

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

Subsequent Report

Sundry ID: 2699024

Type of Submission: Subsequent Report

Type of Action: Drilling Operations

Date Sundry Submitted: 10/21/2022

Time Sundry Submitted: 03:15

Date Operation Actually Began: 09/27/2022

Actual Procedure: MorningStar Operating has drilled a sidetrack and completed the Carracas 25A 14. Attached are the 3160-4 Completion Form, Procedure, C-102 As Drilled Plat, WBD, and Directional Survey.

SR Attachments

PActual Procedure

3160_4_Carracas_25A_14_20221021151455.pdf

3160_4_Carracas_25A_14_20221021151448.pdf

Carracas_25A_14_Procedure__WBD__C_102__Dir_Survey_20221020144219.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: CONNIE BLAYLOCK

Signed on: OCT 21, 2022 03:15 PM

Name: MORNINGSTAR OPERATING LLC

Title: Regulatory Technician

Street Address: 400 W 7th St.

City: Forth Worth

State: TX

Phone: (817) 334-7882

Email address: CBLAYLOCK@MSPARTNERS.COM

Field

Representative Name: Amy Byars

Street Address:

City:

State:

Zip:

Phone:

Email address: abyars@mspartners.com

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Phone: 5055647742

Disposition: Accepted

Signature: Kenneth Rennick

BLM POC Title: Petroleum Engineer

BLM POC Email Address: krennick@blm.gov

Disposition Date: 10/24/2022

CONFIDENTIAL

Form 3160-4
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other						5. Lease Serial No. NMNM 29342			
b. Type of Completion: ☐ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resrv., Other: DRILLED SIDETRACK						6. If Indian, Allottee or Tribe Name			
2. Name of Operator MORNINGSTAR OPERATING LLC						7. Unit or CA Agreement Name and No.			
3. Address 400 W 7TH ST, FORT WORTH, TX 76102				3a. Phone No. (include area code) 817-334-7882		8. Lease Name and Well No. CARRACAS 25A 14-1ST			
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 870' FNL, 1510' FWL 1483' FSL, 1593' FWL At top prod. interval reported below At total depth 1510' FNL, 673' FWL						9. AFI Well No. 30-039-27588			
14. Date Spudded						15. Date T.D. Reached 10/02/2022		16. Date Completed 10/20/2022 ☐ D & A ☒ Ready to Prod.	
18. Total Depth: MD 6664 TVD 3835				19. Plug Back T.D.: MD 6630 TVD 3835		20. Depth Bridge Plug Set: MD TVD			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)						22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit report) Directional Survey? ☐ No ☒ Yes (Submit copy)			
23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12 1/4	9 5/8, H-40	32.3	0	251		110 SX, G		0	5
8 3/4	7, J-55	23	0	4314		600 SX, G		0	20
6 1/4	4 1/2, P-110	11.6	4187	6630		0			
6 1/4	4 1/2, J-55	11.6	4287	5298		0			
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
25. Producing Intervals									
Formation		Top	Bottom	Perforated Interval		Size	No. Holes	Perf. Status	
A) BASIN FRUITLAND COAL		4236	6624	4236-6624		4 SPF		OPEN	
B) BASIN FRUITLAND COAL		4329	5254	4329-5254		.5", 6 SPF		OPEN	
C)									
D)									
27. Acid, Fracture, Treatment, Cement Squeeze, etc.									
Depth Interval		Amount and Type of Material							
28. Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Ibg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						
28a. Production - Interval B									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Ibg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

SI, READY FOR SALE

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) CONNIE BLAYLOCKTitle REGULATORY ANALYST

Signature

Connie BlaylockDate 10/19/2022

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

(Continued on page 3)

(Form 3160-4, page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

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

ITEM 17: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 23: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

NOTICES

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling and completing/recompleting operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

SUBSEQUENT PROCEDURE – CARRACAS 25A 14

9/27/2022: MIRU Drilling Rig.

Set RBP at 4200'. Set Whipstock. Cut window 4,177'-4,185'.

Drill to TD 6664' md. Drop 4.5" pre-perf liner.

Liner top at 4187'. Liner btm at 6630'. Perfs 4236'-6624. Set RBP at 3900'.

10/04/2022: RDMO Drilling Rig.

10/19/2022: MIRU WOR.

Pull RBP, Whipstock and RBP.

RIH Prod tbg. Swab well cleaning up.

Not approved for gas sales during completion so swabbed while building csg pressure.

Install rods and pump.

10/25/2022: Expected RDMO WOR.

MorningStar Operating, LLC

Carracas 25A-14 Rio Arriba County, NM

TD – 5,300' MD; 3,873' TVD

12 1/4" hole to 258'

Csg: 5 jts – 9 5/8" 32.3# H-40 ST&C

Setting Depth: 251 ft

Cement

110 sx Class G

(130 ft³), circ. 5 bbls cmt to surface

8 3/4" hole to 4355'

Csg: 94 jts – 7" 23# J-55 LT&C

Setting Depth: 4314 ft

Cement

Lead: 500 sx 65/35 Class G

Tail: 100 sx Class G

(1104 ft³), circ. 20 bbls cmt to surface

6 1/4" Upper Sidetrack hole to 6,664'

Window: 4,177' – 4,185' MD

Liner: 58 jts- 4 1/2" 11.6# P-110

TOL: 4,187' MD (2' drop off outside window)

