

Form 3160-3
(October 2024)

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-043-21551
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)

- | | |
|---|---|
| <ul style="list-style-type: none"> 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). | <ul style="list-style-type: none"> 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

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

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

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



(Continued on page 2)

*(Instructions on page 2)

Additional Operator Remarks

Location of Well

0. SHL: SWSW / 732 FSL / 19 FWL / TWSP: 23N / RANGE: 7W / SECTION: 33 / LAT: 36.177918 / LONG: -107.588685 (TVD: 0 feet, MD: 0 feet)
PPP: LOT 2 / 607 FNL / 1608 FEL / TWSP: 22N / RANGE: 7W / SECTION: 5 / LAT: 36.177918 / LONG: -107.588685 (TVD: 4915 feet, MD: 5846 feet)
PPP: SWSE / 1 FSL / 2562 FEL / TWSP: 22N / RANGE: 7W / SECTION: 34 / LAT: 36.175808 / LONG: -107.561876 (TVD: 5199 feet, MD: 17745 feet)
PPP: LOT 4 / 610 FNL / 1 FWL / TWSP: 22N / RANGE: 7W / SECTION: 4 / LAT: 36.174233 / LONG: -107.588781 (TVD: 5199 feet, MD: 17745 feet)
PPP: LOT 4 / 621 FNL / 1 FWL / TWSP: 22N / RANGE: 7W / SECTION: 3 / LAT: 36.174135 / LONG: -107.570995 (TVD: 5199 feet, MD: 17745 feet)
PPP: LOT 2 / 627 FNL / 2622 FEL / TWSP: 22N / RANGE: 7W / SECTION: 3 / LAT: 36.174085 / LONG: -107.562101 (TVD: 5199 feet, MD: 17745 feet)
BHL: NWSE / 1852 FSL / 2370 FEL / TWSP: 22N / RANGE: 7W / SECTION: 34 / LAT: 36.180893 / LONG: -107.561211 (TVD: 5199 feet, MD: 17745 feet)




BLM Point of Contact

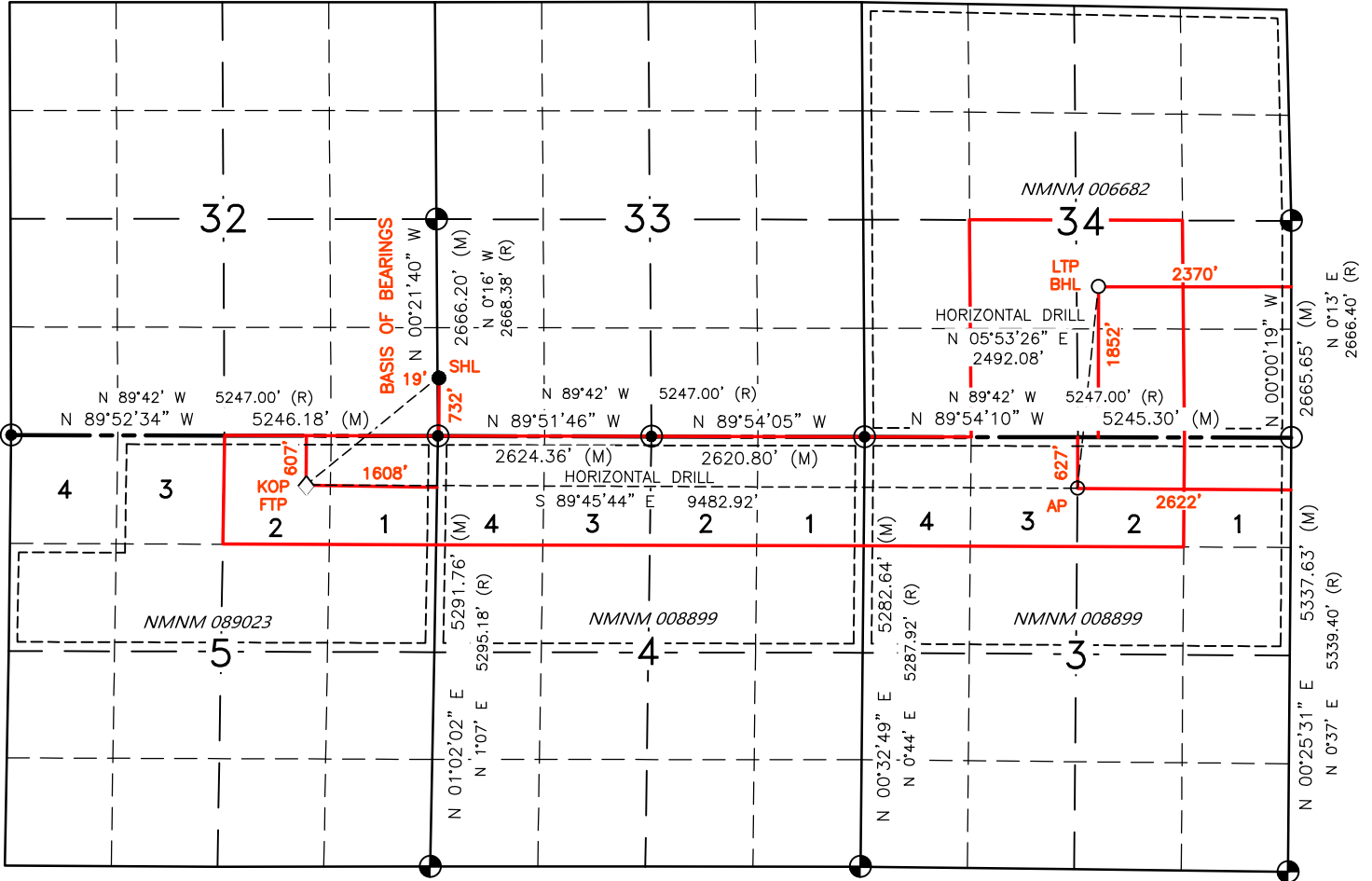
Name: CHRISTOPHER P WENMAN

Title: Natural Resource Specialist

Phone: (505) 564-7727

Email: cwenman@blm.gov

-  FND 2.5" BC
GLO 1948
-  FND 2.5" BC
GLO 1947
-  CALC



SURFACE LOCATION (SHL) ●
 732' FSL 19' FWL
 SEC. 33, T23N, R7W
 LAT. 36.177918° N (NAD83)
 LONG. 107.588685° W (NAD83)

FIRST TAKE POINT (FTP) ◇
 607' FNL 1608' FEL
 SEC. 5, T22N, R7W
 LAT. 36.174262° N (NAD83)
 LONG. 107.594231° W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○
 1852' FSL 2370' FEL
 SEC. 34, T23N, R7W
 LAT. 36.180893° N (NAD83)
 LONG. 107.561211° W (NAD83)

KICK OFF POINT (KOP) △
 607' FNL 1608' FEL
 SEC. 5, T22N, R7W
 LAT. 36.174262° N (NAD83)
 LONG. 107.594231° W (NAD83)

ANGLE POINT (AP) ○
 627' FNL 2622' FEL
 SEC. 3, T22N, R7W
 LAT. 36.174085° N (NAD83)
 LONG. 107.562101° W (NAD83)

LAST TAKE POINT (LTP) □
 1852' FSL 2370' FEL
 SEC. 34, T23N, R7W
 LAT. 36.180893° N (NAD83)
 LONG. 107.561211° W (NAD83)

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: _DJR Operating, LLC_ **OGRID:** _371838_ **Date:** _6/9/2025_

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	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
N. Alamito Unit 560H	M-33-23N-7W	752 FSL 21 FWL	213	482	85
N. Alamito Unit 562H	M-33-23N-7W	732 FSL 19 FWL	510	1157	204
N. Alamito Unit 563H	M-33-23N-7W	712 FSL 18 FWL	417	945	167
			3-year Decline	3-year Decline	3-year Decline
N. Alamito Unit 560H	M-33-23N-7W	752 FSL 21 FWL	48	192	19
N. Alamito Unit 562H	M-33-23N-7W	732 FSL 19 FWL	115	461	46
N. Alamito Unit 563H	M-33-23N-7W	712 FSL 18 FWL	94	377	38

IV. Central Delivery Point Name: _____ Chaco Processing Plat_____ [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	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
N. Alamito Unit 560H	3/26/2026	4/5/2026	5/25/2026	5/26/2026	5/27/2025
N. Alamito Unit 562H	3/27/2026	4/6/2026	5/25/2026	5/26/2026	5/27/2025
N. Alamito Unit 563H	3/28/2026	4/7/2026	5/25/2026	5/26/2026	5/27/2025

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Valadez</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 9/24/2025
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
N. ALAMITO UNIT 560H 562H 563H

SEPARATION EQUIPMENT

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
N. ALAMITO UNIT 560H 562H 563H

VENTING and FLARING

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

- a) DJR 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) DJR'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.

DJR will only flare gas during the following times:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
N. ALAMITO UNIT 560H 562H 563H

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

DJR Operating, LLC (DJR) understands the requirements of NMAC 19.15.27.8 which states that the venting and flaring of natural gas during drilling, completion or production that constitutes waste as defined in 19.15.2 are prohibited.

19.15.27.8 B. Venting and flaring during drilling operations

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

- DJR 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) DJR analyzes the natural gas samples twice per week.
 - 3) DJR routes the natural gas into a gathering pipeline as soon as the pipeline specifications are met.
 - 4) DJR provides the NMOCD with pipeline specifications and natural gas data.



19.15.27.8 D. Venting and flaring during production operations

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

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided:
 - a. DJR does not vent after the well achieves a stabilized rate and pressure.
 - b. DJR will remain present on-site during liquids unloading by manual purging and take all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time.
 - c. DJR 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. DJR receives approval from the NMOCD.
 - b. DJR remains in compliance with the NM gas capture requirements.
 - c. DJR 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. DJR 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. DJR will install a flare that designed to handle the full volume of vapors from the facility in case of the VRU failure and it its designed with an auto ignition system.
3. Flare stacks will appropriately sized and designed to ensure proper combustion efficiency.
 - a. Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.



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

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

1. DJR will have meters on both the low- and high-pressure sides of the flares and the volumes will be recorded in DJR's SCADA system.
2. DJR 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. DJR'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. DJR will estimate the volume of vented or flared natural gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
6. DJR 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. DJR will install measuring equipment whenever the NMOCD determines that metering is necessary.



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
N. ALAMITO UNIT 560H 562H 563H

BEST MANAGEMENT PRACTICES

DJR Operating, LLC (DJR) utilizes the following Best Management Practices to minimize venting during active and planned maintenance.

DJR 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.

DJR 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.

DJR 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.

DJR 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.

DJR 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.

DJR'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.

DJR 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-Gallup formation*

WELL INFORMATION:

Name: North Alamito Unit 562H
API Number: Not yet assigned
AFE Number: Not yet assigned
ER Well Number: Not yet assigned
State: New Mexico
County: Sandoval
Surface Elevation: 6,876 ft ASL (GL) 6,900 ft ASL (KB)
Surface Location: 33-23-7 Sec-Twn-Rng 732 ft FSL 19 ft FWL
 36.177918 ° N latitude 107.588685 ° W longitude (NAD 83)
BH Location: 34-23-7 Sec-Twn-Rng 1,852 ft FSL 2,370 ft FEL
 36.180893 ° N latitude 107.561211 ° 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 39.0 miles to MM 112.7, Right (South) on CR #7900 / IR #7061 for 5.1 miles to T, Left (East) leaving CR #7900 onto Lybrook Rd 5.1 miles to lease road; Right (South) for 300 ft to NAU 328H pad entrance. There is one existing well on this location and 3 proposed wells. From North (location entrance) to South: NAU 560H, NAU 562H, and NAU 563H. The NAU 328H (existing well) is ±80' to the SouthWest of the proposed wells.

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	6,020	880	880	W	normal
	Kirtland	5,980	920	920	W	normal
	Fruitland	5,790	1,110	1,110	G, W	sub
	Pictured Cliffs	5,480	1,420	1,422	G, W	sub
	Lewis	5,320	1,580	1,585	G, W	normal
	Chacra	5,080	1,820	1,838	G, W	normal
	Cliff House	4,005	2,895	3,212	G, W	sub
	Menefee	3,975	2,925	3,253	G, W	normal
	Point Lookout	3,095	3,805	4,466	G, W	normal
	Mancos	2,915	3,985	4,714	O,G	sub (~0.38)
	Gallup (MNCS_A)	2,600	4,300	5,129	O,G	sub (~0.38)
	MNCS_B	2,500	4,400	5,240	O,G	sub (~0.38)
	MNCS_C	2,415	4,485	5,331	O,G	sub (~0.38)
	MNCS_Cms	2,375	4,525	5,374	O,G	sub (~0.38)
	MNCS_D	2,245	4,655	5,514	O,G	sub (~0.38)
	MNCS_E	2,110	4,790	5,671	O,G	sub (~0.38)
	MNCS_F	2,060	4,840	5,736	O,G	sub (~0.38)
	MNCS_G	1,985	4,915	5,846	O,G	sub (~0.38)
	MNCS_H	1,925	4,975	5,957	O,G	sub (~0.38)
	MNCS_I	1,855	5,045	6,365	O,G	sub (~0.38)
	FTP TARGET	1,985	4,915	5,846	O,G	sub (~0.38)

PROJECTED TD	1,701	5,199	17,745	O,G	sub (~0.38)
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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: 2,240 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 1,100 psi

Temperature: Maximum anticipated BHT is 125° F or less

H₂S INFORMATION:

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

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

LOGGING, CORING, AND TESTING:

Mud Logs: None planned; remote geo-steering from drill out of 7" casing to TD; gas detection from drillout of 9-5/8" casing to TD.

MWD / LWD: Gamma Ray from drillout of 9-5/8" casing to TD

Open Hole Logs: None planned

Testing: None planned

Coring: None planned

Cased Hole Logs: CBL on 7" casing from deepest free-fall depth to surface

DRILLING RIG INFORMATION:

Contractor: Ensign

Rig No.: 140

Draw Works: Pacific Rim 1500AC (1,500 hp)

Mast: Process MFG Corp Swing Up Triple (136 ft, 750,000 lbs)

Top Drive: Tesco 400-EXI-600 (400 ton)

Prime Movers: 3 - CAT 3512C (1,350 hp)

Pumps: 2 - Gardner Denver PZ-11 (7,500 psi)

BOPE 1: T3 Annular & Shaffer double gate ram (11", 5,000 psi)

BOPE 2: T3 annular(11", 5,000 psi)

Choke 3", 5,000 psi

KB-GL (ft): 23.5

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

BOPE REQUIREMENTS:

See attached diagram for details regarding BOPE specifications and configuration.

- 1) Rig will be equipped with upper and lower kelly cocks with handles available.
- 2) Inside BOP and TIW valves will be available to use on all sizes and threads of drill pipe used while drilling the well.
- 3) BOP accumulator will have enough capacity to open the HCR valve, close all rams and annular preventer, and retain minimum of 200 psi above precharge on the closing manifold without the use of closing pumps. The fluid reservoir capacity shall be at least double the usable fluid volume of the accumulator system capacity, and the fluid level shall be maintained at manufacturer's recommendation. There will be two additional sources of power for the closing pumps (electric and air). Sufficient nitrogen bottles will be available and will be recharged when pressure falls below manufacturer's recommended minimum.

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

FLUIDS AND SOLIDS CONTROL PROGRAM:

Fluid Measurement:

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

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

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

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

Fluid Program: See "Detailed Drilling Plan" section and attached Newpark mud program for additional details.

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: 12-1/4"

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	9.625	36.0	J-55	LTC	2,020	3,520	564,000
						423,000	

Loading		153	1,079	110,988	110,988
Min. S.F.		13.21	3.26	5.08	3.81

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

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

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

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

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	Hole Cap. (cuft/ft)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Redi-Mix	TYPE I-II	14.5	1.61	7.41	0.3132	50%	0	114	184

Calculated cement volumes assume gauge hole and the excess noted in table Csg ID 8.921
 Mesa Ready Mix or first available Shoe Track L 44

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

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

350 ft (MD)	to	6,191 ft (MD)	Hole Section Length:	5,841 ft
350 ft (TVD)	to	5,041 ft (TVD)	Casing Required:	6,191 ft

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	LSND (KCI)	8.8 - 9.2	15	8 - 14	6 - 12	10.8 - 11.2	No OBM

Hole Size (inches): 8.75

Bit / Motor: 8-3/4" PDC bit w/mud motor

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

Logging: None

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

Casing Specs:	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)	
Specs	7	26.0	J-55	BTC	4,320	4,980	415,000	490,000
Loading					2,202	1,388	240,370	240,370
Min. S.F.					1.96	3.59	1.73	2.04

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

MU Torque (ft lbs): Minimum: NA Optimum: NA Maximum: NA

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

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Lead	III:POZ Blend	12.5	2.150	12.06	100%	0	623	1,340
Tail	Type III	13.5	1.710	8.88	30%	4,614	186	318

Annular Capacity	0.16681	cuft/ft	7" casing x 9-5/8" casing annulus				Shoe Track L	44
	0.1503	cuft/ft	7" casing x 8-3/4" hole annulus				Casing ID	6.276
	0.2148	cuft/ft	7" casing casing volume				Est displacement bbls	235.2

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

		10 bbls D-Mud Breaker (SAPP)							
Spacer	10 bbls water f/b	f/b	10 bbls water f/b	D-MPA-2 .4%					
		D-CSE 1 5.0%	BWOC Fluid Loss & Control	D-SA 1 1.4%					
Lead	ASTM Type III 90/10 Poz	BWOC Strength Enhancer	Gas Migration Control	BWOC Na Metasilicate	D-CD 2 .4%	Cello Face LCM .25 lb/sx	D-FP 1 .5%	D-R1 0.8%	BWOC Defoamer Retarder
		D-CSE 1 5.0%	BWOC Fluid Loss & Control						
Tail	ASTM Type III 90/10 Poz	BWOC Strength Enhancer	Gas Migration Control	Cello Face LCM .25 lb/sx	D-FP 1 .5%	D-R1 0.1%			

Drake Intermediate Cementing Program

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

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

6,191 ft (MD)	to	17,745 ft (MD)	Hole Section Length:	11,554 ft
5,041 ft (TVD)	to	5,199 ft (TVD)	Casing Required:	11,704 ft
Estimated KOP:		4,957 ft (MD)	4,162 ft (TVD)	
Estimated Liner Top:		6,041 ft (MD)	5,009 ft (TVD)	
Estimated Landing Point (FTP):		5,846 ft (MD)	4,915 ft (TVD)	
Estimated Lateral Length:		11,899 ft (MD)		

Fluid:	Type	MW (ppg)	FL (mL/30')	PV (cp)	YP (lb/100 sqft)	pH	Comments	Comments
	WBM	8.7 - 9.0	NC	+20	±2	8.5-9.5	prod water	OBM as contingency

Hole Size: 6.125

Bit / Motor: 6-1/8" PDC bit w/mud motor

MWD / Survey: MWD with GR, inclination, and azimuth (survey every joint from KOP to Landing Point and survey every 100' minimum before KOP and after Landing Point)

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

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

Liner/Casing Specs:	Size (in)	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	4.500	11.6	P-110	BTC	7,560	10,690	367,000	385,000
Loading					2,568	8,797	277,623	277,623
Min. S.F.					2.94	1.22	1.32	1.39

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. Tension calculations assume vertical hole to approximate drag in lateral.

MU Torque (ft lbs): Minimum: BTC Optimum: BTC Maximum: BTC

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

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Spacer	Water	8.4				0	10 bbls	
Spacer	IntegraGuard Star	10		35.7		0	20 bbls	
Tail	G:POZ blend	13.3	1.520	7.50	35%	6,041	979	1,488
Displacement	243	est bbls						

Annular Capacities 0.1044 cuft/ft 4-1/2" casing x 7" casing annulus

0.09417 cuft/ft 4-1/2" casing x 6-1/8" hole annulus
 0.0873 cuft/ft 4-1/2" casing volume est shoe jt ft 42
 0.0102 bbls/ft 4" DP capacity

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

Spacer	S-8 Silica Flour 113.2 lbs/bbl	Avis 616 viscosifier 4.0 lb/bbl	Xcem-311 Defoamer .8 lb/bbl	SS201 Surfactant 0.5 gal/bbl			
			Bentonite		IntegraGuard		Xcem-311
Lead/Tail	Type G 50%	Pozzolan Fly Ash Extender 50%	Viscosifier 4% BWOB	FL24 Fluid Loss .4% BWOB	GW86 Viscosifier .1% BWOB	R3 Retarder BWOB	.2% Defoamer 0.3% BWOB

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

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

FINISH WELL: ND BOP, cap well, RDMO.

COMPLETION AND PRODUCTION PLAN:

Est Lateral Length: 11,799
Est Frac Inform: 49 Frac Stages 189,000 bbls slick water 15,340,000 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: 3/26/2026
Completion: 5/25/2026
Production: 7/9/2026

Prepared by: Greg Olson 7/18/2024
Updated: Greg Olson 4/3/2025
 Greg Olson 9/22/2025

WELL NAME: North Alamito Unit 562H

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

API Number: Not yet assigned

AFE Number: Not yet assigned

ER Well Number: Not yet assigned

State: New Mexico

County: Sandoval

Surface Elev.: 6,876 ft ASL (GL) 6,900 ft ASL (KB)

Surface Location: 33-23-7 Sec-Twn- Rng 732 ft FSL 19 ft FWL

BH Location: 34-23-7 Sec-Twn- Rng 1852 ft FSL 2370 ft FEL

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

South on US Hwy 550 for 39.0 miles to MM 112.7, Right (South) on CR #7900 / IR #7061 for 5.1 miles to T, Left (East) leaving CR #7900 onto Lybrook Rd 5.1 miles to lease road; Right (South) for 300 ft to NAU 328H pad entrance. There is one existing well on this location and 3 proposed wells. From North (location entrance) to South: NAU 560H, NAU 562H, and NAU 563H. The NAU 328H (existing well) is ±80' to the SouthWest of the proposed wells.

