

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Enduring Resources IV LLC. 200 Energy Court Farmington NM 87401		² OGRID Number 372286	
		³ Reason for Filing Code/ Effective Date RT	
⁴ API Number 30-043-21279	⁵ Pool Name LYBROOK GALLUP		⁶ Pool Code 42289
⁷ Property Code 333197	⁸ Property Name S LYBROOK UNIT		⁹ Well Number #345H

II. ¹⁰ Surface Location

UL or lot no. P	Section 2	Township 22N	Range 7W	Lot Idn	Feet from the 1027'	North/South Line South	Feet from the 356'	East/West line East	County Sandoval
--------------------	--------------	-----------------	-------------	---------	------------------------	---------------------------	-----------------------	------------------------	--------------------

¹¹ Bottom Hole Location

UL or lot no. E	Section 2	Township 22N	Range 7W	Lot Idn	Feet from the 1922'	North/South line North	Feet from the 159'	East/West line West	County Sandoval
¹² Lse Code F	¹³ Producing Method Code		¹⁴ Gas Connection Date 10/24/2022		¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date

III. Oil and Gas Transporters

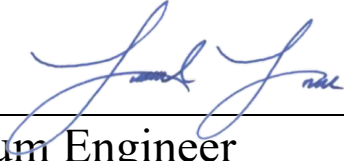
¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
248440	WESTERN REFINING COMPANY, LLC	O
373888	HARVEST FOUR CORNERS. LLC	G

IV. Well Completion Data

²¹ Spud Date 5/16/2022	²² Ready Date 10/24/2022	²³ TD 10375' MD 5185 5186' TVD	²⁴ PBDT 10246' MD 5186' TVD	²⁵ Perforations ~ 5807' - 10225' MD ~ 5179'-5187' TVD	²⁶ DHC, MC R-14051
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set	
17-1/2"		13-3/8",54.5#, J-55		365' MD	
12-1/4"		9-5/8",36#, J-55		3410' MD	
8-1/2"		5-1/2",20#, P-110		10364 40375' MD	

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: Kayla White		OIL CONSERVATION DIVISION Approved by: 	
Printed name: Kayla White		Title: Petroleum Engineer	
Title: Associate Consultant, Environmental Engineer		Approval Date: 10/25/22	
E-mail Address: kwhite@cdhconsult.com		COA: RT expires on 01/22/22	
Date: 9/21/2022	Phone: 720-768-3575		



ENDURING RESOURCES IV LLC

September 21, 2022

Re: S LYBROOK UNIT 345H-30-043-21279

Pursuant to NMOCD rule 19.15.7.16(C) request is herein made to keep all data and accompanying attachments contained in form C-105 confidential.

Sincerely,

A handwritten signature in blue ink, appearing to read "Heather Huntington".

Heather Huntington
Permitting Technician
Enduring Resources, LLC.
hhuntington@enduringresources.com

1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm **Page 3 of 19**
Revised August 1, 2011Submit one copy to
Appropriate District OfficeOIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505☐ AMENDED REPORT

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21279	² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 333197	⁵ Property Name S LYBROOK UNIT	⁶ Well Number 345H
⁷ GRID No. 372286	⁸ Operator Name ENDURING RESOURCES, LLC	⁹ Elevation 7003'

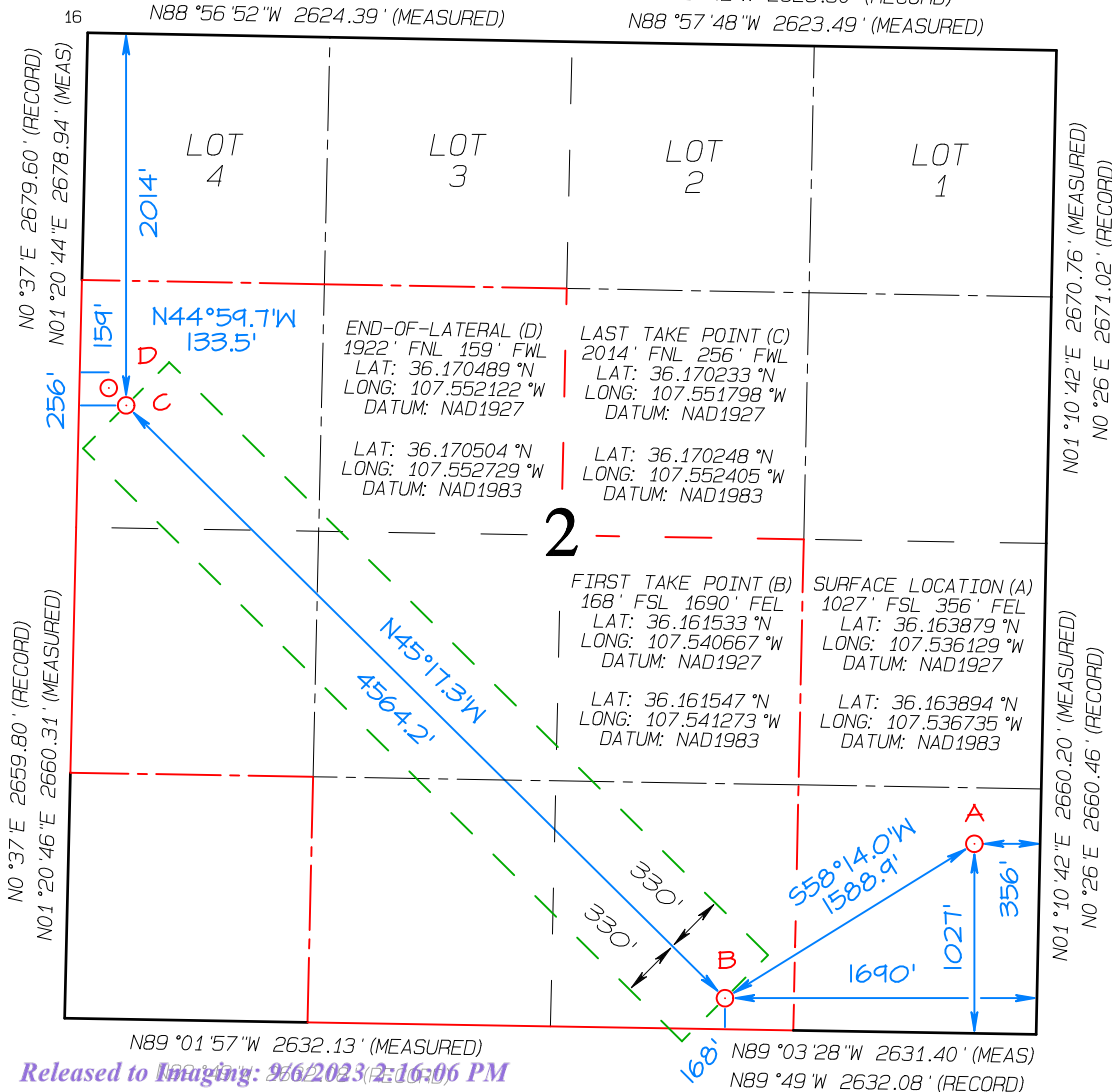
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	22N	7W		1027	SOUTH	356	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
E	2	22N	7W		1922	NORTH	159	WEST	SANDOVAL

¹² Dedicated Acres 280.00	S/2 NW/4, N/2 SW/4 SE/4 SW/4, W/2 SE/4 Section 2, T22N R7W	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13883A
---	--	-------------------------------	----------------------------------	-------------------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION
UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A
NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISIONN89°42'W 2623.50' (RECORD)
N88°56'52"W 2624.39' (MEASURED)N89°42'W 2623.50' (RECORD)
N88°57'48"W 2623.49' (MEASURED)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.

Signature: Heather Huntington Date: 9/21/22
 Printed Name: Heather Huntington
 E-mail Address: hhuntington@enduringresources.com

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: SEPTEMBER 20, 2022
Date of Survey: JUNE 12, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
 Certificate Number 15269

1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm **Page 4 of 19**
Revised August 1, 2011Submit one copy to
Appropriate District OfficeOIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505☐ AMENDED REPORT

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21279	² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 333197	⁵ Property Name S LYBROOK UNIT	⁶ Well Number 345H
⁷ GRID No. 372286	⁸ Operator Name ENDURING RESOURCES, LLC	⁹ Elevation 7003'

