,049.70	29.54	244.25	168.15	-358.20	-320.81	973.17	708.64	264.54	3.679	
5,400.00	5,146.20	5,142.80	5,142.20	30.23	244.96	168.56	-358.24	-320.81	1,007.79	742.16	265.63	3.794	
5,500.00	5,239.82	5,236.42	5,235.82	30.90	245.69	169.00	-358.24	-320.81	1,042.34	775.59	266.75	3.908	
5,600.00	5,334.69	5,333.62	5,333.02	31.54	246.45	169.50	-357.69	-320.81	1,073.97	806.07	267.91	4.009	
5,700.00	5,431.08	5,433.84	5,433.22	32.11	247.23	169.91	-358.09	-320.81	1,099.78	830.69	269.09	4.087	
5,800.00	5,528.73	5,525.35	5,524.73	32.61	249.43	170.20	-358.24	-320.81	1,120.79	849.17	271.62	4.126	
5,900.00	5,627.38	5,623.99	5,623.38	33.04	252.45	170.42	-358.24	-320.81	1,136.91	861.92	274.99	4.134	
6,000.00	5,726.74	5,723.36	5,722.74	33.41	255.49	170.57	-358.24	-320.81	1,147.93	869.56	278.37	4.124	
6,100.00	5,826.55	5,823.17	5,822.55	33.71	258.55	170.64	-358.24	-320.81	1,153.80	872.05	281.75	4.095	
6,200.00	5,926.54	5,923.16	5,922.54	33.93	261.61	9.56	-358.24	-320.81	1,154.85	869.75	285.10	4.051	
6,300.00	6,026.51	6,023.13	6,022.51	34.12	264.67	-80.07	-358.24	-320.81	1,154.65	866.21	288.44	4.003	
6,400.00	6,125.26	6,121.88	6,121.26	34.28	267.69	-81.04	-358.24	-320.81	1,152.16	860.40	291.76	3.949	
6,500.00	6,219.90	6,216.52	6,215.90	34.39	270.59	-82.99	-358.24	-320.81	1,147.48	852.53	294.95	3.890	
6,600.00	6,307.57	6,304.19	6,303.57	34.43	273.27	-85.61	-358.24	-320.81	1,142.10	844.13	297.97	3.833	
6,700.00	6,385.60	6,382.21	6,381.60	34.43	275.66	-88.45	-358.24	-320.81	1,138.07	837.32	300.75	3.784	
6,758.57	6,425.86	6,422.47	6,421.86	34.40	276.89	-90.00	-358.24	-320.81	1,137.28	835.00	302.28	3.762	
6,800.00	6,451.61	6,448.23	6,447.61	34.38	277.68	-90.97	-358.24	-320.81	1,137.74	834.46	303.28	3.751	
6,900.00	6,504.62	6,501.23	6,500.62	34.30	279.30	-92.95	-358.24	-320.81	1,143.30	837.75	305.54	3.742	
7,000.00	6,550.12	6,546.74	6,546.12	34.22	280.69	-93.95	-358.24	-320.81	1,155.80	848.10	307.70	3.756	
7,100.00	6,579.94	6,576.56	6,575.94	34.12	281.61	-93.25	-358.24	-320.81	1,176.54	867.07	309.47	3.802	
7,200.00	6,592.77	6,589.38	6,588.77	34.03	282.00	-90.84	-358.24	-320.81	1,205.72	894.98	310.74	3.880	
7,300.00	6,593.46	6,590.08	6,589.46	33.97	282.02	-90.07	-358.24	-320.81	1,242.52	930.91	311.61	3.987	
7,400.00	6,593.72	6,590.34	6,589.72	33.97	282.03	-90.08	-358.24	-320.81	1,286.06	973.62	312.44	4.116	
7,500.00	6,593.98	6,590.60	6,589.98	34.08	282.04	-90.09	-358.24	-320.81	1,335.68	1,022.47	313.21	4.264	
7,600.00	6,594.24	6,590.86	6,590.24	34.47	282.04	-90.11	-358.24	-320.81	1,390.73	1,076.81	313.92	4.430	
7,700.00	6,594.50	6,591.12	6,590.50	35.39	282.05	-90.12	-358.24	-320.81	1,450.59	1,136.04	314.55	4.612	
7,800.00	6,594.76	6,591.38	6,590.76	36.80	282.06	-90.13	-358.24	-320.81	1,514.70	1,199.58	315.12	4.807	
7,900.00	6,595.02	6,591.64	6,591.02	38.46	282.07	-90.14	-358.24	-320.81	1,582.53	1,266.91	315.62	5.014	
8,000.00	6,595.28	6,591.90	6,591.28	40.28	282.08	-90.16	-358.24	-320.81	1,653.63	1,337.58	316.05	5.232	
8,100.00	6,595.54	6,592.16	6,591.54	42.19	282.08	-90.17	-358.24	-320.81	1,727.59	1,411.16	316.43	5.460	
8,200.00	6,595.80	6,592.42	6,591.80	44.18	282.09	-90.18	-358.24	-320.81	1,804.07	1,487.31	316.76	5.695	
8,300.00	6,596.06	6,592.68	6,592.06	46.22	282.10	-90.20	-358.24	-320.81	1,882.75	1,565.70	317.05	5.938	
8,400.00	6,596.32	6,592.94	6,592.32	48.32	282.11	-90.21	-358.24	-320.81	1,963.38	1,646.08	317.30	6.188	
8,500.00	6,596.59	6,593.20	6,592.59	50.46	282.12	-90.22	-358.24	-320.81	2,045.71	1,728.19	317.52	6.443	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6538+25 @ 6563.00ft

