

Well Name: NORTH ALAMITO UNIT	Well Location: T23N / R7W / SEC 19 / NENE / 36.217323 / -107.610489	County or Parish/State: SANDOVAL / NM
Well Number: 106H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM81638	Unit or CA Name: /1/NORTH ALAMITO UNIT	Unit or CA Number: NMNM135229A
US Well Number: 3004321508	Well Status: Drilling Well	Operator: DJR OPERATING LLC

Notice of Intent

Sundry ID: 2774620

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 02/12/2024	Time Sundry Submitted: 11:23
Date proposed operation will begin: 02/12/2024	

Procedure Description: The subject well is located within DJRs undivided North Alamito Unit. Original plans were to drill an 8800-ft lateral. DJR is seeking approval to 13870-ft, changing the proposed depth from 5285 \ 14654 to 5285 / 20659. Adjusting the BHL & increasing the dedicated acres from 560 to 840. Attached please find updated C102, revised drilling plan with new casing, cement assumptions, revised directional design and proposed wellbore diagram. Please note, effective December 21, 2023, Enduring Resources, LLC & DJR Operating, LLC are wholly owned subsidiaries of Enduring Resources, LLC. Leases, rights of way, wells, and other property interests will continue to be held in their current entity names.

NOI Attachments

Procedure Description

106H_NOI_Change_to_APD_Rev2_20240212112253.pdf

Well Name: NORTH ALAMITO UNIT	Well Location: T23N / R7W / SEC 19 / NENE / 36.217323 / -107.610489	County or Parish/State: SANDOVAL / NM
Well Number: 106H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM81638	Unit or CA Name: /1/NORTH ALAMITO UNIT	Unit or CA Number: NMNM135229A
US Well Number: 3004321508	Well Status: Drilling Well	Operator: DJR OPERATING LLC

Conditions of Approval

Additional

DJR_Operating_LLC_North_Alamito_Unit_106H_BHL_Change_2774620_MHK_20240213080654.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: SHAW-MARIE FORD	Signed on: FEB 12, 2024 11:22 AM
Name: DJR OPERATING LLC	
Title: Regulatory Specialist	
Street Address: 1 ROAD 3263	
City: AZTEC	State: NM
Phone: (505) 632-3476	
Email address: SFORD@DJRLLC.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: MATTHEW H KADE	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647736	BLM POC Email Address: MKADE@BLM.GOV
Disposition: Approved	Disposition Date: 02/13/2024
Signature: Matthew Kade	

DISTRICT I1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720**DISTRICT II**811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720**DISTRICT III**1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170**DISTRICT IV**1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm C-102
Revised August 1, 2011Submit one copy to appropriate
District OfficeOIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21508	² Pool Code 98174	³ Pool Name NORTH ALAMITO UNIT MANCOS OIL POOL
⁴ Property Code 325267	⁵ Property Name NORTH ALAMITO UNIT	⁶ Well Number 106H
⁷ GRID No 371838	⁸ Operator Name DJR OPERATING, LLC	⁹ Elevation 6962'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	23N	7W		897'	NORTH	1158'	EAST	SANDOVAL

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	28	23N	7W		1653'	SOUTH	1425'	WEST	SANDOVAL

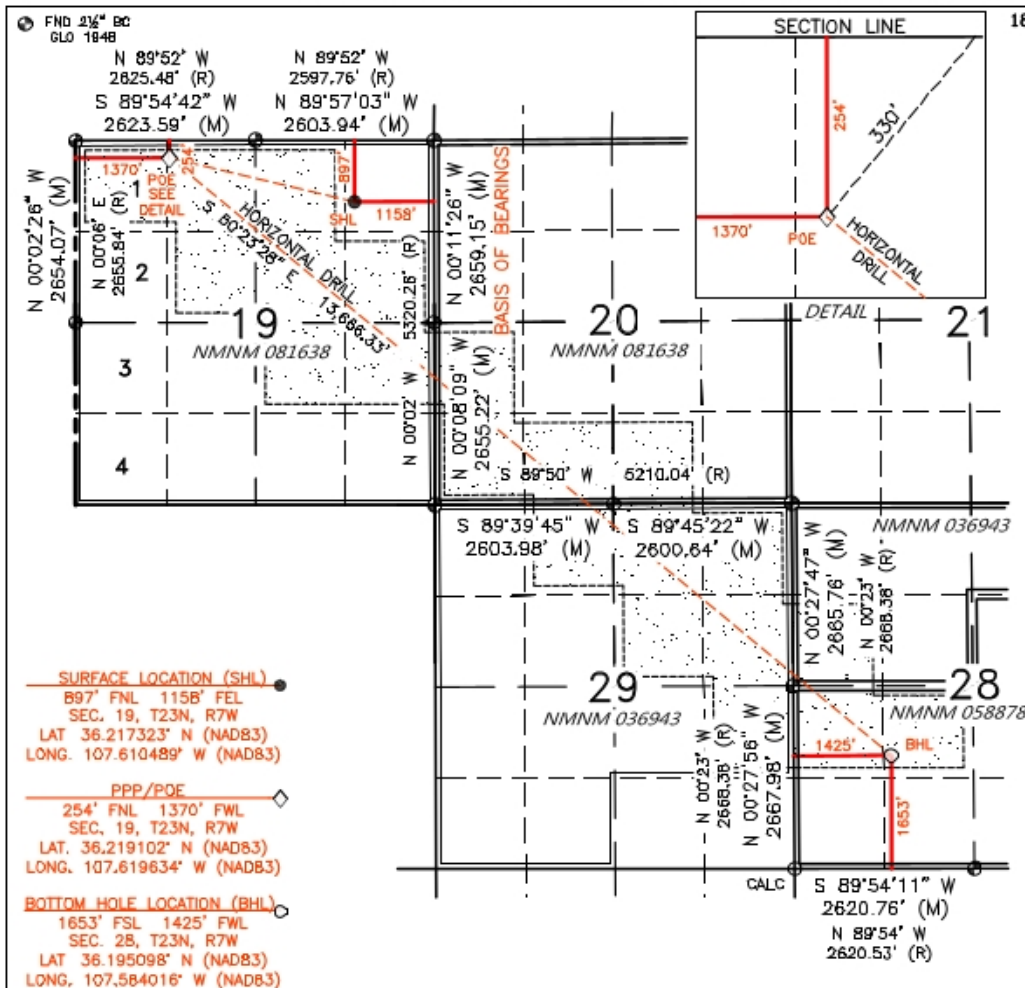
¹² Dedicated Acres PENETRATED SPACING UNIT:
SEC 19: LOT 1, NE/4, SE/4, NW/4, SW/4, SE/4, NW/4, SE/4 & NE/4 (320.82 AC.); SEC 20: NW/4, SW/4, SE/4, SW/4 & SW/4 (180 AC.); SEC 28: NE/4, NW/4, NE/4 & NE/4 (240 AC.); SEC 28: SW/4, NW/4, SW/4 & NE/4 (120 AC.) = 840.82 ACRES

¹³ Joint or Infill¹⁴ Consolidation Code¹⁵ Order No.

R-14081, R-14081A

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

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

Shaw-Marie Ford 2/12/24
Signature Date

Shaw-Marie Ford
Printed Name
sford@djrlc.com

E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

AUGUST 11, 2020

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393



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 106H

API Number: 30-043-21508

State: New Mexico

County: San Juan

Surface Elevation: 6,962 ft ASL (GL) 6,987 ft ASL (KB)

Surface Location: 19-23N-07W Sec-Twn-Rng 897 ft FNL 1,158 ft FEL

36.217323 ° N latitude 107.610489 ° W longitude (NAD 83)

BH Location: 29-23N-07W Sec-Twn-Rng 1,921 ft FNL 579 ft FEL

36.199935 ° N latitude 107.590841 ° 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 Y (just passed 4-way), Left (East) leaving CR #7900 for 4.0 miles to lease road; Left (NorthEast) for 1.8 miles to new access; Right (North) for 1.5 miles to NAU N19-2307 pad entrance on left (from South to North): N Alamito 102H, 106H wells).

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	5,915	1,072	1,081	W	normal
	Kirtland	5,800	1,187	1,203	W	normal
	Fruitland	5,629	1,358	1,390	G, W	sub
	Pictured Cliffs	5,293	1,694	1,789	G, W	sub
	Lewis	5,138	1,849	1,998	G, W	normal
	Chacra	4,887	2,100	2,360	G, W	normal
	Cliff House	3,798	3,189	3,931	G, W	sub
	Menefee	3,758	3,229	3,989	G, W	normal
	Point Lookout	2,925	4,062	5,192	G, W	normal
	Mancos	2,714	4,273	5,496	O,G	sub (~0.38)
	Gallup (MNCS_A)	2,375	4,612	5,913	O,G	sub (~0.38)
	MNCS_B	2,275	4,712	6,016	O,G	sub (~0.38)
	MNCS_C	2,188	4,799	6,106	O,G	sub (~0.38)
	MNCS_Cms	2,143	4,844	6,152	O,G	sub (~0.38)
	MNCS_D	2,018	4,969	6,287	O,G	sub (~0.38)
	MNCS_E	1,907	5,080	6,422	O,G	sub (~0.38)
	MNCS_F	1,853	5,134	6,497	O,G	sub (~0.38)
	MNCS_G	1,779	5,208	6,620	O,G	sub (~0.38)
	MNCS_H	1,720	5,267	6,744	O,G	sub (~0.38)
	MNCS_I	1,695	5,292	6,813	O,G	sub (~0.38)
	FTP TARGET	1,702	5,285	6,789	O,G	sub (~0.38)
	PROJECTED TD	1,721	5,266	20,659	O,G	sub (~0.38)

Surface: Nacimiento

Oil & Gas Zones: Several gas bearing zones will be encountered; target formation is the Gallup

Pressure: Normal (0.43 psi/ft) or sub-normal pressure gradients anticipated in all formations

Max. pressure gradient: 0.43 psi/ft Evacuated hole gradient: 0.22 psi/ft

Maximum anticipated BH pressure, assuming maximum pressure gradient: 2,280 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 1,120 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: Aztec

Rig No.: 1000

Draw Works: E80 AC 1,500 hp

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

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

Prime Movers: 4 - GE Jenbacher Natural Gas Generator

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

BOPE 1: Cameron single & double gate rams (11", 3,000 psi)

BOPE 2: Cameron annular (11", 3,000 psi)

Choke 3", 5,000 psi

KB-GL (ft): 25

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

BOPE REQUIREMENTS:

See attached diagram for details regarding BOPE specifications and configuration.

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

FLUIDS AND SOLIDS CONTROL PROGRAM:

Fluid Measurement:

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

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

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

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

Fluid Program: See "Detailed Drilling Plan" section 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	K-55	STC	2,020	3,520	564,000	423,000
Loading					153	1,135	110,988	110,988
Min. S.F.					13.21	3.10	5.08	3.81

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

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

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

350 ft (MD)	to	6,889 ft (MD)	Hole Section Length:	6,539 ft
350 ft (TVD)	to	5,310 ft (TVD)	Casing Required:	6,889 ft

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

Hole Size: 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

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	7	26.0	K-55	LTC	4,320	4,980	415,000	367,000
Loading					2,319	1,424	256,196	256,196
Min. S.F.					1.86	3.50	1.62	1.43

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

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	2.140	12.05	70%	0	630	1,348
Tail	Type III	14.6	1.380	6.64	20%	5,396	202	279

Annular Capacity	0.16681	cuft/ft	7" casing x 9-5/8" casing annulus	Shoe Track L	44
	0.1503	cuft/ft	9-5/8" casing x 12-1/4" hole annulus	Casing ID	6.276
	0.2148	cuft/ft	7" casing casing volume		

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

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

6,889 ft (MD)	to	20,659 ft (MD)	Hole Section Length:	13,770 ft
5,310 ft (TVD)	to	5,266 ft (TVD)	Casing Required:	13,920 ft
Estimated KOP:		5,588 ft (MD)	4,337 ft (TVD)	
Estimated Liner Top:		6,739 ft (MD)	5,266 ft (TVD)	
Estimated Landing Point (FTP):		6,789 ft (MD)	5,285 ft (TVD)	
Estimated Lateral Length:		13,870 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	9-9.5	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

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					2,601	8,801	306,791	306,791
Min. S.F.					2.91	1.21	1.20	1.25

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Spacer	IntegraGuard Star	11		31.6		0	60 bbls	
Tail	G:POZ blend	13.3	1.560	7.70	30%	6,739	1,124	1,753

Displacement 284 est bbls

Annular Capacity 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 vol est shoe jt ft 100
 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 163.7 lbs/bbl	Avis 616 viscosifier 11.6 lb/bbl	FP24 Defoamer .5 lb/bbl	IntegraGuard Star Plus 3K LCM 15 lb/bbl	SS201 Surfactant 1 gal/bbl		
Lead	ASTM Type I/II	BA90 Bonding Agent 5.0 lb/sx	Bentonite Viscosifier 8% BWOB	FL24 Fluid Loss .5% BWOB	IntegraGuard GW86 Viscosifier .1% BWOB	R7C Retarder .2% BWOB	FP24 Defoamer 0.3% BWOB, Anti-Static .01 lb/sx
Tail	Type G 50%	Pozzolan Fly Ash Extender 50%	BA90 Bonding Agent 3.0 lb/sx	Bentonite Viscosifier 4% BWOB	FL24 Fluid Loss .4% BWOB	IntegraGuard GW86 Viscosifier .1% BWOB	R3 Retarder .5% BWOB, FP24 Defoamer .3% BWOB, IntegraSeal 0.25 lb/sx

COMPLETION AND PRODUCTION PLAN:

Est Lateral Length: 13,770

Est Frac Inform: 57 Frac Stages 221,000 bbls slick water 17,910,000 lbs proppant

Frac: 39 plug-and-perf stages with 150,000 bbls slickwater fluid and 12,100,000 lbs of proppant (estimated)

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: 2/16/2024

Completion: 4/16/2024

Production: 5/31/2024

Prepared by: Greg Olson 1/25/2024

Updated: Greg Olson 2/8/2024

WELL NAME: NORTH ALAMITO UNIT 106H

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

API Number: 30-043-21508

AFE Number: Not yet assigned

ER Well Number: Not yet assigned

State: New Mexico

County: San Juan

Surface Elev.: 6,962 ft ASL (GL) 6,987 ft ASL (KB)

Surface Location: 19-23N-07W Sec-Twn- Rng 897 ft FNL 1,158 ft FEL

BH Location: 29-23N-07W Sec-Twn- Rng 1921 ft FNL 579 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 Y (just passed 4-way), Left (East) leaving CR #7900 for 4.0 miles to lease road; Left (NorthEast) for 1.8 miles to new access; Right (North) for 1.5 miles to NAU N19-2307 pad entrance on left (from South to North): N Alamito 102H, 106H wells).

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	6,889 ft
KOP (MD)	5,588 ft
KOP (TVD)	4,337 ft
Target (TVD)	5,285 ft
Curve BUR	10 °/100 ft
POE (MD)	6,789 ft
TD (MD)	20,659 ft
Lat Len (ft)	13,870 ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	9.625	36	K-55	STC	0	350
Intermediate	12.250	6,889	7	26.0	K-55	LTC	0	6,889
Production	8.500	20,659	4.500	11.6	P-110	BTC	0	20,659

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	2.14	12.05	0.1668	70%	0	630
Inter. (Tail)	Type III	14.6	1.38	6.64	0.1503	20%	5,396	202
Prod. (Lead)	0	0	0.000	0	0.1044	0%	0	0
Prod. (Tail)	G:POZ blend	13.3	1.560	7.7	0.0873	30%	6,739	1,124

COMPLETION / PRODUCTION SUMMARY:

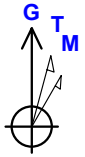
Frac: 39 plug-and-perf stages with 150,000 bbls slickwater fluid and 12,100,000 lbs of proppant (estimated)
Flowback: Flow back through production tubing as pressures allow
Production: Produce through production tubing via gas-lift into permanent production and storage facilities

Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	1,072	1,081
Kirtland	1,187	1,203
Fruitland	1,358	1,390
Pictured Cliffs	1,694	1,789
Lewis	1,849	1,998
Chacra	2,100	2,360
Cliff House	3,189	3,931
Menefee	3,229	3,989
Point Lookout	4,062	5,192
Mancos	4,273	5,496
Gallup (MNCS_A)	4,612	5,913
MNCS_B	4,712	6,016
MNCS_C	4,799	6,106
MNCS_Cms	4,844	6,152
MNCS_D	4,969	6,287
MNCS_E	5,080	6,422
MNCS_F	5,134	6,497
MNCS_G	5,208	6,620
MNCS_H	5,267	6,744
MNCS_I	5,292	6,813
FTP TARGET	5,285	6,789
PROJECTED TD	5,266	20,659



Well: North Alamito Unit 106 H
Site: North Alamito Unit (102 & 106)
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=6962+25 @ 6987.00ft



Azimuths to Grid North
True North: 0.80°
Magnetic North: 9.27°

Magnetic Field
Strength: 49055.2nT
Dip Angle: 62.70°
Date: 1/9/2024
Model: IGRF2020

Surface location:
Northing: 1901187.193
Easting: 1239103.387
Latitude: 36.217323000
Longitude: -107.610489000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 9.27°

