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

Form C-101
August 1, 2011

Permit 364827

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	331165
	3. API Number 30-025-53010

4. Property Code	5. Property Name	6. Well No.
332607	OUTLAND STATE UNIT	122H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	13	21S	34E	M	897	S	1158	W	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	12	21S	34E	C	100	N	1980	W	Lea

9. Pool Information

GRAMA RIDGE;BONE SPRING, NORTH	28434

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3651
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	20589	2nd Bone Spring Sand		7/5/2024
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1721	1300	0
Int1	12.25	9.625	40	5410	1430	0
Prod	7.875	5.5	20	20589	1390	4910
Prod	8.75	5.5	20	10642	720	4910

Casing/Cement Program: Additional Comments

ADDITIONAL CASING INFORMATION ATTACHED

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	2500	2500	
Double Ram	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

OIL CONSERVATION DIVISION

Printed Name:	Electronically filed by Stephanie Rabadue	Approved By:	Paul F Kautz	
Title:	Regulatory Manager	Title:	Geologist	
Email Address:	stephanie.rabadue@permianres.com	Approved Date:	6/4/2024	Expiration Date: 6/4/2026
Date:	5/20/2024 Phone: 432-260-4388	Conditions of Approval Attached		

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1000 Rio Brazon Road, Artec, NM 87410
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1220 S. St Francis Dr., 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 Dr.
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
	28434	GRAMA RIDGE; BONE SPRING, NORTH

[4] Property Code	[5] Property Name	[6] Well Number
	OUTLAND STATE UNIT	122H

[7] OGRID No.	[8] Operator Name	[9] Elevation
331165	EARTHSTONE OPERATING, LLC	3,651.83'

[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
M	13	21 S	34 E		897'	SOUTH	1,158'	WEST	LEA

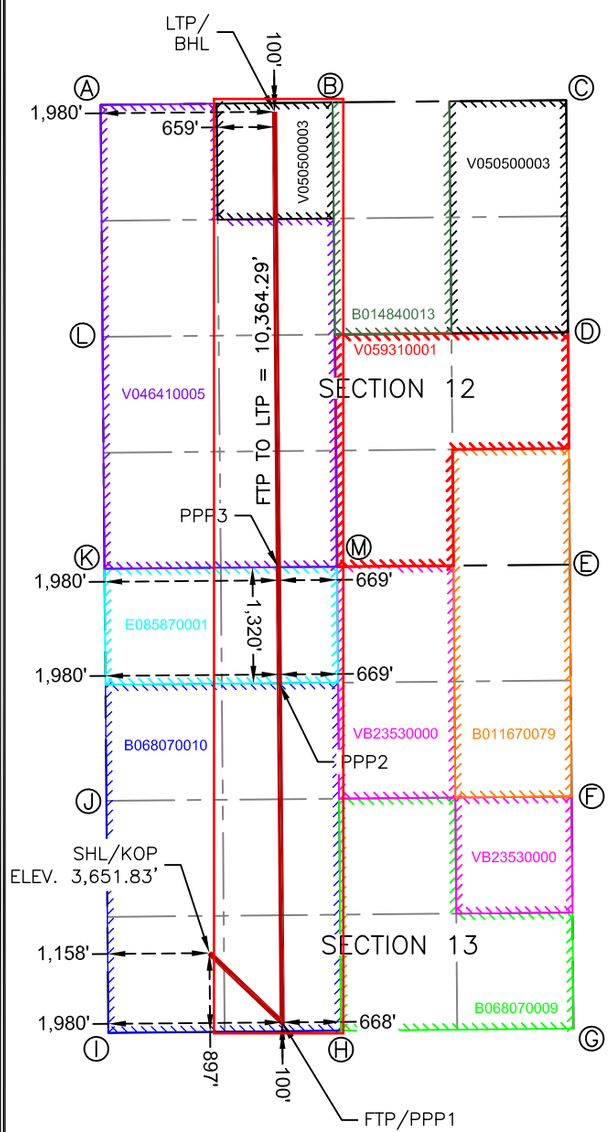
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	12	21 S	34 E		100'	NORTH	1,980'	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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]



SURFACE HOLE LOCATION
& KICK-OFF POINT
897' FSL & 1,158' FWL
ELEV. = 3,651.83'
NAD 83 X = 820,429.95'
NAD 83 Y = 537,441.40'
NAD 83 LAT = 32.474236°
NAD 83 LONG = -103.428327°
NAD 27 X = 779,247.19'
NAD 27 Y = 537,379.82'
NAD 27 LAT = 32.474112°
NAD 27 LONG = -103.427846°

FIRST TAKE POINT &
PENETRATION POINT 1
100' FSL & 1,980' FWL
NAD 83 X = 821,258.65'
NAD 83 Y = 536,652.32'
NAD 83 LAT = 32.472048°
NAD 83 LONG = -103.425662°
NAD 27 X = 780,075.85'
NAD 27 Y = 536,590.76'
NAD 27 LAT = 32.471924°
NAD 27 LONG = -103.425181°

