U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

04/26/2022

Well Name: RINCON UNIT

Well Location: T27N / R6W / SEC 21 / NENE / 36.563993 / -107.467778

County or Parish/State: RIO ARRIBA / NM

Well Number: 713H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name: EASTERN NAVAJO

Lease Number: NMSF0079366, NMSF079366

Unit or CA Name: RINCON UNIT--STATE

Unit or CA Number: NMNM78406X

US Well Number: 3003931373

Well Status: Approved Application for Permit to Drill

Operator: ENDURING RESOURCES LLC

Notice of Intent

Sundry ID: 2668539

Type of Submission: Notice of Intent

Type of Action: Drilling Operations

Date Sundry Submitted: 04/25/2022

Time Sundry Submitted: 05:04

Date proposed operation will begin: 08/01/2022

Procedure Description: Enduring Resources requests to change the BHL of the RINCON UNIT 713H well per the attached updated C-102 Plat, Directional Plan, Drill Prog, and Wellbore Diagram.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Rincon_Unit_713H_Revised_C_102_Plat_Signed_04142022_20220425170405.pdf

RINU_713H_Drill_Prog_Updated_04222022_20220425170405.pdf

Enduring_Rincon_Unit_713H_rev0_20220425170405.pdf

RINU_713H_WBD_updated_04222022_20220425170405.pdf

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Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: KHEM SUTHIWAN

Signed on: APR 25, 2022 05:04 PM

Name: ENDURING RESOURCES LLC

Title: Regulatory Manager

Street Address: 6300 S WAY SUITE 525

City: DENVER **State:** CO

Phone: (303) 350-5721

Email address: KSUTHIWAN@ENDURINGRESOURCES.COM

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 04/26/2022

Signature: Kenneth Rennick

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	97232	BASIN MANCOS

[4] Property Code	[5] Property Name	[6] Well Number
319957	RINCON UNIT	713H

[7] OGRID No.	[8] Operator Name	[9] Elevation
372286	ENDURING RESOURCES, LLC	6538'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	21	27N	6W		1129	NORTH	1241	EAST	RIO ARRIBA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	27N	6W	2	1060	NORTH	717	EAST	RIO ARRIBA

[12] Dedicated Acres		[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
959.32	N/2 - Section 19 N/2 - Section 20 N/2 - Section 21			

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

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

Khem Suthiwan — 4/14/2022
Signature — Date

Khem Suthiwan
Printed Name

ksuthiwan@enduringresources.com
E-mail Address

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

Date Revised: APRIL 13, 2022
Date of Survey: JUNE 17, 2018

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

END-OF-LATERAL
1060' FNL 717' FEL
SECTION 19, T27N, R6W
LAT: 36.563616 °N
LONG: 107.501218 °W
DATUM: NAD1927

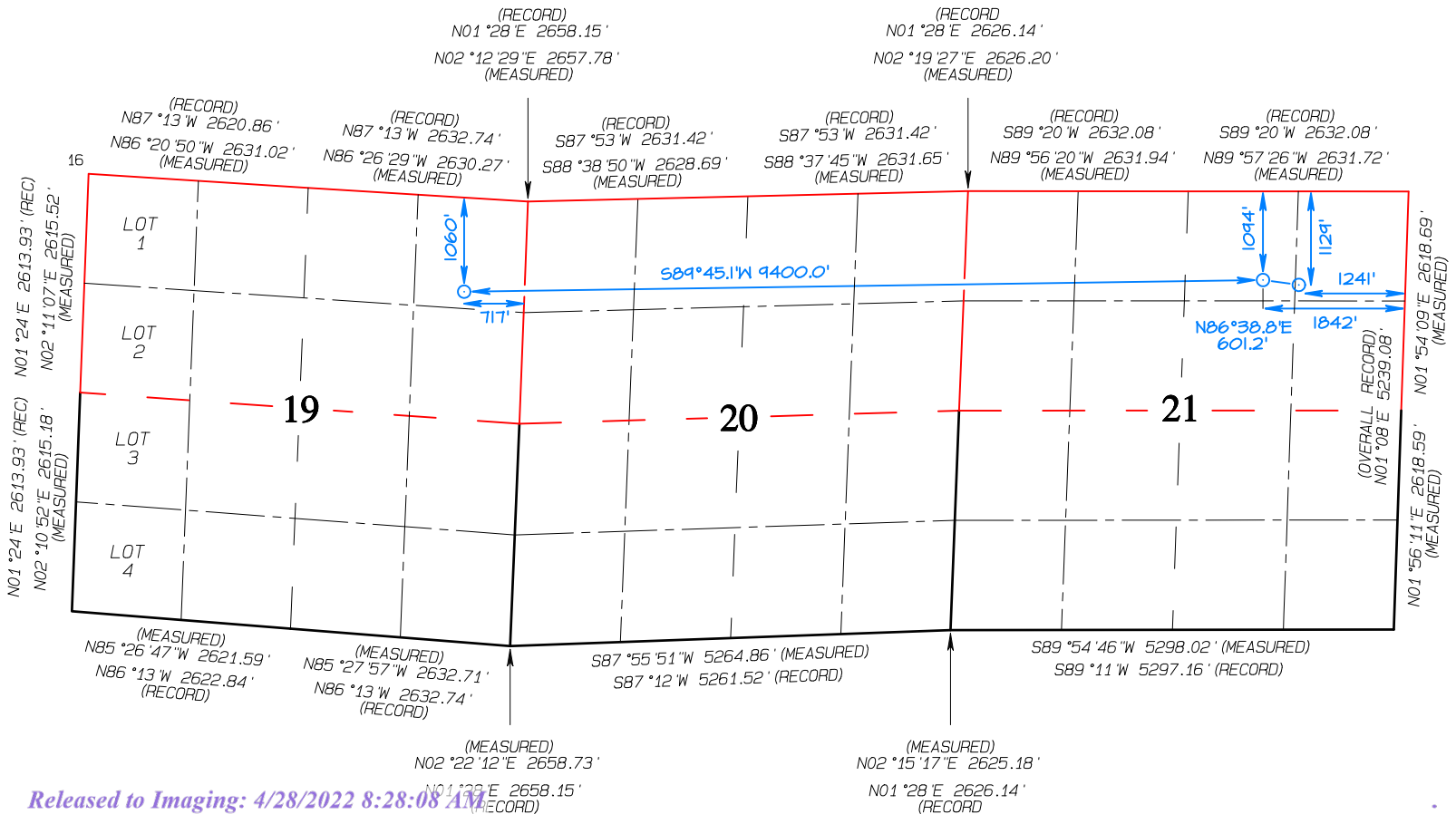
LAT: 36.563625 °N
LONG: 107.501823 °W
DATUM: NAD1983

POINT-OF-ENTRY
1094' FNL 1842' FEL
SECTION 21, T27N, R6W
LAT: 36.564060 °N
LONG: 107.469219 °W
DATUM: NAD1927

LAT: 36.564069 °N
LONG: 107.469823 °W
DATUM: NAD1983

SURFACE LOCATION
1129' FNL 1241' FEL
SECTION 21, T27N, R6W
LAT: 36.563984 °N
LONG: 107.467174 °W
DATUM: NAD1927

LAT: 36.563993 °N
LONG: 107.467778 °W
DATUM: NAD1983



Well: Rincon Unit 713H
Site: Rincon pad (613, 615, 713 & 715)
Project: Rio Arriba County, New Mexico NAD83 NM W
Design: rev0
Rig:

T G M

Azimuths to Grid North
True North: -0.22°
Magnetic North: 8.42°

Magnetic Field
Strength: 49449.2nT
Dip Angle: 63.07°
Date: 4/19/2022
Model: IGRF2020

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Depth Reference: RKB=6538+25 @ 6563.00ft
Surface location:

Northing	Easting	Latitude	Longitude
2024806.170	2830443.397	36.563993000	-107.467778000

Total Corr (M=>G): To convert a Magnetic Direction to a Grid Direction, Add 8.42°

Section Details

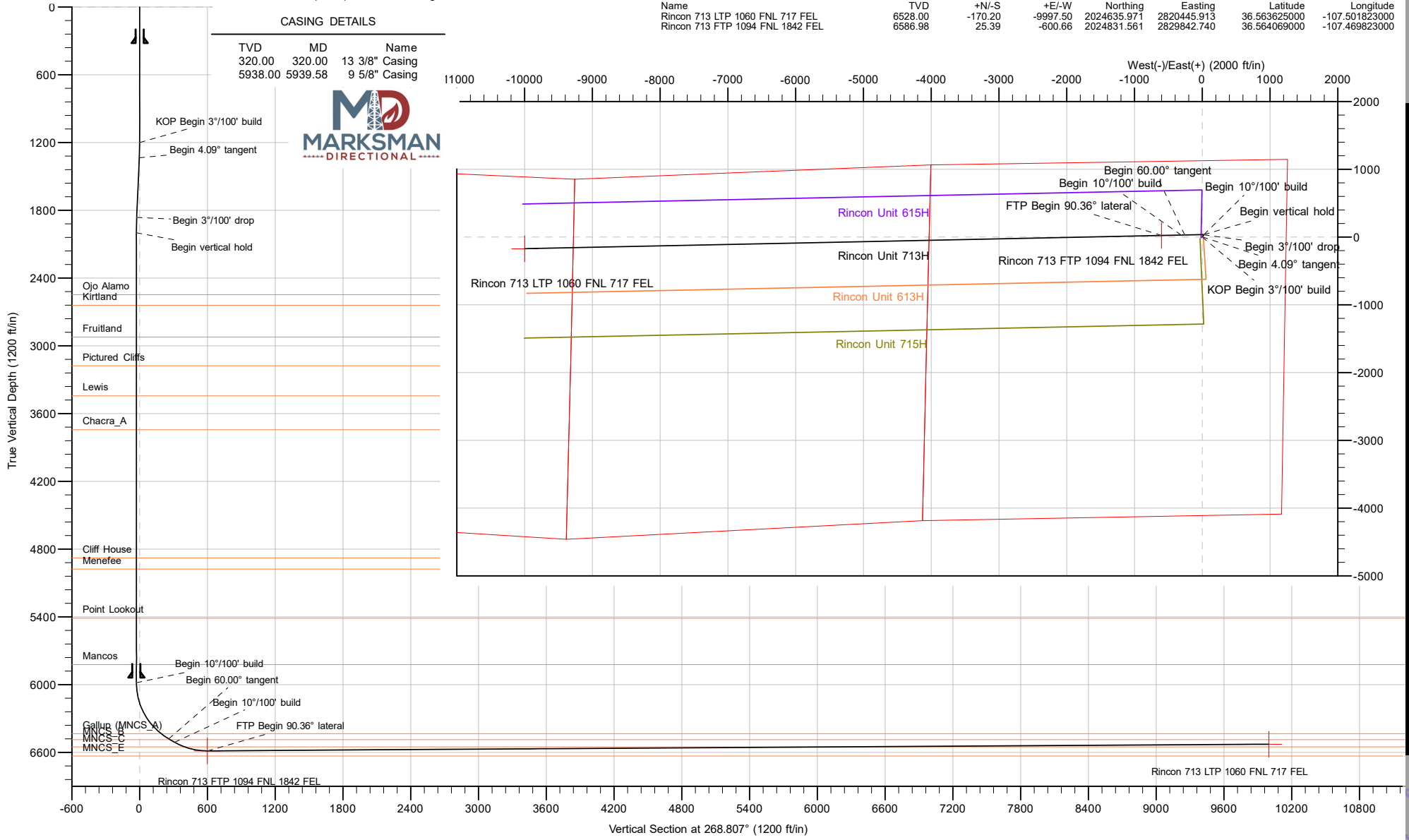
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
2	1200.00	0.00	0.000	1200.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3°/100' build
3	1336.24	4.09	35.768	1336.12	3.94	2.84	3.00	35.77	-2.92	Begin 4.09° tangent
4	1865.34	4.09	35.768	1863.88	34.54	24.88	0.00	0.00	-25.59	Begin 3°/100' drop
5	2001.58	0.00	359.057	2000.00	38.48	27.72	3.00	180.00	-28.52	Begin vertical hold
6	5985.61	0.00	359.057	5984.03	38.48	27.72	0.00	359.06	-28.52	Begin 10°/100' build
7	6585.61	60.00	268.807	6480.23	32.51	-258.70	10.00	268.81	257.96	Begin 60.00° tangent
8	6645.61	60.00	268.807	6510.23	31.43	-310.65	0.00	0.00	309.93	Begin 10°/100' build
9	6949.20	90.36	268.808	6586.98	25.39	-600.66	10.00	0.00	600.00	FTP Begin 90.36° lateral
10	16348.27	90.36	268.808	6528.00	-170.20	-9997.50	0.00	0.00	9998.88	PBHL/TD 16348.27 MD 6528.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Rincon 713 LTP 1060 FNL 717 FEL	6528.00	-170.20	-9997.50	2024635.971	2820445.913	36.563625000	-107.501823000
Rincon 713 FTP 1094 FNL 1842 FEL	6586.98	25.39	-600.66	2024831.561	2829842.740	36.564069000	-107.469823000