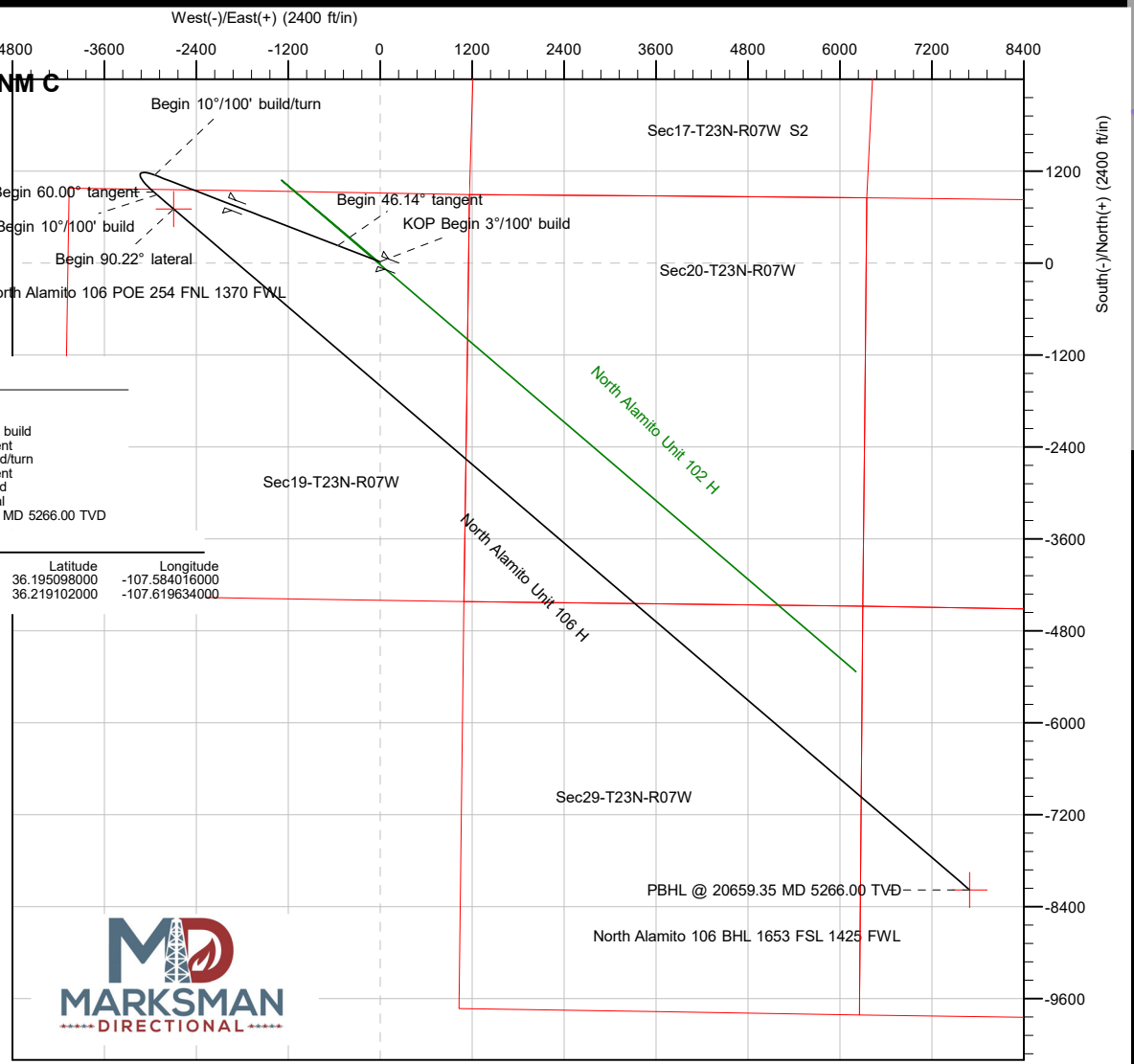
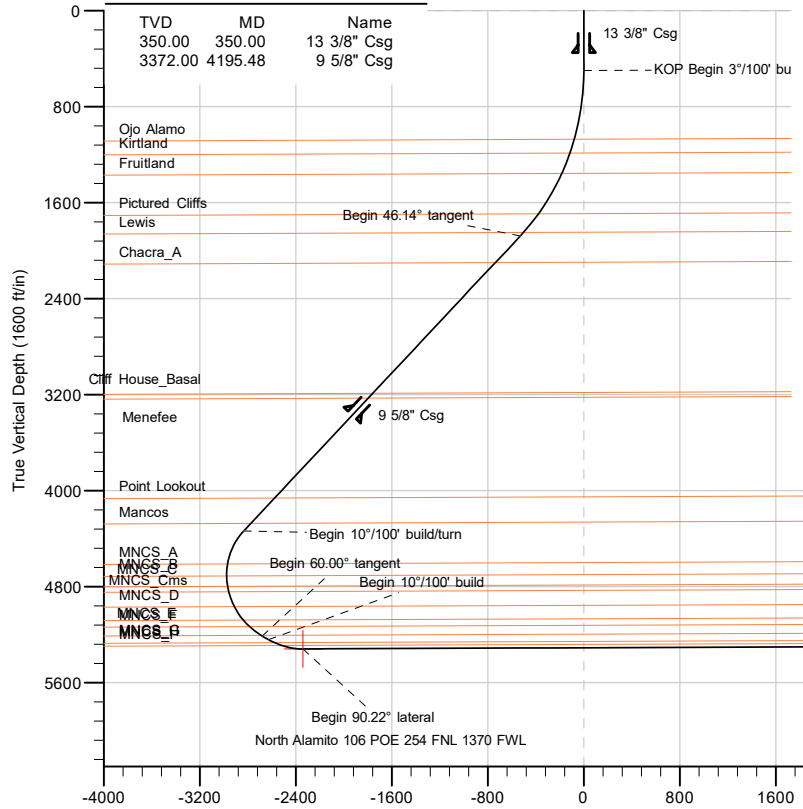
Section Details

ec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.000	0.00	19.36	-4.45	0.00	0.00	0.00	
2	500.00	0.00	0.000	500.00	19.36	-4.45	0.00	0.00	0.00	KOP Begin 3°/100' build
3	2037.98	46.14	291.048	1877.06	230.00	-551.83	3.00	291.05	-528.23	Begin 46.14° tangent
4	5588.43	46.14	291.048	4337.19	1149.41	-2941.01	0.00	0.00	-2833.84	Begin 10°/100' build/turn
5	6628.58	60.00	130.545	5212.24	926.42	-2951.88	10.00	-162.67	-2678.71	Begin 60.00° tangent
6	6688.58	60.00	130.545	5242.24	892.64	-2912.40	0.00	0.00	-2627.06	Begin 10°/100' build
7	6990.80	90.22	130.545	5319.00	704.97	-2693.02	10.00	0.00	-2340.08	Begin 90.22° lateral
8	20659.35	90.22	130.545	5266.00	-8180.06	7693.64	0.00	0.00	11246.82	PBHL @ 20659.35 MD 5266.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
North Alamito 106 BHL 1653 FSL 1425 FWL	5266.00	-8180.06	7693.64	1892987.793	1246801.458	36.195098000	-107.584016000
North Alamito 106 POE 254 FNL 1370 FWL	5319.00	704.98	-2693.03	1901872.815	1236414.814	36.219102000	-107.619634000

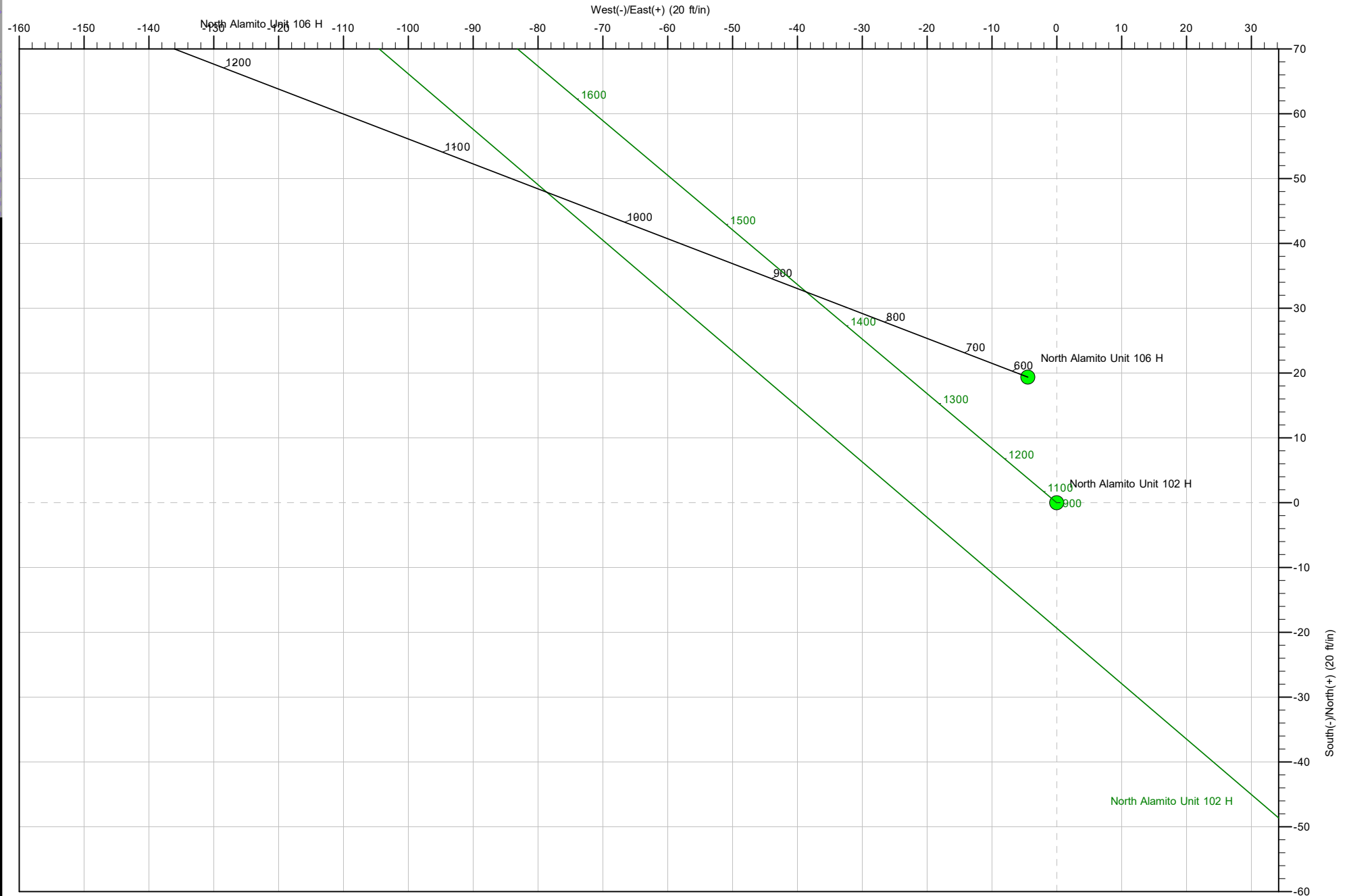
CASING DETAILS



Vertical Section at 136.806° (1600 ft/in)



Well: North Alamito Unit 106 H
Site: North Alamito Unit (102 & 106)
Project: Sandoval County, New Mexico NAD83 NM C
Design: rev0
Rig:





Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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 (102 & 106)		
Site Position:		Northing:	1,901,167.832 usft
From:	Lat/Long	Easting:	1,239,107.836 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	36.217270000
		Longitude:	-107.610473000

Well	North Alamito Unit 106 H, Surf loc: 897 FNL 1158 FEL Section 19-T23N-R07W		
Well Position	+N/-S	19.36 ft	Northing:
	+E/-W	-4.45 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
Grid Convergence:	-0.80 °		
		Latitude:	36.217323000
		Longitude:	-107.610489000
		Ground Level:	6,962.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	1/9/2024	8.47	62.70	49,055.23906377

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	19.36	-4.45	136.806

Plan Survey Tool Program	Date	1/9/2024		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,659.35 rev0 (Original Hole)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	19.36	-4.45	0.00	0.00	0.00	0.00	
500.00	0.00	0.000	500.00	19.36	-4.45	0.00	0.00	0.00	0.00	
2,037.98	46.14	291.048	1,877.06	230.00	-551.83	3.00	3.00	0.00	291.05	
5,588.43	46.14	291.048	4,337.19	1,149.41	-2,941.01	0.00	0.00	0.00	0.00	
6,628.58	60.00	130.545	5,212.24	926.42	-2,951.88	10.00	1.33	-15.43	-162.67	
6,688.58	60.00	130.545	5,242.24	892.64	-2,912.40	0.00	0.00	0.00	0.00	
6,990.80	90.22	130.545	5,319.00	704.97	-2,693.02	10.00	10.00	0.00	0.00	
20,659.35	90.22	130.545	5,266.00	-8,180.06	7,693.64	0.00	0.00	0.00	0.00	North Alamito 106 BH



Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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	19.36	-4.45	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	19.36	-4.45	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	19.36	-4.45	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	19.36	-4.45	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	19.36	-4.45	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	19.36	-4.45	0.00	0.00	0.00	0.00
600.00	3.00	291.048	599.95	20.30	-6.89	-2.36	3.00	3.00	0.00
700.00	6.00	291.048	699.63	23.12	-14.21	-9.42	3.00	3.00	0.00
800.00	9.00	291.048	798.77	27.81	-26.39	-21.18	3.00	3.00	0.00
900.00	12.00	291.048	897.08	34.35	-43.40	-37.59	3.00	3.00	0.00
1,000.00	15.00	291.048	994.31	42.73	-65.18	-58.61	3.00	3.00	0.00
1,100.00	18.00	291.048	1,090.18	52.93	-91.69	-84.19	3.00	3.00	0.00
1,200.00	21.00	291.048	1,184.43	64.92	-122.84	-114.25	3.00	3.00	0.00
1,300.00	24.00	291.048	1,276.81	78.66	-158.55	-148.71	3.00	3.00	0.00
1,400.00	27.00	291.048	1,367.06	94.12	-198.72	-187.48	3.00	3.00	0.00
1,500.00	30.00	291.048	1,454.93	111.26	-243.25	-230.45	3.00	3.00	0.00
1,600.00	33.00	291.048	1,540.18	130.02	-292.01	-277.50	3.00	3.00	0.00
1,700.00	36.00	291.048	1,622.59	150.36	-344.86	-328.51	3.00	3.00	0.00
1,800.00	39.00	291.048	1,701.91	172.22	-401.67	-383.33	3.00	3.00	0.00
1,900.00	42.00	291.048	1,777.95	195.54	-462.28	-441.81	3.00	3.00	0.00
2,000.00	45.00	291.048	1,850.47	220.26	-526.51	-503.80	3.00	3.00	0.00
2,037.98	46.14	291.048	1,877.06	230.00	-551.83	-528.23	3.00	3.00	0.00
2,100.00	46.14	291.048	1,920.04	246.06	-593.56	-568.50	0.00	0.00	0.00
2,200.00	46.14	291.048	1,989.33	271.96	-660.85	-633.44	0.00	0.00	0.00
2,300.00	46.14	291.048	2,058.62	297.85	-728.14	-698.38	0.00	0.00	0.00
2,400.00	46.14	291.048	2,127.91	323.75	-795.44	-763.32	0.00	0.00	0.00
2,500.00	46.14	291.048	2,197.20	349.65	-862.73	-828.26	0.00	0.00	0.00
2,600.00	46.14	291.048	2,266.49	375.54	-930.02	-893.19	0.00	0.00	0.00
2,700.00	46.14	291.048	2,335.78	401.44	-997.31	-958.13	0.00	0.00	0.00
2,800.00	46.14	291.048	2,405.07	427.33	-1,064.60	-1,023.07	0.00	0.00	0.00
2,900.00	46.14	291.048	2,474.36	453.23	-1,131.90	-1,088.01	0.00	0.00	0.00
3,000.00	46.14	291.048	2,543.65	479.12	-1,199.19	-1,152.95	0.00	0.00	0.00
3,100.00	46.14	291.048	2,612.94	505.02	-1,266.48	-1,217.89	0.00	0.00	0.00
3,200.00	46.14	291.048	2,682.23	530.91	-1,333.77	-1,282.82	0.00	0.00	0.00
3,300.00	46.14	291.048	2,751.52	556.81	-1,401.07	-1,347.76	0.00	0.00	0.00
3,400.00	46.14	291.048	2,820.81	582.71	-1,468.36	-1,412.70	0.00	0.00	0.00
3,500.00	46.14	291.048	2,890.10	608.60	-1,535.65	-1,477.64	0.00	0.00	0.00
3,600.00	46.14	291.048	2,959.39	634.50	-1,602.94	-1,542.58	0.00	0.00	0.00
3,700.00	46.14	291.048	3,028.68	660.39	-1,670.24	-1,607.52	0.00	0.00	0.00
3,800.00	46.14	291.048	3,097.97	686.29	-1,737.53	-1,672.46	0.00	0.00	0.00
3,900.00	46.14	291.048	3,167.26	712.18	-1,804.82	-1,737.39	0.00	0.00	0.00
4,000.00	46.14	291.048	3,236.55	738.08	-1,872.11	-1,802.33	0.00	0.00	0.00
4,100.00	46.14	291.048	3,305.84	763.97	-1,939.40	-1,867.27	0.00	0.00	0.00
4,200.00	46.14	291.048	3,375.14	789.87	-2,006.70	-1,932.21	0.00	0.00	0.00
4,300.00	46.14	291.048	3,444.43	815.77	-2,073.99	-1,997.15	0.00	0.00	0.00
4,400.00	46.14	291.048	3,513.72	841.66	-2,141.28	-2,062.09	0.00	0.00	0.00
4,500.00	46.14	291.048	3,583.01	867.56	-2,208.57	-2,127.02	0.00	0.00	0.00
4,600.00	46.14	291.048	3,652.30	893.45	-2,275.87	-2,191.96	0.00	0.00	0.00
4,700.00	46.14	291.048	3,721.59	919.35	-2,343.16	-2,256.90	0.00	0.00	0.00
4,800.00	46.14	291.048	3,790.88	945.24	-2,410.45	-2,321.84	0.00	0.00	0.00
4,900.00	46.14	291.048	3,860.17	971.14	-2,477.74	-2,386.78	0.00	0.00	0.00
5,000.00	46.14	291.048	3,929.46	997.03	-2,545.04	-2,451.72	0.00	0.00	0.00
5,100.00	46.14	291.048	3,998.75	1,022.93	-2,612.33	-2,516.65	0.00	0.00	0.00
5,200.00	46.14	291.048	4,068.04	1,048.83	-2,679.62	-2,581.59	0.00	0.00	0.00



Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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)
5,300.00	46.14	291.048	4,137.33	1,074.72	-2,746.91	-2,646.53	0.00	0.00	0.00
5,400.00	46.14	291.048	4,206.62	1,100.62	-2,814.20	-2,711.47	0.00	0.00	0.00
5,500.00	46.14	291.048	4,275.91	1,126.51	-2,881.50	-2,776.41	0.00	0.00	0.00
5,588.43	46.14	291.048	4,337.19	1,149.41	-2,941.01	-2,833.84	0.00	0.00	0.00
5,600.00	45.04	290.561	4,345.28	1,152.35	-2,948.73	-2,841.26	10.00	-9.54	-4.21
5,650.00	40.30	288.216	4,382.04	1,163.62	-2,980.67	-2,871.34	10.00	-9.48	-4.69
5,700.00	35.61	285.367	4,421.46	1,172.54	-3,010.08	-2,897.98	10.00	-9.37	-5.70
5,750.00	31.01	281.789	4,463.23	1,179.03	-3,036.74	-2,920.96	10.00	-9.20	-7.16
5,800.00	26.54	277.124	4,507.05	1,183.05	-3,060.45	-2,940.12	10.00	-8.94	-9.33
5,850.00	22.28	270.779	4,552.58	1,184.57	-3,081.03	-2,955.30	10.00	-8.53	-12.69
5,900.00	18.37	261.761	4,599.47	1,183.57	-3,098.31	-2,966.40	10.00	-7.82	-18.04
5,950.00	15.08	248.563	4,647.37	1,180.06	-3,112.17	-2,973.33	10.00	-6.56	-26.40
6,000.00	12.92	229.799	4,695.91	1,174.07	-3,122.50	-2,976.04	10.00	-4.32	-37.53
6,050.00	12.48	206.998	4,744.71	1,165.64	-3,129.23	-2,974.50	10.00	-0.89	-45.60
6,100.00	13.91	185.869	4,793.42	1,154.84	-3,132.30	-2,968.73	10.00	2.87	-42.26
6,150.00	16.75	170.194	4,841.66	1,141.76	-3,131.68	-2,958.77	10.00	5.68	-31.35
6,200.00	20.42	159.464	4,889.06	1,126.48	-3,127.39	-2,944.69	10.00	7.33	-21.46
6,250.00	24.54	152.042	4,935.25	1,109.13	-3,119.46	-2,926.61	10.00	8.25	-14.85
6,300.00	28.93	146.696	4,979.90	1,089.83	-3,107.94	-2,904.66	10.00	8.78	-10.69
6,350.00	33.48	142.673	5,022.66	1,068.75	-3,092.93	-2,879.02	10.00	9.09	-8.05
6,400.00	38.13	139.522	5,063.21	1,046.03	-3,074.54	-2,849.86	10.00	9.30	-6.30
6,450.00	42.85	136.967	5,101.23	1,021.84	-3,052.90	-2,817.42	10.00	9.44	-5.11
6,500.00	47.61	134.830	5,136.43	996.38	-3,028.19	-2,781.94	10.00	9.53	-4.27
6,550.00	52.41	132.997	5,168.56	969.84	-3,000.59	-2,743.70	10.00	9.60	-3.67
6,600.00	57.23	131.387	5,197.36	942.41	-2,970.31	-2,702.98	10.00	9.65	-3.22
6,628.58	60.00	130.545	5,212.24	926.42	-2,951.88	-2,678.71	10.00	9.68	-2.95
6,688.58	60.00	130.545	5,242.24	892.64	-2,912.40	-2,627.06	0.00	0.00	0.00
6,700.00	61.14	130.545	5,247.85	886.18	-2,904.84	-2,617.17	10.00	10.00	0.00
6,750.00	66.14	130.545	5,270.04	857.06	-2,870.81	-2,572.65	10.00	10.00	0.00
6,800.00	71.14	130.545	5,288.25	826.80	-2,835.43	-2,526.38	10.00	10.00	0.00
6,850.00	76.14	130.545	5,302.32	795.63	-2,798.99	-2,478.70	10.00	10.00	0.00
6,900.00	81.14	130.545	5,312.17	763.77	-2,761.75	-2,429.99	10.00	10.00	0.00
6,950.00	86.14	130.545	5,317.70	731.48	-2,724.00	-2,380.61	10.00	10.00	0.00
6,990.80	90.22	130.545	5,319.00	704.97	-2,693.02	-2,340.08	10.00	10.00	0.00
7,000.00	90.22	130.545	5,318.96	699.00	-2,686.03	-2,330.94	0.00	0.00	0.00
7,100.00	90.22	130.545	5,318.57	633.99	-2,610.04	-2,231.54	0.00	0.00	0.00
7,200.00	90.22	130.545	5,318.19	568.99	-2,534.05	-2,132.13	0.00	0.00	0.00
7,300.00	90.22	130.545	5,317.80	503.99	-2,458.06	-2,032.73	0.00	0.00	0.00
7,400.00	90.22	130.545	5,317.41	438.98	-2,382.07	-1,933.33	0.00	0.00	0.00
7,500.00	90.22	130.545	5,317.02	373.98	-2,306.08	-1,833.92	0.00	0.00	0.00
7,600.00	90.22	130.545	5,316.64	308.98	-2,230.09	-1,734.52	0.00	0.00	0.00
7,700.00	90.22	130.545	5,316.25	243.97	-2,154.10	-1,635.12	0.00	0.00	0.00
7,800.00	90.22	130.545	5,315.86	178.97	-2,078.11	-1,535.72	0.00	0.00	0.00
7,900.00	90.22	130.545	5,315.47	113.96	-2,002.12	-1,436.31	0.00	0.00	0.00
8,000.00	90.22	130.545	5,315.08	48.96	-1,926.13	-1,336.91	0.00	0.00	0.00
8,100.00	90.22	130.545	5,314.70	-16.04	-1,850.14	-1,237.51	0.00	0.00	0.00
8,200.00	90.22	130.545	5,314.31	-81.05	-1,774.15	-1,138.11	0.00	0.00	0.00
8,300.00	90.22	130.545	5,313.92	-146.05	-1,698.16	-1,038.70	0.00	0.00	0.00
8,400.00	90.22	130.545	5,313.53	-211.05	-1,622.18	-939.30	0.00	0.00	0.00
8,500.00	90.22	130.545	5,313.15	-276.06	-1,546.19	-839.90	0.00	0.00	0.00
8,600.00	90.22	130.545	5,312.76	-341.06	-1,470.20	-740.49	0.00	0.00	0.00
8,700.00	90.22	130.545	5,312.37	-406.06	-1,394.21	-641.09	0.00	0.00	0.00
8,800.00	90.22	130.545	5,311.98	-471.07	-1,318.22	-541.69	0.00	0.00	0.00
8,900.00	90.22	130.545	5,311.60	-536.07	-1,242.23	-442.29	0.00	0.00	0.00



Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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)	
9,000.00	90.22	130.545	5,311.21	-601.07	-1,166.24	-342.88	0.00	0.00	0.00	
9,100.00	90.22	130.545	5,310.82	-666.08	-1,090.25	-243.48	0.00	0.00	0.00	
9,200.00	90.22	130.545	5,310.43	-731.08	-1,014.26	-144.08	0.00	0.00	0.00	
9,300.00	90.22	130.545	5,310.04	-796.08	-938.27	-44.68	0.00	0.00	0.00	
9,400.00	90.22	130.545	5,309.66	-861.09	-862.28	54.73	0.00	0.00	0.00	
9,500.00	90.22	130.545	5,309.27	-926.09	-786.29	154.13	0.00	0.00	0.00	
9,600.00	90.22	130.545	5,308.88	-991.09	-710.30	253.53	0.00	0.00	0.00	
9,700.00	90.22	130.545	5,308.49	-1,056.10	-634.31	352.93	0.00	0.00	0.00	
9,800.00	90.22	130.545	5,308.11	-1,121.10	-558.32	452.34	0.00	0.00	0.00	
9,900.00	90.22	130.545	5,307.72	-1,186.10	-482.33	551.74	0.00	0.00	0.00	
10,000.00	90.22	130.545	5,307.33	-1,251.11	-406.34	651.14	0.00	0.00	0.00	
10,100.00	90.22	130.545	5,306.94	-1,316.11	-330.35	750.55	0.00	0.00	0.00	
10,200.00	90.22	130.545	5,306.55	-1,381.12	-254.37	849.95	0.00	0.00	0.00	
10,300.00	90.22	130.545	5,306.17	-1,446.12	-178.38	949.35	0.00	0.00	0.00	
10,400.00	90.22	130.545	5,305.78	-1,511.12	-102.39	1,048.75	0.00	0.00	0.00	
10,500.00	90.22	130.545	5,305.39	-1,576.13	-26.40	1,148.16	0.00	0.00	0.00	
10,600.00	90.22	130.545	5,305.00	-1,641.13	49.59	1,247.56	0.00	0.00	0.00	
10,700.00	90.22	130.545	5,304.62	-1,706.13	125.58	1,346.96	0.00	0.00	0.00	
10,800.00	90.22	130.545	5,304.23	-1,771.14	201.57	1,446.36	0.00	0.00	0.00	
10,900.00	90.22	130.545	5,303.84	-1,836.14	277.56	1,545.77	0.00	0.00	0.00	
11,000.00	90.22	130.545	5,303.45	-1,901.14	353.55	1,645.17	0.00	0.00	0.00	
11,100.00	90.22	130.545	5,303.06	-1,966.15	429.54	1,744.57	0.00	0.00	0.00	
11,200.00	90.22	130.545	5,302.68	-2,031.15	505.53	1,843.97	0.00	0.00	0.00	
11,300.00	90.22	130.545	5,302.29	-2,096.15	581.52	1,943.38	0.00	0.00	0.00	
11,400.00	90.22	130.545	5,301.90	-2,161.16	657.51	2,042.78	0.00	0.00	0.00	
11,500.00	90.22	130.545	5,301.51	-2,226.16	733.50	2,142.18	0.00	0.00	0.00	
11,600.00	90.22	130.545	5,301.13	-2,291.16	809.49	2,241.59	0.00	0.00	0.00	
11,700.00	90.22	130.545	5,300.74	-2,356.17	885.48	2,340.99	0.00	0.00	0.00	
11,800.00	90.22	130.545	5,300.35	-2,421.17	961.47	2,440.39	0.00	0.00	0.00	
11,900.00	90.22	130.545	5,299.96	-2,486.17	1,037.46	2,539.79	0.00	0.00	0.00	
12,000.00	90.22	130.545	5,299.58	-2,551.18	1,113.45	2,639.20	0.00	0.00	0.00	
12,100.00	90.22	130.545	5,299.19	-2,616.18	1,189.43	2,738.60	0.00	0.00	0.00	
12,200.00	90.22	130.545	5,298.80	-2,681.18	1,265.42	2,838.00	0.00	0.00	0.00	
12,300.00	90.22	130.545	5,298.41	-2,746.19	1,341.41	2,937.40	0.00	0.00	0.00	
12,400.00	90.22	130.545	5,298.02	-2,811.19	1,417.40	3,036.81	0.00	0.00	0.00	
12,500.00	90.22	130.545	5,297.64	-2,876.20	1,493.39	3,136.21	0.00	0.00	0.00	
12,600.00	90.22	130.545	5,297.25	-2,941.20	1,569.38	3,235.61	0.00	0.00	0.00	
12,700.00	90.22	130.545	5,296.86	-3,006.20	1,645.37	3,335.01	0.00	0.00	0.00	
12,800.00	90.22	130.545	5,296.47	-3,071.21	1,721.36	3,434.42	0.00	0.00	0.00	
12,900.00	90.22	130.545	5,296.09	-3,136.21	1,797.35	3,533.82	0.00	0.00	0.00	
13,000.00	90.22	130.545	5,295.70	-3,201.21	1,873.34	3,633.22	0.00	0.00	0.00	
13,100.00	90.22	130.545	5,295.31	-3,266.22	1,949.33	3,732.63	0.00	0.00	0.00	
13,200.00	90.22	130.545	5,294.92	-3,331.22	2,025.32	3,832.03	0.00	0.00	0.00	
13,300.00	90.22	130.545	5,294.53	-3,396.22	2,101.31	3,931.43	0.00	0.00	0.00	
13,400.00	90.22	130.545	5,294.15	-3,461.23	2,177.30	4,030.83	0.00	0.00	0.00	
13,500.00	90.22	130.545	5,293.76	-3,526.23	2,253.29	4,130.24	0.00	0.00	0.00	
13,600.00	90.22	130.545	5,293.37	-3,591.23	2,329.28	4,229.64	0.00	0.00	0.00	
13,700.00	90.22	130.545	5,292.98	-3,656.24	2,405.27	4,329.04	0.00	0.00	0.00	
13,800.00	90.22	130.545	5,292.60	-3,721.24	2,481.26	4,428.44	0.00	0.00	0.00	
13,900.00	90.22	130.545	5,292.21	-3,786.24	2,557.24	4,527.85	0.00	0.00	0.00	
14,000.00	90.22	130.545	5,291.82	-3,851.25	2,633.23	4,627.25	0.00	0.00	0.00	
14,100.00	90.22	130.545	5,291.43	-3,916.25	2,709.22	4,726.65	0.00	0.00	0.00	
14,200.00	90.22	130.545	5,291.05	-3,981.25	2,785.21	4,826.05	0.00	0.00	0.00	
14,300.00	90.22	130.545	5,290.66	-4,046.26	2,861.20	4,925.46	0.00	0.00	0.00	



Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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)	
14,400.00	90.22	130.545	5,290.27	-4,111.26	2,937.19	5,024.86	0.00	0.00	0.00	
14,500.00	90.22	130.545	5,289.88	-4,176.26	3,013.18	5,124.26	0.00	0.00	0.00	
14,600.00	90.22	130.545	5,289.49	-4,241.27	3,089.17	5,223.67	0.00	0.00	0.00	
14,700.00	90.22	130.545	5,289.11	-4,306.27	3,165.16	5,323.07	0.00	0.00	0.00	
14,800.00	90.22	130.545	5,288.72	-4,371.28	3,241.15	5,422.47	0.00	0.00	0.00	
14,900.00	90.22	130.545	5,288.33	-4,436.28	3,317.14	5,521.87	0.00	0.00	0.00	
15,000.00	90.22	130.545	5,287.94	-4,501.28	3,393.13	5,621.28	0.00	0.00	0.00	
15,100.00	90.22	130.545	5,287.56	-4,566.29	3,469.12	5,720.68	0.00	0.00	0.00	
15,200.00	90.22	130.545	5,287.17	-4,631.29	3,545.11	5,820.08	0.00	0.00	0.00	
15,300.00	90.22	130.545	5,286.78	-4,696.29	3,621.10	5,919.48	0.00	0.00	0.00	
15,400.00	90.22	130.545	5,286.39	-4,761.30	3,697.09	6,018.89	0.00	0.00	0.00	
15,500.00	90.22	130.545	5,286.00	-4,826.30	3,773.08	6,118.29	0.00	0.00	0.00	
15,600.00	90.22	130.545	5,285.62	-4,891.30	3,849.07	6,217.69	0.00	0.00	0.00	
15,700.00	90.22	130.545	5,285.23	-4,956.31	3,925.06	6,317.10	0.00	0.00	0.00	
15,800.00	90.22	130.545	5,284.84	-5,021.31	4,001.04	6,416.50	0.00	0.00	0.00	
15,900.00	90.22	130.545	5,284.45	-5,086.31	4,077.03	6,515.90	0.00	0.00	0.00	
16,000.00	90.22	130.545	5,284.07	-5,151.32	4,153.02	6,615.30	0.00	0.00	0.00	
16,100.00	90.22	130.545	5,283.68	-5,216.32	4,229.01	6,714.71	0.00	0.00	0.00	
16,200.00	90.22	130.545	5,283.29	-5,281.32	4,305.00	6,814.11	0.00	0.00	0.00	
16,300.00	90.22	130.545	5,282.90	-5,346.33	4,380.99	6,913.51	0.00	0.00	0.00	
16,400.00	90.22	130.545	5,282.52	-5,411.33	4,456.98	7,012.91	0.00	0.00	0.00	
16,500.00	90.22	130.545	5,282.13	-5,476.33	4,532.97	7,112.32	0.00	0.00	0.00	
16,600.00	90.22	130.545	5,281.74	-5,541.34	4,608.96	7,211.72	0.00	0.00	0.00	
16,700.00	90.22	130.545	5,281.35	-5,606.34	4,684.95	7,311.12	0.00	0.00	0.00	
16,800.00	90.22	130.545	5,280.96	-5,671.34	4,760.94	7,410.52	0.00	0.00	0.00	
16,900.00	90.22	130.545	5,280.58	-5,736.35	4,836.93	7,509.93	0.00	0.00	0.00	
17,000.00	90.22	130.545	5,280.19	-5,801.35	4,912.92	7,609.33	0.00	0.00	0.00	
17,100.00	90.22	130.545	5,279.80	-5,866.36	4,988.91	7,708.73	0.00	0.00	0.00	
17,200.00	90.22	130.545	5,279.41	-5,931.36	5,064.90	7,808.14	0.00	0.00	0.00	
17,300.00	90.22	130.545	5,279.03	-5,996.36	5,140.89	7,907.54	0.00	0.00	0.00	
17,400.00	90.22	130.545	5,278.64	-6,061.37	5,216.88	8,006.94	0.00	0.00	0.00	
17,500.00	90.22	130.545	5,278.25	-6,126.37	5,292.87	8,106.34	0.00	0.00	0.00	
17,600.00	90.22	130.545	5,277.86	-6,191.37	5,368.85	8,205.75	0.00	0.00	0.00	
17,700.00	90.22	130.545	5,277.47	-6,256.38	5,444.84	8,305.15	0.00	0.00	0.00	
17,800.00	90.22	130.545	5,277.09	-6,321.38	5,520.83	8,404.55	0.00	0.00	0.00	
17,900.00	90.22	130.545	5,276.70	-6,386.38	5,596.82	8,503.95	0.00	0.00	0.00	
18,000.00	90.22	130.545	5,276.31	-6,451.39	5,672.81	8,603.36	0.00	0.00	0.00	
18,100.00	90.22	130.545	5,275.92	-6,516.39	5,748.80	8,702.76	0.00	0.00	0.00	
18,200.00	90.22	130.545	5,275.54	-6,581.39	5,824.79	8,802.16	0.00	0.00	0.00	
18,300.00	90.22	130.545	5,275.15	-6,646.40	5,900.78	8,901.56	0.00	0.00	0.00	
18,400.00	90.22	130.545	5,274.76	-6,711.40	5,976.77	9,000.97	0.00	0.00	0.00	
18,500.00	90.22	130.545	5,274.37	-6,776.40	6,052.76	9,100.37	0.00	0.00	0.00	
18,600.00	90.22	130.545	5,273.98	-6,841.41	6,128.75	9,199.77	0.00	0.00	0.00	
18,700.00	90.22	130.545	5,273.60	-6,906.41	6,204.74	9,299.18	0.00	0.00	0.00	
18,800.00	90.22	130.545	5,273.21	-6,971.41	6,280.73	9,398.58	0.00	0.00	0.00	
18,900.00	90.22	130.545	5,272.82	-7,036.42	6,356.72	9,497.98	0.00	0.00	0.00	
19,000.00	90.22	130.545	5,272.43	-7,101.42	6,432.71	9,597.38	0.00	0.00	0.00	
19,100.00	90.22	130.545	5,272.05	-7,166.42	6,508.70	9,696.79	0.00	0.00	0.00	
19,200.00	90.22	130.545	5,271.66	-7,231.43	6,584.69	9,796.19	0.00	0.00	0.00	
19,300.00	90.22	130.545	5,271.27	-7,296.43	6,660.68	9,895.59	0.00	0.00	0.00	
19,400.00	90.22	130.545	5,270.88	-7,361.44	6,736.67	9,994.99	0.00	0.00	0.00	
19,500.00	90.22	130.545	5,270.50	-7,426.44	6,812.65	10,094.40	0.00	0.00	0.00	
19,600.00	90.22	130.545	5,270.11	-7,491.44	6,888.64	10,193.80	0.00	0.00	0.00	
19,700.00	90.22	130.545	5,269.72	-7,556.45	6,964.63	10,293.20	0.00	0.00	0.00	



Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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)
19,800.00	90.22	130.545	5,269.33	-7,621.45	7,040.62	10,392.60	0.00	0.00	0.00
19,900.00	90.22	130.545	5,268.94	-7,686.45	7,116.61	10,492.01	0.00	0.00	0.00
20,000.00	90.22	130.545	5,268.56	-7,751.46	7,192.60	10,591.41	0.00	0.00	0.00
20,100.00	90.22	130.545	5,268.17	-7,816.46	7,268.59	10,690.81	0.00	0.00	0.00
20,200.00	90.22	130.545	5,267.78	-7,881.46	7,344.58	10,790.22	0.00	0.00	0.00
20,300.00	90.22	130.545	5,267.39	-7,946.47	7,420.57	10,889.62	0.00	0.00	0.00
20,400.00	90.22	130.545	5,267.01	-8,011.47	7,496.56	10,989.02	0.00	0.00	0.00
20,500.00	90.22	130.545	5,266.62	-8,076.47	7,572.55	11,088.42	0.00	0.00	0.00
20,600.00	90.22	130.545	5,266.23	-8,141.48	7,648.54	11,187.83	0.00	0.00	0.00
20,659.35	90.22	130.545	5,266.00	-8,180.06	7,693.64	11,246.82	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
North Alamito 106 BHL 1	0.00	0.000	5,266.00	-8,180.06	7,693.64	1,892,987.793	1,246,801.458	36.195098000	-107.584016000
- plan hits target center									
- Point									
North Alamito 106 POE :	0.00	0.000	5,319.00	704.98	-2,693.03	1,901,872.814	1,236,414.814	36.219102000	-107.619634000
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
350.00	350.00	13 3/8" Csg		13-3/8	17-1/2
4,195.48	3,372.00	9 5/8" Csg		9-5/8	12-1/4



Planning Report

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,081.25	1,072.32	Ojo Alamo		-0.22	130.545	
1,203.25	1,187.46	Kirtland		-0.22	130.545	
1,389.55	1,357.74	Fruitland		-0.22	130.545	
1,789.22	1,693.52	Pictured Cliffs		-0.22	130.545	
1,997.94	1,849.02	Lewis		-0.22	130.545	
2,359.67	2,099.96	Chacra_A		-0.22	130.545	
3,931.46	3,189.06	Cliff House_Basal		-0.22	130.545	
3,989.41	3,229.22	Menefee		-0.22	130.545	
5,191.79	4,062.35	Point Lookout		-0.22	130.545	
5,496.01	4,273.15	Mancos		-0.22	130.545	
5,913.10	4,611.94	MNCS_A		-0.22	130.545	
6,016.48	4,711.98	MNCS_B		-0.22	130.545	
6,105.71	4,798.96	MNCS_C		-0.22	130.545	
6,152.37	4,843.92	MNCS_Cms		-0.22	130.545	
6,287.32	4,968.75	MNCS_D		-0.22	130.545	
6,422.27	5,080.47	MNCS_E		-0.22	130.545	
6,496.80	5,134.27	MNCS_F		-0.22	130.545	
6,620.00	5,207.89	MNCS_G		-0.22	130.545	
6,743.73	5,267.48	MNCS_H		-0.22	130.545	
6,812.74	5,292.23	MNCS_I		-0.22	130.545	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
500.00	500.00	19.36	-4.45	KOP Begin 3°/100' build	
2,037.98	1,877.06	230.00	-551.83	Begin 46.14° tangent	
5,588.43	4,337.19	1,149.41	-2,941.01	Begin 10°/100' build/turn	
6,628.58	5,212.24	926.42	-2,951.88	Begin 60.00° tangent	
6,688.58	5,242.24	892.64	-2,912.40	Begin 10°/100' build	
6,990.80	5,319.00	704.97	-2,693.02	Begin 90.22° lateral	
20,659.35	5,266.00	-8,180.06	7,693.64	PBHL @ 20659.35 MD 5266.00 TVD	



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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 (102 & 106)			
Site Position:		Northing:	1,901,167.832 usft	Latitude:	36.217270000
From:	Lat/Long	Easting:	1,239,107.836 usft	Longitude:	-107.610473000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	North Alamito Unit 106 H, Surf loc: 897 FNL 1158 FEL Section 19-T23N-R07W					
Well Position	+N/-S	19.36 ft	Northing:	1,901,187.193 usft	Latitude:	36.217323000
	+E/-W	-4.45 ft	Easting:	1,239,103.387 usft	Longitude:	-107.610489000
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,962.00 ft
Grid Convergence:		-0.80 °				

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	1/9/2024	8.47	62.70	49,055.23906377

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	19.36	-4.45	136.806

Plan Survey Tool Program	Date	1/9/2024		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,659.35 rev0 (Original Hole)	MWD	OWSG MWD - Standard

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	19.36	-4.45	0.00	0.00	0.00	0.00	
500.00	0.00	0.000	500.00	19.36	-4.45	0.00	0.00	0.00	0.00	
2,037.98	46.14	291.048	1,877.06	230.00	-551.83	3.00	3.00	0.00	291.05	
5,588.43	46.14	291.048	4,337.19	1,149.41	-2,941.01	0.00	0.00	0.00	0.00	
6,628.58	60.00	130.545	5,212.24	926.42	-2,951.88	10.00	1.33	-15.43	-162.67	
6,688.58	60.00	130.545	5,242.24	892.64	-2,912.40	0.00	0.00	0.00	0.00	
6,990.80	90.22	130.545	5,319.00	704.97	-2,693.02	10.00	10.00	0.00	0.00	
20,659.35	90.22	130.545	5,266.00	-8,180.06	7,693.64	0.00	0.00	0.00	0.00	North Alamito 106 BH



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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	19.36	-4.45	1,901,187.193	1,239,103.387	36.217323000	-107.610489000
100.00	0.00	0.000	100.00	19.36	-4.45	1,901,187.193	1,239,103.387	36.217323000	-107.610489000
200.00	0.00	0.000	200.00	19.36	-4.45	1,901,187.193	1,239,103.387	36.217323000	-107.610489000
300.00	0.00	0.000	300.00	19.36	-4.45	1,901,187.193	1,239,103.387	36.217323000	-107.610489000
400.00	0.00	0.000	400.00	19.36	-4.45	1,901,187.193	1,239,103.387	36.217323000	-107.610489000
500.00	0.00	0.000	500.00	19.36	-4.45	1,901,187.193	1,239,103.387	36.217323000	-107.610489000
600.00	3.00	291.048	599.95	20.30	-6.89	1,901,188.133	1,239,100.944	36.217325488	-107.610497324
700.00	6.00	291.048	699.63	23.12	-14.21	1,901,190.950	1,239,093.623	36.217332944	-107.610522273
800.00	9.00	291.048	798.77	27.81	-26.39	1,901,195.637	1,239,081.442	36.217345347	-107.610563778
900.00	12.00	291.048	897.08	34.35	-43.40	1,901,202.182	1,239,064.437	36.217362664	-107.610621725
1,000.00	15.00	291.048	994.31	42.73	-65.18	1,901,210.565	1,239,042.652	36.217384848	-107.610695957
1,100.00	18.00	291.048	1,090.18	52.93	-91.69	1,901,220.764	1,239,016.149	36.217411837	-107.610786269
1,200.00	21.00	291.048	1,184.43	64.92	-122.84	1,901,232.751	1,238,984.999	36.217443557	-107.610892413
1,300.00	24.00	291.048	1,276.81	78.66	-158.55	1,901,246.493	1,238,949.288	36.217479922	-107.611014100
1,400.00	27.00	291.048	1,367.06	94.12	-198.72	1,901,261.953	1,238,909.114	36.217520832	-107.611150995
1,500.00	30.00	291.048	1,454.93	111.26	-243.25	1,901,279.088	1,238,864.587	36.217566174	-107.611302724
1,600.00	33.00	291.048	1,540.18	130.02	-292.01	1,901,297.852	1,238,815.828	36.217615824	-107.611468870
1,700.00	36.00	291.048	1,622.59	150.36	-344.86	1,901,318.192	1,238,762.973	36.217669646	-107.611648978
1,800.00	39.00	291.048	1,701.91	172.22	-401.67	1,901,340.053	1,238,706.165	36.217727493	-107.611842554
1,900.00	42.00	291.048	1,777.95	195.54	-462.28	1,901,363.375	1,238,645.560	36.217789206	-107.612049069
2,000.00	45.00	291.048	1,850.47	220.26	-526.51	1,901,388.094	1,238,581.325	36.217854615	-107.612267956
2,037.98	46.14	291.048	1,877.06	230.00	-551.83	1,901,397.835	1,238,556.010	36.217880392	-107.612354217
2,100.00	46.14	291.048	1,920.04	246.06	-593.56	1,901,413.895	1,238,514.279	36.217922886	-107.612496421
2,200.00	46.14	291.048	1,989.33	271.96	-660.85	1,901,439.790	1,238,446.987	36.217991407	-107.612725725
2,300.00	46.14	291.048	2,058.62	297.85	-728.14	1,901,465.686	1,238,379.694	36.218059928	-107.612955028
2,400.00	46.14	291.048	2,127.91	323.75	-795.44	1,901,491.581	1,238,312.402	36.218128448	-107.613184333
2,500.00	46.14	291.048	2,197.20	349.65	-862.73	1,901,517.477	1,238,245.110	36.218196968	-107.613413638
2,600.00	46.14	291.048	2,266.49	375.54	-930.02	1,901,543.372	1,238,177.818	36.218265487	-107.613642943
2,700.00	46.14	291.048	2,335.78	401.44	-997.31	1,901,569.268	1,238,110.526	36.218334006	-107.613872249
2,800.00	46.14	291.048	2,405.07	427.33	-1,064.60	1,901,595.163	1,238,043.234	36.218402524	-107.614101555
2,900.00	46.14	291.048	2,474.36	453.23	-1,131.90	1,901,621.059	1,237,975.942	36.218471042	-107.614330862
3,000.00	46.14	291.048	2,543.65	479.12	-1,199.19	1,901,646.954	1,237,908.649	36.218539559	-107.614560169
3,100.00	46.14	291.048	2,612.94	505.02	-1,266.48	1,901,672.850	1,237,841.357	36.218608076	-107.614789476
3,200.00	46.14	291.048	2,682.23	530.91	-1,333.77	1,901,698.745	1,237,774.065	36.218676593	-107.615018784
3,300.00	46.14	291.048	2,751.52	556.81	-1,401.07	1,901,724.641	1,237,706.773	36.218745109	-107.615248092
3,400.00	46.14	291.048	2,820.81	582.71	-1,468.36	1,901,750.536	1,237,639.481	36.218813625	-107.615477400
3,500.00	46.14	291.048	2,890.10	608.60	-1,535.65	1,901,776.432	1,237,572.189	36.218882140	-107.615706709
3,600.00	46.14	291.048	2,959.39	634.50	-1,602.94	1,901,802.327	1,237,504.896	36.218950655	-107.615936019
3,700.00	46.14	291.048	3,028.68	660.39	-1,670.24	1,901,828.223	1,237,437.604	36.219019169	-107.616165328
3,800.00	46.14	291.048	3,097.97	686.29	-1,737.53	1,901,854.118	1,237,370.312	36.219087683	-107.616394638
3,900.00	46.14	291.048	3,167.26	712.18	-1,804.82	1,901,880.014	1,237,303.020	36.219156196	-107.616623949
4,000.00	46.14	291.048	3,236.55	738.08	-1,872.11	1,901,905.909	1,237,235.728	36.219224709	-107.616853259
4,100.00	46.14	291.048	3,305.84	763.97	-1,939.40	1,901,931.805	1,237,168.436	36.219293222	-107.617082571
4,200.00	46.14	291.048	3,375.14	789.87	-2,006.70	1,901,957.700	1,237,101.143	36.219361734	-107.617311882
4,300.00	46.14	291.048	3,444.43	815.77	-2,073.99	1,901,983.596	1,237,033.851	36.219430246	-107.617541194
4,400.00	46.14	291.048	3,513.72	841.66	-2,141.28	1,902,009.491	1,236,966.559	36.219498757	-107.617770507
4,500.00	46.14	291.048	3,583.01	867.56	-2,208.57	1,902,035.387	1,236,899.267	36.219567268	-107.617999819
4,600.00	46.14	291.048	3,652.30	893.45	-2,275.87	1,902,061.282	1,236,831.975	36.219635778	-107.618229132
4,700.00	46.14	291.048	3,721.59	919.35	-2,343.16	1,902,087.178	1,236,764.683	36.219704288	-107.618458446
4,800.00	46.14	291.048	3,790.88	945.24	-2,410.45	1,902,113.073	1,236,697.390	36.219772797	-107.618687760
4,900.00	46.14	291.048	3,860.17	971.14	-2,477.74	1,902,138.969	1,236,630.098	36.219841306	-107.618917074
5,000.00	46.14	291.048	3,929.46	997.03	-2,545.04	1,902,164.864	1,236,562.806	36.219909814	-107.619146389
5,100.00	46.14	291.048	3,998.75	1,022.93	-2,612.33	1,902,190.760	1,236,495.514	36.219978323	-107.619375704
5,200.00	46.14	291.048	4,068.04	1,048.83	-2,679.62	1,902,216.655	1,236,428.222	36.220046830	-107.619605019
5,300.00	46.14	291.048	4,137.33	1,074.72	-2,746.91	1,902,242.551	1,236,360.930	36.220115337	-107.619834335