PENETRATION POINT 2
1,320' FNL & 1,980' FWL
NAD 83 X = 821,226.19'
NAD 83 Y = 540,512.84'
NAD 83 LAT = 32.482659°
NAD 83 LONG = -103.425661°
NAD 27 X = 780,043.47'
NAD 27 Y = 540,451.17'
NAD 27 LAT = 32.482535°
NAD 27 LONG = -103.425180°

PENETRATION POINT 3
0' FNL & 1,980' FWL
NAD 83 X = 821,215.09'
NAD 83 Y = 541,833.29'
NAD 83 LAT = 32.486288°
NAD 83 LONG = -103.425660°
NAD 27 X = 780,032.39'
NAD 27 Y = 541,771.59'
NAD 27 LAT = 32.486164°
NAD 27 LONG = -103.425179°

LAST TAKE POINT &
BOTTOM HOLE LOCATION
100' FNL & 1,980' FWL
NAD 83 X = 821,171.89'
NAD 83 Y = 547,016.25'
NAD 83 LAT = 32.500535°
NAD 83 LONG = -103.425658°
NAD 27 X = 779,989.30'
NAD 27 Y = 546,954.40'
NAD 27 LAT = 32.500410°
NAD 27 LONG = -103.425176°

[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.

Jennifer Elrod 5/20/2024
Signature Date

JENNIFER ELROD
Printed Name

jennifer.elrod@permianres.com
Email 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.

CORNER COORDINATES NEW MEXICO EAST - NAD 83
A - IRON PIPE W/ BRASS CAP N:547,095.19' E:819,191.16'
B - IRON PIPE W/ BRASS CAP N:547,123.27' E:821,832.03'
C - IRON PIPE W/ BRASS CAP N:547,148.52' E:824,492.23'
D - 1/2" CAPPED IRON ROD N:544,506.94' E:824,513.04'
E - CALCULATED CORNER N:541,862.38' E:824,533.87'
F - CALCULATED CORNER N:539,223.55' E:824,554.28'
G - 3/4" IRON ROD N:536,581.76' E:824,574.71'
H - IRON PIPE W/ BRASS CAP N:536,558.77' E:821,927.92'
I - IRON PIPE N:536,533.22' E:819,279.65'
J - IRON PIPE W/ BRASS CAP N:539,173.79' E:819,257.66'
K - IRON PIPE W/ BRASS CAP N:541,815.84' E:819,235.17'
L - IRON PIPE W/ BRASS CAP N:544,455.72' E:819,213.31'
M - 5/8" IRON ROD N:541,839.19' E:821,884.50'

Date: 5/20/2024

MARK J. MURRAY NEW MEXICO 12177 REGISTERED PROFESSIONAL SURVEYOR

MARK J. MURRAY P.L.S. NO. 12177

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
EARTHSTONE OPERATING, LLC	OUTLAND STATE UNIT	122H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	13	21 S	34 E		897	S	1,158	W	LEA

Latitude	Longitude	NAD
32.474236	-103.428327	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
N	13	21 S	34 E		100	S	1,980	W	LEA

Latitude	Longitude	NAD
32.472048	-103.425662	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	12	21 S	34 E		100	N	1,980	W	LEA

Latitude	Longitude	NAD
32.500535	-103.425658	83

Is this well the defining well for the Horizontal Spacing Unit? yes

Is this well an infill well? [ ]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

Form APD Conditions

Permit 364827

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Earthstone Operating, LLC [331165] 300 N. Marienfeld St Ste 1000 Midland, TX 79701	30-025-53010
	Well: OUTLAND STATE UNIT #122H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

Permian Resources - Outland State Unit 122H

1. Geologic Formations

Formation	Elevation	TVD	Target
Rustler	1986	1696	No
Top of Salt	1587	2095	No
Yates	92	3590	No
Capitan	-311	3993	No
Cherry Canyon	-1778	5460	No
Brushy Canyon	-3038	6720	No
Bone Spring Lime	-4487	8169	No
1st Bone Spring Sand	-5689	9371	No
2nd Bone Spring Sand	-6209	9891	Yes
3rd Bone Spring Sand	-7096	10778	No
Wolfcamp	-7274	10956	No

2. Blowout Prevention

BOP installed and tested before drilling	Size?	Min. Required WP	Type	x	Tested to:
12.25	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		
8.75	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		