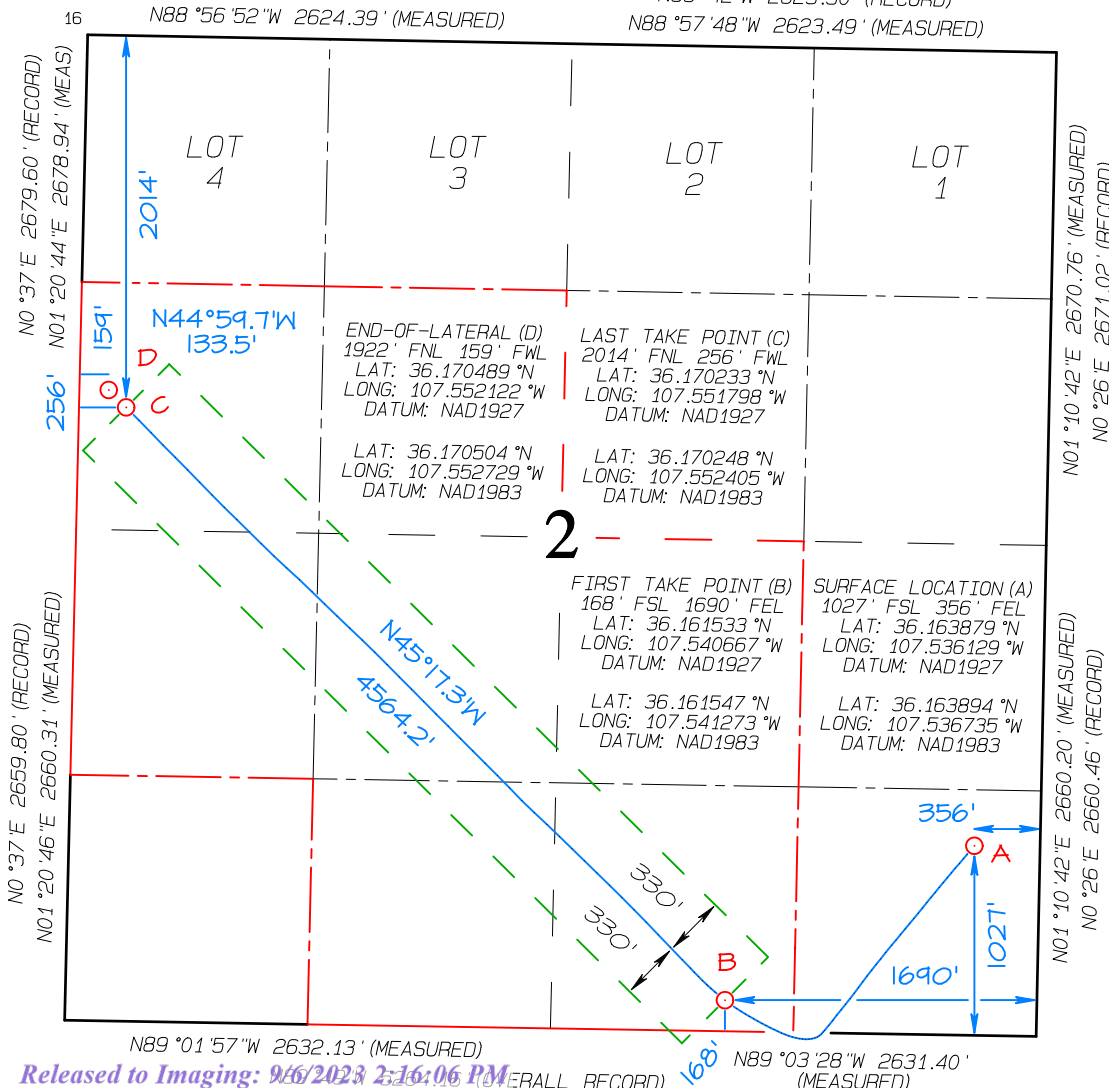
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	22N	7W		1027	SOUTH	356	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
E	2	22N	7W		1922	NORTH	159	WEST	SANDOVAL

¹² Dedicated Acres 280.00	S/2 NW/4, N/2 SW/4 SE/4 SW/4, W/2 SE/4 Section 2, T22N R7W	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13883A
---	--	-------------------------------	----------------------------------	--

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION
UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A
NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISIONN89°42'W 2623.50' (RECORD)
N88°56'52"W 2624.39' (MEASURED)N89°42'W 2623.50' (RECORD)
N88°57'48"W 2623.49' (MEASURED)¹⁷ OPERATOR CERTIFICATION

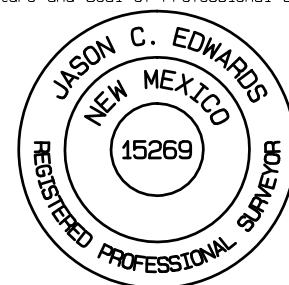
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this 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.

Signature: Heather Huntington Date: 9/21/22Printed Name: Heather HuntingtonE-mail Address: hhuntington@enduringresources.comE-mail Address: hhuntington@enduringresources.com¹⁸ 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: SEPTEMBER 20, 2022
Date of Survey: JUNE 12, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm **Page 5 of 19**
Revised August 1, 2011Submit one copy to
Appropriate District OfficeOIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505☐ AMENDED REPORT

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21279	² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 333197	⁵ Property Name S LYBROOK UNIT	⁶ Well Number 345H
⁷ GRID No. 372286	⁸ Operator Name ENDURING RESOURCES, LLC	⁹ Elevation 7003'

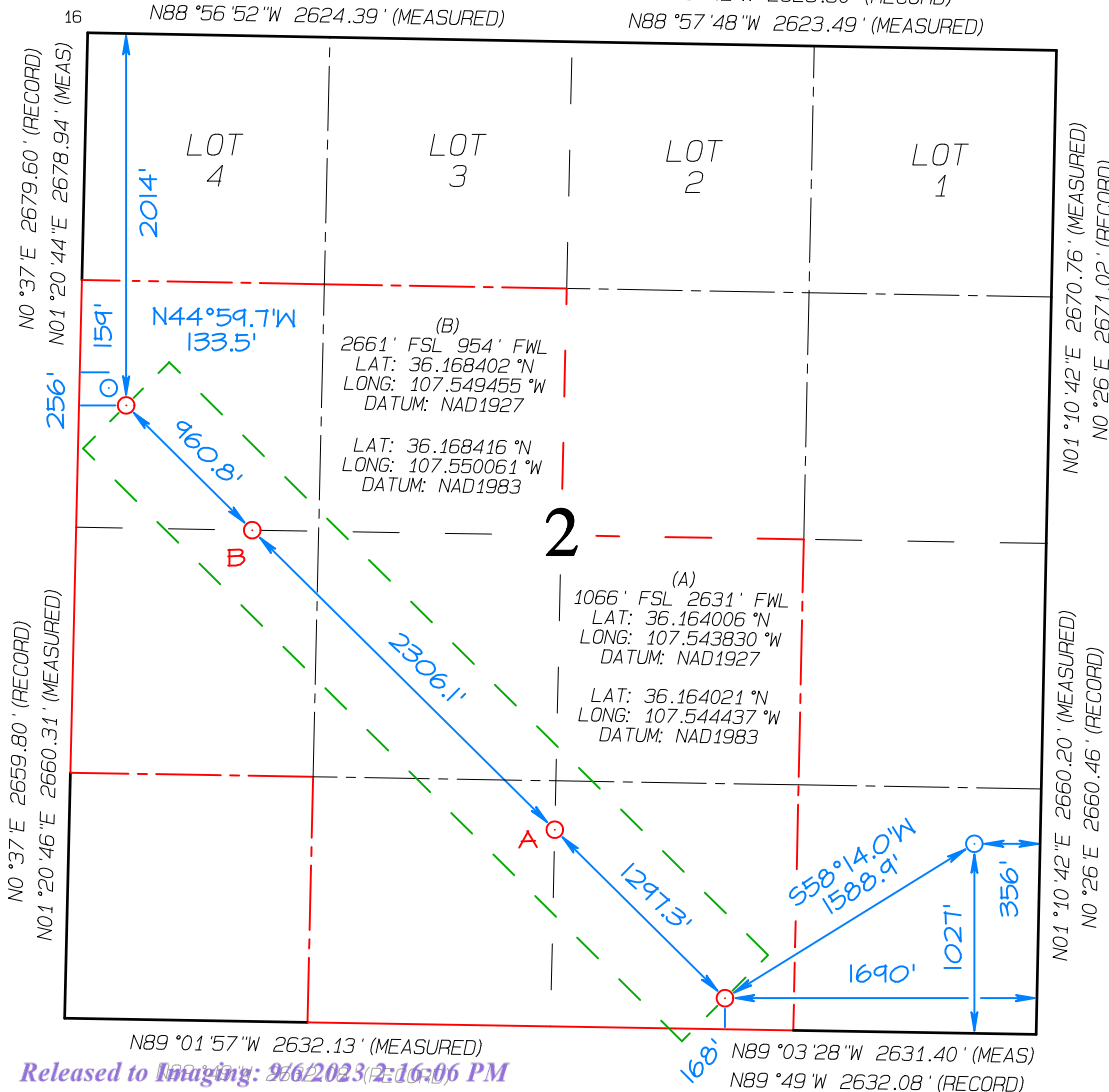
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	22N	7W		1027	SOUTH	356	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
E	2	22N	7W		1922	NORTH	159	WEST	SANDOVAL

¹² Dedicated Acres 280.00	S/2 NW/4, N/2 SW/4 SE/4 SW/4, W/2 SE/4 Section 2, T22N R7W	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13883A
---	--	-------------------------------	----------------------------------	-------------------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION
UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A
NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISIONN89°42'W 2623.50' (RECORD)
N88°56'52"W 2624.39' (MEASURED)N89°42'W 2623.50' (RECORD)
N88°57'48"W 2623.49' (MEASURED)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.