Setting Depth: 6,630' MD; 3,835' TVD

every other jt perf'd 29blank 29perf'd

4' blank on each end. 4spf; 90° ph

~ 3,944 total perforations

No cement

6 1/4" Lower Lateral hole to 5,728'

Set OH-PKR at 5335' MD

Cmt Plug 25sx- tag 5300' md new TD

Liner: 24 jts- 4 1/2" 11.6# J-55

TOL: 4,287'

Setting Depth: 5,298'

4,536 – 1/2" holes @ 6 spf from 4,329'-5,254'

No cement

Post Sidetrack Proposed Corod RTP

Lufkin M-160D-173-74
PU 634; SN#209007

Prepared by: B.Savage
Date: 08/26/2020
Proposed: J Marschall 01/17/2022

KB = 18 ft
GL = 7,163 ft
API# 30-039-27588

Spud Date: 06/02/2006
Sidetrack Spud Date: 09/27/2022

PROPOSED

2-3/8" 4.7# J-55 Prod Tbg:

Tj smash open end, new 1.78" id SN, 8' PerfSub,
new 1.78" ID SN,
~ 118~ Jts 2-3/8" Tbg,
EOT @ ~4,247' kb; SN @ ~4,207' kb

Rods and Pump:

2"x1.5"x16" RWAC pump (sureflow or petrovalve)

4 > Stabilizer subs

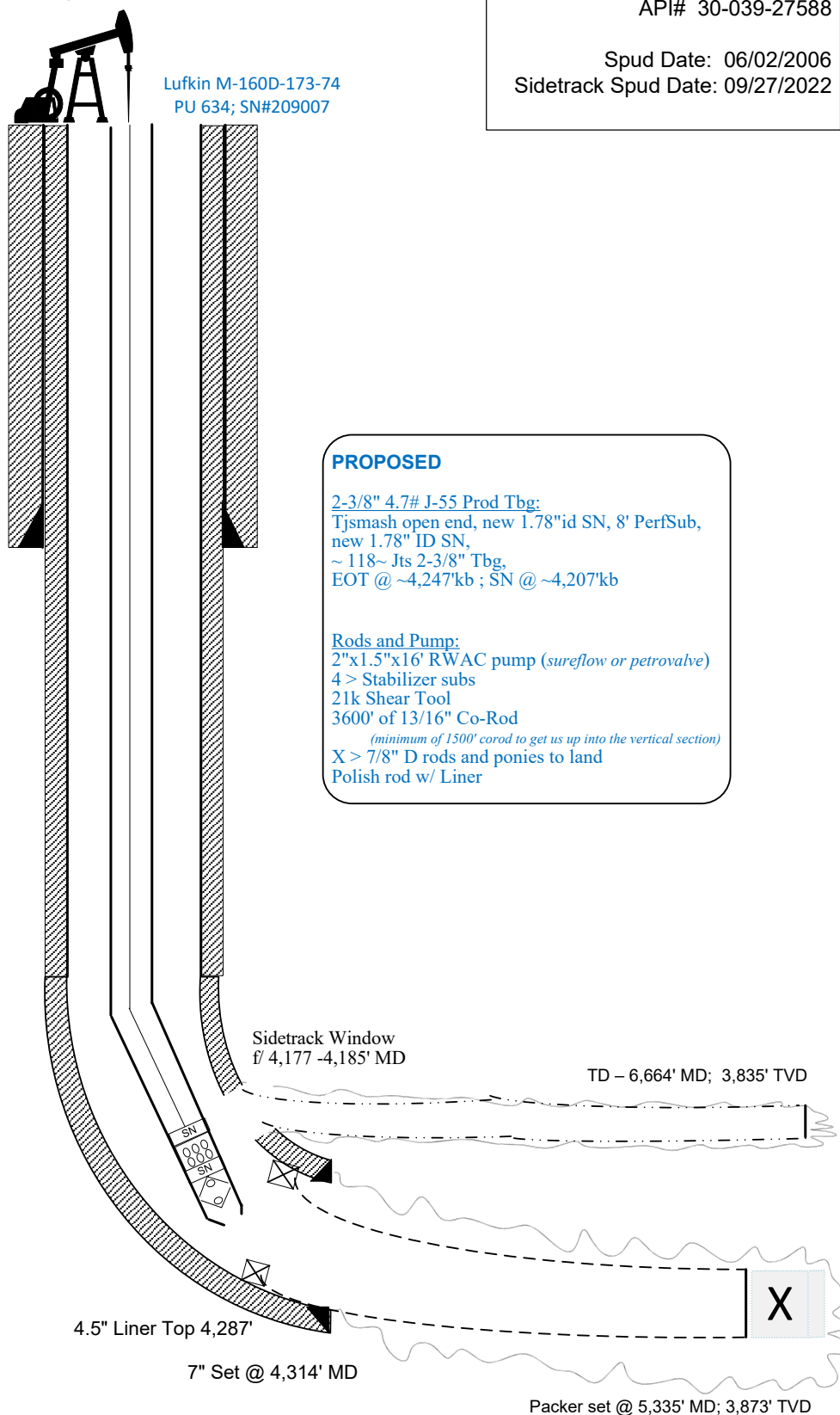
21k Shear Tool

3600' of 13/16" Co-Rod

(minimum of 1500' corod to get us up into the vertical section)