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	6,191 ft
KOP (MD)	4,957 ft
KOP (TVD)	4,162 ft
Target (TVD)	4,915 ft
Curve BUR	10 °/100 ft
POE (MD)	5,846 ft
TD (MD)	17,745 ft
Lat Len (ft)	11,899 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	12.250	350	9.625	36	J-55	LTC	0	350
Intermediate	8.750	6,191	7	26.0	J-55	BTC	0	6,191
Production	6.125	17,745	4.500	11.6	P-110	BTC	6,041	17,745

CEMENT PROPERTIES SUMMARY:

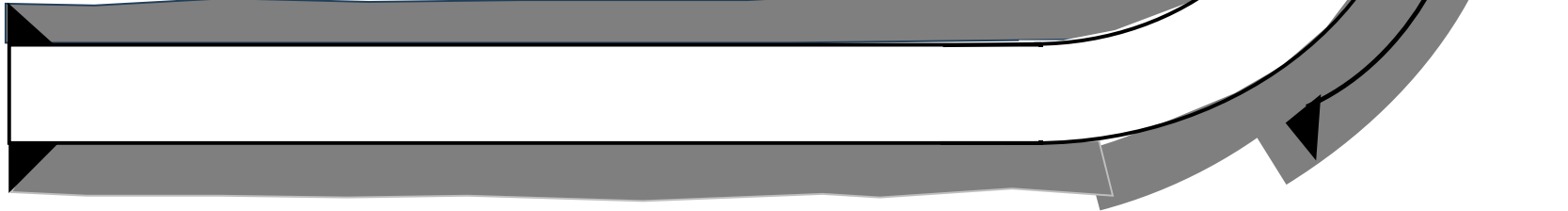
	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	TYPE I-II	14.5	1.61	7.41	0.3132	50%	0	114
Inter. (Lead)	III:POZ Blend	12.5	2.15	12.06	0.1668	100%	0	623
Inter. (Tail)	Type III	13.5	1.71	8.88	0.1503	30%	4,614	186
Prod. (Lead)	TegraGuard S	10	0.000	35.7	0.1044	0%	0	20 bbls
Prod. (Tail)	G:POZ blend	13.3	1.520	7.5	0.0873	35%	6,041	979

COMPLETION / PRODUCTION SUMMARY:

Frac: 49 Frac Stages, 189000 bbls slick water, 15340000 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

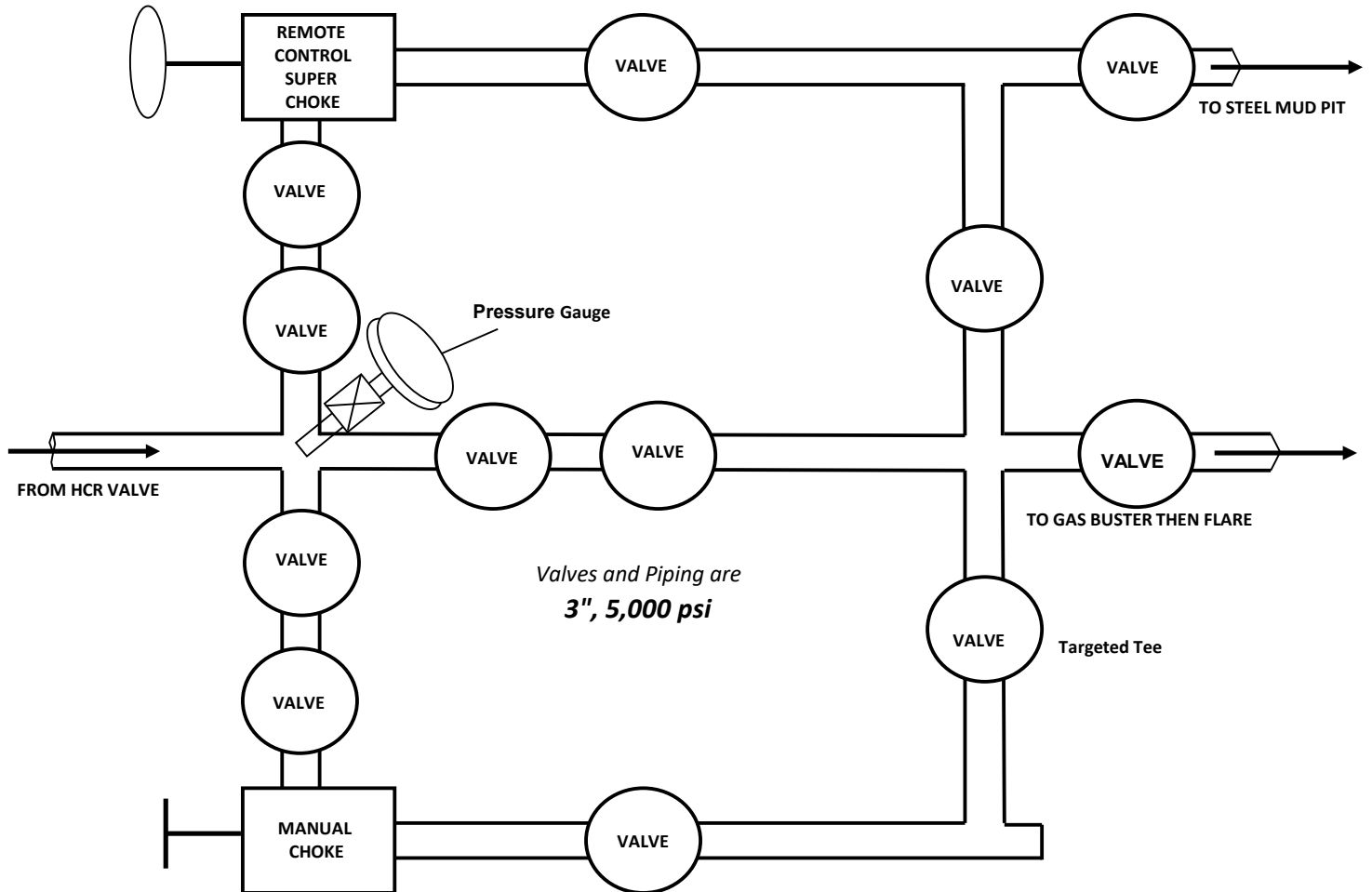


Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	880	880
Kirtland	920	920
Fruitland	1,110	1,110
Pictured Cliffs	1,420	1,422
Lewis	1,580	1,585
Chacra	1,820	1,838
Cliff House	2,895	3,212
Menefee	2,925	3,253
Point Lookout	3,805	4,466
Mancos	3,985	4,714
Gallup (MNCS_A)	4,300	5,129
MNCS_B	4,400	5,240
MNCS_C	4,485	5,331
MNCS_Cms	4,525	5,374
MNCS_D	4,655	5,514
MNCS_E	4,790	5,671
MNCS_F	4,840	5,736
MNCS_G	4,915	5,846
MNCS_H	4,975	5,957
MNCS_I	5,045	6,365
FTP TARGET	4,915	5,846
PROJECTED TD	5,199	17,745

CHOKE MANIFOLD DIAGRAM

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

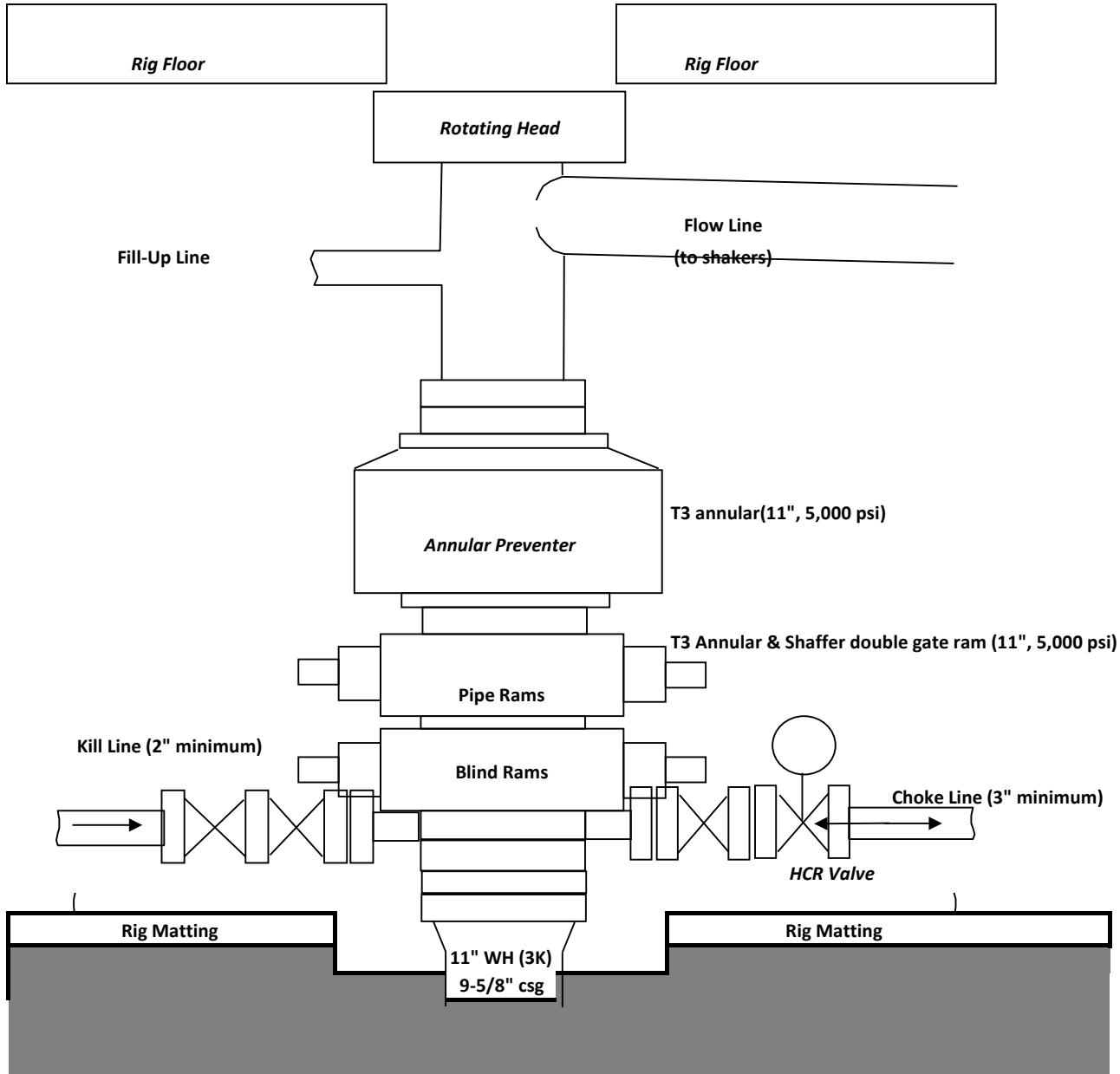
CHOKE MANIFOLD



BOPE DIAGRAM

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

BOPE





Well: North Alamito Unit 562H
Site: North Alamito Unit (560, 562 & 563)
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=6876+23.5 @ 6899.50ft



Azimuths to Grid North
 True North: 0.79°
 Magnetic North: 9.06°

Magnetic Field
 Strength: 48869.7nT
 Dip Angle: 62.63°
 Date: 8/29/2025
 Model: IGRF2020

Surface location:
 Northing 1886752.51 Easting 1245337.45 Latitude 36.17791800 Longitude -107.58868500

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 9.064°

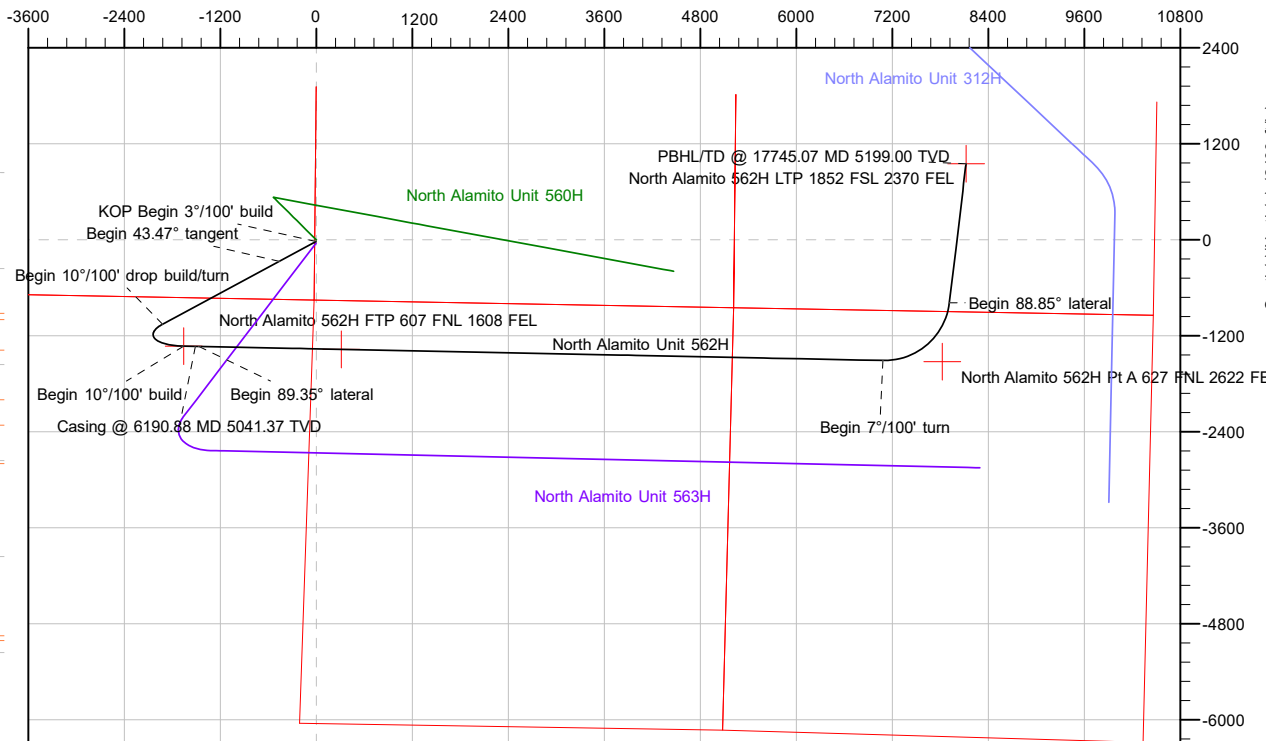
Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
1	0.00	0.00	0.000	0.00	-20.01	-1.46	0.00	0.000	0.00	
2	1100.00	0.00	0.000	1100.00	-20.01	-1.46	0.00	0.000	0.00	KOP Begin 3°/100' build
3	2549.13	43.47	241.694	2414.03	-268.43	-462.71	3.00	241.694	-505.62	Begin 43.47° tangent
4	4957.49	43.47	241.694	4161.75	-1054.17	-1921.58	0.00	0.000	-2104.83	Begin 10°/100' drop build/turn
5	6040.88	70.00	91.173	5009.00	-1328.32	-1656.75	10.00	-150.845	-1909.19	Begin 10°/100' build
6	6190.88	85.00	91.173	5041.37	-1331.31	-1510.75	10.00	0.000	-1767.68	Casing @ 6190.88 MD 5041.37 TVD
7	6234.38	89.35	91.173	5043.52	-1332.20	-1467.33	10.00	0.000	-1725.59	Begin 89.35° lateral
8	14788.61	89.35	91.173	5140.56	-1507.36	7084.56	0.00	0.000	6563.01	Begin 7°/100' turn
9	15993.43	88.85	6.824	5163.85	-786.57	7913.80	7.00	-91.091	7534.28	Begin 88.85° lateral
10	17745.07	88.85	6.824	5199.00	952.31	8121.89	0.00	0.000	8131.88	PBHL/TD @ 17745.07 MD 5199.00 TVD

DESIGN TARGET DETAILS

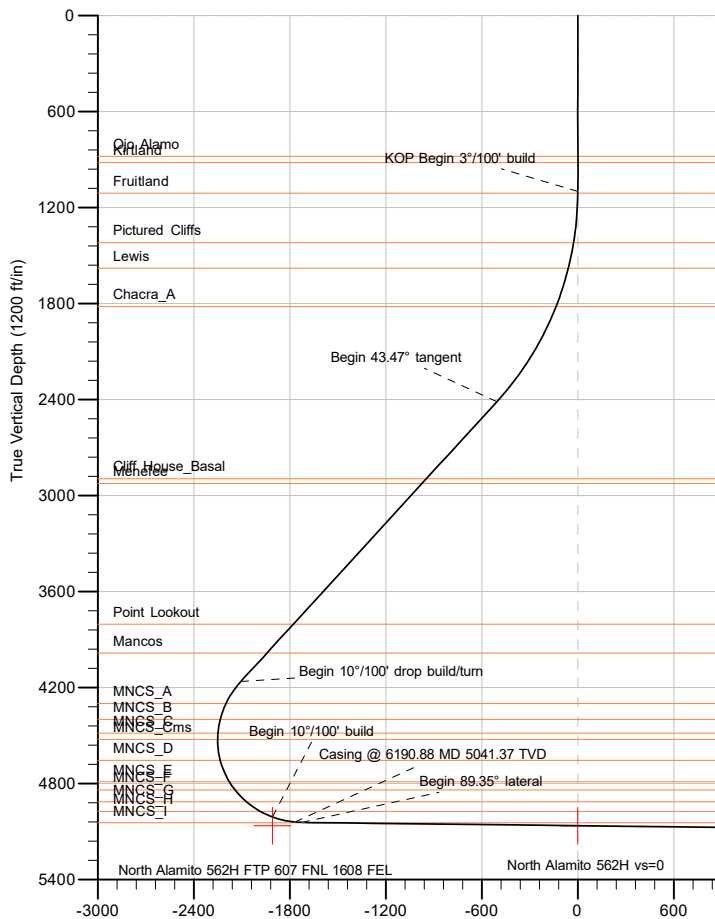
Name	TVD	+N/-S	+E/W	Northing	Easting	Latitude	Longitude
North Alamito 562H FTP 607 FNL 1608 FEL	5064.00	-1328.32	-1656.75	1885444.19	1243682.16	36.17426200	-107.59423100
North Alamito 562H vs=0	5064.00	-1368.87	313.07	1885403.65	1245651.98	36.17422540	-107.58755654
North Alamito 562H Pt A 627 FNL 2622 FEL	5149.00	-1522.54	7825.72	1885249.98	1253164.61	36.17408500	-107.56210100
North Alamito 562H LTP 1852 FSL 2370 FEL	5199.00	952.31	8121.89	1887724.83	1253460.78	36.18089300	-107.56121100

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



CASING DETAILS

TVD	MD	Name
350.00	350.00	9-5/8" Surface Casing
5041.37	6190.88	7" Intermediate Casing





Planning Report

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	North Alamito Unit (560, 562 & 563)				
Site Position:		Northing:	1,886,772.52 usft	Latitude:	36.17797300
From:	Lat/Long	Easting:	1,245,338.91 usft	Longitude:	-107.58868100
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	North Alamito Unit 562H, Surf loc: 732 FSL 19 FWL Section 33-T23N-R07W					
Well Position	+N/-S	-20.01 ft	Northing:	1,886,752.51 usft	Latitude:	36.17791800
	+E/-W	-1.46 ft	Easting:	1,245,337.45 usft	Longitude:	-107.58868500
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,876.00 ft
Grid Convergence:		-0.790 °				

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/29/2025	8.273	62.628	48,869.66355888

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	-20.01	-1.46	76.872

Plan Survey Tool Program	Date	8/29/2025		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,745.04	rev0 (Original Hole)	MWD OWSG MWD - Standard



Planning Report

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	-20.01	-1.46	0.00	0.00	0.00	0.000	
1,100.00	0.00	0.000	1,100.00	-20.01	-1.46	0.00	0.00	0.00	0.000	
2,549.13	43.47	241.694	2,414.03	-268.43	-462.71	3.00	3.00	0.00	241.694	
4,957.49	43.47	241.694	4,161.75	-1,054.17	-1,921.58	0.00	0.00	0.00	0.000	
6,040.88	70.00	91.173	5,009.00	-1,328.32	-1,656.75	10.00	2.45	-13.89	-150.845	
6,190.88	85.00	91.173	5,041.37	-1,331.31	-1,510.75	10.00	10.00	0.00	0.000	
6,234.38	89.35	91.173	5,043.52	-1,332.20	-1,467.33	10.00	10.00	0.00	0.000	
14,788.61	89.35	91.173	5,140.56	-1,507.36	7,084.56	0.00	0.00	0.00	0.000	
15,993.43	88.85	6.824	5,163.85	-786.57	7,913.80	7.00	-0.04	-7.00	-91.091	
17,745.07	88.85	6.824	5,199.00	952.31	8,121.89	0.00	0.00	0.00	0.000	North Alamito 562H L



Planning Report

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	-20.01	-1.46	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	-20.01	-1.46	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	-20.01	-1.46	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	-20.01	-1.46	0.00	0.00	0.00	0.00
350.00	0.00	0.000	350.00	-20.01	-1.46	0.00	0.00	0.00	0.00
9-5/8" Surface Casing									
400.00	0.00	0.000	400.00	-20.01	-1.46	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	-20.01	-1.46	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	-20.01	-1.46	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	-20.01	-1.46	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	-20.01	-1.46	0.00	0.00	0.00	0.00
880.00	0.00	0.000	880.00	-20.01	-1.46	0.00	0.00	0.00	0.00
Ojo Alamo									
900.00	0.00	0.000	900.00	-20.01	-1.46	0.00	0.00	0.00	0.00
920.00	0.00	0.000	920.00	-20.01	-1.46	0.00	0.00	0.00	0.00
Kirtland									
1,000.00	0.00	0.000	1,000.00	-20.01	-1.46	0.00	0.00	0.00	0.00
1,100.00	0.00	0.000	1,100.00	-20.01	-1.46	0.00	0.00	0.00	0.00
KOP Begin 3°/100' build									
1,110.00	0.30	241.694	1,110.00	-20.02	-1.48	-0.03	3.00	3.00	0.00
Fruitland									
1,200.00	3.00	241.694	1,199.95	-21.25	-3.76	-2.53	3.00	3.00	0.00
1,300.00	6.00	241.694	1,299.63	-24.97	-10.67	-10.10	3.00	3.00	0.00
1,400.00	9.00	241.694	1,398.77	-31.16	-22.16	-22.69	3.00	3.00	0.00
1,421.52	9.65	241.694	1,420.00	-32.81	-25.23	-26.06	3.00	3.00	0.00
Pictured Cliffs									
1,500.00	12.00	241.694	1,497.08	-39.80	-38.20	-40.28	3.00	3.00	0.00
1,585.20	14.56	241.694	1,580.00	-49.07	-55.43	-59.16	3.00	3.00	0.00
Lewis									
1,600.00	15.00	241.694	1,594.31	-50.86	-58.75	-62.81	3.00	3.00	0.00
1,700.00	18.00	241.694	1,690.18	-64.33	-83.75	-90.21	3.00	3.00	0.00
1,800.00	21.00	241.694	1,784.43	-80.16	-113.14	-122.43	3.00	3.00	0.00
1,838.25	22.15	241.694	1,820.00	-86.83	-125.52	-136.00	3.00	3.00	0.00
Chacra_A									
1,900.00	24.00	241.694	1,876.81	-98.30	-146.83	-159.36	3.00	3.00	0.00
2,000.00	27.00	241.694	1,967.06	-118.71	-184.73	-200.90	3.00	3.00	0.00
2,100.00	30.00	241.694	2,054.93	-141.34	-226.73	-246.95	3.00	3.00	0.00
2,200.00	33.00	241.694	2,140.18	-166.11	-272.73	-297.37	3.00	3.00	0.00
2,300.00	36.00	241.694	2,222.59	-192.97	-322.59	-352.03	3.00	3.00	0.00
2,400.00	39.00	241.694	2,301.91	-221.83	-376.18	-410.77	3.00	3.00	0.00
2,500.00	42.00	241.694	2,377.95	-252.62	-433.36	-473.44	3.00	3.00	0.00
2,549.13	43.47	241.694	2,414.03	-268.43	-462.71	-505.62	3.00	3.00	0.00
Begin 43.47° tangent									
2,600.00	43.47	241.694	2,450.94	-285.03	-493.52	-539.40	0.00	0.00	0.00
2,700.00	43.47	241.694	2,523.51	-317.65	-554.10	-605.80	0.00	0.00	0.00
2,800.00	43.47	241.694	2,596.08	-350.28	-614.67	-672.20	0.00	0.00	0.00
2,900.00	43.47	241.694	2,668.65	-382.90	-675.25	-738.61	0.00	0.00	0.00
3,000.00	43.47	241.694	2,741.22	-415.53	-735.82	-805.01	0.00	0.00	0.00
3,100.00	43.47	241.694	2,813.79	-448.15	-796.40	-871.41	0.00	0.00	0.00
3,200.00	43.47	241.694	2,886.36	-480.78	-856.98	-937.81	0.00	0.00	0.00
3,211.91	43.47	241.694	2,895.00	-484.67	-864.19	-945.72	0.00	0.00	0.00
Cliff House_Basal									
3,253.25	43.47	241.694	2,925.00	-498.15	-889.23	-973.17	0.00	0.00	0.00



Planning Report

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Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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)
Menefee									
3,300.00	43.47	241.694	2,958.93	-513.40	-917.55	-1,004.22	0.00	0.00	0.00
3,400.00	43.47	241.694	3,031.50	-546.03	-978.13	-1,070.62	0.00	0.00	0.00
3,500.00	43.47	241.694	3,104.06	-578.66	-1,038.70	-1,137.02	0.00	0.00	0.00
3,600.00	43.47	241.694	3,176.63	-611.28	-1,099.28	-1,203.42	0.00	0.00	0.00
3,700.00	43.47	241.694	3,249.20	-643.91	-1,159.85	-1,269.82	0.00	0.00	0.00
3,800.00	43.47	241.694	3,321.77	-676.53	-1,220.43	-1,336.23	0.00	0.00	0.00
3,900.00	43.47	241.694	3,394.34	-709.16	-1,281.00	-1,402.63	0.00	0.00	0.00
4,000.00	43.47	241.694	3,466.91	-741.78	-1,341.58	-1,469.03	0.00	0.00	0.00
4,100.00	43.47	241.694	3,539.48	-774.41	-1,402.15	-1,535.43	0.00	0.00	0.00
4,200.00	43.47	241.694	3,612.05	-807.03	-1,462.73	-1,601.84	0.00	0.00	0.00
4,300.00	43.47	241.694	3,684.61	-839.66	-1,523.30	-1,668.24	0.00	0.00	0.00
4,400.00	43.47	241.694	3,757.18	-872.28	-1,583.88	-1,734.64	0.00	0.00	0.00
4,465.89	43.47	241.694	3,805.00	-893.78	-1,623.79	-1,778.39	0.00	0.00	0.00
Point Lookout									
4,500.00	43.47	241.694	3,829.75	-904.91	-1,644.45	-1,801.04	0.00	0.00	0.00
4,600.00	43.47	241.694	3,902.32	-937.53	-1,705.03	-1,867.44	0.00	0.00	0.00
4,700.00	43.47	241.694	3,974.89	-970.16	-1,765.60	-1,933.85	0.00	0.00	0.00
4,713.93	43.47	241.694	3,985.00	-974.70	-1,774.04	-1,943.10	0.00	0.00	0.00
Mancos									
4,800.00	43.47	241.694	4,047.46	-1,002.78	-1,826.18	-2,000.25	0.00	0.00	0.00
4,900.00	43.47	241.694	4,120.03	-1,035.41	-1,886.75	-2,066.65	0.00	0.00	0.00
4,957.49	43.47	241.694	4,161.75	-1,054.17	-1,921.58	-2,104.83	0.00	0.00	0.00
Begin 10°/100' drop build/turn									
5,000.00	39.81	238.460	4,193.51	-1,068.22	-1,946.06	-2,131.86	10.00	-8.63	-7.61
5,050.00	35.63	233.967	4,233.07	-1,085.17	-1,971.50	-2,160.48	10.00	-8.36	-8.99
5,100.00	31.65	228.482	4,274.70	-1,102.45	-1,993.11	-2,185.45	10.00	-7.95	-10.97
5,129.38	29.44	224.663	4,300.00	-1,112.69	-2,003.96	-2,198.34	10.00	-7.51	-13.00
MNCS_A									
5,150.00	27.97	221.664	4,318.09	-1,119.91	-2,010.73	-2,206.58	10.00	-7.16	-14.54
5,200.00	24.71	213.094	4,362.90	-1,137.44	-2,024.24	-2,223.72	10.00	-6.52	-17.14
5,240.47	22.51	204.593	4,400.00	-1,151.57	-2,032.09	-2,234.57	10.00	-5.43	-21.00
MNCS_B									
5,250.00	22.07	202.373	4,408.81	-1,154.89	-2,033.53	-2,236.73	10.00	-4.68	-23.31
5,300.00	20.28	189.408	4,455.46	-1,172.13	-2,038.52	-2,245.51	10.00	-3.57	-25.93
5,331.42	19.71	180.362	4,485.00	-1,182.80	-2,039.45	-2,248.83	10.00	-1.83	-28.78
MNCS_C									
5,350.00	19.59	174.847	4,502.50	-1,189.04	-2,039.19	-2,249.99	10.00	-0.64	-29.69
5,373.89	19.68	167.739	4,525.00	-1,196.96	-2,037.97	-2,250.61	10.00	0.40	-29.75
MNCS_Cms									
5,400.00	20.10	160.160	4,549.56	-1,205.48	-2,035.52	-2,250.15	10.00	1.60	-29.03
5,450.00	21.74	146.892	4,596.28	-1,221.33	-2,027.54	-2,245.98	10.00	3.27	-26.53
5,500.00	24.27	135.829	4,642.33	-1,236.46	-2,015.31	-2,237.51	10.00	5.06	-22.13
5,513.95	25.10	133.147	4,655.00	-1,240.54	-2,011.16	-2,234.39	10.00	5.96	-19.23
MNCS_D									
5,550.00	27.45	126.960	4,687.33	-1,250.77	-1,998.93	-2,224.81	10.00	6.51	-17.16
5,600.00	31.08	119.908	4,730.96	-1,264.14	-1,978.52	-2,207.98	10.00	7.26	-14.10
5,650.00	35.02	114.248	4,772.87	-1,276.48	-1,954.24	-2,187.13	10.00	7.88	-11.32
5,671.15	36.75	112.184	4,790.00	-1,281.36	-1,942.85	-2,177.14	10.00	8.20	-9.76
MNCS_E									
5,700.00	39.17	109.625	4,812.75	-1,287.68	-1,926.27	-2,162.43	10.00	8.38	-8.87
5,735.95	42.25	106.789	4,840.00	-1,294.99	-1,904.00	-2,142.40	10.00	8.58	-7.89
MNCS_F									