Signature Heather Huntington Date 9/21/22

Printed Name Heather Huntington

hhuntington@enduringresources.com

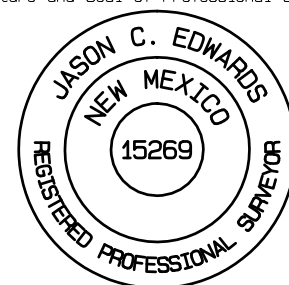
E-mail Address

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: SEPTEMBER 20, 2022
Date of Survey: JUNE 12, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269



Company: Enduring Resources LLC
Well: S Chaco Unit 345 H
Site: S Chaco Unit 344 Pad (344, 345 & 908)
Project: Sandoval County, New Mexico NAD83 NmW
Design: Surveys Original Hole
Rig: Ensign 145

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=7003+13 @ 7016.00ft (Ensign 145)
 Surface location:

Northing Easting Latitude Longitude
 1879087.903 2810639.945 36.163894000 -107.536735000

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



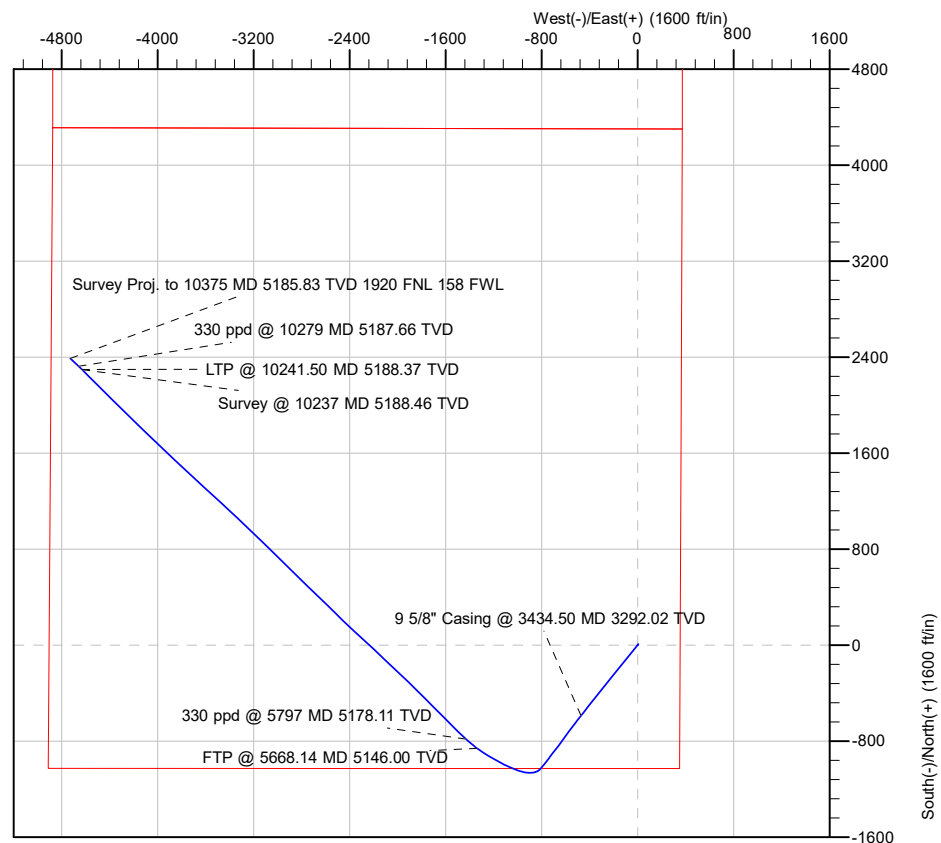
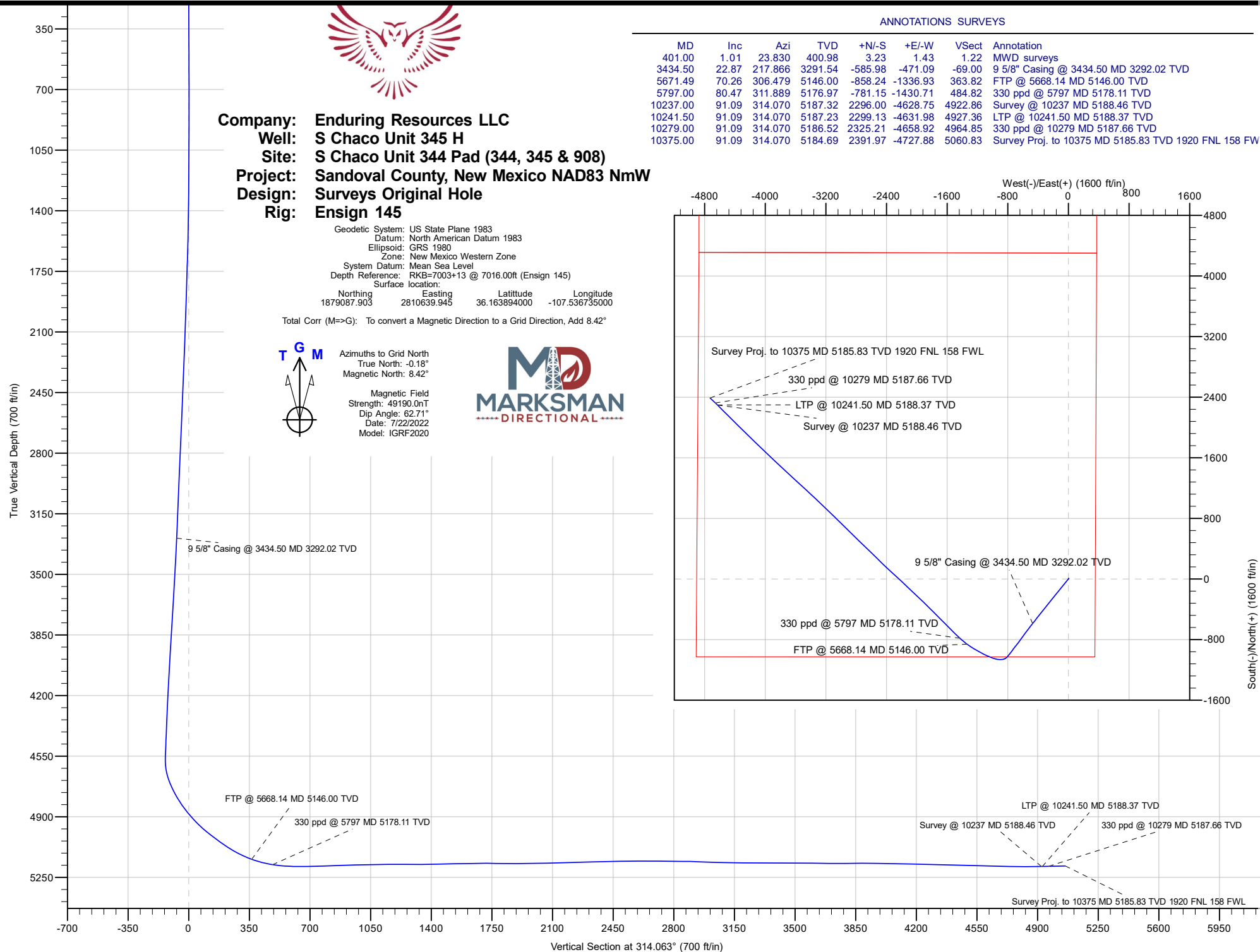
Azimuths to Grid North
 True North: -0.18°
 Magnetic North: 8.42°

Magnetic Field
 Strength: 49190.0nT
 Dip Angle: 62.71°
 Date: 7/22/2022
 Model: IGRF2020



ANNOTATIONS SURVEYS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Annotation
401.00	1.01	23.830	400.98	3.23	1.43	1.22	MWD surveys
3434.50	22.87	217.866	3291.54	-585.98	-471.09	-69.00	9 5/8" Casing @ 3434.50 MD 3292.02 TVD
5671.49	70.26	306.479	5146.00	-858.24	-1336.93	363.82	FTP @ 5668.14 MD 5146.00 TVD
5797.00	80.47	311.889	5176.97	-781.15	-1430.71	484.82	330 ppd @ 5797 MD 5178.11 TVD
10237.00	91.09	314.070	5187.32	2296.00	-4628.75	4922.86	Survey @ 10237 MD 5188.46 TVD
10241.50	91.09	314.070	5187.23	2299.13	-4631.98	4927.36	LTP @ 10241.50 MD 5188.37 TVD
10279.00	91.09	314.070	5186.52	2325.21	-4658.92	4964.85	330 ppd @ 10279 MD 5187.66 TVD
10375.00	91.09	314.070	5184.69	2391.97	-4727.88	5060.83	Survey Proj. to 10375 MD 5185.83 TVD 1920 FNL 158 FW





Survey Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

Project	Sandoval County, New Mexico NAD83 NmW		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	S Chaco Unit 344 Pad (344, 345 & 908)		
Site Position:		Northing:	1,879,087.903 usft
From:	Lat/Long	Easting:	2,810,639.945 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	36.163894000
		Longitude:	-107.536735000

Well	S Chaco Unit 345 H, Surf loc: 1027 FSL 356 FEL Section 02-T22N-R07W		
Well Position	+N/-S	0.00 ft	Northing: 1,879,087.903 usft
	+E/-W	0.00 ft	Easting: 2,810,639.945 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
Grid Convergence:	0.18 °	Ground Level:	7,003.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/22/2022	8.60	62.71	49,190.02868651