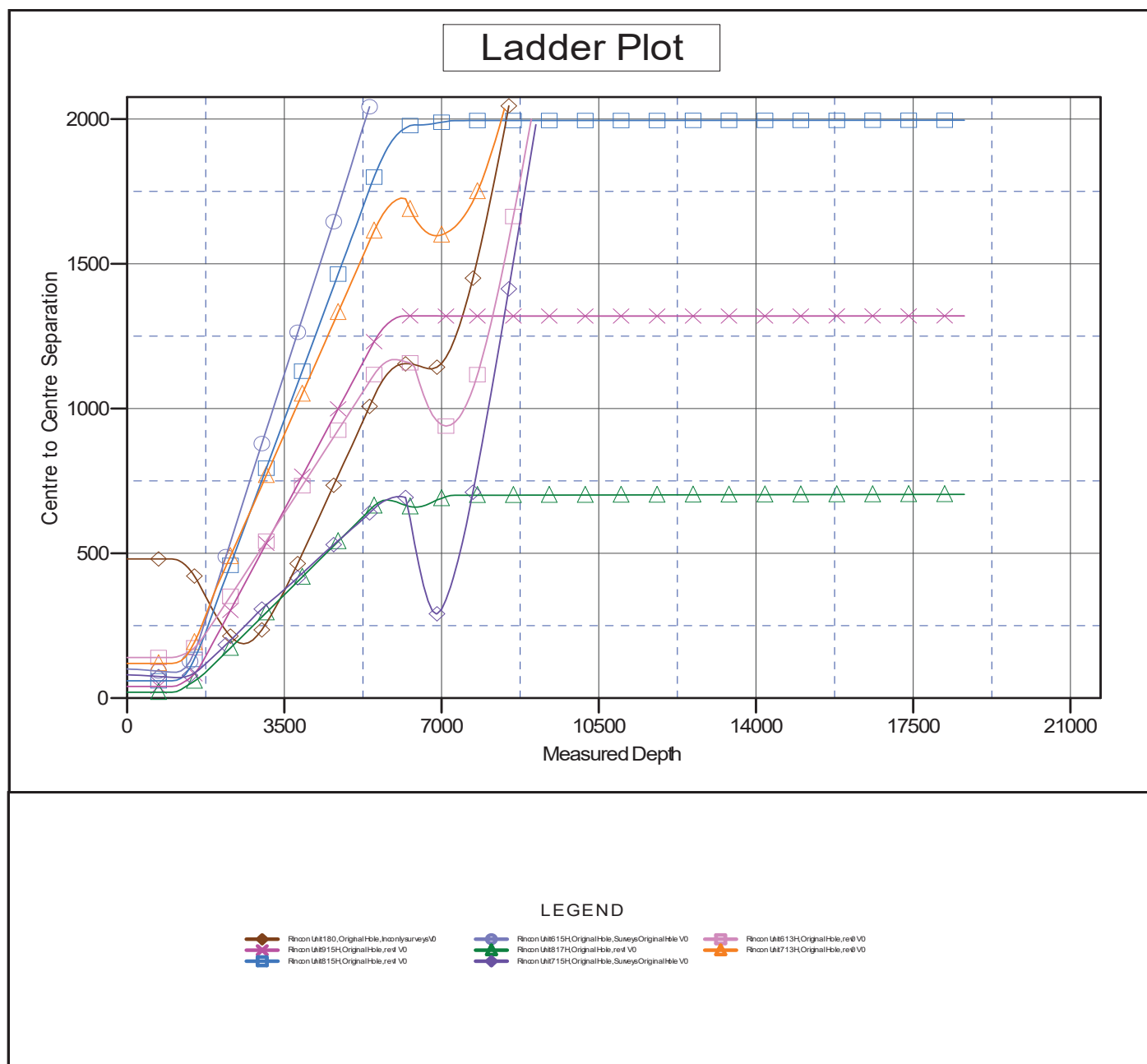
Offset Depths are relative to Offset Datum

Central Meridian is -107.833333333

Coordinates are relative to: Rincon Unit 917H

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

Grid Convergence at Surface is: 0.22°



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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Rincon Unit 917H
Project:	Rio Arriba County, New Mexico NAD83 NM W	TVD Reference:	RKB=6538+25 @ 6563.00ft
Reference Site:	Rincon pad (613, 615, 713, 715,815,817,915 & 917)	MD Reference:	RKB=6538+25 @ 6563.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Rincon Unit 917H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	rev1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6538+25 @ 6563.00ft