Equipment: BOPE with working pressure ratings in excess of anticipated maximum surface pressure will be utilized for well control from drill out of surface casing to TMD. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. All BOPE connections shall be flanged, welded or clamped. All choke lines shall be straight unless targeted with running tees or tee blocks are used, and choke lines shall be anchored to prevent whip and reduce vibrations. All valves in the choke line & the choke manifold shall be full opening as to not cause restrictions and to allow for straight fluid paths to minimize potential erosion. All gauges utilized in the well control system shall be of a type designed for drilling fluid service. A top drive inside BOP valve will be utilized at all times. Subs equipped with full opening valves sized to fit the drill pipe and collars will be available on the rig floor in the open position. The key to operate said valve equipped subs will be on the rig floor at all times. The accumulator system will have sufficient capacity to open the HCR and close all three sets of rams plus the annular preventer while retaining at least 300 psi above precharge on the closing manifold (accumulator system shall be capable of doing so without using the closing unit pumps). The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity, and the fluid level will be maintained at the manufacturer's recommended level. Prior to connecting the closing unit to the BOP stack, an accumulator precharge pressure test shall be performed to ensure the precharge pressure is within 100 psi of the desired precharge pressure (only nitrogen gas will be used to precharge). Two independent power sources will be made available at all times to power the closing unit pumps so that the pumps can automatically start when the closing valve manifold pressure has decreased to the preset level. Closing unit pumps will be sized to allow opening of HCR and closing of annular preventer on 5" drill pipe achieving at least 200 psi above precharge pressure with the accumulator system isolated from service in less than two minutes. A valve shall be installed in the closing line as close to the annular preventer as possible to act as a locking device; the valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative. Remote controls capable of opening and closing all preventers & the HCR shall be readily accessible to the driller; master controls with the same capability will be operable at the accumulator. The wellhead will be a multibowl speed head allowing for hangoff of intermediate casing & isolation of the 133/8 x 95/8 annulus without breaking the connection between the BOP & wellhead to install an additional casing head. A wear bushing will be installed & inspected frequently to guard against internal wear to wellhead. VBRs (variablebore rams) will be run in upper rambody of BOP stack to provide redundancy to annular preventer while RIH w/ production casing;

Requesting Variance? YES
Variance request: Flex hose and offline cement variances, see attachments in section 8.
Testing Procedure: The BOP test shall be performed before drilling out of the surface casing shoe and will occur at a minimum: a. when initially installed b. whenever any seal subject to test pressure is broken c. following related repairs d. at 30 day intervals e. checked daily as to mechanical operating conditions. The ram type preventer(s) will be tested using a test plug to 250 psi (low) and 5,000 psi (high) (casinghead WP) with a test plug upon its installation onto the 13 surface casing. If a test plug is not used, the ram type preventer(s) shall be tested to 70% of the minimum internal yield pressure of the casing. The annular type preventer(s) shall be tested to 3500 psi. Pressure will be maintained for at least 10 minutes or until provisions of the test are met, whichever is longer. A Sundry Notice (Form 3160 5), along with a copy of the BOP test report, shall be submitted to the local BLM office within 5 working days following the test. If the bleed line is connected into the buffer tank (header), all BOP equipment including the buffer tank and associated valves will be rated at the required BOP pressure. The BLM office will be provided with a minimum of four (4) hours notice of BOP testing to allow witnessing. The BOP Configuration, choke manifold layout, and accumulator system, will be in compliance with Onshore Order 2 for a 5,000 psi system. A remote accumulator and a multi-bowl system will be used, please see attachment in section 8 for multi-bowl procedure. Pressures, capacities, and specific placement and use of the manual and/or hydraulic controls, accumulator controls, bleed lines, etc., will be identified at the time of the BLM 'witnessed BOP test. Any remote controls will be capable of both opening and closing all preventers and shall be readily accessible.

Choke Diagram Attachemnt: 5 M Choe Manifold
BOP Diagram Attachment: BOP Schematic

3. Casing

String	Hole Size	Casing Size	Top	Bottom	Top TVD	Bottom TVD	Length	Grade	Weight	Connection	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	1721	0	1721	1721	J55	54.5	BTC	1.33	1.53	Dry	4.69	Dry	4.40
Intermediate	12.25	9.625	0	5410	0	5410	5410	J55	40	BTC	2.30	1.46	Dry	2.26	Dry	1.99
Production	8.75	5.5	0	10642	0	10250	10642	P110RY	20	TCBC-HT	1.98	2.07	Dry	2.10	Dry	2.10
Production	7.875	5.5	10642	20589	10250	10250	9947	P110RY	20	TCBC-HT	1.98	2.07	Dry	2.10	Dry	2.10
									BLM Min Safety Factor		1.125	1		1.6		1.6

Non API casing spec sheets and casing design assumptions attached.

