Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-043-21512

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

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

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

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

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

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 03/22/2024

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 03/22/2024

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 306 FNL / 2207 FEL / TWSP: 22N / RANGE: 7W / SECTION: 22 / LAT: 36.131251 / LONG: -107.56133 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 1755 FNL / 2434 FEL / TWSP: 22N / RANGE: 7W / SECTION: 22 / LAT: 36.127294 / LONG: -107.562111 (TVD: 4805 feet, MD: 5260 feet)

PPP: NESE / 2573 FNL / 871 FEL / TWSP: 22N / RANGE: 7W / SECTION: 22 / LAT: 36.124914 / LONG: -107.556826 (TVD: 4838 feet, MD: 12421 feet)

PPP: NWSW / 2288 FSL / 0 FEL / TWSP: 22N / RANGE: 7W / SECTION: 23 / LAT: 36.123585 / LONG: -107.553877 (TVD: 4838 feet, MD: 12421 feet)

BHL: SWSE / 330 FSL / 1626 FEL / TWSP: 22N / RANGE: 7W / SECTION: 23 / LAT: 36.118158 / LONG: -107.541834 (TVD: 4838 feet, MD: 12421 feet)

BLM Point of Contact

Name: DAVE J MANKIEWICZ
Title: AFM-Minerals
Phone: (505) 564-7761
Email: DMANKIEW@BLM.GOV

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-043-21512	52860	RUSTY GALLUP OIL POOL

[4] Property Code	[5] Property Name	[6] Well Number
322151	S ESCAVADA UNIT	337H

[7] OGRID No.	[8] Operator Name	[9] Elevation
372286	ENDURING RESOURCES, LLC	6867'

[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	22	22N	7W		306	NORTH	2207	EAST	SANDOVAL

[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
O	23	22N	7W		330	SOUTH	1626	EAST	SANDOVAL

[12] Dedicated Acres		[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
360.00	S/2 NE/4, N/2 SE/4 - Section 22 SW/4, SW/4 SE/4 - Section 23			R-14347

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

[17] OPERATOR CERTIFICATION

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.

Shaw-Marie Ford 2/1/24
Signature Date

Shaw-Marie Ford
Printed Name

sford@djrllc.com
E-mail Address

[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 26, 2023
Survey Date: JANUARY 21, 2022

Signature and Seal of Professional Surveyor

JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

SURFACE LOCATION (A)
306' FNL 2207' FEL
SEC 22, T22N, R7W

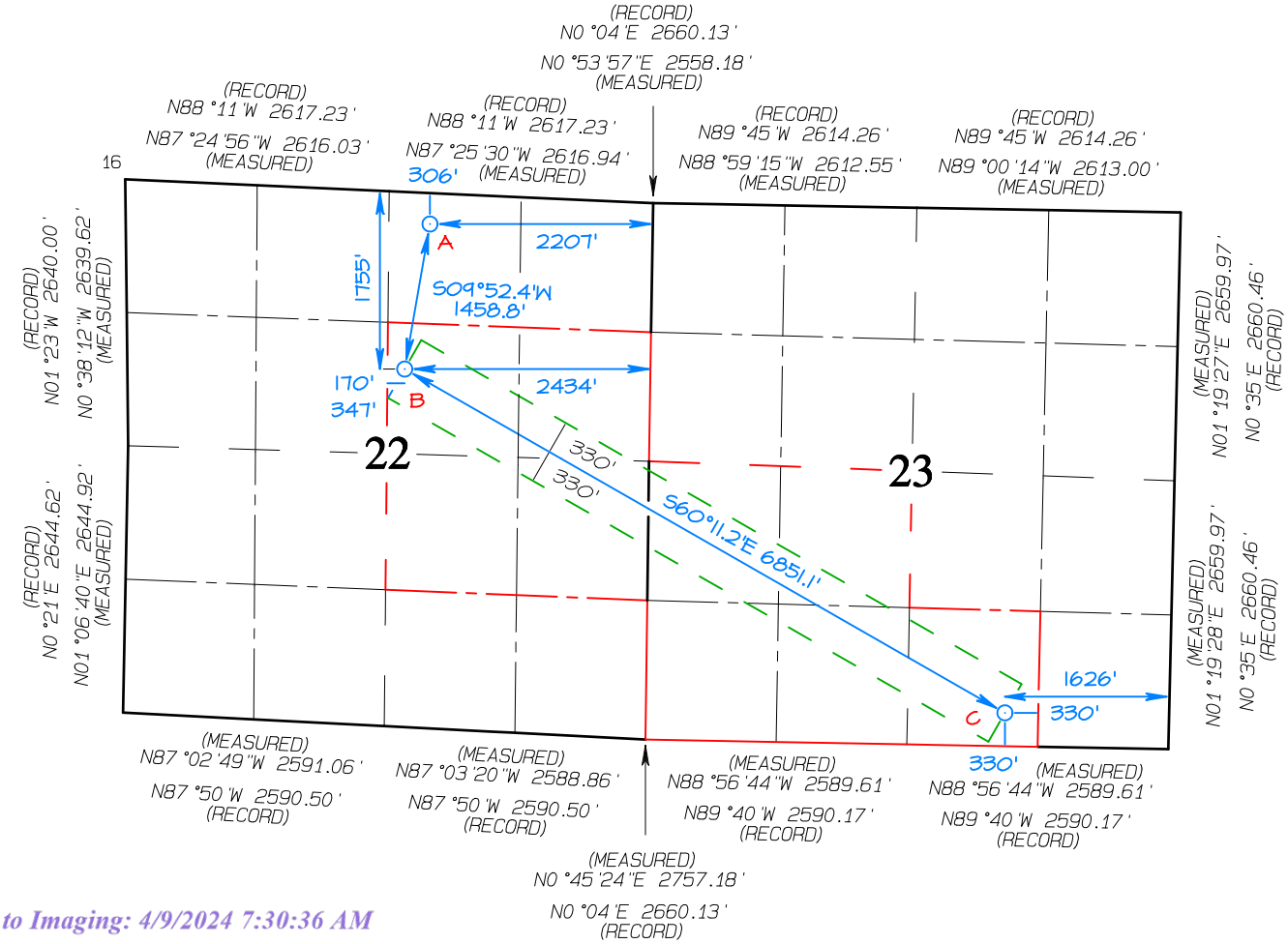
LAT 36.131251 °N
LONG -107.561330 °W
DATUM: NAD1983

FIRST TAKE POINT (B)
1755' FNL 2434' FEL
SEC 22, T22N, R7W

LAT 36.127294 °N
LONG -107.562111 °W
DATUM: NAD1983

LAST TAKE POINT (C)
330' FSL 1626' FEL
SEC 23, T22N, R7W

LAT 36.118158 °N
LONG -107.541834 °W
DATUM: NAD1983



District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011

Submit one copy to Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	52860	RUSTY GALLUP OIL POOL

[4] Property Code	[5] Property Name	[6] Well Number
322151	S ESCAVADA UNIT	337H

[7] OGRID No.	[8] Operator Name	[9] Elevation
372286	ENDURING RESOURCES, LLC	6867'

[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	22	22N	7W		306	NORTH	2207	EAST	SANDOVAL

[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
O	23	22N	7W		330	SOUTH	1626	EAST	SANDOVAL

[12] Dedicated Acres		[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
360.00	S/2 NE/4, N/2 SE/4 - Section 22 SW/4, SW/4 SE/4 - Section 23			R-14347

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

[17] OPERATOR CERTIFICATION

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.

Shaw-Marie Ford 2/1/24
Signature Date

Shaw-Marie Ford
Printed Name

sford@djrllc.com
E-mail Address

[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 26, 2023
Survey Date: JANUARY 21, 2022

Signature and Seal of Professional Surveyor

JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

LEASE X-ING (A)
2573' FNL 871' FEL
SEC 22, T22N, R7W

LAT 36.124914°N
LONG -107.556826°W
DATUM: NAD1983

LEASE X-ING (B)
2288' FSL 0' FEL
SEC 22, T22N, R7W

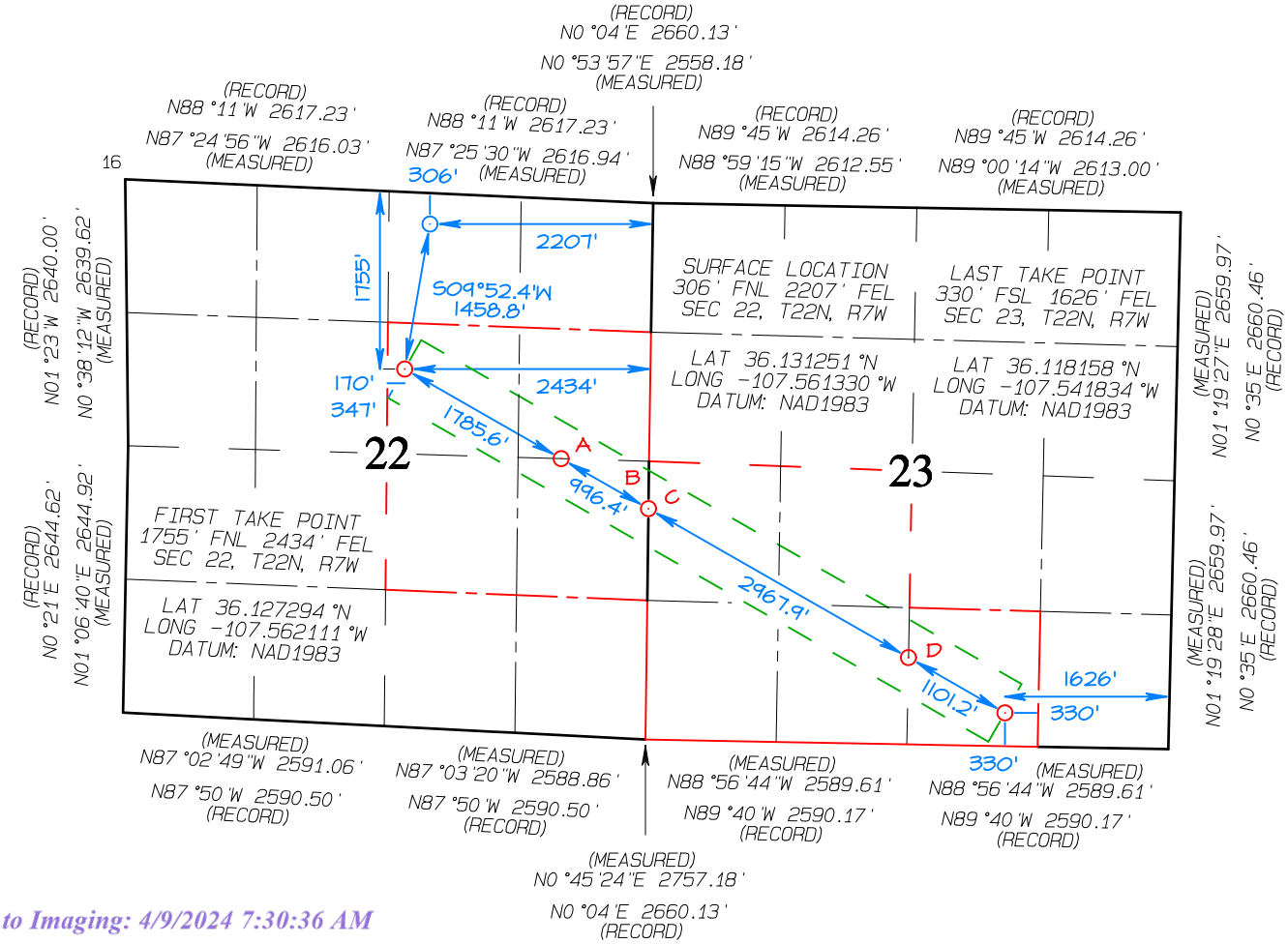
LAT 36.123585°N
LONG -107.553877°W
DATUM: NAD1983

LEASE X-ING (C)
2288' FSL 0' FWL
SEC 23, T22N, R7W

LAT 36.123585°N
LONG -107.553877°W
DATUM: NAD1983

LEASE X-ING (D)
860' FSL 2594' FWL
SEC 23, T22N, R7W

LAT 36.119627°N
LONG -107.545093°W
DATUM: NAD1983



State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Enduring Resources, LLC OGRID: 372286 **Date:** 03 / 22 / 2024

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
S Escavada Unit 337H	TBD	B-22-22N-07W	306 FNL x 2207 FEL	599	2138	1026
S Escavada Unit 345H	TBD	B-22-22N-07W	279 FNL x 2177 FEL	692	2472	986
S Escavada Unit 346H	TBD	B-22-22N-07W	293 FNL x 2192 FEL	826	2949	1016

IV. Central Delivery Point Name: South Escavada CDP [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
S Escavada Unit 337H	TBD	4/10/2024	5/11/2024	8/26/2024	9/12/2024	9/17/2024
S Escavada Unit 345H	TBD	4/11/2024	5/12/2024	8/26/2024	9/12/2024	9/17/2024
S Escavada Unit 346H	TBD	4/12/2024	5/13/2024	8/26/2024	9/12/2024	9/17/2024

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: Shaw-Marie Ford
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 3/22/2024
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
S Escavada Unit 337H, 345H, 346H
NWNE B-22-22N-07W

SEPARATION EQUIPMENT

Enduring Resources IV, 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.

200 Energy Court
Farmington, NM 87401
Phone (505) 636-9720

ENDURING RESOURCES, LLC
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
S Escavada Unit 337H, 345H, 346H
NWNE B-22-22N-07W

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.

ENDURING RESOURCES, LLC
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
S Escavada Unit 337H, 345H, 346H
NWNE B-22-22N-07W

19.15.27.8 B. Venting and flaring during drilling operations.

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations.

During Completion Operations, Enduring utilizes the following:

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

19.15.27.8 D. Venting and flaring during production operations.

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

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided:

ENDURING RESOURCES, LLC
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
S Escavada Unit 337H, 345H, 346H
NWNE B-22-22N-07W

a. Enduring does not vent after the well achieves a stabilized rate and pressure.
b. Enduring will remain present on-site during liquids unloading by manual purging and tall all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time.
c. Enduring will optimize the system to minimize natural gas venting on any well equipped with a plunger lift or auto control system.
d. Best Management Practices will be used during downhole well maintenance.

3. During the first year of production from an exploratory well provided:
   a. Enduring receives approval from the NMOCD.
   b. Enduring remains in compliance with the NM gas capture requirements.
   c. Enduring submits an updated C-129 form to the NMOCD.
4. During the following activities unless prohibited:
   a. Gauging or sampling a storage tank or low-pressure production vessel.
   b. Loading out liquids from a storage tank.
   c. Repair and maintenance.
   d. Normal operation of gas activated pneumatic controller or pump.
   e. Normal operation of a storage tank but not including venting from a thief hatch.
   f. Normal operation of dehydration units.
   g. Normal operations of compressors, compressor engines, turbines, valves, flanges, and connectors.
   h. During a bradenhead, packer leakage test, or production test lasting less than 24-hours.
   i. When natural gas does not meet the gathering pipeline specifications.
   j. Commissioning of pipelines, equipment, or facilities only for as long as necessary to purge introduced impurities.

19.15.27.8 E. Performance standards

1. Enduring has utilized process simulations with a safety factor to design all separation and storage equipment. The equipment is routed to a Vapor Recovery System and utilizes a flare as back up for periods of startup, shutdown, maintenance, or malfunction of the VRU System.
2. Enduring will install a flare that designed to handle the full volume of vapors from the facility in case of the VRU failure and it its designed with an auto ignition system.

ENDURING RESOURCES, LLC
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
S Escavada Unit 337H, 345H, 346H
NWNE B-22-22N-07W

3. Flare stacks will appropriately sized and designed to ensure proper combustion efficiency.
    a. Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.
    b. Previously installed flare stacks will be retrofitted with an automatic ignitor, continuous pilot, or technology that alerts Enduring of flare malfunction within 18 months after May 25, 2021.
    c. Flare stacks replaced after May 25, 2021, will be equipped with an automatic ignitor or continuous pilot if located at a well or facility with average daily production of 60,000 cubic feet of natural gas or less.
    d. Flare stacks will be located at least 100 feet from the well and storage tanks and securely anchored.
4. Enduring will conduct an AVO inspection on all components for leaks and defects on a weekly basis.
5. Enduring will make and keep records of AVO inspections which will be available to the NMOCD for at least 5 years.
6. Enduring may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
7. Facilities will be designed to minimize waste.
8. Enduring will resolve emergencies as promptly as possible.

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

1. Enduring will have meters on both the low- and high-pressure sides of the flares and the volumes will be recorded in Enduring's SCADA system.
2. Enduring will install equipment to measure the volume of flared natural gas that has an average daily production of 60,000 cubic feet or greater of natural gas.
3. Enduring's measuring equipment will conform to the industry standards.
4. The measurement system is designed such that it cannot be bypassed except for inspections and servicing meters.
5. Enduring will estimate the volume of vented or flared natural gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.