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Well:	North Alamito Unit 562H	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)
5,750.00	43.48	105.771	4,850.30	-1,297.67	-1,894.82	-2,134.08	10.00	8.70	-7.24
5,800.00	47.89	102.490	4,885.22	-1,306.36	-1,860.14	-2,102.27	10.00	8.83	-6.56
5,846.30	52.05	99.839	4,915.00	-1,313.20	-1,825.36	-2,069.96	10.00	8.99	-5.73
MNCS_G									
5,850.00	52.39	99.641	4,917.26	-1,313.69	-1,822.48	-2,067.27	10.00	9.06	-5.37
5,900.00	56.95	97.119	4,946.17	-1,319.61	-1,782.14	-2,029.32	10.00	9.12	-5.04
5,950.00	61.55	94.847	4,971.74	-1,324.06	-1,739.42	-1,988.73	10.00	9.21	-4.54
5,956.92	62.19	94.549	4,975.00	-1,324.56	-1,733.33	-1,982.91	10.00	9.25	-4.31
MNCS_H									
6,000.00	66.19	92.766	4,993.75	-1,327.03	-1,694.64	-1,945.79	10.00	9.28	-4.14
6,040.88	70.00	91.173	5,009.00	-1,328.32	-1,656.75	-1,909.19	10.00	9.32	-3.90
Begin 10°/100' build									
6,050.00	70.91	91.173	5,012.05	-1,328.50	-1,648.15	-1,900.85	10.00	10.00	0.00
6,100.00	75.91	91.173	5,026.32	-1,329.48	-1,600.26	-1,854.43	10.00	10.00	0.00
6,150.00	80.91	91.173	5,036.36	-1,330.48	-1,551.30	-1,806.99	10.00	10.00	0.00
6,190.88	85.00	91.173	5,041.37	-1,331.31	-1,510.75	-1,767.68	10.00	10.00	0.00
Casing @ 6190.88 MD 5041.37 TVD - 7" Intermediate Casing									
6,200.00	85.91	91.173	5,042.10	-1,331.50	-1,501.66	-1,758.87	10.01	10.01	0.00
6,234.38	89.35	91.173	5,043.52	-1,332.20	-1,467.33	-1,725.59	10.00	10.00	0.00
Begin 89.35° lateral									
6,300.00	89.35	91.173	5,044.26	-1,333.55	-1,401.72	-1,662.01	0.00	0.00	0.00
6,365.13	89.35	91.173	5,045.00	-1,334.88	-1,336.61	-1,598.90	0.00	0.00	0.00
MNCS_I									
6,400.00	89.35	91.173	5,045.40	-1,335.59	-1,301.75	-1,565.11	0.00	0.00	0.00
6,500.00	89.35	91.173	5,046.53	-1,337.64	-1,201.77	-1,468.22	0.00	0.00	0.00
6,600.00	89.35	91.173	5,047.66	-1,339.69	-1,101.80	-1,371.32	0.00	0.00	0.00
6,700.00	89.35	91.173	5,048.80	-1,341.74	-1,001.83	-1,274.43	0.00	0.00	0.00
6,800.00	89.35	91.173	5,049.93	-1,343.78	-901.86	-1,177.53	0.00	0.00	0.00
6,900.00	89.35	91.173	5,051.07	-1,345.83	-801.88	-1,080.64	0.00	0.00	0.00
7,000.00	89.35	91.173	5,052.20	-1,347.88	-701.91	-983.74	0.00	0.00	0.00
7,100.00	89.35	91.173	5,053.34	-1,349.93	-601.94	-886.85	0.00	0.00	0.00
7,200.00	89.35	91.173	5,054.47	-1,351.97	-501.97	-789.95	0.00	0.00	0.00
7,300.00	89.35	91.173	5,055.61	-1,354.02	-401.99	-693.06	0.00	0.00	0.00
7,400.00	89.35	91.173	5,056.74	-1,356.07	-302.02	-596.16	0.00	0.00	0.00
7,500.00	89.35	91.173	5,057.87	-1,358.12	-202.05	-499.27	0.00	0.00	0.00
7,600.00	89.35	91.173	5,059.01	-1,360.17	-102.07	-402.38	0.00	0.00	0.00
7,700.00	89.35	91.173	5,060.14	-1,362.21	-2.10	-305.48	0.00	0.00	0.00
7,800.00	89.35	91.173	5,061.28	-1,364.26	97.87	-208.59	0.00	0.00	0.00
7,900.00	89.35	91.173	5,062.41	-1,366.31	197.84	-111.69	0.00	0.00	0.00
8,000.00	89.35	91.173	5,063.55	-1,368.36	297.82	-14.80	0.00	0.00	0.00
8,100.00	89.35	91.173	5,064.68	-1,370.40	397.79	82.10	0.00	0.00	0.00
8,200.00	89.35	91.173	5,065.82	-1,372.45	497.76	178.99	0.00	0.00	0.00
8,300.00	89.35	91.173	5,066.95	-1,374.50	597.73	275.89	0.00	0.00	0.00
8,400.00	89.35	91.173	5,068.08	-1,376.55	697.71	372.78	0.00	0.00	0.00
8,500.00	89.35	91.173	5,069.22	-1,378.59	797.68	469.68	0.00	0.00	0.00
8,600.00	89.35	91.173	5,070.35	-1,380.64	897.65	566.57	0.00	0.00	0.00
8,700.00	89.35	91.173	5,071.49	-1,382.69	997.62	663.47	0.00	0.00	0.00
8,800.00	89.35	91.173	5,072.62	-1,384.74	1,097.60	760.36	0.00	0.00	0.00
8,900.00	89.35	91.173	5,073.76	-1,386.78	1,197.57	857.26	0.00	0.00	0.00
9,000.00	89.35	91.173	5,074.89	-1,388.83	1,297.54	954.15	0.00	0.00	0.00
9,100.00	89.35	91.173	5,076.03	-1,390.88	1,397.51	1,051.05	0.00	0.00	0.00
9,200.00	89.35	91.173	5,077.16	-1,392.93	1,497.49	1,147.94	0.00	0.00	0.00
9,300.00	89.35	91.173	5,078.29	-1,394.97	1,597.46	1,244.84	0.00	0.00	0.00



Planning Report

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,400.00	89.35	91.173	5,079.43	-1,397.02	1,697.43	1,341.73	0.00	0.00	0.00	
9,500.00	89.35	91.173	5,080.56	-1,399.07	1,797.40	1,438.63	0.00	0.00	0.00	
9,600.00	89.35	91.173	5,081.70	-1,401.12	1,897.38	1,535.52	0.00	0.00	0.00	
9,700.00	89.35	91.173	5,082.83	-1,403.16	1,997.35	1,632.42	0.00	0.00	0.00	
9,800.00	89.35	91.173	5,083.97	-1,405.21	2,097.32	1,729.31	0.00	0.00	0.00	
9,900.00	89.35	91.173	5,085.10	-1,407.26	2,197.30	1,826.20	0.00	0.00	0.00	
10,000.00	89.35	91.173	5,086.24	-1,409.31	2,297.27	1,923.10	0.00	0.00	0.00	
10,100.00	89.35	91.173	5,087.37	-1,411.35	2,397.24	2,019.99	0.00	0.00	0.00	
10,200.00	89.35	91.173	5,088.50	-1,413.40	2,497.21	2,116.89	0.00	0.00	0.00	
10,300.00	89.35	91.173	5,089.64	-1,415.45	2,597.19	2,213.78	0.00	0.00	0.00	
10,400.00	89.35	91.173	5,090.77	-1,417.50	2,697.16	2,310.68	0.00	0.00	0.00	
10,500.00	89.35	91.173	5,091.91	-1,419.54	2,797.13	2,407.57	0.00	0.00	0.00	
10,600.00	89.35	91.173	5,093.04	-1,421.59	2,897.10	2,504.47	0.00	0.00	0.00	
10,700.00	89.35	91.173	5,094.18	-1,423.64	2,997.08	2,601.36	0.00	0.00	0.00	
10,800.00	89.35	91.173	5,095.31	-1,425.69	3,097.05	2,698.26	0.00	0.00	0.00	
10,900.00	89.35	91.173	5,096.45	-1,427.74	3,197.02	2,795.15	0.00	0.00	0.00	
11,000.00	89.35	91.173	5,097.58	-1,429.78	3,296.99	2,892.05	0.00	0.00	0.00	
11,100.00	89.35	91.173	5,098.71	-1,431.83	3,396.97	2,988.94	0.00	0.00	0.00	
11,200.00	89.35	91.173	5,099.85	-1,433.88	3,496.94	3,085.84	0.00	0.00	0.00	
11,300.00	89.35	91.173	5,100.98	-1,435.93	3,596.91	3,182.73	0.00	0.00	0.00	
11,400.00	89.35	91.173	5,102.12	-1,437.97	3,696.88	3,279.63	0.00	0.00	0.00	
11,500.00	89.35	91.173	5,103.25	-1,440.02	3,796.86	3,376.52	0.00	0.00	0.00	
11,600.00	89.35	91.173	5,104.39	-1,442.07	3,896.83	3,473.42	0.00	0.00	0.00	
11,700.00	89.35	91.173	5,105.52	-1,444.12	3,996.80	3,570.31	0.00	0.00	0.00	
11,800.00	89.35	91.173	5,106.66	-1,446.16	4,096.77	3,667.21	0.00	0.00	0.00	
11,900.00	89.35	91.173	5,107.79	-1,448.21	4,196.75	3,764.10	0.00	0.00	0.00	
12,000.00	89.35	91.173	5,108.92	-1,450.26	4,296.72	3,860.99	0.00	0.00	0.00	
12,100.00	89.35	91.173	5,110.06	-1,452.31	4,396.69	3,957.89	0.00	0.00	0.00	
12,200.00	89.35	91.173	5,111.19	-1,454.35	4,496.66	4,054.78	0.00	0.00	0.00	
12,300.00	89.35	91.173	5,112.33	-1,456.40	4,596.64	4,151.68	0.00	0.00	0.00	
12,400.00	89.35	91.173	5,113.46	-1,458.45	4,696.61	4,248.57	0.00	0.00	0.00	
12,500.00	89.35	91.173	5,114.60	-1,460.50	4,796.58	4,345.47	0.00	0.00	0.00	
12,600.00	89.35	91.173	5,115.73	-1,462.54	4,896.56	4,442.36	0.00	0.00	0.00	
12,700.00	89.35	91.173	5,116.87	-1,464.59	4,996.53	4,539.26	0.00	0.00	0.00	
12,800.00	89.35	91.173	5,118.00	-1,466.64	5,096.50	4,636.15	0.00	0.00	0.00	
12,900.00	89.35	91.173	5,119.13	-1,468.69	5,196.47	4,733.05	0.00	0.00	0.00	
13,000.00	89.35	91.173	5,120.27	-1,470.73	5,296.45	4,829.94	0.00	0.00	0.00	
13,100.00	89.35	91.173	5,121.40	-1,472.78	5,396.42	4,926.84	0.00	0.00	0.00	
13,200.00	89.35	91.173	5,122.54	-1,474.83	5,496.39	5,023.73	0.00	0.00	0.00	
13,300.00	89.35	91.173	5,123.67	-1,476.88	5,596.36	5,120.63	0.00	0.00	0.00	
13,400.00	89.35	91.173	5,124.81	-1,478.92	5,696.34	5,217.52	0.00	0.00	0.00	
13,500.00	89.35	91.173	5,125.94	-1,480.97	5,796.31	5,314.42	0.00	0.00	0.00	
13,600.00	89.35	91.173	5,127.08	-1,483.02	5,896.28	5,411.31	0.00	0.00	0.00	
13,700.00	89.35	91.173	5,128.21	-1,485.07	5,996.25	5,508.21	0.00	0.00	0.00	
13,800.00	89.35	91.173	5,129.34	-1,487.11	6,096.23	5,605.10	0.00	0.00	0.00	
13,900.00	89.35	91.173	5,130.48	-1,489.16	6,196.20	5,702.00	0.00	0.00	0.00	
14,000.00	89.35	91.173	5,131.61	-1,491.21	6,296.17	5,798.89	0.00	0.00	0.00	
14,100.00	89.35	91.173	5,132.75	-1,493.26	6,396.14	5,895.78	0.00	0.00	0.00	
14,200.00	89.35	91.173	5,133.88	-1,495.30	6,496.12	5,992.68	0.00	0.00	0.00	
14,300.00	89.35	91.173	5,135.02	-1,497.35	6,596.09	6,089.57	0.00	0.00	0.00	
14,400.00	89.35	91.173	5,136.15	-1,499.40	6,696.06	6,186.47	0.00	0.00	0.00	
14,500.00	89.35	91.173	5,137.29	-1,501.45	6,796.03	6,283.36	0.00	0.00	0.00	
14,600.00	89.35	91.173	5,138.42	-1,503.50	6,896.01	6,380.26	0.00	0.00	0.00	
14,700.00	89.35	91.173	5,139.55	-1,505.54	6,995.98	6,477.15	0.00	0.00	0.00	



Planning Report

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
14,788.61	89.35	91.173	5,140.56	-1,507.36	7,084.56	6,563.01	0.00	0.00	0.00	
Begin 7°/100' turn										
14,800.00	89.33	90.376	5,140.69	-1,507.51	7,095.95	6,574.07	7.00	-0.13	-7.00	
14,850.00	89.27	86.876	5,141.30	-1,506.31	7,145.93	6,623.01	7.00	-0.13	-7.00	
14,900.00	89.21	83.376	5,141.96	-1,502.07	7,195.73	6,672.48	7.00	-0.12	-7.00	
14,950.00	89.15	79.876	5,142.68	-1,494.79	7,245.19	6,722.29	7.00	-0.12	-7.00	
15,000.00	89.09	76.377	5,143.45	-1,484.50	7,294.11	6,772.27	7.00	-0.11	-7.00	
15,050.00	89.04	72.876	5,144.26	-1,471.25	7,342.30	6,822.21	7.00	-0.11	-7.00	
15,100.00	88.99	69.376	5,145.12	-1,455.08	7,389.60	6,871.95	7.00	-0.10	-7.00	
15,150.00	88.95	65.876	5,146.02	-1,436.05	7,435.82	6,921.28	7.00	-0.09	-7.00	
15,200.00	88.90	62.376	5,146.96	-1,414.24	7,480.79	6,970.03	7.00	-0.08	-7.00	
15,250.00	88.87	58.875	5,147.93	-1,389.72	7,524.35	7,018.02	7.00	-0.07	-7.00	
15,300.00	88.83	55.375	5,148.94	-1,362.59	7,566.33	7,065.06	7.00	-0.07	-7.00	
15,350.00	88.81	51.874	5,149.96	-1,332.95	7,606.57	7,110.99	7.00	-0.06	-7.00	
15,400.00	88.78	48.373	5,151.02	-1,300.91	7,644.93	7,155.62	7.00	-0.05	-7.00	
15,450.00	88.76	44.873	5,152.09	-1,266.58	7,681.26	7,198.80	7.00	-0.04	-7.00	
15,500.00	88.75	41.372	5,153.18	-1,230.10	7,715.42	7,240.35	7.00	-0.03	-7.00	
15,550.00	88.74	37.871	5,154.27	-1,191.60	7,747.29	7,280.14	7.00	-0.02	-7.00	
15,600.00	88.73	34.370	5,155.38	-1,151.23	7,776.76	7,318.00	7.00	-0.01	-7.00	
15,650.00	88.73	30.869	5,156.49	-1,109.13	7,803.70	7,353.80	7.00	0.00	-7.00	
15,700.00	88.73	27.368	5,157.59	-1,065.47	7,828.02	7,387.40	7.00	0.01	-7.00	
15,750.00	88.74	23.868	5,158.70	-1,020.40	7,849.63	7,418.68	7.00	0.02	-7.00	
15,800.00	88.76	20.367	5,159.79	-974.10	7,868.45	7,447.52	7.00	0.03	-7.00	
15,850.00	88.77	16.866	5,160.87	-926.73	7,884.40	7,473.82	7.00	0.04	-7.00	
15,900.00	88.80	13.365	5,161.93	-878.48	7,897.44	7,497.47	7.00	0.04	-7.00	
15,950.00	88.82	9.865	5,162.97	-829.52	7,907.50	7,518.39	7.00	0.05	-7.00	
15,993.43	88.85	6.824	5,163.85	-786.57	7,913.80	7,534.28	7.00	0.06	-7.00	
Begin 88.85° lateral										
16,000.00	88.85	6.824	5,163.98	-780.04	7,914.58	7,536.53	0.00	0.00	0.00	
16,100.00	88.85	6.824	5,165.99	-680.77	7,926.46	7,570.64	0.00	0.00	0.00	
16,200.00	88.85	6.824	5,167.99	-581.50	7,938.34	7,604.76	0.00	0.00	0.00	
16,300.00	88.85	6.824	5,170.00	-482.23	7,950.22	7,638.88	0.00	0.00	0.00	
16,400.00	88.85	6.824	5,172.01	-382.96	7,962.10	7,672.99	0.00	0.00	0.00	
16,500.00	88.85	6.824	5,174.01	-283.69	7,973.98	7,707.11	0.00	0.00	0.00	
16,600.00	88.85	6.824	5,176.02	-184.41	7,985.86	7,741.23	0.00	0.00	0.00	
16,700.00	88.85	6.824	5,178.03	-85.14	7,997.74	7,775.34	0.00	0.00	0.00	
16,800.00	88.85	6.824	5,180.03	14.13	8,009.62	7,809.46	0.00	0.00	0.00	
16,900.00	88.85	6.824	5,182.04	113.40	8,021.50	7,843.58	0.00	0.00	0.00	
17,000.00	88.85	6.824	5,184.05	212.67	8,033.38	7,877.69	0.00	0.00	0.00	
17,100.00	88.85	6.824	5,186.05	311.94	8,045.26	7,911.81	0.00	0.00	0.00	
17,200.00	88.85	6.824	5,188.06	411.21	8,057.14	7,945.93	0.00	0.00	0.00	
17,300.00	88.85	6.824	5,190.07	510.49	8,069.02	7,980.04	0.00	0.00	0.00	
17,400.00	88.85	6.824	5,192.08	609.76	8,080.90	8,014.16	0.00	0.00	0.00	
17,500.00	88.85	6.824	5,194.08	709.03	8,092.78	8,048.28	0.00	0.00	0.00	
17,600.00	88.85	6.824	5,196.09	808.30	8,104.66	8,082.39	0.00	0.00	0.00	
17,700.00	88.85	6.824	5,198.10	907.57	8,116.54	8,116.51	0.00	0.00	0.00	
17,745.07	88.85	6.824	5,199.00	952.31	8,121.89	8,131.88	0.00	0.00	0.00	
PBHLTD @ 17745.07 MD 5199.00 TVD										



Planning Report

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Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
350.00	350.00	9-5/8" Surface Casing	9-5/8	12-1/4	
6,190.88	5,041.37	7" Intermediate Casing	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
880.00	880.00	Ojo Alamo				
920.00	920.00	Kirtland				
1,110.00	1,110.00	Fruitland				
1,421.52	1,420.00	Pictured Cliffs				
1,585.20	1,580.00	Lewis				
1,838.25	1,820.00	Chacra_A				
3,211.91	2,895.00	Cliff House_Basal				
3,253.25	2,925.00	Menefee				
4,465.89	3,805.00	Point Lookout				
4,713.93	3,985.00	Mancos				
5,129.38	4,300.00	MNCS_A				
5,240.47	4,400.00	MNCS_B				
5,331.42	4,485.00	MNCS_C				
5,373.89	4,525.00	MNCS_Cms				
5,513.95	4,655.00	MNCS_D				
5,671.15	4,790.00	MNCS_E				
5,735.95	4,840.00	MNCS_F				
5,846.30	4,915.00	MNCS_G				
5,956.92	4,975.00	MNCS_H				
6,365.13	5,045.00	MNCS_I				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,100.00	1,100.00	-20.01	-1.46	KOP Begin 3°/100' build	
2,549.13	2,414.03	-268.43	-462.71	Begin 43.47° tangent	
4,957.49	4,161.75	-1,054.17	-1,921.58	Begin 10°/100' drop build/turn	
6,040.88	5,009.00	-1,328.32	-1,656.75	Begin 10°/100' build	
6,190.88	5,041.37	-1,331.31	-1,510.75	Casing @ 6190.88 MD 5041.37 TVD	
6,234.38	5,043.52	-1,332.20	-1,467.33	Begin 89.35° lateral	
14,788.61	5,140.56	-1,507.36	7,084.56	Begin 7°/100' turn	
15,993.43	5,163.85	-786.57	7,913.80	Begin 88.85° lateral	
17,745.07	5,199.00	952.31	8,121.89	PBHL/TD @ 17745.07 MD 5199.00 TVD	



Planning Report - Geographic

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	North Alamito Unit (560, 562 & 563)				
Site Position:		Northing:	1,886,772.52 usft	Latitude:	36.17797300
From:	Lat/Long	Easting:	1,245,338.91 usft	Longitude:	-107.58868100
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	North Alamito Unit 562H, Surf loc: 732 FSL 19 FWL Section 33-T23N-R07W					
Well Position	+N/-S	-20.01 ft	Northing:	1,886,752.51 usft	Latitude:	36.17791800
	+E/-W	-1.46 ft	Easting:	1,245,337.45 usft	Longitude:	-107.58868500
Position Uncertainty	0.00 ft		Wellhead Elevation:	ft	Ground Level:	6,876.00 ft
Grid Convergence:	-0.790 °					

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/29/2025	8.273	62.628	48,869.66355888

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	-20.01	-1.46	76.872	

Plan Survey Tool Program	Date	8/29/2025			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	17,745.04 rev0 (Original Hole)	MWD	OWSG MWD - Standard	



Planning Report - Geographic

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	-20.01	-1.46	0.00	0.00	0.00	0.000	
1,100.00	0.00	0.000	1,100.00	-20.01	-1.46	0.00	0.00	0.00	0.000	
2,549.13	43.47	241.694	2,414.03	-268.43	-462.71	3.00	3.00	0.00	241.694	
4,957.49	43.47	241.694	4,161.75	-1,054.17	-1,921.58	0.00	0.00	0.00	0.000	
6,040.88	70.00	91.173	5,009.00	-1,328.32	-1,656.75	10.00	2.45	-13.89	-150.845	
6,190.88	85.00	91.173	5,041.37	-1,331.31	-1,510.75	10.00	10.00	0.00	0.000	
6,234.38	89.35	91.173	5,043.52	-1,332.20	-1,467.33	10.00	10.00	0.00	0.000	
14,788.61	89.35	91.173	5,140.56	-1,507.36	7,084.56	0.00	0.00	0.00	0.000	
15,993.43	88.85	6.824	5,163.85	-786.57	7,913.80	7.00	-0.04	-7.00	-91.091	
17,745.07	88.85	6.824	5,199.00	952.31	8,121.89	0.00	0.00	0.00	0.000	North Alamito 562H L