4. Cement

String	Lead/Tail	Top MD	Bottom MD	Quanity (sx)	Yield	Density	Cu Ft	Excess %	Cement Type	Additives
Surface	lead	0	1370	1020	1.88	12.9	1910	100%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Surface	Tail	1370	1721	280	1.34	14.8	370	50%	Class C	Accelerator
Intermediate	Lead	3615	4320	190	1.88	12.9	340	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate	Tail	4320	5410	390	1.34	14.8	520	50%	Class C	Retarder
Stage Tool Depth		3615								
Intermediate 2nd Stage	Lead	0	3115	690	1.88	12.9	1280	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate 2nd Stage	Tail	3115	3615	160	1.33	14.8	200	25%	Class C	Salt
Production	Lead	4910	9892	720	2.41	11.5	1720	40%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Production	Tail	9892	20589	1390	1.73	12.5	2400	25%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Plug Back	Tail	9472	11175	450	0.97	17.5	430	10%	Class C	Defoamer, HR-601, Salt

5. Circulating Medium

Mud System Type: Closed
Will an air or gas system be used: No
Describe what will be on location to control well or mitigate oter conditions: Sufficient quantities of mud materials will be on the well site at all times for the purpose of assuring well control and maintaining wellbore integrity. Surface interval will employ fresh water mud. The intermediate hole will utilize a saturated brine fluid to inhibit salt washout. The production hole will employ brine based and oil base fluid to inhibit formation reactivity and of the appropriate density to maintain well control.

Describe the mud monitoring system utilized: Centrifuge separation system. Open tank monitoring with EDR will be used for drilling fluids and return volumes. Open tank monitoring will be used for cement and cuttings return volumes. Mud properties will be monitored at least every 24 hours using industry accepted mud check

Cuttings Volume: 11450 Cu Ft

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight	Max Weight
0	1721	Spud Mud	8.6	9.5
1721	5410	Water Based Mud	10	10
5410	10642	Water Based Mud	9	10.5
10642	20589	OBM	9	10.5

6. Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:
Will utilize MWD/LWD (Gamma Ray logging) from intermediate hole to TD of the well.
List of open and cased hole logs run in the well:
DIRECTIONAL SURVEY,GAMMA RAY LOG,
Coring operation description for the well:
N/A

7. Pressure

Anticipated Bottom Hole Pressure	5600	psi
Anticipated Surface Pressure	3342	psi
Anticipated Bottom Hole Temperature	158	°F
Anticipated Abnormal pressure, temp, or geo hazards	No	

8. Waste Management

Waste Type:	Drilling
Waste content description:	Fresh water based drilling fluid
Amount of waste:	1500 bbls
Waste disposal frequency:	Weekly (after drilling all surfaces)
Safe containment description:	Steel tanks with plastic-lined containment berms
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Grey Water & Human Waste
Waste content description:	Grey Water/Human Waste
Amount of waste:	5000 gallons
Waste disposal frequency:	Weekly
Safe containment description:	Approved waste storage tanks with containment
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Garbage
Waste content description:	General trash/garbage
Amount of waste:	5000 lbs
Waste disposal frequency:	Weekly
Safe containment description:	Enclosed trash trailer
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Drilling
Waste content description:	Drill Cuttings
Amount of waste:	11450 Cu Ft
Waste disposal frequency:	Per well
Safe containment description:	Steel tanks
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Drilling
Waste content description:	Brine water based drilling fluid
Amount of waste:	1500 bbls
Waste disposal frequency:	Monthly
Safe containment description:	Steel tanks with plastic-lined containment berms
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial

9. Other Information

Well Plan and AC Report: attached
Batching Drilling Procedure: attached
WBD: attached
Flex Hose Specs: attached
Offline Cementing Procedure Attached:

NEW MEXICO

(SP) LEA
OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT
OUTLAND STATE UNIT 122H

OWB

Plan: PWP0

Standard Planning Report - Geographic

14 May, 2024

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project	(SP) LEA		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT				
Site Position:		**Northing:**	537,441.40 usft	**Latitude:**	32° 28' 27.249 N
From:	Map	**Easting:**	820,429.95 usft	**Longitude:**	103° 25' 41.978 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well	OUTLAND STATE UNIT 122H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	537,441.40 usft	**Latitude:**	32° 28' 27.249 N
	+E/-W	0.0 usft	**Easting:**	820,429.95 usft	**Longitude:**	103° 25' 41.978 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,652.0 usft
Grid Convergence:		0.49 °				

Wellbore	OWB				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	7.70	60.50	48,958.63988163

Design	PWP0			
Audit Notes:				
Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.0	0.0	0.0	4.43

Plan Survey Tool Program **Date** 4/26/2024

	Depth From (usft)	**Depth To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Remarks**
1	0.0	20,589.6	PWP0 (OWB)	MWD OWSG_Rev2_ MWD - Standa	

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	12.00	135.70	1,595.6	-44.8	43.7	2.00	2.00	0.00	135.70	
6,704.4	12.00	135.70	6,588.5	-804.3	785.0	0.00	0.00	0.00	0.00	
7,304.4	0.00	0.00	7,184.1	-849.1	828.7	2.00	-2.00	0.00	180.00	
9,892.8	0.00	0.00	9,772.5	-849.1	828.7	0.00	0.00	0.00	0.00	
10,642.8	90.00	359.52	10,250.0	-371.7	824.7	12.00	12.00	-0.06	359.52	
20,589.6	90.00	359.52	10,250.0	9,574.8	741.9	0.00	0.00	0.00	0.00	BHL-OUTLAND STU