X > 7/8" D rods and ponies to land

Polish rod w/ Liner



DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II

811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
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
☒ AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-27588	² Pool Code 71629	³ Pool Name BASIN FRIUTLAND COAL
⁴ Property Code 329025	⁵ Property Name CARRACAS 25A	⁶ Well Number 14-1ST
⁷ GRID No. 330132	⁸ Operator Name MORNINGSTAR OPERATING LLC	⁹ Elevation 7163'

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
N	25	32N	5W		863'	SOUTH	1502'	WEST	RIO ARriba

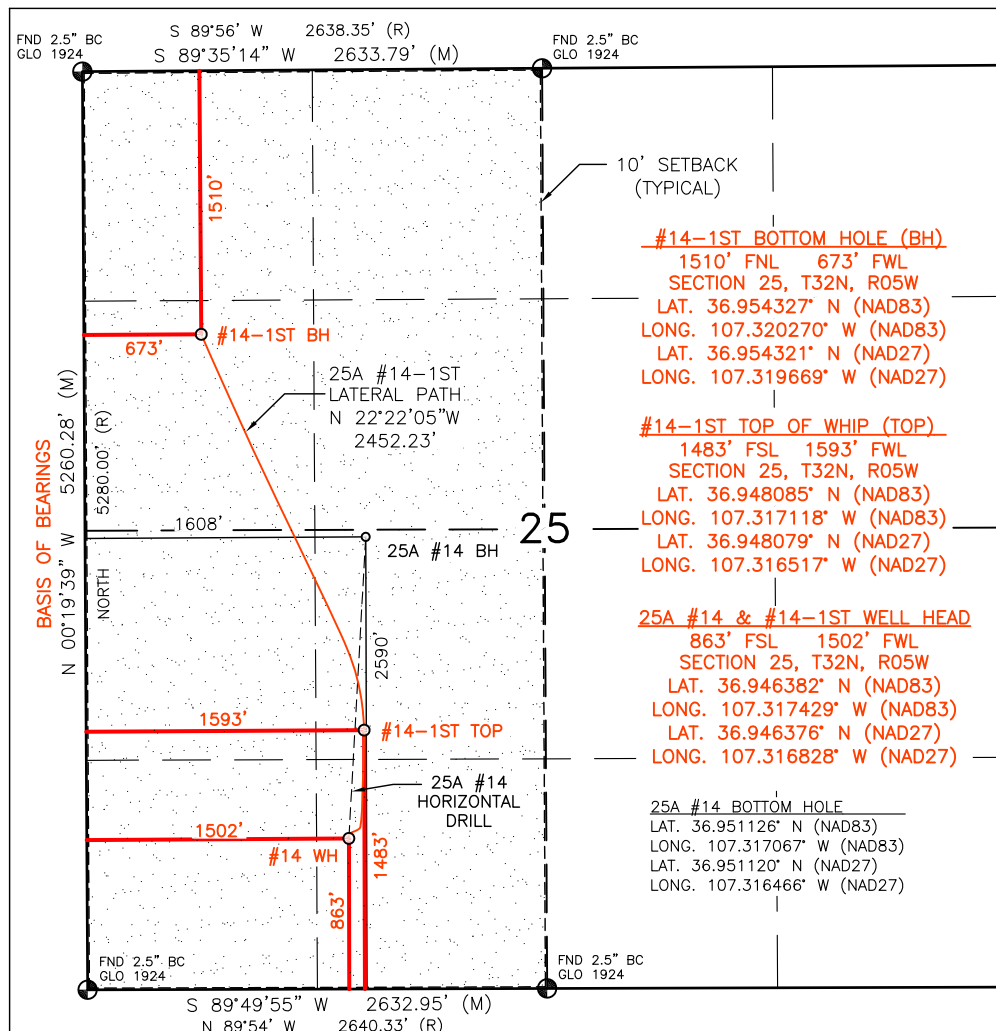
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	25	32N	5W		1510'	NORTH	673'	WEST	RIO ARriba

¹² Dedicated Acres W/2 SEC. 25 320.00 ACRES	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13119
--	-------------------------------	----------------------------------	------------------------------------

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

16



17 OPERATOR CERTIFICATION

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

Connie Blaylock 10/17/22
Signature Date

Connie Blaylock
Printed Name

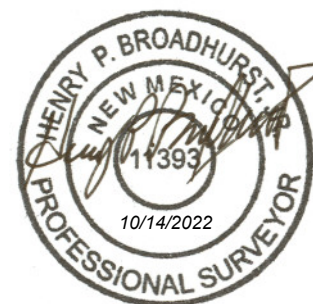
cblaylock@mspartners.com
E-mail Address

SURVEYOR CERTIFICATION

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

OCTOBER 13, 2022

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number 11393



MorningStar Partners

Rio Arriba County, NM (NAD 27 - True North)

Carracas 25A 14

Carracas 25A 14

ST01

Design: ST01

Standard Survey Report

04 October, 2022

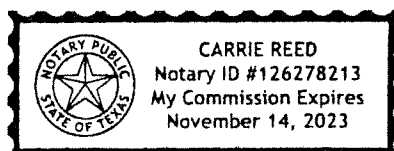
This survey is correct to the best of my knowledge and is supported by actual field data.

Cameron Stevens

Notarized this date 4th of October, 2022.