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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	
5,400.00	46.14	291.048	4,206.62	1,100.62	-2,814.20	1,902,268.447	1,236,293.638	36.220183844	-107.620063651	
5,500.00	46.14	291.048	4,275.91	1,126.51	-2,881.50	1,902,294.342	1,236,226.345	36.220252350	-107.620292968	
5,588.43	46.14	291.048	4,337.19	1,149.41	-2,941.01	1,902,317.242	1,236,166.836	36.220312933	-107.620495763	
5,600.00	45.04	290.561	4,345.28	1,152.35	-2,948.73	1,902,320.177	1,236,159.113	36.220320692	-107.620522078	
5,650.00	40.30	288.216	4,382.04	1,163.62	-2,980.67	1,902,331.451	1,236,127.173	36.220350414	-107.620630875	
5,700.00	35.61	285.367	4,421.46	1,172.54	-3,010.08	1,902,340.368	1,236,097.760	36.220373762	-107.620730993	
5,750.00	31.01	281.789	4,463.23	1,179.03	-3,036.74	1,902,346.861	1,236,071.098	36.220390559	-107.620821671	
5,800.00	26.54	277.124	4,507.05	1,183.05	-3,060.45	1,902,350.881	1,236,047.390	36.220400677	-107.620902219	
5,850.00	22.28	270.779	4,552.58	1,184.57	-3,081.03	1,902,352.396	1,236,026.816	36.220404039	-107.620972023	
5,900.00	18.37	261.761	4,599.47	1,183.57	-3,098.31	1,902,351.395	1,236,009.533	36.220400620	-107.621030553	
5,950.00	15.08	248.563	4,647.37	1,180.06	-3,112.17	1,902,347.887	1,235,995.673	36.220390446	-107.621077363	
6,000.00	12.92	229.799	4,695.91	1,174.07	-3,122.50	1,902,341.896	1,235,985.340	36.220373593	-107.621112096	
6,050.00	12.48	206.998	4,744.71	1,165.64	-3,129.23	1,902,333.470	1,235,978.614	36.220350191	-107.621134489	
6,100.00	13.91	185.869	4,793.42	1,154.84	-3,132.30	1,902,322.673	1,235,975.546	36.220320417	-107.621144370	
6,150.00	16.75	170.194	4,841.66	1,141.76	-3,131.68	1,902,309.585	1,235,976.159	36.220284499	-107.621141666	
6,200.00	20.42	159.464	4,889.06	1,126.48	-3,127.39	1,902,294.308	1,235,980.449	36.220242708	-107.621126395	
6,250.00	24.54	152.042	4,935.25	1,109.13	-3,119.46	1,902,276.957	1,235,988.382	36.220195365	-107.621098675	
6,300.00	28.93	146.696	4,979.90	1,089.83	-3,107.94	1,902,257.664	1,235,999.898	36.220142827	-107.621058717	
6,350.00	33.48	142.673	5,022.66	1,068.75	-3,092.93	1,902,236.577	1,236,014.911	36.220085497	-107.621006824	
6,400.00	38.13	139.522	5,063.21	1,046.03	-3,074.54	1,902,213.855	1,236,033.304	36.220023809	-107.620943392	
6,450.00	42.85	136.967	5,101.23	1,021.84	-3,052.90	1,902,189.672	1,236,054.940	36.219958234	-107.620868904	
6,500.00	47.61	134.830	5,136.43	996.38	-3,028.19	1,902,164.211	1,236,079.652	36.219889270	-107.620783926	
6,550.00	52.41	132.997	5,168.56	969.84	-3,000.59	1,902,137.667	1,236,107.253	36.219817442	-107.620689105	
6,600.00	57.23	131.387	5,197.36	942.41	-2,970.31	1,902,110.242	1,236,137.533	36.219743298	-107.620585163	
6,628.58	60.00	130.545	5,212.24	926.42	-2,951.88	1,902,094.248	1,236,155.958	36.219700089	-107.620521949	
6,688.58	60.00	130.545	5,242.24	892.64	-2,912.40	1,902,060.471	1,236,195.443	36.219608858	-107.620386502	
6,700.00	61.14	130.545	5,247.85	886.18	-2,904.84	1,902,054.007	1,236,203.000	36.219591399	-107.620360580	
6,750.00	66.14	130.545	5,270.04	857.06	-2,870.81	1,902,024.893	1,236,237.034	36.219512764	-107.620243834	
6,800.00	71.14	130.545	5,288.25	826.80	-2,835.43	1,901,994.633	1,236,272.408	36.219431032	-107.620122490	
6,850.00	76.14	130.545	5,302.32	795.63	-2,798.99	1,901,963.457	1,236,308.853	36.219346825	-107.619997472	
6,900.00	81.14	130.545	5,312.17	763.77	-2,761.75	1,901,931.601	1,236,346.092	36.219260784	-107.619869732	
6,950.00	86.14	130.545	5,317.70	731.48	-2,724.00	1,901,899.310	1,236,383.842	36.219173565	-107.619740243	
6,990.80	90.22	130.545	5,319.00	704.97	-2,693.02	1,901,872.805	1,236,414.826	36.219101974	-107.619633957	
7,000.00	90.22	130.545	5,318.96	699.00	-2,686.03	1,901,866.827	1,236,421.814	36.219085828	-107.619609986	
7,100.00	90.22	130.545	5,318.57	633.99	-2,610.04	1,901,801.823	1,236,497.804	36.218910254	-107.619349324	
7,200.00	90.22	130.545	5,318.19	568.99	-2,534.05	1,901,736.820	1,236,573.793	36.218734679	-107.619088664	
7,300.00	90.22	130.545	5,317.80	503.99	-2,458.06	1,901,671.817	1,236,649.782	36.218559104	-107.618828004	
7,400.00	90.22	130.545	5,317.41	438.98	-2,382.07	1,901,606.813	1,236,725.771	36.218383528	-107.618567346	
7,500.00	90.22	130.545	5,317.02	373.98	-2,306.08	1,901,541.810	1,236,801.761	36.218207951	-107.618306688	
7,600.00	90.22	130.545	5,316.64	308.98	-2,230.09	1,901,476.807	1,236,877.750	36.218032374	-107.618046032	
7,700.00	90.22	130.545	5,316.25	243.97	-2,154.10	1,901,411.803	1,236,953.739	36.217856796	-107.617785377	
7,800.00	90.22	130.545	5,315.86	178.97	-2,078.11	1,901,346.800	1,237,029.729	36.217681218	-107.617524723	
7,900.00	90.22	130.545	5,315.47	113.96	-2,002.12	1,901,281.797	1,237,105.718	36.217505639	-107.617264071	
8,000.00	90.22	130.545	5,315.08	48.96	-1,926.13	1,901,216.793	1,237,181.707	36.217330059	-107.617003419	
8,100.00	90.22	130.545	5,314.70	-16.04	-1,850.14	1,901,151.790	1,237,257.697	36.217154479	-107.616742769	
8,200.00	90.22	130.545	5,314.31	-81.05	-1,774.15	1,901,086.787	1,237,333.686	36.216978898	-107.616482120	
8,300.00	90.22	130.545	5,313.92	-146.05	-1,698.16	1,901,021.783	1,237,409.675	36.216803317	-107.616221472	
8,400.00	90.22	130.545	5,313.53	-211.05	-1,622.18	1,900,956.780	1,237,485.664	36.216627735	-107.615960825	
8,500.00	90.22	130.545	5,313.15	-276.06	-1,546.19	1,900,891.777	1,237,561.654	36.216452152	-107.615700179	
8,600.00	90.22	130.545	5,312.76	-341.06	-1,470.20	1,900,826.773	1,237,637.643	36.216276569	-107.615439535	
8,700.00	90.22	130.545	5,312.37	-406.06	-1,394.21	1,900,761.770	1,237,713.632	36.216100985	-107.615178891	
8,800.00	90.22	130.545	5,311.98	-471.07	-1,318.22	1,900,696.767	1,237,789.622	36.215925401	-107.614918249	
8,900.00	90.22	130.545	5,311.60	-536.07	-1,242.23	1,900,631.763	1,237,865.611	36.215749816	-107.614657608	
9,000.00	90.22	130.545	5,311.21	-601.07	-1,166.24	1,900,566.760	1,237,941.600	36.215574230	-107.614396968	
9,100.00	90.22	130.545	5,310.82	-666.08	-1,090.25	1,900,501.756	1,238,017.590	36.215398644	-107.614136329	



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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	
9,200.00	90.22	130.545	5,310.43	-731.08	-1,014.26	1,900,436.753	1,238,093.579	36.215223057	-107.613875692	
9,300.00	90.22	130.545	5,310.04	-796.08	-938.27	1,900,371.750	1,238,169.568	36.215047470	-107.613615055	
9,400.00	90.22	130.545	5,309.66	-861.09	-862.28	1,900,306.746	1,238,245.557	36.214871882	-107.613354420	
9,500.00	90.22	130.545	5,309.27	-926.09	-786.29	1,900,241.743	1,238,321.547	36.214696293	-107.613093786	
9,600.00	90.22	130.545	5,308.88	-991.09	-710.30	1,900,176.740	1,238,397.536	36.214520704	-107.612833154	
9,700.00	90.22	130.545	5,308.49	-1,056.10	-634.31	1,900,111.736	1,238,473.525	36.214345115	-107.612572522	
9,800.00	90.22	130.545	5,308.11	-1,121.10	-558.32	1,900,046.733	1,238,549.515	36.214169524	-107.612311892	
9,900.00	90.22	130.545	5,307.72	-1,186.10	-482.33	1,899,981.730	1,238,625.504	36.213993933	-107.612051262	
10,000.00	90.22	130.545	5,307.33	-1,251.11	-406.34	1,899,916.726	1,238,701.493	36.213818342	-107.611790634	
10,100.00	90.22	130.545	5,306.94	-1,316.11	-330.35	1,899,851.723	1,238,777.483	36.213642750	-107.611530007	
10,200.00	90.22	130.545	5,306.55	-1,381.12	-254.37	1,899,786.720	1,238,853.472	36.213467157	-107.611269381	
10,300.00	90.22	130.545	5,306.17	-1,446.12	-178.38	1,899,721.716	1,238,929.461	36.213291563	-107.611008756	
10,400.00	90.22	130.545	5,305.78	-1,511.12	-102.39	1,899,656.713	1,239,005.450	36.213115970	-107.610748132	
10,500.00	90.22	130.545	5,305.39	-1,576.13	-26.40	1,899,591.710	1,239,081.440	36.212940375	-107.610487510	
10,600.00	90.22	130.545	5,305.00	-1,641.13	49.59	1,899,526.706	1,239,157.429	36.212764780	-107.610226888	
10,700.00	90.22	130.545	5,304.62	-1,706.13	125.58	1,899,461.703	1,239,233.418	36.212589184	-107.609966268	
10,800.00	90.22	130.545	5,304.23	-1,771.14	201.57	1,899,396.700	1,239,309.408	36.212413588	-107.609705649	
10,900.00	90.22	130.545	5,303.84	-1,836.14	277.56	1,899,331.696	1,239,385.397	36.212237991	-107.609445031	
11,000.00	90.22	130.545	5,303.45	-1,901.14	353.55	1,899,266.693	1,239,461.386	36.212062393	-107.609184415	
11,100.00	90.22	130.545	5,303.06	-1,966.15	429.54	1,899,201.690	1,239,537.376	36.211886795	-107.608923799	
11,200.00	90.22	130.545	5,302.68	-2,031.15	505.53	1,899,136.686	1,239,613.365	36.211711196	-107.608663185	
11,300.00	90.22	130.545	5,302.29	-2,096.15	581.52	1,899,071.683	1,239,689.354	36.211535597	-107.608402571	
11,400.00	90.22	130.545	5,301.90	-2,161.16	657.51	1,899,006.680	1,239,765.343	36.211359997	-107.608141959	
11,500.00	90.22	130.545	5,301.51	-2,226.16	733.50	1,898,941.676	1,239,841.333	36.211184397	-107.607881348	
11,600.00	90.22	130.545	5,301.13	-2,291.16	809.49	1,898,876.673	1,239,917.322	36.211008796	-107.607620739	
11,700.00	90.22	130.545	5,300.74	-2,356.17	885.48	1,898,811.669	1,239,993.311	36.210833194	-107.607360130	
11,800.00	90.22	130.545	5,300.35	-2,421.17	961.47	1,898,746.666	1,240,069.301	36.210657592	-107.607099523	
11,900.00	90.22	130.545	5,299.96	-2,486.17	1,037.46	1,898,681.663	1,240,145.290	36.210481989	-107.606838916	
12,000.00	90.22	130.545	5,299.58	-2,551.18	1,113.45	1,898,616.659	1,240,221.279	36.210306385	-107.606578311	
12,100.00	90.22	130.545	5,299.19	-2,616.18	1,189.43	1,898,551.656	1,240,297.269	36.210130781	-107.606317707	
12,200.00	90.22	130.545	5,298.80	-2,681.18	1,265.42	1,898,486.653	1,240,373.258	36.209955176	-107.606057105	
12,300.00	90.22	130.545	5,298.41	-2,746.19	1,341.41	1,898,421.649	1,240,449.247	36.209779571	-107.605796503	
12,400.00	90.22	130.545	5,298.02	-2,811.19	1,417.40	1,898,356.646	1,240,525.236	36.209603965	-107.605535902	
12,500.00	90.22	130.545	5,297.64	-2,876.20	1,493.39	1,898,291.643	1,240,601.226	36.209428359	-107.605275303	
12,600.00	90.22	130.545	5,297.25	-2,941.20	1,569.38	1,898,226.639	1,240,677.215	36.209252752	-107.605014705	
12,700.00	90.22	130.545	5,296.86	-3,006.20	1,645.37	1,898,161.636	1,240,753.204	36.209077144	-107.604754108	
12,800.00	90.22	130.545	5,296.47	-3,071.21	1,721.36	1,898,096.633	1,240,829.194	36.208901536	-107.604493512	
12,900.00	90.22	130.545	5,296.09	-3,136.21	1,797.35	1,898,031.629	1,240,905.183	36.208725927	-107.604232917	
13,000.00	90.22	130.545	5,295.70	-3,201.21	1,873.34	1,897,966.626	1,240,981.172	36.208550317	-107.603972324	
13,100.00	90.22	130.545	5,295.31	-3,266.22	1,949.33	1,897,901.623	1,241,057.162	36.208374707	-107.603711732	
13,200.00	90.22	130.545	5,294.92	-3,331.22	2,025.32	1,897,836.619	1,241,133.151	36.208199096	-107.603451140	
13,300.00	90.22	130.545	5,294.53	-3,396.22	2,101.31	1,897,771.616	1,241,209.140	36.208023485	-107.603190550	
13,400.00	90.22	130.545	5,294.15	-3,461.23	2,177.30	1,897,706.613	1,241,285.129	36.207847873	-107.602929961	
13,500.00	90.22	130.545	5,293.76	-3,526.23	2,253.29	1,897,641.609	1,241,361.119	36.207672261	-107.602669374	
13,600.00	90.22	130.545	5,293.37	-3,591.23	2,329.28	1,897,576.606	1,241,437.108	36.207496648	-107.602408787	
13,700.00	90.22	130.545	5,292.98	-3,656.24	2,405.27	1,897,511.603	1,241,513.097	36.207321034	-107.602148202	
13,800.00	90.22	130.545	5,292.60	-3,721.24	2,481.26	1,897,446.599	1,241,589.087	36.207145420	-107.601887617	
13,900.00	90.22	130.545	5,292.21	-3,786.24	2,557.24	1,897,381.596	1,241,665.076	36.206969805	-107.601627034	
14,000.00	90.22	130.545	5,291.82	-3,851.25	2,633.23	1,897,316.593	1,241,741.065	36.206794190	-107.601366452	
14,100.00	90.22	130.545	5,291.43	-3,916.25	2,709.22	1,897,251.589	1,241,817.055	36.206618574	-107.601105872	
14,200.00	90.22	130.545	5,291.05	-3,981.25	2,785.21	1,897,186.586	1,241,893.044	36.206442957	-107.600845292	
14,300.00	90.22	130.545	5,290.66	-4,046.26	2,861.20	1,897,121.582	1,241,969.033	36.206267340	-107.600584714	
14,400.00	90.22	130.545	5,290.27	-4,111.26	2,937.19	1,897,056.579	1,242,045.022	36.206091722	-107.600324136	
14,500.00	90.22	130.545	5,289.88	-4,176.26	3,013.18	1,896,991.576	1,242,121.012	36.205916103	-107.600063560	
14,600.00	90.22	130.545	5,289.49	-4,241.27	3,089.17	1,896,926.572	1,242,197.001	36.205740484	-107.599802985	