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
100.0	0.00	0.00	100.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
200.0	0.00	0.00	200.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
300.0	0.00	0.00	300.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
400.0	0.00	0.00	400.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
500.0	0.00	0.00	500.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
600.0	0.00	0.00	600.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
700.0	0.00	0.00	700.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
800.0	0.00	0.00	800.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
900.0	0.00	0.00	900.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	537,441.40	820,429.95	32° 28' 27.249 N	103° 25' 41.978 W
Start Build 2.00									
1,100.0	2.00	135.70	1,100.0	-1.2	1.2	537,440.15	820,431.17	32° 28' 27.237 N	103° 25' 41.964 W
1,200.0	4.00	135.70	1,199.8	-5.0	4.9	537,436.41	820,434.82	32° 28' 27.199 N	103° 25' 41.922 W
1,300.0	6.00	135.70	1,299.5	-11.2	11.0	537,430.17	820,440.91	32° 28' 27.137 N	103° 25' 41.851 W
1,400.0	8.00	135.70	1,398.7	-20.0	19.5	537,421.45	820,449.42	32° 28' 27.050 N	103° 25' 41.753 W
1,500.0	10.00	135.70	1,497.5	-31.1	30.4	537,410.26	820,460.35	32° 28' 26.938 N	103° 25' 41.627 W
1,600.0	12.00	135.70	1,595.6	-44.8	43.7	537,396.60	820,473.67	32° 28' 26.802 N	103° 25' 41.472 W
Start 5104.4 hold at 1600.0 MD									
1,700.0	12.00	135.70	1,693.4	-59.7	58.2	537,381.72	820,488.20	32° 28' 26.654 N	103° 25' 41.304 W
1,800.0	12.00	135.70	1,791.3	-74.6	72.8	537,366.84	820,502.72	32° 28' 26.505 N	103° 25' 41.136 W
1,900.0	12.00	135.70	1,889.1	-89.4	87.3	537,351.96	820,517.24	32° 28' 26.357 N	103° 25' 40.968 W
2,000.0	12.00	135.70	1,986.9	-104.3	101.8	537,337.08	820,531.76	32° 28' 26.208 N	103° 25' 40.800 W
2,100.0	12.00	135.70	2,084.7	-119.2	116.3	537,322.20	820,546.28	32° 28' 26.060 N	103° 25' 40.632 W
2,200.0	12.00	135.70	2,182.5	-134.1	130.9	537,307.33	820,560.80	32° 28' 25.912 N	103° 25' 40.464 W
2,300.0	12.00	135.70	2,280.3	-149.0	145.4	537,292.45	820,575.33	32° 28' 25.763 N	103° 25' 40.296 W
2,400.0	12.00	135.70	2,378.1	-163.8	159.9	537,277.57	820,589.85	32° 28' 25.615 N	103° 25' 40.128 W
2,500.0	12.00	135.70	2,476.0	-178.7	174.4	537,262.69	820,604.37	32° 28' 25.466 N	103° 25' 39.960 W
2,600.0	12.00	135.70	2,573.8	-193.6	188.9	537,247.81	820,618.89	32° 28' 25.318 N	103° 25' 39.792 W
2,700.0	12.00	135.70	2,671.6	-208.5	203.5	537,232.93	820,633.41	32° 28' 25.169 N	103° 25' 39.624 W
2,800.0	12.00	135.70	2,769.4	-223.4	218.0	537,218.05	820,647.93	32° 28' 25.021 N	103° 25' 39.456 W
2,900.0	12.00	135.70	2,867.2	-238.2	232.5	537,203.17	820,662.46	32° 28' 24.872 N	103° 25' 39.288 W
3,000.0	12.00	135.70	2,965.0	-253.1	247.0	537,188.29	820,676.98	32° 28' 24.724 N	103° 25' 39.120 W
3,100.0	12.00	135.70	3,062.8	-268.0	261.6	537,173.41	820,691.50	32° 28' 24.576 N	103° 25' 38.952 W
3,200.0	12.00	135.70	3,160.7	-282.9	276.1	537,158.53	820,706.02	32° 28' 24.427 N	103° 25' 38.784 W
3,300.0	12.00	135.70	3,258.5	-297.7	290.6	537,143.65	820,720.54	32° 28' 24.279 N	103° 25' 38.616 W
3,400.0	12.00	135.70	3,356.3	-312.6	305.1	537,128.77	820,735.07	32° 28' 24.130 N	103° 25' 38.448 W
3,500.0	12.00	135.70	3,454.1	-327.5	319.6	537,113.90	820,749.59	32° 28' 23.982 N	103° 25' 38.280 W
3,600.0	12.00	135.70	3,551.9	-342.4	334.2	537,099.02	820,764.11	32° 28' 23.833 N	103° 25' 38.112 W
3,700.0	12.00	135.70	3,649.7	-357.3	348.7	537,084.14	820,778.63	32° 28' 23.685 N	103° 25' 37.944 W
3,800.0	12.00	135.70	3,747.5	-372.1	363.2	537,069.26	820,793.15	32° 28' 23.536 N	103° 25' 37.776 W
3,900.0	12.00	135.70	3,845.4	-387.0	377.7	537,054.38	820,807.67	32° 28' 23.388 N	103° 25' 37.608 W
4,000.0	12.00	135.70	3,943.2	-401.9	392.2	537,039.50	820,822.20	32° 28' 23.240 N	103° 25' 37.440 W
4,100.0	12.00	135.70	4,041.0	-416.8	406.8	537,024.62	820,836.72	32° 28' 23.091 N	103° 25' 37.272 W
4,200.0	12.00	135.70	4,138.8	-431.7	421.3	537,009.74	820,851.24	32° 28' 22.943 N	103° 25' 37.104 W
4,300.0	12.00	135.70	4,236.6	-446.5	435.8	536,994.86	820,865.76	32° 28' 22.794 N	103° 25' 36.936 W
4,400.0	12.00	135.70	4,334.4	-461.4	450.3	536,979.98	820,880.28	32° 28' 22.646 N	103° 25' 36.768 W
4,500.0	12.00	135.70	4,432.3	-476.3	464.9	536,965.10	820,894.80	32° 28' 22.497 N	103° 25' 36.600 W
4,600.0	12.00	135.70	4,530.1	-491.2	479.4	536,950.22	820,909.33	32° 28' 22.349 N	103° 25' 36.432 W
4,700.0	12.00	135.70	4,627.9	-506.1	493.9	536,935.34	820,923.85	32° 28' 22.200 N	103° 25' 36.264 W
4,800.0	12.00	135.70	4,725.7	-520.9	508.4	536,920.47	820,938.37	32° 28' 22.052 N	103° 25' 36.096 W
4,900.0	12.00	135.70	4,823.5	-535.8	522.9	536,905.59	820,952.89	32° 28' 21.904 N	103° 25' 35.927 W
5,000.0	12.00	135.70	4,921.3	-550.7	537.5	536,890.71	820,967.41	32° 28' 21.755 N	103° 25' 35.759 W