Planning Report - Geographic

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Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
100.00	0.00	0.000	100.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
200.00	0.00	0.000	200.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
300.00	0.00	0.000	300.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
350.00	0.00	0.000	350.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
9-5/8" Surface Casing										
400.00	0.00	0.000	400.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
500.00	0.00	0.000	500.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
600.00	0.00	0.000	600.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
700.00	0.00	0.000	700.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
800.00	0.00	0.000	800.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
880.00	0.00	0.000	880.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
Ojo Alamo										
900.00	0.00	0.000	900.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
920.00	0.00	0.000	920.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
Kirtland										
1,000.00	0.00	0.000	1,000.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
1,100.00	0.00	0.000	1,100.00	-20.01	-1.46	1,886,752.51	1,245,337.45	36.17791800	-107.58868500	
KOP Begin 3"/100' build										
1,110.00	0.30	241.694	1,110.00	-20.02	-1.48	1,886,752.50	1,245,337.43	36.17791796	-107.58868508	
Fruitland										
1,200.00	3.00	241.694	1,199.95	-21.25	-3.76	1,886,751.27	1,245,335.15	36.17791450	-107.58869275	
1,300.00	6.00	241.694	1,299.63	-24.97	-10.67	1,886,747.55	1,245,328.24	36.17790403	-107.58871598	
1,400.00	9.00	241.694	1,398.77	-31.16	-22.16	1,886,741.36	1,245,316.75	36.17788659	-107.58875461	
1,421.52	9.65	241.694	1,420.00	-32.81	-25.23	1,886,739.71	1,245,313.68	36.17788194	-107.58876493	
Pictured Cliffs										
1,500.00	12.00	241.694	1,497.08	-39.80	-38.20	1,886,732.72	1,245,300.71	36.17786226	-107.58880855	
1,585.20	14.56	241.694	1,580.00	-49.07	-55.43	1,886,723.44	1,245,283.48	36.17783612	-107.58886648	
Lewis										
1,600.00	15.00	241.694	1,594.31	-50.86	-58.75	1,886,721.65	1,245,280.16	36.17783108	-107.58887765	
1,700.00	18.00	241.694	1,690.18	-64.33	-83.75	1,886,708.19	1,245,255.15	36.17779315	-107.58896172	
1,800.00	21.00	241.694	1,784.43	-80.16	-113.14	1,886,692.36	1,245,225.77	36.17774857	-107.58906053	
1,838.25	22.15	241.694	1,820.00	-86.83	-125.52	1,886,685.69	1,245,213.39	36.17772978	-107.58910216	
Chacra_A										
1,900.00	24.00	241.694	1,876.81	-98.30	-146.83	1,886,674.21	1,245,192.08	36.17769746	-107.58917380	
2,000.00	27.00	241.694	1,967.06	-118.71	-184.73	1,886,653.80	1,245,154.18	36.17763996	-107.58930123	
2,100.00	30.00	241.694	2,054.93	-141.34	-226.73	1,886,631.18	1,245,112.18	36.17757624	-107.58944247	
2,200.00	33.00	241.694	2,140.18	-166.11	-272.73	1,886,606.41	1,245,066.18	36.17750646	-107.58959712	
2,300.00	36.00	241.694	2,222.59	-192.97	-322.59	1,886,579.55	1,245,016.32	36.17743081	-107.58976478	
2,400.00	39.00	241.694	2,301.91	-221.83	-376.18	1,886,550.69	1,244,962.73	36.17734951	-107.58994497	
2,500.00	42.00	241.694	2,377.95	-252.62	-433.36	1,886,519.89	1,244,905.55	36.17726277	-107.59013720	
2,549.13	43.47	241.694	2,414.03	-268.43	-462.71	1,886,504.09	1,244,876.20	36.17721824	-107.59023590	
Begin 43.47° tangent										
2,600.00	43.47	241.694	2,450.94	-285.03	-493.52	1,886,487.49	1,244,845.39	36.17717149	-107.59033951	
2,700.00	43.47	241.694	2,523.51	-317.65	-554.10	1,886,454.86	1,244,784.81	36.17707959	-107.59054318	
2,800.00	43.47	241.694	2,596.08	-350.28	-614.67	1,886,422.24	1,244,724.24	36.17698769	-107.59074685	
2,900.00	43.47	241.694	2,668.65	-382.90	-675.25	1,886,389.61	1,244,663.66	36.17689579	-107.59095053	
3,000.00	43.47	241.694	2,741.22	-415.53	-735.82	1,886,356.99	1,244,603.09	36.17680389	-107.59115420	
3,100.00	43.47	241.694	2,813.79	-448.15	-796.40	1,886,324.36	1,244,542.51	36.17671199	-107.59135787	
3,200.00	43.47	241.694	2,886.36	-480.78	-856.98	1,886,291.74	1,244,481.93	36.17662009	-107.59156154	
3,211.91	43.47	241.694	2,895.00	-484.67	-864.19	1,886,287.85	1,244,474.72	36.17660914	-107.59158580	
Cliff House_Basal										



Planning Report - Geographic

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Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	
3,253.25	43.47	241.694	2,925.00	-498.15	-889.23	1,886,274.36	1,244,449.68	36.17657115	-107.59166999	
Menefee										
3,300.00	43.47	241.694	2,958.93	-513.40	-917.55	1,886,259.11	1,244,421.36	36.17652818	-107.59176521	
3,400.00	43.47	241.694	3,031.50	-546.03	-978.13	1,886,226.49	1,244,360.78	36.17643628	-107.59196888	
3,500.00	43.47	241.694	3,104.06	-578.66	-1,038.70	1,886,193.86	1,244,300.21	36.17634438	-107.59217255	
3,600.00	43.47	241.694	3,176.63	-611.28	-1,099.28	1,886,161.24	1,244,239.63	36.17625248	-107.59237622	
3,700.00	43.47	241.694	3,249.20	-643.91	-1,159.85	1,886,128.61	1,244,179.06	36.17616057	-107.59257989	
3,800.00	43.47	241.694	3,321.77	-676.53	-1,220.43	1,886,095.99	1,244,118.48	36.17606867	-107.59278356	
3,900.00	43.47	241.694	3,394.34	-709.16	-1,281.00	1,886,063.36	1,244,057.91	36.17597677	-107.59298722	
4,000.00	43.47	241.694	3,466.91	-741.78	-1,341.58	1,886,030.74	1,243,997.33	36.17588486	-107.59319089	
4,100.00	43.47	241.694	3,539.48	-774.41	-1,402.15	1,885,998.11	1,243,936.76	36.17579296	-107.59339456	
4,200.00	43.47	241.694	3,612.05	-807.03	-1,462.73	1,885,965.49	1,243,876.18	36.17570105	-107.59359822	
4,300.00	43.47	241.694	3,684.61	-839.66	-1,523.30	1,885,932.86	1,243,815.61	36.17560915	-107.59380189	
4,400.00	43.47	241.694	3,757.18	-872.28	-1,583.88	1,885,900.24	1,243,755.03	36.17551724	-107.59400555	
4,465.89	43.47	241.694	3,805.00	-893.78	-1,623.79	1,885,878.74	1,243,715.12	36.17545668	-107.59413975	
Point Lookout										
4,500.00	43.47	241.694	3,829.75	-904.91	-1,644.45	1,885,867.61	1,243,694.46	36.17542534	-107.59420922	
4,600.00	43.47	241.694	3,902.32	-937.53	-1,705.03	1,885,834.99	1,243,633.88	36.17533343	-107.59441288	
4,700.00	43.47	241.694	3,974.89	-970.16	-1,765.60	1,885,802.36	1,243,573.31	36.17524152	-107.59461655	
4,713.93	43.47	241.694	3,985.00	-974.70	-1,774.04	1,885,797.81	1,243,564.87	36.17522872	-107.59464492	
Mancos										
4,800.00	43.47	241.694	4,047.46	-1,002.78	-1,826.18	1,885,769.73	1,243,512.73	36.17514962	-107.59482021	
4,900.00	43.47	241.694	4,120.03	-1,035.41	-1,886.75	1,885,737.11	1,243,452.16	36.17505771	-107.59502387	
4,957.49	43.47	241.694	4,161.75	-1,054.17	-1,921.58	1,885,718.35	1,243,417.33	36.17500487	-107.59514097	
Begin 10°/100' drop build/turn										
5,000.00	39.81	238.460	4,193.51	-1,068.22	-1,946.06	1,885,704.29	1,243,392.85	36.17496533	-107.59522323	
5,050.00	35.63	233.967	4,233.07	-1,085.17	-1,971.50	1,885,687.35	1,243,367.42	36.17491781	-107.59530859	
5,100.00	31.65	228.482	4,274.70	-1,102.45	-1,993.11	1,885,670.07	1,243,345.80	36.17486955	-107.59538099	
5,129.38	29.44	224.663	4,300.00	-1,112.69	-2,003.96	1,885,659.83	1,243,334.95	36.17484099	-107.59541726	
MNCS_A										
5,150.00	27.97	221.664	4,318.09	-1,119.91	-2,010.73	1,885,652.61	1,243,328.18	36.17482091	-107.59543988	
5,200.00	24.71	213.094	4,362.90	-1,137.44	-2,024.24	1,885,635.08	1,243,314.67	36.17477227	-107.59548481	
5,240.47	22.51	204.593	4,400.00	-1,151.57	-2,032.09	1,885,620.94	1,243,306.82	36.17473314	-107.59551073	
MNCS_B										
5,250.00	22.07	202.373	4,408.81	-1,154.89	-2,033.53	1,885,617.63	1,243,305.38	36.17472399	-107.59551545	
5,300.00	20.28	189.408	4,455.46	-1,172.13	-2,038.52	1,885,600.39	1,243,300.39	36.17467644	-107.59553156	
5,331.42	19.71	180.362	4,485.00	-1,182.80	-2,039.45	1,885,589.71	1,243,299.46	36.17464709	-107.59553419	
MNCS_C										
5,350.00	19.59	174.847	4,502.50	-1,189.04	-2,039.19	1,885,583.48	1,243,299.72	36.17462998	-107.59553302	
5,373.89	19.68	167.739	4,525.00	-1,196.96	-2,037.97	1,885,575.56	1,243,300.94	36.17460827	-107.59552853	
MNCS_Cms										
5,400.00	20.10	160.160	4,549.56	-1,205.48	-2,035.52	1,885,567.04	1,243,303.39	36.17458497	-107.59551981	
5,450.00	21.74	146.892	4,596.28	-1,221.33	-2,027.54	1,885,551.19	1,243,311.37	36.17454175	-107.59549204	
5,500.00	24.27	135.829	4,642.33	-1,236.46	-2,015.31	1,885,536.06	1,243,323.60	36.17450064	-107.59544991	
5,513.95	25.10	133.147	4,655.00	-1,240.54	-2,011.16	1,885,531.98	1,243,327.76	36.17448959	-107.59543564	
MNCS_D										
5,550.00	27.45	126.960	4,687.33	-1,250.77	-1,998.93	1,885,521.75	1,243,339.98	36.17446197	-107.59539376	
5,600.00	31.08	119.908	4,730.96	-1,264.14	-1,978.52	1,885,508.37	1,243,360.39	36.17442602	-107.59532400	
5,650.00	35.02	114.248	4,772.87	-1,276.48	-1,954.24	1,885,496.04	1,243,384.67	36.17439307	-107.59524117	
5,671.15	36.75	112.184	4,790.00	-1,281.36	-1,942.85	1,885,491.16	1,243,396.06	36.17438010	-107.59520235	
MNCS_E										
5,700.00	39.17	109.625	4,812.75	-1,287.68	-1,926.27	1,885,484.84	1,243,412.64	36.17436337	-107.59514589	



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Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	
5,735.95	42.25	106.789	4,840.00	-1,294.99	-1,904.00	1,885,477.53	1,243,434.91	36.17434414	-107.59507009	
MNCS_F										
5,750.00	43.48	105.771	4,850.30	-1,297.67	-1,894.82	1,885,474.85	1,243,444.09	36.17433714	-107.59503890	
5,800.00	47.89	102.490	4,885.22	-1,306.36	-1,860.14	1,885,466.16	1,243,478.77	36.17431459	-107.59492100	
5,846.30	52.05	99.839	4,915.00	-1,313.20	-1,825.36	1,885,459.32	1,243,513.55	36.17429713	-107.59480287	
MNCS_G										
5,850.00	52.39	99.641	4,917.26	-1,313.69	-1,822.48	1,885,458.83	1,243,516.43	36.17429588	-107.59479310	
5,900.00	56.95	97.119	4,946.17	-1,319.61	-1,782.14	1,885,452.91	1,243,556.77	36.17428117	-107.59465616	
5,950.00	61.55	94.847	4,971.74	-1,324.06	-1,739.42	1,885,448.45	1,243,599.49	36.17427055	-107.59451124	
5,956.92	62.19	94.549	4,975.00	-1,324.56	-1,733.33	1,885,447.95	1,243,605.58	36.17426941	-107.59449060	
MNCS_H										
6,000.00	66.19	92.766	4,993.75	-1,327.03	-1,694.64	1,885,445.49	1,243,644.27	36.17426412	-107.59435942	
6,040.88	70.00	91.173	5,009.00	-1,328.32	-1,656.75	1,885,444.20	1,243,682.16	36.17426200	-107.59423100	
Begin 10°/100' build										
6,050.00	70.91	91.173	5,012.05	-1,328.50	-1,648.15	1,885,444.02	1,243,690.76	36.17426184	-107.59420187	
6,100.00	75.91	91.173	5,026.32	-1,329.48	-1,600.26	1,885,443.04	1,243,738.65	36.17426097	-107.59403959	
6,150.00	80.91	91.173	5,036.36	-1,330.48	-1,551.30	1,885,442.04	1,243,787.61	36.17426008	-107.59387371	
6,190.88	85.00	91.173	5,041.37	-1,331.31	-1,510.75	1,885,441.21	1,243,828.16	36.17425934	-107.59373630	
Casing @ 6190.88 MD 5041.37 TVD - 7" Intermediate Casing										
6,200.00	85.91	91.173	5,042.10	-1,331.50	-1,501.66	1,885,441.02	1,243,837.25	36.17425917	-107.59370550	
6,234.38	89.35	91.173	5,043.52	-1,332.20	-1,467.33	1,885,440.32	1,243,871.59	36.17425855	-107.59358917	
Begin 89.35° lateral										
6,300.00	89.35	91.173	5,044.26	-1,333.55	-1,401.72	1,885,438.97	1,243,937.19	36.17425735	-107.59336687	
6,365.13	89.35	91.173	5,045.00	-1,334.88	-1,336.61	1,885,437.64	1,244,002.30	36.17425616	-107.59314626	
MNCS_I										
6,400.00	89.35	91.173	5,045.40	-1,335.59	-1,301.75	1,885,436.92	1,244,037.16	36.17425553	-107.59302813	
6,500.00	89.35	91.173	5,046.53	-1,337.64	-1,201.77	1,885,434.88	1,244,137.14	36.17425370	-107.59268939	
6,600.00	89.35	91.173	5,047.66	-1,339.69	-1,101.80	1,885,432.83	1,244,237.11	36.17425188	-107.59235064	
6,700.00	89.35	91.173	5,048.80	-1,341.74	-1,001.83	1,885,430.78	1,244,337.08	36.17425005	-107.59201190	
6,800.00	89.35	91.173	5,049.93	-1,343.78	-901.86	1,885,428.73	1,244,437.05	36.17424823	-107.59167316	
6,900.00	89.35	91.173	5,051.07	-1,345.83	-801.88	1,885,426.69	1,244,537.03	36.17424640	-107.59133442	
7,000.00	89.35	91.173	5,052.20	-1,347.88	-701.91	1,885,424.64	1,244,637.00	36.17424457	-107.59099567	
7,100.00	89.35	91.173	5,053.34	-1,349.93	-601.94	1,885,422.59	1,244,736.97	36.17424274	-107.59065693	
7,200.00	89.35	91.173	5,054.47	-1,351.97	-501.97	1,885,420.54	1,244,836.94	36.17424091	-107.59031819	
7,300.00	89.35	91.173	5,055.61	-1,354.02	-401.99	1,885,418.50	1,244,936.92	36.17423907	-107.58997945	
7,400.00	89.35	91.173	5,056.74	-1,356.07	-302.02	1,885,416.45	1,245,036.89	36.17423724	-107.58964070	
7,500.00	89.35	91.173	5,057.87	-1,358.12	-202.05	1,885,414.40	1,245,136.86	36.17423541	-107.58930196	
7,600.00	89.35	91.173	5,059.01	-1,360.17	-102.07	1,885,412.35	1,245,236.83	36.17423357	-107.58896322	
7,700.00	89.35	91.173	5,060.14	-1,362.21	-2.10	1,885,410.31	1,245,336.81	36.17423174	-107.58862448	
7,800.00	89.35	91.173	5,061.28	-1,364.26	97.87	1,885,408.26	1,245,436.78	36.17422990	-107.58828573	
7,900.00	89.35	91.173	5,062.41	-1,366.31	197.84	1,885,406.21	1,245,536.75	36.17422806	-107.58794699	
8,000.00	89.35	91.173	5,063.55	-1,368.36	297.82	1,885,404.16	1,245,636.72	36.17422622	-107.58760825	
8,100.00	89.35	91.173	5,064.68	-1,370.40	397.79	1,885,402.12	1,245,736.70	36.17422438	-107.58726950	
8,200.00	89.35	91.173	5,065.82	-1,372.45	497.76	1,885,400.07	1,245,836.67	36.17422254	-107.58693076	
8,300.00	89.35	91.173	5,066.95	-1,374.50	597.73	1,885,398.02	1,245,936.64	36.17422070	-107.58659202	
8,400.00	89.35	91.173	5,068.08	-1,376.55	697.71	1,885,395.97	1,246,036.61	36.17421886	-107.58625328	
8,500.00	89.35	91.173	5,069.22	-1,378.59	797.68	1,885,393.93	1,246,136.59	36.17421701	-107.58591453	
8,600.00	89.35	91.173	5,070.35	-1,380.64	897.65	1,885,391.88	1,246,236.56	36.17421517	-107.58557579	
8,700.00	89.35	91.173	5,071.49	-1,382.69	997.62	1,885,389.83	1,246,336.53	36.17421332	-107.58523705	
8,800.00	89.35	91.173	5,072.62	-1,384.74	1,097.60	1,885,387.78	1,246,436.50	36.17421148	-107.58489831	
8,900.00	89.35	91.173	5,073.76	-1,386.78	1,197.57	1,885,385.74	1,246,536.47	36.17420963	-107.58455956	
9,000.00	89.35	91.173	5,074.89	-1,388.83	1,297.54	1,885,383.69	1,246,636.45	36.17420778	-107.58422082	
9,100.00	89.35	91.173	5,076.03	-1,390.88	1,397.51	1,885,381.64	1,246,736.42	36.17420593	-107.58388208	
9,200.00	89.35	91.173	5,077.16	-1,392.93	1,497.49	1,885,379.59	1,246,836.39	36.17420408	-107.58354333	



Planning Report - Geographic

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	
9,300.00	89.35	91.173	5,078.29	-1,394.97	1,597.46	1,885,377.55	1,246,936.36	36.17420223	-107.58320459	
9,400.00	89.35	91.173	5,079.43	-1,397.02	1,697.43	1,885,375.50	1,247,036.34	36.17420038	-107.58286585	
9,500.00	89.35	91.173	5,080.56	-1,399.07	1,797.40	1,885,373.45	1,247,136.31	36.17419852	-107.58252711	
9,600.00	89.35	91.173	5,081.70	-1,401.12	1,897.38	1,885,371.40	1,247,236.28	36.17419667	-107.58218836	
9,700.00	89.35	91.173	5,082.83	-1,403.16	1,997.35	1,885,369.35	1,247,336.25	36.17419481	-107.58184962	
9,800.00	89.35	91.173	5,083.97	-1,405.21	2,097.32	1,885,367.31	1,247,436.23	36.17419296	-107.58151088	
9,900.00	89.35	91.173	5,085.10	-1,407.26	2,197.30	1,885,365.26	1,247,536.20	36.17419110	-107.58117213	
10,000.00	89.35	91.173	5,086.24	-1,409.31	2,297.27	1,885,363.21	1,247,636.17	36.17418924	-107.58083339	
10,100.00	89.35	91.173	5,087.37	-1,411.35	2,397.24	1,885,361.16	1,247,736.14	36.17418738	-107.58049465	
10,200.00	89.35	91.173	5,088.50	-1,413.40	2,497.21	1,885,359.12	1,247,836.12	36.17418552	-107.58015590	
10,300.00	89.35	91.173	5,089.64	-1,415.45	2,597.19	1,885,357.07	1,247,936.09	36.17418366	-107.57981716	
10,400.00	89.35	91.173	5,090.77	-1,417.50	2,697.16	1,885,355.02	1,248,036.06	36.17418180	-107.57947842	
10,500.00	89.35	91.173	5,091.91	-1,419.54	2,797.13	1,885,352.97	1,248,136.03	36.17417994	-107.57913968	
10,600.00	89.35	91.173	5,093.04	-1,421.59	2,897.10	1,885,350.93	1,248,236.01	36.17417807	-107.57880093	
10,700.00	89.35	91.173	5,094.18	-1,423.64	2,997.08	1,885,348.88	1,248,335.98	36.17417621	-107.57846219	
10,800.00	89.35	91.173	5,095.31	-1,425.69	3,097.05	1,885,346.83	1,248,435.95	36.17417434	-107.57812345	
10,900.00	89.35	91.173	5,096.45	-1,427.74	3,197.02	1,885,344.78	1,248,535.92	36.17417248	-107.57778470	
11,000.00	89.35	91.173	5,097.58	-1,429.78	3,296.99	1,885,342.74	1,248,635.90	36.17417061	-107.57744596	
11,100.00	89.35	91.173	5,098.71	-1,431.83	3,396.97	1,885,340.69	1,248,735.87	36.17416874	-107.57710722	
11,200.00	89.35	91.173	5,099.85	-1,433.88	3,496.94	1,885,338.64	1,248,835.84	36.17416687	-107.57676847	
11,300.00	89.35	91.173	5,100.98	-1,435.93	3,596.91	1,885,336.59	1,248,935.81	36.17416500	-107.57642973	
11,400.00	89.35	91.173	5,102.12	-1,437.97	3,696.88	1,885,334.55	1,249,035.78	36.17416313	-107.57609099	
11,500.00	89.35	91.173	5,103.25	-1,440.02	3,796.86	1,885,332.50	1,249,135.76	36.17416126	-107.57575224	
11,600.00	89.35	91.173	5,104.39	-1,442.07	3,896.83	1,885,330.45	1,249,235.73	36.17415938	-107.57541350	
11,700.00	89.35	91.173	5,105.52	-1,444.12	3,996.80	1,885,328.40	1,249,335.70	36.17415751	-107.57507476	
11,800.00	89.35	91.173	5,106.66	-1,446.16	4,096.77	1,885,326.36	1,249,435.67	36.17415563	-107.57473601	
11,900.00	89.35	91.173	5,107.79	-1,448.21	4,196.75	1,885,324.31	1,249,535.65	36.17415376	-107.57439727	
12,000.00	89.35	91.173	5,108.92	-1,450.26	4,296.72	1,885,322.26	1,249,635.62	36.17415188	-107.57405853	
12,100.00	89.35	91.173	5,110.06	-1,452.31	4,396.69	1,885,320.21	1,249,735.59	36.17415000	-107.57371978	
12,200.00	89.35	91.173	5,111.19	-1,454.35	4,496.66	1,885,318.17	1,249,835.56	36.17414812	-107.57338104	
12,300.00	89.35	91.173	5,112.33	-1,456.40	4,596.64	1,885,316.12	1,249,935.54	36.17414624	-107.57304230	
12,400.00	89.35	91.173	5,113.46	-1,458.45	4,696.61	1,885,314.07	1,250,035.51	36.17414436	-107.57270356	
12,500.00	89.35	91.173	5,114.60	-1,460.50	4,796.58	1,885,312.02	1,250,135.48	36.17414248	-107.57236481	
12,600.00	89.35	91.173	5,115.73	-1,462.54	4,896.56	1,885,309.98	1,250,235.45	36.17414060	-107.57202607	
12,700.00	89.35	91.173	5,116.87	-1,464.59	4,996.53	1,885,307.93	1,250,335.43	36.17413871	-107.57168733	
12,800.00	89.35	91.173	5,118.00	-1,466.64	5,096.50	1,885,305.88	1,250,435.40	36.17413683	-107.57134858	
12,900.00	89.35	91.173	5,119.13	-1,468.69	5,196.47	1,885,303.83	1,250,535.37	36.17413494	-107.57100984	
13,000.00	89.35	91.173	5,120.27	-1,470.73	5,296.45	1,885,301.79	1,250,635.34	36.17413306	-107.57067109	
13,100.00	89.35	91.173	5,121.40	-1,472.78	5,396.42	1,885,299.74	1,250,735.32	36.17413117	-107.57033235	
13,200.00	89.35	91.173	5,122.54	-1,474.83	5,496.39	1,885,297.69	1,250,835.29	36.17412928	-107.56999361	
13,300.00	89.35	91.173	5,123.67	-1,476.88	5,596.36	1,885,295.64	1,250,935.26	36.17412739	-107.56965486	
13,400.00	89.35	91.173	5,124.81	-1,478.92	5,696.34	1,885,293.59	1,251,035.23	36.17412550	-107.56931612	
13,500.00	89.35	91.173	5,125.94	-1,480.97	5,796.31	1,885,291.55	1,251,135.21	36.17412361	-107.56897738	
13,600.00	89.35	91.173	5,127.08	-1,483.02	5,896.28	1,885,289.50	1,251,235.18	36.17412171	-107.56863863	
13,700.00	89.35	91.173	5,128.21	-1,485.07	5,996.25	1,885,287.45	1,251,335.15	36.17411982	-107.56829989	
13,800.00	89.35	91.173	5,129.34	-1,487.11	6,096.23	1,885,285.40	1,251,435.12	36.17411793	-107.56796115	
13,900.00	89.35	91.173	5,130.48	-1,489.16	6,196.20	1,885,283.36	1,251,535.09	36.17411603	-107.56762240	
14,000.00	89.35	91.173	5,131.61	-1,491.21	6,296.17	1,885,281.31	1,251,635.07	36.17411413	-107.56728366	
14,100.00	89.35	91.173	5,132.75	-1,493.26	6,396.14	1,885,279.26	1,251,735.04	36.17411224	-107.56694492	
14,200.00	89.35	91.173	5,133.88	-1,495.30	6,496.12	1,885,277.21	1,251,835.01	36.17411034	-107.56660617	
14,300.00	89.35	91.173	5,135.02	-1,497.35	6,596.09	1,885,275.17	1,251,934.98	36.17410844	-107.56626743	
14,400.00	89.35	91.173	5,136.15	-1,499.40	6,696.06	1,885,273.12	1,252,034.96	36.17410654	-107.56592869	
14,500.00	89.35	91.173	5,137.29	-1,501.45	6,796.03	1,885,271.07	1,252,134.93	36.17410464	-107.56558994	
14,600.00	89.35	91.173	5,138.42	-1,503.50	6,896.01	1,885,269.02	1,252,234.90	36.17410274	-107.56525120	
14,700.00	89.35	91.173	5,139.55	-1,505.54	6,995.98	1,885,266.98	1,252,334.87	36.17410083	-107.56491246	