CASING DETAILS

TVD	MD	Name
320.00	320.00	13 3/8" Casing
5938.00	5939.58	9 5/8" Casing



Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project Rio Arriba County, New Mexico NAD83 NM W

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

Site Rincon pad (613, 615, 713 & 715)

Site Position:		**Northing:**	2,024,818.244 usft	**Latitude:**	36.564026000
From:	Lat/Long	**Easting:**	2,830,459.503 usft	**Longitude:**	-107.467723000
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "		

Well Rincon Unit 713H, Surf loc: 1129 FNL 1241 FEL Section 21-T27N-R06W

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,024,806.170 usft	**Latitude:**	36.563993000
	+E/-W	0.00 ft	**Easting:**	2,830,443.396 usft	**Longitude:**	-107.467778000
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,538.00 ft
Grid Convergence:		0.22 °				

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	4/19/2022	8.64	63.07	49,449.15725544

Design rev0

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	268.807

Plan Survey Tool Program **Date** 4/20/2022

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,347.82	rev0 (Original Hole)	MWD	
				OWSG MWD - Standard	

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Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.000	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,336.24	4.09	35.768	1,336.12	3.94	2.84	3.00	3.00	0.00	35.77	
1,865.34	4.09	35.768	1,863.88	34.54	24.88	0.00	0.00	0.00	0.00	
2,001.58	0.00	359.057	2,000.00	38.48	27.72	3.00	-3.00	0.00	180.00	
5,985.61	0.00	359.057	5,984.03	38.48	27.72	0.00	0.00	0.00	359.06	
6,585.61	60.00	268.807	6,480.23	32.51	-258.70	10.00	10.00	0.00	268.81	
6,645.61	60.00	268.807	6,510.23	31.43	-310.65	0.00	0.00	0.00	0.00	
6,949.20	90.36	268.808	6,586.98	25.39	-600.66	10.00	10.00	0.00	0.00	
16,348.27	90.36	268.808	6,528.00	-170.20	-9,997.50	0.00	0.00	0.00	0.00	Rincon 713 LTP 1060

Planning Report

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Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.000	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.000	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 3°/100' build									
1,300.00	3.00	35.768	1,299.95	2.12	1.53	-1.57	3.00	3.00	0.00
1,336.24	4.09	35.768	1,336.12	3.94	2.84	-2.92	3.00	3.00	0.00
Begin 4.09° tangent									
1,400.00	4.09	35.768	1,399.72	7.63	5.50	-5.65	0.00	0.00	0.00
1,500.00	4.09	35.768	1,499.47	13.41	9.66	-9.94	0.00	0.00	0.00
1,600.00	4.09	35.768	1,599.21	19.19	13.83	-14.22	0.00	0.00	0.00
1,700.00	4.09	35.768	1,698.96	24.98	17.99	-18.51	0.00	0.00	0.00
1,800.00	4.09	35.768	1,798.71	30.76	22.16	-22.79	0.00	0.00	0.00
1,865.34	4.09	35.768	1,863.88	34.54	24.88	-25.59	0.00	0.00	0.00
Begin 3°/100' drop									
1,900.00	3.05	35.768	1,898.47	36.29	26.14	-26.89	3.00	-3.00	0.00
2,001.58	0.00	0.000	2,000.00	38.48	27.72	-28.52	3.00	-3.00	0.00
Begin vertical hold									
2,100.00	0.00	0.000	2,098.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,200.00	0.00	0.000	2,198.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,300.00	0.00	0.000	2,298.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,400.00	0.00	0.000	2,398.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,500.00	0.00	0.000	2,498.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,549.58	0.00	0.000	2,548.00	38.48	27.72	-28.52	0.00	0.00	0.00
Ojo Alamo									
2,600.00	0.00	0.000	2,598.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,644.58	0.00	0.000	2,643.00	38.48	27.72	-28.52	0.00	0.00	0.00
Kirtland									
2,700.00	0.00	0.000	2,698.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,800.00	0.00	0.000	2,798.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,900.00	0.00	0.000	2,898.42	38.48	27.72	-28.52	0.00	0.00	0.00
2,924.58	0.00	0.000	2,923.00	38.48	27.72	-28.52	0.00	0.00	0.00
Fruitland									
3,000.00	0.00	0.000	2,998.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,100.00	0.00	0.000	3,098.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,179.58	0.00	0.000	3,178.00	38.48	27.72	-28.52	0.00	0.00	0.00
Pictured Cliffs									
3,200.00	0.00	0.000	3,198.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,300.00	0.00	0.000	3,298.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,400.00	0.00	0.000	3,398.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,444.58	0.00	0.000	3,443.00	38.48	27.72	-28.52	0.00	0.00	0.00
Lewis									
3,500.00	0.00	0.000	3,498.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,600.00	0.00	0.000	3,598.42	38.48	27.72	-28.52	0.00	0.00	0.00

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Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,700.00	0.00	0.000	3,698.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,744.58	0.00	0.000	3,743.00	38.48	27.72	-28.52	0.00	0.00	0.00
Chacra_A									
3,800.00	0.00	0.000	3,798.42	38.48	27.72	-28.52	0.00	0.00	0.00
3,900.00	0.00	0.000	3,898.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,000.00	0.00	0.000	3,998.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,100.00	0.00	0.000	4,098.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,200.00	0.00	0.000	4,198.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,300.00	0.00	0.000	4,298.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,400.00	0.00	0.000	4,398.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,500.00	0.00	0.000	4,498.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,600.00	0.00	0.000	4,598.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,700.00	0.00	0.000	4,698.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,800.00	0.00	0.000	4,798.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,879.58	0.00	0.000	4,878.00	38.48	27.72	-28.52	0.00	0.00	0.00
Cliff House									
4,900.00	0.00	0.000	4,898.42	38.48	27.72	-28.52	0.00	0.00	0.00
4,979.58	0.00	0.000	4,978.00	38.48	27.72	-28.52	0.00	0.00	0.00
Menefee									
5,000.00	0.00	0.000	4,998.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,100.00	0.00	0.000	5,098.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,200.00	0.00	0.000	5,198.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,300.00	0.00	0.000	5,298.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,400.00	0.00	0.000	5,398.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,414.58	0.00	0.000	5,413.00	38.48	27.72	-28.52	0.00	0.00	0.00
Point Lookout									
5,500.00	0.00	0.000	5,498.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,600.00	0.00	0.000	5,598.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,700.00	0.00	0.000	5,698.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,800.00	0.00	0.000	5,798.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,824.58	0.00	0.000	5,823.00	38.48	27.72	-28.52	0.00	0.00	0.00
Mancos									
5,900.00	0.00	0.000	5,898.42	38.48	27.72	-28.52	0.00	0.00	0.00
5,985.61	0.00	0.000	5,984.03	38.48	27.72	-28.52	0.00	0.00	0.00
Begin 10°/100' build									
6,000.00	1.44	268.807	5,998.42	38.48	27.54	-28.33	10.00	10.00	0.00
6,050.00	6.44	268.807	6,048.29	38.41	24.11	-24.90	10.00	10.00	0.00
6,100.00	11.44	268.807	6,097.66	38.24	16.34	-17.13	10.00	10.00	0.00
6,150.00	16.44	268.807	6,146.18	37.99	4.30	-5.09	10.00	10.00	0.00
6,200.00	21.44	268.807	6,193.46	37.65	-11.92	11.13	10.00	10.00	0.00
6,250.00	26.44	268.807	6,239.14	37.23	-32.19	31.41	10.00	10.00	0.00
6,300.00	31.44	268.807	6,282.88	36.73	-56.38	55.60	10.00	10.00	0.00
6,350.00	36.44	268.807	6,324.35	36.15	-84.28	83.51	10.00	10.00	0.00
6,400.00	41.44	268.807	6,363.23	35.49	-115.68	114.92	10.00	10.00	0.00
6,450.00	46.44	268.807	6,399.22	34.77	-150.36	149.60	10.00	10.00	0.00
6,500.00	51.44	268.807	6,432.05	33.99	-188.04	187.29	10.00	10.00	0.00
6,504.75	51.91	268.807	6,435.00	33.91	-191.77	191.02	10.00	10.00	0.00
Gallup (MNCS_A)									
6,550.00	56.44	268.807	6,461.48	33.14	-228.44	227.70	10.00	10.00	0.00
6,585.61	60.00	268.807	6,480.23	32.51	-258.70	257.96	10.00	10.00	0.00
Begin 60.00° tangent									
6,600.00	60.00	268.807	6,487.42	32.25	-271.16	270.43	0.00	0.00	0.00
6,601.15	60.00	268.807	6,488.00	32.23	-272.16	271.43	0.00	0.00	0.00