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,100.0	12.00	135.70	5,019.1	-565.6	552.0	536,875.83	820,981.93	32° 28' 21.607 N	103° 25' 35.591 W
5,200.0	12.00	135.70	5,117.0	-580.5	566.5	536,860.95	820,996.46	32° 28' 21.458 N	103° 25' 35.423 W
5,300.0	12.00	135.70	5,214.8	-595.3	581.0	536,846.07	821,010.98	32° 28' 21.310 N	103° 25' 35.255 W
5,400.0	12.00	135.70	5,312.6	-610.2	595.6	536,831.19	821,025.50	32° 28' 21.161 N	103° 25' 35.087 W
5,500.0	12.00	135.70	5,410.4	-625.1	610.1	536,816.31	821,040.02	32° 28' 21.013 N	103° 25' 34.919 W
5,600.0	12.00	135.70	5,508.2	-640.0	624.6	536,801.43	821,054.54	32° 28' 20.865 N	103° 25' 34.751 W
5,700.0	12.00	135.70	5,606.0	-654.9	639.1	536,786.55	821,069.07	32° 28' 20.716 N	103° 25' 34.583 W
5,800.0	12.00	135.70	5,703.8	-669.7	653.6	536,771.67	821,083.59	32° 28' 20.568 N	103° 25' 34.415 W
5,900.0	12.00	135.70	5,801.7	-684.6	668.2	536,756.79	821,098.11	32° 28' 20.419 N	103° 25' 34.247 W
6,000.0	12.00	135.70	5,899.5	-699.5	682.7	536,741.91	821,112.63	32° 28' 20.271 N	103° 25' 34.079 W
6,100.0	12.00	135.70	5,997.3	-714.4	697.2	536,727.04	821,127.15	32° 28' 20.122 N	103° 25' 33.911 W
6,200.0	12.00	135.70	6,095.1	-729.2	711.7	536,712.16	821,141.67	32° 28' 19.974 N	103° 25' 33.743 W
6,300.0	12.00	135.70	6,192.9	-744.1	726.2	536,697.28	821,156.20	32° 28' 19.825 N	103° 25' 33.575 W
6,400.0	12.00	135.70	6,290.7	-759.0	740.8	536,682.40	821,170.72	32° 28' 19.677 N	103° 25' 33.407 W
6,500.0	12.00	135.70	6,388.5	-773.9	755.3	536,667.52	821,185.24	32° 28' 19.529 N	103° 25' 33.239 W
6,600.0	12.00	135.70	6,486.4	-788.8	769.8	536,652.64	821,199.76	32° 28' 19.380 N	103° 25' 33.071 W
6,704.4	12.00	135.70	6,588.5	-804.3	785.0	536,637.10	821,214.92	32° 28' 19.225 N	103° 25' 32.896 W
Start Drop -2.00									
6,800.0	10.09	135.70	6,682.3	-817.4	797.8	536,624.00	821,227.71	32° 28' 19.094 N	103° 25' 32.748 W
6,900.0	8.09	135.70	6,781.0	-828.7	808.8	536,612.70	821,238.74	32° 28' 18.982 N	103° 25' 32.620 W
7,000.0	6.09	135.70	6,880.3	-837.5	817.4	536,603.87	821,247.36	32° 28' 18.893 N	103° 25' 32.520 W
7,100.0	4.09	135.70	6,979.9	-843.9	823.6	536,597.52	821,253.56	32° 28' 18.830 N	103° 25' 32.449 W
7,200.0	2.09	135.70	7,079.7	-847.7	827.4	536,593.66	821,257.32	32° 28' 18.792 N	103° 25' 32.405 W
7,304.4	0.00	0.00	7,184.1	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
Start 2588.4 hold at 7304.4 MD									
7,400.0	0.00	0.00	7,279.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
7,500.0	0.00	0.00	7,379.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
7,600.0	0.00	0.00	7,479.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
7,700.0	0.00	0.00	7,579.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
7,800.0	0.00	0.00	7,679.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
7,900.0	0.00	0.00	7,779.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,000.0	0.00	0.00	7,879.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,100.0	0.00	0.00	7,979.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,200.0	0.00	0.00	8,079.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,300.0	0.00	0.00	8,179.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,400.0	0.00	0.00	8,279.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,500.0	0.00	0.00	8,379.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,600.0	0.00	0.00	8,479.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,700.0	0.00	0.00	8,579.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,800.0	0.00	0.00	8,679.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
8,900.0	0.00	0.00	8,779.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,000.0	0.00	0.00	8,879.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,100.0	0.00	0.00	8,979.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,200.0	0.00	0.00	9,079.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,300.0	0.00	0.00	9,179.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,400.0	0.00	0.00	9,279.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,500.0	0.00	0.00	9,379.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,600.0	0.00	0.00	9,479.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,700.0	0.00	0.00	9,579.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,800.0	0.00	0.00	9,679.7	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
9,892.8	0.00	0.00	9,772.5	-849.1	828.7	536,592.30	821,258.65	32° 28' 18.778 N	103° 25' 32.390 W
Start DLS 12.00 TFO 359.52									