ENDURING RESOURCES, LLC
OGRID NO: 372286
NATURAL GAS MANAGEMENT PLAN
S Escavada Unit 337H, 345H, 346H
NWNE B-22-22N-07W

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.

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-H formation**

WELL INFORMATION:

Name: **S ESCAVADA UNIT 337H**
State: New Mexico
County: Sandoval
Surface Elevation: 6,867 ft ASL (GL) 6,895 ft ASL (KB)
Surface Location: 22-22N-7 Sec-Twn-Rng 306 ft FNL 2,207 ft FEL
36.131251 ° N latitude 107.56133 ° W longitude (NAD 83)
BH Location: 23-22N-7 Sec-Twn-Rng 330 ft FSL 1,626 ft FEL
36.118158 ° N latitude 107.541834 ° W longitude (NAD 83)
Driving Directions: **FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:**
South on US Hwy 550 for 48.9 miles to MM 103.0; Right (South) on Atkins Road for 4.3 miles to 4-way intersection; Straight (South) on Atkins Road for 1.6 mi to 4-way, Straight (South) on Atkins Road for 1.8 mi to fork, Right (South-West) exiting Atkins Road for 0.4 miles to 4-way; Right (North-West) on access road for 0.2 miles to new access on the right side of the road for 0.3 miles to S Escavada Unit 345H PAD (WELLS: 345H, 346H, 337H). The 337H well will be the closest to the location entrance and furthest South of the three wells

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:

Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
Ojo Alamo	6,166	725	725	W	normal
Kirtland	6,076	815	815	W	normal
Fruitland	5,941	950	950	G, W	sub
Pictured Cliffs	5,641	1,250	1,251	G, W	sub
Lewis	5,506	1,385	1,388	G, W	normal
Chacra	5,251	1,640	1,653	G, W	normal
Cliff House	4,161	2,730	2,882	G, W	sub
Menefee	4,124	2,767	2,924	G, W	normal
Point Lookout	3,224	3,667	3,922	G, W	normal
Mancos	3,096	3,795	4,053	O,G	sub (~0.38)
Gallup (MNCS_A)	2,771	4,120	4,379	O,G	sub (~0.38)
MNCS_B	2,676	4,215	4,474	O,G	sub (~0.38)
MNCS_C	2,586	4,305	4,565	O,G	sub (~0.38)
MNCS_Cms	2,541	4,350	4,610	O,G	sub (~0.38)
MNCS_D	2,408	4,483	4,751	O,G	sub (~0.38)
MNCS_E	2,266	4,625	4,923	O,G	sub (~0.38)
MNCS_F	2,218	4,673	4,993	O,G	sub (~0.38)
MNCS_G	2,144	4,747	5,126	O,G	sub (~0.38)
MNCS_H	2,086	4,805	5,260	O,G	sub (~0.38)
MNCS_I	0	NA	0	O,G	sub (~0.38)
FTP TARGET	**2,086**	**4,838**	**5,260**	**O,G**	**sub (~0.38)**
PROJECTED LTP	**2,068**	**4,823**	**12,421**	**O,G**	**sub (~0.38)**

Surface: Nacimiento
Oil & Gas Zones: Several gas bearing zones will be encountered; target formation is the Gallup
Pressure: Normal (0.43 psi/ft) or sub-normal pressure gradients anticipated in all formations
Max. pressure gradient: 0.43 psi/ft Evacuated hole gradient: 0.22 psi/ft
Maximum anticipated BH pressure, assuming maximum pressure gradient: **2,080 psi**
Maximum anticipated surface pressure, assuming partially evacuated hole: **1,020 psi**
Temperature: **Maximum anticipated BHT is 125° F or less**

H_2S INFORMATION:

H_2S Zones: Encountering hydrogen-sulfide bearing zones is **NOT** anticipated.

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

LOGGING, CORING, AND TESTING:

Mud Logs:

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

MWD / 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.

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 minimimize the amount of fluids and solids that require disposal.

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

Solids Disposal:

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

Fluid Program: See "Detailed Drilling Plan" section for 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**	**350 ft (MD)**	**Hole Section Length:**	**350 ft**
0 ft (TVD)	**to**	**350 ft (TVD)**	**Casing Required:**	**350 ft**

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

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

Hole Size: 17-1/2"

Bit / Motor: Mill Tooth or PDC, no motor

MWD / Survey: No MWD, deviation survey

Logging: None

Casing Specs:		**Wt (lb/ft)**	**Grade**	**Conn.**	**Collapse (psi)**	**Burst (psi)**	**Tens. Body (lbs)**	**Tens. Conn (lbs)**
Specs	13.375	54.5	J-55	BTC	1,130	2,730	853,000	909,000
Loading					153	633	116,634	116,634
Min. S.F.					**7.39**	**4.32**	**7.31**	**7.79**

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

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

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

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

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

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

					Cu Ft Slurry
Tail	ASTM Type III Blend	Calcium Chloride 2% BWOC Accelerator	D-CD2 .3% BWOC Dispersant/Friction reducer	.25 lbs/sx Cello Flake - seepage	505.3

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

350 ft (MD)	**to**	**3,095 ft (MD)**	**Hole Section Length:**	**2,745 ft**
350 ft (TVD)	**to**	**2,917 ft (TVD)**	**Casing Required:**	**3,095 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

Hole Size: 12-1/4"

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

Logging: None

Casing Specs:		**Wt (lb/ft)**	**Grade**	**Conn.**	**Collapse (psi)**	**Burst (psi)**	**Tens. Body (lbs)**	**Tens. Conn (lbs)**
Specs	9.625	36.0	J-55	LTC	2,020	3,520	564,000	453,000
Loading					1,274	1,187	191,576	191,576
Min. S.F.					**1.59**	**2.97**	**2.94**	**2.36**

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

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

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

	Cement:	**Type**	**Weight (ppg)**	**Yield (cuft/sk)**	**Water (gal/sk)**	**% Excess**	**Planned TOC (ft MD)**	**Total Cmt (sx)**	**Total Cmt (cu ft)**
Stage 1	Spacer	D-Mud Breaker	8.5				0	10 bbls	
	Lead	90:10 Type III:POZ	12.5	2.140	12.05	70%	0	618	1,322
	Tail	Type III	14.6	1.380	6.64	20%	2,595	150	207
	Displacement	236	est bbls						

Annular Capacity	0.3627	cuft/ft	9-5/8" casing x 13-3/8" casing annulus		
	0.3132	cuft/ft	9-5/8" casing x 12-1/4" hole annulus	9-5/8" 36# ID	8.921
	0.4341	cuft/ft	9-5/8" casing vol	est shoe jt ft	44

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

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

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

3,095	ft (MD)	to	12,421 ft (MD)	Hole Section Length:	9,326 ft
2,917	ft (TVD)	to	4,838 ft (TVD)	Casing Required:	12,421 ft

Estimated KOP:	4,500	ft (MD)	4,241	ft (TVD)
Estimated Landing Point (FTP):	5,260	ft (MD)	4,838	ft (TVD)
Estimated Lateral Length:	7,161	ft (MD)		

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

Hole Size: 8-1/2"

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

Casing Specs:	Size (in)	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	5.500	17.0	P-110	LTC	7,460	10,640	546,000	445,000
Loading					2,383	8,951	282,209	282,209
Min. S.F.					**3.13**	**1.19**	**1.93**	**1.58**

Assumptions: Collapse: fully evacuated casing with 9.5 ppg fluid in the annulus (floating casing during running)
Burst: 8,500 psi maximum surface treating pressure with 10.2 ppg equivalent mud weight sand laden fluid with 8.4 ppg equivalent external pressure gradient
Tension: buoyed weight in 9.0 ppg fluid with 100,000 lbs over-pull

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Spacer	ntegraGuard Sta	11		31.6		0	60 bbls	
Lead	ASTM type I/II	12.4	2.370	13.40	50%	0	490	1,162
Tail	G:POZ blend	13.3	1.570	7.70	10%	4,053	1,351	2,121

Displacement	273	est bbls			
Annular Capacity	0.2691	cuft/ft	5-1/2" casing x 9-5/8" casing annulus		
	0.2291	cuft/ft	5-1/2" casing x 8-1/2" hole annulus		
	0.1245	cuft/ft	5-1/2" casing vol	est shoe jt ft	100

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

American Cementing Liner & Production Blend

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

COMPLETION AND PRODUCTION PLAN:

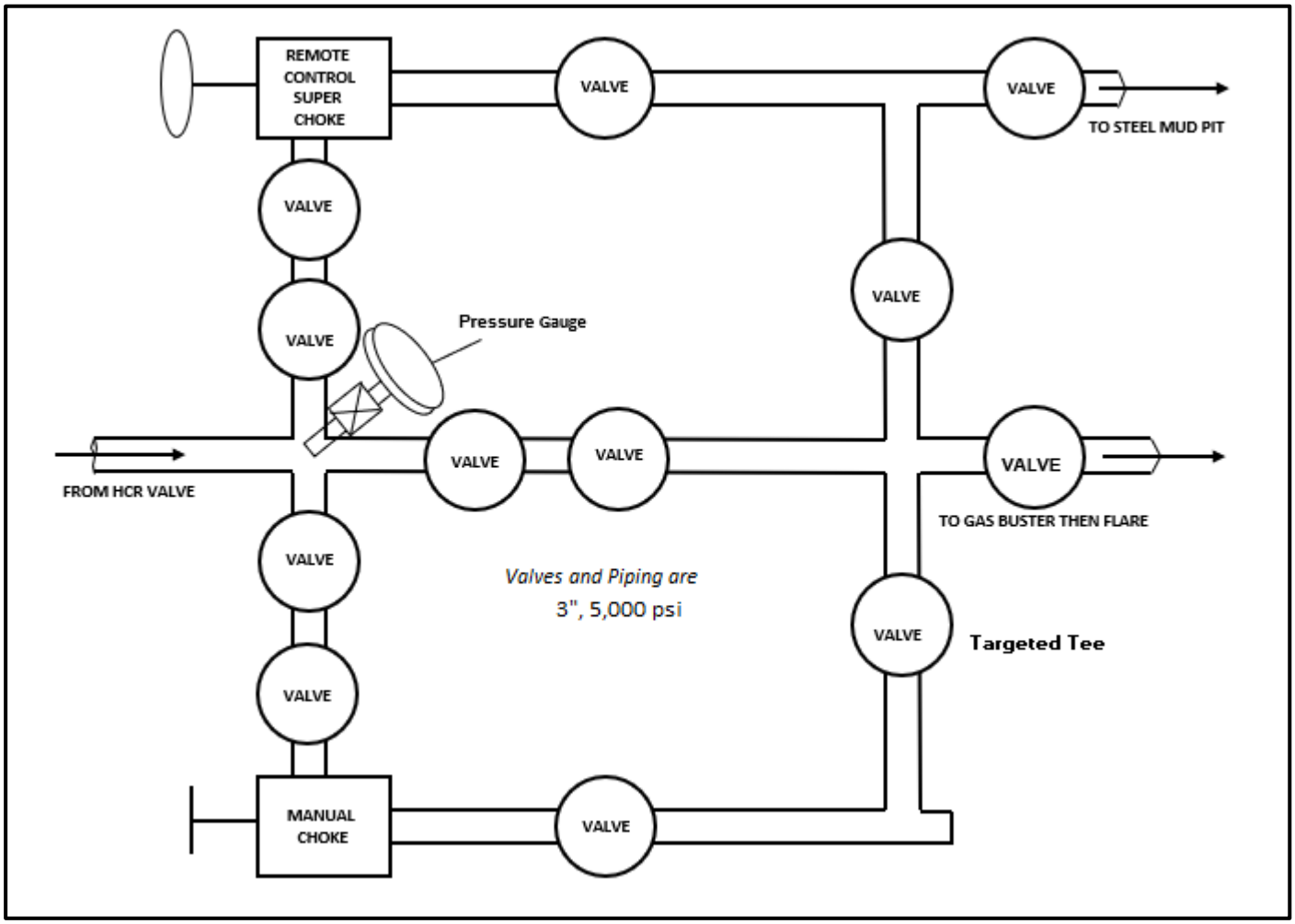
Est Lateral Length:	7,061					
Est Frac Inform:	29	Frac Stages	113,000	bbls slick water	9,180,000	lbs proppant
Flowback:	Flow back through production tubing as pressures allow					
Production:	Produce through production tubing via gas-lift into permanent production and storage facilities					

ESTIMATED START DATES:

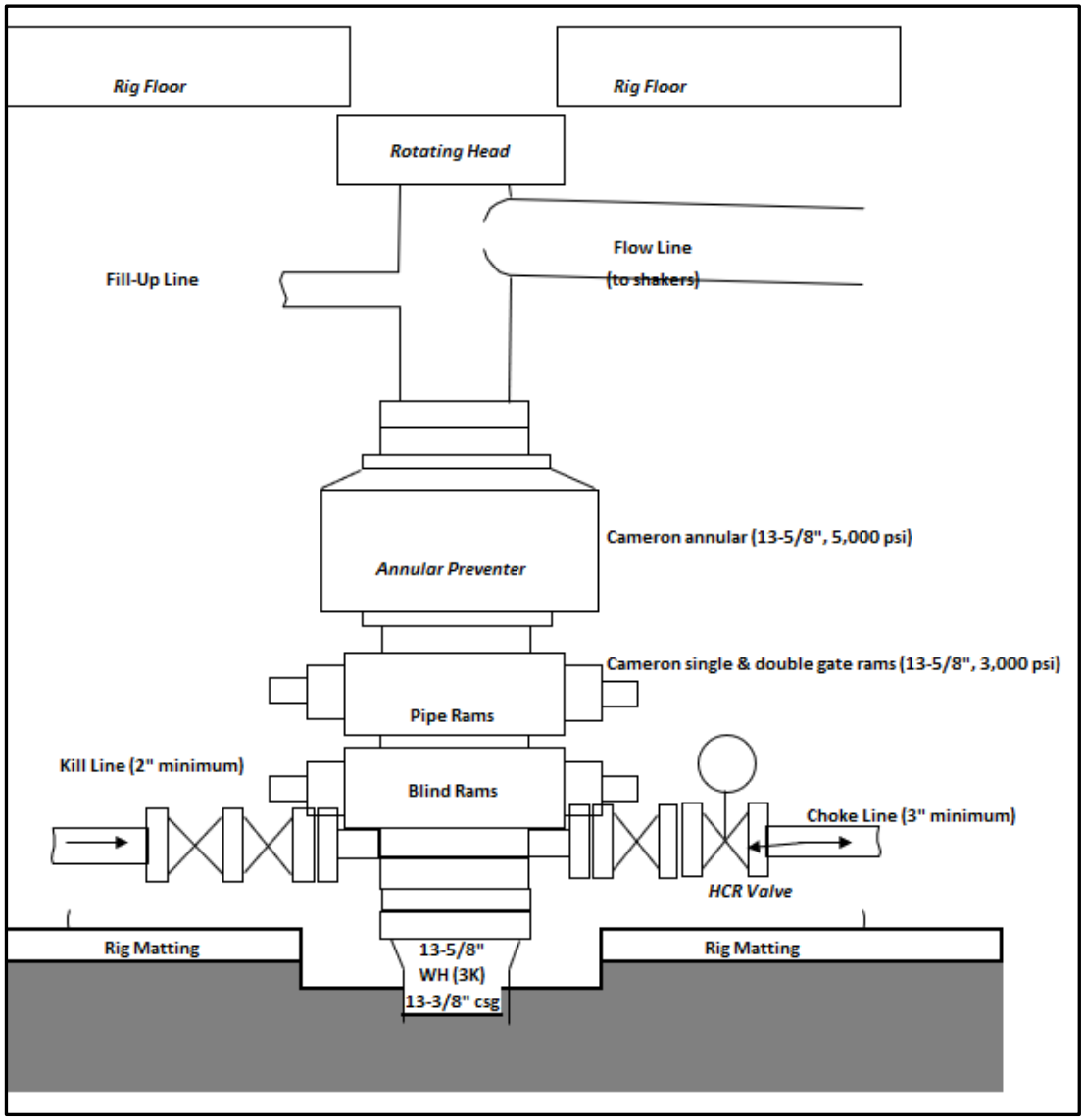
Drilling:	11/1/2023
Completion:	12/31/2023
Production:	2/14/2024

Prepared by:	**Alec Bridge**	**12/20/2021**
Updated:	Greg Olson	2/20/2023
	Greg Olson	3/27/2023
	G Olson	**8/23/2023**