Offset Depths are relative to Offset Datum

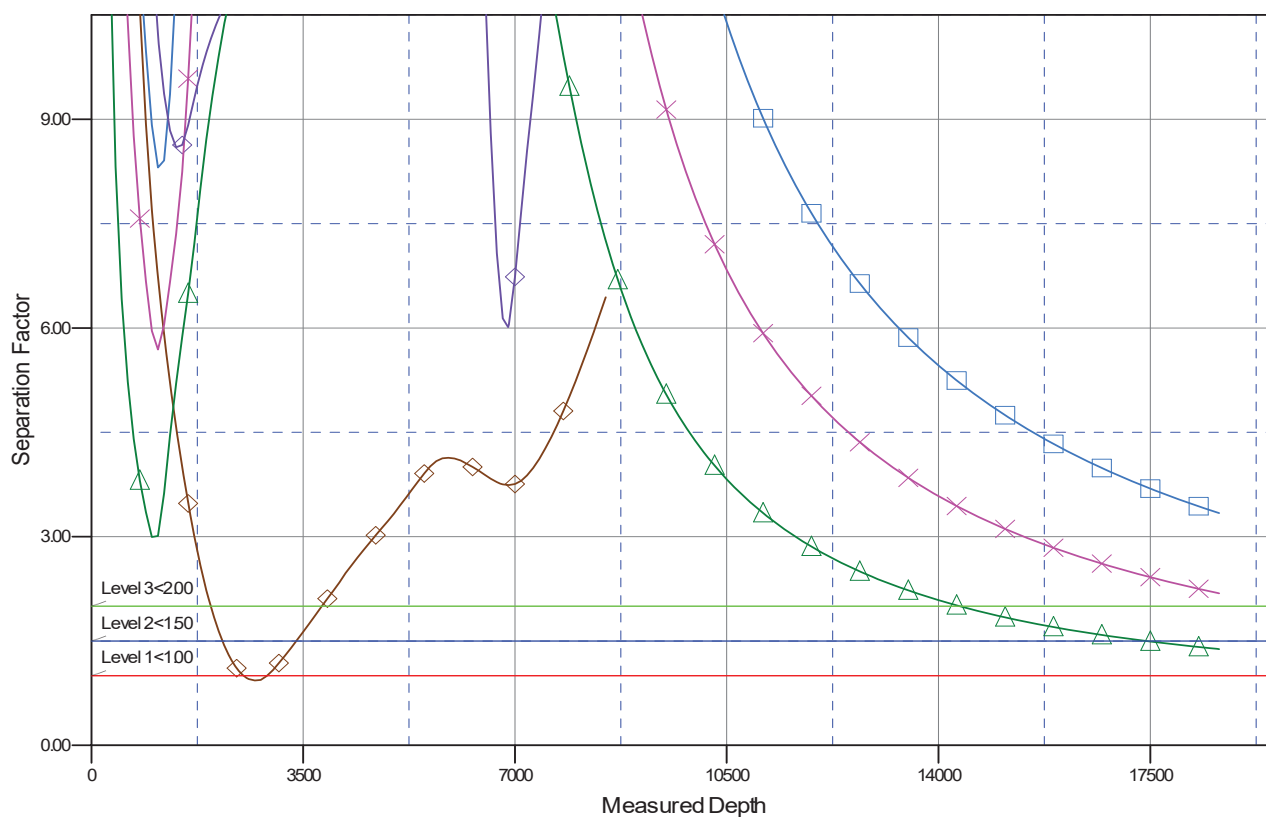
Central Meridian is -107.833333333

Coordinates are relative to: Rincon Unit 917H

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

Grid Convergence at Surface is: 0.22°

Separation Factor Plot



LEGEND

Rincon Unit180,Original Hole,In only surveys VO	Rincon Unit15H,Original Hole,SuneyeOriginalHole VO	Rincon Unit13H,OriginalHole,rev VO
Rincon Unit915H,OriginalHole,rev VO	Rincon Unit817H,OriginalHole,rev VO	Rincon Unit13H,OriginalHole,rev VO
Rincon Unit815H,OriginalHole,rev VO	Rincon Unit715H,OriginalHole,SuneyeOriginalHole VO	

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



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Blvd, Suite A
Farmington, New Mexico 87402



In Reply Refer To:
3162.3-1(NMF0110)

* Enduring Resources LLC

#917H RINCON UNIT

Lease: NMSF079366 / Agreement: NMNM078406X
SH: NW¼NE¼ Section 21, T. 27N., R. 6W.
Rio Arriba County, New Mexico
BH: NE¼SE¼ Section 23, T. 27N., R. 6W.
Rio Arriba County, New Mexico

***Above Data Required on Well Sign**

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

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

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

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

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

- K. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two-year extension may be granted if submitted prior to expiration.
- 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.

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 or 50 MMCF following its (completion)(recompletion), whichever first occurs, without the prior, written approval of the authorized officer. 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 first gas to surface.*

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.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 357832

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID:
	372286
	Action Number:
	357832
Action Type:	
[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	7/24/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/24/2024
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	7/24/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	7/24/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	7/24/2024
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	7/24/2024