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,900.0	0.86	359.52	9,779.7	-849.0	828.7	536,592.36	821,258.65	32° 28' 18.779 N	103° 25' 32.390 W
9,925.0	3.86	359.52	9,804.7	-848.0	828.7	536,593.39	821,258.64	32° 28' 18.789 N	103° 25' 32.390 W
9,950.0	6.86	359.52	9,829.6	-845.7	828.7	536,595.72	821,258.62	32° 28' 18.812 N	103° 25' 32.390 W
9,975.0	9.86	359.52	9,854.3	-842.0	828.6	536,599.36	821,258.59	32° 28' 18.848 N	103° 25' 32.390 W
10,000.0	12.86	359.52	9,878.8	-837.1	828.6	536,604.29	821,258.55	32° 28' 18.897 N	103° 25' 32.390 W
10,025.0	15.86	359.52	9,903.0	-830.9	828.5	536,610.49	821,258.50	32° 28' 18.958 N	103° 25' 32.390 W
10,050.0	18.86	359.52	9,926.9	-823.5	828.5	536,617.95	821,258.43	32° 28' 19.032 N	103° 25' 32.390 W
10,075.0	21.86	359.52	9,950.3	-814.8	828.4	536,626.65	821,258.36	32° 28' 19.118 N	103° 25' 32.390 W
10,100.0	24.86	359.52	9,973.3	-804.8	828.3	536,636.56	821,258.28	32° 28' 19.216 N	103° 25' 32.390 W
10,125.0	27.86	359.52	9,995.7	-793.7	828.2	536,647.66	821,258.19	32° 28' 19.326 N	103° 25' 32.390 W
10,150.0	30.86	359.52	10,017.4	-781.5	828.1	536,659.92	821,258.09	32° 28' 19.447 N	103° 25' 32.390 W
10,175.0	33.86	359.52	10,038.6	-768.1	828.0	536,673.30	821,257.97	32° 28' 19.580 N	103° 25' 32.390 W
10,200.0	36.86	359.52	10,058.9	-753.6	827.9	536,687.76	821,257.85	32° 28' 19.723 N	103° 25' 32.390 W
10,225.0	39.86	359.52	10,078.5	-738.1	827.8	536,703.28	821,257.72	32° 28' 19.876 N	103° 25' 32.390 W
10,250.0	42.86	359.52	10,097.3	-721.6	827.6	536,719.80	821,257.59	32° 28' 20.040 N	103° 25' 32.389 W
10,275.0	45.86	359.52	10,115.2	-704.1	827.5	536,737.27	821,257.44	32° 28' 20.213 N	103° 25' 32.389 W
10,300.0	48.86	359.52	10,132.1	-685.7	827.3	536,755.66	821,257.29	32° 28' 20.395 N	103° 25' 32.389 W
10,325.0	51.86	359.52	10,148.1	-666.5	827.2	536,774.91	821,257.13	32° 28' 20.585 N	103° 25' 32.389 W
10,350.0	54.86	359.52	10,163.0	-646.4	827.0	536,794.97	821,256.96	32° 28' 20.784 N	103° 25' 32.389 W
10,375.0	57.86	359.52	10,176.8	-625.6	826.8	536,815.78	821,256.79	32° 28' 20.990 N	103° 25' 32.389 W
10,400.0	60.86	359.52	10,189.6	-604.1	826.7	536,837.29	821,256.61	32° 28' 21.202 N	103° 25' 32.389 W
10,425.0	63.86	359.52	10,201.1	-582.0	826.5	536,859.44	821,256.42	32° 28' 21.421 N	103° 25' 32.389 W