Design	Surveys Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	314.063	

Survey Program	Date	8/29/2022			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
401.00	3,375.00	MWD int (Original Hole)	MWD	OWSG MWD - Standard	
3,453.00	10,237.00	MWD (Original Hole)	MWD	OWSG MWD - Standard	
10,375.00	10,375.00	Projection (Original Hole)	MWD	OWSG MWD - Standard	

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	
401.00	1.01	23.830	400.98	3.23	1.43	1.22	0.25	0.25	0.00	
MWD surveys										
492.00	1.32	32.350	491.96	4.85	2.31	1.71	0.39	0.34	9.36	
583.00	1.30	37.070	582.94	6.56	3.50	2.05	0.12	-0.02	5.19	
675.00	1.26	42.090	674.91	8.14	4.80	2.21	0.13	-0.04	5.46	
765.00	0.62	55.510	764.90	9.15	5.87	2.15	0.75	-0.71	14.91	
855.00	0.50	53.130	854.90	9.67	6.58	1.99	0.14	-0.13	-2.64	



Survey Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

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)
946.00	0.34	41.160	945.89	10.11	7.08	1.94	0.20	-0.18	-13.15
1,037.00	0.23	51.920	1,036.89	10.42	7.40	1.93	0.13	-0.12	11.82
1,131.00	2.33	212.240	1,130.87	8.92	6.53	1.51	2.71	2.23	170.55
1,226.00	4.73	217.090	1,225.68	4.16	3.14	0.64	2.54	2.53	5.11
1,321.00	6.77	218.770	1,320.20	-3.33	-2.73	-0.35	2.15	2.15	1.77
1,416.00	9.73	220.050	1,414.21	-13.84	-11.41	-1.43	3.12	3.12	1.35
1,510.00	13.25	219.580	1,506.31	-28.23	-23.39	-2.83	3.75	3.74	-0.50
1,605.00	16.95	218.960	1,598.01	-47.39	-39.03	-4.91	3.90	3.89	-0.65
1,700.00	20.00	218.760	1,688.11	-70.83	-57.92	-7.64	3.21	3.21	-0.21
1,794.00	22.08	220.030	1,775.83	-96.90	-79.35	-10.37	2.27	2.21	1.35
1,889.00	21.00	219.300	1,864.20	-123.75	-101.61	-13.04	1.17	-1.14	-0.77
1,983.00	19.69	218.730	1,952.33	-149.13	-122.19	-15.91	1.41	-1.39	-0.61
2,078.00	21.92	219.520	2,041.13	-175.30	-143.49	-18.80	2.37	2.35	0.83
2,172.00	21.67	219.180	2,128.41	-202.29	-165.62	-21.67	0.30	-0.27	-0.36
2,266.00	20.57	218.680	2,216.10	-228.63	-186.91	-24.70	1.19	-1.17	-0.53
2,361.00	22.02	218.210	2,304.61	-255.66	-208.35	-28.08	1.54	1.53	-0.49
2,455.00	21.22	218.580	2,392.00	-282.80	-229.86	-31.50	0.86	-0.85	0.39
2,549.00	23.62	218.120	2,478.88	-310.92	-252.10	-35.08	2.56	2.55	-0.49
2,644.00	23.51	218.020	2,565.96	-340.82	-275.52	-39.04	0.12	-0.12	-0.11
2,738.00	22.69	217.810	2,652.42	-369.92	-298.18	-42.99	0.88	-0.87	-0.22
2,832.00	23.40	218.720	2,738.92	-398.80	-320.97	-46.70	0.85	0.76	0.97
2,926.00	22.84	218.970	2,825.37	-427.55	-344.12	-50.06	0.60	-0.60	0.27
3,020.00	24.63	218.900	2,911.42	-456.98	-367.90	-53.45	1.90	1.90	-0.07
3,114.00	24.32	218.450	2,996.97	-487.38	-392.23	-57.10	0.38	-0.33	-0.48
3,208.00	23.62	218.990	3,082.86	-517.18	-416.12	-60.66	0.78	-0.74	0.57
3,302.00	22.58	218.920	3,169.33	-545.86	-439.30	-63.94	1.11	-1.11	-0.07
3,434.50	22.87	217.865	3,291.54	-585.98	-471.09	-69.00	0.38	0.22	-0.80
9 5/8" Casing @ 3434.50 MD 3292.02 TVD									
3,547.00	23.12	216.990	3,395.10	-620.88	-497.80	-74.08	0.38	0.22	-0.78
3,641.00	25.02	217.860	3,480.92	-651.31	-521.10	-78.50	2.06	2.02	0.93
3,735.00	25.25	217.240	3,566.02	-682.97	-545.44	-83.03	0.37	0.24	-0.66
3,830.00	24.82	216.340	3,652.10	-715.16	-569.51	-88.12	0.60	-0.45	-0.95
3,924.00	24.37	215.850	3,737.57	-746.77	-592.56	-93.54	0.53	-0.48	-0.52
4,019.00	23.82	215.910	3,824.29	-778.20	-615.29	-99.06	0.58	-0.58	0.06
4,113.00	22.64	215.170	3,910.67	-808.36	-636.85	-104.55	1.29	-1.26	-0.79
4,207.00	24.93	218.280	3,996.68	-838.71	-659.55	-109.34	2.78	2.44	3.31
4,302.00	24.67	218.010	4,082.92	-870.04	-684.16	-113.45	0.30	-0.27	-0.28
4,396.00	22.74	217.270	4,168.99	-899.96	-707.24	-117.67	2.08	-2.05	-0.79
4,490.00	24.07	217.750	4,255.25	-929.58	-729.98	-121.93	1.43	1.41	0.51
4,583.00	20.79	215.780	4,341.21	-957.97	-751.25	-126.39	3.62	-3.53	-2.12
4,678.00	21.14	219.620	4,429.92	-984.85	-772.03	-130.15	1.49	0.37	4.04
4,772.00	23.88	218.750	4,516.75	-1,012.75	-794.75	-133.22	2.94	2.91	-0.93
4,802.00	26.09	219.100	4,543.94	-1,022.60	-802.72	-134.36	7.38	7.37	1.17
4,834.00	25.74	224.490	4,572.73	-1,033.02	-812.02	-134.91	7.44	-1.09	16.84



Survey Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

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)
4,865.00	26.33	233.100	4,600.59	-1,041.96	-822.24	-133.78	12.33	1.90	27.77
4,896.00	28.08	242.720	4,628.18	-1,049.43	-834.23	-130.37	15.25	5.65	31.03
4,927.00	29.85	251.500	4,655.31	-1,055.23	-848.04	-124.48	14.84	5.71	28.32
4,959.00	30.46	258.100	4,682.99	-1,059.43	-863.53	-116.26	10.53	1.91	20.63
4,991.00	31.54	264.950	4,710.42	-1,061.84	-879.81	-106.24	11.52	3.38	21.41
5,022.00	33.17	270.570	4,736.62	-1,062.47	-896.37	-94.78	11.03	5.26	18.13
5,053.00	34.41	274.510	4,762.38	-1,061.69	-913.59	-81.87	8.12	4.00	12.71
5,085.00	36.04	279.040	4,788.53	-1,059.50	-931.90	-67.19	9.62	5.09	14.16
5,116.00	37.63	282.320	4,813.34	-1,056.05	-950.16	-51.67	8.16	5.13	10.58
5,147.00	38.89	285.160	4,837.68	-1,051.49	-968.80	-35.10	6.98	4.06	9.16
5,179.00	40.78	288.070	4,862.26	-1,045.62	-988.43	-16.91	8.29	5.91	9.09
5,211.00	42.64	290.850	4,886.15	-1,038.52	-1,008.50	2.45	8.20	5.81	8.69
5,242.00	44.18	292.240	4,908.67	-1,030.69	-1,028.31	22.13	5.85	4.97	4.48
5,273.00	45.96	293.210	4,930.56	-1,022.21	-1,048.55	42.57	6.15	5.74	3.13
5,304.00	48.18	294.460	4,951.67	-1,013.03	-1,069.31	63.87	7.75	7.16	4.03
5,336.00	50.25	295.490	4,972.57	-1,002.80	-1,091.27	86.76	6.91	6.47	3.22
5,367.00	52.37	296.810	4,991.95	-992.13	-1,112.99	109.79	7.60	6.84	4.26
5,398.00	54.56	298.140	5,010.41	-980.64	-1,135.08	133.66	7.86	7.06	4.29
5,430.00	54.87	298.410	5,028.89	-968.27	-1,158.09	158.79	1.19	0.97	0.84
5,461.00	54.54	298.030	5,046.80	-956.30	-1,180.38	183.13	1.46	-1.06	-1.23
5,492.00	56.13	298.630	5,064.43	-944.20	-1,202.82	207.68	5.37	5.13	1.94
5,524.00	58.31	300.360	5,081.76	-930.95	-1,226.24	233.71	8.19	6.81	5.41
5,555.00	60.95	301.780	5,097.43	-917.15	-1,249.14	259.77	9.39	8.52	4.58
5,587.00	63.30	302.600	5,112.39	-902.08	-1,273.08	287.45	7.69	7.34	2.56
5,618.00	65.56	303.780	5,125.77	-886.77	-1,296.47	314.91	8.06	7.29	3.81
5,649.00	68.01	305.440	5,137.99	-870.59	-1,319.92	343.01	9.31	7.90	5.35
5,671.49	70.26	306.479	5,146.00	-858.24	-1,336.93	363.82	10.92	10.03	4.62
FTP @ 5668.14 MD 5146.00 TVD									
5,681.00	71.22	306.910	5,149.14	-852.88	-1,344.12	372.72	10.92	10.04	4.53
5,712.00	73.81	308.450	5,158.45	-834.81	-1,367.52	402.10	9.60	8.35	4.97
5,744.00	76.78	310.020	5,166.57	-815.23	-1,391.49	432.94	10.42	9.28	4.91
5,775.00	79.07	311.180	5,173.06	-795.50	-1,414.50	463.20	8.24	7.39	3.74
5,797.00	80.47	311.889	5,176.97	-781.15	-1,430.71	484.82	7.09	6.34	3.22
330 ppd @ 5797 MD 5178.11 TVD									
5,807.00	81.10	312.210	5,178.57	-774.54	-1,438.04	494.69	7.09	6.35	3.21
5,838.00	84.14	313.550	5,182.55	-753.62	-1,460.56	525.42	10.70	9.81	4.32
5,869.00	87.10	314.520	5,184.92	-732.14	-1,482.78	556.33	10.05	9.55	3.13
5,901.00	87.75	314.940	5,186.35	-709.64	-1,505.49	588.29	2.42	2.03	1.31
5,932.00	89.37	315.160	5,187.13	-687.71	-1,527.38	619.28	5.27	5.23	0.71
5,995.00	90.48	314.920	5,187.22	-643.13	-1,571.90	682.27	1.80	1.76	-0.38
6,089.00	91.86	314.920	5,185.30	-576.77	-1,638.45	776.23	1.47	1.47	0.00
6,183.00	92.60	316.040	5,181.64	-509.80	-1,704.30	870.13	1.43	0.79	1.19
6,277.00	91.02	314.550	5,178.67	-443.03	-1,770.39	964.06	2.31	-1.68	-1.59