Carrie Reed

Notary Signature
County of Midland
State of Texas





Survey Report

Company:	MorningStar Partners	Local Co-ordinate Reference:	Well Carracas 25A 14
Project:	Rio Arriba County, NM (NAD 27 - True North)	TVD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Site:	Carracas 25A 14	MD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Well:	Carracas 25A 14	North Reference:	True
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	EDM5000

Project	Rio Arriba County, NM (NAD 27 - True North)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site	Carracas 25A 14		
Site Position:		Northing:	2,164,156.31 usft
From:	Lat/Long	Easting:	650,933.85 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	36.946376
		Longitude:	-107.316828

Well	Carracas 25A 14		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.31 °	Latitude:	36.946376
		Longitude:	-107.316828
		Ground Level:	7,163.00 usft

Wellbore	ST01		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2020	9/27/2022	8.57
			Dip Angle (°)
			63.40
			Field Strength (nT)
			49,633.71246412

Design	ST01		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	4,187.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			338.78

Survey Program	Date	10/4/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
98.00	4,187.00	Energen Resources MWD Surveys (OH)	MWD+IGRF	OWSG MWD + IGRF or WMM
4,220.00	6,664.00	Legacy MWD (ST01)	MWD+IGRF	OWSG MWD + IGRF or WMM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
98.00	0.20	339.83	98.00	0.16	-0.06	0.17	0.20	0.20	0.00	
198.00	0.40	339.83	198.00	0.65	-0.24	0.69	0.20	0.20	0.00	
298.00	0.60	339.83	297.99	1.47	-0.54	1.57	0.20	0.20	0.00	
398.00	0.80	339.83	397.99	2.62	-0.96	2.79	0.20	0.20	0.00	
440.00	0.88	339.83	439.98	3.20	-1.17	3.40	0.19	0.19	0.00	
498.00	1.06	346.52	497.97	4.14	-1.45	4.38	0.37	0.31	11.53	
598.00	1.39	353.81	597.95	6.24	-1.80	6.47	0.36	0.33	7.29	
698.00	1.74	358.25	697.91	8.96	-1.98	9.07	0.37	0.35	4.44	



Survey Report

Company:	MorningStar Partners	Local Co-ordinate Reference:	Well Carracas 25A 14
Project:	Rio Arriba County, NM (NAD 27 - True North)	TVD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Site:	Carracas 25A 14	MD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Well:	Carracas 25A 14	North Reference:	True
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	EDM5000

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
798.00	2.09	1.21	797.86	12.30	-1.98	12.19	0.36	0.35	2.96	
876.00	2.37	2.90	875.80	15.34	-1.87	14.98	0.37	0.36	2.17	
898.00	2.37	7.23	897.78	16.24	-1.79	15.79	0.81	0.00	19.68	
998.00	2.52	26.08	997.69	20.27	-0.57	19.10	0.81	0.15	18.85	
1,098.00	2.90	41.38	1,097.58	24.14	2.07	21.75	0.81	0.38	15.30	
1,198.00	3.44	52.53	1,197.43	27.86	6.13	23.76	0.82	0.54	11.15	
1,298.00	4.06	60.47	1,297.21	31.43	11.59	25.11	0.81	0.62	7.94	
1,308.00	4.13	61.13	1,307.19	31.78	12.21	25.21	0.84	0.70	6.60	
1,398.00	3.67	62.46	1,396.98	34.68	17.60	25.96	0.52	-0.51	1.48	
1,498.00	3.16	64.40	1,496.80	37.35	22.93	26.52	0.52	-0.51	1.94	
1,598.00	2.65	67.08	1,596.67	39.44	27.54	26.80	0.53	-0.51	2.68	
1,698.00	2.15	71.01	1,696.58	40.95	31.45	26.79	0.53	-0.50	3.93	
1,743.00	1.93	73.44	1,741.56	41.44	32.97	26.70	0.53	-0.49	5.40	
1,774.00	1.93	62.19	1,772.54	41.84	33.93	26.72	1.22	0.00	-36.29	
1,798.00	1.91	62.15	1,796.53	42.21	34.64	26.81	0.08	-0.08	-0.17	
1,898.00	1.84	61.99	1,896.47	43.74	37.53	27.19	0.07	-0.07	-0.16	
1,998.00	1.77	61.82	1,996.42	45.23	40.31	27.57	0.07	-0.07	-0.17	
2,098.00	1.69	61.63	2,096.38	46.66	42.97	27.94	0.08	-0.08	-0.19	
2,198.00	1.62	61.42	2,196.33	48.03	45.51	28.30	0.07	-0.07	-0.21	
2,298.00	1.55	61.19	2,296.30	49.36	47.94	28.66	0.07	-0.07	-0.23	
2,398.00	1.47	60.94	2,396.26	50.64	50.24	29.02	0.08	-0.08	-0.25	
2,498.00	1.40	60.67	2,496.23	51.86	52.43	29.37	0.07	-0.07	-0.27	
2,605.00	1.32	60.34	2,603.20	53.11	54.64	29.73	0.08	-0.07	-0.31	
2,698.00	1.18	59.02	2,696.18	54.13	56.39	30.05	0.15	-0.15	-1.42	
2,798.00	1.04	57.23	2,796.16	55.15	58.04	30.41	0.14	-0.14	-1.79	
2,898.00	0.89	54.85	2,896.15	56.09	59.44	30.77	0.16	-0.15	-2.38	
2,998.00	0.75	51.56	2,996.13	56.94	60.58	31.16	0.15	-0.14	-3.29	
3,034.00	0.70	49.97	3,032.13	57.23	60.94	31.30	0.15	-0.14	-4.42	
3,098.00	0.76	45.50	3,096.13	57.78	61.54	31.59	0.13	0.09	-6.98	
3,198.00	0.84	39.52	3,196.12	58.81	62.48	32.21	0.12	0.08	-5.98	
3,236.00	0.88	37.58	3,234.11	59.26	62.83	32.50	0.13	0.11	-5.11	
3,263.00	1.06	38.28	3,261.11	59.62	63.11	32.73	0.67	0.67	2.59	
3,294.00	2.20	19.29	3,292.10	60.40	63.49	33.33	4.02	3.68	-61.26	
3,298.00	2.50	17.51	3,296.09	60.56	63.54	33.46	7.72	7.50	-44.50	
3,324.00	4.48	11.82	3,322.04	62.10	63.92	34.75	7.72	7.62	-21.88	
3,348.00	6.33	10.59	3,345.94	64.31	64.35	36.66	7.72	7.71	-5.13	
3,356.00	6.95	10.33	3,353.88	65.22	64.52	37.45	7.76	7.75	-3.25	
3,386.00	9.41	10.95	3,383.57	69.42	65.31	41.07	8.21	8.20	2.07	
3,398.00	10.30	10.91	3,395.40	71.43	65.70	42.81	7.42	7.42	-0.33	
3,418.00	11.78	10.86	3,415.03	75.19	66.43	46.05	7.40	7.40	-0.25	
3,448.00	14.77	9.98	3,444.22	81.97	67.67	51.92	9.99	9.97	-2.93	
3,480.00	17.94	9.36	3,474.92	90.85	69.17	59.65	9.92	9.91	-1.94	
3,498.00	19.77	8.60	3,491.96	96.60	70.08	64.68	10.26	10.17	-4.22	