Planning Report - Geographic

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	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	
14,788.61	89.35	91.173	5,140.56	-1,507.36	7,084.56	1,885,265.16	1,252,423.45	36.17409915	-107.56461231	
Begin 7°/100' turn										
14,800.00	89.33	90.376	5,140.69	-1,507.51	7,095.95	1,885,265.01	1,252,434.85	36.17409915	-107.56457371	
14,850.00	89.27	86.876	5,141.30	-1,506.31	7,145.93	1,885,266.21	1,252,484.82	36.17410430	-107.56440448	
14,900.00	89.21	83.376	5,141.96	-1,502.07	7,195.73	1,885,270.45	1,252,534.63	36.17411781	-107.56423596	
14,950.00	89.15	79.876	5,142.68	-1,494.79	7,245.19	1,885,277.73	1,252,584.08	36.17413965	-107.56406877	
15,000.00	89.09	76.377	5,143.45	-1,484.50	7,294.11	1,885,288.02	1,252,633.00	36.17416971	-107.56390354	
15,050.00	89.04	72.876	5,144.26	-1,471.25	7,342.30	1,885,301.27	1,252,681.20	36.17420790	-107.56374088	
15,100.00	88.99	69.376	5,145.12	-1,455.08	7,389.60	1,885,317.44	1,252,728.49	36.17425406	-107.56358141	
15,150.00	88.95	65.876	5,146.02	-1,436.05	7,435.82	1,885,336.47	1,252,774.71	36.17430804	-107.56342571	
15,200.00	88.90	62.376	5,146.96	-1,414.24	7,480.79	1,885,358.28	1,252,819.69	36.17436961	-107.56327437	
15,250.00	88.87	58.875	5,147.93	-1,389.72	7,524.35	1,885,382.80	1,252,863.24	36.17443857	-107.56312794	
15,300.00	88.83	55.375	5,148.94	-1,362.59	7,566.33	1,885,409.93	1,252,905.22	36.17451464	-107.56298699	
15,350.00	88.81	51.874	5,149.96	-1,332.95	7,606.57	1,885,439.57	1,252,945.46	36.17459755	-107.56285203	
15,400.00	88.78	48.373	5,151.02	-1,300.91	7,644.93	1,885,471.61	1,252,983.82	36.17468698	-107.56272357	
15,450.00	88.76	44.873	5,152.09	-1,266.58	7,681.26	1,885,505.94	1,253,020.15	36.17478261	-107.56260208	
15,500.00	88.75	41.372	5,153.18	-1,230.10	7,715.42	1,885,542.42	1,253,054.31	36.17488407	-107.56248802	
15,550.00	88.74	37.871	5,154.27	-1,191.60	7,747.29	1,885,580.92	1,253,086.19	36.17499098	-107.56238181	
15,600.00	88.73	34.370	5,155.38	-1,151.23	7,776.76	1,885,621.29	1,253,115.65	36.17510296	-107.56228386	
15,650.00	88.73	30.869	5,156.49	-1,109.13	7,803.70	1,885,663.39	1,253,142.59	36.17521957	-107.56219452	
15,700.00	88.73	27.368	5,157.59	-1,065.47	7,828.02	1,885,707.05	1,253,166.91	36.17534040	-107.56211413	
15,750.00	88.74	23.868	5,158.70	-1,020.40	7,849.63	1,885,752.12	1,253,188.52	36.17546497	-107.56204299	
15,800.00	88.76	20.367	5,159.79	-974.10	7,868.45	1,885,798.42	1,253,207.34	36.17559284	-107.56198137	
15,850.00	88.77	16.866	5,160.87	-926.73	7,884.40	1,885,845.79	1,253,223.30	36.17572352	-107.56192949	
15,900.00	88.80	13.365	5,161.93	-878.48	7,897.44	1,885,894.04	1,253,236.33	36.17585652	-107.56188755	
15,950.00	88.82	9.865	5,162.97	-829.52	7,907.50	1,885,943.00	1,253,246.39	36.17599135	-107.56185570	
15,993.43	88.85	6.824	5,163.85	-786.57	7,913.80	1,885,985.95	1,253,252.69	36.17610956	-107.56183633	
Begin 88.85° lateral										
16,000.00	88.85	6.824	5,163.98	-780.04	7,914.58	1,885,992.47	1,253,253.47	36.17612750	-107.56183398	
16,100.00	88.85	6.824	5,165.99	-680.77	7,926.46	1,886,091.74	1,253,265.35	36.17640059	-107.56179828	
16,200.00	88.85	6.824	5,167.99	-581.50	7,938.34	1,886,191.02	1,253,277.23	36.17667367	-107.56176259	
16,300.00	88.85	6.824	5,170.00	-482.23	7,950.22	1,886,290.29	1,253,289.11	36.17694676	-107.56172689	
16,400.00	88.85	6.824	5,172.01	-382.96	7,962.10	1,886,389.56	1,253,300.99	36.17721984	-107.56169119	
16,500.00	88.85	6.824	5,174.01	-283.69	7,973.98	1,886,488.83	1,253,312.87	36.17749292	-107.56165549	
16,600.00	88.85	6.824	5,176.02	-184.41	7,985.86	1,886,588.10	1,253,324.75	36.17776601	-107.56161979	
16,700.00	88.85	6.824	5,178.03	-85.14	7,997.74	1,886,687.37	1,253,336.63	36.17803909	-107.56158409	
16,800.00	88.85	6.824	5,180.03	14.13	8,009.62	1,886,786.64	1,253,348.51	36.17831217	-107.56154840	
16,900.00	88.85	6.824	5,182.04	113.40	8,021.50	1,886,885.92	1,253,360.39	36.17858526	-107.56151270	
17,000.00	88.85	6.824	5,184.05	212.67	8,033.38	1,886,985.19	1,253,372.27	36.17885834	-107.56147700	
17,100.00	88.85	6.824	5,186.05	311.94	8,045.26	1,887,084.46	1,253,384.15	36.17913142	-107.56144130	
17,200.00	88.85	6.824	5,188.06	411.21	8,057.14	1,887,183.73	1,253,396.03	36.17940451	-107.56140560	
17,300.00	88.85	6.824	5,190.07	510.49	8,069.02	1,887,283.00	1,253,407.91	36.17967759	-107.56136990	
17,400.00	88.85	6.824	5,192.08	609.76	8,080.90	1,887,382.27	1,253,419.79	36.17995067	-107.56133420	
17,500.00	88.85	6.824	5,194.08	709.03	8,092.78	1,887,481.54	1,253,431.67	36.18022376	-107.56129850	
17,600.00	88.85	6.824	5,196.09	808.30	8,104.66	1,887,580.82	1,253,443.55	36.18049684	-107.56126279	
17,700.00	88.85	6.824	5,198.10	907.57	8,116.54	1,887,680.09	1,253,455.43	36.18076992	-107.56122709	
17,745.07	88.85	6.824	5,199.00	952.31	8,121.89	1,887,724.83	1,253,460.78	36.18089300	-107.56121100	
PBHL/TD @ 17745.07 MD 5199.00 TVD										



Planning Report - Geographic

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

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
North Alamito 562H FTP - plan misses target center by 51.99ft at 6056.59ft MD (5014.17 TVD, -1328.63 N, -1641.91 E) - Point	0.00	0.000	5,064.00	-1,328.32	-1,656.75	1,885,444.20	1,243,682.16	36.17426200	-107.59423100
North Alamito 562H vs=(- plan misses target center by 0.34ft at 8015.27ft MD (5063.72 TVD, -1368.67 N, 313.08 E) - Point	0.00	0.000	5,064.00	-1,368.87	313.07	1,885,403.65	1,245,651.98	36.17422540	-107.58755654
North Alamito 562H Pt A - plan misses target center by 285.91ft at 15396.61ft MD (5150.95 TVD, -1303.15 N, 7642.39 E) - Point	0.00	0.000	5,149.00	-1,522.54	7,825.72	1,885,249.98	1,253,164.61	36.17408500	-107.56210100
North Alamito 562H LTP - plan hits target center - Point	0.00	0.000	5,199.00	952.31	8,121.89	1,887,724.83	1,253,460.78	36.18089300	-107.56121100

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
350.00	350.00	9-5/8" Surface Casing	9-5/8	12-1/4	
6,190.88	5,041.37	7" Intermediate Casing	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
880.00	880.00	Ojo Alamo				
920.00	920.00	Kirtland				
1,110.00	1,110.00	Fruitland				
1,421.52	1,420.00	Pictured Cliffs				
1,585.20	1,580.00	Lewis				
1,838.25	1,820.00	Chacra_A				
3,211.91	2,895.00	Cliff House_Basal				
3,253.25	2,925.00	Menefee				
4,465.89	3,805.00	Point Lookout				
4,713.93	3,985.00	Mancos				
5,129.38	4,300.00	MNCS_A				
5,240.47	4,400.00	MNCS_B				
5,331.42	4,485.00	MNCS_C				
5,373.89	4,525.00	MNCS_Cms				
5,513.95	4,655.00	MNCS_D				
5,671.15	4,790.00	MNCS_E				
5,735.95	4,840.00	MNCS_F				
5,846.30	4,915.00	MNCS_G				
5,956.92	4,975.00	MNCS_H				
6,365.13	5,045.00	MNCS_I				



Planning Report - Geographic

Database:	DT-Jun1425_v17	Local Co-ordinate Reference:	Site North Alamito Unit (560, 562 & 563)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site:	North Alamito Unit (560, 562 & 563)	North Reference:	Grid
Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,100.00	1,100.00	-20.01	-1.46	KOP Begin 3°/100' build	
2,549.13	2,414.03	-268.43	-462.71	Begin 43.47° tangent	
4,957.49	4,161.75	-1,054.17	-1,921.58	Begin 10°/100' drop build/turn	
6,040.88	5,009.00	-1,328.32	-1,656.75	Begin 10°/100' build	
6,190.88	5,041.37	-1,331.31	-1,510.75	Casing @ 6190.88 MD 5041.37 TVD	
6,234.38	5,043.52	-1,332.20	-1,467.33	Begin 89.35° lateral	
14,788.61	5,140.56	-1,507.36	7,084.56	Begin 7°/100' turn	
15,993.43	5,163.85	-786.57	7,913.80	Begin 88.85° lateral	
17,745.07	5,199.00	952.31	8,121.89	PBHL/TD @ 17745.07 MD 5199.00 TVD	



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
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 1,974.51ft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	12/10/2025		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	17,745.04	rev0 (Original Hole)	MWD	OWSG MWD - Standard

Site Name Offset Well - Wellbore - Design	Reference Measured	Offset Measured	Distance		Separation Factor	Warning
	Depth (ft)	Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
Sec 28 T23N R07W North Alamito 4 301 311&312 North Alamito Unit 312H - Original Hole - rev1	17,745.07	10,619.83	1,089.11	809.84	3.900	CC, ES, SF
Sec 32 T23N R07W N Alamito Unit #328H (Lybrook P32-2307 01H) - Orig hol	1,639.69	1,625.76	35.72	25.23	3.406	CC, ES, SF
Sec 33 T23N R07W North Alamito Unit 560 562 563 North Alamito Unit 560H - Original Hole - rev0	1,000.00	1,000.00	20.06	13.06	2.865	CC, ES
North Alamito Unit 560H - Original Hole - rev0	1,100.00	1,099.23	21.84	14.13	2.833	SF
North Alamito Unit 563H - Original Hole - rev0	1,000.00	1,000.00	20.06	13.06	2.865	CC, ES, SF
Sec 34 T23N R07W Federal B #003 - Orig Hole - Inc only surveys	17,743.68	5,265.43	591.39	340.07	2.353	CC
Federal B #003 - Orig Hole - Inc only surveys	17,745.07	5,265.45	591.39	339.84	2.351	ES, SF
Federal B #002 - Orig Hole - Inc only surveys	17,745.07	5,235.73	1,681.70	1,287.98	4.271	CC, ES, SF
N Alamito Unit #306H - Orig Hole - MWD surveys	13,019.40	5,019.87	1,018.28	825.92	5.294	CC, ES
N Alamito Unit #306H - Orig Hole - MWD surveys	13,100.00	5,003.00	1,021.40	827.96	5.280	SF
N Alamito Unit #308H - Orig Hole - MWD surveys	16,900.00	4,913.00	1,579.19	1,372.20	7.629	SF
N Alamito Unit #308H - Orig Hole - MWD surveys	17,745.07	5,039.00	1,219.56	1,111.94	11.332	CC, ES