Survey Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,372.00	91.80	314.990	5,176.33	-376.14	-1,837.82	1,059.02	0.94	0.82	0.46
6,466.00	89.92	314.150	5,174.92	-310.19	-1,904.77	1,153.00	2.19	-2.00	-0.89
6,560.00	89.34	313.030	5,175.53	-245.38	-1,972.85	1,246.99	1.34	-0.62	-1.19
6,654.00	90.31	313.220	5,175.82	-181.12	-2,041.46	1,340.98	1.05	1.03	0.20
6,749.00	92.10	313.630	5,173.82	-115.83	-2,110.43	1,435.95	1.93	1.88	0.43
6,843.00	90.52	313.010	5,171.67	-51.36	-2,178.80	1,529.91	1.81	-1.68	-0.66
6,937.00	91.44	313.470	5,170.06	13.02	-2,247.27	1,623.89	1.09	0.98	0.49
7,032.00	89.57	312.670	5,169.22	77.89	-2,316.66	1,718.87	2.14	-1.97	-0.84
7,126.00	89.44	311.480	5,170.04	140.88	-2,386.43	1,812.80	1.27	-0.14	-1.27
7,220.00	90.19	314.700	5,170.34	205.08	-2,455.07	1,906.78	3.52	0.80	3.43
7,315.00	90.80	315.150	5,169.52	272.17	-2,522.33	2,001.76	0.80	0.64	0.47
7,409.00	91.28	314.340	5,167.81	338.33	-2,589.08	2,095.74	1.00	0.51	-0.86
7,503.00	91.60	313.890	5,165.45	403.74	-2,656.54	2,189.71	0.59	0.34	-0.48
7,598.00	92.29	313.890	5,162.23	469.56	-2,724.97	2,284.65	0.73	0.73	0.00
7,692.00	90.82	314.270	5,159.67	534.93	-2,792.47	2,378.62	1.62	-1.56	0.40
7,787.00	91.38	314.240	5,157.85	601.21	-2,860.50	2,473.60	0.59	0.59	-0.03
7,880.00	89.86	314.680	5,156.84	666.34	-2,926.87	2,566.59	1.70	-1.63	0.47
7,975.00	90.72	314.060	5,156.36	732.78	-2,994.78	2,661.58	1.12	0.91	-0.65
8,069.00	88.77	314.500	5,156.78	798.40	-3,062.07	2,755.58	2.13	-2.07	0.47
8,163.00	89.61	314.080	5,158.11	864.03	-3,129.35	2,849.56	1.00	0.89	-0.45
8,257.00	87.89	314.330	5,160.16	929.55	-3,196.72	2,943.54	1.85	-1.83	0.27
8,351.00	88.25	313.750	5,163.33	994.86	-3,264.25	3,037.48	0.73	0.38	-0.62
8,446.00	88.72	312.940	5,165.84	1,060.04	-3,333.31	3,132.44	0.99	0.49	-0.85
8,540.00	89.65	312.780	5,167.18	1,123.98	-3,402.21	3,226.41	1.00	0.99	-0.17
8,634.00	90.67	312.790	5,166.91	1,187.82	-3,471.19	3,320.39	1.09	1.09	0.01
8,729.00	89.27	313.340	5,166.96	1,252.69	-3,540.60	3,415.37	1.58	-1.47	0.58
8,823.00	89.52	312.830	5,167.96	1,316.90	-3,609.25	3,509.35	0.60	0.27	-0.54
8,917.00	89.64	312.480	5,168.65	1,380.59	-3,678.38	3,603.32	0.39	0.13	-0.37
9,012.00	89.43	311.140	5,169.42	1,443.92	-3,749.18	3,698.24	1.43	-0.22	-1.41
9,106.00	90.27	313.440	5,169.66	1,507.16	-3,818.71	3,792.19	2.60	0.89	2.45
9,201.00	90.59	313.060	5,168.95	1,572.25	-3,887.90	3,887.18	0.52	0.34	-0.40
9,294.00	88.50	313.690	5,169.69	1,636.12	-3,955.50	3,980.16	2.35	-2.25	0.68
9,388.00	88.81	314.030	5,171.89	1,701.23	-4,023.26	4,074.13	0.49	0.33	0.36
9,483.00	89.45	313.040	5,173.34	1,766.66	-4,092.12	4,169.12	1.24	0.67	-1.04
9,577.00	88.58	315.260	5,174.95	1,832.12	-4,159.55	4,263.10	2.54	-0.93	2.36
9,672.00	88.68	314.500	5,177.22	1,899.13	-4,226.85	4,358.06	0.81	0.11	-0.80
9,766.00	88.17	315.510	5,179.81	1,965.58	-4,293.28	4,452.01	1.20	-0.54	1.07
9,861.00	88.44	313.320	5,182.62	2,032.03	-4,361.11	4,546.96	2.32	0.28	-2.31
9,955.00	88.62	314.530	5,185.03	2,097.22	-4,428.79	4,640.93	1.30	0.19	1.29
10,049.00	88.76	315.460	5,187.18	2,163.66	-4,495.24	4,734.89	1.00	0.15	0.99
10,143.00	89.99	314.730	5,188.20	2,230.24	-4,561.59	4,828.86	1.52	1.31	-0.78
10,237.00	91.09	314.070	5,187.32	2,296.00	-4,628.75	4,922.86	1.36	1.17	-0.70
Survey @ 10237 MD 5188.46 TVD									
10,241.50	91.09	314.070	5,187.23	2,299.13	-4,631.98	4,927.36	0.00	0.00	0.00



Survey Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

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)
LTP @ 10241.50 MD 5188.37 TVD									
10,279.00	91.09	314.070	5,186.52	2,325.21	-4,658.92	4,964.85	0.00	0.00	0.00
330 ppd @ 10279 MD 5187.66 TVD									
10,375.00	91.09	314.070	5,184.69	2,391.97	-4,727.88	5,060.83	0.00	0.00	0.00
Survey Proj. to 10375 MD 5185.83 TVD 1920 FNL 158 FWL									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
401.00	400.98	3.23	1.43	MWD surveys
3,434.50	3,291.54	-585.98	-471.09	9 5/8" Casing @ 3434.50 MD 3292.02 TVD
5,671.49	5,146.00	-858.24	-1,336.93	FTP @ 5668.14 MD 5146.00 TVD
5,797.00	5,176.97	-781.15	-1,430.71	330 ppd @ 5797 MD 5178.11 TVD
10,237.00	5,187.32	2,296.00	-4,628.75	Survey @ 10237 MD 5188.46 TVD
10,241.50	5,187.23	2,299.13	-4,631.98	LTP @ 10241.50 MD 5188.37 TVD
10,279.00	5,186.52	2,325.21	-4,658.92	330 ppd @ 10279 MD 5187.66 TVD
10,375.00	5,184.69	2,391.97	-4,727.88	Survey Proj. to 10375 MD 5185.83 TVD 1920 FNL 158 FWL



Survey Report - Geographic



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

Project	Sandoval County, New Mexico NAD83 NmW		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	S Chaco Unit 344 Pad (344, 345 & 908)		
Site Position:		Northing:	1,879,087.903 usft
From:	Lat/Long	Easting:	2,810,639.945 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	36.163894000
		Longitude:	-107.536735000
		Grid Convergence:	0.18 °