Survey Report

Company:	MorningStar Partners	Local Co-ordinate Reference:	Well Carracas 25A 14
Project:	Rio Arriba County, NM (NAD 27 - True North)	TVD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Site:	Carracas 25A 14	MD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Well:	Carracas 25A 14	North Reference:	True
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	EDM5000

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,511.00	21.10	8.13	3,504.14	101.09	70.74	68.63	10.31	10.23	-3.62
3,541.00	24.09	7.43	3,531.83	112.51	72.30	78.71	10.01	9.97	-2.33
3,548.00	24.76	6.91	3,538.21	115.38	72.66	81.26	10.05	9.57	-7.43
3,572.00	27.08	5.32	3,559.79	125.81	73.77	90.58	10.09	9.67	-6.63
3,598.00	29.30	4.16	3,582.70	138.05	74.78	101.62	8.79	8.54	-4.46
3,604.00	29.81	3.91	3,587.92	141.00	74.99	104.30	8.74	8.50	-4.17
3,634.00	32.62	2.77	3,613.58	156.52	75.89	118.44	9.57	9.37	-3.80
3,648.00	33.93	2.36	3,625.28	164.19	76.23	125.47	9.49	9.36	-2.93
3,665.00	35.53	1.89	3,639.25	173.87	76.59	134.36	9.54	9.41	-2.76
3,695.00	38.25	1.45	3,663.25	191.87	77.11	150.95	9.11	9.07	-1.47
3,698.00	38.52	1.44	3,665.60	193.73	77.16	152.67	9.00	9.00	-0.33
3,725.00	40.96	1.37	3,686.36	210.99	77.58	168.60	9.04	9.04	-0.26
3,748.00	42.94	1.23	3,703.46	226.36	77.93	182.80	8.62	8.61	-0.61
3,756.00	43.62	1.19	3,709.29	231.84	78.04	187.87	8.51	8.50	-0.50
3,788.00	46.34	1.28	3,731.92	254.45	78.53	208.78	8.50	8.50	0.28
3,798.00	47.13	1.43	3,738.77	261.73	78.70	215.50	7.98	7.90	1.50
3,819.00	48.80	1.72	3,752.83	277.32	79.13	229.88	8.02	7.95	1.38
3,849.00	51.35	2.77	3,772.09	300.31	80.04	250.98	8.91	8.50	3.50
3,881.00	54.08	3.74	3,791.47	325.73	81.49	274.15	8.87	8.53	3.03
3,898.00	55.57	3.83	3,801.26	339.59	82.41	286.74	8.78	8.76	0.53
3,913.00	56.89	3.91	3,809.60	352.03	83.25	298.03	8.81	8.80	0.53
3,944.00	59.97	3.65	3,825.83	378.38	84.99	321.97	9.96	9.94	-0.84
3,948.00	60.48	3.51	3,827.81	381.85	85.20	325.12	13.11	12.75	-3.50
3,973.00	63.66	2.68	3,839.52	403.90	86.39	345.25	13.05	12.72	-3.32
3,998.00	66.50	2.19	3,850.06	426.55	87.36	366.01	11.50	11.36	-1.96
4,004.00	67.18	2.07	3,852.42	432.06	87.56	371.08	11.48	11.33	-2.00
4,023.00	69.35	1.23	3,859.45	449.70	88.07	387.34	12.14	11.42	-4.42
4,034.00	70.61	0.75	3,863.22	460.04	88.25	396.91	12.17	11.45	-4.36
4,048.00	72.16	0.59	3,867.69	473.30	88.40	409.22	11.12	11.07	-1.14
4,065.00	74.04	0.40	3,872.63	489.57	88.54	424.33	11.11	11.06	-1.12
4,095.00	77.47	0.49	3,880.01	518.64	88.77	451.35	11.44	11.43	0.30
4,098.00	77.80	0.54	3,880.65	521.57	88.79	454.07	11.12	11.00	1.67
4,125.00	80.81	1.01	3,885.66	548.10	89.15	478.67	11.28	11.15	1.74
4,148.00	85.44	1.47	3,888.41	570.92	89.65	499.76	20.23	20.13	2.00
4,156.00	87.05	1.63	3,888.94	578.90	89.86	507.12	20.22	20.13	2.00
4,173.00	90.04	1.82	3,889.37	595.88	90.38	522.77	17.62	17.59	1.12
4,187.00	92.51	1.96	3,889.06	609.87	90.84	535.64	17.67	17.64	1.00
4,220.00	91.10	355.39	3,888.02	642.83	90.07	566.64	20.35	-4.27	-19.91
4,252.00	90.97	359.25	3,887.44	674.78	88.58	596.97	12.07	-0.41	12.06
4,284.00	90.66	355.47	3,886.98	706.74	87.10	627.29	11.85	-0.97	-11.81
4,316.00	90.26	352.49	3,886.73	738.56	83.75	658.17	9.40	-1.25	-9.31
4,380.00	91.67	350.73	3,885.65	801.86	74.41	720.56	3.52	2.20	-2.75
4,443.00	92.86	348.97	3,883.16	863.82	63.32	782.33	3.37	1.89	-2.79