Offset Design:	Sec 28 T23N R07W North Alamito 4 301 311&312 - North Alamito Unit 312H - Original Hole - rev1											Offset Site Error:	0.00 ft
Survey Program:	0-MWD											Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:				Warning
				Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
16,700.00	5,178.03	11,239.77	5,271.98	251.00	141.61	89.638	1,341.56	9,320.91	1,930.36	1,622.29	308.07	6.266	
16,800.00	5,180.03	11,180.45	5,272.14	251.12	140.24	89.594	1,382.18	9,277.67	1,849.86	1,544.11	305.75	6.050	
16,900.00	5,182.04	11,121.13	5,272.31	251.24	138.87	89.546	1,422.79	9,234.44	1,769.36	1,465.99	303.37	5.832	
17,000.00	5,184.05	11,061.81	5,272.48	251.36	137.51	89.494	1,463.41	9,191.21	1,688.86	1,387.92	300.94	5.612	
17,100.00	5,186.05	11,002.49	5,272.64	251.49	136.14	89.436	1,504.03	9,147.98	1,608.36	1,309.92	298.44	5.389	
17,200.00	5,188.06	10,943.17	5,272.81	251.62	134.77	89.372	1,544.65	9,104.74	1,527.86	1,232.01	295.86	5.164	
17,300.00	5,190.07	10,883.85	5,272.97	251.76	133.41	89.301	1,585.27	9,061.51	1,447.37	1,154.19	293.17	4.937	
17,400.00	5,192.08	10,824.53	5,273.14	251.89	132.04	89.221	1,625.89	9,018.28	1,366.87	1,076.50	290.37	4.707	
17,500.00	5,194.08	10,765.21	5,273.30	252.03	130.67	89.132	1,666.50	8,975.04	1,286.37	998.96	287.41	4.476	
17,600.00	5,196.09	10,705.88	5,273.47	252.17	129.31	89.031	1,707.12	8,931.81	1,205.88	921.61	284.27	4.242	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 28 T23N R07W North Alamito 4 301 311&312 - North Alamito Unit 312H - Original Hole - rev1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
17,700.00	5,198.10	10,646.56	5,273.64	252.31	127.94	88.915	1,747.74	8,888.58	1,125.39	844.50	280.89	4.007		
17,745.07	5,199.00	10,619.83	5,273.71	252.38	127.33	88.858	1,766.05	8,869.09	1,089.11	809.84	279.27	3.900	CC, ES, SF	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 32 T23N R07W - N Alamito Unit #328H (Lybrook P32-2307 01H) - Orig hole - MWD surveys													Offset Site Error:	0.00 ft
Survey Program: 570-MWD											Rule Assigned:		Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-142.284	-64.13	-49.59	81.41					
100.00	100.00	92.60	92.60	0.27	0.16	-142.212	-64.02	-49.64	81.01	80.57	0.44	186.113		
200.00	200.00	192.72	192.71	0.63	0.34	-141.971	-63.65	-49.78	80.81	79.84	0.97	83.500		
300.00	300.00	292.82	292.82	0.99	0.51	-141.558	-63.03	-50.03	80.48	78.98	1.50	53.641		
400.00	400.00	392.93	392.92	1.35	0.68	-140.968	-62.16	-50.39	80.02	77.98	2.03	39.362		
500.00	500.00	493.03	493.01	1.71	0.86	-140.197	-61.02	-50.85	79.43	76.87	2.57	30.964		
600.00	600.00	593.02	592.99	2.07	1.07	-139.234	-59.64	-51.42	78.75	75.61	3.14	25.078		
700.00	700.00	692.84	692.79	2.43	1.43	-138.028	-58.21	-52.36	78.29	74.43	3.86	20.299		
719.04	719.04	711.58	711.54	2.49	1.50	-137.831	-57.99	-52.53	78.25	74.26	3.99	19.611		
800.00	800.00	791.45	791.39	2.78	1.77	-138.241	-58.89	-52.58	78.96	74.41	4.55	17.361		
900.00	900.00	891.17	891.07	3.14	2.10	-140.009	-61.74	-51.79	80.59	75.36	5.24	15.384		
1,000.00	1,000.00	991.14	991.00	3.50	2.44	-141.493	-64.42	-51.25	82.34	76.40	5.94	13.865		
1,100.00	1,100.00	1,091.45	1,091.28	3.86	2.79	-142.886	-66.99	-50.69	84.01	77.37	6.64	12.644		
1,200.00	1,199.95	1,191.66	1,191.46	4.21	3.14	-26.749	-69.29	-49.88	83.04	75.70	7.34	11.314		
1,300.00	1,299.63	1,292.26	1,292.05	4.54	3.49	-30.759	-70.92	-48.95	77.00	68.97	8.03	9.587		
1,400.00	1,398.77	1,392.49	1,392.27	4.89	3.84	-36.879	-70.15	-48.51	65.23	56.51	8.73	7.475		
1,500.00	1,497.08	1,490.60	1,490.37	5.26	4.18	-49.217	-68.63	-48.24	50.19	40.76	9.43	5.322		
1,600.00	1,594.31	1,587.63	1,587.39	5.66	4.52	-76.386	-67.12	-48.25	37.38	27.20	10.18	3.673		
1,639.69	1,632.54	1,625.76	1,625.51	5.84	4.65	-92.723	-66.56	-48.34	35.72	25.23	10.49	3.406	CC, ES, SF	
1,700.00	1,690.18	1,683.32	1,683.07	6.10	4.85	-118.299	-65.76	-48.44	40.07	29.16	10.91	3.673		
1,800.00	1,784.43	1,778.09	1,777.82	6.60	5.19	-146.145	-64.43	-49.11	62.72	51.17	11.55	5.429		
1,900.00	1,876.81	1,871.63	1,871.34	7.15	5.52	-159.248	-63.27	-50.90	95.68	83.47	12.21	7.838		
2,000.00	1,967.06	1,963.23	1,962.90	7.78	5.84	-165.974	-62.40	-53.25	135.04	122.17	12.87	10.492		
2,100.00	2,054.93	2,054.02	2,053.60	8.49	6.16	-170.455	-60.53	-56.93	179.10	165.55	13.54	13.225		
2,200.00	2,140.18	2,138.20	2,137.73	9.29	6.45	-172.667	-60.37	-59.68	228.36	214.17	14.19	16.093		
2,300.00	2,222.59	2,219.66	2,219.14	10.19	6.74	-173.353	-62.94	-60.22	283.19	268.36	14.83	19.098		
2,400.00	2,301.91	2,287.45	2,286.91	11.18	6.97	-173.824	-64.17	-59.42	344.13	328.76	15.37	22.388		
2,500.00	2,377.95	2,353.59	2,353.00	12.27	7.20	-174.445	-63.17	-57.13	411.67	395.76	15.90	25.888		
2,600.00	2,450.94	2,452.67	2,452.05	13.46	7.54	-175.439	-62.42	-56.33	480.61	463.90	16.71	28.765		
2,700.00	2,523.51	2,519.79	2,519.15	14.69	7.78	-175.832	-63.75	-56.99	548.08	530.82	17.26	31.752		
2,800.00	2,596.08	2,583.29	2,582.57	15.95	8.00	-175.829	-66.56	-55.46	616.99	599.19	17.79	34.676		
2,900.00	2,668.65	2,649.44	2,648.60	17.23	8.23	-175.774	-69.57	-52.98	686.74	668.38	18.35	37.420		
3,000.00	2,741.22	2,720.93	2,720.07	18.53	8.48	-176.046	-69.96	-51.32	756.79	737.83	18.96	39.918		
3,100.00	2,813.79	2,790.05	2,789.17	19.85	8.72	-176.391	-69.14	-50.21	826.92	807.37	19.55	42.297		
3,200.00	2,886.36	2,862.07	2,861.17	21.17	8.97	-176.688	-68.34	-49.02	897.08	876.90	20.17	44.471		
3,300.00	2,958.93	2,931.51	2,930.60	22.50	9.21	-176.928	-67.59	-47.73	967.36	946.59	20.78	46.557		
3,400.00	3,031.50	3,004.00	3,003.08	23.85	9.47	-177.141	-66.87	-46.45	1,037.57	1,016.16	21.41	48.451		
3,500.00	3,104.06	3,079.81	3,078.87	25.19	9.73	-177.341	-66.08	-45.20	1,107.74	1,085.66	22.08	50.159		
3,600.00	3,176.63	3,126.00	3,125.06	26.55	9.90	-177.451	-65.74	-44.79	1,177.71	1,155.21	22.50	52.339		
3,700.00	3,249.20	3,152.00	3,151.03	27.91	9.99	-177.515	-65.19	-43.96	1,249.94	1,227.21	22.73	54.998		
3,800.00	3,321.77	3,168.82	3,167.78	29.27	10.05	-177.557	-64.39	-42.67	1,325.05	1,302.21	22.85	58.001		
3,900.00	3,394.34	3,184.00	3,182.84	30.64	10.10	-177.595	-63.40	-40.97	1,402.58	1,379.65	22.93	61.168		
4,000.00	3,466.91	3,215.00	3,213.41	32.01	10.21	-177.667	-60.91	-36.54	1,482.09	1,458.92	23.17	63.960		
4,100.00	3,539.48	3,229.66	3,227.81	33.38	10.27	-177.698	-59.61	-34.11	1,562.95	1,539.70	23.24	67.249		
4,200.00	3,612.05	3,247.00	3,244.79	34.75	10.33	-177.730	-57.98	-30.99	1,645.18	1,621.85	23.34	70.498		
4,300.00	3,684.61	3,180.88	3,180.88	36.13	10.33	145.281	244.23	-1,475.37	1,714.11	1,666.25	47.86	35.812		
4,400.00	3,757.18	3,225.00	3,225.00	37.51	10.33	144.023	247.43	-1,519.37	1,681.21	1,629.86	51.35	32.742		
4,500.00	3,829.75	3,301.89	3,301.89	38.89	10.33	141.841	251.45	-1,596.15	1,651.64	1,596.04	55.60	29.707		
4,600.00	3,902.32	3,364.02	3,364.02	40.27	10.33	140.044	254.52	-1,658.19	1,624.87	1,565.13	59.75	27.196		
4,700.00	3,974.89	3,427.30	3,427.30	41.65	10.33	137.023	258.52	-1,761.38	1,601.58	1,536.61	64.96	24.653		
4,800.00	4,047.46	3,490.47	3,490.47	43.04	10.33	134.182	258.02	-1,858.53	1,579.35	1,509.18	70.17	22.507		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 32 T23N R07W - N Alamito Unit #328H (Lybrook P32-2307 01H) - Orig hole - MWD surveys													Offset Site Error:	0.00 ft
Survey Program: 570-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
4,900.00	4,120.03	6,618.88	5,016.73	44.42	49.10	132.609	256.64	-1,912.92	1,560.92	1,486.43	74.48	20.956		
5,000.00	4,193.51	6,689.17	5,017.37	45.78	50.76	132.353	254.28	-1,983.17	1,545.68	1,466.48	79.20	19.515		
5,100.00	4,274.70	6,733.85	5,017.38	46.89	51.81	137.672	253.02	-2,027.83	1,532.17	1,448.80	83.36	18.379		
5,200.00	4,362.90	6,782.23	5,017.36	47.70	52.96	148.487	251.44	-2,076.18	1,521.46	1,433.95	87.51	17.387		
5,300.00	4,455.46	6,790.89	5,017.39	48.21	53.16	169.477	251.05	-2,084.84	1,515.07	1,424.77	90.30	16.778		
5,370.42	4,521.74	6,791.39	5,017.39	48.40	53.17	-171.247	251.03	-2,085.34	1,513.74	1,421.90	91.84	16.482		
5,400.00	4,549.56	6,805.65	5,017.44	48.48	53.51	-163.667	250.42	-2,099.59	1,513.95	1,421.10	92.85	16.305		
5,500.00	4,642.33	6,774.92	5,017.35	48.56	52.78	-139.514	251.72	-2,068.88	1,518.19	1,424.53	93.66	16.209		
5,600.00	4,730.96	6,722.65	5,017.42	48.54	51.55	-122.698	253.30	-2,016.64	1,526.53	1,433.14	93.39	16.345		
5,700.00	4,812.75	6,681.37	5,017.33	48.49	50.57	-111.820	254.54	-1,975.38	1,537.75	1,444.58	93.16	16.506		
5,800.00	4,885.22	6,606.35	5,016.59	48.46	48.81	-103.303	257.01	-1,900.40	1,550.16	1,458.43	91.72	16.901		
5,900.00	4,946.17	6,448.15	5,018.42	48.49	45.10	-95.575	258.14	-1,742.24	1,560.25	1,472.71	87.54	17.823		
6,000.00	4,993.75	6,324.93	5,019.84	48.62	42.23	-91.147	252.46	-1,619.16	1,561.60	1,477.04	84.56	18.466		
6,100.00	5,026.32	6,191.66	5,020.10	48.85	39.16	-89.321	245.01	-1,486.11	1,558.56	1,477.13	81.43	19.140		
6,200.00	5,042.10	6,114.61	5,021.93	49.17	37.41	-89.378	239.80	-1,409.26	1,554.01	1,473.51	80.49	19.306		
6,300.00	5,044.26	6,038.00	5,021.93	49.57	35.69	-89.437	236.26	-1,332.74	1,551.34	1,471.62	79.72	19.459		
6,400.00	5,045.40	5,961.52	5,020.57	50.08	34.01	-89.355	234.16	-1,256.31	1,550.47	1,471.37	79.09	19.603		
6,500.00	5,046.53	5,831.42	5,022.44	50.70	31.22	-89.368	228.38	-1,126.35	1,547.88	1,470.94	76.93	20.120		
6,600.00	5,047.66	5,721.75	5,023.52	51.42	28.94	-89.360	223.02	-1,016.82	1,545.05	1,469.43	75.62	20.431		
6,700.00	5,048.80	5,615.76	5,021.29	52.26	26.84	-89.232	217.19	-911.03	1,541.64	1,467.03	74.62	20.661		
6,800.00	5,049.93	5,363.00	5,009.06	53.21	22.24	-88.648	186.31	-660.81	1,529.34	1,459.83	69.51	22.002		
6,900.00	5,051.07	5,271.00	4,992.27	54.27	20.78	-87.959	172.08	-571.49	1,516.17	1,446.66	69.51	21.811		
7,000.00	5,052.20	5,210.00	4,977.63	55.43	19.90	-87.363	163.59	-512.91	1,504.71	1,434.13	70.57	21.321		
7,100.00	5,053.34	5,081.00	4,927.20	56.70	18.32	-85.342	146.62	-395.65	1,495.39	1,425.33	70.06	21.345		
7,200.00	5,054.47	4,947.51	4,849.93	58.06	17.08	-82.239	124.70	-289.47	1,485.00	1,415.20	69.80	21.274		
7,300.00	5,055.61	4,907.45	4,822.70	59.51	16.78	-81.140	117.27	-261.06	1,475.30	1,403.46	71.83	20.538		
7,400.00	5,056.74	4,859.00	4,787.85	61.04	16.44	-79.740	109.44	-228.33	1,470.72	1,397.10	73.62	19.976		
7,439.65	5,057.19	4,859.00	4,787.85	61.68	16.44	-79.740	109.44	-228.33	1,470.19	1,395.48	74.71	19.679		
7,500.00	5,057.87	4,828.00	4,764.23	62.65	16.25	-78.797	104.85	-208.80	1,471.08	1,395.40	75.69	19.437		
7,600.00	5,059.01	4,786.45	4,730.74	64.33	16.02	-77.464	98.59	-185.02	1,476.49	1,399.09	77.40	19.076		
7,700.00	5,060.14	4,755.13	4,704.93	66.08	15.85	-76.441	94.00	-167.88	1,487.13	1,408.01	79.12	18.796		
7,800.00	5,061.28	4,733.00	4,686.56	67.89	15.74	-75.720	91.22	-155.87	1,503.51	1,422.74	80.78	18.613		
7,900.00	5,062.41	4,702.00	4,660.52	69.76	15.60	-74.707	87.93	-139.38	1,525.54	1,443.47	82.07	18.588		
8,000.00	5,063.55	4,663.41	4,627.51	71.67	15.42	-73.433	83.85	-119.81	1,552.57	1,469.54	83.04	18.698		
8,100.00	5,064.68	4,567.73	4,543.53	73.63	15.02	-70.195	70.01	-76.23	1,583.50	1,500.58	82.92	19.096		
8,200.00	5,065.82	4,533.56	4,512.78	75.63	14.90	-69.004	63.28	-62.94	1,618.00	1,534.47	83.52	19.372		
8,300.00	5,066.95	4,512.00	4,493.10	77.66	14.82	-68.245	58.87	-55.31	1,657.32	1,573.22	84.10	19.706		
8,400.00	5,068.08	4,512.00	4,493.10	79.73	14.82	-68.245	58.87	-55.31	1,701.37	1,616.56	84.80	20.062		
8,500.00	5,069.22	4,494.93	4,477.36	81.84	14.76	-67.642	55.51	-49.63	1,749.73	1,664.68	85.05	20.573		
8,600.00	5,070.35	4,480.00	4,463.47	83.97	14.71	-67.116	52.83	-44.87	1,802.29	1,717.12	85.17	21.162		
8,700.00	5,071.49	4,480.00	4,463.47	86.12	14.71	-67.116	52.83	-44.87	1,858.53	1,773.20	85.33	21.781		
8,800.00	5,072.62	4,480.00	4,463.47	88.30	14.71	-67.116	52.83	-44.87	1,918.34	1,832.99	85.35	22.476		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 560H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference	Vertical	Offset	Vertical	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Depth (ft)	Measured Depth (ft)	Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.00	0.00	0.00	0.00	0.00	0.00	4.165	20.01	1.46	20.06					
100.00	100.00	100.00	100.00	0.27	0.27	4.165	20.01	1.46	20.06	19.51	0.55	36.573		
200.00	200.00	200.00	200.00	0.63	0.63	4.165	20.01	1.46	20.06	18.79	1.27	15.852		
300.00	300.00	300.00	300.00	0.99	0.99	4.165	20.01	1.46	20.06	18.08	1.98	10.119		
400.00	400.00	400.00	400.00	1.35	1.35	4.165	20.01	1.46	20.06	17.36	2.70	7.431		
500.00	500.00	500.00	500.00	1.71	1.71	4.165	20.01	1.46	20.06	16.64	3.42	5.872		
600.00	600.00	600.00	600.00	2.07	2.07	4.165	20.01	1.46	20.06	15.93	4.13	4.853		
700.00	700.00	700.00	700.00	2.43	2.43	4.165	20.01	1.46	20.06	15.21	4.85	4.136		
800.00	800.00	800.00	800.00	2.78	2.78	4.165	20.01	1.46	20.06	14.49	5.57	3.603		
900.00	900.00	900.00	900.00	3.14	3.14	4.165	20.01	1.46	20.06	13.78	6.28	3.192		
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	4.165	20.01	1.46	20.06	13.06	7.00	2.865 CC, ES		
1,100.00	1,100.00	1,099.23	1,099.19	3.86	3.85	-0.977	21.82	-0.37	21.84	14.13	7.71	2.833 SF		
1,200.00	1,199.95	1,197.96	1,197.61	4.21	4.21	111.017	27.23	-5.82	28.78	20.39	8.39	3.431		
1,300.00	1,299.63	1,295.69	1,294.51	4.54	4.56	109.819	36.10	-14.75	41.75	32.70	9.05	4.613		
1,400.00	1,398.77	1,391.88	1,389.13	4.89	4.93	110.675	48.23	-26.97	60.49	50.77	9.72	6.225		
1,500.00	1,497.08	1,486.07	1,480.84	5.26	5.31	111.915	63.35	-42.20	84.89	74.49	10.40	8.165		
1,600.00	1,594.31	1,581.27	1,572.82	5.66	5.73	113.667	80.67	-59.64	113.61	102.45	11.16	10.177		
1,700.00	1,690.18	1,676.02	1,664.33	6.10	6.16	116.265	97.94	-77.03	144.69	132.70	11.99	12.070		
1,800.00	1,784.43	1,769.57	1,754.70	6.60	6.59	119.109	115.00	-94.21	178.51	165.66	12.85	13.889		
1,900.00	1,876.81	1,861.68	1,843.68	7.15	7.04	121.915	131.78	-111.12	215.42	201.67	13.75	15.664		
2,000.00	1,967.06	1,952.09	1,931.01	7.78	7.48	124.546	148.26	-127.72	255.70	241.02	14.68	17.418		
2,100.00	2,054.93	2,040.56	2,016.47	8.49	7.92	126.932	164.39	-143.96	299.55	283.92	15.63	19.168		
2,200.00	2,140.18	2,126.84	2,099.81	9.29	8.36	129.042	180.12	-159.79	347.10	330.51	16.59	20.926		
2,300.00	2,222.59	2,210.70	2,180.81	10.19	8.79	130.866	195.40	-175.19	398.42	380.87	17.55	22.703		
2,400.00	2,301.91	2,291.90	2,259.25	11.18	9.21	132.402	210.20	-190.10	453.51	435.01	18.51	24.504		
2,500.00	2,377.95	2,370.23	2,334.91	12.27	9.61	133.655	224.48	-204.47	512.36	492.90	19.46	26.335		
2,600.00	2,450.94	2,445.88	2,407.99	13.46	10.01	135.470	238.27	-218.36	574.51	554.12	20.39	28.179		
2,700.00	2,523.51	2,521.15	2,480.70	14.69	10.41	137.670	251.99	-232.18	637.68	616.37	21.31	29.924		
2,800.00	2,596.08	2,596.42	2,553.41	15.95	10.80	139.490	265.71	-246.00	701.33	679.10	22.23	31.546		
2,900.00	2,668.65	2,671.70	2,626.12	17.23	11.20	141.019	279.43	-259.82	765.36	742.20	23.16	33.449		
3,000.00	2,741.22	2,746.97	2,698.83	18.53	11.60	142.320	293.15	-273.63	829.66	805.58	24.09	35.045		
3,100.00	2,813.79	2,822.24	2,771.54	19.85	12.01	143.439	306.87	-287.45	894.20	869.18	25.02	35.742		
3,200.00	2,886.36	2,897.51	2,844.25	21.17	12.41	144.410	320.59	-301.27	958.90	932.95	25.95	36.947		
3,300.00	2,958.93	2,972.78	2,916.96	22.50	12.81	145.262	334.31	-315.09	1,023.75	996.86	26.89	38.068		
3,400.00	3,031.50	3,048.06	2,989.67	23.85	13.22	146.014	348.03	-328.91	1,088.72	1,060.89	27.83	39.114		
3,500.00	3,104.06	3,123.33	3,062.37	25.19	13.63	146.682	361.75	-342.72	1,153.79	1,125.01	28.78	40.090		
3,600.00	3,176.63	3,198.60	3,135.08	26.55	14.03	147.281	375.47	-356.54	1,218.94	1,189.21	29.73	41.002		
3,700.00	3,249.20	3,273.87	3,207.79	27.91	14.44	147.819	389.19	-370.36	1,284.16	1,253.48	30.68	41.857		
3,800.00	3,321.77	3,349.14	3,280.50	29.27	14.85	148.306	402.91	-384.18	1,349.44	1,317.81	31.63	42.658		
3,900.00	3,394.34	3,424.41	3,353.21	30.64	15.26	148.749	416.63	-398.00	1,414.77	1,382.18	32.59	43.411		
4,000.00	3,466.91	3,499.69	3,425.92	32.01	15.67	149.153	430.35	-411.81	1,480.15	1,446.60	33.55	44.120		
4,100.00	3,539.48	3,574.96	3,498.63	33.38	16.08	149.523	444.07	-425.63	1,545.56	1,511.05	34.51	44.787		
4,200.00	3,612.05	3,650.23	3,571.34	34.75	16.49	149.863	457.79	-439.45	1,611.01	1,575.54	35.47	45.417		
4,300.00	3,684.61	3,725.50	3,644.05	36.13	16.90	150.177	471.51	-453.27	1,676.49	1,640.05	36.44	46.012		
4,400.00	3,757.18	3,800.77	3,716.76	37.51	17.32	150.467	485.23	-467.09	1,741.99	1,704.59	37.40	46.574		
4,500.00	3,829.75	3,876.04	3,789.47	38.89	17.73	150.737	498.95	-480.90	1,807.52	1,769.15	38.37	47.107		
4,600.00	3,902.32	3,954.57	3,865.43	40.27	18.15	151.015	512.98	-495.03	1,873.04	1,833.68	39.37	47.581		
4,700.00	3,974.89	4,036.30	3,945.20	41.65	18.56	151.401	525.50	-507.64	1,938.36	1,898.02	40.34	48.049		
4,800.00	4,048.80	4,988.10	4,868.55	52.26	20.98	-84.288	530.36	-418.30	1,949.75	1,887.31	62.44	31.226		
4,900.00	5,049.93	5,032.02	4,902.39	53.21	21.00	-85.299	525.28	-390.79	1,923.66	1,858.85	64.81	29.682		
4,900.00	5,051.07	5,084.75	4,940.03	54.27	21.03	-86.429	518.57	-354.50	1,900.78	1,833.62	67.17	28.300		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 560H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	(ft)			
7,000.00	5,052.20	5,150.00	4,981.68	55.43	21.09	-87.685	509.45	-305.15	1,880.69	1,811.20	69.49	27.064		
7,100.00	5,053.34	5,223.34	5,021.33	56.70	21.22	-88.888	498.25	-244.53	1,862.77	1,790.94	71.83	25.933		
7,200.00	5,054.47	5,311.04	5,057.93	58.06	21.50	-90.003	483.78	-166.26	1,846.26	1,772.06	74.21	24.880		
7,300.00	5,055.61	5,409.39	5,084.01	59.51	22.02	-90.796	466.57	-73.13	1,830.33	1,753.61	76.72	23.856		
7,400.00	5,056.74	5,513.53	5,093.59	61.04	22.85	-91.073	447.76	28.70	1,814.33	1,734.88	79.45	22.836		
7,500.00	5,057.87	5,612.22	5,094.58	62.65	23.90	-91.079	429.82	125.74	1,798.17	1,715.74	82.43	21.814		
7,600.00	5,059.01	5,710.90	5,095.57	64.33	25.19	-91.085	411.89	222.78	1,782.02	1,696.36	85.66	20.804		
7,700.00	5,060.14	5,809.59	5,096.57	66.08	26.68	-91.091	393.96	319.82	1,765.87	1,676.77	89.10	19.818		
7,800.00	5,061.28	5,908.28	5,097.56	67.89	28.32	-91.098	376.03	416.86	1,749.72	1,656.98	92.73	18.869		
7,900.00	5,062.41	6,006.96	5,098.55	69.76	30.09	-91.104	358.09	513.89	1,733.56	1,637.05	96.52	17.961		
8,000.00	5,063.55	6,105.65	5,099.54	71.67	31.97	-91.111	340.16	610.93	1,717.41	1,616.97	100.44	17.099		
8,100.00	5,064.68	6,204.34	5,100.54	73.63	33.93	-91.117	322.23	707.97	1,701.26	1,596.79	104.47	16.284		
8,200.00	5,065.82	6,303.02	5,101.53	75.63	35.97	-91.124	304.30	805.01	1,685.10	1,576.50	108.60	15.516		
8,300.00	5,066.95	6,401.71	5,102.52	77.66	38.06	-91.131	286.36	902.05	1,668.95	1,556.13	112.82	14.793		
8,400.00	5,068.08	6,500.40	5,103.51	79.73	40.20	-91.138	268.43	999.09	1,652.80	1,535.69	117.11	14.113		
8,500.00	5,069.22	6,599.08	5,104.50	81.84	42.39	-91.145	250.50	1,096.13	1,636.65	1,515.18	121.46	13.474		
8,600.00	5,070.35	6,697.77	5,105.50	83.97	44.61	-91.153	232.57	1,193.16	1,620.49	1,494.62	125.87	12.874		
8,700.00	5,071.49	6,796.46	5,106.49	86.12	46.86	-91.160	214.64	1,290.20	1,604.34	1,474.01	130.33	12.310		
8,800.00	5,072.62	6,895.14	5,107.48	88.30	49.14	-91.168	196.70	1,387.24	1,588.19	1,453.36	134.83	11.779		
8,900.00	5,073.76	6,993.83	5,108.47	90.50	51.44	-91.176	178.77	1,484.28	1,572.04	1,432.67	139.37	11.280		
9,000.00	5,074.89	7,092.52	5,109.46	92.72	53.76	-91.184	160.84	1,581.32	1,555.88	1,411.94	143.94	10.809		
9,100.00	5,076.03	7,191.20	5,110.46	94.96	56.10	-91.192	142.91	1,678.36	1,539.73	1,391.19	148.55	10.365		
9,200.00	5,077.16	7,289.89	5,111.45	97.22	58.46	-91.200	124.97	1,775.40	1,523.58	1,370.40	153.18	9.947		
9,300.00	5,078.29	7,388.58	5,112.44	99.49	60.83	-91.209	107.04	1,872.44	1,507.43	1,349.60	157.83	9.551		
9,400.00	5,079.43	7,487.26	5,113.43	101.77	63.21	-91.218	89.11	1,969.47	1,491.27	1,328.77	162.51	9.177		
9,500.00	5,080.56	7,585.95	5,114.43	104.07	65.60	-91.227	71.18	2,066.51	1,475.12	1,307.92	167.20	8.822		
9,600.00	5,081.70	7,684.64	5,115.42	106.38	68.00	-91.236	53.25	2,163.55	1,458.97	1,287.05	171.92	8.486		
9,700.00	5,082.83	7,783.32	5,116.41	108.70	70.41	-91.245	35.31	2,260.59	1,442.82	1,266.16	176.65	8.167		
9,800.00	5,083.97	7,882.01	5,117.40	111.04	72.83	-91.254	17.38	2,357.63	1,426.66	1,245.26	181.40	7.865		
9,900.00	5,085.10	7,980.70	5,118.39	113.38	75.25	-91.264	-0.55	2,454.67	1,410.51	1,224.35	186.16	7.577		
10,000.00	5,086.24	8,079.38	5,119.39	115.73	77.68	-91.274	-18.48	2,551.71	1,394.36	1,203.42	190.94	7.303		
10,100.00	5,087.37	8,178.07	5,120.38	118.09	80.12	-91.284	-36.42	2,648.74	1,378.21	1,182.48	195.73	7.041		
10,200.00	5,088.50	8,276.76	5,121.37	120.46	82.56	-91.295	-54.35	2,745.78	1,362.06	1,161.53	200.53	6.792		
10,300.00	5,089.64	8,375.44	5,122.36	122.84	85.01	-91.305	-72.28	2,842.82	1,345.90	1,140.57	205.34	6.555		
10,400.00	5,090.77	8,474.13	5,123.35	125.22	87.46	-91.316	-90.21	2,939.86	1,329.75	1,119.60	210.15	6.328		
10,500.00	5,091.91	8,572.82	5,124.35	127.61	89.91	-91.328	-108.14	3,036.90	1,313.60	1,098.62	214.98	6.110		
10,600.00	5,093.04	8,671.50	5,125.34	130.01	92.37	-91.339	-126.08	3,133.94	1,297.45	1,077.63	219.81	5.902		
10,700.00	5,094.18	8,770.19	5,126.33	132.41	94.84	-91.351	-144.01	3,230.98	1,281.30	1,056.64	224.66	5.703		
10,800.00	5,095.31	8,868.88	5,127.32	134.82	97.30	-91.363	-161.94	3,328.01	1,265.14	1,035.64	229.51	5.512		
10,900.00	5,096.45	8,967.56	5,128.32	137.23	99.77	-91.375	-179.87	3,425.05	1,248.99	1,014.63	234.36	5.329		
11,000.00	5,097.58	9,066.25	5,129.31	139.65	102.24	-91.388	-197.81	3,522.09	1,232.84	993.62	239.22	5.154		
11,100.00	5,098.71	9,164.94	5,130.30	142.07	104.72	-91.401	-215.74	3,619.13	1,216.69	972.60	244.09	4.985		
11,200.00	5,099.85	9,263.62	5,131.29	144.50	107.19	-91.414	-233.67	3,716.17	1,200.54	951.58	248.96	4.822		
11,300.00	5,100.98	9,362.31	5,132.28	146.93	109.67	-91.428	-251.60	3,813.21	1,184.39	930.55	253.83	4.666		
11,400.00	5,102.12	9,461.00	5,133.28	149.37	112.15	-91.442	-269.53	3,910.25	1,168.23	909.52	258.71	4.516		
11,500.00	5,103.25	9,559.68	5,134.27	151.81	114.63	-91.457	-287.47	4,007.29	1,152.08	888.49	263.60	4.371		
11,600.00	5,104.39	9,658.37	5,135.26	154.25	117.12	-91.472	-305.40	4,104.32	1,135.93	867.45	268.48	4.231		
11,700.00	5,105.52	9,757.06	5,136.25	156.69	119.61	-91.487	-323.33	4,201.36	1,119.78	846.41	273.37	4.096		
11,800.00	5,106.66	9,855.74	5,137.24	159.14	122.09	-91.503	-341.26	4,298.40	1,103.63	825.36	278.27	3.966		
11,900.00	5,107.79	9,954.43	5,138.24	161.60	124.58	-91.519	-359.20	4,395.44	1,087.48	804.32	283.16	3.840		
12,000.00	5,108.92	10,030.35	5,139.00	164.05	126.50	-91.532	-372.99	4,470.10	1,071.57	783.33	288.24	3.718		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 560H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
12,100.00	5,110.06	10,030.35	5,139.00	166.51	126.50	-91.532	-372.99	4,470.10	1,062.14	770.12	292.02	3.637		
12,150.57	5,110.63	10,030.35	5,139.00	167.75	126.50	-91.532	-372.99	4,470.10	1,060.94	768.28	292.66	3.625		
12,200.00	5,111.19	10,030.35	5,139.00	168.97	126.50	-91.532	-372.99	4,470.10	1,062.09	769.66	292.43	3.632		
12,300.00	5,112.33	10,030.35	5,139.00	171.43	126.50	-91.532	-372.99	4,470.10	1,071.41	781.97	289.44	3.702		
12,400.00	5,113.46	10,030.35	5,139.00	173.90	126.50	-91.532	-372.99	4,470.10	1,089.87	806.46	283.40	3.846		
12,500.00	5,114.60	10,030.35	5,139.00	176.37	126.50	-91.532	-372.99	4,470.10	1,117.00	842.07	274.93	4.063		
12,600.00	5,115.73	10,030.35	5,139.00	178.84	126.50	-91.532	-372.99	4,470.10	1,152.21	887.46	264.75	4.352		
12,700.00	5,116.87	10,030.35	5,139.00	181.31	126.50	-91.532	-372.99	4,470.10	1,194.77	941.21	253.56	4.712		
12,800.00	5,118.00	10,030.35	5,139.00	183.79	126.50	-91.532	-372.99	4,470.10	1,243.93	1,001.98	241.95	5.141		
12,900.00	5,119.13	10,030.35	5,139.00	186.26	126.50	-91.532	-372.99	4,470.10	1,298.94	1,068.57	230.37	5.638		
13,000.00	5,120.27	10,030.35	5,139.00	188.74	126.50	-91.532	-372.99	4,470.10	1,359.09	1,139.95	219.14	6.202		
13,100.00	5,121.40	10,030.35	5,139.00	191.22	126.50	-91.532	-372.99	4,470.10	1,423.73	1,215.29	208.45	6.830		
13,200.00	5,122.54	10,030.35	5,139.00	193.71	126.50	-91.532	-372.99	4,470.10	1,492.28	1,293.88	198.40	7.522		
13,300.00	5,123.67	10,030.35	5,139.00	196.19	126.50	-91.532	-372.99	4,470.10	1,564.22	1,375.17	189.05	8.274		
13,400.00	5,124.81	10,030.35	5,139.00	198.68	126.50	-91.532	-372.99	4,470.10	1,639.11	1,458.72	180.39	9.086		
13,500.00	5,125.94	10,030.35	5,139.00	201.16	126.50	-91.532	-372.99	4,470.10	1,716.56	1,544.14	172.42	9.956		
13,600.00	5,127.08	10,030.35	5,139.00	203.65	126.50	-91.532	-372.99	4,470.10	1,796.23	1,631.14	165.09	10.880		
13,700.00	5,128.21	10,030.35	5,139.00	206.14	126.50	-91.532	-372.99	4,470.10	1,877.85	1,719.49	158.36	11.858		
13,800.00	5,129.34	10,030.35	5,139.00	208.63	126.50	-91.532	-372.99	4,470.10	1,961.18	1,808.98	152.20	12.886		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 563H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.00	0.00	0.00	0.00	0.00	0.00	-175.835	-20.01	-1.46	20.06					
100.00	100.00	100.00	100.00	0.27	0.27	-175.835	-20.01	-1.46	20.06	19.51	0.55	36.573		
200.00	200.00	200.00	200.00	0.63	0.63	-175.835	-20.01	-1.46	20.06	18.79	1.27	15.852		
300.00	300.00	300.00	300.00	0.99	0.99	-175.835	-20.01	-1.46	20.06	18.08	1.98	10.119		
400.00	400.00	400.00	400.00	1.35	1.35	-175.835	-20.01	-1.46	20.06	17.36	2.70	7.431		
500.00	500.00	500.00	500.00	1.71	1.71	-175.835	-20.01	-1.46	20.06	16.64	3.42	5.872		
600.00	600.00	600.00	600.00	2.07	2.07	-175.835	-20.01	-1.46	20.06	15.93	4.13	4.853		
700.00	700.00	700.00	700.00	2.43	2.43	-175.835	-20.01	-1.46	20.06	15.21	4.85	4.136		
800.00	800.00	800.00	800.00	2.78	2.78	-175.835	-20.01	-1.46	20.06	14.49	5.57	3.603		
900.00	900.00	900.00	900.00	3.14	3.14	-175.835	-20.01	-1.46	20.06	13.78	6.28	3.192		
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-175.835	-20.01	-1.46	20.06	13.06	7.00	2.865	CC, ES, SF	
1,100.00	1,100.00	1,099.04	1,099.00	3.86	3.84	-172.213	-22.05	-3.01	22.27	14.58	7.69	2.895		
1,200.00	1,199.95	1,197.75	1,197.40	4.21	4.17	-50.245	-28.14	-7.66	27.54	19.20	8.34	3.302		
1,300.00	1,299.63	1,296.11	1,294.92	4.54	4.51	-50.722	-38.21	-15.36	34.14	25.18	8.97	3.808		
1,400.00	1,398.77	1,394.05	1,391.26	4.89	4.87	-53.309	-52.20	-26.04	42.07	32.47	9.60	4.384		
1,500.00	1,497.08	1,491.53	1,486.12	5.26	5.25	-56.776	-70.00	-39.63	51.47	41.22	10.25	5.020		
1,600.00	1,594.31	1,588.48	1,579.21	5.66	5.67	-60.434	-91.49	-56.05	62.50	51.54	10.95	5.705		
1,700.00	1,690.18	1,684.86	1,670.28	6.10	6.14	-63.924	-116.56	-75.19	75.26	63.53	11.73	6.414		
1,800.00	1,784.43	1,780.64	1,759.08	6.60	6.65	-67.084	-145.05	-96.95	89.82	77.21	12.61	7.123		
1,900.00	1,876.81	1,875.77	1,845.40	7.15	7.23	-69.860	-176.81	-121.20	106.19	92.58	13.61	7.804		
2,000.00	1,967.06	1,970.23	1,929.04	7.78	7.86	-72.256	-211.69	-147.84	124.37	109.62	14.74	8.436		
2,100.00	2,054.93	2,064.00	2,009.81	8.49	8.56	-74.301	-249.53	-176.74	144.31	128.29	16.03	9.004		
2,200.00	2,140.18	2,157.08	2,087.58	9.29	9.33	-76.031	-290.15	-207.76	165.99	148.51	17.47	9.499		
2,300.00	2,222.59	2,249.44	2,162.20	10.19	10.16	-77.486	-333.40	-240.78	189.32	170.24	19.08	9.921		
2,400.00	2,301.91	2,341.10	2,233.57	11.18	11.05	-78.701	-379.10	-275.68	214.26	193.40	20.86	10.274		
2,500.00	2,377.95	2,432.06	2,301.59	12.27	12.00	-79.707	-427.09	-312.33	240.72	217.93	22.79	10.562		
2,600.00	2,450.94	2,522.36	2,366.19	13.46	13.01	-80.836	-477.22	-350.61	268.74	243.88	24.86	10.810		
2,700.00	2,523.51	2,612.49	2,427.64	14.69	14.08	-81.448	-529.61	-390.62	298.74	271.79	26.95	11.084		
2,800.00	2,596.08	2,707.61	2,491.17	15.95	15.26	-81.678	-585.88	-433.60	329.55	300.32	29.23	11.274		
2,900.00	2,668.65	2,802.74	2,554.70	17.23	16.45	-81.869	-642.15	-476.57	360.37	328.82	31.55	11.521		
3,000.00	2,741.22	2,897.87	2,618.23	18.53	17.66	-82.030	-698.43	-519.54	391.19	357.28	33.90	11.438		
3,100.00	2,813.79	2,993.00	2,681.76	19.85	18.89	-82.168	-754.70	-562.52	422.01	385.72	36.28	11.631		
3,200.00	2,886.36	3,088.13	2,745.29	21.17	20.13	-82.287	-810.97	-605.49	452.83	414.15	38.68	11.706		
3,300.00	2,958.93	3,183.25	2,808.82	22.50	21.37	-82.390	-867.24	-648.46	483.65	442.55	41.10	11.768		
3,400.00	3,031.50	3,278.38	2,872.35	23.85	22.63	-82.481	-923.52	-691.44	514.48	470.94	43.53	11.819		
3,500.00	3,104.06	3,373.51	2,935.88	25.19	23.89	-82.562	-979.79	-734.41	545.30	499.33	45.97	11.861		
3,600.00	3,176.63	3,468.64	2,999.41	26.55	25.15	-82.635	-1,036.06	-777.38	576.13	527.70	48.43	11.896		
3,700.00	3,249.20	3,563.76	3,062.94	27.91	26.42	-82.699	-1,092.33	-820.36	606.95	556.06	50.89	11.926		
3,800.00	3,321.77	3,658.89	3,126.47	29.27	27.70	-82.758	-1,148.61	-863.33	637.78	584.42	53.36	11.952		
3,900.00	3,394.34	3,754.02	3,190.00	30.64	28.97	-82.811	-1,204.88	-906.30	668.61	612.77	55.84	11.973		
4,000.00	3,466.91	3,849.15	3,253.52	32.01	30.26	-82.860	-1,261.15	-949.28	699.44	641.11	58.33	11.992		
4,100.00	3,539.48	3,944.27	3,317.05	33.38	31.54	-82.904	-1,317.42	-992.25	730.27	669.45	60.82	12.008		
4,200.00	3,612.05	4,039.40	3,380.58	34.75	32.82	-82.945	-1,373.70	-1,035.22	761.10	697.79	63.31	12.022		
4,300.00	3,684.61	4,134.53	3,444.11	36.13	34.11	-82.983	-1,429.97	-1,078.20	791.93	726.12	65.81	12.034		
4,400.00	3,757.18	4,229.66	3,507.64	37.51	35.40	-83.018	-1,486.24	-1,121.17	822.76	754.45	68.31	12.045		
4,500.00	3,829.75	4,324.79	3,571.17	38.89	36.69	-83.050	-1,542.51	-1,164.14	853.59	782.78	70.81	12.054		
4,600.00	3,902.32	4,419.91	3,634.70	40.27	37.98	-83.080	-1,598.79	-1,207.12	884.42	811.10	73.32	12.062		
4,700.00	3,974.89	4,515.04	3,698.23	41.65	39.28	-83.108	-1,655.06	-1,250.09	915.25	839.42	75.83	12.070		
4,800.00	4,047.46	4,610.17	3,761.76	43.04	40.57	-83.134	-1,711.33	-1,293.06	946.08	867.74	78.34	12.076		
4,900.00	4,120.03	4,705.30	3,825.29	44.42	41.87	-83.159	-1,767.60	-1,336.04	976.91	896.06	80.86	12.082		
5,000.00	4,193.51	4,800.58	3,888.92	45.78	43.17	-81.885	-1,823.97	-1,379.08	1,007.17	923.84	83.32	12.087		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 563H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.00	4,274.70	4,896.29	3,952.84	46.89	44.47	-75.268	-1,880.58	-1,422.32	1,031.88	946.56	85.32	12.095		
5,200.00	4,362.90	4,989.96	4,015.40	47.70	45.75	-61.751	-1,935.99	-1,464.63	1,049.93	963.27	86.65	12.116		
5,300.00	4,455.46	5,078.75	4,074.69	48.21	46.97	-38.762	-1,988.52	-1,504.74	1,062.03	974.80	87.23	12.176		
5,400.00	4,549.56	5,159.96	4,128.93	48.48	48.08	-9.408	-2,036.55	-1,541.43	1,069.56	982.62	86.94	12.302		
5,500.00	4,642.33	5,231.11	4,176.45	48.56	49.05	15.395	-2,078.65	-1,573.57	1,074.37	988.61	85.76	12.528		
5,600.00	4,730.96	5,290.06	4,215.81	48.54	49.85	31.671	-2,113.52	-1,600.20	1,078.53	994.83	83.70	12.886		
5,700.00	4,812.75	5,335.00	4,245.83	48.49	50.47	41.704	-2,140.10	-1,620.50	1,084.04	1,003.18	80.86	13.407		
5,800.00	4,885.22	5,364.57	4,265.58	48.46	50.87	47.565	-2,157.60	-1,633.86	1,092.51	1,015.10	77.40	14.114		
5,900.00	4,946.17	5,377.88	4,274.46	48.49	51.06	50.344	-2,165.47	-1,639.87	1,104.88	1,031.26	73.61	15.009		
6,000.00	4,993.75	5,374.52	4,272.22	48.62	51.01	50.664	-2,163.48	-1,638.35	1,121.22	1,051.42	69.80	16.064		
6,100.00	5,026.32	5,355.08	4,259.24	48.85	50.74	48.694	-2,151.98	-1,629.57	1,139.82	1,073.58	66.24	17.208		
6,200.00	5,042.10	5,322.27	4,237.32	49.17	50.30	45.973	-2,132.57	-1,614.75	1,155.40	1,092.30	63.10	18.311		
6,300.00	5,044.26	5,279.78	4,208.95	49.57	49.71	43.753	-2,107.44	-1,595.56	1,168.83	1,108.35	60.48	19.327		
6,400.00	5,045.40	5,236.59	4,180.10	50.08	49.12	41.830	-2,081.89	-1,576.04	1,188.27	1,129.86	58.41	20.345		
6,500.00	5,046.53	5,193.39	4,151.26	50.70	48.53	39.921	-2,056.33	-1,556.53	1,214.12	1,157.21	56.90	21.337		
6,600.00	5,047.66	5,150.20	4,122.41	51.42	47.94	38.031	-2,030.78	-1,537.02	1,245.97	1,190.03	55.95	22.271		
6,700.00	5,048.80	5,107.01	4,093.56	52.26	47.35	36.162	-2,005.23	-1,517.51	1,283.39	1,227.91	55.47	23.136		
6,800.00	5,049.93	6,822.52	5,035.47	53.21	54.86	89.363	-2,621.63	-929.40	1,298.26	1,211.01	87.25	14.880		
6,900.00	5,051.07	6,922.52	5,036.43	54.27	54.79	89.355	-2,623.88	-829.43	1,298.46	1,208.84	89.61	14.490		
7,000.00	5,052.20	7,022.52	5,037.39	55.43	54.75	89.348	-2,626.12	-729.46	1,298.66	1,206.46	92.20	14.085		
7,100.00	5,053.34	7,122.52	5,038.35	56.70	54.76	89.340	-2,628.37	-629.49	1,298.85	1,203.86	95.00	13.673		
7,200.00	5,054.47	7,222.52	5,039.31	58.06	54.82	89.332	-2,630.61	-529.52	1,299.05	1,201.08	97.98	13.259		
7,300.00	5,055.61	7,322.52	5,040.27	59.51	54.94	89.325	-2,632.85	-429.55	1,299.25	1,198.12	101.13	12.847		
7,400.00	5,056.74	7,422.52	5,041.23	61.04	55.13	89.317	-2,635.10	-329.58	1,299.45	1,195.01	104.44	12.441		
7,500.00	5,057.87	7,522.52	5,042.18	62.65	55.42	89.310	-2,637.34	-229.61	1,299.65	1,191.75	107.90	12.045		
7,600.00	5,059.01	7,622.52	5,043.14	64.33	55.81	89.302	-2,639.59	-129.64	1,299.85	1,188.37	111.48	11.660		
7,700.00	5,060.14	7,722.52	5,044.10	66.08	56.35	89.294	-2,641.83	-29.67	1,300.05	1,184.88	115.17	11.288		
7,800.00	5,061.28	7,822.52	5,045.06	67.89	57.05	89.287	-2,644.08	70.30	1,300.25	1,181.28	118.97	10.929		
7,900.00	5,062.41	7,922.52	5,046.02	69.76	57.95	89.279	-2,646.32	170.27	1,300.45	1,177.58	122.86	10.584		
8,000.00	5,063.55	8,022.52	5,046.98	71.67	59.04	89.271	-2,648.56	270.24	1,300.64	1,173.80	126.85	10.254		
8,100.00	5,064.68	8,122.52	5,047.94	73.63	60.34	89.264	-2,650.81	370.21	1,300.84	1,169.94	130.90	9.938		
8,200.00	5,065.82	8,222.52	5,048.90	75.63	61.82	89.256	-2,653.05	470.18	1,301.04	1,166.01	135.03	9.635		
8,300.00	5,066.95	8,322.52	5,049.86	77.66	63.46	89.249	-2,655.30	570.15	1,301.24	1,162.02	139.22	9.347		
8,400.00	5,068.08	8,422.52	5,050.82	79.73	65.24	89.241	-2,657.54	670.12	1,301.44	1,157.97	143.47	9.071		
8,500.00	5,069.22	8,522.52	5,051.78	81.84	67.13	89.233	-2,659.79	770.09	1,301.64	1,153.87	147.77	8.808		
8,600.00	5,070.35	8,622.52	5,052.74	83.97	69.10	89.226	-2,662.03	870.06	1,301.84	1,149.71	152.12	8.558		
8,700.00	5,071.49	8,722.52	5,053.69	86.12	71.15	89.218	-2,664.27	970.03	1,302.04	1,145.52	156.52	8.319		
8,800.00	5,072.62	8,822.52	5,054.65	88.30	73.25	89.211	-2,666.52	1,070.00	1,302.24	1,141.28	160.96	8.091		
8,900.00	5,073.76	8,922.52	5,055.61	90.50	75.40	89.203	-2,668.76	1,169.97	1,302.44	1,137.00	165.43	7.873		
9,000.00	5,074.89	9,022.52	5,056.57	92.72	77.59	89.195	-2,671.01	1,269.94	1,302.64	1,132.69	169.94	7.665		
9,100.00	5,076.03	9,122.52	5,057.53	94.96	79.82	89.188	-2,673.25	1,369.91	1,302.83	1,128.35	174.48	7.467		
9,200.00	5,077.16	9,222.52	5,058.49	97.22	82.07	89.180	-2,675.50	1,469.88	1,303.03	1,123.98	179.05	7.277		
9,300.00	5,078.29	9,322.52	5,059.45	99.49	84.34	89.173	-2,677.74	1,569.85	1,303.23	1,119.58	183.65	7.096		
9,400.00	5,079.43	9,422.52	5,060.41	101.77	86.64	89.165	-2,679.99	1,669.82	1,303.43	1,115.16	188.28	6.923		
9,500.00	5,080.56	9,522.52	5,061.37	104.07	88.95	89.158	-2,682.23	1,769.79	1,303.63	1,110.70	192.93	6.757		
9,600.00	5,081.70	9,622.51	5,062.33	106.38	91.28	89.150	-2,684.47	1,869.76	1,303.83	1,106.24	197.59	6.599		
9,700.00	5,082.83	9,722.51	5,063.29	108.70	93.63	89.142	-2,686.72	1,969.73	1,304.03	1,101.75	202.28	6.447		
9,800.00	5,083.97	9,822.51	5,064.25	111.04	95.98	89.135	-2,688.96	2,069.70	1,304.23	1,097.24	206.99	6.301		
9,900.00	5,085.10	9,922.51	5,065.21	113.38	98.35	89.127	-2,691.21	2,169.67	1,304.43	1,092.71	211.72	6.161		
10,000.00	5,086.24	10,022.51	5,066.16	115.73	100.73	89.120	-2,693.45	2,269.64	1,304.63	1,088.17	216.46	6.027		
10,100.00	5,087.37	10,122.51	5,067.12	118.09	103.12	89.112	-2,695.70	2,369.61	1,304.83	1,083.61	221.22	5.898		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 563H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,200.00	5,088.50	10,222.51	5,068.08	120.46	105.51	89.105	-2,697.94	2,469.58	1,305.03	1,079.04	225.99	5.775		
10,300.00	5,089.64	10,322.51	5,069.04	122.84	107.91	89.097	-2,700.18	2,569.55	1,305.23	1,074.45	230.77	5.656		
10,400.00	5,090.77	10,422.51	5,070.00	125.22	110.32	89.089	-2,702.43	2,669.52	1,305.43	1,069.85	235.57	5.541		
10,500.00	5,091.91	10,522.51	5,070.96	127.61	112.74	89.082	-2,704.67	2,769.49	1,305.63	1,065.24	240.38	5.431		
10,600.00	5,093.04	10,622.51	5,071.92	130.01	115.16	89.074	-2,706.92	2,869.46	1,305.83	1,060.62	245.21	5.325		
10,700.00	5,094.18	10,722.51	5,072.88	132.41	117.59	89.067	-2,709.16	2,969.43	1,306.03	1,055.99	250.04	5.223		
10,800.00	5,095.31	10,822.51	5,073.84	134.82	120.03	89.059	-2,711.41	3,069.40	1,306.23	1,051.34	254.88	5.125		
10,900.00	5,096.45	10,922.51	5,074.80	137.23	122.47	89.052	-2,713.65	3,169.37	1,306.43	1,046.69	259.73	5.030		
11,000.00	5,097.58	11,022.51	5,075.76	139.65	124.91	89.044	-2,715.89	3,269.34	1,306.62	1,042.03	264.59	4.938		
11,100.00	5,098.71	11,122.51	5,076.72	142.07	127.36	89.037	-2,718.14	3,369.31	1,306.82	1,037.36	269.46	4.850		
11,200.00	5,099.85	11,222.51	5,077.67	144.50	129.81	89.029	-2,720.38	3,469.28	1,307.02	1,032.68	274.34	4.764		
11,300.00	5,100.98	11,322.51	5,078.63	146.93	132.26	89.022	-2,722.63	3,569.25	1,307.22	1,028.00	279.23	4.682		
11,400.00	5,102.12	11,422.51	5,079.59	149.37	134.72	89.014	-2,724.87	3,669.22	1,307.42	1,023.31	284.12	4.602		
11,500.00	5,103.25	11,522.51	5,080.55	151.81	137.18	89.007	-2,727.12	3,769.19	1,307.62	1,018.61	289.02	4.524		
11,600.00	5,104.39	11,622.51	5,081.51	154.25	139.65	88.999	-2,729.36	3,869.16	1,307.82	1,013.90	293.92	4.450		
11,700.00	5,105.52	11,722.51	5,082.47	156.69	142.11	88.991	-2,731.60	3,969.13	1,308.02	1,009.19	298.83	4.377		
11,800.00	5,106.66	11,822.51	5,083.43	159.14	144.58	88.984	-2,733.85	4,069.10	1,308.22	1,004.47	303.75	4.307		
11,900.00	5,107.79	11,922.51	5,084.39	161.60	147.06	88.976	-2,736.09	4,169.07	1,308.42	999.75	308.68	4.239		
12,000.00	5,108.92	12,022.51	5,085.35	164.05	149.53	88.969	-2,738.34	4,269.04	1,308.62	995.02	313.61	4.173		
12,100.00	5,110.06	12,122.51	5,086.31	166.51	152.01	88.961	-2,740.58	4,369.01	1,308.82	990.28	318.54	4.109		
12,200.00	5,111.19	12,222.51	5,087.27	168.97	154.49	88.954	-2,742.83	4,468.98	1,309.02	985.55	323.48	4.047		
12,300.00	5,112.33	12,322.51	5,088.23	171.43	156.97	88.946	-2,745.07	4,568.95	1,309.22	980.80	328.42	3.986		
12,400.00	5,113.46	12,422.51	5,089.18	173.90	159.46	88.939	-2,747.32	4,668.92	1,309.42	976.05	333.37	3.928		
12,500.00	5,114.60	12,522.50	5,090.14	176.37	161.94	88.931	-2,749.56	4,768.89	1,309.62	971.30	338.32	3.871		
12,600.00	5,115.73	12,622.50	5,091.10	178.84	164.43	88.924	-2,751.80	4,868.86	1,309.82	966.55	343.27	3.816		
12,700.00	5,116.87	12,722.50	5,092.06	181.31	166.92	88.916	-2,754.05	4,968.83	1,310.02	961.79	348.23	3.762		
12,800.00	5,118.00	12,822.50	5,093.02	183.79	169.41	88.909	-2,756.29	5,068.79	1,310.22	957.03	353.20	3.710		
12,900.00	5,119.13	12,922.50	5,093.98	186.26	171.90	88.901	-2,758.54	5,168.76	1,310.42	952.26	358.16	3.659		
13,000.00	5,120.27	13,022.50	5,094.94	188.74	174.40	88.894	-2,760.78	5,268.73	1,310.62	947.49	363.13	3.609		
13,100.00	5,121.40	13,122.50	5,095.90	191.22	176.89	88.886	-2,763.03	5,368.70	1,310.82	942.72	368.11	3.561		
13,200.00	5,122.54	13,222.50	5,096.86	193.71	179.39	88.879	-2,765.27	5,468.67	1,311.02	937.94	373.08	3.514		
13,300.00	5,123.67	13,322.50	5,097.82	196.19	181.89	88.871	-2,767.51	5,568.64	1,311.22	933.16	378.06	3.468		
13,400.00	5,124.81	13,422.50	5,098.78	198.68	184.39	88.864	-2,769.76	5,668.61	1,311.42	928.38	383.05	3.424		
13,500.00	5,125.94	13,522.50	5,099.74	201.16	186.89	88.856	-2,772.00	5,768.58	1,311.62	923.59	388.03	3.380		
13,600.00	5,127.08	13,622.50	5,100.69	203.65	189.39	88.849	-2,774.25	5,868.55	1,311.82	918.80	393.02	3.338		
13,700.00	5,128.21	13,722.50	5,101.65	206.14	191.90	88.841	-2,776.49	5,968.52	1,312.02	914.01	398.01	3.296		
13,800.00	5,129.34	13,822.50	5,102.61	208.63	194.40	88.834	-2,778.74	6,068.49	1,312.22	909.22	403.00	3.256		
13,900.00	5,130.48	13,922.50	5,103.57	211.13	196.91	88.826	-2,780.98	6,168.46	1,312.42	904.42	408.00	3.217		
14,000.00	5,131.61	14,022.50	5,104.53	213.62	199.41	88.819	-2,783.22	6,268.43	1,312.63	899.63	413.00	3.178		
14,100.00	5,132.75	14,122.50	5,105.49	216.11	201.92	88.812	-2,785.47	6,368.40	1,312.83	894.83	418.00	3.141		
14,200.00	5,133.88	14,222.50	5,106.45	218.61	204.43	88.804	-2,787.71	6,468.37	1,313.03	890.03	423.00	3.104		
14,300.00	5,135.02	14,322.50	5,107.41	221.11	206.94	88.797	-2,789.96	6,568.34	1,313.23	885.22	428.00	3.068		
14,400.00	5,136.15	14,422.50	5,108.37	223.61	209.45	88.789	-2,792.20	6,668.31	1,313.43	880.42	433.01	3.033		
14,500.00	5,137.29	14,522.50	5,109.33	226.11	211.96	88.782	-2,794.45	6,768.28	1,313.63	875.61	438.02	2.999		
14,600.00	5,138.42	14,622.50	5,110.29	228.61	214.47	88.774	-2,796.69	6,868.25	1,313.83	870.80	443.03	2.966		
14,700.00	5,139.55	14,722.50	5,111.25	231.11	216.99	88.767	-2,798.94	6,968.22	1,314.03	865.99	448.04	2.933		
14,700.45	5,139.56	14,722.95	5,111.25	231.12	217.00	88.767	-2,798.95	6,968.67	1,314.03	865.97	448.06	2.933		
14,800.00	5,140.69	14,822.50	5,112.20	233.61	219.50	88.760	-2,801.18	7,068.19	1,314.31	861.26	453.05	2.901		
14,900.00	5,141.96	14,922.14	5,113.16	236.09	222.00	88.850	-2,803.42	7,167.80	1,322.00	863.97	458.03	2.886		
15,000.00	5,143.45	15,020.10	5,114.10	238.47	224.47	88.945	-2,805.61	7,265.74	1,341.77	878.90	462.87	2.899		
15,100.00	5,145.12	15,114.92	5,115.01	240.71	226.85	89.051	-2,807.74	7,360.53	1,373.34	905.84	467.50	2.938		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 33 T23N R07W North Alamito Unit 560 562 563 - North Alamito Unit 563H - Original Hole - rev0													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
15,200.00	5,146.96	15,205.19	5,115.88	242.76	229.12	89.168	-2,809.77	7,450.77	1,416.22	944.42	471.81	3.002		
15,300.00	5,148.94	15,289.56	5,116.68	244.58	231.25	89.292	-2,811.66	7,535.11	1,469.79	994.06	475.73	3.090		
15,400.00	5,151.02	15,366.77	5,117.43	246.14	233.19	89.418	-2,813.39	7,612.30	1,533.24	1,054.03	479.21	3.199		
15,500.00	5,153.18	15,435.67	5,118.09	247.43	234.93	89.544	-2,814.94	7,681.19	1,605.63	1,123.42	482.21	3.330		
15,600.00	5,155.38	15,495.24	5,118.66	248.45	236.43	89.661	-2,816.28	7,740.74	1,685.87	1,201.19	484.69	3.478		
15,700.00	5,157.59	15,544.59	5,119.13	249.21	237.67	89.758	-2,817.39	7,790.07	1,772.78	1,286.13	486.65	3.643		
15,800.00	5,159.79	15,582.97	5,119.50	249.73	238.64	89.810	-2,818.25	7,828.44	1,865.05	1,376.96	488.09	3.821		
15,900.00	5,161.93	15,609.83	5,119.76	250.05	239.31	89.738	-2,818.85	7,855.29	1,961.31	1,472.27	489.05	4.010		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 34 T23N R07W - Federal B #003 - Orig Hole - Inc only surveys													Offset Site Error:	0.00 ft
Survey Program: 1246-INC-ONLY													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
15,900.00	5,161.93	5,228.38	5,227.43	250.05	211.95	84.051	900.67	8,710.39	1,937.30	1,503.93	433.37	4.470		
16,000.00	5,163.98	5,230.43	5,229.48	250.22	211.98	86.614	900.67	8,710.39	1,840.91	1,409.73	431.18	4.270		
16,100.00	5,165.99	5,232.44	5,231.49	250.32	212.01	86.808	900.67	8,710.39	1,746.53	1,318.26	428.27	4.078		
16,200.00	5,167.99	5,234.45	5,233.49	250.43	212.04	87.002	900.67	8,710.39	1,652.80	1,227.92	424.88	3.890		
16,300.00	5,170.00	5,236.45	5,235.50	250.54	212.08	87.196	900.67	8,710.39	1,559.85	1,138.93	420.92	3.706		
16,400.00	5,172.01	5,238.46	5,237.51	250.65	212.11	87.390	900.67	8,710.39	1,467.82	1,051.59	416.24	3.526		
16,500.00	5,174.01	5,240.47	5,239.51	250.76	212.14	87.584	900.67	8,710.39	1,376.91	966.24	410.66	3.353		
16,600.00	5,176.02	5,242.47	5,241.52	250.88	212.17	87.778	900.67	8,710.39	1,287.34	883.37	403.97	3.187		
16,700.00	5,178.03	5,244.48	5,243.53	251.00	212.20	87.972	900.67	8,710.39	1,199.41	803.56	395.85	3.030		
16,800.00	5,180.03	5,246.49	5,245.53	251.12	212.23	88.166	900.67	8,710.39	1,113.52	727.57	385.95	2.885		
16,900.00	5,182.04	5,248.49	5,247.54	251.24	212.26	88.360	900.67	8,710.39	1,030.18	656.40	373.78	2.756		
17,000.00	5,184.05	5,250.50	5,249.55	251.36	212.30	88.555	900.67	8,710.39	950.05	591.24	358.81	2.648		
17,100.00	5,186.05	5,252.51	5,251.55	251.49	212.33	88.749	900.67	8,710.39	874.02	533.54	340.48	2.567		
17,200.00	5,188.06	5,254.51	5,253.56	251.62	212.36	88.943	900.67	8,710.39	803.26	484.75	318.51	2.522		
17,300.00	5,190.07	5,256.52	5,255.57	251.76	212.39	89.138	900.67	8,710.39	739.27	445.58	293.69	2.517		
17,400.00	5,192.08	5,258.53	5,257.58	251.89	212.42	89.332	900.67	8,710.39	683.97	414.62	269.35	2.539		
17,500.00	5,194.08	5,260.54	5,259.58	252.03	212.45	89.526	900.67	8,710.39	639.61	388.96	250.65	2.552		
17,600.00	5,196.09	5,262.54	5,261.59	252.17	212.49	89.721	900.67	8,710.39	608.59	366.74	241.85	2.516		
17,700.00	5,198.10	5,264.55	5,263.60	252.31	212.52	89.915	900.67	8,710.39	593.00	347.47	245.53	2.415		
17,743.68	5,198.97	5,265.43	5,264.47	252.37	212.53	90.000	900.67	8,710.39	591.39	340.07	251.33	2.353 CC		
17,745.07	5,199.00	5,265.45	5,264.50	252.38	212.53	90.003	900.67	8,710.39	591.39	339.84	251.55	2.351 ES, SF		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 34 T23N R07W - Federal B L #002 - Orig Hole - Inc only surveys													Offset Site Error:	0.00 ft
Survey Program: 1007-INC-ONLY													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
17,500.00	5,194.08	5,230.81	5,230.58	252.03	163.02	83.292	2,572.51	8,640.56	1,922.73	1,525.72	397.01	4.843		
17,600.00	5,196.09	5,232.82	5,232.59	252.17	163.05	83.643	2,572.51	8,640.56	1,824.25	1,428.44	395.80	4.609		
17,700.00	5,198.10	5,234.83	5,234.60	252.31	163.08	83.994	2,572.51	8,640.56	1,725.94	1,331.53	394.42	4.376		
17,745.07	5,199.00	5,235.73	5,235.50	252.38	163.09	84.153	2,572.51	8,640.56	1,681.70	1,287.98	393.72	4.271	CC, ES, SF	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 34 T23N R07W - N Alamito Unit #306H - Orig Hole - MWD surveys													Offset Site Error:	0.00 ft
Survey Program: 409-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
11,100.00	5,098.71	6,004.00	5,118.79	142.07	29.39	-89.844	35.56	4,713.38	1,955.54	1,825.91	129.63	15.085		
11,200.00	5,099.85	5,981.00	5,119.39	144.50	29.20	-89.858	20.27	4,730.54	1,890.78	1,757.01	133.77	14.135		
11,300.00	5,100.98	5,918.00	5,120.69	146.93	28.68	-89.885	-20.52	4,778.54	1,827.58	1,692.18	135.40	13.498		
11,400.00	5,102.12	5,880.11	5,121.20	149.37	28.40	-89.890	-44.50	4,807.87	1,765.66	1,626.76	138.90	12.712		
11,500.00	5,103.25	5,804.84	5,122.19	151.81	27.96	-89.900	-91.52	4,866.63	1,704.79	1,564.85	139.94	12.182		
11,600.00	5,104.39	5,735.96	5,123.84	154.25	27.65	-89.941	-134.58	4,920.36	1,643.88	1,502.33	141.55	11.613		
11,700.00	5,105.52	5,678.45	5,123.26	156.69	27.46	-89.890	-170.04	4,965.63	1,583.85	1,439.72	144.13	10.989		
11,800.00	5,106.66	5,593.91	5,118.67	159.14	27.26	-89.635	-221.49	5,032.54	1,524.52	1,379.67	144.85	10.525		
11,900.00	5,107.79	5,483.46	5,094.44	161.60	27.12	-88.368	-288.63	5,116.38	1,463.62	1,319.89	143.73	10.183		
12,000.00	5,108.92	5,419.95	5,067.72	164.05	27.08	-86.929	-325.00	5,160.97	1,403.06	1,256.63	146.42	9.582		
12,100.00	5,110.06	5,340.87	5,022.91	166.51	27.03	-84.425	-366.74	5,210.81	1,343.57	1,195.23	148.34	9.057		
12,200.00	5,111.19	5,297.30	4,993.17	168.97	27.01	-82.720	-387.48	5,234.95	1,286.51	1,133.31	153.20	8.397		
12,300.00	5,112.33	5,235.30	4,947.21	171.43	26.98	-80.027	-415.16	5,265.97	1,232.66	1,075.70	156.96	7.853		
12,400.00	5,113.46	5,181.84	4,904.75	173.90	26.96	-77.488	-437.96	5,289.08	1,182.32	1,020.89	161.44	7.324		
12,500.00	5,114.60	5,142.92	4,872.56	176.37	26.96	-75.540	-453.88	5,304.07	1,136.99	970.05	166.94	6.811		
12,600.00	5,115.73	5,107.19	4,842.24	178.84	26.96	-73.696	-468.05	5,316.58	1,097.68	925.24	172.45	6.365		
12,700.00	5,116.87	5,077.20	4,816.21	181.31	26.96	-72.107	-479.64	5,325.93	1,065.30	887.34	177.96	5.986		
12,800.00	5,118.00	5,055.18	4,796.78	183.79	26.96	-70.923	-487.95	5,332.12	1,040.81	857.41	183.40	5.675		
12,900.00	5,119.13	5,037.73	4,781.20	186.26	26.96	-69.976	-494.36	5,336.66	1,025.03	836.83	188.20	5.447		
13,000.00	5,120.27	5,022.58	4,767.55	188.74	26.96	-69.148	-499.80	5,340.33	1,018.46	826.64	191.82	5.309		
13,019.40	5,120.49	5,019.87	4,765.10	189.22	26.96	-69.000	-500.76	5,340.96	1,018.28	825.92	192.36	5.294	CC, ES	
13,100.00	5,121.40	5,003.00	4,749.74	191.22	26.96	-68.074	-506.65	5,344.71	1,021.40	827.96	193.44	5.280	SF	
13,200.00	5,122.54	5,003.00	4,749.74	193.71	26.96	-68.074	-506.65	5,344.71	1,033.74	838.81	194.94	5.303		
13,300.00	5,123.67	5,003.00	4,749.74	196.19	26.96	-68.074	-506.65	5,344.71	1,055.46	860.86	194.60	5.424		
13,400.00	5,124.81	4,981.12	4,729.60	198.68	26.97	-66.869	-514.03	5,349.04	1,085.46	894.33	191.13	5.679		
13,500.00	5,125.94	4,974.01	4,723.00	201.16	26.97	-66.476	-516.35	5,350.31	1,123.66	936.13	187.53	5.992		
13,600.00	5,127.08	4,967.66	4,717.08	203.65	26.97	-66.126	-518.40	5,351.38	1,169.10	986.00	183.10	6.385		
13,700.00	5,128.21	4,961.96	4,711.75	206.14	26.97	-65.811	-520.21	5,352.29	1,220.97	1,042.83	178.14	6.854		
13,800.00	5,129.34	4,939.00	4,690.14	208.63	26.97	-64.546	-527.26	5,355.49	1,278.87	1,106.88	171.99	7.436		
13,900.00	5,130.48	4,939.00	4,690.14	211.13	26.97	-64.546	-527.26	5,355.49	1,341.18	1,174.18	167.00	8.031		
14,000.00	5,131.61	4,939.00	4,690.14	213.62	26.97	-64.546	-527.26	5,355.49	1,407.85	1,245.82	162.03	8.689		
14,100.00	5,132.75	4,939.00	4,690.14	216.11	26.97	-64.546	-527.26	5,355.49	1,478.27	1,321.09	157.18	9.405		
14,200.00	5,133.88	4,939.00	4,690.14	218.61	26.97	-64.546	-527.26	5,355.49	1,551.95	1,399.42	152.53	10.175		
14,300.00	5,135.02	4,939.00	4,690.14	221.11	26.97	-64.546	-527.26	5,355.49	1,628.44	1,480.32	148.12	10.994		
14,400.00	5,136.15	4,939.00	4,690.14	223.61	26.97	-64.546	-527.26	5,355.49	1,707.36	1,563.41	143.96	11.860		
14,500.00	5,137.29	4,939.00	4,690.14	226.11	26.97	-64.546	-527.26	5,355.49	1,788.39	1,648.34	140.05	12.769		
14,600.00	5,138.42	4,939.00	4,690.14	228.61	26.97	-64.546	-527.26	5,355.49	1,871.26	1,734.85	136.41	13.718		
14,700.00	5,139.55	4,939.00	4,690.14	231.11	26.97	-64.546	-527.26	5,355.49	1,955.73	1,822.72	133.01	14.704		