Enduring Resources IV, LLC
CHOKE MANIFOLD



Enduring Resources IV, LLC
BOPE Diagram



WELL NAME: S ESCAVADA UNIT 337H

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

API Number: *not yet assigned*

AFE Number: *not yet assigned*

ER Well Number: *not yet assigned*

State: New Mexico

County: Sandoval

Surface Elev.:	6,867	ft ASL (GL)	6,895	ft ASL (KB)		
Surface Location:	22-22N-7	Sec-Twn- Rng	306	ft FNL	2,207	ft FEL
BH Location:	23-22N-7	Sec-Twn- Rng	330	ft FSL	1626	ft FEL

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

South on US Hwy 550 for 48.9 miles to MM 103.0; Right (South) on Atkins Road for 4.3 miles to 4-way intersection; Straight (South) on Atkins Road for 1.6 mi to 4-way, Straight (South) on Atkins Road for 1.8 mi to fork, Right (South-West) exiting Atkins Road for 0.4 miles to 4-way; Right (North-West) on access road for 0.2 miles to new access on the right side of the road for 0.3 miles to S Escavada Unit 345H PAD (WELLS: 345H, 346H, 337H). The 337H well will be the closest to the location entrance and furthest South of the three wells

QUICK REFERENCE		
Sur TD (MD)	350	ft
Int TD (MD)	3,095	ft
KOP (MD)	4,500	ft
KOP (TVD)	4,241	ft
Target (TVD)	4,838	ft
Curve BUR	10	°/100 ft
POE (MD)	5,260	ft
TD (MD)	12,421	ft
Lat Len (ft)	7,161	ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	3,095	9.625	36.0	J-55	LTC	0	3,095
Production	8.500	12,421	5.500	17.0	P-110	LTC	0	12,421

CEMENT PROPERTIES SUMMARY:

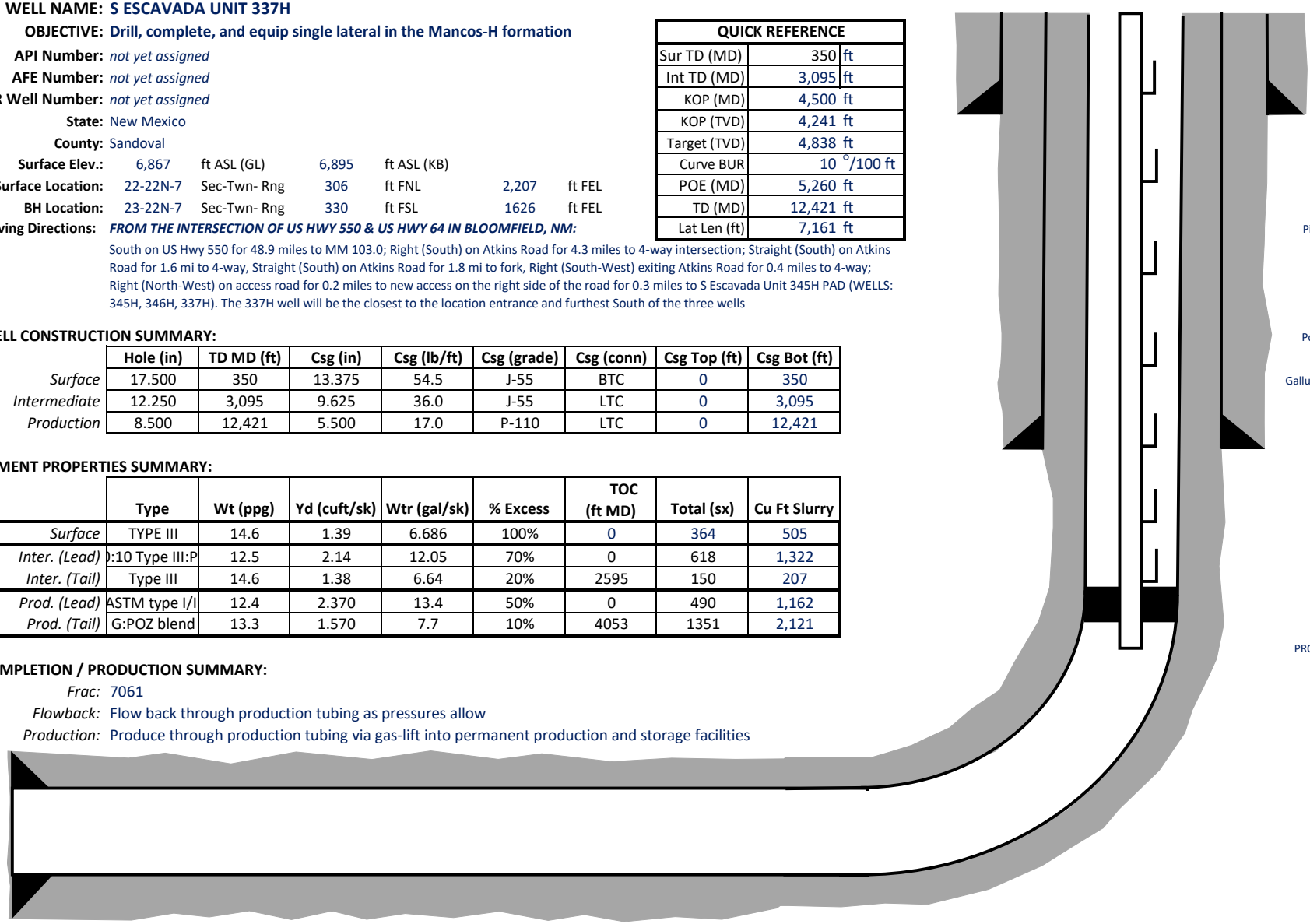
	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	% Excess	TOC (ft MD)	Total (sx)	Cu Ft Slurry
Surface	TYPE III	14.6	1.39	6.686	100%	0	364	505
Inter. (Lead)	):10 Type III:P	12.5	2.14	12.05	70%	0	618	1,322
Inter. (Tail)	Type III	14.6	1.38	6.64	20%	2595	150	207
Prod. (Lead)	ASTM type I/I	12.4	2.370	13.4	50%	0	490	1,162
Prod. (Tail)	G:POZ blend	13.3	1.570	7.7	10%	4053	1351	2,121

COMPLETION / PRODUCTION SUMMARY:

Frac: 7061

Flowback: Flow back through production tubing as pressures allow

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



Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	725	725
Kirtland	815	815
Fruitland	950	950
Pictured Cliffs	1,250	1,251
Lewis	1,385	1,388
Chacra	1,640	1,653
Cliff House	2,730	2,882
Menefee	2,767	2,924
Point Lookout	3,667	3,922
Mancos	3,795	4,053
Gallup (MNCS_A)	4,120	4,379
MNCS_B	4,215	4,474
MNCS_C	4,305	4,565
MNCS_Cms	4,350	4,610
MNCS_D	4,483	4,751
MNCS_E	4,625	4,923
MNCS_F	4,673	4,993
MNCS_G	4,747	5,126
MNCS_H	4,805	5,260
MNCS_I	NA	0
FTP TARGET	4,805	5,260
PROJECTED LTP	4,823	12,421

Well: S Escavada Unit 337H
Site: S Escavada Unit 337, 345 & 346
Project: Sandoval County, New Mexico NAD83 NM C
Design: rev0
Rig:

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Central Zone
System Datum: Mean Sea Level
Depth Reference: RKB=6867+28 @ 6895.00ft

Surface location:

Northing	Easting	Latitude	Longitude
1869653.610	1253181.598	36.131251000	-107.561330000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 9.35°

Azimuths to Grid North
True North: 0.77°
Magnetic North: 9.35°

Magnetic Field
Strength: 49148.9nT
Dip Angle: 62.67°
Date: 9/12/2022
Model: IGRF2020

CASING DETAILS

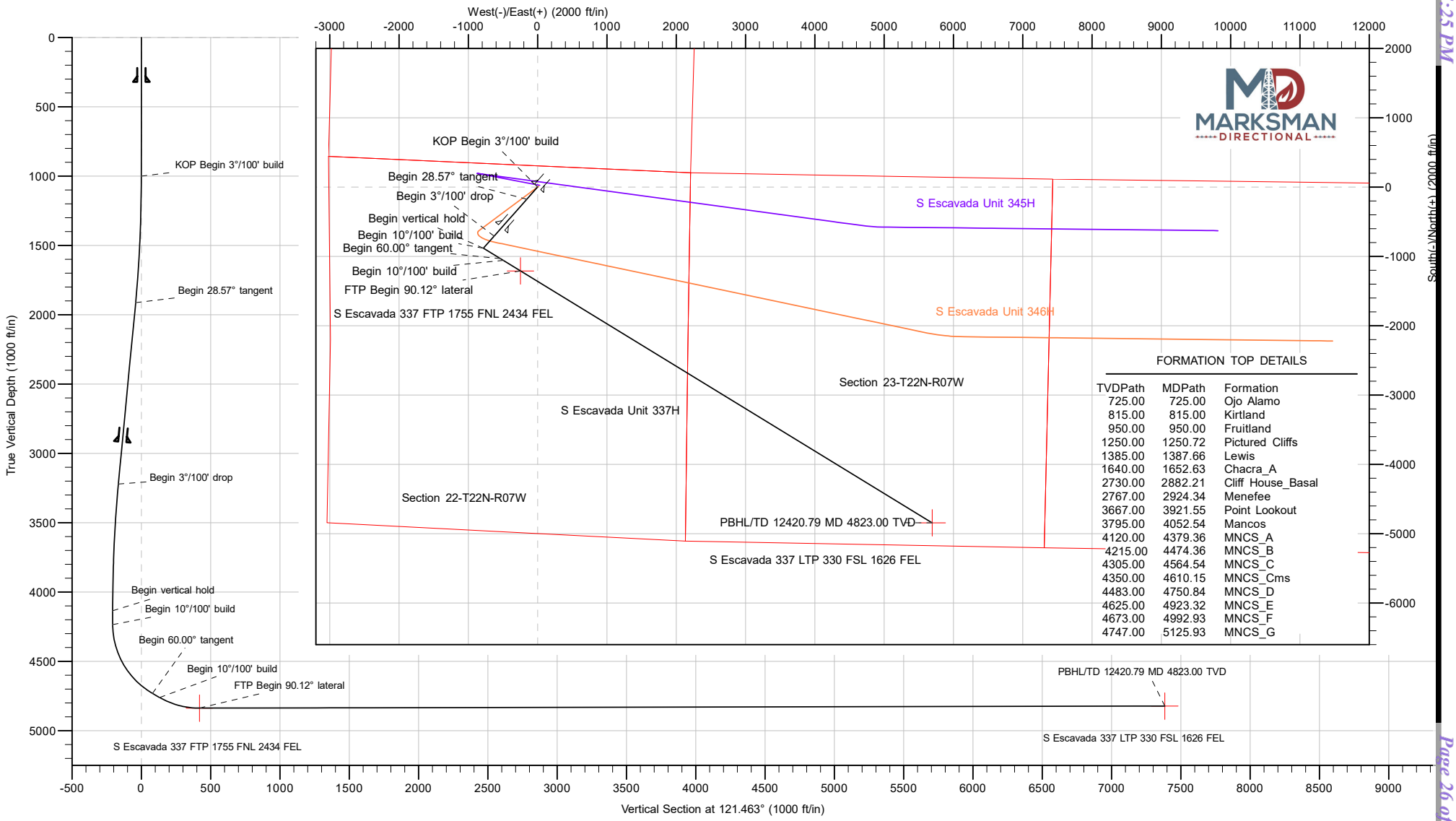
TVD	MD	Name
320.00	320.00	13 3/8" Casing
2917.00	3095.14	9 5/8" Casing

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	1952.36	28.57	221.553	1913.38	-174.04	-154.26	3.00	221.55	-40.74	Begin 28.57° tangent
4	3442.05	28.57	221.553	3221.66	-707.19	-626.83	0.00	0.00	-165.55	Begin 3°/100' drop
5	4394.40	0.00	0.000	4135.04	-881.23	-781.09	3.00	180.00	-206.30	Begin vertical hold
6	4494.40	0.00	0.000	4235.04	-881.23	-781.09	0.00	0.00	-206.30	Begin 10°/100' build
7	5094.40	60.00	121.463	4731.24	-1030.76	-536.73	10.00	121.46	80.18	Begin 60.00° tangent
8	5154.40	60.00	121.463	4761.24	-1057.88	-492.41	0.00	0.00	132.14	Begin 10°/100' build
9	5455.64	90.12	121.463	4838.00	-1208.05	-247.00	10.00	0.00	419.86	FTP Begin 90.12° lateral
10	12420.79	90.12	121.463	4823.00	-4843.49	5694.11	0.00	0.00	7384.99	PBHL/TD 12420.79 MD 4823.00 TVD

DESIGN TARGET DETAILS

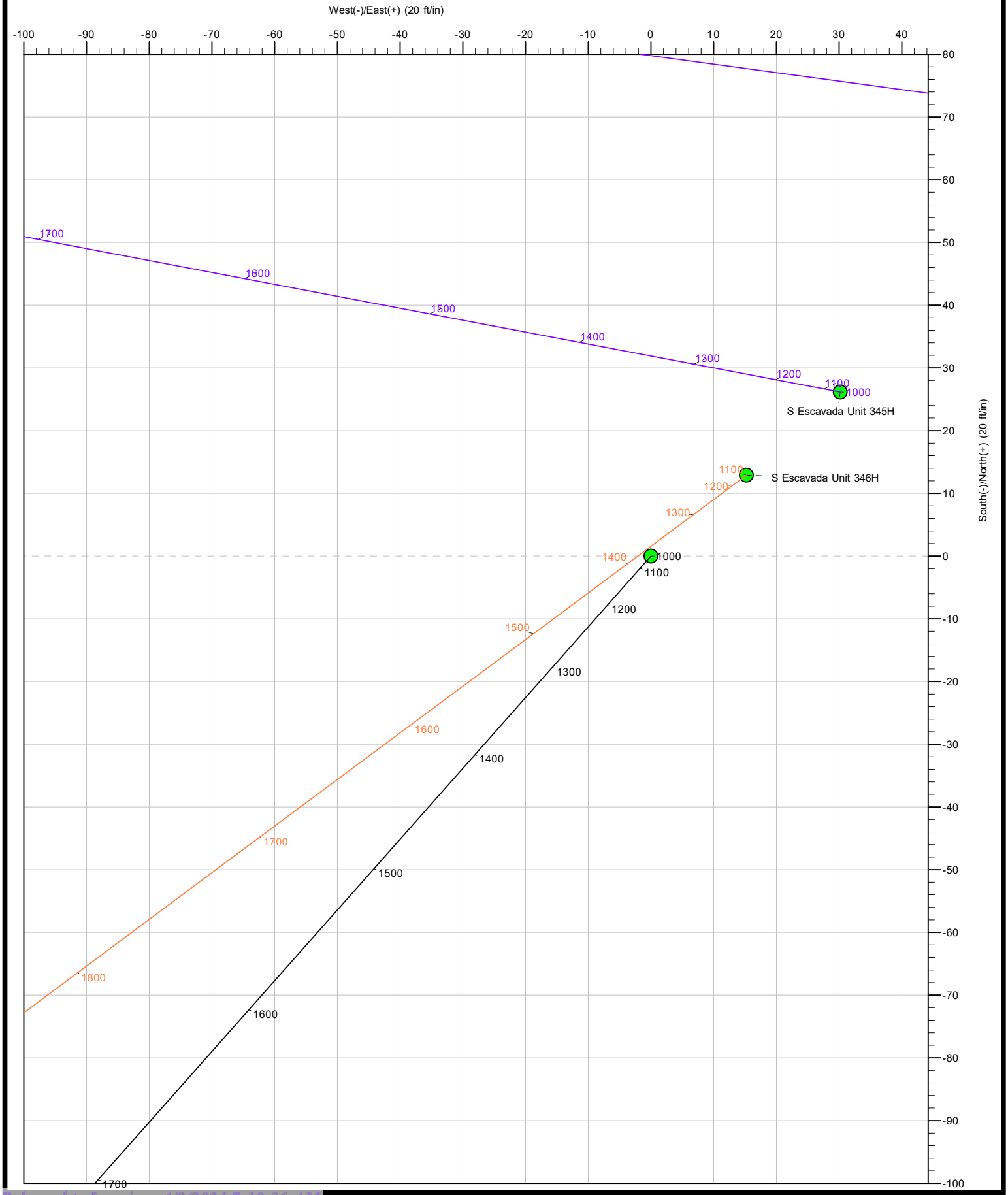
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitu
S Escavada 337 LTP 330 FSL 1626 FEL	4823.00	-4843.49	5694.11	1864810.133	1258875.693	36.118158000	-107.5418340
S Escavada 337 FTP 1755 FNL 2434 FEL	4838.00	-1208.05	-247.00	1868445.567	1252934.601	36.127924000	-107.5621110