Survey Report

Company:	MorningStar Partners	Local Co-ordinate Reference:	Well Carracas 25A 14
Project:	Rio Arriba County, NM (NAD 27 - True North)	TVD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Site:	Carracas 25A 14	MD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Well:	Carracas 25A 14	North Reference:	True
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	EDM5000

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,507.00	94.00	346.25	3,879.33	926.21	49.62	845.46	4.60	1.78	-4.25
4,571.00	95.10	343.61	3,874.25	987.81	33.03	908.88	4.46	1.72	-4.13
4,634.00	95.76	338.86	3,868.29	1,047.18	12.86	971.52	7.58	1.05	-7.54
4,698.00	94.79	335.26	3,862.40	1,105.86	-11.97	1,035.21	5.80	-1.52	-5.63
4,762.00	91.27	335.44	3,859.02	1,163.93	-38.62	1,099.00	5.51	-5.50	0.28
4,823.00	91.27	334.64	3,857.67	1,219.22	-64.36	1,159.85	1.31	0.00	-1.31
4,884.00	90.66	334.64	3,856.64	1,274.33	-90.48	1,220.68	1.00	-1.00	0.00
4,945.00	90.57	333.85	3,855.98	1,329.27	-116.99	1,281.49	1.30	-0.15	-1.30
5,006.00	90.57	334.38	3,855.38	1,384.15	-143.62	1,342.28	0.87	0.00	0.87
5,067.00	89.87	333.85	3,855.14	1,439.03	-170.25	1,403.08	1.44	-1.15	-0.87
5,127.00	90.88	335.00	3,854.75	1,493.15	-196.15	1,462.90	2.55	1.68	1.92
5,188.00	89.78	334.64	3,854.40	1,548.35	-222.10	1,523.75	1.90	-1.80	-0.59
5,250.00	89.87	334.38	3,854.59	1,604.31	-248.78	1,585.58	0.44	0.15	-0.42
5,310.00	89.56	335.79	3,854.89	1,658.73	-274.06	1,645.45	2.41	-0.52	2.35
5,370.00	91.19	337.46	3,854.49	1,713.80	-297.86	1,705.41	3.89	2.72	2.78
5,431.00	90.88	337.37	3,853.39	1,770.11	-321.28	1,766.38	0.53	-0.51	-0.15
5,493.00	91.10	336.84	3,852.32	1,827.22	-345.40	1,828.34	0.93	0.35	-0.85
5,554.00	91.27	337.28	3,851.06	1,883.38	-369.17	1,889.30	0.77	0.28	0.72
5,614.00	91.27	336.58	3,849.73	1,938.57	-392.67	1,949.26	1.17	0.00	-1.17
5,676.00	90.88	335.44	3,848.57	1,995.20	-417.88	2,011.17	1.94	-0.63	-1.84
5,737.00	90.09	335.70	3,848.05	2,050.74	-443.10	2,072.07	1.36	-1.30	0.43
5,796.00	89.56	335.88	3,848.23	2,104.55	-467.30	2,130.99	0.95	-0.90	0.31
5,856.00	89.69	335.38	3,848.62	2,159.20	-492.06	2,190.90	0.86	0.22	-0.83
5,917.00	90.66	334.38	3,848.44	2,214.43	-517.95	2,251.76	2.28	1.59	-1.64
5,979.00	91.19	334.47	3,847.44	2,270.35	-544.71	2,313.57	0.87	0.85	0.15
6,041.00	90.88	333.85	3,846.32	2,326.14	-571.73	2,375.36	1.12	-0.50	-1.00
6,102.00	91.10	333.24	3,845.26	2,380.74	-598.90	2,436.09	1.06	0.36	-1.00
6,164.00	91.76	333.94	3,843.71	2,436.25	-626.47	2,497.82	1.55	1.06	1.13
6,225.00	91.67	335.00	3,841.89	2,491.27	-652.75	2,558.62	1.74	-0.15	1.74
6,286.00	91.58	335.61	3,840.16	2,546.67	-678.22	2,619.48	1.01	-0.15	1.00
6,350.00	91.89	334.64	3,838.22	2,604.71	-705.13	2,683.32	1.59	0.48	-1.52
6,414.00	90.97	335.79	3,836.62	2,662.79	-731.95	2,747.18	2.30	-1.44	1.80
6,477.00	90.88	337.55	3,835.61	2,720.63	-756.90	2,810.12	2.80	-0.14	2.79
6,541.00	89.69	336.49	3,835.29	2,779.55	-781.88	2,874.09	2.49	-1.86	-1.66
6,605.00	90.40	336.93	3,835.24	2,838.33	-807.19	2,938.05	1.31	1.11	0.69
6,664.00	90.40	336.93	3,834.83	2,892.61	-830.31	2,997.02	0.00	0.00	0.00
PTB 6664.00' MD/3834.83' TVD									