Well	S Chaco Unit 345 H, Surf loc: 1027 FSL 356 FEL Section 02-T22N-R07W		
Well Position	+N/-S	0.00 ft	Northing: 1,879,087.903 usft
	+E/-W	0.00 ft	Easting: 2,810,639.945 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	36.163894000
		Longitude:	-107.536735000
		Ground Level:	7,003.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/22/2022	8.60	62.71	49,190.02868651

Design	Surveys Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00		314.063

Survey Program	Date	8/29/2022			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
401.00	3,375.00	MWD int (Original Hole)	MWD	OWSG MWD - Standard	
3,453.00	10,237.00	MWD (Original Hole)	MWD	OWSG MWD - Standard	
10,375.00	10,375.00	Projection (Original Hole)	MWD	OWSG MWD - Standard	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.000	0.00	0.00	0.00	1,879,087.903	2,810,639.945	36.163894000	-107.536735000	
401.00	1.01	23.830	400.98	3.23	1.43	1,879,091.136	2,810,641.373	36.163902869	-107.536730129	
MWD surveys										
492.00	1.32	32.350	491.96	4.85	2.31	1,879,092.755	2,810,642.258	36.163907310	-107.536727115	
583.00	1.30	37.070	582.94	6.56	3.50	1,879,094.464	2,810,643.441	36.163911995	-107.536723089	
675.00	1.26	42.090	674.91	8.14	4.80	1,879,096.047	2,810,644.748	36.163916333	-107.536718644	
765.00	0.62	55.510	764.90	9.15	5.87	1,879,097.057	2,810,645.813	36.163919099	-107.536715027	
855.00	0.50	53.130	854.90	9.67	6.58	1,879,097.569	2,810,646.528	36.163920498	-107.536712598	
946.00	0.34	41.160	945.89	10.11	7.08	1,879,098.010	2,810,647.023	36.163921706	-107.536710915	
1,037.00	0.23	51.920	1,036.89	10.42	7.40	1,879,098.326	2,810,647.345	36.163922572	-107.536709823	



Survey Report - Geographic



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,131.00	2.33	212.240	1,130.87	8.92	6.53	1,879,096.826	2,810,646.474	36.163918458	-107.536712789
1,226.00	4.73	217.090	1,225.68	4.16	3.14	1,879,092.067	2,810,643.081	36.163905415	-107.536724333
1,321.00	6.77	218.770	1,320.20	-3.33	-2.73	1,879,084.576	2,810,637.212	36.163884886	-107.536744293
1,416.00	9.73	220.050	1,414.21	-13.84	-11.41	1,879,074.063	2,810,628.538	36.163856078	-107.536773787
1,510.00	13.25	219.580	1,506.31	-28.23	-23.39	1,879,059.676	2,810,616.560	36.163816654	-107.536814517
1,605.00	16.95	218.960	1,598.01	-47.39	-39.03	1,879,040.510	2,810,600.910	36.163764136	-107.536867732
1,700.00	20.00	218.760	1,688.11	-70.83	-57.92	1,879,017.068	2,810,582.028	36.163699898	-107.536931945
1,794.00	22.08	220.030	1,775.83	-96.90	-79.35	1,878,991.002	2,810,560.598	36.163628473	-107.537004813
1,889.00	21.00	219.300	1,864.20	-123.75	-101.61	1,878,964.157	2,810,538.331	36.163554913	-107.537080525
1,983.00	19.69	218.730	1,952.33	-149.13	-122.19	1,878,938.768	2,810,517.754	36.163485341	-107.537150497
2,078.00	21.92	219.520	2,041.13	-175.30	-143.49	1,878,912.601	2,810,496.455	36.163413636	-107.537222926
2,172.00	21.67	219.180	2,128.41	-202.29	-165.62	1,878,885.614	2,810,474.325	36.163339684	-107.537298174
2,266.00	20.57	218.680	2,216.10	-228.63	-186.91	1,878,859.268	2,810,453.040	36.163267489	-107.537370556
2,361.00	22.02	218.210	2,304.61	-255.66	-208.35	1,878,832.245	2,810,431.593	36.163193434	-107.537443493
2,455.00	21.22	218.580	2,392.00	-282.80	-229.86	1,878,805.100	2,810,410.084	36.163119043	-107.537516639
2,549.00	23.62	218.120	2,478.88	-310.92	-252.10	1,878,776.982	2,810,387.847	36.163041987	-107.537592262
2,644.00	23.51	218.020	2,565.96	-340.82	-275.52	1,878,747.082	2,810,364.428	36.162960046	-107.537671909
2,738.00	22.69	217.810	2,652.42	-369.92	-298.18	1,878,717.988	2,810,341.765	36.162880311	-107.537748985
2,832.00	23.40	218.720	2,738.92	-398.80	-320.97	1,878,689.100	2,810,318.974	36.162801146	-107.537826492
2,926.00	22.84	218.970	2,825.37	-427.55	-344.12	1,878,660.353	2,810,295.825	36.162722367	-107.537905213
3,020.00	24.63	218.900	2,911.42	-456.98	-367.90	1,878,630.923	2,810,272.049	36.162641719	-107.537986062
3,114.00	24.32	218.450	2,996.97	-487.38	-392.23	1,878,600.520	2,810,247.713	36.162558404	-107.538068821
3,208.00	23.62	218.990	3,082.86	-517.18	-416.12	1,878,570.724	2,810,223.828	36.162476751	-107.538150043
3,302.00	22.58	218.920	3,169.33	-545.86	-439.30	1,878,542.046	2,810,200.641	36.162398163	-107.538228889
3,434.50	22.87	217.865	3,291.54	-585.98	-471.09	1,878,501.928	2,810,168.856	36.162288222	-107.538336980
9 5/8" Casing @ 3434.50 MD 3292.02 TVD									
3,547.00	23.12	216.990	3,395.10	-620.88	-497.80	1,878,467.029	2,810,142.149	36.162192573	-107.538427816
3,641.00	25.02	217.860	3,480.92	-651.31	-521.10	1,878,436.591	2,810,118.843	36.162109153	-107.538507082
3,735.00	25.25	217.240	3,566.02	-682.97	-545.44	1,878,404.937	2,810,094.511	36.162022398	-107.538589839
3,830.00	24.82	216.340	3,652.10	-715.16	-569.51	1,878,372.744	2,810,070.433	36.161934164	-107.538671736
3,924.00	24.37	215.850	3,737.57	-746.77	-592.56	1,878,341.133	2,810,047.384	36.161847516	-107.538750145
4,019.00	23.82	215.910	3,824.29	-778.20	-615.29	1,878,309.708	2,810,024.654	36.161761380	-107.538827472
4,113.00	22.64	215.170	3,910.67	-808.36	-636.85	1,878,279.544	2,810,003.099	36.161678695	-107.538900803
4,207.00	24.93	218.280	3,996.68	-838.71	-659.55	1,878,249.198	2,809,980.401	36.161595521	-107.538978009
4,302.00	24.67	218.010	4,082.92	-870.04	-684.16	1,878,217.860	2,809,955.788	36.161509638	-107.539061710
4,396.00	22.74	217.270	4,168.99	-899.96	-707.24	1,878,187.943	2,809,932.704	36.161427645	-107.539140220
4,490.00	24.07	217.750	4,255.25	-929.58	-729.98	1,878,158.327	2,809,909.965	36.161346477	-107.539217555
4,583.00	20.79	215.780	4,341.21	-957.97	-751.25	1,878,129.933	2,809,888.698	36.161268654	-107.539289891
4,678.00	21.14	219.620	4,429.92	-984.85	-772.03	1,878,103.058	2,809,867.916	36.161195000	-107.539360572
4,772.00	23.88	218.750	4,516.75	-1,012.75	-794.75	1,878,075.158	2,809,845.193	36.161118543	-107.539437835
4,802.00	26.09	219.100	4,543.94	-1,022.60	-802.72	1,878,065.301	2,809,837.231	36.161091533	-107.539464909
4,834.00	25.74	224.490	4,572.73	-1,033.02	-812.02	1,878,054.882	2,809,827.922	36.161062989	-107.539496551
4,865.00	26.33	233.100	4,600.59	-1,041.96	-822.24	1,878,045.949	2,809,817.703	36.161038533	-107.539531260
4,896.00	28.08	242.720	4,628.18	-1,049.43	-834.23	1,878,038.473	2,809,805.714	36.161018096	-107.539571951
4,927.00	29.85	251.500	4,655.31	-1,055.23	-848.04	1,878,032.678	2,809,791.906	36.161002291	-107.539618787
4,959.00	30.46	258.100	4,682.99	-1,059.43	-863.53	1,878,028.477	2,809,776.413	36.160990880	-107.539671316
4,991.00	31.54	264.950	4,710.42	-1,061.84	-879.81	1,878,026.067	2,809,760.134	36.160984395	-107.539726490
5,022.00	33.17	270.570	4,736.62	-1,062.47	-896.37	1,878,025.438	2,809,743.572	36.160982803	-107.539782600
5,053.00	34.41	274.510	4,762.38	-1,061.69	-913.59	1,878,026.211	2,809,726.358	36.160985070	-107.539840911
5,085.00	36.04	279.040	4,788.53	-1,059.50	-931.90	1,878,028.402	2,809,708.043	36.160991240	-107.539902933
5,116.00	37.63	282.320	4,813.34	-1,056.05	-950.16	1,878,031.854	2,809,689.788	36.161000876	-107.539964738
5,147.00	38.89	285.160	4,837.68	-1,051.49	-968.80	1,878,036.419	2,809,671.147	36.161013571	-107.540027840
5,179.00	40.78	288.070	4,862.26	-1,045.62	-988.43	1,878,042.289	2,809,651.513	36.161029858	-107.540094294
5,211.00	42.64	290.850	4,886.15	-1,038.52	-1,008.50	1,878,049.389	2,809,631.446	36.161049529	-107.540162201
5,242.00	44.18	292.240	4,908.67	-1,030.69	-1,028.31	1,878,057.215	2,809,611.634	36.161071193	-107.540229238