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**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)
MNCS_B									
6,645.61	60.00	268.807	6,510.23	31.43	-310.65	309.93	0.00	0.00	0.00
Begin 10°/100' build									
6,650.00	60.44	268.807	6,512.41	31.35	-314.46	313.74	10.00	10.00	0.00
6,700.00	65.44	268.807	6,535.15	30.43	-358.96	358.25	10.00	10.00	0.00
6,741.45	69.58	268.807	6,551.00	29.63	-397.25	396.54	10.00	10.00	0.00
MNCS_C									
6,750.00	70.44	268.807	6,553.92	29.46	-405.28	404.57	10.00	10.00	0.00
6,800.00	75.44	268.807	6,568.59	28.47	-453.05	452.36	10.00	10.00	0.00
6,850.00	80.44	268.807	6,579.03	27.45	-501.92	501.24	10.00	10.00	0.00
6,900.00	85.44	268.807	6,585.17	26.42	-551.52	550.85	10.00	10.00	0.00
6,949.20	90.36	268.808	6,586.98	25.39	-600.66	600.00	10.00	10.00	0.00
FTP Begin 90.36° lateral									
7,000.00	90.36	268.808	6,586.66	24.34	-651.44	650.80	0.00	0.00	0.00
7,100.00	90.36	268.808	6,586.03	22.26	-751.42	750.79	0.00	0.00	0.00
7,200.00	90.36	268.808	6,585.40	20.17	-851.40	850.79	0.00	0.00	0.00
7,300.00	90.36	268.808	6,584.78	18.09	-951.37	950.79	0.00	0.00	0.00
7,400.00	90.36	268.808	6,584.15	16.01	-1,051.35	1,050.79	0.00	0.00	0.00
7,500.00	90.36	268.808	6,583.52	13.93	-1,151.33	1,150.79	0.00	0.00	0.00
7,600.00	90.36	268.808	6,582.89	11.85	-1,251.30	1,250.78	0.00	0.00	0.00
7,700.00	90.36	268.808	6,582.27	9.77	-1,351.28	1,350.78	0.00	0.00	0.00
7,800.00	90.36	268.808	6,581.64	7.69	-1,451.26	1,450.78	0.00	0.00	0.00
7,900.00	90.36	268.808	6,581.01	5.61	-1,551.23	1,550.78	0.00	0.00	0.00
8,000.00	90.36	268.808	6,580.38	3.53	-1,651.21	1,650.78	0.00	0.00	0.00
8,100.00	90.36	268.808	6,579.76	1.45	-1,751.18	1,750.77	0.00	0.00	0.00
8,200.00	90.36	268.808	6,579.13	-0.64	-1,851.16	1,850.77	0.00	0.00	0.00
8,300.00	90.36	268.808	6,578.50	-2.72	-1,951.14	1,950.77	0.00	0.00	0.00
8,400.00	90.36	268.808	6,577.87	-4.80	-2,051.11	2,050.77	0.00	0.00	0.00
8,500.00	90.36	268.808	6,577.25	-6.88	-2,151.09	2,150.77	0.00	0.00	0.00
8,600.00	90.36	268.808	6,576.62	-8.96	-2,251.07	2,250.76	0.00	0.00	0.00
8,700.00	90.36	268.808	6,575.99	-11.04	-2,351.04	2,350.76	0.00	0.00	0.00
8,800.00	90.36	268.808	6,575.36	-13.12	-2,451.02	2,450.76	0.00	0.00	0.00
8,900.00	90.36	268.808	6,574.74	-15.20	-2,551.00	2,550.76	0.00	0.00	0.00
9,000.00	90.36	268.808	6,574.11	-17.28	-2,650.97	2,650.76	0.00	0.00	0.00
9,100.00	90.36	268.808	6,573.48	-19.36	-2,750.95	2,750.75	0.00	0.00	0.00
9,200.00	90.36	268.808	6,572.85	-21.45	-2,850.92	2,850.75	0.00	0.00	0.00
9,300.00	90.36	268.808	6,572.23	-23.53	-2,950.90	2,950.75	0.00	0.00	0.00
9,400.00	90.36	268.808	6,571.60	-25.61	-3,050.88	3,050.75	0.00	0.00	0.00
9,500.00	90.36	268.808	6,570.97	-27.69	-3,150.85	3,150.75	0.00	0.00	0.00
9,600.00	90.36	268.808	6,570.34	-29.77	-3,250.83	3,250.75	0.00	0.00	0.00
9,700.00	90.36	268.808	6,569.72	-31.85	-3,350.81	3,350.74	0.00	0.00	0.00
9,800.00	90.36	268.808	6,569.09	-33.93	-3,450.78	3,450.74	0.00	0.00	0.00
9,900.00	90.36	268.808	6,568.46	-36.01	-3,550.76	3,550.74	0.00	0.00	0.00
10,000.00	90.36	268.808	6,567.83	-38.09	-3,650.74	3,650.74	0.00	0.00	0.00
10,100.00	90.36	268.808	6,567.21	-40.17	-3,750.71	3,750.74	0.00	0.00	0.00
10,200.00	90.36	268.808	6,566.58	-42.26	-3,850.69	3,850.73	0.00	0.00	0.00
10,300.00	90.36	268.808	6,565.95	-44.34	-3,950.66	3,950.73	0.00	0.00	0.00
10,400.00	90.36	268.808	6,565.32	-46.42	-4,050.64	4,050.73	0.00	0.00	0.00
10,500.00	90.36	268.808	6,564.70	-48.50	-4,150.62	4,150.73	0.00	0.00	0.00
10,600.00	90.36	268.808	6,564.07	-50.58	-4,250.59	4,250.73	0.00	0.00	0.00
10,700.00	90.36	268.808	6,563.44	-52.66	-4,350.57	4,350.72	0.00	0.00	0.00
10,800.00	90.36	268.808	6,562.81	-54.74	-4,450.55	4,450.72	0.00	0.00	0.00
10,900.00	90.36	268.808	6,562.19	-56.82	-4,550.52	4,550.72	0.00	0.00	0.00

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**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)
11,000.00	90.36	268.808	6,561.56	-58.90	-4,650.50	4,650.72	0.00	0.00	0.00
11,100.00	90.36	268.808	6,560.93	-60.98	-4,750.48	4,750.72	0.00	0.00	0.00
11,200.00	90.36	268.808	6,560.30	-63.07	-4,850.45	4,850.71	0.00	0.00	0.00
11,300.00	90.36	268.808	6,559.68	-65.15	-4,950.43	4,950.71	0.00	0.00	0.00
11,400.00	90.36	268.808	6,559.05	-67.23	-5,050.41	5,050.71	0.00	0.00	0.00
11,500.00	90.36	268.808	6,558.42	-69.31	-5,150.38	5,150.71	0.00	0.00	0.00
11,600.00	90.36	268.808	6,557.79	-71.39	-5,250.36	5,250.71	0.00	0.00	0.00
11,700.00	90.36	268.808	6,557.17	-73.47	-5,350.33	5,350.70	0.00	0.00	0.00
11,800.00	90.36	268.808	6,556.54	-75.55	-5,450.31	5,450.70	0.00	0.00	0.00
11,900.00	90.36	268.808	6,555.91	-77.63	-5,550.29	5,550.70	0.00	0.00	0.00
12,000.00	90.36	268.808	6,555.28	-79.71	-5,650.26	5,650.70	0.00	0.00	0.00
12,100.00	90.36	268.808	6,554.66	-81.79	-5,750.24	5,750.70	0.00	0.00	0.00
12,200.00	90.36	268.808	6,554.03	-83.87	-5,850.22	5,850.69	0.00	0.00	0.00
12,300.00	90.36	268.808	6,553.40	-85.96	-5,950.19	5,950.69	0.00	0.00	0.00
12,400.00	90.36	268.808	6,552.77	-88.04	-6,050.17	6,050.69	0.00	0.00	0.00
12,500.00	90.36	268.808	6,552.15	-90.12	-6,150.15	6,150.69	0.00	0.00	0.00
12,600.00	90.36	268.808	6,551.52	-92.20	-6,250.12	6,250.69	0.00	0.00	0.00
12,700.00	90.36	268.808	6,550.89	-94.28	-6,350.10	6,350.68	0.00	0.00	0.00
12,800.00	90.36	268.808	6,550.26	-96.36	-6,450.07	6,450.68	0.00	0.00	0.00
12,900.00	90.36	268.808	6,549.64	-98.44	-6,550.05	6,550.68	0.00	0.00	0.00
13,000.00	90.36	268.808	6,549.01	-100.52	-6,650.03	6,650.68	0.00	0.00	0.00
13,100.00	90.36	268.808	6,548.38	-102.60	-6,750.00	6,750.68	0.00	0.00	0.00
13,200.00	90.36	268.808	6,547.75	-104.68	-6,849.98	6,850.67	0.00	0.00	0.00
13,300.00	90.36	268.808	6,547.13	-106.77	-6,949.96	6,950.67	0.00	0.00	0.00
13,400.00	90.36	268.808	6,546.50	-108.85	-7,049.93	7,050.67	0.00	0.00	0.00
13,500.00	90.36	268.808	6,545.87	-110.93	-7,149.91	7,150.67	0.00	0.00	0.00
13,600.00	90.36	268.808	6,545.24	-113.01	-7,249.89	7,250.67	0.00	0.00	0.00
13,700.00	90.36	268.808	6,544.62	-115.09	-7,349.86	7,350.66	0.00	0.00	0.00
13,800.00	90.36	268.808	6,543.99	-117.17	-7,449.84	7,450.66	0.00	0.00	0.00
13,900.00	90.36	268.808	6,543.36	-119.25	-7,549.81	7,550.66	0.00	0.00	0.00
14,000.00	90.36	268.808	6,542.73	-121.33	-7,649.79	7,650.66	0.00	0.00	0.00
14,100.00	90.36	268.808	6,542.11	-123.41	-7,749.77	7,750.66	0.00	0.00	0.00
14,200.00	90.36	268.808	6,541.48	-125.49	-7,849.74	7,850.65	0.00	0.00	0.00
14,300.00	90.36	268.808	6,540.85	-127.58	-7,949.72	7,950.65	0.00	0.00	0.00
14,400.00	90.36	268.808	6,540.22	-129.66	-8,049.70	8,050.65	0.00	0.00	0.00
14,500.00	90.36	268.808	6,539.60	-131.74	-8,149.67	8,150.65	0.00	0.00	0.00
14,600.00	90.36	268.808	6,538.97	-133.82	-8,249.65	8,250.65	0.00	0.00	0.00
14,700.00	90.36	268.808	6,538.34	-135.90	-8,349.63	8,350.64	0.00	0.00	0.00
14,800.00	90.36	268.808	6,537.72	-137.98	-8,449.60	8,450.64	0.00	0.00	0.00
14,900.00	90.36	268.808	6,537.09	-140.06	-8,549.58	8,550.64	0.00	0.00	0.00
15,000.00	90.36	268.808	6,536.46	-142.14	-8,649.55	8,650.64	0.00	0.00	0.00
15,100.00	90.36	268.808	6,535.83	-144.22	-8,749.53	8,750.64	0.00	0.00	0.00
15,200.00	90.36	268.808	6,535.21	-146.30	-8,849.51	8,850.63	0.00	0.00	0.00
15,300.00	90.36	268.808	6,534.58	-148.39	-8,949.48	8,950.63	0.00	0.00	0.00
15,400.00	90.36	268.808	6,533.95	-150.47	-9,049.46	9,050.63	0.00	0.00	0.00
15,500.00	90.36	268.808	6,533.32	-152.55	-9,149.44	9,150.63	0.00	0.00	0.00
15,600.00	90.36	268.808	6,532.70	-154.63	-9,249.41	9,250.63	0.00	0.00	0.00
15,700.00	90.36	268.808	6,532.07	-156.71	-9,349.39	9,350.63	0.00	0.00	0.00
15,800.00	90.36	268.808	6,531.44	-158.79	-9,449.37	9,450.62	0.00	0.00	0.00
15,900.00	90.36	268.808	6,530.81	-160.87	-9,549.34	9,550.62	0.00	0.00	0.00
16,000.00	90.36	268.808	6,530.19	-162.95	-9,649.32	9,650.62	0.00	0.00	0.00
16,100.00	90.36	268.808	6,529.56	-165.03	-9,749.29	9,750.62	0.00	0.00	0.00
16,200.00	90.36	268.808	6,528.93	-167.11	-9,849.27	9,850.62	0.00	0.00	0.00
16,300.00	90.36	268.808	6,528.30	-169.19	-9,949.25	9,950.61	0.00	0.00	0.00