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
725.00	725.00	Ojo Alamo
815.00	815.00	Kirtland
950.00	950.00	Fruitland
1250.00	1250.72	Pictured Cliffs
1385.00	1387.66	Lewis
1640.00	1652.63	Chacra_A
2730.00	2882.21	Cliff House_Basal
2767.00	2924.34	Menefee
3667.00	3921.55	Point Lookout
3795.00	4052.54	Mancos
4120.00	4379.36	MNCS_A
4215.00	4474.36	MNCS_B
4305.00	4564.54	MNCS_C
4350.00	4610.15	MNCS_Cms
4483.00	4750.84	MNCS_D
4625.00	4923.32	MNCS_E
4673.00	4992.93	MNCS_F
4747.00	5125.93	MNCS_G

Well: S Escavada Unit 337H
Site: S Escavada Unit 337, 345 & 346
Project: Sandoval County, New Mexico NAD83 NM C
Design: rev0
Rig:



Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project Sandoval County, New Mexico NAD83 NM C

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

Site S Escavada Unit 337, 345 & 346

Site Position:		**Northing:**	1,869,666.513 usft	**Latitude:**	36.131287000
From:	Lat/Long	**Easting:**	1,253,196.837 usft	**Longitude:**	-107.561279000
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "		

Well S Escavada Unit 337H, Surf loc: 306 FNL 2207 FEL Section 22T22N-R07W-

Well Position	**+N/-S**	0.00 ft	**Northing:**	1,869,653.611 usft	**Latitude:**	36.131251000
	+E/-W	0.00 ft	**Easting:**	1,253,181.599 usft	**Longitude:**	-107.561330000
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,867.00 ft
Grid Convergence:		-0.77 °				

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	9/12/2022	8.58	62.67	49,148.94968318

Design rev0

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	121.463

Plan Survey Tool Program **Date** 9/13/2022

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	12,420.76	rev0 (Original Hole)	MWD	
				OWSG MWD - Standard	

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,952.36	28.57	221.553	1,913.38	-174.04	-154.26	3.00	3.00	0.00	221.55	
3,442.05	28.57	221.553	3,221.66	-707.19	-626.83	0.00	0.00	0.00	0.00	
4,394.40	0.00	0.000	4,135.04	-881.23	-781.09	3.00	-3.00	0.00	180.00	
4,494.40	0.00	0.000	4,235.04	-881.23	-781.09	0.00	0.00	0.00	0.00	
5,094.40	60.00	121.463	4,731.24	-1,030.76	-536.73	10.00	10.00	0.00	121.46	
5,154.40	60.00	121.463	4,761.24	-1,057.88	-492.41	0.00	0.00	0.00	0.00	
5,455.64	90.12	121.463	4,838.00	-1,208.05	-247.00	10.00	10.00	0.00	0.00	
12,420.79	90.12	121.463	4,823.00	-4,843.49	5,694.11	0.00	0.00	0.00	0.00	S Escavada 337 LTP

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
320.00	0.00	0.000	320.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8" Casing									
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
725.00	0.00	0.000	725.00	0.00	0.00	0.00	0.00	0.00	0.00
Ojo Alamo									
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
815.00	0.00	0.000	815.00	0.00	0.00	0.00	0.00	0.00	0.00
Kirtland									
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
950.00	0.00	0.000	950.00	0.00	0.00	0.00	0.00	0.00	0.00
Fruitland									
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	221.553	1,099.95	-1.96	-1.74	-0.46	3.00	3.00	0.00
1,200.00	6.00	221.553	1,199.63	-7.83	-6.94	-1.83	3.00	3.00	0.00
1,250.72	7.52	221.553	1,250.00	-12.30	-10.90	-2.88	3.00	3.00	0.00
Pictured Cliffs									
1,300.00	9.00	221.553	1,298.77	-17.60	-15.60	-4.12	3.00	3.00	0.00
1,387.66	11.63	221.553	1,385.00	-29.34	-26.01	-6.87	3.00	3.00	0.00
Lewis									
1,400.00	12.00	221.553	1,397.08	-31.23	-27.68	-7.31	3.00	3.00	0.00
1,500.00	15.00	221.553	1,494.31	-48.70	-43.17	-11.40	3.00	3.00	0.00
1,600.00	18.00	221.553	1,590.18	-69.95	-62.00	-16.38	3.00	3.00	0.00
1,652.63	19.58	221.553	1,640.00	-82.64	-73.25	-19.35	3.00	3.00	0.00
Chacra_A									
1,700.00	21.00	221.553	1,684.43	-94.93	-84.14	-22.22	3.00	3.00	0.00
1,800.00	24.00	221.553	1,776.81	-123.56	-109.52	-28.93	3.00	3.00	0.00
1,900.00	27.00	221.553	1,867.06	-155.78	-138.08	-36.47	3.00	3.00	0.00
1,952.36	28.57	221.553	1,913.38	-174.04	-154.26	-40.74	3.00	3.00	0.00
Begin 28.57° tangent									
2,000.00	28.57	221.553	1,955.22	-191.09	-169.38	-44.73	0.00	0.00	0.00
2,100.00	28.57	221.553	2,043.04	-226.88	-201.10	-53.11	0.00	0.00	0.00
2,200.00	28.57	221.553	2,130.86	-262.67	-232.82	-61.49	0.00	0.00	0.00
2,300.00	28.57	221.553	2,218.69	-298.46	-264.54	-69.87	0.00	0.00	0.00
2,400.00	28.57	221.553	2,306.51	-334.25	-296.27	-78.25	0.00	0.00	0.00
2,500.00	28.57	221.553	2,394.33	-370.04	-327.99	-86.63	0.00	0.00	0.00
2,600.00	28.57	221.553	2,482.16	-405.83	-359.71	-95.00	0.00	0.00	0.00
2,700.00	28.57	221.553	2,569.98	-441.62	-391.43	-103.38	0.00	0.00	0.00
2,800.00	28.57	221.553	2,657.80	-477.41	-423.15	-111.76	0.00	0.00	0.00
2,882.21	28.57	221.553	2,730.00	-506.83	-449.23	-118.65	0.00	0.00	0.00
Cliff House_Basal									
2,900.00	28.57	221.553	2,745.62	-513.19	-454.88	-120.14	0.00	0.00	0.00
2,924.34	28.57	221.553	2,767.00	-521.91	-462.60	-122.18	0.00	0.00	0.00
Menefee									
3,000.00	28.57	221.553	2,833.45	-548.98	-486.60	-128.52	0.00	0.00	0.00
3,095.14	28.57	221.553	2,917.00	-583.03	-516.78	-136.49	0.00	0.00	0.00

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9 5/8" Casing									
3,100.00	28.57	221.553	2,921.27	-584.77	-518.32	-136.90	0.00	0.00	0.00
3,200.00	28.57	221.553	3,009.09	-620.56	-550.04	-145.27	0.00	0.00	0.00
3,300.00	28.57	221.553	3,096.91	-656.35	-581.77	-153.65	0.00	0.00	0.00
3,400.00	28.57	221.553	3,184.74	-692.14	-613.49	-162.03	0.00	0.00	0.00
3,442.05	28.57	221.553	3,221.66	-707.19	-626.83	-165.55	0.00	0.00	0.00
Begin 3°/100' drop									
3,500.00	26.83	221.553	3,272.97	-727.35	-644.70	-170.27	3.00	-3.00	0.00
3,600.00	23.83	221.553	3,363.35	-759.36	-673.07	-177.77	3.00	-3.00	0.00
3,700.00	20.83	221.553	3,455.84	-787.80	-698.27	-184.42	3.00	-3.00	0.00
3,800.00	17.83	221.553	3,550.19	-812.57	-720.23	-190.22	3.00	-3.00	0.00
3,900.00	14.83	221.553	3,646.14	-833.61	-738.88	-195.15	3.00	-3.00	0.00
3,921.55	14.19	221.553	3,667.00	-837.65	-742.46	-196.09	3.00	-3.00	0.00
Point Lookout									
4,000.00	11.83	221.553	3,743.43	-850.86	-754.17	-199.19	3.00	-3.00	0.00
4,052.54	10.26	221.553	3,795.00	-858.39	-760.85	-200.95	3.00	-3.00	0.00
Mancos									
4,100.00	8.83	221.553	3,841.80	-864.28	-766.07	-202.33	3.00	-3.00	0.00
4,200.00	5.83	221.553	3,940.97	-873.83	-774.53	-204.56	3.00	-3.00	0.00
4,300.00	2.83	221.553	4,040.68	-879.48	-779.54	-205.89	3.00	-3.00	0.00
4,379.36	0.45	221.553	4,120.00	-881.19	-781.05	-206.29	3.00	-3.00	0.00
MNCS_A									
4,394.40	0.00	0.000	4,135.04	-881.23	-781.09	-206.30	3.00	-3.00	0.00
Begin vertical hold									
4,400.00	0.00	0.000	4,140.64	-881.23	-781.09	-206.30	0.00	0.00	0.00
4,474.36	0.00	0.000	4,215.00	-881.23	-781.09	-206.30	0.00	0.00	0.00
MNCS_B									
4,494.40	0.00	0.000	4,235.04	-881.23	-781.09	-206.30	0.00	0.00	0.00
Begin 10°/100' build									
4,500.00	0.56	121.463	4,240.64	-881.24	-781.07	-206.27	10.00	10.00	0.00
4,550.00	5.56	121.463	4,290.55	-882.64	-778.79	-203.60	10.00	10.00	0.00
4,564.54	7.01	121.463	4,305.00	-883.47	-777.43	-202.01	10.00	10.00	0.00
MNCS_C									
4,600.00	10.56	121.463	4,340.04	-886.29	-772.81	-196.59	10.00	10.00	0.00
4,610.15	11.57	121.463	4,350.00	-887.31	-771.15	-194.64	10.00	10.00	0.00
MNCS_Cms									
4,650.00	15.56	121.463	4,388.73	-892.19	-763.18	-185.30	10.00	10.00	0.00
4,700.00	20.56	121.463	4,436.25	-900.28	-749.96	-169.80	10.00	10.00	0.00
4,750.00	25.56	121.463	4,482.24	-910.50	-733.26	-150.22	10.00	10.00	0.00
4,750.84	25.64	121.463	4,483.00	-910.69	-732.95	-149.86	10.00	10.00	0.00
MNCS_D									
4,800.00	30.56	121.463	4,526.35	-922.77	-713.21	-126.71	10.00	10.00	0.00
4,850.00	35.56	121.463	4,568.24	-937.00	-689.95	-99.45	10.00	10.00	0.00
4,900.00	40.56	121.463	4,607.60	-953.08	-663.66	-68.63	10.00	10.00	0.00
4,923.32	42.89	121.463	4,625.00	-961.18	-650.43	-53.11	10.00	10.00	0.00
MNCS_E									
4,950.00	45.56	121.463	4,644.12	-970.90	-634.55	-34.50	10.00	10.00	0.00
4,992.93	49.85	121.463	4,673.00	-987.47	-607.48	-2.76	10.00	10.00	0.00
MNCS_F									
5,000.00	50.56	121.463	4,677.53	-990.30	-602.84	2.68	10.00	10.00	0.00
5,050.00	55.56	121.463	4,707.57	-1,011.15	-568.76	42.63	10.00	10.00	0.00
5,094.40	60.00	121.463	4,731.24	-1,030.76	-536.73	80.18	10.00	10.00	0.00

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Begin 60.00° tangent									
5,100.00	60.00	121.463	4,734.03	-1,033.29	-532.60	85.03	0.00	0.00	0.00
5,125.93	60.00	121.463	4,747.00	-1,045.01	-513.44	107.49	0.00	0.00	0.00
MNCS_G									
5,154.40	60.00	121.463	4,761.24	-1,057.88	-492.41	132.14	0.00	0.00	0.00
Begin 10°/100' build									
5,200.00	64.56	121.463	4,782.44	-1,078.94	-457.99	172.50	10.00	10.00	0.00
5,250.00	69.56	121.463	4,801.92	-1,102.97	-418.72	218.53	10.00	10.00	0.00
5,300.00	74.56	121.463	4,817.32	-1,127.79	-378.16	266.08	10.00	10.00	0.00
5,350.00	79.56	121.463	4,828.51	-1,153.21	-336.61	314.80	10.00	10.00	0.00
5,400.00	84.56	121.463	4,835.42	-1,179.05	-294.38	364.30	10.00	10.00	0.00
5,450.00	89.56	121.463	4,837.98	-1,205.11	-251.80	414.22	10.00	10.00	0.00
5,455.64	90.12	121.463	4,838.00	-1,208.05	-247.00	419.86	10.00	10.00	0.00
FTP Begin 90.12° lateral									
5,500.00	90.12	121.463	4,837.90	-1,231.20	-209.15	464.22	0.00	0.00	0.00
5,600.00	90.12	121.463	4,837.69	-1,283.40	-123.86	564.22	0.00	0.00	0.00
5,700.00	90.12	121.463	4,837.47	-1,335.59	-38.56	664.22	0.00	0.00	0.00
5,800.00	90.12	121.463	4,837.26	-1,387.79	46.74	764.22	0.00	0.00	0.00
5,900.00	90.12	121.463	4,837.04	-1,439.98	132.04	864.22	0.00	0.00	0.00
6,000.00	90.12	121.463	4,836.82	-1,492.18	217.33	964.22	0.00	0.00	0.00
6,100.00	90.12	121.463	4,836.61	-1,544.37	302.63	1,064.22	0.00	0.00	0.00
6,200.00	90.12	121.463	4,836.39	-1,596.57	387.93	1,164.22	0.00	0.00	0.00
6,300.00	90.12	121.463	4,836.18	-1,648.76	473.23	1,264.22	0.00	0.00	0.00
6,400.00	90.12	121.463	4,835.96	-1,700.96	558.52	1,364.22	0.00	0.00	0.00
6,500.00	90.12	121.463	4,835.75	-1,753.15	643.82	1,464.22	0.00	0.00	0.00
6,600.00	90.12	121.463	4,835.53	-1,805.35	729.12	1,564.22	0.00	0.00	0.00
6,700.00	90.12	121.463	4,835.32	-1,857.54	814.42	1,664.22	0.00	0.00	0.00
6,800.00	90.12	121.463	4,835.10	-1,909.74	899.71	1,764.22	0.00	0.00	0.00
6,900.00	90.12	121.463	4,834.89	-1,961.93	985.01	1,864.22	0.00	0.00	0.00
7,000.00	90.12	121.463	4,834.67	-2,014.12	1,070.31	1,964.22	0.00	0.00	0.00
7,100.00	90.12	121.463	4,834.46	-2,066.32	1,155.61	2,064.22	0.00	0.00	0.00
7,200.00	90.12	121.463	4,834.24	-2,118.51	1,240.90	2,164.22	0.00	0.00	0.00
7,300.00	90.12	121.463	4,834.03	-2,170.71	1,326.20	2,264.22	0.00	0.00	0.00
7,400.00	90.12	121.463	4,833.81	-2,222.90	1,411.50	2,364.22	0.00	0.00	0.00
7,500.00	90.12	121.463	4,833.59	-2,275.10	1,496.80	2,464.22	0.00	0.00	0.00
7,600.00	90.12	121.463	4,833.38	-2,327.29	1,582.09	2,564.22	0.00	0.00	0.00
7,700.00	90.12	121.463	4,833.16	-2,379.49	1,667.39	2,664.22	0.00	0.00	0.00
7,800.00	90.12	121.463	4,832.95	-2,431.68	1,752.69	2,764.21	0.00	0.00	0.00
7,900.00	90.12	121.463	4,832.73	-2,483.88	1,837.99	2,864.21	0.00	0.00	0.00
8,000.00	90.12	121.463	4,832.52	-2,536.07	1,923.28	2,964.21	0.00	0.00	0.00
8,100.00	90.12	121.463	4,832.30	-2,588.27	2,008.58	3,064.21	0.00	0.00	0.00
8,200.00	90.12	121.463	4,832.09	-2,640.46	2,093.88	3,164.21	0.00	0.00	0.00
8,300.00	90.12	121.463	4,831.87	-2,692.66	2,179.18	3,264.21	0.00	0.00	0.00
8,400.00	90.12	121.463	4,831.66	-2,744.85	2,264.47	3,364.21	0.00	0.00	0.00
8,500.00	90.12	121.463	4,831.44	-2,797.05	2,349.77	3,464.21	0.00	0.00	0.00
8,600.00	90.12	121.463	4,831.23	-2,849.24	2,435.07	3,564.21	0.00	0.00	0.00
8,700.00	90.12	121.463	4,831.01	-2,901.43	2,520.37	3,664.21	0.00	0.00	0.00
8,800.00	90.12	121.463	4,830.80	-2,953.63	2,605.66	3,764.21	0.00	0.00	0.00
8,900.00	90.12	121.463	4,830.58	-3,005.82	2,690.96	3,864.21	0.00	0.00	0.00
9,000.00	90.12	121.463	4,830.37	-3,058.02	2,776.26	3,964.21	0.00	0.00	0.00
9,100.00	90.12	121.463	4,830.15	-3,110.21	2,861.56	4,064.21	0.00	0.00	0.00
9,200.00	90.12	121.463	4,829.93	-3,162.41	2,946.85	4,164.21	0.00	0.00	0.00
9,300.00	90.12	121.463	4,829.72	-3,214.60	3,032.15	4,264.21	0.00	0.00	0.00