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well North Alamito Unit 562H
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6876+23.5 @ 6899.50ft
Reference Site:	Sec 33 T23N R07W North Alamito Unit 560 562 563	MD Reference:	RKB=6876+23.5 @ 6899.50ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: Sec 34 T23N R07W - N Alamito Unit #308H - Orig Hole - MWD surveys													Offset Site Error:	0.00 ft
Survey Program: 356-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Reference Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
16,400.00	5,172.01	4,850.00	4,663.54	250.65	25.77	-64.084	1,238.62	7,020.38	1,929.48	1,694.75	234.73	8.220		
16,500.00	5,174.01	4,862.08	4,674.53	250.76	25.84	-64.510	1,243.30	7,022.17	1,854.39	1,623.78	230.62	8.041		
16,600.00	5,176.02	4,881.00	4,691.70	250.88	25.95	-65.194	1,250.92	7,024.40	1,781.63	1,555.34	226.29	7.873		
16,700.00	5,178.03	4,881.00	4,691.70	251.00	25.95	-65.194	1,250.92	7,024.40	1,711.16	1,491.13	220.03	7.777		
16,800.00	5,180.03	4,893.30	4,702.83	251.12	26.02	-65.650	1,256.03	7,025.47	1,643.57	1,429.87	213.70	7.691		
16,900.00	5,182.04	4,913.00	4,720.60	251.24	26.12	-66.397	1,264.47	7,026.58	1,579.19	1,372.20	206.99	7.629 SF		
17,000.00	5,184.05	4,913.00	4,720.60	251.36	26.12	-66.397	1,264.47	7,026.58	1,518.17	1,320.36	197.81	7.675		
17,100.00	5,186.05	4,927.31	4,733.44	251.49	26.19	-66.951	1,270.79	7,026.90	1,461.17	1,272.60	188.57	7.749		
17,200.00	5,188.06	4,945.00	4,749.18	251.62	26.27	-67.648	1,278.84	7,026.70	1,408.66	1,230.22	178.44	7.894		
17,300.00	5,190.07	4,945.00	4,749.18	251.76	26.27	-67.648	1,278.84	7,026.70	1,361.01	1,195.23	165.78	8.210		
17,400.00	5,192.08	4,976.00	4,776.56	251.89	26.40	-68.892	1,293.30	7,025.25	1,318.48	1,163.96	154.53	8.532		
17,500.00	5,194.08	4,990.57	4,789.39	252.03	26.45	-69.487	1,300.14	7,024.12	1,281.74	1,140.65	141.09	9.085		
17,600.00	5,196.09	5,007.00	4,803.83	252.17	26.51	-70.167	1,307.76	7,022.36	1,251.32	1,124.09	127.23	9.835		
17,700.00	5,198.10	5,022.05	4,817.02	252.31	26.55	-70.799	1,314.70	7,020.31	1,227.73	1,114.47	113.26	10.840		
17,745.07	5,199.00	5,039.00	4,831.83	252.38	26.60	-71.516	1,322.48	7,017.53	1,219.56	1,111.94	107.62	11.332 CC, ES		