Survey Report - Geographic



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

Survey										
Measured			Vertical			Map		Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting			
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude	
5,273.00	45.96	293.210	4,930.56	-1,022.21	-1,048.55	1,878,065.695	2,809,591.393	36.161094657	-107.540297721	
5,304.00	48.18	294.460	4,951.67	-1,013.03	-1,069.31	1,878,074.871	2,809,570.635	36.161120035	-107.540367948	
5,336.00	50.25	295.490	4,972.57	-1,002.80	-1,091.27	1,878,085.103	2,809,548.675	36.161148326	-107.540442238	
5,367.00	52.37	296.810	4,991.95	-992.13	-1,112.99	1,878,095.770	2,809,526.959	36.161177808	-107.540515696	
5,398.00	54.56	298.140	5,010.41	-980.64	-1,135.08	1,878,107.264	2,809,504.864	36.161209567	-107.540590429	
5,430.00	54.87	298.410	5,028.89	-968.27	-1,158.09	1,878,119.638	2,809,481.859	36.161243749	-107.540668234	
5,461.00	54.54	298.030	5,046.80	-956.30	-1,180.38	1,878,131.602	2,809,459.565	36.161276801	-107.540743637	
5,492.00	56.13	298.630	5,064.43	-944.20	-1,202.82	1,878,143.703	2,809,437.123	36.161310227	-107.540819539	
5,524.00	58.31	300.360	5,081.76	-930.95	-1,226.24	1,878,156.951	2,809,413.711	36.161346816	-107.540898717	
5,555.00	60.95	301.780	5,097.43	-917.15	-1,249.14	1,878,170.757	2,809,390.807	36.161384930	-107.540976166	
5,587.00	63.30	302.600	5,112.39	-902.08	-1,273.08	1,878,185.827	2,809,366.872	36.161426527	-107.541057099	
5,618.00	65.56	303.780	5,125.77	-886.77	-1,296.47	1,878,201.135	2,809,343.474	36.161468774	-107.541136209	
5,649.00	68.01	305.440	5,137.99	-870.59	-1,319.92	1,878,217.319	2,809,320.030	36.161513425	-107.541215462	
5,671.49	70.26	306.479	5,146.00	-858.24	-1,336.93	1,878,229.660	2,809,303.022	36.161547467	-107.541272956	
FTP @ 5668.14 MD 5146.00 TVD										
5,681.00	71.22	306.910	5,149.14	-852.88	-1,344.12	1,878,235.024	2,809,295.823	36.161562263	-107.541297287	
5,712.00	73.81	308.450	5,158.45	-834.81	-1,367.52	1,878,253.097	2,809,272.427	36.161612105	-107.541376362	
5,744.00	76.78	310.020	5,166.57	-815.23	-1,391.49	1,878,272.674	2,809,248.458	36.161666081	-107.541457361	
5,775.00	79.07	311.180	5,173.06	-795.50	-1,414.50	1,878,292.401	2,809,225.445	36.161720463	-107.541535124	
5,797.00	80.47	311.889	5,176.97	-781.15	-1,430.71	1,878,306.756	2,809,209.239	36.161760032	-107.541589877	
330 ppd @ 5797 MD 5178.11 TVD										
5,807.00	81.10	312.210	5,178.57	-774.54	-1,438.04	1,878,313.367	2,809,201.910	36.161778254	-107.541614641	
5,838.00	84.14	313.550	5,182.55	-753.62	-1,460.56	1,878,334.285	2,809,179.386	36.161835902	-107.541690732	
5,869.00	87.10	314.520	5,184.92	-732.14	-1,482.78	1,878,355.768	2,809,157.167	36.161895101	-107.541765782	
5,901.00	87.75	314.940	5,186.35	-709.64	-1,505.49	1,878,378.265	2,809,134.457	36.161957091	-107.541842490	
5,932.00	89.37	315.160	5,187.13	-687.71	-1,527.38	1,878,400.197	2,809,112.563	36.162017520	-107.541916435	
5,995.00	90.48	314.920	5,187.22	-643.13	-1,571.90	1,878,444.775	2,809,068.048	36.162140346	-107.542066789	
6,089.00	91.86	314.920	5,185.30	-576.77	-1,638.45	1,878,511.134	2,809,001.502	36.162323190	-107.542291550	
6,183.00	92.60	316.040	5,181.64	-509.80	-1,704.30	1,878,578.104	2,808,935.645	36.162507704	-107.542513977	
6,277.00	91.02	314.550	5,178.67	-443.03	-1,770.39	1,878,644.876	2,808,869.557	36.162691674	-107.542737189	
6,372.00	91.80	314.990	5,176.33	-376.14	-1,837.82	1,878,711.760	2,808,802.134	36.162875964	-107.542964923	
6,466.00	89.92	314.150	5,174.92	-310.19	-1,904.77	1,878,777.716	2,808,735.180	36.163057701	-107.543191077	
6,560.00	89.34	313.030	5,175.53	-245.38	-1,972.85	1,878,842.525	2,808,667.099	36.163236297	-107.543421062	
6,654.00	90.31	313.220	5,175.82	-181.12	-2,041.46	1,878,906.782	2,808,598.493	36.163413377	-107.543652832	
6,749.00	92.10	313.630	5,173.82	-115.83	-2,110.43	1,878,972.068	2,808,529.516	36.163593289	-107.543885854	
6,843.00	90.52	313.010	5,171.67	-51.36	-2,178.80	1,879,036.539	2,808,461.148	36.163770957	-107.544116818	
6,937.00	91.44	313.470	5,170.06	13.02	-2,247.27	1,879,100.924	2,808,392.681	36.163948387	-107.544348120	
7,032.00	89.57	312.670	5,169.22	77.89	-2,316.66	1,879,165.793	2,808,323.288	36.164127154	-107.544582555	
7,126.00	89.44	311.480	5,170.04	140.88	-2,386.43	1,879,228.779	2,808,253.519	36.164300751	-107.544818285	
7,220.00	90.19	314.700	5,170.34	205.08	-2,455.07	1,879,292.985	2,808,184.882	36.164477692	-107.545050166	
7,315.00	90.80	315.150	5,169.52	272.17	-2,522.33	1,879,360.069	2,808,117.622	36.164662526	-107.545277356	
7,409.00	91.28	314.340	5,167.81	338.33	-2,589.08	1,879,426.229	2,808,050.871	36.164844816	-107.545502833	
7,503.00	91.60	313.890	5,165.45	403.74	-2,656.54	1,879,491.641	2,807,983.406	36.165025059	-107.545730736	
7,598.00	92.29	313.890	5,162.23	469.56	-2,724.97	1,879,557.464	2,807,914.982	36.165206436	-107.545961885	
7,692.00	90.82	314.270	5,159.67	534.93	-2,792.47	1,879,622.830	2,807,847.483	36.165386551	-107.546189909	
7,787.00	91.38	314.240	5,157.85	601.21	-2,860.50	1,879,689.114	2,807,779.453	36.165569190	-107.546419720	
7,880.00	89.86	314.680	5,156.84	666.34	-2,926.87	1,879,754.246	2,807,713.081	36.165748652	-107.546643927	
7,975.00	90.72	314.060	5,156.36	732.78	-2,994.78	1,879,820.676	2,807,645.173	36.165931693	-107.546873325	
8,069.00	88.77	314.500	5,156.78	798.40	-3,062.07	1,879,886.300	2,807,577.879	36.166112511	-107.547100653	
8,163.00	89.61	314.080	5,158.11	864.03	-3,129.35	1,879,951.932	2,807,510.600	36.166293352	-107.547327931	
8,257.00	87.89	314.330	5,160.16	929.55	-3,196.72	1,880,017.453	2,807,443.235	36.166473889	-107.547555504	
8,351.00	88.25	313.750	5,163.33	994.86	-3,264.25	1,880,082.760	2,807,375.702	36.166653840	-107.547783650	
8,446.00	88.72	312.940	5,165.84	1,060.04	-3,333.31	1,880,147.944	2,807,306.640	36.166833462	-107.548016977	
8,540.00	89.65	312.780	5,167.18	1,123.98	-3,402.21	1,880,211.876	2,807,237.744	36.167009646	-107.548249754	
8,634.00	90.67	312.790	5,166.91	1,187.82	-3,471.19	1,880,275.724	2,807,168.758	36.167185598	-107.548482839	