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,400.00	90.12	121.463	4,829.50	-3,266.80	3,117.45	4,364.21	0.00	0.00	0.00
9,500.00	90.12	121.463	4,829.29	-3,318.99	3,202.75	4,464.21	0.00	0.00	0.00
9,600.00	90.12	121.463	4,829.07	-3,371.19	3,288.04	4,564.21	0.00	0.00	0.00
9,700.00	90.12	121.463	4,828.86	-3,423.38	3,373.34	4,664.21	0.00	0.00	0.00
9,800.00	90.12	121.463	4,828.64	-3,475.58	3,458.64	4,764.21	0.00	0.00	0.00
9,900.00	90.12	121.463	4,828.43	-3,527.77	3,543.94	4,864.21	0.00	0.00	0.00
10,000.00	90.12	121.463	4,828.21	-3,579.97	3,629.23	4,964.21	0.00	0.00	0.00
10,100.00	90.12	121.463	4,828.00	-3,632.16	3,714.53	5,064.21	0.00	0.00	0.00
10,200.00	90.12	121.463	4,827.78	-3,684.35	3,799.83	5,164.21	0.00	0.00	0.00
10,300.00	90.12	121.463	4,827.57	-3,736.55	3,885.13	5,264.21	0.00	0.00	0.00
10,400.00	90.12	121.463	4,827.35	-3,788.74	3,970.42	5,364.21	0.00	0.00	0.00
10,500.00	90.12	121.463	4,827.14	-3,840.94	4,055.72	5,464.21	0.00	0.00	0.00
10,600.00	90.12	121.463	4,826.92	-3,893.13	4,141.02	5,564.21	0.00	0.00	0.00
10,700.00	90.12	121.463	4,826.71	-3,945.33	4,226.32	5,664.21	0.00	0.00	0.00
10,800.00	90.12	121.463	4,826.49	-3,997.52	4,311.61	5,764.21	0.00	0.00	0.00
10,900.00	90.12	121.463	4,826.27	-4,049.72	4,396.91	5,864.21	0.00	0.00	0.00
11,000.00	90.12	121.463	4,826.06	-4,101.91	4,482.21	5,964.21	0.00	0.00	0.00
11,100.00	90.12	121.463	4,825.84	-4,154.11	4,567.51	6,064.21	0.00	0.00	0.00
11,200.00	90.12	121.463	4,825.63	-4,206.30	4,652.80	6,164.21	0.00	0.00	0.00
11,300.00	90.12	121.463	4,825.41	-4,258.50	4,738.10	6,264.21	0.00	0.00	0.00
11,400.00	90.12	121.463	4,825.20	-4,310.69	4,823.40	6,364.21	0.00	0.00	0.00
11,500.00	90.12	121.463	4,824.98	-4,362.89	4,908.70	6,464.21	0.00	0.00	0.00
11,600.00	90.12	121.463	4,824.77	-4,415.08	4,993.99	6,564.21	0.00	0.00	0.00
11,700.00	90.12	121.463	4,824.55	-4,467.28	5,079.29	6,664.21	0.00	0.00	0.00
11,800.00	90.12	121.463	4,824.34	-4,519.47	5,164.59	6,764.21	0.00	0.00	0.00
11,900.00	90.12	121.463	4,824.12	-4,571.66	5,249.89	6,864.21	0.00	0.00	0.00
12,000.00	90.12	121.463	4,823.91	-4,623.86	5,335.18	6,964.21	0.00	0.00	0.00
12,100.00	90.12	121.463	4,823.69	-4,676.05	5,420.48	7,064.21	0.00	0.00	0.00
12,200.00	90.12	121.463	4,823.48	-4,728.25	5,505.78	7,164.20	0.00	0.00	0.00
12,300.00	90.12	121.463	4,823.26	-4,780.44	5,591.08	7,264.20	0.00	0.00	0.00
12,400.00	90.12	121.463	4,823.04	-4,832.64	5,676.37	7,364.20	0.00	0.00	0.00
12,420.79	90.12	121.463	4,823.00	-4,843.49	5,694.11	7,384.99	0.00	0.00	0.00
PBHL/TD 12420.79 MD 4823.00 TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
S Escavada 337 LTP 33 - plan hits target center - Point	0.00	357.843	4,823.00	-4,843.49	5,694.11	1,864,810.133	1,258,875.693	36.118158000	-107.541834000
S Escavada 337 FTP 17 - plan hits target center - Point	0.00	357.842	4,838.00	-1,208.05	-247.00	1,868,445.567	1,252,934.601	36.127924000	-107.562111000

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
320.00	320.00	13 3/8" Casing	13-5/8	17-1/2
3,095.14	2,917.00	9 5/8" Casing	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
725.00	725.00	Ojo Alamo			
815.00	815.00	Kirtland			
950.00	950.00	Fruitland			
1,250.72	1,250.00	Pictured Cliffs			
1,387.66	1,385.00	Lewis			
1,652.63	1,640.00	Chacra_A			
2,882.21	2,730.00	Cliff House_Basal			
2,924.34	2,767.00	Menefee			
3,921.55	3,667.00	Point Lookout			
4,052.54	3,795.00	Mancos			
4,379.36	4,120.00	MNCS_A			
4,474.36	4,215.00	MNCS_B			
4,564.54	4,305.00	MNCS_C			
4,610.15	4,350.00	MNCS_Cms			
4,750.84	4,483.00	MNCS_D			
4,923.32	4,625.00	MNCS_E			
4,992.93	4,673.00	MNCS_F			
5,125.93	4,747.00	MNCS_G			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,000.00	1,000.00	0.00	0.00	KOP Begin 3°/100' build
1,952.36	1,913.38	-174.04	-154.26	Begin 28.57° tangent
3,442.05	3,221.66	-707.19	-626.83	Begin 3°/100' drop
4,394.40	4,135.04	-881.23	-781.09	Begin vertical hold
4,494.40	4,235.04	-881.23	-781.09	Begin 10°/100' build
5,094.40	4,731.24	-1,030.76	-536.73	Begin 60.00° tangent
5,154.40	4,761.24	-1,057.88	-492.41	Begin 10°/100' build
5,455.64	4,838.00	-1,208.05	-247.00	FTP Begin 90.12° lateral
12,420.79	4,823.00	-4,843.49	5,694.11	PBHL/TD 12420.79 MD 4823.00 TVD

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project Sandoval County, New Mexico NAD83 NM C

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

Site S Escavada Unit 337, 345 & 346

Site Position:		**Northing:**	1,869,666.513 usft	**Latitude:**	36.131287000
From:	Lat/Long	**Easting:**	1,253,196.837 usft	**Longitude:**	-107.561279000
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "		

Well S Escavada Unit 337H, Surf loc: 306 FNL 2207 FEL Section 22T22N-R07W-

Well Position	**+N/-S**	0.00 ft	**Northing:**	1,869,653.611 usft	**Latitude:**	36.131251000
	+E/-W	0.00 ft	**Easting:**	1,253,181.599 usft	**Longitude:**	-107.561330000
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,867.00 ft
Grid Convergence:						

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	9/12/2022	8.58	62.67	49,148.94968318

Design rev0

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	121.463

Plan Survey Tool Program **Date**

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	12,420.76	rev0 (Original Hole)		

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,952.36	28.57	221.553	1,913.38	-174.04	-154.26	3.00	3.00	0.00	221.55	
3,442.05	28.57	221.553	3,221.66	-707.19	-626.83	0.00	0.00	0.00	0.00	
4,394.40	0.00	0.000	4,135.04	-881.23	-781.09	3.00	-3.00	0.00	180.00	
4,494.40	0.00	0.000	4,235.04	-881.23	-781.09	0.00	0.00	0.00	0.00	
5,094.40	60.00	121.463	4,731.24	-1,030.76	-536.73	10.00	10.00	0.00	121.46	
5,154.40	60.00	121.463	4,761.24	-1,057.88	-492.41	0.00	0.00	0.00	0.00	
5,455.64	90.12	121.463	4,838.00	-1,208.05	-247.00	10.00	10.00	0.00	0.00	
12,420.79	90.12	121.463	4,823.00	-4,843.49	5,694.11	0.00	0.00	0.00	0.00	S Escavada 337 LTP

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.000	0.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
100.00	0.00	0.000	100.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
200.00	0.00	0.000	200.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
300.00	0.00	0.000	300.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
320.00	0.00	0.000	320.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
13 3/8" Casing									
400.00	0.00	0.000	400.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
500.00	0.00	0.000	500.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
600.00	0.00	0.000	600.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
700.00	0.00	0.000	700.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
725.00	0.00	0.000	725.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
Ojo Alamo									
800.00	0.00	0.000	800.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
815.00	0.00	0.000	815.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
Kirtland									
900.00	0.00	0.000	900.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
950.00	0.00	0.000	950.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
Fruitland									
1,000.00	0.00	0.000	1,000.00	0.00	0.00	1,869,653.611	1,253,181.599	36.131251000	-107.561330000
KOP Begin 3°/100' build									
1,100.00	3.00	221.553	1,099.95	-1.96	-1.74	1,869,651.652	1,253,179.863	36.131245556	-107.561335788
1,200.00	6.00	221.553	1,199.63	-7.83	-6.94	1,869,645.781	1,253,174.659	36.131229239	-107.561353138
1,250.72	7.52	221.553	1,250.00	-12.30	-10.90	1,869,641.313	1,253,170.699	36.131216821	-107.561366342
Pictured Cliffs									
1,300.00	9.00	221.553	1,298.77	-17.60	-15.60	1,869,636.014	1,253,166.002	36.131202094	-107.561382000
1,387.66	11.63	221.553	1,385.00	-29.34	-26.01	1,869,624.270	1,253,155.592	36.131169452	-107.561416707
Lewis									
1,400.00	12.00	221.553	1,397.08	-31.23	-27.68	1,869,622.378	1,253,153.916	36.131164196	-107.561422296
1,500.00	15.00	221.553	1,494.31	-48.70	-43.17	1,869,604.911	1,253,138.433	36.131115647	-107.561473917
1,600.00	18.00	221.553	1,590.18	-69.95	-62.00	1,869,583.659	1,253,119.596	36.131056582	-107.561536719
1,652.63	19.58	221.553	1,640.00	-82.64	-73.25	1,869,570.974	1,253,108.353	36.131021327	-107.561574204
Chacra_A									
1,700.00	21.00	221.553	1,684.43	-94.93	-84.14	1,869,558.681	1,253,097.457	36.130987161	-107.561610531
1,800.00	24.00	221.553	1,776.81	-123.56	-109.52	1,869,530.047	1,253,072.077	36.130907576	-107.561695151
1,900.00	27.00	221.553	1,867.06	-155.78	-138.08	1,869,497.833	1,253,043.524	36.130818045	-107.561790346
1,952.36	28.57	221.553	1,913.38	-174.04	-154.26	1,869,479.570	1,253,027.336	36.130767284	-107.561844317
Begin 28.57° tangent									
2,000.00	28.57	221.553	1,955.22	-191.09	-169.38	1,869,462.518	1,253,012.222	36.130719892	-107.561894707
2,100.00	28.57	221.553	2,043.04	-226.88	-201.10	1,869,426.729	1,252,980.500	36.130620423	-107.562000468
2,200.00	28.57	221.553	2,130.86	-262.67	-232.82	1,869,390.940	1,252,948.778	36.130520953	-107.562106229
2,300.00	28.57	221.553	2,218.69	-298.46	-264.54	1,869,355.151	1,252,917.055	36.130421483	-107.562211989
2,400.00	28.57	221.553	2,306.51	-334.25	-296.27	1,869,319.362	1,252,885.333	36.130322013	-107.562317750
2,500.00	28.57	221.553	2,394.33	-370.04	-327.99	1,869,283.573	1,252,853.611	36.130222543	-107.562423510
2,600.00	28.57	221.553	2,482.16	-405.83	-359.71	1,869,247.784	1,252,821.889	36.130123073	-107.562529270
2,700.00	28.57	221.553	2,569.98	-441.62	-391.43	1,869,211.995	1,252,790.167	36.130023603	-107.562635029
2,800.00	28.57	221.553	2,657.80	-477.41	-423.15	1,869,176.206	1,252,758.445	36.129924133	-107.562740789
2,882.21	28.57	221.553	2,730.00	-506.83	-449.23	1,869,146.784	1,252,732.366	36.129842358	-107.562827733
Cliff House_Basal									
2,900.00	28.57	221.553	2,745.62	-513.19	-454.88	1,869,140.417	1,252,726.723	36.129824663	-107.562846548
2,924.34	28.57	221.553	2,767.00	-521.91	-462.60	1,869,131.706	1,252,719.001	36.129800451	-107.562872290
Menefee									
3,000.00	28.57	221.553	2,833.45	-548.98	-486.60	1,869,104.628	1,252,695.000	36.129725192	-107.562952306

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,095.14	28.57	221.553	2,917.00	-583.03	-516.78	1,869,070.578	1,252,664.820	36.129630557	-107.563052924
9 5/8" Casing									
3,100.00	28.57	221.553	2,921.27	-584.77	-518.32	1,869,068.839	1,252,663.278	36.129625722	-107.563058065
3,200.00	28.57	221.553	3,009.09	-620.56	-550.04	1,869,033.050	1,252,631.556	36.129526251	-107.563163823
3,300.00	28.57	221.553	3,096.91	-656.35	-581.77	1,868,997.261	1,252,599.833	36.129426780	-107.563269581
3,400.00	28.57	221.553	3,184.74	-692.14	-613.49	1,868,961.472	1,252,568.111	36.129327310	-107.563375339
3,442.05	28.57	221.553	3,221.66	-707.19	-626.83	1,868,946.423	1,252,554.773	36.129285485	-107.563419807
Begin 3°/100' drop									
3,500.00	26.83	221.553	3,272.97	-727.35	-644.70	1,868,926.264	1,252,536.904	36.129229454	-107.563479379
3,600.00	23.83	221.553	3,363.35	-759.36	-673.07	1,868,894.248	1,252,508.527	36.129140471	-107.563573985
3,700.00	20.83	221.553	3,455.84	-787.80	-698.27	1,868,865.816	1,252,483.326	36.129061448	-107.563658002
3,800.00	17.83	221.553	3,550.19	-812.57	-720.23	1,868,841.046	1,252,461.370	36.128992601	-107.563731199
3,900.00	14.83	221.553	3,646.14	-833.61	-738.88	1,868,820.004	1,252,442.720	36.128934120	-107.563793376
3,921.55	14.19	221.553	3,667.00	-837.65	-742.46	1,868,815.965	1,252,439.139	36.128922892	-107.563805314
Point Lookout									
4,000.00	11.83	221.553	3,743.43	-850.86	-754.17	1,868,802.750	1,252,427.426	36.128886163	-107.563844363
4,052.54	10.26	221.553	3,795.00	-858.39	-760.85	1,868,795.218	1,252,420.750	36.128865229	-107.563866619
Mancos									
4,100.00	8.83	221.553	3,841.80	-864.28	-766.07	1,868,789.329	1,252,415.531	36.128848863	-107.563884020
4,200.00	5.83	221.553	3,940.97	-873.83	-774.53	1,868,779.780	1,252,407.067	36.128822322	-107.563912238
4,300.00	2.83	221.553	4,040.68	-879.48	-779.54	1,868,774.128	1,252,402.057	36.128806612	-107.563928940
4,379.36	0.45	221.553	4,120.00	-881.19	-781.05	1,868,772.427	1,252,400.549	36.128801884	-107.563933968
MNCS_A									
4,394.40	0.00	0.000	4,135.04	-881.23	-781.09	1,868,772.382	1,252,400.510	36.128801760	-107.563934099
Begin vertical hold									
4,400.00	0.00	0.000	4,140.64	-881.23	-781.09	1,868,772.382	1,252,400.510	36.128801760	-107.563934099
4,474.36	0.00	0.000	4,215.00	-881.23	-781.09	1,868,772.382	1,252,400.510	36.128801760	-107.563934099
MNCS_B									
4,494.40	0.00	0.000	4,235.04	-881.23	-781.09	1,868,772.382	1,252,400.510	36.128801760	-107.563934099
Begin 10°/100' build									
4,500.00	0.56	121.463	4,240.64	-881.24	-781.07	1,868,772.368	1,252,400.533	36.128801722	-107.563934019
4,550.00	5.56	121.463	4,290.55	-882.64	-778.79	1,868,770.976	1,252,402.809	36.128797982	-107.563926251
4,564.54	7.01	121.463	4,305.00	-883.47	-777.43	1,868,770.145	1,252,404.166	36.128795751	-107.563921616
MNCS_C									
4,600.00	10.56	121.463	4,340.04	-886.29	-772.81	1,868,767.318	1,252,408.786	36.128788158	-107.563905846
4,610.15	11.57	121.463	4,350.00	-887.31	-771.15	1,868,766.301	1,252,410.448	36.128785427	-107.563900174
MNCS_Cms									
4,650.00	15.56	121.463	4,388.73	-892.19	-763.18	1,868,761.423	1,252,418.420	36.128772325	-107.563872960
4,700.00	20.56	121.463	4,436.25	-900.28	-749.96	1,868,753.335	1,252,431.638	36.128750603	-107.563827843
4,750.00	25.56	121.463	4,482.24	-910.50	-733.26	1,868,743.116	1,252,448.337	36.128723158	-107.563770838
4,750.84	25.64	121.463	4,483.00	-910.69	-732.95	1,868,742.927	1,252,448.647	36.128722649	-107.563769783
MNCS_D									
4,800.00	30.56	121.463	4,526.35	-922.77	-713.21	1,868,730.844	1,252,468.393	36.128690198	-107.563702380
4,850.00	35.56	121.463	4,568.24	-937.00	-689.95	1,868,716.612	1,252,491.651	36.128651974	-107.563622989
4,900.00	40.56	121.463	4,607.60	-953.08	-663.66	1,868,700.528	1,252,517.935	36.128608777	-107.563533269
4,923.32	42.89	121.463	4,625.00	-961.18	-650.43	1,868,692.430	1,252,531.170	36.128587026	-107.563488090
MNCS_E									
4,950.00	45.56	121.463	4,644.12	-970.90	-634.55	1,868,682.716	1,252,547.044	36.128560937	-107.563433904
4,992.93	49.85	121.463	4,673.00	-987.47	-607.48	1,868,666.147	1,252,574.122	36.128516436	-107.563341475
MNCS_F									
5,000.00	50.56	121.463	4,677.53	-990.30	-602.84	1,868,663.310	1,252,578.758	36.128508816	-107.563325649
5,050.00	55.56	121.463	4,707.57	-1,011.15	-568.76	1,868,642.458	1,252,612.835	36.128452812	-107.563209329