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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
14,700.00	90.22	130.545	5,289.11	-4,306.27	3,165.16	1,896,861.569	1,242,272.990	36.205564865	-107.599542411	
14,800.00	90.22	130.545	5,288.72	-4,371.28	3,241.15	1,896,796.566	1,242,348.980	36.205389244	-107.599281839	
14,900.00	90.22	130.545	5,288.33	-4,436.28	3,317.14	1,896,731.562	1,242,424.969	36.205213624	-107.599021267	
15,000.00	90.22	130.545	5,287.94	-4,501.28	3,393.13	1,896,666.559	1,242,500.958	36.205038002	-107.598760697	
15,100.00	90.22	130.545	5,287.56	-4,566.29	3,469.12	1,896,601.556	1,242,576.948	36.204862380	-107.598500128	
15,200.00	90.22	130.545	5,287.17	-4,631.29	3,545.11	1,896,536.552	1,242,652.937	36.204686758	-107.598239560	
15,300.00	90.22	130.545	5,286.78	-4,696.29	3,621.10	1,896,471.549	1,242,728.926	36.204511134	-107.597978993	
15,400.00	90.22	130.545	5,286.39	-4,761.30	3,697.09	1,896,406.546	1,242,804.915	36.204335511	-107.597718427	
15,500.00	90.22	130.545	5,286.00	-4,826.30	3,773.08	1,896,341.542	1,242,880.905	36.204159886	-107.597457863	
15,600.00	90.22	130.545	5,285.62	-4,891.30	3,849.07	1,896,276.539	1,242,956.894	36.203984261	-107.597197299	
15,700.00	90.22	130.545	5,285.23	-4,956.31	3,925.06	1,896,211.536	1,243,032.883	36.203808636	-107.596936737	
15,800.00	90.22	130.545	5,284.84	-5,021.31	4,001.04	1,896,146.532	1,243,108.873	36.203633009	-107.596676176	
15,900.00	90.22	130.545	5,284.45	-5,086.31	4,077.03	1,896,081.529	1,243,184.862	36.203457383	-107.596415616	
16,000.00	90.22	130.545	5,284.07	-5,151.32	4,153.02	1,896,016.526	1,243,260.851	36.203281755	-107.596155057	
16,100.00	90.22	130.545	5,283.68	-5,216.32	4,229.01	1,895,951.522	1,243,336.841	36.203106127	-107.595894500	
16,200.00	90.22	130.545	5,283.29	-5,281.32	4,305.00	1,895,886.519	1,243,412.830	36.202930499	-107.595633943	
16,300.00	90.22	130.545	5,282.90	-5,346.33	4,380.99	1,895,821.516	1,243,488.819	36.202754869	-107.595373388	
16,400.00	90.22	130.545	5,282.52	-5,411.33	4,456.98	1,895,756.512	1,243,564.808	36.202579240	-107.595112834	
16,500.00	90.22	130.545	5,282.13	-5,476.33	4,532.97	1,895,691.509	1,243,640.798	36.202403609	-107.594852281	
16,600.00	90.22	130.545	5,281.74	-5,541.34	4,608.96	1,895,626.505	1,243,716.787	36.202227978	-107.594591729	
16,700.00	90.22	130.545	5,281.35	-5,606.34	4,684.95	1,895,561.502	1,243,792.776	36.202052347	-107.594331178	
16,800.00	90.22	130.545	5,280.96	-5,671.34	4,760.94	1,895,496.499	1,243,868.766	36.201876715	-107.594070629	
16,900.00	90.22	130.545	5,280.58	-5,736.35	4,836.93	1,895,431.495	1,243,944.755	36.201701082	-107.593810081	
17,000.00	90.22	130.545	5,280.19	-5,801.35	4,912.92	1,895,366.492	1,244,020.744	36.201525448	-107.593549533	
17,100.00	90.22	130.545	5,279.80	-5,866.36	4,988.91	1,895,301.489	1,244,096.734	36.201349814	-107.593288987	
17,200.00	90.22	130.545	5,279.41	-5,931.36	5,064.90	1,895,236.485	1,244,172.723	36.201174180	-107.593028443	
17,300.00	90.22	130.545	5,279.03	-5,996.36	5,140.89	1,895,171.482	1,244,248.712	36.200998545	-107.592767899	
17,400.00	90.22	130.545	5,278.64	-6,061.37	5,216.88	1,895,106.479	1,244,324.701	36.200822909	-107.592507356	
17,500.00	90.22	130.545	5,278.25	-6,126.37	5,292.87	1,895,041.475	1,244,400.691	36.200647273	-107.592246815	
17,600.00	90.22	130.545	5,277.86	-6,191.37	5,368.85	1,894,976.472	1,244,476.680	36.200471636	-107.591986275	
17,700.00	90.22	130.545	5,277.47	-6,256.38	5,444.84	1,894,911.469	1,244,552.669	36.200295998	-107.591725736	
17,800.00	90.22	130.545	5,277.09	-6,321.38	5,520.83	1,894,846.465	1,244,628.659	36.200120360	-107.591465198	
17,900.00	90.22	130.545	5,276.70	-6,386.38	5,596.82	1,894,781.462	1,244,704.648	36.199944721	-107.591204661	
18,000.00	90.22	130.545	5,276.31	-6,451.39	5,672.81	1,894,716.459	1,244,780.637	36.199769082	-107.590944126	
18,100.00	90.22	130.545	5,275.92	-6,516.39	5,748.80	1,894,651.455	1,244,856.627	36.199593442	-107.590683591	
18,200.00	90.22	130.545	5,275.54	-6,581.39	5,824.79	1,894,586.452	1,244,932.616	36.199417801	-107.590423058	
18,300.00	90.22	130.545	5,275.15	-6,646.40	5,900.78	1,894,521.449	1,245,008.605	36.199242160	-107.590162526	
18,400.00	90.22	130.545	5,274.76	-6,711.40	5,976.77	1,894,456.445	1,245,084.594	36.199066519	-107.589901995	
18,500.00	90.22	130.545	5,274.37	-6,776.40	6,052.76	1,894,391.442	1,245,160.584	36.198890876	-107.589641465	
18,600.00	90.22	130.545	5,273.98	-6,841.41	6,128.75	1,894,326.439	1,245,236.573	36.198715233	-107.589380936	
18,700.00	90.22	130.545	5,273.60	-6,906.41	6,204.74	1,894,261.435	1,245,312.562	36.198539590	-107.589120409	
18,800.00	90.22	130.545	5,273.21	-6,971.41	6,280.73	1,894,196.432	1,245,388.552	36.198363946	-107.588859883	
18,900.00	90.22	130.545	5,272.82	-7,036.42	6,356.72	1,894,131.429	1,245,464.541	36.198188301	-107.588599357	
19,000.00	90.22	130.545	5,272.43	-7,101.42	6,432.71	1,894,066.425	1,245,540.530	36.198012656	-107.588338834	
19,100.00	90.22	130.545	5,272.05	-7,166.42	6,508.70	1,894,001.422	1,245,616.520	36.197837010	-107.588078311	
19,200.00	90.22	130.545	5,271.66	-7,231.43	6,584.69	1,893,936.418	1,245,692.509	36.197661363	-107.587817789	
19,300.00	90.22	130.545	5,271.27	-7,296.43	6,660.68	1,893,871.415	1,245,768.498	36.197485716	-107.587557268	
19,400.00	90.22	130.545	5,270.88	-7,361.44	6,736.67	1,893,806.412	1,245,844.487	36.197310069	-107.587296749	
19,500.00	90.22	130.545	5,270.50	-7,426.44	6,812.65	1,893,741.408	1,245,920.477	36.197134420	-107.587036231	
19,600.00	90.22	130.545	5,270.11	-7,491.44	6,888.64	1,893,676.405	1,245,996.466	36.196958771	-107.586775714	
19,700.00	90.22	130.545	5,269.72	-7,556.45	6,964.63	1,893,611.402	1,246,072.455	36.196783122	-107.586515198	
19,800.00	90.22	130.545	5,269.33	-7,621.45	7,040.62	1,893,546.398	1,246,148.445	36.196607472	-107.586254683	
19,900.00	90.22	130.545	5,268.94	-7,686.45	7,116.61	1,893,481.395	1,246,224.434	36.196431821	-107.585994170	
20,000.00	90.22	130.545	5,268.56	-7,751.46	7,192.60	1,893,416.392	1,246,300.423	36.196256170	-107.585733657	
20,100.00	90.22	130.545	5,268.17	-7,816.46	7,268.59	1,893,351.388	1,246,376.413	36.196080518	-107.585473146	



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	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	
20,200.00	90.22	130.545	5,267.78	-7,881.46	7,344.58	1,893,286.385	1,246,452.402	36.195904866	-107.585212636	
20,300.00	90.22	130.545	5,267.39	-7,946.47	7,420.57	1,893,221.382	1,246,528.391	36.195729213	-107.584952127	
20,400.00	90.22	130.545	5,267.01	-8,011.47	7,496.56	1,893,156.378	1,246,604.380	36.195553559	-107.584691619	
20,500.00	90.22	130.545	5,266.62	-8,076.47	7,572.55	1,893,091.375	1,246,680.370	36.195377905	-107.584431113	
20,600.00	90.22	130.545	5,266.23	-8,141.48	7,648.54	1,893,026.372	1,246,756.359	36.195202250	-107.584170607	
20,659.35	90.22	130.545	5,266.00	-8,180.06	7,693.64	1,892,987.793	1,246,801.458	36.195098000	-107.584016000	

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 106 BHL 1 - plan hits target center - Point	0.00	0.000	5,266.00	-8,180.06	7,693.64	1,892,987.793	1,246,801.458	36.195098000	-107.584016000	
North Alamito 106 POE : - plan hits target center - Point	0.00	0.000	5,319.00	704.98	-2,693.03	1,901,872.814	1,236,414.814	36.219102000	-107.619634000	

Casing Points							Casing Diameter (")	Hole Diameter (")
Measured Depth (ft)	Vertical Depth (ft)	Name						
350.00	350.00	13 3/8" Csg					13-3/8	17-1/2
4,195.48	3,372.00	9 5/8" Csg					9-5/8	12-1/4



Planning Report - Geographic

Database:	DT_Aug2923v16	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Company:	Enduring Resources LLC	TVD Reference:	RKB=6962+25 @ 6987.00ft
Project:	Sandoval County, New Mexico NAD83 NM C	MD Reference:	RKB=6962+25 @ 6987.00ft
Site:	North Alamito Unit (102 & 106)	North Reference:	Grid
Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,081.25	1,072.32	Ojo Alamo		-0.22	130.545	
1,203.25	1,187.46	Kirtland		-0.22	130.545	
1,389.55	1,357.74	Fruitland		-0.22	130.545	
1,789.22	1,693.52	Pictured Cliffs		-0.22	130.545	
1,997.94	1,849.02	Lewis		-0.22	130.545	
2,359.67	2,099.96	Chacra_A		-0.22	130.545	
3,931.46	3,189.06	Cliff House_Basal		-0.22	130.545	
3,989.41	3,229.22	Menefee		-0.22	130.545	
5,191.79	4,062.35	Point Lookout		-0.22	130.545	
5,496.01	4,273.15	Mancos		-0.22	130.545	
5,913.10	4,611.94	MNCS_A		-0.22	130.545	
6,016.48	4,711.98	MNCS_B		-0.22	130.545	
6,105.71	4,798.96	MNCS_C		-0.22	130.545	
6,152.37	4,843.92	MNCS_Cms		-0.22	130.545	
6,287.32	4,968.75	MNCS_D		-0.22	130.545	
6,422.27	5,080.47	MNCS_E		-0.22	130.545	
6,496.80	5,134.27	MNCS_F		-0.22	130.545	
6,620.00	5,207.89	MNCS_G		-0.22	130.545	
6,743.73	5,267.48	MNCS_H		-0.22	130.545	
6,812.74	5,292.23	MNCS_I		-0.22	130.545	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
500.00	500.00	19.36	-4.45	KOP Begin 3°/100' build	
2,037.98	1,877.06	230.00	-551.83	Begin 46.14° tangent	
5,588.43	4,337.19	1,149.41	-2,941.01	Begin 10°/100' build/turn	
6,628.58	5,212.24	926.42	-2,951.88	Begin 60.00° tangent	
6,688.58	5,242.24	892.64	-2,912.40	Begin 10°/100' build	
6,990.80	5,319.00	704.97	-2,693.02	Begin 90.22° lateral	
20,659.35	5,266.00	-8,180.06	7,693.64	PBHL @ 20659.35 MD 5266.00 TVD	



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
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 2,265.93ft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	1/10/2024		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	20,659.35	rev0 (Original Hole)	MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)		Separation Factor	Warning
Offset Well - Wellbore - Design						
North Alamito Unit (102 & 106)						
North Alamito Unit 102 H - Original Hole - rev0	500.00	500.00	19.87	16.73	6.333	CC, ES
North Alamito Unit 102 H - Original Hole - rev0	17,700.00	15,330.24	1,200.29	696.85	2.384	SF

Offset Design:		North Alamito Unit (102 & 106) - North Alamito Unit 102 H - Original Hole - rev0											Offset Site Error:		0.00 ft
Survey Program:		0-MWD						Rule Assigned:				Offset Well Error:		0.00 ft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance			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)	Minimum Separation (ft)				
0.00	0.00	0.00	0.00	0.00	0.00	167.06	0.00	0.00	19.87						
100.00	100.00	100.00	100.00	0.13	0.13	167.06	0.00	0.00	19.87	19.60	0.27	73.889			
200.00	200.00	200.00	200.00	0.49	0.49	167.06	0.00	0.00	19.87	18.88	0.99	20.152			
300.00	300.00	300.00	300.00	0.85	0.85	167.06	0.00	0.00	19.87	18.16	1.70	11.667			
400.00	400.00	400.00	400.00	1.21	1.21	167.06	0.00	0.00	19.87	17.45	2.42	8.210			
500.00	500.00	500.00	500.00	1.57	1.57	167.06	0.00	0.00	19.87	16.73	3.14	6.333	CC, ES		
600.00	599.95	599.95	599.95	1.92	1.93	-129.76	0.00	0.00	21.44	17.59	3.85	5.569			
700.00	699.63	699.63	699.63	2.28	2.28	-142.48	0.00	0.00	27.14	22.57	4.57	5.944			
800.00	798.77	798.77	798.77	2.66	2.64	-154.28	0.00	0.00	38.34	33.05	5.29	7.250			
900.00	897.08	897.08	897.08	3.06	2.99	-162.32	0.00	0.00	55.35	49.34	6.01	9.208			
1,000.00	994.31	994.31	994.31	3.50	3.34	-167.38	0.00	0.00	77.94	71.21	6.73	11.577			
1,100.00	1,090.18	1,095.31	1,095.27	4.00	3.70	-170.98	1.53	-1.82	103.66	96.20	7.46	13.898			
1,200.00	1,184.43	1,197.84	1,197.48	4.57	4.07	-173.98	6.59	-7.83	129.61	121.43	8.18	15.841			
1,300.00	1,276.81	1,301.66	1,300.41	5.22	4.45	-176.68	15.31	-18.19	155.79	146.89	8.91	17.491			
1,400.00	1,367.06	1,406.78	1,403.71	5.95	4.85	-179.22	27.80	-33.01	182.22	172.58	9.64	18.903			
1,500.00	1,454.93	1,513.18	1,507.03	6.79	5.29	178.32	44.14	-52.42	208.89	198.50	10.39	20.111			
1,600.00	1,540.18	1,620.86	1,609.98	7.72	5.79	175.91	64.43	-76.52	235.82	224.66	11.16	21.135			
1,700.00	1,622.59	1,729.80	1,712.17	8.76	6.36	173.54	88.72	-105.37	263.02	251.05	11.97	21.965			
1,800.00	1,701.91	1,839.98	1,813.16	9.92	7.01	171.17	117.07	-139.04	290.51	277.65	12.86	22.594			
1,900.00	1,777.95	1,951.40	1,912.54	11.18	7.77	168.82	149.50	-177.56	318.28	304.45	13.83	23.014			
2,000.00	1,850.47	2,046.34	1,995.92	12.56	8.48	166.99	178.74	-212.28	348.74	333.80	14.94	23.346			
2,100.00	1,920.04	2,139.90	2,078.09	14.04	9.21	165.70	207.56	-246.51	383.28	367.20	16.08	23.836			
2,200.00	1,989.33	2,233.35	2,160.16	15.54	9.97	164.71	236.34	-280.69	418.30	401.04	17.26	24.239			
2,300.00	2,058.62	2,326.80	2,242.23	17.07	10.75	163.88	265.12	-314.88	453.40	434.93	18.47	24.545			
2,400.00	2,127.91	2,420.24	2,324.30	18.60	11.54	163.16	293.90	-349.06	488.58	468.86	19.72	24.777			