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
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Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**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)
16,348.27	90.36	268.808	6,528.00	-170.20	-9,997.50	9,998.88	0.00	0.00	0.00
PBHL/TD 16348.27 MD 6528.00 TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Rincon 713 LTP 1060 FI - plan hits target center - Point	0.00	2.190	6,528.00	-170.20	-9,997.50	2,024,635.970	2,820,445.913	36.563625000	-107.501823000
Rincon 713 FTP 1094 FI - plan hits target center - Point	0.00	2.190	6,586.98	25.39	-600.66	2,024,831.561	2,829,842.739	36.564069000	-107.469823000

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
320.00	320.00	13 3/8" Casing	13-5/8	17-1/2
5,939.58	5,938.00	9 5/8" Casing	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,549.58	2,548.00	Ojo Alamo			
2,644.58	2,643.00	Kirtland			
2,924.58	2,923.00	Fruitland			
3,179.58	3,178.00	Pictured Cliffs			
3,444.58	3,443.00	Lewis			
3,744.58	3,743.00	Chacra_A			
4,879.58	4,878.00	Cliff House			
4,979.58	4,978.00	Menefee			
5,414.58	5,413.00	Point Lookout			
5,824.58	5,823.00	Mancos			
6,504.75	6,435.00	Gallup (MNCS_A)			
6,601.15	6,488.00	MNCS_B			
6,741.45	6,551.00	MNCS_C			

Planning Report

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,200.00	1,200.00	0.00	0.00	KOP Begin 3°/100' build
1,336.24	1,336.12	3.94	2.84	Begin 4.09° tangent
1,865.34	1,863.88	34.54	24.88	Begin 3°/100' drop
2,001.58	2,000.00	38.48	27.72	Begin vertical hold
5,985.61	5,984.03	38.48	27.72	Begin 10°/100' build
6,585.61	6,480.23	32.51	-258.70	Begin 60.00° tangent
6,645.61	6,510.23	31.43	-310.65	Begin 10°/100' build
6,949.20	6,586.98	25.39	-600.66	FTP Begin 90.36° lateral
16,348.27	6,528.00	-170.20	-9,997.50	PBHL/TD 16348.27 MD 6528.00 TVD

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Project Rio Arriba County, New Mexico NAD83 NM W

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

Site Rincon pad (613, 615, 713 & 715)

Site Position:		**Northing:**	2,024,818.244 usft	**Latitude:**	36.564026000
From:	Lat/Long	**Easting:**	2,830,459.503 usft	**Longitude:**	-107.467723000
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "		

Well Rincon Unit 713H, Surf loc: 1129 FNL 1241 FEL Section 21-T27N-R06W

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,024,806.170 usft	**Latitude:**	36.563993000
	+E/-W	0.00 ft	**Easting:**	2,830,443.396 usft	**Longitude:**	-107.467778000
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,538.00 ft
Grid Convergence:		0.22 °				

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	4/19/2022	8.64	63.07	49,449.15725544

Design rev0

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	268.807

Plan Survey Tool Program **Date** 4/20/2022

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,347.82	rev0 (Original Hole)	MWD OWSG MWD - Standard	

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.000	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,336.24	4.09	35.768	1,336.12	3.94	2.84	3.00	3.00	0.00	35.77	
1,865.34	4.09	35.768	1,863.88	34.54	24.88	0.00	0.00	0.00	0.00	
2,001.58	0.00	359.057	2,000.00	38.48	27.72	3.00	-3.00	0.00	180.00	
5,985.61	0.00	359.057	5,984.03	38.48	27.72	0.00	0.00	0.00	359.06	
6,585.61	60.00	268.807	6,480.23	32.51	-258.70	10.00	10.00	0.00	268.81	
6,645.61	60.00	268.807	6,510.23	31.43	-310.65	0.00	0.00	0.00	0.00	
6,949.20	90.36	268.808	6,586.98	25.39	-600.66	10.00	10.00	0.00	0.00	
16,348.27	90.36	268.808	6,528.00	-170.20	-9,997.50	0.00	0.00	0.00	0.00	Rincon 713 LTP 1060

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.000	0.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
100.00	0.00	0.000	100.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
200.00	0.00	0.000	200.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
300.00	0.00	0.000	300.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
400.00	0.00	0.000	400.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
500.00	0.00	0.000	500.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
600.00	0.00	0.000	600.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
700.00	0.00	0.000	700.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
800.00	0.00	0.000	800.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
900.00	0.00	0.000	900.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
1,000.00	0.00	0.000	1,000.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
1,100.00	0.00	0.000	1,100.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
1,200.00	0.00	0.000	1,200.00	0.00	0.00	2,024,806.170	2,830,443.396	36.563993000	-107.467778000
KOP Begin 3°/100' build									
1,300.00	3.00	35.768	1,299.95	2.12	1.53	2,024,808.293	2,830,444.926	36.563998818	-107.467772763
1,336.24	4.09	35.768	1,336.12	3.94	2.84	2,024,810.111	2,830,446.235	36.564003796	-107.467768282
Begin 4.09° tangent									
1,400.00	4.09	35.768	1,399.72	7.63	5.50	2,024,813.798	2,830,448.892	36.564013897	-107.467759189
1,500.00	4.09	35.768	1,499.47	13.41	9.66	2,024,819.581	2,830,453.058	36.564029739	-107.467744929
1,600.00	4.09	35.768	1,599.21	19.19	13.83	2,024,825.364	2,830,457.224	36.564045581	-107.467730669
1,700.00	4.09	35.768	1,698.96	24.98	17.99	2,024,831.147	2,830,461.389	36.564061423	-107.467716408
1,800.00	4.09	35.768	1,798.71	30.76	22.16	2,024,836.930	2,830,465.555	36.564077265	-107.467702148
1,865.34	4.09	35.768	1,863.88	34.54	24.88	2,024,840.709	2,830,468.277	36.564087616	-107.467692830
Begin 3°/100' drop									
1,900.00	3.05	35.768	1,898.47	36.29	26.14	2,024,842.459	2,830,469.538	36.564092409	-107.467688515
2,001.58	0.00	0.000	2,000.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Begin vertical hold									
2,100.00	0.00	0.000	2,098.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,200.00	0.00	0.000	2,198.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,300.00	0.00	0.000	2,298.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,400.00	0.00	0.000	2,398.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,500.00	0.00	0.000	2,498.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,549.58	0.00	0.000	2,548.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Ojo Alamo									
2,600.00	0.00	0.000	2,598.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,644.58	0.00	0.000	2,643.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Kirtland									
2,700.00	0.00	0.000	2,698.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,800.00	0.00	0.000	2,798.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,900.00	0.00	0.000	2,898.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
2,924.58	0.00	0.000	2,923.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Fruitland									
3,000.00	0.00	0.000	2,998.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,100.00	0.00	0.000	3,098.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,179.58	0.00	0.000	3,178.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Pictured Cliffs									
3,200.00	0.00	0.000	3,198.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,300.00	0.00	0.000	3,298.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,400.00	0.00	0.000	3,398.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,444.58	0.00	0.000	3,443.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Lewis									
3,500.00	0.00	0.000	3,498.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,600.00	0.00	0.000	3,598.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,700.00	0.00	0.000	3,698.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,744.58	0.00	0.000	3,743.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Chacra_A									
3,800.00	0.00	0.000	3,798.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
3,900.00	0.00	0.000	3,898.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,000.00	0.00	0.000	3,998.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,100.00	0.00	0.000	4,098.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,200.00	0.00	0.000	4,198.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,300.00	0.00	0.000	4,298.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,400.00	0.00	0.000	4,398.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,500.00	0.00	0.000	4,498.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,600.00	0.00	0.000	4,598.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,700.00	0.00	0.000	4,698.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,800.00	0.00	0.000	4,798.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,879.58	0.00	0.000	4,878.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Cliff House									
4,900.00	0.00	0.000	4,898.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
4,979.58	0.00	0.000	4,978.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Menefee									
5,000.00	0.00	0.000	4,998.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,100.00	0.00	0.000	5,098.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,200.00	0.00	0.000	5,198.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,300.00	0.00	0.000	5,298.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,400.00	0.00	0.000	5,398.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,414.58	0.00	0.000	5,413.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Point Lookout									
5,500.00	0.00	0.000	5,498.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,600.00	0.00	0.000	5,598.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,700.00	0.00	0.000	5,698.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,800.00	0.00	0.000	5,798.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,824.58	0.00	0.000	5,823.00	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Mancos									
5,900.00	0.00	0.000	5,898.42	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
5,985.61	0.00	0.000	5,984.03	38.48	27.72	2,024,844.650	2,830,471.116	36.564098412	-107.467683112
Begin 10°/100' build									
6,000.00	1.44	268.807	5,998.42	38.48	27.54	2,024,844.646	2,830,470.936	36.564098403	-107.467683727
6,050.00	6.44	268.807	6,048.29	38.41	24.11	2,024,844.575	2,830,467.502	36.564098243	-107.467695419
6,100.00	11.44	268.807	6,097.66	38.24	16.34	2,024,844.413	2,830,459.737	36.564097879	-107.467721863
6,150.00	16.44	268.807	6,146.18	37.99	4.30	2,024,844.162	2,830,447.699	36.564097316	-107.467762858
6,200.00	21.44	268.807	6,193.46	37.65	-11.92	2,024,843.824	2,830,431.479	36.564096557	-107.467818093
6,250.00	26.44	268.807	6,239.14	37.23	-32.19	2,024,843.402	2,830,411.202	36.564095609	-107.467887146
6,300.00	31.44	268.807	6,282.88	36.73	-56.38	2,024,842.898	2,830,387.021	36.564094477	-107.467969494
6,350.00	36.44	268.807	6,324.35	36.15	-84.28	2,024,842.317	2,830,359.120	36.564093172	-107.468064508
6,400.00	41.44	268.807	6,363.23	35.49	-115.68	2,024,841.663	2,830,327.712	36.564091703	-107.468171465
6,450.00	46.44	268.807	6,399.22	34.77	-150.36	2,024,840.940	2,830,293.036	36.564090080	-107.468289552
6,500.00	51.44	268.807	6,432.05	33.99	-188.04	2,024,840.155	2,830,255.355	36.564088317	-107.468417870
6,504.75	51.91	268.807	6,435.00	33.91	-191.77	2,024,840.078	2,830,251.628	36.564088142	-107.468430562
Gallup (MNCS_A)									
6,550.00	56.44	268.807	6,461.48	33.14	-228.44	2,024,839.314	2,830,214.957	36.564086426	-107.468555443
6,585.61	60.00	268.807	6,480.23	32.51	-258.70	2,024,838.684	2,830,184.700	36.564085010	-107.468658480
Begin 60.00° tangent									
6,600.00	60.00	268.807	6,487.42	32.25	-271.16	2,024,838.424	2,830,172.238	36.564084427	-107.468700919