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,094.40	60.00	121.463	4,731.24	-1,030.76	-536.73	1,868,622.856	1,252,644.869	36.128400165	-107.563099981
Begin 60.00° tangent									
5,100.00	60.00	121.463	4,734.03	-1,033.29	-532.60	1,868,620.326	1,252,649.004	36.128393370	-107.563085868
5,125.93	60.00	121.463	4,747.00	-1,045.01	-513.44	1,868,608.604	1,252,668.159	36.128361888	-107.563020483
MNCS_G									
5,154.40	60.00	121.463	4,761.24	-1,057.88	-492.41	1,868,595.734	1,252,689.191	36.128327322	-107.562948690
Begin 10°/100' build									
5,200.00	64.56	121.463	4,782.44	-1,078.94	-457.99	1,868,574.672	1,252,723.612	36.128270753	-107.562831198
5,250.00	69.56	121.463	4,801.92	-1,102.97	-418.72	1,868,550.647	1,252,762.876	36.128206225	-107.562697174
5,300.00	74.56	121.463	4,817.32	-1,127.79	-378.16	1,868,525.826	1,252,803.438	36.128139561	-107.562558717
5,350.00	79.56	121.463	4,828.51	-1,153.21	-336.61	1,868,500.399	1,252,844.990	36.128071270	-107.562416880
5,400.00	84.56	121.463	4,835.42	-1,179.05	-294.38	1,868,474.561	1,252,887.217	36.128001871	-107.562272743
5,450.00	89.56	121.463	4,837.98	-1,205.11	-251.80	1,868,448.506	1,252,929.796	36.127931892	-107.562127402
5,455.64	90.12	121.463	4,838.00	-1,208.05	-247.00	1,868,445.564	1,252,934.604	36.127923990	-107.562110991
FTP Begin 90.12° lateral									
5,500.00	90.12	121.463	4,837.90	-1,231.20	-209.15	1,868,422.409	1,252,972.445	36.127861798	-107.561981824
5,600.00	90.12	121.463	4,837.69	-1,283.40	-123.86	1,868,370.214	1,253,057.742	36.127721611	-107.561690669
5,700.00	90.12	121.463	4,837.47	-1,335.59	-38.56	1,868,318.019	1,253,143.039	36.127581423	-107.561399515
5,800.00	90.12	121.463	4,837.26	-1,387.79	46.74	1,868,265.825	1,253,228.337	36.127441234	-107.561108361
5,900.00	90.12	121.463	4,837.04	-1,439.98	132.04	1,868,213.630	1,253,313.634	36.127301044	-107.560817209
6,000.00	90.12	121.463	4,836.82	-1,492.18	217.33	1,868,161.436	1,253,398.931	36.127160854	-107.560526058
6,100.00	90.12	121.463	4,836.61	-1,544.37	302.63	1,868,109.241	1,253,484.229	36.127020663	-107.560234908
6,200.00	90.12	121.463	4,836.39	-1,596.57	387.93	1,868,057.047	1,253,569.526	36.126880471	-107.559943759
6,300.00	90.12	121.463	4,836.18	-1,648.76	473.23	1,868,004.852	1,253,654.823	36.126740279	-107.559652611
6,400.00	90.12	121.463	4,835.96	-1,700.96	558.52	1,867,952.657	1,253,740.121	36.126600085	-107.559361464
6,500.00	90.12	121.463	4,835.75	-1,753.15	643.82	1,867,900.463	1,253,825.418	36.126459891	-107.559070318
6,600.00	90.12	121.463	4,835.53	-1,805.35	729.12	1,867,848.268	1,253,910.715	36.126319697	-107.558779173
6,700.00	90.12	121.463	4,835.32	-1,857.54	814.42	1,867,796.074	1,253,996.013	36.126179501	-107.558488028
6,800.00	90.12	121.463	4,835.10	-1,909.74	899.71	1,867,743.879	1,254,081.310	36.126039305	-107.558196885
6,900.00	90.12	121.463	4,834.89	-1,961.93	985.01	1,867,691.684	1,254,166.608	36.125899108	-107.557905744
7,000.00	90.12	121.463	4,834.67	-2,014.12	1,070.31	1,867,639.490	1,254,251.905	36.125758911	-107.557614603
7,100.00	90.12	121.463	4,834.46	-2,066.32	1,155.61	1,867,587.295	1,254,337.202	36.125618712	-107.557323463
7,200.00	90.12	121.463	4,834.24	-2,118.51	1,240.90	1,867,535.101	1,254,422.500	36.125478513	-107.557032324
7,300.00	90.12	121.463	4,834.03	-2,170.71	1,326.20	1,867,482.906	1,254,507.797	36.125338313	-107.556741186
7,400.00	90.12	121.463	4,833.81	-2,222.90	1,411.50	1,867,430.712	1,254,593.094	36.125198113	-107.556450049
7,500.00	90.12	121.463	4,833.59	-2,275.10	1,496.80	1,867,378.517	1,254,678.392	36.125057911	-107.556158913
7,600.00	90.12	121.463	4,833.38	-2,327.29	1,582.09	1,867,326.322	1,254,763.689	36.124917709	-107.555867778
7,700.00	90.12	121.463	4,833.16	-2,379.49	1,667.39	1,867,274.128	1,254,848.986	36.124777507	-107.555576644
7,800.00	90.12	121.463	4,832.95	-2,431.68	1,752.69	1,867,221.933	1,254,934.284	36.124637303	-107.555285512
7,900.00	90.12	121.463	4,832.73	-2,483.88	1,837.99	1,867,169.739	1,255,019.581	36.124497099	-107.554994380
8,000.00	90.12	121.463	4,832.52	-2,536.07	1,923.28	1,867,117.544	1,255,104.878	36.124356894	-107.554703249
8,100.00	90.12	121.463	4,832.30	-2,588.27	2,008.58	1,867,065.350	1,255,190.176	36.124216688	-107.554412119
8,200.00	90.12	121.463	4,832.09	-2,640.46	2,093.88	1,867,013.155	1,255,275.473	36.124076482	-107.554120991
8,300.00	90.12	121.463	4,831.87	-2,692.66	2,179.18	1,866,960.960	1,255,360.771	36.123936275	-107.553829863
8,400.00	90.12	121.463	4,831.66	-2,744.85	2,264.47	1,866,908.766	1,255,446.068	36.123796067	-107.553538736
8,500.00	90.12	121.463	4,831.44	-2,797.05	2,349.77	1,866,856.571	1,255,531.365	36.123655858	-107.553247611
8,600.00	90.12	121.463	4,831.23	-2,849.24	2,435.07	1,866,804.377	1,255,616.663	36.123515649	-107.552956486
8,700.00	90.12	121.463	4,831.01	-2,901.43	2,520.37	1,866,752.182	1,255,701.960	36.123375439	-107.552665363
8,800.00	90.12	121.463	4,830.80	-2,953.63	2,605.66	1,866,699.988	1,255,787.257	36.123235228	-107.552374240
8,900.00	90.12	121.463	4,830.58	-3,005.82	2,690.96	1,866,647.793	1,255,872.555	36.123095016	-107.552083118
9,000.00	90.12	121.463	4,830.37	-3,058.02	2,776.26	1,866,595.598	1,255,957.852	36.122954804	-107.551791998
9,100.00	90.12	121.463	4,830.15	-3,110.21	2,861.56	1,866,543.404	1,256,043.149	36.122814591	-107.551500878
9,200.00	90.12	121.463	4,829.93	-3,162.41	2,946.85	1,866,491.209	1,256,128.447	36.122674377	-107.551209760
9,300.00	90.12	121.463	4,829.72	-3,214.60	3,032.15	1,866,439.015	1,256,213.744	36.122534163	-107.550918642

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,400.00	90.12	121.463	4,829.50	-3,266.80	3,117.45	1,866,386.820	1,256,299.041	36.122393948	-107.550627526
9,500.00	90.12	121.463	4,829.29	-3,318.99	3,202.75	1,866,334.625	1,256,384.339	36.122253732	-107.550336411
9,600.00	90.12	121.463	4,829.07	-3,371.19	3,288.04	1,866,282.431	1,256,469.636	36.122113515	-107.550045296
9,700.00	90.12	121.463	4,828.86	-3,423.38	3,373.34	1,866,230.236	1,256,554.934	36.121973297	-107.549754183
9,800.00	90.12	121.463	4,828.64	-3,475.58	3,458.64	1,866,178.042	1,256,640.231	36.121833079	-107.549463070
9,900.00	90.12	121.463	4,828.43	-3,527.77	3,543.94	1,866,125.847	1,256,725.528	36.121692860	-107.549171959
10,000.00	90.12	121.463	4,828.21	-3,579.97	3,629.23	1,866,073.653	1,256,810.826	36.121552641	-107.548880849
10,100.00	90.12	121.463	4,828.00	-3,632.16	3,714.53	1,866,021.458	1,256,896.123	36.121412421	-107.548589739
10,200.00	90.12	121.463	4,827.78	-3,684.35	3,799.83	1,865,969.263	1,256,981.420	36.121272199	-107.548298631
10,300.00	90.12	121.463	4,827.57	-3,736.55	3,885.13	1,865,917.069	1,257,066.718	36.121131978	-107.548007524
10,400.00	90.12	121.463	4,827.35	-3,788.74	3,970.42	1,865,864.874	1,257,152.015	36.120991755	-107.547716418
10,500.00	90.12	121.463	4,827.14	-3,840.94	4,055.72	1,865,812.680	1,257,237.312	36.120851532	-107.547425312
10,600.00	90.12	121.463	4,826.92	-3,893.13	4,141.02	1,865,760.485	1,257,322.610	36.120711308	-107.547134208
10,700.00	90.12	121.463	4,826.71	-3,945.33	4,226.32	1,865,708.291	1,257,407.907	36.120571083	-107.546843105
10,800.00	90.12	121.463	4,826.49	-3,997.52	4,311.61	1,865,656.096	1,257,493.204	36.120430858	-107.546552003
10,900.00	90.12	121.463	4,826.27	-4,049.72	4,396.91	1,865,603.901	1,257,578.502	36.120290631	-107.546260902
11,000.00	90.12	121.463	4,826.06	-4,101.91	4,482.21	1,865,551.707	1,257,663.799	36.120150405	-107.545969802
11,100.00	90.12	121.463	4,825.84	-4,154.11	4,567.51	1,865,499.512	1,257,749.096	36.120010177	-107.545678703
11,200.00	90.12	121.463	4,825.63	-4,206.30	4,652.80	1,865,447.318	1,257,834.394	36.119869949	-107.545387605
11,300.00	90.12	121.463	4,825.41	-4,258.50	4,738.10	1,865,395.123	1,257,919.691	36.119729719	-107.545096508
11,400.00	90.12	121.463	4,825.20	-4,310.69	4,823.40	1,865,342.929	1,258,004.989	36.119589490	-107.544805412
11,500.00	90.12	121.463	4,824.98	-4,362.89	4,908.70	1,865,290.734	1,258,090.286	36.119449259	-107.544514317
11,600.00	90.12	121.463	4,824.77	-4,415.08	4,993.99	1,865,238.539	1,258,175.583	36.119309028	-107.544223223
11,700.00	90.12	121.463	4,824.55	-4,467.28	5,079.29	1,865,186.345	1,258,260.881	36.119168796	-107.543932130
11,800.00	90.12	121.463	4,824.34	-4,519.47	5,164.59	1,865,134.150	1,258,346.178	36.119028563	-107.543641038
11,900.00	90.12	121.463	4,824.12	-4,571.66	5,249.89	1,865,081.956	1,258,431.475	36.118888329	-107.543349947
12,000.00	90.12	121.463	4,823.91	-4,623.86	5,335.18	1,865,029.761	1,258,516.773	36.118748095	-107.543058857
12,100.00	90.12	121.463	4,823.69	-4,676.05	5,420.48	1,864,977.566	1,258,602.070	36.118607860	-107.542767768
12,200.00	90.12	121.463	4,823.48	-4,728.25	5,505.78	1,864,925.372	1,258,687.367	36.118467624	-107.542476680
12,300.00	90.12	121.463	4,823.26	-4,780.44	5,591.08	1,864,873.177	1,258,772.665	36.118327389	-107.542185593
12,400.00	90.12	121.463	4,823.04	-4,832.64	5,676.37	1,864,820.983	1,258,857.962	36.118187152	-107.541894509
12,420.79	90.12	121.463	4,823.00	-4,843.49	5,694.11	1,864,810.133	1,258,875.693	36.118158000	-107.541834000
PBHL/TD 12420.79 MD 4823.00 TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
S Escavada 337 LTP 33 - plan hits target center - Point	0.00	357.843	4,823.00	-4,843.49	5,694.11	1,864,810.133	1,258,875.693	36.118158000	-107.541834000
S Escavada 337 FTP 17 - plan hits target center - Point	0.00	357.842	4,838.00	-1,208.05	-247.00	1,868,445.567	1,252,934.601	36.127924000	-107.562111000

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site:	S Escavada Unit 337, 345 & 346	**North Reference:**	Grid
Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
320.00	320.00	13 3/8" Casing	13-5/8	17-1/2
3,095.14	2,917.00	9 5/8" Casing	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
725.00	725.00	Ojo Alamo			
815.00	815.00	Kirtland			
950.00	950.00	Fruitland			
1,250.72	1,250.00	Pictured Cliffs			
1,387.66	1,385.00	Lewis			
1,652.63	1,640.00	Chacra_A			
2,882.21	2,730.00	Cliff House_Basal			
2,924.34	2,767.00	Menefee			
3,921.55	3,667.00	Point Lookout			
4,052.54	3,795.00	Mancos			
4,379.36	4,120.00	MNCS_A			
4,474.36	4,215.00	MNCS_B			
4,564.54	4,305.00	MNCS_C			
4,610.15	4,350.00	MNCS_Cms			
4,750.84	4,483.00	MNCS_D			
4,923.32	4,625.00	MNCS_E			
4,992.93	4,673.00	MNCS_F			
5,125.93	4,747.00	MNCS_G			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,000.00	1,000.00	0.00	0.00	KOP Begin 3°/100' build
1,952.36	1,913.38	-174.04	-154.26	Begin 28.57° tangent
3,442.05	3,221.66	-707.19	-626.83	Begin 3°/100' drop
4,394.40	4,135.04	-881.23	-781.09	Begin vertical hold
4,494.40	4,235.04	-881.23	-781.09	Begin 10°/100' build
5,094.40	4,731.24	-1,030.76	-536.73	Begin 60.00° tangent
5,154.40	4,761.24	-1,057.88	-492.41	Begin 10°/100' build
5,455.64	4,838.00	-1,208.05	-247.00	FTP Begin 90.12° lateral
12,420.79	4,823.00	-4,843.49	5,694.11	PBHL/TD 12420.79 MD 4823.00 TVD