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:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: North Alamito Unit (102 & 106) - North Alamito Unit 102 H - 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)			
2,500.00	2,197.20	2,513.69	2,406.37	20.15	12.34	162.54	322.68	-383.24	523.82	502.83	20.99	24.952	
2,600.00	2,266.49	2,607.13	2,488.43	21.71	13.15	162.00	351.46	-417.42	559.10	536.81	22.29	25.083	
2,700.00	2,335.78	2,700.58	2,570.50	23.27	13.98	161.53	380.24	-451.61	594.42	570.82	23.61	25.180	
2,800.00	2,405.07	2,794.03	2,652.57	24.84	14.81	161.10	409.02	-485.79	629.78	604.84	24.94	25.251	
2,900.00	2,474.36	2,887.47	2,734.64	26.41	15.64	160.72	437.81	-519.97	665.16	638.87	26.29	25.301	
3,000.00	2,543.65	2,980.92	2,816.71	27.99	16.48	160.38	466.59	-554.16	700.56	672.91	27.65	25.337	
3,100.00	2,612.94	3,074.36	2,898.78	29.57	17.32	160.07	495.37	-588.34	735.99	706.97	29.02	25.360	
3,200.00	2,682.23	3,167.81	2,980.85	31.15	18.17	159.80	524.15	-622.52	771.43	741.02	30.40	25.374	
3,300.00	2,751.52	3,261.25	3,062.92	32.73	19.02	159.54	552.93	-656.70	806.88	775.09	31.79	25.380	
3,400.00	2,820.81	3,354.70	3,144.99	34.32	19.88	159.31	581.71	-690.89	842.35	809.16	33.19	25.380	
3,500.00	2,890.10	3,448.15	3,227.06	35.91	20.73	159.09	610.49	-725.07	877.83	843.24	34.59	25.376	
3,600.00	2,959.39	3,541.59	3,309.12	37.50	21.59	158.89	639.27	-759.25	913.32	877.32	36.00	25.369	
3,700.00	3,028.68	3,635.04	3,391.19	39.09	22.45	158.71	668.06	-793.43	948.82	911.40	37.42	25.358	
3,800.00	3,097.97	3,728.48	3,473.26	40.68	23.31	158.54	696.84	-827.62	984.32	945.49	38.84	25.346	
3,900.00	3,167.26	3,821.93	3,555.33	42.27	24.17	158.38	725.62	-861.80	1,019.84	979.58	40.26	25.332	
4,000.00	3,236.55	3,915.38	3,637.40	43.86	25.04	158.23	754.40	-895.98	1,055.35	1,013.67	41.69	25.317	
4,100.00	3,305.84	4,008.82	3,719.47	45.46	25.90	158.10	783.18	-930.17	1,090.88	1,047.76	43.12	25.301	
4,200.00	3,375.14	4,102.27	3,801.54	47.05	26.77	157.97	811.96	-964.35	1,126.41	1,081.86	44.55	25.285	
4,300.00	3,444.43	4,195.71	3,883.61	48.65	27.64	157.85	840.74	-998.53	1,161.94	1,115.96	45.98	25.268	
4,400.00	3,513.72	4,289.16	3,965.68	50.25	28.51	157.73	869.52	-1,032.71	1,197.48	1,150.06	47.42	25.251	
4,500.00	3,583.01	4,382.61	4,047.75	51.84	29.38	157.62	898.31	-1,066.90	1,233.03	1,184.16	48.87	25.233	
4,600.00	3,652.30	4,476.05	4,129.81	53.44	30.25	157.52	927.09	-1,101.08	1,268.57	1,218.26	50.31	25.216	
4,700.00	3,721.59	4,569.50	4,211.88	55.04	31.12	157.43	955.87	-1,135.26	1,304.12	1,252.37	51.75	25.198	
4,800.00	3,790.88	4,662.94	4,293.95	56.64	31.99	157.34	984.65	-1,169.45	1,339.68	1,286.47	53.20	25.181	
4,900.00	3,860.17	4,756.39	4,376.02	58.23	32.86	157.25	1,013.43	-1,203.63	1,375.23	1,320.58	54.65	25.163	
5,000.00	3,929.46	4,843.83	4,452.82	59.83	33.68	157.17	1,040.36	-1,235.61	1,410.81	1,354.79	56.02	25.183	
5,100.00	3,998.75	4,875.25	4,480.89	61.43	33.94	157.17	1,049.44	-1,246.40	1,448.76	1,392.20	56.56	25.614	
5,200.00	4,068.04	4,900.00	4,503.52	63.03	34.15	157.21	1,055.88	-1,254.08	1,490.59	1,433.72	56.87	26.209	
5,300.00	4,137.33	4,950.00	4,550.45	64.63	34.50	157.36	1,066.92	-1,267.27	1,536.25	1,478.87	57.38	26.772	
5,400.00	4,206.62	4,950.00	4,550.45	66.23	34.50	157.36	1,066.92	-1,267.27	1,585.04	1,527.92	57.12	27.747	
5,500.00	4,275.91	5,000.00	4,598.70	67.83	34.77	157.62	1,075.27	-1,277.31	1,637.14	1,579.72	57.43	28.508	
5,600.00	4,345.28	5,000.00	4,598.70	69.43	34.77	158.46	1,075.27	-1,277.31	1,692.28	1,635.28	57.00	29.690	
5,700.00	4,421.46	5,050.00	4,647.90	70.82	34.98	166.22	1,080.86	-1,284.11	1,743.18	1,685.98	57.20	30.477	
5,800.00	4,507.05	5,050.00	4,647.90	71.85	34.98	175.88	1,080.86	-1,284.11	1,784.85	1,728.10	56.75	31.449	
5,900.00	4,599.47	5,100.00	4,697.69	72.54	35.12	-168.22	1,083.64	-1,287.62	1,816.10	1,759.15	56.96	31.886	
6,000.00	4,695.91	5,119.45	4,717.12	72.90	35.15	-136.36	1,083.96	-1,288.09	1,836.75	1,779.96	56.79	32.342	
6,100.00	4,793.42	5,150.00	4,747.67	73.00	35.21	-93.21	1,083.59	-1,287.81	1,846.43	1,789.59	56.83	32.489	
6,200.00	4,889.06	5,174.59	4,772.21	72.96	35.23	-68.17	1,082.53	-1,286.69	1,844.93	1,788.00	56.93	32.410	
6,300.00	4,979.90	5,200.00	4,797.47	72.85	35.25	-57.41	1,080.72	-1,284.69	1,832.38	1,775.15	57.23	32.018	
6,400.00	5,063.21	5,228.28	4,825.42	72.75	35.26	-53.00	1,077.85	-1,281.47	1,809.05	1,751.21	57.84	31.277	
6,500.00	5,136.43	5,250.00	4,846.72	72.72	35.26	-51.84	1,075.05	-1,278.28	1,775.47	1,716.72	58.75	30.218	
6,600.00	5,197.36	5,277.95	4,873.86	72.78	35.25	-53.08	1,070.67	-1,273.28	1,732.34	1,672.19	60.16	28.797	
6,700.00	5,247.85	5,300.00	4,895.03	72.95	35.25	-54.63	1,066.61	-1,268.62	1,683.52	1,621.60	61.93	27.186	
6,800.00	5,288.25	5,323.69	4,917.49	73.20	35.23	-60.20	1,061.67	-1,262.94	1,632.60	1,568.40	64.20	25.429	
6,900.00	5,312.17	5,350.00	4,942.04	73.53	35.21	-66.87	1,055.48	-1,255.80	1,577.97	1,510.80	67.16	23.494	
7,000.00	5,318.96	5,350.00	4,942.04	73.91	35.21	-72.71	1,055.48	-1,255.80	1,521.42	1,450.73	70.69	21.522	
7,100.00	5,318.57	5,375.70	4,965.58	74.33	35.19	-73.75	1,048.73	-1,248.00	1,466.89	1,392.21	74.68	19.643	
7,200.00	5,318.19	5,400.00	4,987.39	74.83	35.17	-74.71	1,041.74	-1,239.90	1,416.95	1,338.07	78.88	17.964	
7,300.00	5,317.80	5,414.34	5,000.05	75.38	35.15	-75.28	1,037.32	-1,234.78	1,371.79	1,288.52	83.28	16.473	
7,400.00	5,317.41	5,450.00	5,030.74	76.00	35.12	-76.66	1,025.49	-1,221.04	1,331.97	1,244.27	87.70	15.188	
7,500.00	5,317.02	5,465.67	5,043.86	76.69	35.10	-77.25	1,019.90	-1,214.55	1,297.41	1,205.17	92.24	14.065	
7,600.00	5,316.64	5,500.00	5,071.75	77.43	35.06	-78.53	1,006.85	-1,199.38	1,268.60	1,172.01	96.59	13.134	

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



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: North Alamito Unit (102 & 106) - North Alamito Unit 102 H - Original Hole - rev0												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Rule Assigned:												Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,700.00	5,316.25	5,535.75	5,099.47	78.24	35.03	-79.81	992.15	-1,182.27	1,245.48	1,144.75	100.74	12.364	
7,800.00	5,315.86	5,580.48	5,132.08	79.11	35.00	-81.33	972.22	-1,159.05	1,227.89	1,123.37	104.52	11.748	
7,900.00	5,315.47	5,633.39	5,167.44	80.03	34.97	-82.99	946.61	-1,129.18	1,215.42	1,107.56	107.86	11.268	
8,000.00	5,315.08	5,700.00	5,206.53	81.02	34.97	-84.85	911.57	-1,088.25	1,207.45	1,096.77	110.67	10.910	
8,100.00	5,314.70	5,774.90	5,244.50	82.06	35.03	-86.66	869.61	-1,039.20	1,202.89	1,089.80	113.09	10.637	
8,200.00	5,314.31	5,857.13	5,281.75	83.15	35.16	-88.45	822.00	-983.54	1,200.67	1,085.43	115.24	10.419	
8,300.00	5,313.92	5,948.93	5,310.60	84.30	35.40	-89.84	765.42	-917.40	1,200.16	1,083.04	117.11	10.248	
8,315.02	5,313.86	5,963.50	5,313.88	84.48	35.45	-90.00	756.19	-906.61	1,200.15	1,082.77	117.38	10.224	
8,400.00	5,313.53	6,048.59	5,325.76	85.50	35.77	-90.58	701.46	-842.64	1,200.21	1,081.34	118.87	10.097	
8,500.00	5,313.15	6,149.49	5,326.71	86.75	36.28	-90.65	635.90	-765.99	1,200.23	1,079.49	120.73	9.941	
8,600.00	5,312.76	6,249.49	5,326.25	88.04	36.90	-90.64	570.89	-690.00	1,200.23	1,077.46	122.77	9.777	
8,700.00	5,312.37	6,349.49	5,325.78	89.38	37.66	-90.64	505.89	-614.01	1,200.22	1,075.25	124.98	9.604	
8,800.00	5,311.98	6,449.49	5,325.32	90.76	38.55	-90.64	440.88	-538.02	1,200.22	1,072.87	127.36	9.424	
8,900.00	5,311.60	6,549.49	5,324.85	92.19	39.57	-90.63	375.88	-462.03	1,200.22	1,070.33	129.90	9.240	
9,000.00	5,311.21	6,649.49	5,324.39	93.65	40.69	-90.63	310.88	-386.04	1,200.22	1,067.64	132.58	9.053	
9,100.00	5,310.82	6,749.49	5,323.92	95.16	41.92	-90.63	245.87	-310.06	1,200.22	1,064.81	135.41	8.864	
9,200.00	5,310.43	6,849.49	5,323.46	96.70	43.24	-90.62	180.87	-234.07	1,200.22	1,061.86	138.36	8.675	
9,300.00	5,310.04	6,949.49	5,322.99	98.27	44.64	-90.62	115.87	-158.08	1,200.22	1,058.80	141.42	8.487	
9,400.00	5,309.66	7,049.49	5,322.53	99.88	46.13	-90.61	50.86	-82.09	1,200.22	1,055.63	144.59	8.301	
9,500.00	5,309.27	7,149.49	5,322.06	101.52	47.68	-90.61	-14.14	-6.10	1,200.22	1,052.35	147.86	8.117	
9,600.00	5,308.88	7,249.49	5,321.60	103.19	49.30	-90.61	-79.14	69.89	1,200.21	1,048.99	151.22	7.937	
9,700.00	5,308.49	7,349.49	5,321.13	104.88	50.98	-90.60	-144.15	145.88	1,200.21	1,045.55	154.66	7.760	
9,800.00	5,308.11	7,449.49	5,320.67	106.61	52.71	-90.60	-209.15	221.87	1,200.21	1,042.03	158.18	7.588	
9,900.00	5,307.72	7,549.49	5,320.20	108.36	54.49	-90.60	-274.15	297.86	1,200.21	1,038.44	161.77	7.419	
10,000.00	5,307.33	7,649.49	5,319.74	110.13	56.31	-90.59	-339.16	373.85	1,200.21	1,034.79	165.42	7.256	
10,100.00	5,306.94	7,749.49	5,319.27	111.93	58.17	-90.59	-404.16	449.83	1,200.21	1,031.08	169.13	7.096	
10,200.00	5,306.55	7,849.49	5,318.81	113.75	60.06	-90.58	-469.16	525.82	1,200.21	1,027.32	172.89	6.942	
10,300.00	5,306.17	7,949.49	5,318.34	115.59	61.99	-90.58	-534.17	601.81	1,200.21	1,023.50	176.71	6.792	
10,400.00	5,305.78	8,049.49	5,317.87	117.45	63.95	-90.58	-599.17	677.80	1,200.21	1,019.64	180.57	6.647	
10,500.00	5,305.39	8,149.49	5,317.41	119.33	65.93	-90.57	-664.17	753.79	1,200.20	1,015.74	184.47	6.506	
10,600.00	5,305.00	8,249.49	5,316.94	121.23	67.93	-90.57	-729.18	829.78	1,200.20	1,011.79	188.41	6.370	
10,700.00	5,304.62	8,349.49	5,316.48	123.14	69.96	-90.57	-794.18	905.77	1,200.20	1,007.81	192.39	6.238	
10,800.00	5,304.23	8,449.49	5,316.01	125.07	72.01	-90.56	-859.18	981.76	1,200.20	1,003.79	196.41	6.111	
10,900.00	5,303.84	8,549.49	5,315.55	127.02	74.08	-90.56	-924.19	1,057.75	1,200.20	999.75	200.45	5.987	
11,000.00	5,303.45	8,649.49	5,315.08	128.98	76.16	-90.56	-989.19	1,133.74	1,200.20	995.67	204.53	5.868	
11,100.00	5,303.06	8,749.49	5,314.62	130.95	78.27	-90.55	-1,054.20	1,209.72	1,200.20	991.56	208.64	5.753	
11,200.00	5,302.68	8,849.49	5,314.15	132.94	80.38	-90.55	-1,119.20	1,285.71	1,200.20	987.43	212.77	5.641	
11,300.00	5,302.29	8,949.49	5,313.69	134.94	82.51	-90.54	-1,184.20	1,361.70	1,200.20	983.27	216.92	5.533	
11,400.00	5,301.90	9,049.49	5,313.22	136.96	84.65	-90.54	-1,249.21	1,437.69	1,200.20	979.10	221.10	5.428	
11,500.00	5,301.51	9,149.49	5,312.76	138.98	86.80	-90.54	-1,314.21	1,513.68	1,200.19	974.89	225.30	5.327	
11,600.00	5,301.13	9,249.49	5,312.29	141.02	88.96	-90.53	-1,379.21	1,589.67	1,200.19	970.67	229.52	5.229	
11,700.00	5,300.74	9,349.49	5,311.83	143.07	91.14	-90.53	-1,444.22	1,665.66	1,200.19	966.43	233.76	5.134	
11,800.00	5,300.35	9,449.49	5,311.36	145.12	93.32	-90.53	-1,509.22	1,741.65	1,200.19	962.17	238.02	5.042	
11,900.00	5,299.96	9,549.49	5,310.90	147.19	95.51	-90.52	-1,574.22	1,817.64	1,200.19	957.90	242.29	4.953	
12,000.00	5,299.58	9,649.49	5,310.43	149.26	97.71	-90.52	-1,639.23	1,893.62	1,200.19	953.60	246.58	4.867	
12,100.00	5,299.19	9,749.49	5,309.97	151.35	99.91	-90.51	-1,704.23	1,969.61	1,200.19	949.30	250.89	4.784	
12,200.00	5,298.80	9,849.49	5,309.50	153.44	102.12	-90.51	-1,769.23	2,045.60	1,200.19	944.97	255.21	4.703	
12,300.00	5,298.41	9,949.49	5,309.03	155.54	104.34	-90.51	-1,834.24	2,121.59	1,200.19	940.64	259.55	4.624	
12,400.00	5,298.02	10,049.49	5,308.57	157.65	106.57	-90.50	-1,899.24	2,197.58	1,200.19	936.29	263.89	4.548	
12,500.00	5,297.64	10,149.49	5,308.10	159.77	108.80	-90.50	-1,964.24	2,273.57	1,200.18	931.93	268.25	4.474	
12,600.00	5,297.25	10,249.49	5,307.64	161.89	111.03	-90.50	-2,029.25	2,349.56	1,200.18	927.56	272.63	4.402	
12,700.00	5,296.86	10,349.49	5,307.17	164.02	113.28	-90.49	-2,094.25	2,425.55	1,200.18	923.17	277.01	4.333	