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,601.15	60.00	268.807	6,488.00	32.23	-272.16	2,024,838.403	2,830,171.238	36.564084380	-107.468704324
MNCS_B									
6,645.61	60.00	268.807	6,510.23	31.43	-310.65	2,024,837.601	2,830,132.750	36.564082578	-107.468835392
Begin 10°/100' build									
6,650.00	60.44	268.807	6,512.41	31.35	-314.46	2,024,837.522	2,830,128.938	36.564082400	-107.468848374
6,700.00	65.44	268.807	6,535.15	30.43	-358.96	2,024,836.595	2,830,084.435	36.564080317	-107.468999924
6,741.45	69.58	268.807	6,551.00	29.63	-397.25	2,024,835.798	2,830,046.150	36.564078525	-107.469130303
MNCS_C									
6,750.00	70.44	268.807	6,553.92	29.46	-405.28	2,024,835.630	2,830,038.121	36.564078149	-107.469157644
6,800.00	75.44	268.807	6,568.59	28.47	-453.05	2,024,834.636	2,829,990.347	36.564075913	-107.469320335
6,850.00	80.44	268.807	6,579.03	27.45	-501.92	2,024,833.618	2,829,941.477	36.564073626	-107.469486759
6,900.00	85.44	268.807	6,585.17	26.42	-551.52	2,024,832.586	2,829,891.882	36.564071305	-107.469655648
6,949.20	90.36	268.808	6,586.98	25.39	-600.66	2,024,831.563	2,829,842.739	36.564069006	-107.469823000
FTP Begin 90.36° lateral									
7,000.00	90.36	268.808	6,586.66	24.34	-651.44	2,024,830.506	2,829,791.953	36.564066629	-107.469995948
7,100.00	90.36	268.808	6,586.03	22.26	-751.42	2,024,828.425	2,829,691.977	36.564061950	-107.470336409
7,200.00	90.36	268.808	6,585.40	20.17	-851.40	2,024,826.344	2,829,592.001	36.564057270	-107.470676870
7,300.00	90.36	268.808	6,584.78	18.09	-951.37	2,024,824.263	2,829,492.025	36.564052588	-107.471017331
7,400.00	90.36	268.808	6,584.15	16.01	-1,051.35	2,024,822.182	2,829,392.049	36.564047906	-107.471357792
7,500.00	90.36	268.808	6,583.52	13.93	-1,151.33	2,024,820.101	2,829,292.073	36.564043223	-107.471698251
7,600.00	90.36	268.808	6,582.89	11.85	-1,251.30	2,024,818.020	2,829,192.096	36.564038539	-107.472038712
7,700.00	90.36	268.808	6,582.27	9.77	-1,351.28	2,024,815.939	2,829,092.120	36.564033854	-107.472379173
7,800.00	90.36	268.808	6,581.64	7.69	-1,451.26	2,024,813.858	2,828,992.144	36.564029168	-107.472719634
7,900.00	90.36	268.808	6,581.01	5.61	-1,551.23	2,024,811.777	2,828,892.168	36.564024481	-107.473060094
8,000.00	90.36	268.808	6,580.38	3.53	-1,651.21	2,024,809.696	2,828,792.192	36.564019793	-107.473400555
8,100.00	90.36	268.808	6,579.76	1.45	-1,751.18	2,024,807.615	2,828,692.216	36.564015104	-107.473741015
8,200.00	90.36	268.808	6,579.13	-0.64	-1,851.16	2,024,805.534	2,828,592.239	36.564010414	-107.474081476
8,300.00	90.36	268.808	6,578.50	-2.72	-1,951.14	2,024,803.453	2,828,492.263	36.564005723	-107.474421936
8,400.00	90.36	268.808	6,577.87	-4.80	-2,051.11	2,024,801.372	2,828,392.287	36.564001032	-107.474762397
8,500.00	90.36	268.808	6,577.25	-6.88	-2,151.09	2,024,799.291	2,828,292.311	36.563996339	-107.475102857
8,600.00	90.36	268.808	6,576.62	-8.96	-2,251.07	2,024,797.210	2,828,192.335	36.563991645	-107.475443318
8,700.00	90.36	268.808	6,575.99	-11.04	-2,351.04	2,024,795.129	2,828,092.358	36.563986950	-107.475783778
8,800.00	90.36	268.808	6,575.36	-13.12	-2,451.02	2,024,793.048	2,827,992.382	36.563982254	-107.476124239
8,900.00	90.36	268.808	6,574.74	-15.20	-2,551.00	2,024,790.967	2,827,892.406	36.563977558	-107.476464699
9,000.00	90.36	268.808	6,574.11	-17.28	-2,650.97	2,024,788.886	2,827,792.430	36.563972860	-107.476805159
9,100.00	90.36	268.808	6,573.48	-19.36	-2,750.95	2,024,786.805	2,827,692.454	36.563968161	-107.477145619
9,200.00	90.36	268.808	6,572.85	-21.45	-2,850.92	2,024,784.724	2,827,592.478	36.563963462	-107.477486080
9,300.00	90.36	268.808	6,572.23	-23.53	-2,950.90	2,024,782.643	2,827,492.501	36.563958761	-107.477826540
9,400.00	90.36	268.808	6,571.60	-25.61	-3,050.88	2,024,780.562	2,827,392.525	36.563954060	-107.478167000
9,500.00	90.36	268.808	6,570.97	-27.69	-3,150.85	2,024,778.481	2,827,292.549	36.563949357	-107.478507460
9,600.00	90.36	268.808	6,570.34	-29.77	-3,250.83	2,024,776.400	2,827,192.573	36.563944653	-107.478847920
9,700.00	90.36	268.808	6,569.72	-31.85	-3,350.81	2,024,774.319	2,827,092.597	36.563939949	-107.479188380
9,800.00	90.36	268.808	6,569.09	-33.93	-3,450.78	2,024,772.238	2,826,992.621	36.563935243	-107.479528840
9,900.00	90.36	268.808	6,568.46	-36.01	-3,550.76	2,024,770.157	2,826,892.644	36.563930537	-107.479869300
10,000.00	90.36	268.808	6,567.83	-38.09	-3,650.74	2,024,768.076	2,826,792.668	36.563925830	-107.480209760
10,100.00	90.36	268.808	6,567.21	-40.17	-3,750.71	2,024,765.995	2,826,692.692	36.563921121	-107.480550220
10,200.00	90.36	268.808	6,566.58	-42.26	-3,850.69	2,024,763.914	2,826,592.716	36.563916412	-107.480890680
10,300.00	90.36	268.808	6,565.95	-44.34	-3,950.66	2,024,761.833	2,826,492.740	36.563911702	-107.481231140
10,400.00	90.36	268.808	6,565.32	-46.42	-4,050.64	2,024,759.752	2,826,392.764	36.563906990	-107.481571600
10,500.00	90.36	268.808	6,564.70	-48.50	-4,150.62	2,024,757.671	2,826,292.787	36.563902278	-107.481912059
10,600.00	90.36	268.808	6,564.07	-50.58	-4,250.59	2,024,755.590	2,826,192.811	36.563897565	-107.482252519
10,700.00	90.36	268.808	6,563.44	-52.66	-4,350.57	2,024,753.510	2,826,092.835	36.563892851	-107.482592979
10,800.00	90.36	268.808	6,562.81	-54.74	-4,450.55	2,024,751.429	2,825,992.859	36.563888135	-107.482933439
10,900.00	90.36	268.808	6,562.19	-56.82	-4,550.52	2,024,749.348	2,825,892.883	36.563883419	-107.483273898