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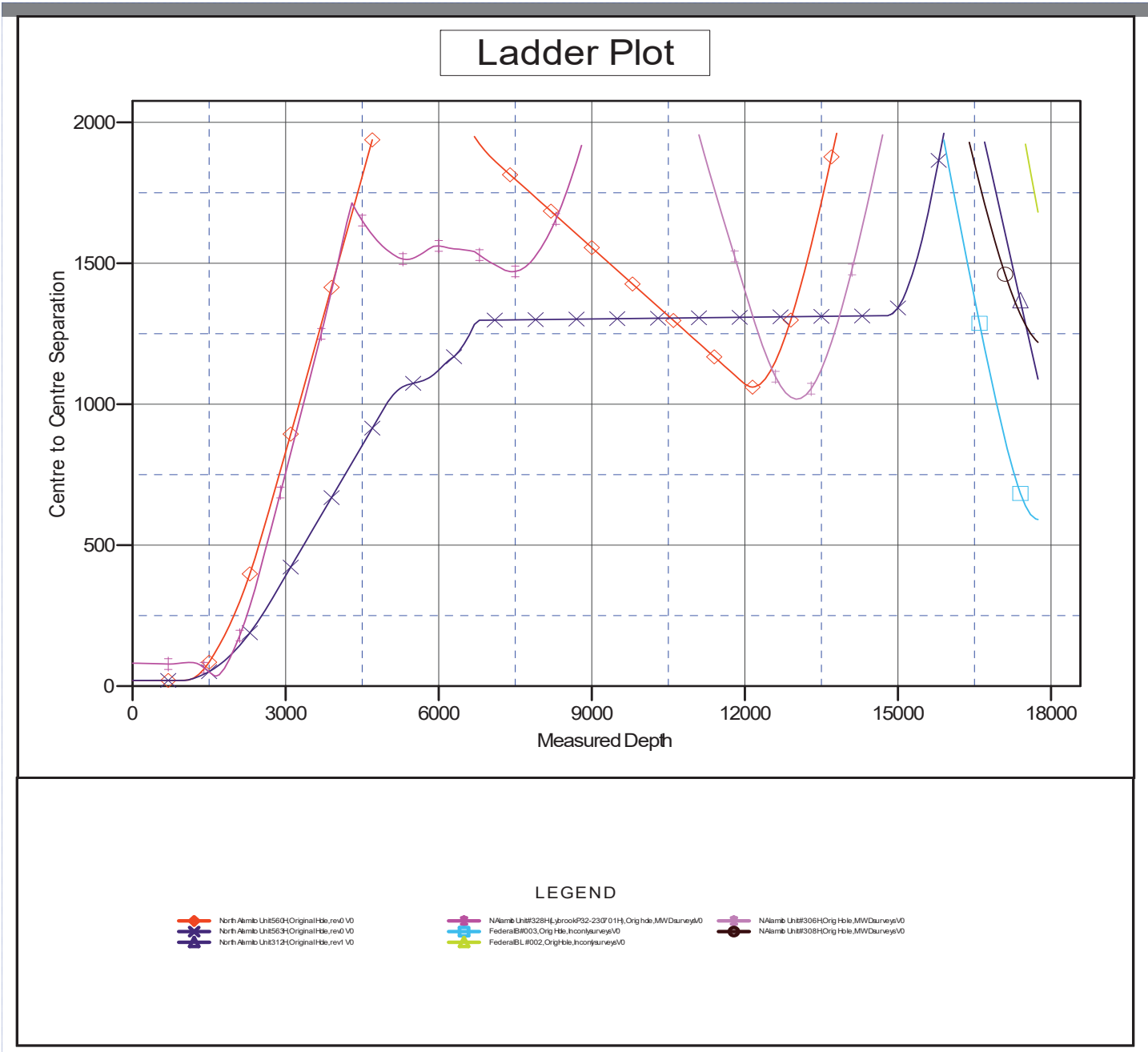


Anticollision Report

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Reference Well:	North Alamito Unit 562H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT-Oct0825v17
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6876+23.5 @ 6899.50ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -106.25000000

Coordinates are relative to: North Alamito Unit 562H
 Coordinate System is US State Plane 1983, New Mexico Central Zone
 Grid Convergence at Surface is: -0.790°



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

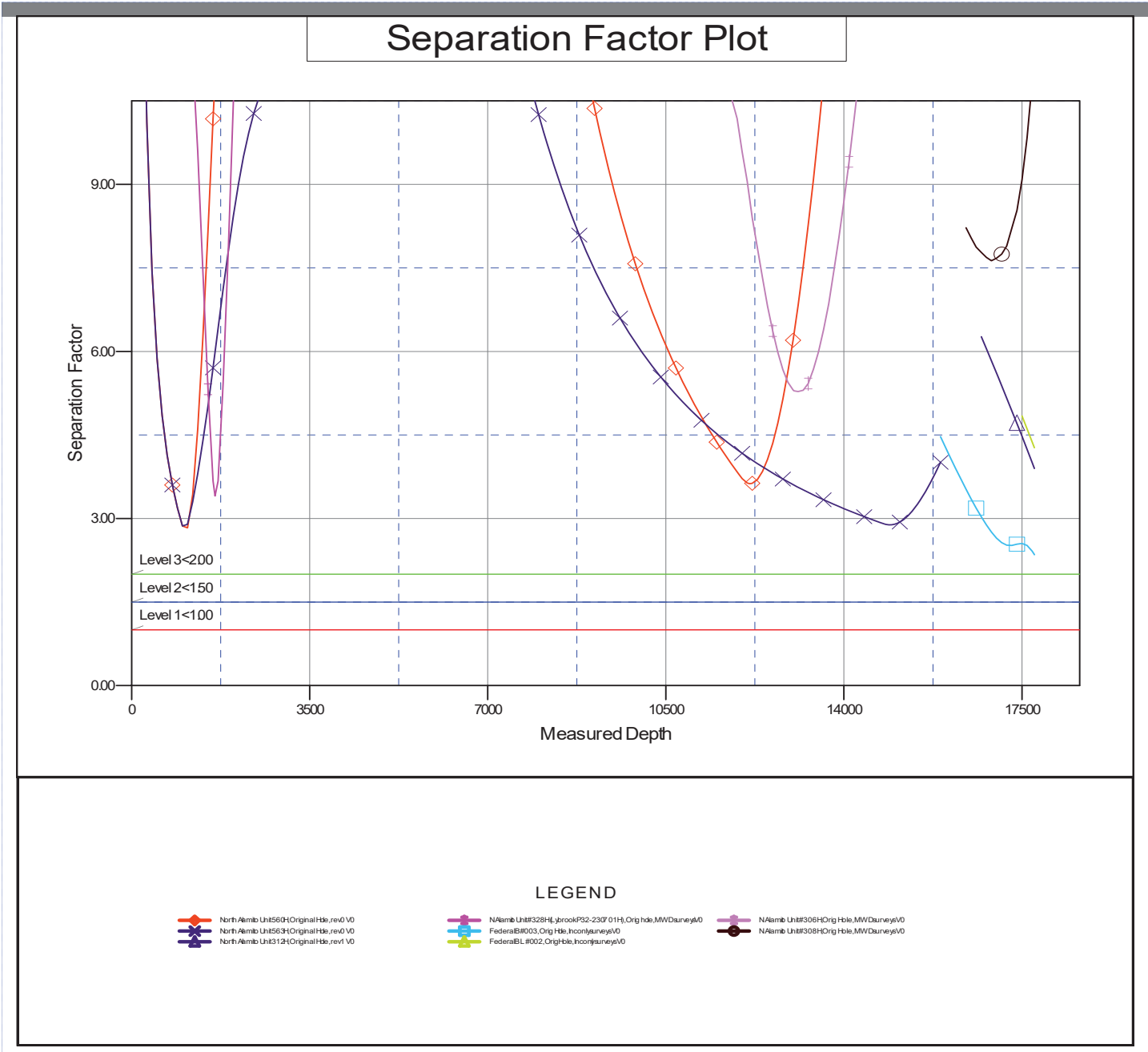


Anticollision Report

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United States Department of the Interior

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



In Reply Refer To:
3162.3-1(NMF0110)

* DJR OPERATING LLC
#562H N ALAMITO UNIT
Lease: NMNM 089023 Unit: NMNM 135229A
SH: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 33, T. 23 N., R. 7 W.
Sandoval County, New Mexico
BH: NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 34, T.22 N., R. 7 W.
Sandoval, New Mexico
***Above Data Required on Well Sign**

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

The following special requirements apply and are effective when checked:

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

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

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

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

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

VII. PHONE NUMBERS

- A. For BOPE tests, cementing, and plugging operations the phone number is 505-564-7750 and must be called 24 hours in advance in order that a BLM representative may witness the operations.

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

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 545085

ACKNOWLEDGMENTS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 545085
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

CONDITIONS

Action 545085

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 545085
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
scrues76	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/21/2026
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/21/2026
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	3/30/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	3/30/2026
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.	3/30/2026
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.	3/30/2026
ward.rikala	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.	3/30/2026