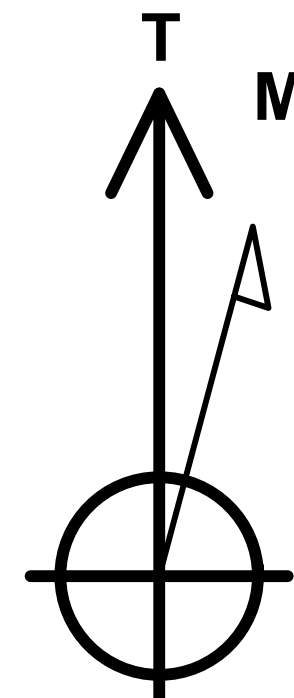
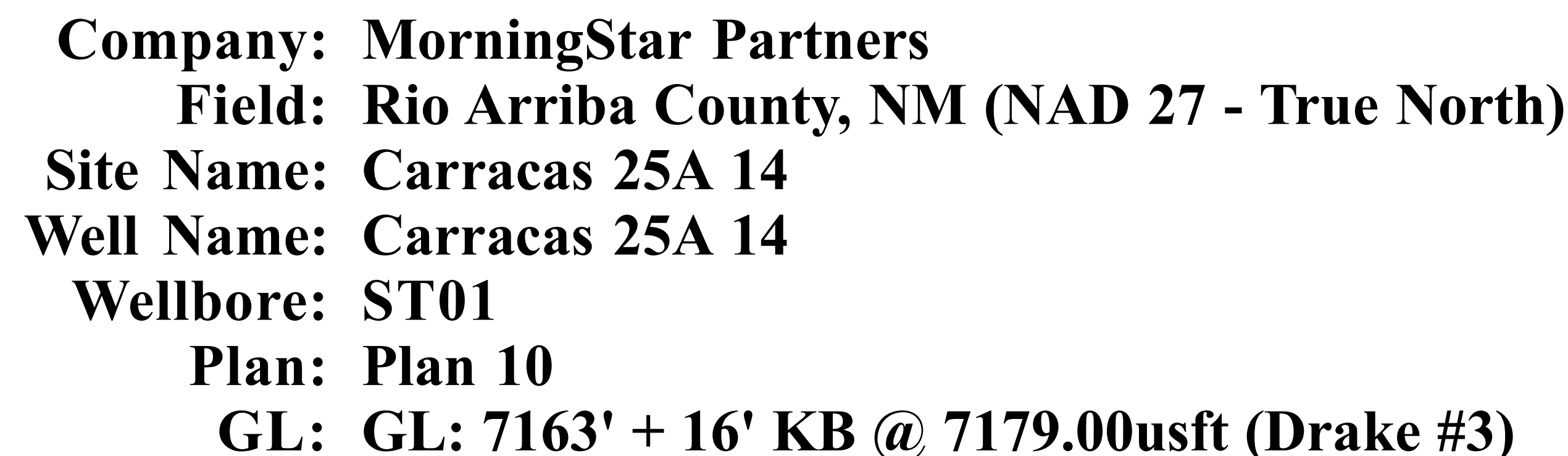
Survey Report

Company:	MorningStar Partners	Local Co-ordinate Reference:	Well Carracas 25A 14
Project:	Rio Arriba County, NM (NAD 27 - True North)	TVD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Site:	Carracas 25A 14	MD Reference:	GL: 7163' + 16' KB @ 7179.00usft (Drake #3)
Well:	Carracas 25A 14	North Reference:	True
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	EDM5000

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,664.00	3,834.83	2,892.61	-830.31	PTB 6664.00' MD/3834.83' TVD

Checked By: _____ Approved By: _____ Date: _____



Magnetic Field
Strength: 49633.7nT
Dip Angle: 63.40°
Date: 9/27/2022
Model: IGRF2020