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**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
11,000.00	90.36	268.808	6,561.56	-58.90	-4,650.50	2,024,747.267	2,825,792.907	36.563878702	-107.483614358
11,100.00	90.36	268.808	6,560.93	-60.98	-4,750.48	2,024,745.186	2,825,692.930	36.563873984	-107.483954817
11,200.00	90.36	268.808	6,560.30	-63.07	-4,850.45	2,024,743.105	2,825,592.954	36.563869265	-107.484295277
11,300.00	90.36	268.808	6,559.68	-65.15	-4,950.43	2,024,741.024	2,825,492.978	36.563864545	-107.484635737
11,400.00	90.36	268.808	6,559.05	-67.23	-5,050.41	2,024,738.943	2,825,393.002	36.563859824	-107.484976196
11,500.00	90.36	268.808	6,558.42	-69.31	-5,150.38	2,024,736.862	2,825,293.026	36.563855102	-107.485316656
11,600.00	90.36	268.808	6,557.79	-71.39	-5,250.36	2,024,734.781	2,825,193.050	36.563850379	-107.485657115
11,700.00	90.36	268.808	6,557.17	-73.47	-5,350.33	2,024,732.700	2,825,093.073	36.563845655	-107.485997574
11,800.00	90.36	268.808	6,556.54	-75.55	-5,450.31	2,024,730.619	2,824,993.097	36.563840930	-107.486338034
11,900.00	90.36	268.808	6,555.91	-77.63	-5,550.29	2,024,728.538	2,824,893.121	36.563836204	-107.486678493
12,000.00	90.36	268.808	6,555.28	-79.71	-5,650.26	2,024,726.457	2,824,793.145	36.563831477	-107.487018952
12,100.00	90.36	268.808	6,554.66	-81.79	-5,750.24	2,024,724.376	2,824,693.169	36.563826749	-107.487359412
12,200.00	90.36	268.808	6,554.03	-83.87	-5,850.22	2,024,722.295	2,824,593.192	36.563822021	-107.487699871
12,300.00	90.36	268.808	6,553.40	-85.96	-5,950.19	2,024,720.214	2,824,493.216	36.563817291	-107.488040330
12,400.00	90.36	268.808	6,552.77	-88.04	-6,050.17	2,024,718.133	2,824,393.240	36.563812560	-107.488380789
12,500.00	90.36	268.808	6,552.15	-90.12	-6,150.15	2,024,716.052	2,824,293.264	36.563807828	-107.488721248
12,600.00	90.36	268.808	6,551.52	-92.20	-6,250.12	2,024,713.971	2,824,193.288	36.563803096	-107.489061707
12,700.00	90.36	268.808	6,550.89	-94.28	-6,350.10	2,024,711.890	2,824,093.312	36.563798362	-107.489402166
12,800.00	90.36	268.808	6,550.26	-96.36	-6,450.07	2,024,709.809	2,823,993.335	36.563793627	-107.489742625
12,900.00	90.36	268.808	6,549.64	-98.44	-6,550.05	2,024,707.728	2,823,893.359	36.563788892	-107.490083084
13,000.00	90.36	268.808	6,549.01	-100.52	-6,650.03	2,024,705.647	2,823,793.383	36.563784155	-107.490423543
13,100.00	90.36	268.808	6,548.38	-102.60	-6,750.00	2,024,703.566	2,823,693.407	36.563779417	-107.490764002
13,200.00	90.36	268.808	6,547.75	-104.68	-6,849.98	2,024,701.485	2,823,593.431	36.563774679	-107.491104461
13,300.00	90.36	268.808	6,547.13	-106.77	-6,949.96	2,024,699.404	2,823,493.455	36.563769939	-107.491444920
13,400.00	90.36	268.808	6,546.50	-108.85	-7,049.93	2,024,697.323	2,823,393.478	36.563765199	-107.491785379
13,500.00	90.36	268.808	6,545.87	-110.93	-7,149.91	2,024,695.242	2,823,293.502	36.563760458	-107.492125838
13,600.00	90.36	268.808	6,545.24	-113.01	-7,249.89	2,024,693.161	2,823,193.526	36.563755715	-107.492466296
13,700.00	90.36	268.808	6,544.62	-115.09	-7,349.86	2,024,691.080	2,823,093.550	36.563750972	-107.492806755
13,800.00	90.36	268.808	6,543.99	-117.17	-7,449.84	2,024,688.999	2,822,993.574	36.563746227	-107.493147214
13,900.00	90.36	268.808	6,543.36	-119.25	-7,549.81	2,024,686.918	2,822,893.598	36.563741482	-107.493487672
14,000.00	90.36	268.808	6,542.73	-121.33	-7,649.79	2,024,684.837	2,822,793.621	36.563736736	-107.493828131
14,100.00	90.36	268.808	6,542.11	-123.41	-7,749.77	2,024,682.756	2,822,693.645	36.563731988	-107.494168590
14,200.00	90.36	268.808	6,541.48	-125.49	-7,849.74	2,024,680.675	2,822,593.669	36.563727240	-107.494509048
14,300.00	90.36	268.808	6,540.85	-127.58	-7,949.72	2,024,678.594	2,822,493.693	36.563722491	-107.494849507
14,400.00	90.36	268.808	6,540.22	-129.66	-8,049.70	2,024,676.513	2,822,393.717	36.563717741	-107.495189965
14,500.00	90.36	268.808	6,539.60	-131.74	-8,149.67	2,024,674.432	2,822,293.741	36.563712990	-107.495530423
14,600.00	90.36	268.808	6,538.97	-133.82	-8,249.65	2,024,672.351	2,822,193.764	36.563708237	-107.495870882
14,700.00	90.36	268.808	6,538.34	-135.90	-8,349.63	2,024,670.271	2,822,093.788	36.563703484	-107.496211340
14,800.00	90.36	268.808	6,537.72	-137.98	-8,449.60	2,024,668.190	2,821,993.812	36.563698730	-107.496551799
14,900.00	90.36	268.808	6,537.09	-140.06	-8,549.58	2,024,666.109	2,821,893.836	36.563693975	-107.496892257
15,000.00	90.36	268.808	6,536.46	-142.14	-8,649.55	2,024,664.028	2,821,793.860	36.563689219	-107.497232715
15,100.00	90.36	268.808	6,535.83	-144.22	-8,749.53	2,024,661.947	2,821,693.884	36.563684462	-107.497573173
15,200.00	90.36	268.808	6,535.21	-146.30	-8,849.51	2,024,659.866	2,821,593.907	36.563679704	-107.497913632
15,300.00	90.36	268.808	6,534.58	-148.39	-8,949.48	2,024,657.785	2,821,493.931	36.563674945	-107.498254090
15,400.00	90.36	268.808	6,533.95	-150.47	-9,049.46	2,024,655.704	2,821,393.955	36.563670185	-107.498594548
15,500.00	90.36	268.808	6,533.32	-152.55	-9,149.44	2,024,653.623	2,821,293.979	36.563665424	-107.498935006
15,600.00	90.36	268.808	6,532.70	-154.63	-9,249.41	2,024,651.542	2,821,194.003	36.563660662	-107.499275464
15,700.00	90.36	268.808	6,532.07	-156.71	-9,349.39	2,024,649.461	2,821,094.026	36.563655900	-107.499615922
15,800.00	90.36	268.808	6,531.44	-158.79	-9,449.37	2,024,647.380	2,820,994.050	36.563651136	-107.499956380
15,900.00	90.36	268.808	6,530.81	-160.87	-9,549.34	2,024,645.299	2,820,894.074	36.563646371	-107.500296838
16,000.00	90.36	268.808	6,530.19	-162.95	-9,649.32	2,024,643.218	2,820,794.098	36.563641605	-107.500637296
16,100.00	90.36	268.808	6,529.56	-165.03	-9,749.29	2,024,641.137	2,820,694.122	36.563636839	-107.500977754
16,200.00	90.36	268.808	6,528.93	-167.11	-9,849.27	2,024,639.056	2,820,594.146	36.563632071	-107.501318212
16,300.00	90.36	268.808	6,528.30	-169.19	-9,949.25	2,024,636.975	2,820,494.169	36.563627302	-107.501658670

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**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
16,348.27	90.36	268.808	6,528.00	-170.20	-9,997.50	2,024,635.970	2,820,445.913	36.563625000	-107.501823000
PBHL/TD 16348.27 MD 6528.00 TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Rincon 713 LTP 1060 Fl - plan hits target center - Point	0.00	2.190	6,528.00	-170.20	-9,997.50	2,024,635.970	2,820,445.913	36.563625000	-107.501823000
Rincon 713 FTP 1094 Fl - plan hits target center - Point	0.00	2.190	6,586.98	25.39	-600.66	2,024,831.561	2,829,842.739	36.564069000	-107.469823000

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
320.00	320.00	13 3/8" Casing	13-5/8	17-1/2
5,939.58	5,938.00	9 5/8" Casing	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,549.58	2,548.00	Ojo Alamo			
2,644.58	2,643.00	Kirtland			
2,924.58	2,923.00	Fruitland			
3,179.58	3,178.00	Pictured Cliffs			
3,444.58	3,443.00	Lewis			
3,744.58	3,743.00	Chacra_A			
4,879.58	4,878.00	Cliff House			
4,979.58	4,978.00	Menefee			
5,414.58	5,413.00	Point Lookout			
5,824.58	5,823.00	Mancos			
6,504.75	6,435.00	Gallup (MNCS_A)			
6,601.15	6,488.00	MNCS_B			
6,741.45	6,551.00	MNCS_C			

Planning Report - Geographic

Database:	DB_Feb2822	**Local Co-ordinate Reference:**	Well Rincon Unit 713H
Company:	Enduring Resources LLC	**TVD Reference:**	RKB=6538+25 @ 6563.00ft
Project:	Rio Arriba County, New Mexico NAD83 NM W	**MD Reference:**	RKB=6538+25 @ 6563.00ft
Site:	Rincon pad (613, 615, 713 & 715)	**North Reference:**	Grid
Well:	Rincon Unit 713H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev0		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,200.00	1,200.00	0.00	0.00	KOP Begin 3°/100' build
1,336.24	1,336.12	3.94	2.84	Begin 4.09° tangent
1,865.34	1,863.88	34.54	24.88	Begin 3°/100' drop
2,001.58	2,000.00	38.48	27.72	Begin vertical hold
5,985.61	5,984.03	38.48	27.72	Begin 10°/100' build
6,585.61	6,480.23	32.51	-258.70	Begin 60.00° tangent
6,645.61	6,510.23	31.43	-310.65	Begin 10°/100' build
6,949.20	6,586.98	25.39	-600.66	FTP Begin 90.36° lateral
16,348.27	6,528.00	-170.20	-9,997.50	PBHL/TD 16348.27 MD 6528.00 TVD