Survey Report - Geographic



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well S Chaco Unit 345 H
Project:	Sandoval County, New Mexico NAD83 NmW	TVD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Site:	S Chaco Unit 344 Pad (344, 345 & 908)	MD Reference:	RKB=7003+13 @ 7016.00ft (Ensign 145)
Well:	S Chaco Unit 345 H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Feb2822

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,729.00	89.27	313.340	5,166.96	1,252.69	-3,540.60	1,880,340.591	2,807,099.355	36.167364351	-107.548717327	
8,823.00	89.52	312.830	5,167.96	1,316.90	-3,609.25	1,880,404.797	2,807,030.707	36.167541283	-107.548949264	
8,917.00	89.64	312.480	5,168.65	1,380.59	-3,678.38	1,880,468.487	2,806,961.577	36.167716803	-107.549182841	
9,012.00	89.43	311.140	5,169.42	1,443.92	-3,749.18	1,880,531.817	2,806,890.772	36.167891343	-107.549422098	
9,106.00	90.27	313.440	5,169.66	1,507.16	-3,818.71	1,880,595.062	2,806,821.241	36.168065643	-107.549657039	
9,201.00	90.59	313.060	5,168.95	1,572.25	-3,887.90	1,880,660.153	2,806,752.049	36.168245006	-107.549890818	
9,294.00	88.50	313.690	5,169.69	1,636.12	-3,955.50	1,880,724.016	2,806,684.455	36.168420987	-107.550119191	
9,388.00	88.81	314.030	5,171.89	1,701.23	-4,023.26	1,880,789.131	2,806,616.697	36.168600404	-107.550348112	
9,483.00	89.45	313.040	5,173.34	1,766.66	-4,092.12	1,880,854.557	2,806,547.836	36.168780688	-107.550580768	
9,577.00	88.58	315.260	5,174.95	1,832.12	-4,159.55	1,880,920.017	2,806,480.404	36.168961052	-107.550808582	
9,672.00	88.68	314.500	5,177.22	1,899.13	-4,226.85	1,880,987.032	2,806,413.108	36.169145684	-107.551035920	
9,766.00	88.17	315.510	5,179.81	1,965.58	-4,293.28	1,881,053.479	2,806,346.672	36.169328751	-107.551260353	
9,861.00	88.44	313.320	5,182.62	2,032.03	-4,361.11	1,881,119.932	2,806,278.849	36.169511842	-107.551489487	
9,955.00	88.62	314.530	5,185.03	2,097.22	-4,428.79	1,881,185.118	2,806,211.169	36.169691455	-107.551718147	
10,049.00	88.76	315.460	5,187.18	2,163.66	-4,495.24	1,881,251.562	2,806,144.713	36.169874511	-107.551942648	
10,143.00	89.99	314.730	5,188.20	2,230.24	-4,561.59	1,881,318.134	2,806,078.361	36.170057919	-107.552166799	
10,237.00	91.09	314.070	5,187.32	2,296.00	-4,628.75	1,881,383.898	2,806,011.205	36.170239112	-107.552393682	
Survey @ 10237 MD 5188.46 TVD										
10,241.50	91.09	314.070	5,187.23	2,299.13	-4,631.98	1,881,387.028	2,806,007.973	36.170247734	-107.552404603	
LTP @ 10241.50 MD 5188.37 TVD										
10,279.00	91.09	314.070	5,186.52	2,325.21	-4,658.92	1,881,413.106	2,805,981.034	36.170319587	-107.552495617	
330 ppd @ 10279 MD 5187.66 TVD										
10,375.00	91.09	314.070	5,184.69	2,391.97	-4,727.88	1,881,479.865	2,805,912.072	36.170503528	-107.552728613	
Survey Proj. to 10375 MD 5185.83 TVD 1920 FNL 158 FWL										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
401.00	400.98	3.23	1.43	MWD surveys	
3,434.50	3,291.54	-585.98	-471.09	9 5/8" Casing @ 3434.50 MD 3292.02 TVD	
5,671.49	5,146.00	-858.24	-1,336.93	FTP @ 5668.14 MD 5146.00 TVD	
5,797.00	5,176.97	-781.15	-1,430.71	330 ppd @ 5797 MD 5178.11 TVD	
10,237.00	5,187.32	2,296.00	-4,628.75	Survey @ 10237 MD 5188.46 TVD	
10,241.50	5,187.23	2,299.13	-4,631.98	LTP @ 10241.50 MD 5188.37 TVD	
10,279.00	5,186.52	2,325.21	-4,658.92	330 ppd @ 10279 MD 5187.66 TVD	
10,375.00	5,184.69	2,391.97	-4,727.88	Survey Proj. to 10375 MD 5185.83 TVD 1920 FNL 158 FWL	

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------

WELL NAME: S CHACO UNIT 345H
OBJECTIVE: Drill, complete, and equip single lateral in the Mancos-H formation
API Number: 30-043-21279
AFE Number: DV03084
ER Well Number: NM08014.01
State: New Mexico
County: San Juan
Surface Elev.: 7,003 ft ASL (GL) 7,016 ft ASL (KB)
Surface Location: 2-22N-07W Sec-Twn- Rng 1,027 ft FSL 356 ft FEL
BH Location: 2-22N-07W Sec-Twn- Rng 1974 ft FNL 228 ft FWL
Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

QUICK REFERENCE		
Sur TD (MD)	365	ft
Int TD (MD)	3,410	ft
KOP (MD)	4,859	ft
KOP (TVD)	4,593	ft
Target (TVD)	5,172	ft
Curve BUR	10	°/100 ft
POE (MD)	5,837	ft
TD (MD)	10,364	ft
Lat Len (ft)	4,499	ft

South on US Hwy 550 for 48.3 miles to MM 103.0; Right (South) on Atkins Road for 4.2 miles to 4-way intersection; Left (East) exiting Atkins Road for 0.3 miles to fork; Right (South) along existing access road for 0.2 miles; Right (South) for 0.6 miles to S CHACO UNIT 344H PAD (WELLS: 344H, 345H, 908H).

WELL CONSTRUCTION SUMMARY:

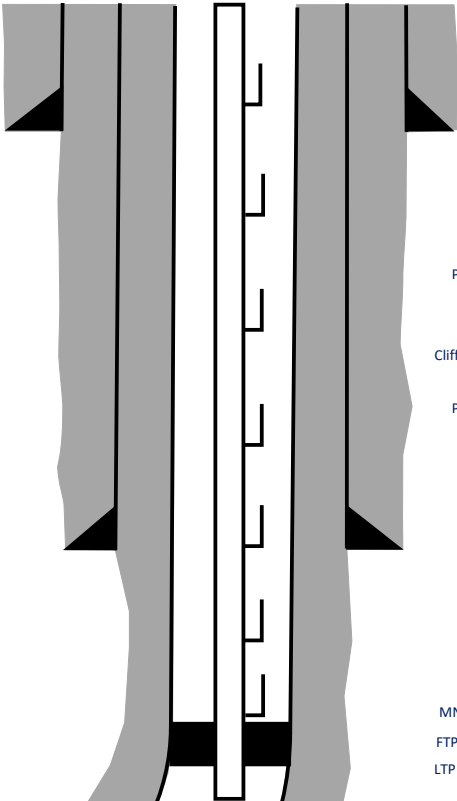
	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	365	13.375	54.5	J-55	BTC	0	365
Intermediate	12.250	3,410	9.625	36.0	J-55	LTC	0	3,410
Production	8.500	10,364	5.500	20.0	HCP-110	TCBC-HT	0	10,364

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	Type III	14.6	1.39	6.686	0.6946	100%	0	350
Inter. (Lead)	III:POZ Blend	12.5	2.14	12.05	0.3627	70%	0	698
Inter. (Tail)	Type III	14.6	1.38	6.64	0.3132	20%	2,919	136
Prod. (Lead)	Type III	12.4	2.360	13.4	0.2691	65%	0	543
Prod. (Tail)	G:POZ blend	13.3	1.560	7.7	0.2291	10%	4,376	963

COMPLETION / PRODUCTION SUMMARY:

Frac: 20 plug-and-perf stages with 180,000 bbls slickwater fluid and 7,000,000 lbs of proppant (estimated)
Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assistance)
Production: Produce through production tubing via gas-lift into permanent production and storage facilities



Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	974	989
Kirtland	1,086	1,101
Fruitland	1,306	1,321
Pictured Cliffs	1,586	1,604
Lewis	1,721	1,743
Chacra A	1,976	2,016
Cliff House Basal	3,076	3,217
Menefee	3,111	3,256
Point Lookout	3,960	4,183
Mancos	4,151	4,376
MNCS A	4,466	4,725
MNCS B	4,564	4,843
MNCS C	4,644	4,931
MNCS Cms	4,688	4,979
MNCS D	4,816	5,125
MNCS E	4,946	5,294
MNCS F	4,996	5,371
MNCS G	5,071	5,512
MNCS H @ 0 VS	5,134	5,674
FTP (LP) TARGET	5,172	5,837
LTP (TD) TARGET	5,230	10,336

This document will be submitted with the completion package after the well has been completed.

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

ACKNOWLEDGMENTS

Action 152652

ACKNOWLEDGMENTS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 152652
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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 152652

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 152652
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

CONDITIONS

Created By	Condition	Condition Date
Ilowe	COA: RT expires on 01/22/22	10/25/2022