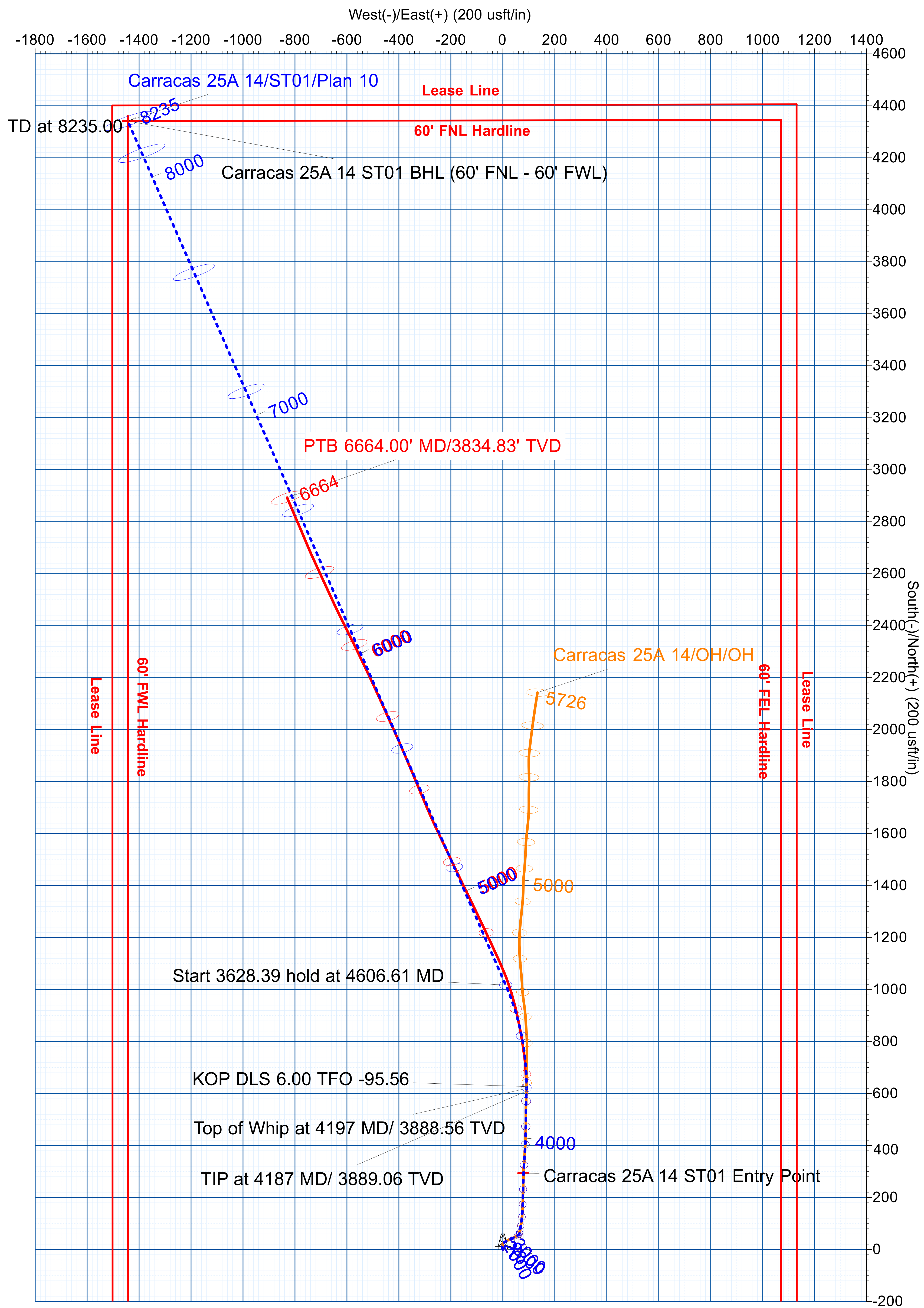
To convert a Magnetic Direction to a True Direction, Add 8.57° East

WELL DETAILS: Carracas 25A 14

		GL: 7163' + 16' KB @ 7179.00usft (Drake #3)			7163.00
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2164156.31	650933.85	36.946376	-107.316828

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
4187.00	92.51	1.96	3889.06	609.87	90.84	0.00	0.00	535.64	TIP at 4187 MD/ 3889.06 TVD
4197.00	93.22	1.86	3888.56	619.85	91.17	7.17	-8.00	544.83	Top of Whip at 4197 MD/ 3888.56 TVD
4204.00	93.75	0.41	3888.13	626.84	91.31	22.00	-70.00	551.29	KOP DLS 6.00 TFO -95.56
4606.61	91.15	336.37	3870.69	1017.91	10.87	6.00	-95.56	944.96	Start 3628.39 hold at 4606.61 MD
8235.00	91.15	336.37	3797.95	4341.37	-1443.26	0.00	0.00	4569.40	TD at 8235.00

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Carracas 25A 14 ST01 Entry Point	3766.37	293.80	78.81	2164450.54	651011.06	36.947183	-107.316558
Carracas 25A 14 ST01 BHL (60' FNL - 60' FWL)	3797.95	4341.37	-1443.26	2164849.79	649467.80	36.958301	-107.321768



TVDPATH	MDPATH	FORMATION
2183.49	2185.15	Nacimiento
3308.39	3310.31	Ojo Alamo
3403.20	3405.94	Kirtland
3672.13	3706.40	Fruitland
3869.44	4053.82	Top Target
3874.16	4070.70	Centerline
3886.20	4128.53	Base Target

Plan: Plan 10 (Carracas 25A 14/ST01)
Created By: Kurt Otto Date: 5:48, October 04 2022

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 152925

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 152925
	Action Type: [C-103] Sub. Drilling (C-103N)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	None	10/24/2022