ENDURING RESOURCES IV, LLC
6300 S SYRACUSE WAY, SUITE 525
CENTENNIAL, CO 80111

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

WELL INFORMATION:

Name: **RINCON UNIT 713H**
API Number: **30-039-31373**
State: New Mexico
County: Rio Arriba
Surface Elevation: 6,538 ft ASL (GL) 6,552 ft ASL (KB)
Surface Location: 21-27N-06W Sec-Twn-Rng 1,129 ft FNL 1,241 ft FEL
36.563993 ° N latitude 107.467778 ° W longitude (NAD 83)
BH Location: 19-27N-06W Sec-Twn-Rng 1,060 ft FNL 717 ft FEL
36.563625 ° N latitude 107.501823 ° W longitude (NAD 83)
Driving Directions: From intersection of US Hwy 64 & US Hwy 550 in Bloomfield, NM: east on Hwy 64 for 36.8 miles to General American Road (GAR) just past MM 101, right (S) on GAR for 1.2 miles to fork, continue right (SW) on GAR for 3.4 miles to 4-way intersection, straight (S) on GAR for 1.1 miles to fork, right (SW) along Munoz Wash for 4.3 miles to 4-way intersection, straight (SW) across Carrizo Wash for 0.3 mile to fork, left (SE) onto CR #492 for 0.4 miles to fork, straight (S) on 492 for 1.4 miles to fork, right (N) uphill on existing road for 0.6 miles to fork, left (SW) for 0.8 miles to fork, left (SE) for 0.1 miles to fork, right (SW) to location to staked location which overlaps existing roadway.

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:

Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
Ojo Alamo	4,004	2,548	2,562	W	normal
Kirtland	3,909	2,643	2,578	W	normal
Fruitland	3,629	2,923	2,941	G, W	sub
Pictured Cliffs	3,374	3,178	3,199	G, W	sub
Lewis	3,109	3,443	3,467	G, W	normal
Chacra	2,809	3,743	3,771	G, W	normal
Cliff House	1,674	4,878	4,919	G, W	sub
Menefee	1,574	4,978	5,020	G, W	normal
Point Lookout	1,139	5,413	5,461	G, W	sub
Mancos	729	5,823	5,875	O,G	normal
Gallup (MNCS_A)	117	6,435	6,511	O,G	normal
MNCS_B	64	6,488	6,563	O,G	normal
MNCS_C	-4	6,556	6,649	O,G	normal
MNCS_E	-81	6,633	6,761	O,G	normal
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
MNCS_C TARGET (POE)	**-35**	**6,587**	**6,949**	**O,G**	**normal**
PROJECTED WELL TD (BHL)	**24**	**6,528**	**16,348**	**O,G**	**normal**

Surface: San Jose
Oil & Gas Zones: Several gas bearing zones will be encountered; target formation is the MNCS G
Pressure: Normal pressure gradient (0.43 psi/ft) 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: 2,840 psi
Maximum anticipated surface pressure, assuming partially evacuated hole: 1,400 psi
Temperature: **Maximum anticipated BHT is 185° F or less**

H_2S INFORMATION:

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

LOGGING, CORING, AND TESTING:

Mud Logs: Requested; remote geo-steering from drill out of 9-5/8" casing to TD; gas detection from drillout of 13-3/8" casing to TD.

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

Open Hole Logs: None planned

Testing: None planned

Coring: None planned

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

DRILLING RIG INFORMATION:

Contractor: Ensign

Rig No.: 145

Draw Works: ADR 1000AC

Mast: ADR 1000 Cantilever Triple (134 ft, 500,000 lbs, 12 lines)

Top Drive: Tesco 350-EXI-600 (350 ton, 600 hp)

Prime Movers: 3 - CAT 3512 (1,475 hp)

Pumps: 2 - Mudder MD-11 5,000 psi

BOPE 1: T3 Annular & Shaffer double gate ram (13-5/8", 5,000 psi)

Int Hole BOPE 2: T3 annular(13-5/8", 5,000 psi)

Prod Hole BOPE 2: T3 annular/ Townsend Double gate(11", 5,000 psi)

Choke 3", 5,000 psi

KB-GL (ft): 14

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

Note: BOPE 2 are alternate stacks to be used only if problems with rig height and BOP 1 height are encountered. Intermediate hole BOPE 2 is designed for 2,000 psi permit requirements.

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. If alternate intermediate hole BOPE 2 is needed, testing of annular will be to 1,500 psi/ 10 min, 250 psi/5 min. Prod hole BOPE 2 will be tested same as BOPE 1

4) Remote valve for BOP rams, HCR, and choke shall be placed in a location that is readily available to the driller. The remote BOP valve shall be capable of closing and opening the rams.

5) Manual locking devices (hand wheels) shall be intalled on rams. A valve will be installed on the annular preventer's closing line as close as possible to the preventer to act as a locking device.The valve will be maintained in the open position and shall only be closed when the there is no power to the accumulator.

FLUIDS AND SOLIDS CONTROL PROGRAM:

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

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

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

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

Fluid Program: See "Detailed Drilling Plan" section for specifics.

DETAILED DRILLING PLAN:

SURFACE: *Drill vertically to casing setting depth, run casing, cement casing to surface.*

0 ft (MD)	to	320 ft (MD)	Hole Section Length:	320 ft
0 ft (TVD)	to	320 ft (TVD)	Casing Required:	320 ft

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

Update: Surface section was drilled, cased, cemented in November 2018

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

Hole Size: 17-1/2"

Bit / Motor: Mill Tooth or PDC, no motor

MWD / Survey: No MWD, run deviation survey after drilling

Logging: None

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	13.375	54.5	J-55	BTC	1,130	2,730	853,000	909,000
Loading					70	1,518	115,209	115,209
Min. S.F.					**16.17**	**1.80**	**7.40**	**7.89**

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

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

Make-up as per API Buttress Connection running procedure.

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

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

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)
	Class G	15.8	1.174	5.15	100%	0	379

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

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

Halliburton HALCEM surface cementing blend

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out. NOTE: cement was circulated to surface Nov 15, 2018

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

320 ft (MD)	to	5,925 ft (MD)	Hole Section Length:	5,605 ft
320 ft (TVD)	to	5,923 ft (TVD)	Casing Required:	5,925 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	

Interm Hole Mud: Losses may occur around 5,400' TVD. Maintain minimum mud weights. Pre-treat with gilsonite and medium LCM products, 60% fibrous, 20% platey, 20% granular. If needed, reduce gpm

Hole Size: 12-1/4"

Bit / Motor: PDC w/mud motor

Bit / Motor (Detail): **MOTOR:** NOV 087840 - 7/8, 4.0, stage, 0.16 rev/gal, 1.83 DEG, 900 GPM, 950 DIFF PSIG
BIT: 5- or 6-BLADE PDC w/16 mm or 19 mm cutters, target TFA 0.65 - 1.0 max); 6 - 14s = 0.902 sq-in TFA

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

Logging: None

Pressure Test: NU BOPE and test (as noted above); pressure test 13-3/8" casing to **1,500** psi for 30 minutes.
Maximum anticipated surface pressure while drilling intermediate hole section is 1,250 psi

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	9.625	36.0	J55	LTC	2,020	3,520	564,000	453,000
Loading					1,263	1,760	285,945	285,945
Min. S.F.					**1.60**	**2.00**	**1.97**	**1.58**

Assumptions: Collapse: evacuated casing with 8.33 ppg equiv external pressure gradient, .22 psi/ft backup
Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling production hole and 8.4 ppg equivalent external pressure gradient
Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull

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

Casing Summary: Float shoe, 1 jt casing, float collar, casing to surface **(FLOAT EQUIPMENT FROM WEATHERFORD)**

Centralizers: 1 centralizers jt stop-banded 10' from float shoe on bottom 1 jt & 1 centralizer floating on bottom joint, 1 centralizer per jt (floating) to KOP ; 1 centralizer per 2 jts (floating) to surface **(CENTRALIZERS FROM ARSENAL - SLIP'N'SLIDE 9-5/8" x 12" SOLID BODY POLYMER)**

Casing Contingency: Hole conditions encountered during the drilling of the 12-1/4" intermediate hole section may warrant the use of an ECP and/or a DV Tool to ensure that cement can be successfully circulated to surface. Anticipated placement tool placement is ~100' above the Point Lookout top. Actual drilling conditions will determine if a tools are needed and their exact placement.

Cement:	**Type**	**Weight (ppg)**	**Yield (cuft/sk)**	**Water (gal/sk)**	**% Excess**	**Planned TOC (ft MD)**	**Total Cmt (sx)**
Lead	III:POZ Blend	12.5	2.140	12.05	70%	0	1,362
Tail	Type III	14.6	1.38	6.64	20%	5,425	136

Annular Capacity 0.3627 cuft/ft *9-5/8" casing x 13-3/8" casing annulus*

0.3132 cuft/ft *9-5/8" casing x 12-1/4" hole annulus*

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

Drake Energy Services Intermediate Cementing Program

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

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

5,925	**ft (MD)**	**to**	**16,348**	**ft (MD)**	**Hole Section Length:** **10,423 ft**
5,923	**ft (TVD)**	**to**	**6,528**	**ft (TVD)**	**Casing Required:** **16,348 ft**

Estimated KOP:	**6,646**	**ft (MD)**	**6,510**	**ft (TVD)**
Estimated Landing Point (P.O.E.):	**6,949**	**ft (MD)**	**6,587**	**ft (TVD)**
Estimated Lateral Length:	**9,399**	**ft (MD)**		

Fluid:	**Type**	**MW (ppg)**	**FL (mL/30')**	**PV (cp)**	**YP (lb/100 sqft)**	**ES**	**OWR**	**Comment**
	OBM	8.7 - 9.0	10 - 15	10 - 20	6 - 6 - 10	500+	80:20	WBM as contingency

Hole Size: 8-1/2"

Bit / Motor: PDC w/mud motor

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

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

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

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

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

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	5.500	17.0	P-110	LTC	7,460	10,640	546,000	445,000
Loading					3,254	7,044	339,816	339,816
Min. S.F.					**2.29**	**1.51**	**1.61**	**1.31**