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Project:	Sandoval County, New Mexico NAD83 NM C	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Reference Site:	S Escavada Unit 337, 345 & 346	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	DB_Feb2822
Reference Design:	rev0	**Offset TVD Reference:**	Offset Datum

Reference rev0

Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.00ft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,442.08ft	**Error Surface:**	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 9/13/2022

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	12,420.76	rev0 (Original Hole)	MWD	OWSG MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S Escavada Unit 337, 345 & 346						
S Escavada Unit 345H - Original Hole - rev0	1,000.00	1,000.00	39.95	33.24	5.954	CC, ES
S Escavada Unit 345H - Original Hole - rev0	1,100.00	1,101.24	40.98	33.57	5.532	SF
S Escavada Unit 346H - Original Hole - rev0	1,000.00	1,000.00	19.97	13.26	2.975	CC, ES, SF

Offset Design: S Escavada Unit 337, 345 & 346 - S Escavada Unit 345H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD **Rule Assigned:** **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	49.07	26.17	30.19	39.95				
100.00	100.00	100.00	100.00	0.13	0.13	49.07	26.17	30.19	39.95	39.69	0.26	154.793	
200.00	200.00	200.00	200.00	0.49	0.49	49.07	26.17	30.19	39.95	38.98	0.98	40.975	
300.00	300.00	300.00	300.00	0.85	0.85	49.07	26.17	30.19	39.95	38.26	1.69	23.612	
400.00	400.00	400.00	400.00	1.20	1.20	49.07	26.17	30.19	39.95	37.54	2.41	16.585	
500.00	500.00	500.00	500.00	1.56	1.56	49.07	26.17	30.19	39.95	36.83	3.13	12.781	
600.00	600.00	600.00	600.00	1.92	1.92	49.07	26.17	30.19	39.95	36.11	3.84	10.397	
700.00	700.00	700.00	700.00	2.28	2.28	49.07	26.17	30.19	39.95	35.39	4.56	8.762	
800.00	800.00	800.00	800.00	2.64	2.64	49.07	26.17	30.19	39.95	34.68	5.28	7.571	
900.00	900.00	900.00	900.00	3.00	3.00	49.07	26.17	30.19	39.95	33.96	5.99	6.666	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	49.07	26.17	30.19	39.95	33.24	6.71	5.954	CC, ES
1,100.00	1,099.95	1,101.24	1,101.20	3.70	3.71	-175.91	26.67	27.55	40.98	33.57	7.41	5.532	SF
1,200.00	1,199.63	1,202.08	1,201.70	4.03	4.07	174.94	28.17	19.69	44.83	36.74	8.09	5.542	
1,300.00	1,298.77	1,302.09	1,300.83	4.38	4.43	163.23	30.63	6.76	53.20	44.40	8.79	6.049	
1,400.00	1,397.08	1,400.91	1,397.97	4.75	4.81	152.35	34.01	-11.00	67.35	57.81	9.53	7.064	
1,500.00	1,494.31	1,498.19	1,492.56	5.15	5.21	143.81	38.25	-33.28	87.53	77.22	10.31	8.490	
1,600.00	1,590.18	1,593.61	1,584.10	5.59	5.65	137.52	43.28	-59.71	113.42	102.29	11.13	10.192	
1,700.00	1,684.43	1,688.17	1,673.81	6.08	6.12	133.37	48.87	-89.07	144.28	132.27	12.01	12.015	
1,800.00	1,776.81	1,781.98	1,762.77	6.64	6.61	131.59	54.44	-118.33	178.77	165.83	12.95	13.810	
1,900.00	1,867.06	1,874.55	1,850.55	7.27	7.12	131.13	59.94	-147.21	216.54	202.61	13.93	15.544	
2,000.00	1,955.22	1,965.82	1,937.09	7.96	7.63	131.78	65.35	-175.68	257.16	242.21	14.95	17.200	
2,100.00	2,043.04	2,056.87	2,023.43	8.70	8.16	132.74	70.76	-204.08	298.30	282.31	15.99	18.651	
2,200.00	2,130.86	2,147.91	2,109.76	9.47	8.69	133.47	76.17	-232.48	339.49	322.43	17.06	19.899	
2,300.00	2,218.69	2,238.96	2,196.10	10.25	9.24	134.04	81.57	-260.88	380.72	362.57	18.15	20.978	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Project:	Sandoval County, New Mexico NAD83 NM C	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Reference Site:	S Escavada Unit 337, 345 & 346	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	DB_Feb2822
Reference Design:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: S Escavada Unit 337, 345 & 346 - S Escavada Unit 345H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Rule Assigned: Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,400.00	2,306.51	2,330.01	2,282.44	11.06	9.79	134.50	86.98	-289.28	421.97	402.72	19.25	21.916	
2,500.00	2,394.33	2,421.06	2,368.77	11.88	10.34	134.87	92.38	-317.68	463.24	442.87	20.37	22.737	
2,600.00	2,482.16	2,512.11	2,455.11	12.71	10.90	135.19	97.79	-346.08	504.53	483.02	21.51	23.459	
2,700.00	2,569.98	2,603.15	2,541.45	13.54	11.47	135.46	103.19	-374.48	545.82	523.17	22.65	24.099	
2,800.00	2,657.80	2,694.20	2,627.78	14.39	12.04	135.69	108.60	-402.88	587.12	563.32	23.80	24.668	
2,900.00	2,745.62	2,785.25	2,714.12	15.24	12.61	135.89	114.00	-431.28	628.43	603.47	24.96	25.176	
3,000.00	2,833.45	2,876.30	2,800.45	16.10	13.18	136.06	119.41	-459.68	669.75	643.62	26.13	25.633	
3,100.00	2,921.27	2,967.35	2,886.79	16.96	13.76	136.22	124.81	-488.08	711.07	683.77	27.30	26.046	
3,200.00	3,009.09	3,058.40	2,973.13	17.82	14.34	136.35	130.22	-516.48	752.39	723.91	28.48	26.420	
3,300.00	3,096.91	3,149.44	3,059.46	18.69	14.92	136.48	135.63	-544.88	793.72	764.06	29.66	26.761	
3,400.00	3,184.74	3,240.49	3,145.80	19.56	15.50	136.59	141.03	-573.28	835.05	804.20	30.85	27.071	
3,500.00	3,272.97	3,331.80	3,232.39	20.42	16.09	137.17	146.45	-601.76	875.80	843.76	32.03	27.339	
3,600.00	3,363.35	3,424.45	3,320.24	21.22	16.68	137.82	151.95	-630.66	913.32	880.10	33.22	27.491	
3,700.00	3,455.84	3,518.33	3,409.26	21.95	17.28	138.16	157.53	-659.94	947.24	912.84	34.41	27.529	
3,800.00	3,550.19	3,613.17	3,499.20	22.61	17.90	138.23	163.16	-689.52	977.54	941.95	35.59	27.469	
3,900.00	3,646.14	3,708.73	3,589.81	23.20	18.51	138.04	168.83	-719.33	1,004.21	967.46	36.75	27.324	
4,000.00	3,743.43	3,804.74	3,680.85	23.72	19.13	137.62	174.53	-749.28	1,027.31	989.41	37.90	27.107	
4,100.00	3,841.80	3,900.93	3,772.06	24.16	19.76	136.98	180.24	-779.28	1,046.93	1,007.91	39.02	26.832	
4,200.00	3,940.97	3,997.04	3,863.20	24.53	20.38	136.13	185.95	-809.26	1,063.20	1,023.09	40.11	26.510	
4,300.00	4,040.68	4,092.81	3,954.01	24.84	21.00	135.07	191.63	-839.13	1,076.27	1,035.12	41.15	26.153	
4,400.00	4,140.64	4,276.63	4,134.02	25.07	21.85	-4.80	197.84	-871.77	1,082.90	1,040.20	42.70	25.362	
4,477.45	4,218.09	4,360.70	4,218.09	25.22	22.05	-126.29	197.87	-871.91	1,083.09	1,040.00	43.09	25.137	
4,500.00	4,240.64	4,383.25	4,240.64	25.26	22.10	-126.27	197.87	-871.91	1,082.93	1,039.74	43.19	25.073	
4,600.00	4,340.04	4,547.36	4,402.77	25.45	22.32	-125.61	194.98	-850.54	1,085.88	1,042.32	43.55	24.932	
4,700.00	4,436.25	4,708.00	4,549.27	25.60	22.36	-123.46	186.31	-786.51	1,093.06	1,049.64	43.41	25.178	
4,800.00	4,526.35	4,854.38	4,662.47	25.73	22.43	-120.15	173.94	-695.17	1,105.27	1,062.07	43.19	25.589	
4,900.00	4,607.60	4,984.94	4,740.87	25.83	22.71	-116.02	159.98	-592.07	1,123.29	1,080.07	43.22	25.989	
5,000.00	4,677.53	5,085.62	4,790.24	25.91	23.13	-111.93	148.20	-505.14	1,148.24	1,104.61	43.62	26.323	
5,100.00	4,734.03	5,198.48	4,830.18	25.96	23.86	-107.30	134.06	-400.73	1,178.70	1,134.34	44.36	26.571	
5,200.00	4,782.44	5,300.58	4,847.91	26.00	24.74	-103.76	120.59	-301.22	1,211.50	1,166.06	45.44	26.660	
5,300.00	4,817.32	5,391.71	4,850.29	26.05	25.69	-98.25	108.37	-210.98	1,247.85	1,201.05	46.79	26.668	
5,400.00	4,835.42	5,481.72	4,850.87	26.11	26.79	-93.14	96.29	-121.78	1,287.06	1,238.56	48.51	26.535	
5,500.00	4,837.90	5,573.19	4,851.46	26.25	28.05	-90.59	84.02	-31.14	1,327.28	1,276.72	50.57	26.248	
5,600.00	4,837.69	5,664.72	4,852.05	26.60	29.44	-90.60	71.73	59.56	1,367.57	1,314.62	52.95	25.830	
5,700.00	4,837.47	5,756.25	4,852.64	27.36	30.94	-90.62	59.45	150.25	1,407.85	1,352.25	55.60	25.320	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Project:	Sandoval County, New Mexico NAD83 NM C	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Reference Site:	S Escavada Unit 337, 345 & 346	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	DB_Feb2822
Reference Design:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: S Escavada Unit 337, 345 & 346 - S Escavada Unit 346H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	49.75	12.90	15.24	19.97				
100.00	100.00	100.00	100.00	0.13	0.13	49.75	12.90	15.24	19.97	19.71	0.26	77.360	
200.00	200.00	200.00	200.00	0.49	0.49	49.75	12.90	15.24	19.97	18.99	0.98	20.478	
300.00	300.00	300.00	300.00	0.85	0.85	49.75	12.90	15.24	19.97	18.27	1.69	11.801	
400.00	400.00	400.00	400.00	1.20	1.20	49.75	12.90	15.24	19.97	17.56	2.41	8.289	
500.00	500.00	500.00	500.00	1.56	1.56	49.75	12.90	15.24	19.97	16.84	3.13	6.388	
600.00	600.00	600.00	600.00	1.92	1.92	49.75	12.90	15.24	19.97	16.12	3.84	5.196	
700.00	700.00	700.00	700.00	2.28	2.28	49.75	12.90	15.24	19.97	15.41	4.56	4.379	
800.00	800.00	800.00	800.00	2.64	2.64	49.75	12.90	15.24	19.97	14.69	5.28	3.784	
900.00	900.00	900.00	900.00	3.00	3.00	49.75	12.90	15.24	19.97	13.97	5.99	3.331	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	49.75	12.90	15.24	19.97	13.26	6.71	2.975	CC, ES, SF
1,100.00	1,099.95	1,099.95	1,099.95	3.70	3.71	-172.74	12.90	15.24	22.56	15.15	7.41	3.044	
1,200.00	1,199.63	1,201.14	1,201.09	4.03	4.06	-175.24	11.30	13.09	27.74	19.66	8.08	3.432	
1,300.00	1,298.77	1,302.58	1,302.20	4.38	4.41	-178.87	6.50	6.63	32.96	24.23	8.73	3.777	
1,400.00	1,397.08	1,404.25	1,402.96	4.75	4.76	176.85	-1.53	-4.17	38.34	28.98	9.36	4.096	
1,500.00	1,494.31	1,506.13	1,503.08	5.15	5.14	172.21	-12.77	-19.28	44.03	34.03	9.99	4.406	
1,600.00	1,590.18	1,608.20	1,602.23	5.59	5.55	167.41	-27.21	-38.70	50.15	39.51	10.64	4.712	
1,700.00	1,684.43	1,710.45	1,700.11	6.08	6.00	162.60	-44.82	-62.38	56.83	45.50	11.33	5.016	
1,800.00	1,776.81	1,812.85	1,796.41	6.64	6.51	157.90	-65.57	-90.28	64.17	52.08	12.09	5.307	
1,900.00	1,867.06	1,912.92	1,889.22	7.27	7.06	154.26	-87.90	-120.31	73.58	60.56	13.02	5.651	
2,000.00	1,955.22	2,011.97	1,981.03	7.96	7.64	152.88	-110.08	-150.13	87.18	73.19	13.98	6.234	
2,100.00	2,043.04	2,110.94	2,072.78	8.70	8.24	152.13	-132.24	-179.93	101.44	86.47	14.97	6.776	
2,200.00	2,130.86	2,209.91	2,164.52	9.47	8.86	151.56	-154.39	-209.72	115.72	99.73	15.98	7.240	
2,300.00	2,218.69	2,308.88	2,256.26	10.25	9.50	151.12	-176.55	-239.52	130.00	112.98	17.02	7.638	
2,400.00	2,306.51	2,407.85	2,348.00	11.06	10.15	150.77	-198.71	-269.31	144.29	126.21	18.08	7.982	
2,500.00	2,394.33	2,506.82	2,439.74	11.88	10.81	150.48	-220.87	-299.11	158.58	139.43	19.15	8.282	
2,600.00	2,482.16	2,605.79	2,531.48	12.71	11.48	150.24	-243.02	-328.90	172.88	152.64	20.24	8.543	
2,700.00	2,569.98	2,704.76	2,623.22	13.54	12.16	150.03	-265.18	-358.70	187.18	165.84	21.33	8.773	
2,800.00	2,657.80	2,803.73	2,714.96	14.39	12.84	149.86	-287.34	-388.49	201.48	179.04	22.44	8.977	
2,900.00	2,745.62	2,902.70	2,806.70	15.24	13.53	149.70	-309.49	-418.29	215.78	192.22	23.56	9.158	
3,000.00	2,833.45	3,001.67	2,898.44	16.10	14.22	149.57	-331.65	-448.08	230.09	205.40	24.69	9.320	
3,100.00	2,921.27	3,100.64	2,990.19	16.96	14.92	149.45	-353.81	-477.88	244.40	218.57	25.82	9.465	
3,200.00	3,009.09	3,199.61	3,081.93	17.82	15.62	149.35	-375.97	-507.67	258.70	231.74	26.96	9.596	
3,300.00	3,096.91	3,298.58	3,173.67	18.69	16.32	149.25	-398.12	-537.47	273.01	244.91	28.10	9.714	
3,400.00	3,184.74	3,397.55	3,265.41	19.56	17.03	149.17	-420.28	-567.27	287.32	258.06	29.25	9.822	
3,500.00	3,272.97	3,496.62	3,357.24	20.42	17.73	149.12	-442.46	-597.09	300.88	270.46	30.42	9.892	
3,600.00	3,363.35	3,596.10	3,449.46	21.22	18.45	148.67	-464.73	-627.04	310.39	278.73	31.65	9.805	
3,700.00	3,455.84	3,695.79	3,541.86	21.95	19.16	147.67	-487.05	-657.05	315.51	282.53	32.98	9.567	
3,800.00	3,550.19	3,795.40	3,634.20	22.61	19.88	146.14	-509.35	-687.04	316.38	281.98	34.40	9.198	
3,900.00	3,646.14	3,894.68	3,726.22	23.20	20.60	143.99	-531.58	-716.92	313.24	277.30	35.94	8.716	
4,000.00	3,743.43	3,993.33	3,817.67	23.72	21.31	141.16	-553.66	-746.62	306.42	268.80	37.62	8.145	
4,100.00	3,841.80	4,091.10	3,908.29	24.16	22.02	137.50	-575.55	-776.06	296.46	256.97	39.48	7.508	
4,200.00	3,940.97	4,187.71	3,997.85	24.53	22.72	132.86	-597.18	-805.14	284.09	242.54	41.55	6.837	
4,300.00	4,040.68	4,282.90	4,086.09	24.84	23.41	127.05	-618.49	-833.80	270.41	226.58	43.83	6.169	
4,400.00	4,140.64	4,392.50	4,189.58	25.07	24.11	-18.11	-643.98	-858.67	254.36	208.50	45.86	5.547	
4,500.00	4,240.64	4,508.11	4,301.26	25.26	24.60	-142.91	-672.79	-862.59	231.90	185.50	46.39	4.998	
4,600.00	4,340.04	4,623.47	4,410.90	25.45	24.86	-144.22	-702.37	-843.42	209.37	163.74	45.63	4.588	
4,700.00	4,436.25	4,737.12	4,512.83	25.60	24.96	-142.43	-731.16	-802.73	193.00	148.74	44.26	4.361	
4,800.00	4,526.35	4,847.05	4,601.90	25.73	24.97	-137.38	-757.62	-744.29	184.25	141.16	43.08	4.277	
4,840.36	4,560.36	4,890.01	4,633.42	25.77	24.95	-134.55	-767.37	-716.80	183.38	140.58	42.80	4.285	
4,900.00	4,607.60	4,951.75	4,674.97	25.83	24.91	-129.78	-780.64	-673.14	185.38	142.80	42.58	4.354	
5,000.00	4,677.53	5,050.41	4,731.11	25.91	24.85	-120.93	-799.69	-594.44	198.18	155.61	42.57	4.655	