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:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: North Alamito Unit (102 & 106) - North Alamito Unit 102 H - 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)			
12,800.00	5,296.47	10,449.49	5,306.71	166.16	115.52	-90.49	-2,159.25	2,501.54	1,200.18	918.78	281.40	4.265	
12,900.00	5,296.09	10,549.49	5,306.24	168.30	117.77	-90.48	-2,224.26	2,577.53	1,200.18	914.37	285.81	4.199	
13,000.00	5,295.70	10,649.49	5,305.78	170.45	120.03	-90.48	-2,289.26	2,653.51	1,200.18	909.96	290.22	4.135	
13,100.00	5,295.31	10,749.49	5,305.31	172.60	122.29	-90.48	-2,354.26	2,729.50	1,200.18	905.53	294.65	4.073	
13,200.00	5,294.92	10,849.49	5,304.85	174.76	124.55	-90.47	-2,419.27	2,805.49	1,200.18	901.10	299.08	4.013	
13,300.00	5,294.53	10,949.49	5,304.38	176.93	126.81	-90.47	-2,484.27	2,881.48	1,200.18	896.66	303.52	3.954	
13,400.00	5,294.15	11,049.49	5,303.92	179.10	129.08	-90.47	-2,549.27	2,957.47	1,200.18	892.21	307.97	3.897	
13,500.00	5,293.76	11,149.49	5,303.45	181.28	131.36	-90.46	-2,614.28	3,033.46	1,200.17	887.75	312.42	3.842	
13,600.00	5,293.37	11,249.49	5,302.99	183.46	133.63	-90.46	-2,679.28	3,109.45	1,200.17	883.29	316.89	3.787	
13,700.00	5,292.98	11,349.49	5,302.52	185.64	135.91	-90.46	-2,744.29	3,185.44	1,200.17	878.82	321.36	3.735	
13,800.00	5,292.60	11,449.49	5,302.06	187.83	138.19	-90.45	-2,809.29	3,261.43	1,200.17	874.34	325.83	3.683	
13,900.00	5,292.21	11,549.49	5,301.59	190.02	140.48	-90.45	-2,874.29	3,337.42	1,200.17	869.85	330.32	3.633	
14,000.00	5,291.82	11,649.49	5,301.13	192.22	142.76	-90.44	-2,939.30	3,413.40	1,200.17	865.36	334.81	3.585	
14,100.00	5,291.43	11,749.49	5,300.66	194.42	145.05	-90.44	-3,004.30	3,489.39	1,200.17	860.86	339.31	3.537	
14,200.00	5,291.05	11,849.49	5,300.19	196.63	147.34	-90.44	-3,069.30	3,565.38	1,200.17	856.36	343.81	3.491	
14,300.00	5,290.66	11,949.49	5,299.73	198.84	149.64	-90.43	-3,134.31	3,641.37	1,200.17	851.85	348.32	3.446	
14,400.00	5,290.27	12,049.49	5,299.26	201.05	151.93	-90.43	-3,199.31	3,717.36	1,200.17	847.34	352.83	3.402	
14,500.00	5,289.88	12,149.49	5,298.80	203.27	154.23	-90.43	-3,264.31	3,793.35	1,200.17	842.82	357.35	3.359	
14,600.00	5,289.49	12,249.49	5,298.33	205.49	156.53	-90.42	-3,329.32	3,869.34	1,200.16	838.29	361.87	3.317	
14,700.00	5,289.11	12,349.49	5,297.87	207.71	158.83	-90.42	-3,394.32	3,945.33	1,200.16	833.76	366.40	3.276	
14,800.00	5,288.72	12,449.49	5,297.40	209.94	161.13	-90.41	-3,459.32	4,021.32	1,200.16	829.23	370.93	3.236	
14,900.00	5,288.33	12,549.49	5,296.94	212.17	163.44	-90.41	-3,524.33	4,097.31	1,200.16	824.69	375.47	3.196	
15,000.00	5,287.94	12,649.49	5,296.47	214.40	165.74	-90.41	-3,589.33	4,173.29	1,200.16	820.15	380.01	3.158	
15,100.00	5,287.56	12,749.49	5,296.01	216.63	168.05	-90.40	-3,654.33	4,249.28	1,200.16	815.60	384.56	3.121	
15,200.00	5,287.17	12,849.49	5,295.54	218.87	170.36	-90.40	-3,719.34	4,325.27	1,200.16	811.05	389.11	3.084	
15,300.00	5,286.78	12,949.49	5,295.08	221.11	172.67	-90.40	-3,784.34	4,401.26	1,200.16	806.49	393.66	3.049	
15,400.00	5,286.39	13,049.49	5,294.61	223.35	174.98	-90.39	-3,849.34	4,477.25	1,200.16	801.94	398.22	3.014	
15,500.00	5,286.00	13,149.49	5,294.15	225.60	177.30	-90.39	-3,914.35	4,553.24	1,200.16	797.37	402.78	2.980	
15,600.00	5,285.62	13,249.49	5,293.68	227.84	179.61	-90.38	-3,979.35	4,629.23	1,200.16	792.81	407.35	2.946	
15,700.00	5,285.23	13,349.49	5,293.22	230.09	181.93	-90.38	-4,044.35	4,705.22	1,200.16	788.24	411.92	2.914	
15,800.00	5,284.84	13,449.49	5,292.75	232.35	184.24	-90.38	-4,109.36	4,781.21	1,200.15	783.67	416.49	2.882	
15,900.00	5,284.45	13,549.49	5,292.29	234.60	186.56	-90.37	-4,174.36	4,857.20	1,200.15	779.09	421.06	2.850	
16,000.00	5,284.07	13,649.49	5,291.82	236.86	188.88	-90.37	-4,239.37	4,933.18	1,200.15	774.51	425.64	2.820	
16,100.00	5,283.68	13,749.49	5,291.35	239.12	191.20	-90.37	-4,304.37	5,009.17	1,200.15	769.93	430.22	2.790	
16,200.00	5,283.29	13,849.49	5,290.89	241.38	193.52	-90.36	-4,369.37	5,085.16	1,200.15	765.34	434.81	2.760	
16,300.00	5,282.90	13,949.49	5,290.42	243.64	195.84	-90.36	-4,434.38	5,161.15	1,200.15	760.76	439.39	2.731	
16,400.00	5,282.52	14,049.49	5,289.96	245.90	198.17	-90.36	-4,499.38	5,237.14	1,200.15	756.17	443.98	2.703	
16,500.00	5,282.13	14,149.49	5,289.49	248.17	200.49	-90.35	-4,564.38	5,313.13	1,200.15	751.57	448.58	2.675	
16,600.00	5,281.74	14,249.49	5,289.03	250.44	202.81	-90.35	-4,629.39	5,389.12	1,200.15	746.98	453.17	2.648	
16,700.00	5,281.35	14,349.49	5,288.56	252.71	205.14	-90.34	-4,694.39	5,465.11	1,200.15	742.38	457.77	2.622	
16,800.00	5,280.96	14,449.49	5,288.10	254.98	207.47	-90.34	-4,759.39	5,541.10	1,200.15	737.78	462.37	2.596	
16,900.00	5,280.58	14,549.49	5,287.63	257.25	209.79	-90.34	-4,824.40	5,617.09	1,200.15	733.18	466.97	2.570	
17,000.00	5,280.19	14,649.49	5,287.17	259.53	212.12	-90.33	-4,889.40	5,693.07	1,200.15	728.57	471.57	2.545	
17,100.00	5,279.80	14,749.49	5,286.70	261.80	214.45	-90.33	-4,954.40	5,769.06	1,200.14	723.97	476.18	2.520	
17,200.00	5,279.41	14,849.49	5,286.24	264.08	216.78	-90.33	-5,019.41	5,845.05	1,200.14	719.36	480.79	2.496	
17,300.00	5,279.03	14,949.49	5,285.77	266.36	219.11	-90.32	-5,084.41	5,921.04	1,200.14	714.74	485.40	2.472	
17,400.00	5,278.64	15,049.49	5,285.31	268.64	221.44	-90.32	-5,149.41	5,997.03	1,200.14	710.13	490.01	2.449	
17,500.00	5,278.25	15,149.49	5,284.84	270.92	223.77	-90.31	-5,214.42	6,073.02	1,200.14	705.52	494.63	2.426	
17,600.00	5,277.86	15,249.49	5,284.38	273.20	226.10	-90.31	-5,279.42	6,149.01	1,200.14	700.90	499.24	2.404	
17,680.76	5,277.55	15,330.24	5,284.00	275.05	227.98	-90.31	-5,331.91	6,210.37	1,200.14	697.17	502.97	2.386	
17,700.00	5,277.17	15,330.24	5,284.00	275.49	227.98	-90.31	-5,331.91	6,210.37	1,200.29	696.85	503.44	2.384 SF	
17,800.00	5,277.09	15,330.24	5,284.00	277.78	227.98	-90.31	-5,331.91	6,210.37	1,206.05	703.67	502.38	2.401	

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:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Offset Design: North Alamito Unit (102 & 106) - North Alamito Unit 102 H - 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)			
17,900.00	5,276.70	15,330.24	5,284.00	280.06	227.98	-90.31	-5,331.91	6,210.37	1,220.00	724.26	495.75	2.461	
18,000.00	5,276.31	15,330.24	5,284.00	282.35	227.98	-90.31	-5,331.91	6,210.37	1,241.87	757.49	484.39	2.564	
18,100.00	5,275.92	15,330.24	5,284.00	284.64	227.98	-90.31	-5,331.91	6,210.37	1,271.26	801.79	469.47	2.708	
18,200.00	5,275.54	15,330.24	5,284.00	286.93	227.98	-90.31	-5,331.91	6,210.37	1,307.65	855.45	452.20	2.892	
18,300.00	5,275.15	15,330.24	5,284.00	289.22	227.98	-90.31	-5,331.91	6,210.37	1,350.48	916.83	433.65	3.114	
18,400.00	5,274.76	15,330.24	5,284.00	291.52	227.98	-90.31	-5,331.91	6,210.37	1,399.16	984.48	414.68	3.374	
18,500.00	5,274.37	15,330.24	5,284.00	293.81	227.98	-90.31	-5,331.91	6,210.37	1,453.10	1,057.20	395.89	3.670	
18,600.00	5,273.98	15,330.24	5,284.00	296.11	227.98	-90.31	-5,331.91	6,210.37	1,511.74	1,134.02	377.71	4.002	
18,700.00	5,273.60	15,330.24	5,284.00	298.40	227.98	-90.31	-5,331.91	6,210.37	1,574.55	1,214.16	360.38	4.369	
18,800.00	5,273.21	15,330.24	5,284.00	300.70	227.98	-90.31	-5,331.91	6,210.37	1,641.05	1,297.01	344.04	4.770	
18,900.00	5,272.82	15,330.24	5,284.00	303.00	227.98	-90.31	-5,331.91	6,210.37	1,710.82	1,382.08	328.74	5.204	
19,000.00	5,272.43	15,330.24	5,284.00	305.30	227.98	-90.31	-5,331.91	6,210.37	1,783.46	1,468.97	314.49	5.671	
19,100.00	5,272.05	15,330.24	5,284.00	307.60	227.98	-90.31	-5,331.91	6,210.37	1,858.65	1,557.40	301.25	6.170	
19,200.00	5,271.66	15,330.24	5,284.00	309.90	227.98	-90.31	-5,331.91	6,210.37	1,936.09	1,647.11	288.98	6.700	
19,300.00	5,271.27	15,330.24	5,284.00	312.20	227.98	-90.31	-5,331.91	6,210.37	2,015.51	1,737.91	277.61	7.260	
19,400.00	5,270.88	15,330.24	5,284.00	314.50	227.98	-90.31	-5,331.91	6,210.37	2,096.70	1,829.63	267.07	7.851	
19,500.00	5,270.50	15,330.24	5,284.00	316.81	227.98	-90.31	-5,331.91	6,210.37	2,179.45	1,922.14	257.31	8.470	
19,600.00	5,270.11	15,330.24	5,284.00	319.11	227.98	-90.31	-5,331.91	6,210.37	2,263.59	2,015.33	248.26	9.118	

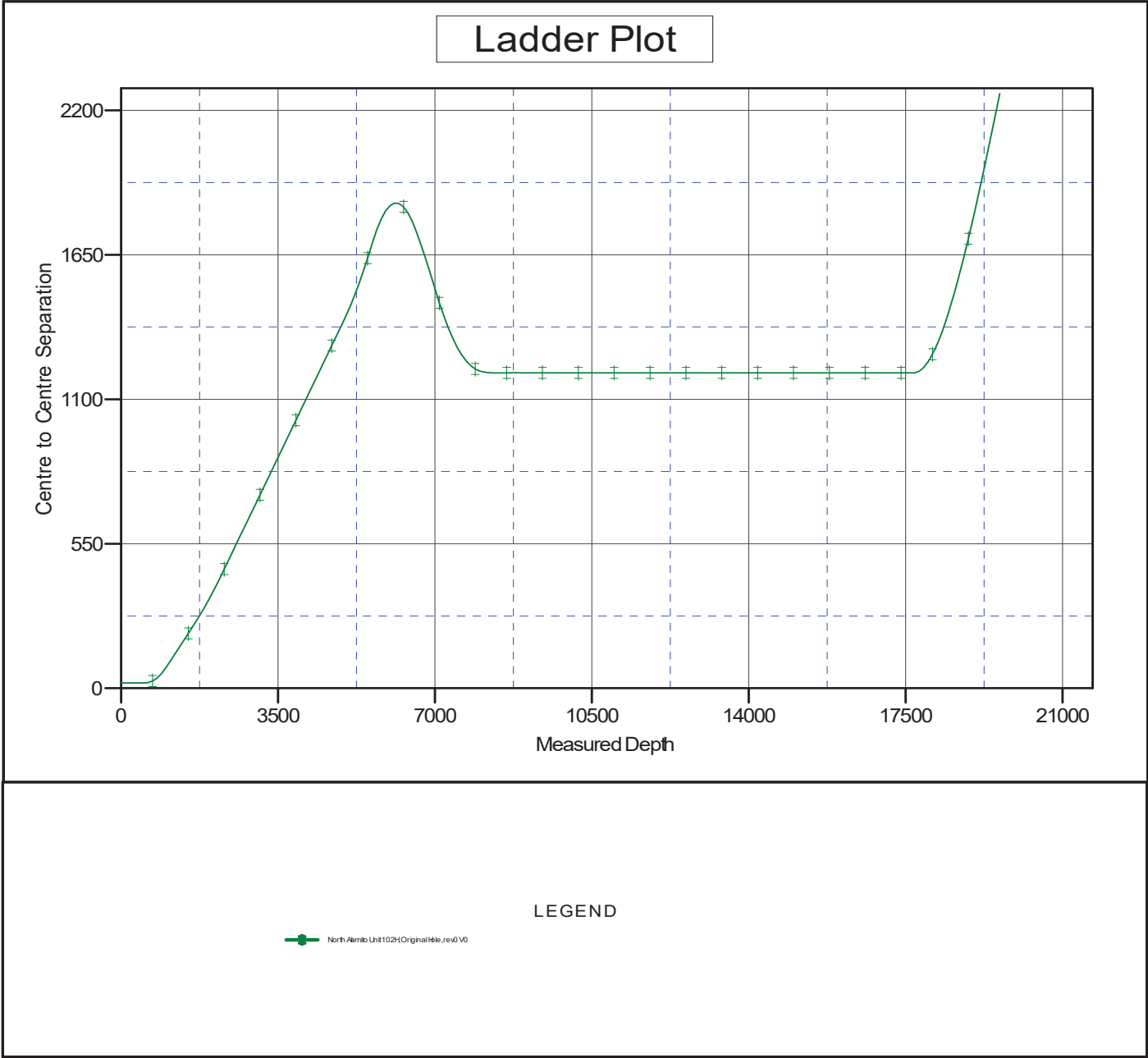
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6962+25 @ 6987.00ft	Coordinates are relative to: North Alamito Unit (102 & 106)
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, New Mexico Central Zone
Central Meridian is -106.250000000	Grid Convergence at Surface is: -0.80°





Anticollision Report

Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Site North Alamito Unit (102 & 106)
Project:	Sandoval County, New Mexico NAD83 NM C	TVD Reference:	RKB=6962+25 @ 6987.00ft
Reference Site:	North Alamito Unit (102 & 106)	MD Reference:	RKB=6962+25 @ 6987.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	North Alamito Unit 106 H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DT_Aug2923v16
Reference Design:	rev0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6962+25 @ 6987.00ft

Offset Depths are relative to Offset Datum

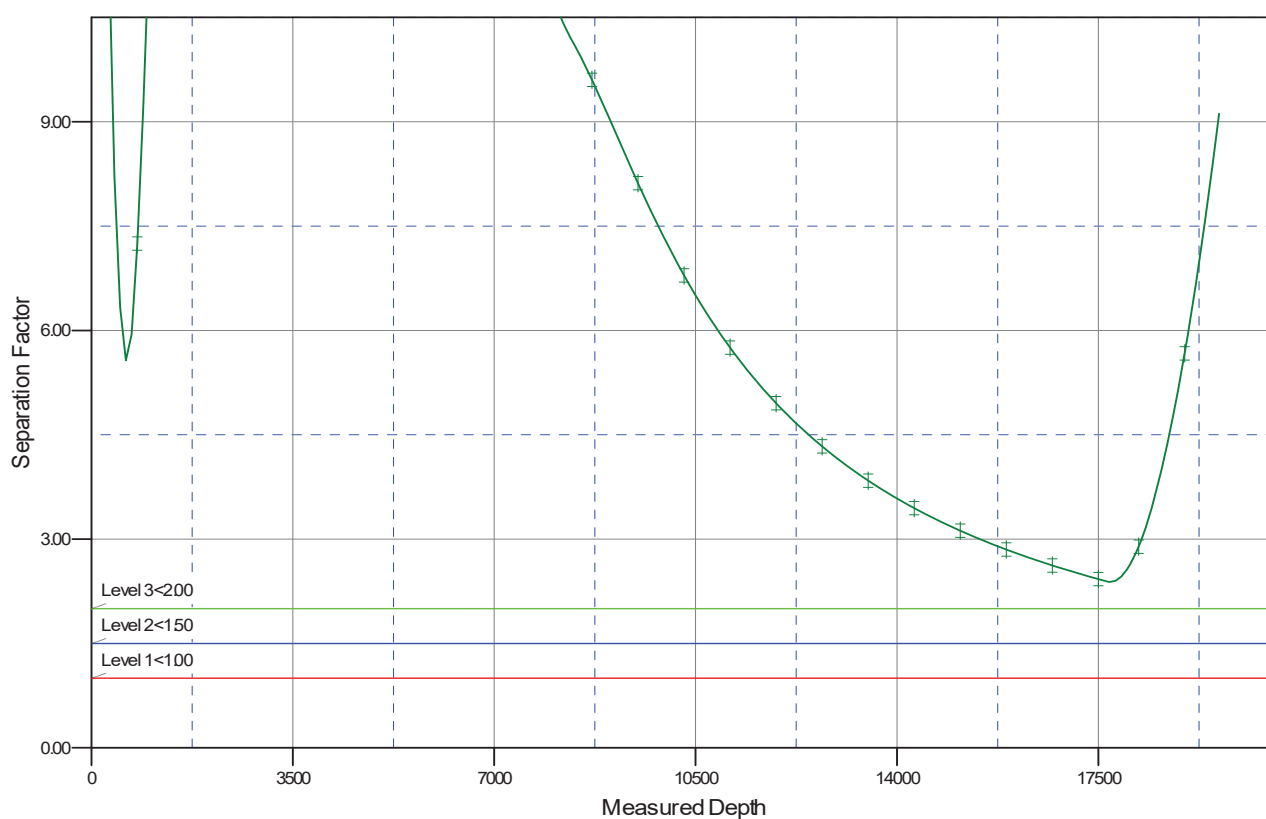
Central Meridian is -106.250000000

Coordinates are relative to: North Alamito Unit (102 & 106)

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

Grid Convergence at Surface is: -0.80°

Separation Factor Plot



LEGEND

North Alamito Unit 102+Original Hole, rev0 V0



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Boulevard, Suite A
Farmington, New Mexico 87402
<http://www.blm.gov/nm>



February 13, 2024

CONDITIONS OF APPROVAL

Sundry Notice of Intent ID # 2774620 Request for Bottom Hole Location and Dedicated Acreage Changes

Operator: DJR Operating LLC
Lease: NMNM 81638
Agreement: NMNM 135229A
Well: North Alamito Unit 106H (API # 30-043-21508)
Location: NENE Sec 19 T23N R7W (Sandoval County, NM)

The requested change to the Application for Permit to Drill is approved with the following Conditions of Approval:

1. This approval is only for the sundry notice and well listed above.
2. No changes to the original APD or COA are granted with the approval of this Sundry Notice other than the dedicated acreage, directional plan, bottomhole location change, casing lengths, and cement volumes.

If you have any questions regarding this, please feel free to contact Matthew Kade of this office at (505) 564-7736 or mkade@blm.gov.

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

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

CONDITIONS

Action 313753

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 313753
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	4/12/2024