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

MU Torque (ft lbs): *Minumum: 3,470 Optimum: 4,620 Maximum: 5,780*

Casing Summary: Float shoe, 1 jt casing, float collar w/debris catcher, 1 jt casing, float collar **(WFT float equipment)**, 20' marker joint, toe-intitiation sleeve **(WFT RD 9,500 psi)**, 20' marker joint, toe-initiation sleeve (Weatherford RD 10,500 psi), casing to KOP with 20' marker joints spaced evenly in lateral every ~2,000', floatation sub **(NCS Air-Lock 4,500 psi from WFT)**, casing to surface. The toe-initiation sleeve shall be placed no closer to the unit boundary than 100' measured along the azimuth of the well or 330' measured perpendicular to the the azimuth of the well. ***Note: the LTP is the maximum depth of the toe sleeve and is noted on the Well Plan. Drill past the LTP as required for necessary rat-hole and shoe-track length to place the toe sleeve as close to (but not past) the planned LTP as possible.***

Centralizers: *Centralizer count and placement may be adjusted based on well conditions and as-drilled surveys* ***(ARSENAL***
Lateral: 1 centralizer per joint
POE to 9-5/8" shoe: 1 centralizer per joint
9-5/8" shoe to surface: 1 centralizer per 2 joints

Casing Summary: Float shoe, 1 jt casing, float collar, 1 jt casing, float collar, 1 jt casing, toe-intitiation sleeve, 20' marker joint, toe-initiation sleeve, casing to KOP with 20' marker joints spaced evenly in lateral every 2,000', floatation sub, casing to surface. **The toe-initiation sleeves must be positioned INSIDE any unit setback.**

Casing Details: Float shoe, 1 jt casing, float collar, NCS debris catcher, 1 jt casing, float collar, 1 jt casing, toe-intitiation sleeve **(WFT RD 9,500 psi)**, 20' marker joint, toe-initiation sleeve **(Weatherford RD 10,500 psi)**, casing to KOP with 20' marker joints spaced evenly in lateral every 2,000'. Place **NCS Floatation Sub** (opening pressure 3,000 psi - 3,500 psi applied) at KOP (+/-), casing to surface. Run **Arsenal Slip N Slide 8" x 5-1/2" polymer centralizers** on casing as noted below. **The toe-initiation sleeves must be positioned INSIDE the 330' unit setback.**

Centralizers: *Centralizer count and placement may be adjusted based on well conditions and as-drilled surveys.*
Lateral: 1 centralizer per joint
Curve: 1 centralizer per joint from landing point to KOP
KOP to surf: 1 centralizer per 2 joints

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)
Lead	Type III	12.4	2.360	13.40	65%	0	1,107
Tail	G:POZ blend	13.3	1.360	6.00	10%	5,875	1,940

Annular Capacity	0.2691	cuft/ft	*5-1/2" casing x 9-5/8" casing annulus*
	0.2291	cuft/ft	*5-1/2" casing x 8-1/2" hole annulus*

Calculated cement volumes assume gauge hole and the excess noted in table
American Cementing Liner & Production Blend
Notify NMOCD & BLM if cement is not circulated to surface.

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

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

COMPLETION AND PRODUCTION PLAN:

Frac: 40 plug-and-perf stages with 300,000 bbls slickwater fluid and 24,000,000 lbs of proppant (estimated)
Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assitance)
Production: Produce through production tubing via gas-lift into permanent production and storage facilities

ESTIMATED START DATES:

Drilling: 7/11/2022
Completion: 10/10/2022
Production: 12/9/2022

Prepared by:	**Alec Bridge**	**9/4/2018**	
Updated by:	**Alec Bridge**	**10/5/2018**	*- changed 9-5/8" casing weight to 40#, updated AFE-information*
	Alec Bridge	**10/18/2018**	*- eliminated pilot hole, lengthened lateral by ~5,000', updated BOPE information*
	Alec Bridge	**10/26/2018**	*- updated directional plan based on final plats, updated AFE-information*
	Alec Bridge	**3/6/2019**	*- lowered 9-5/8" casing point into the Mancos, added contingency ECP and/or DV Tool in 9-5/8" casing string, modified directional plan for AC (COMPASS Design #2)*
	Alec Bridge	**7/29/2019**	*- updated AFE information, updated rig information, updated BOPE schematic*
	Alec Bridge	**2/7/2022**	*- updated AFE information for 10K LL*
	Greg Olson	**4/21/2022**	updated geology, directional, mud, casing, rig, BOPE, cement

WELL NAME: **RINCON UNIT 713H**

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

API Number: 30-039-31373

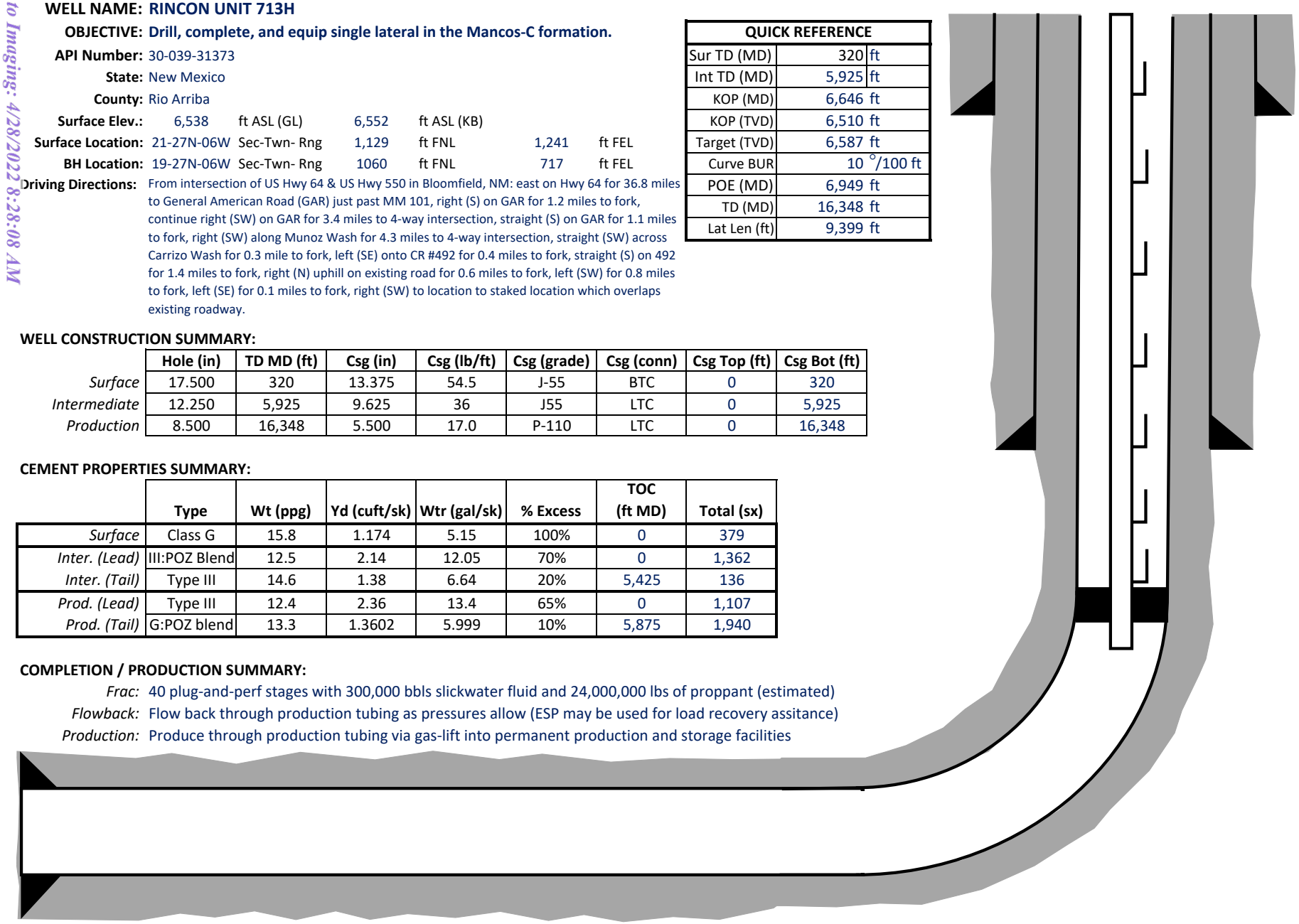
State: New Mexico

County: Rio Arriba

Surface Elev.:	6,538	ft ASL (GL)	6,552	ft ASL (KB)		
Surface Location:	21-27N-06W	Sec-Twn- Rng	1,129	ft FNL	1,241	ft FEL
BH Location:	19-27N-06W	Sec-Twn- Rng	1060	ft FNL	717	ft FEL

Driving Directions: From intersection of US Hwy 64 & US Hwy 550 in Bloomfield, NM: east on Hwy 64 for 36.8 miles to General American Road (GAR) just past MM 101, right (S) on GAR for 1.2 miles to fork, continue right (SW) on GAR for 3.4 miles to 4-way intersection, straight (S) on GAR for 1.1 miles to fork, right (SW) along Munoz Wash for 4.3 miles to 4-way intersection, straight (SW) across Carrizo Wash for 0.3 mile to fork, left (SE) onto CR #492 for 0.4 miles to fork, straight (S) on 492 for 1.4 miles to fork, right (N) uphill on existing road for 0.6 miles to fork, left (SW) for 0.8 miles to fork, left (SE) for 0.1 miles to fork, right (SW) to location to staked location which overlaps existing roadway.

QUICK REFERENCE		
Sur TD (MD)	320	ft
Int TD (MD)	5,925	ft
KOP (MD)	6,646	ft
KOP (TVD)	6,510	ft
Target (TVD)	6,587	ft
Curve BUR	10	°/100 ft
POE (MD)	6,949	ft
TD (MD)	16,348	ft
Lat Len (ft)	9,399	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	320	13.375	54.5	J-55	BTC	0	320
Intermediate	12.250	5,925	9.625	36	J55	LTC	0	5,925
Production	8.500	16,348	5.500	17.0	P-110	LTC	0	16,348

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	% Excess	TOC (ft MD)	Total (sx)
Surface	Class G	15.8	1.174	5.15	100%	0	379
Inter. (Lead)	III:POZ Blend	12.5	2.14	12.05	70%	0	1,362
Inter. (Tail)	Type III	14.6	1.38	6.64	20%	5,425	136
Prod. (Lead)	Type III	12.4	2.36	13.4	65%	0	1,107
Prod. (Tail)	G:POZ blend	13.3	1.3602	5.999	10%	5,875	1,940

COMPLETION / PRODUCTION SUMMARY:

Frac: 40 plug-and-perf stages with 300,000 bbls slickwater fluid and 24,000,000 lbs of proppant (estimated)

Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assitance)

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

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 101490

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 101490
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	4/28/2022