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

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Project:	Sandoval County, New Mexico NAD83 NM C	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Reference Site:	S Escavada Unit 337, 345 & 346	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	DB_Feb2822
Reference Design:	rev0	**Offset TVD Reference:**	Offset Datum

Offset Design: S Escavada Unit 337, 345 & 346 - S Escavada Unit 346H - Original Hole - rev0

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

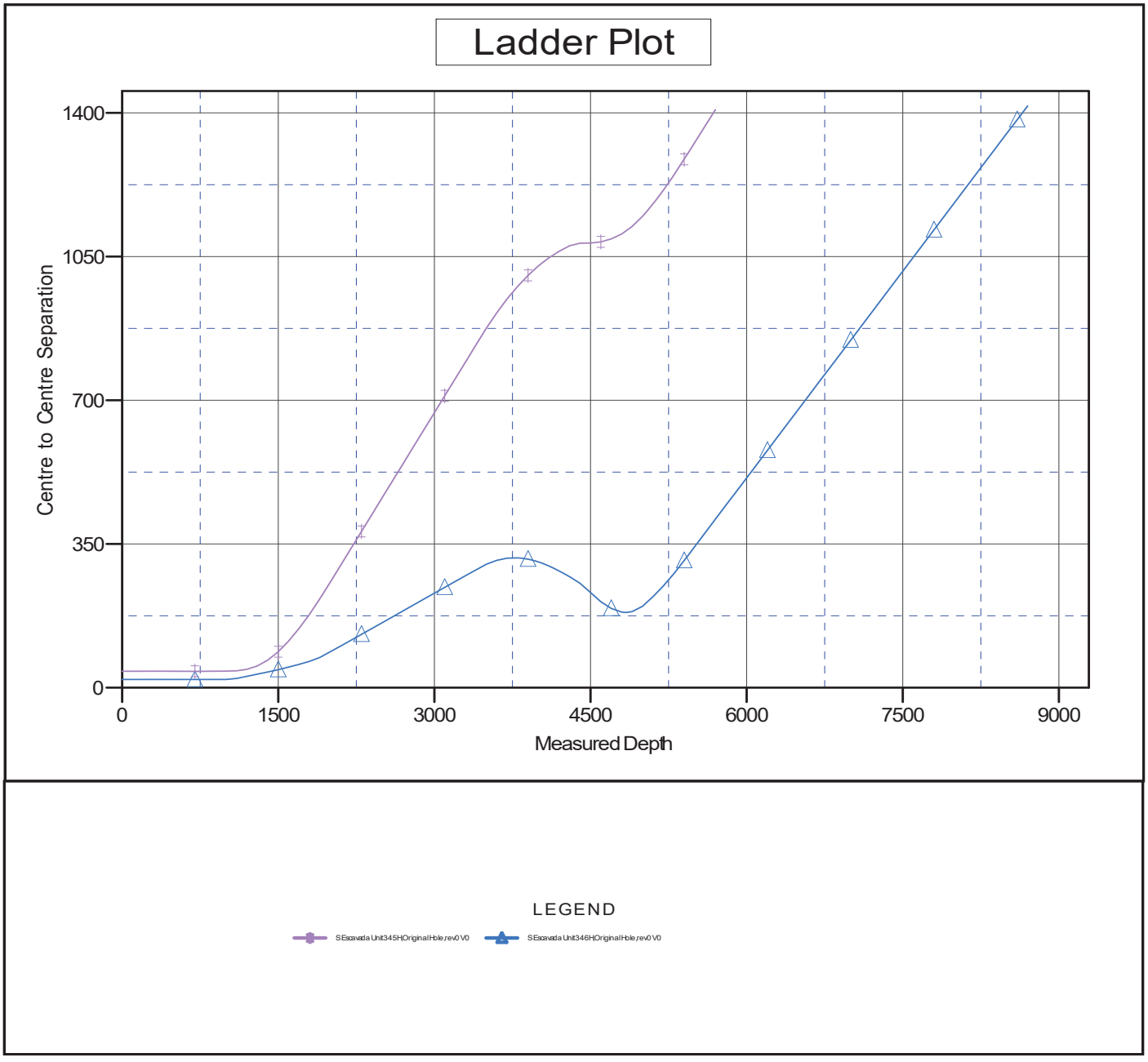
Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Rule Assigned: Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	4,734.03	5,149.28	4,779.41	25.96	24.82	-113.70	-817.41	-510.03	221.75	179.02	42.73	5.189	
5,200.00	4,782.44	5,251.29	4,815.98	26.00	24.86	-106.97	-836.94	-416.97	247.73	204.68	43.05	5.754	
5,300.00	4,817.32	5,349.08	4,834.70	26.05	25.00	-99.16	-856.64	-323.15	277.22	233.33	43.89	6.316	
5,400.00	4,835.42	5,443.59	4,838.13	26.11	25.32	-92.46	-876.03	-230.78	309.64	264.36	45.28	6.838	
5,500.00	4,837.90	5,537.72	4,838.49	26.25	25.93	-90.06	-895.37	-138.65	343.15	295.75	47.40	7.239	
5,600.00	4,837.69	5,631.92	4,838.86	26.60	26.91	-90.15	-914.73	-46.46	376.71	326.77	49.94	7.543	
5,700.00	4,837.47	5,726.12	4,839.22	27.36	28.21	-90.22	-934.08	45.73	410.27	357.57	52.69	7.786	
5,800.00	4,837.26	5,820.32	4,839.58	28.64	29.72	-90.27	-953.43	137.92	443.83	388.05	55.77	7.958	
5,900.00	4,837.04	5,914.52	4,839.94	30.27	31.40	-90.33	-972.79	230.10	477.39	418.34	59.04	8.086	
6,000.00	4,836.82	6,008.72	4,840.31	32.09	33.19	-90.37	-992.14	322.29	510.95	448.46	62.49	8.177	
6,100.00	4,836.61	6,102.92	4,840.67	34.02	35.07	-90.41	-1,011.50	414.48	544.51	478.42	66.08	8.240	
6,200.00	4,836.39	6,197.12	4,841.03	36.03	37.02	-90.44	-1,030.85	506.67	578.07	508.26	69.81	8.281	
6,300.00	4,836.18	6,291.32	4,841.39	38.10	39.02	-90.47	-1,050.20	598.86	611.62	537.98	73.64	8.305	
6,400.00	4,835.96	6,385.52	4,841.76	40.22	41.07	-90.50	-1,069.56	691.05	645.18	567.61	77.57	8.317	
6,500.00	4,835.75	6,479.72	4,842.12	42.38	43.16	-90.53	-1,088.91	783.24	678.74	597.16	81.58	8.320	
6,600.00	4,835.53	6,573.92	4,842.48	44.57	45.27	-90.55	-1,108.26	875.43	712.31	626.65	85.66	8.316	
6,700.00	4,835.32	6,668.12	4,842.84	46.78	47.42	-90.57	-1,127.62	967.62	745.87	656.07	89.80	8.306	
6,800.00	4,835.10	6,762.32	4,843.21	49.02	49.58	-90.59	-1,146.97	1,059.81	779.43	685.44	93.99	8.293	
6,900.00	4,834.89	6,856.52	4,843.57	51.28	51.77	-90.61	-1,166.33	1,152.00	812.99	714.76	98.23	8.277	
7,000.00	4,834.67	6,950.72	4,843.93	53.56	53.98	-90.62	-1,185.68	1,244.19	846.55	744.05	102.50	8.259	
7,100.00	4,834.46	7,044.92	4,844.29	55.85	56.20	-90.64	-1,205.03	1,336.38	880.11	773.29	106.81	8.240	
7,200.00	4,834.24	7,139.12	4,844.65	58.16	58.44	-90.65	-1,224.39	1,428.57	913.67	802.51	111.16	8.220	
7,300.00	4,834.03	7,233.32	4,845.02	60.47	60.69	-90.66	-1,243.74	1,520.76	947.23	831.70	115.53	8.199	
7,400.00	4,833.81	7,327.52	4,845.38	62.80	62.95	-90.67	-1,263.10	1,612.95	980.79	860.87	119.92	8.179	
7,500.00	4,833.59	7,421.72	4,845.74	65.13	65.22	-90.68	-1,282.45	1,705.14	1,014.35	890.01	124.34	8.158	
7,600.00	4,833.38	7,515.92	4,846.10	67.48	67.50	-90.69	-1,301.80	1,797.33	1,047.91	919.13	128.78	8.137	
7,700.00	4,833.16	7,610.12	4,846.47	69.83	69.78	-90.70	-1,321.16	1,889.52	1,081.47	948.24	133.23	8.117	
7,800.00	4,832.95	7,704.32	4,846.83	72.19	72.08	-90.71	-1,340.51	1,981.71	1,115.03	977.33	137.70	8.097	
7,900.00	4,832.73	7,798.52	4,847.19	74.55	74.38	-90.72	-1,359.87	2,073.90	1,148.59	1,006.40	142.19	8.078	
8,000.00	4,832.52	7,892.72	4,847.55	76.92	76.69	-90.73	-1,379.22	2,166.09	1,182.15	1,035.46	146.69	8.059	
8,100.00	4,832.30	7,986.92	4,847.92	79.30	79.00	-90.74	-1,398.57	2,258.28	1,215.71	1,064.51	151.20	8.040	
8,200.00	4,832.09	8,081.12	4,848.28	81.67	81.32	-90.74	-1,417.93	2,350.47	1,249.28	1,093.55	155.73	8.022	
8,300.00	4,831.87	8,175.32	4,848.64	84.06	83.64	-90.75	-1,437.28	2,442.66	1,282.84	1,122.58	160.26	8.005	
8,400.00	4,831.66	8,269.53	4,849.00	86.44	85.97	-90.76	-1,456.63	2,534.85	1,316.40	1,151.59	164.80	7.988	
8,500.00	4,831.44	8,363.73	4,849.37	88.83	88.30	-90.76	-1,475.99	2,627.04	1,349.96	1,180.60	169.36	7.971	
8,600.00	4,831.23	8,457.93	4,849.73	91.23	90.63	-90.77	-1,495.34	2,719.23	1,383.52	1,209.60	173.92	7.955	
8,700.00	4,831.01	8,552.13	4,850.09	93.62	92.97	-90.77	-1,514.70	2,811.42	1,417.08	1,238.60	178.48	7.940	

Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Project:	Sandoval County, New Mexico NAD83 NM C	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Reference Site:	S Escavada Unit 337, 345 & 346	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	DB_Feb2822
Reference Design:	rev0	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=6867+28 @ 6895.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -106.250000000

Coordinates are relative to: S Escavada Unit 337H
Coordinate System is US State Plane 1983, New Mexico Central Zone
Grid Convergence at Surface is: -0.77°



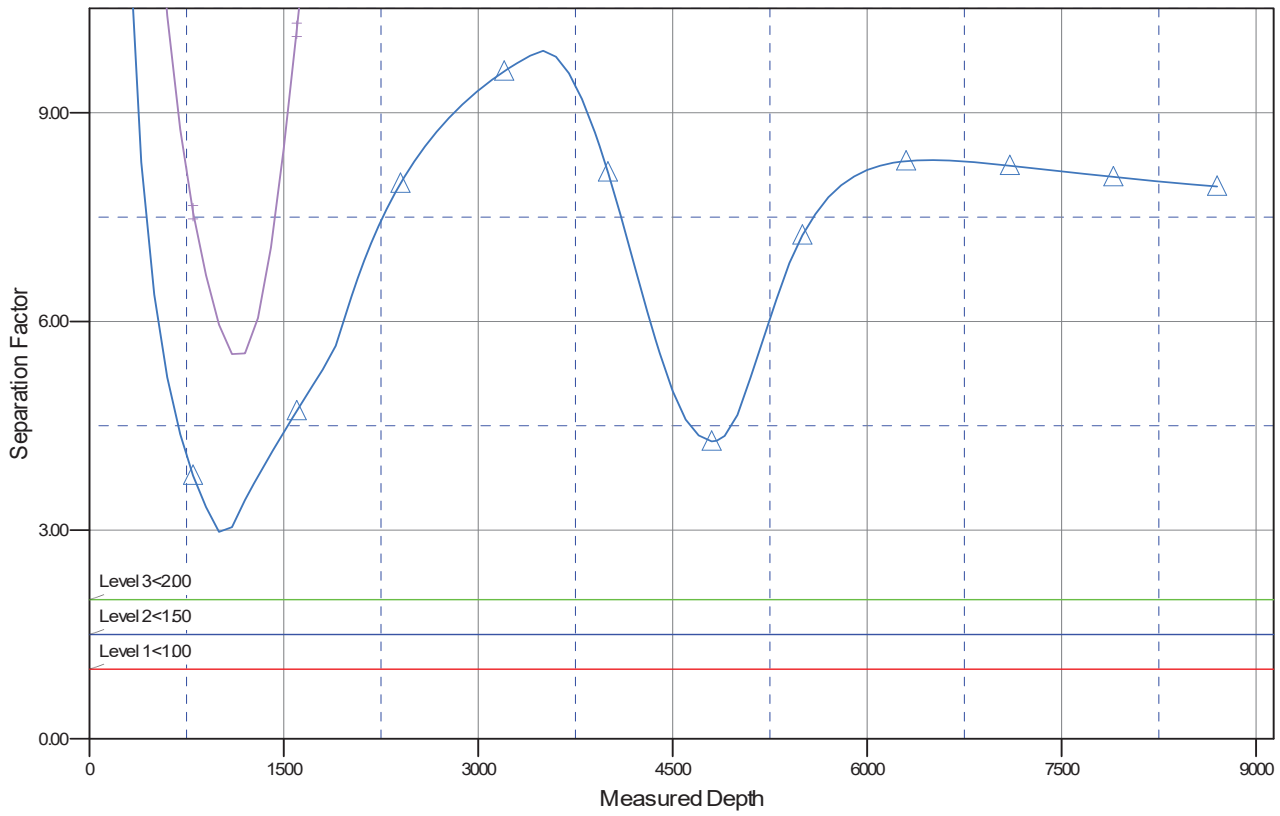
Anticollision Report

Company:	Enduring Resources LLC	**Local Co-ordinate Reference:**	Well S Escavada Unit 337H
Project:	Sandoval County, New Mexico NAD83 NM C	**TVD Reference:**	RKB=6867+28 @ 6895.00ft
Reference Site:	S Escavada Unit 337, 345 & 346	**MD Reference:**	RKB=6867+28 @ 6895.00ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	S Escavada Unit 337H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	DB_Feb2822
Reference Design:	rev0	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=6867+28 @ 6895.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -106.250000000

Coordinates are relative to: S Escavada Unit 337H
Coordinate System is US State Plane 1983, New Mexico Central Zone
Grid Convergence at Surface is: -0.77°

Separation Factor Plot



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 325954

CONDITIONS

Operator:	OGRID:
ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	372286
	Action Number: 325954
	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	4/8/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	4/8/2024
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	4/8/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	4/8/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	4/8/2024
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	4/8/2024