10,450.0	66.86	359.52	10,211.6	-559.2	826.3	536,882.16	821,256.24	32° 28' 21.646 N	103° 25' 32.389 W
10,475.0	69.86	359.52	10,220.8	-536.0	826.1	536,905.39	821,256.04	32° 28' 21.876 N	103° 25' 32.389 W
10,500.0	72.86	359.52	10,228.8	-512.3	825.9	536,929.08	821,255.85	32° 28' 22.111 N	103° 25' 32.389 W
10,525.0	75.86	359.52	10,235.5	-488.3	825.7	536,953.15	821,255.64	32° 28' 22.349 N	103° 25' 32.389 W
10,550.0	78.86	359.52	10,241.0	-463.9	825.5	536,977.54	821,255.44	32° 28' 22.590 N	103° 25' 32.389 W
10,575.0	81.86	359.52	10,245.2	-439.2	825.3	537,002.18	821,255.24	32° 28' 22.834 N	103° 25' 32.389 W
10,600.0	84.86	359.52	10,248.0	-414.4	825.1	537,027.01	821,255.03	32° 28' 23.080 N	103° 25' 32.389 W
10,625.0	87.86	359.52	10,249.6	-389.4	824.9	537,051.96	821,254.82	32° 28' 23.326 N	103° 25' 32.389 W
10,642.8	90.00	359.52	10,250.0	-371.7	824.7	537,069.75	821,254.67	32° 28' 23.503 N	103° 25' 32.389 W
Start 9946.8 hold at 10642.8 MD									
10,700.0	90.00	359.52	10,250.0	-314.5	824.3	537,126.95	821,254.20	32° 28' 24.069 N	103° 25' 32.389 W
10,800.0	90.00	359.52	10,250.0	-214.5	823.4	537,226.95	821,253.37	32° 28' 25.058 N	103° 25' 32.388 W
10,900.0	90.00	359.52	10,250.0	-114.5	822.6	537,326.94	821,252.53	32° 28' 26.048 N	103° 25' 32.388 W
11,000.0	90.00	359.52	10,250.0	-14.5	821.8	537,426.94	821,251.70	32° 28' 27.037 N	103° 25' 32.388 W
11,100.0	90.00	359.52	10,250.0	85.5	820.9	537,526.94	821,250.87	32° 28' 28.026 N	103° 25' 32.388 W
11,200.0	90.00	359.52	10,250.0	185.5	820.1	537,626.93	821,250.04	32° 28' 29.016 N	103° 25' 32.388 W
11,300.0	90.00	359.52	10,250.0	285.5	819.3	537,726.93	821,249.20	32° 28' 30.005 N	103° 25' 32.387 W
11,400.0	90.00	359.52	10,250.0	385.5	818.4	537,826.93	821,248.37	32° 28' 30.995 N	103° 25' 32.387 W
11,500.0	90.00	359.52	10,250.0	485.5	817.6	537,926.92	821,247.54	32° 28' 31.984 N	103° 25' 32.387 W
11,600.0	90.00	359.52	10,250.0	585.5	816.8	538,026.92	821,246.71	32° 28' 32.974 N	103° 25' 32.387 W
11,700.0	90.00	359.52	10,250.0	685.5	815.9	538,126.92	821,245.88	32° 28' 33.963 N	103° 25' 32.386 W
11,800.0	90.00	359.52	10,250.0	785.5	815.1	538,226.91	821,245.04	32° 28' 34.953 N	103° 25' 32.386 W
11,900.0	90.00	359.52	10,250.0	885.5	814.3	538,326.91	821,244.21	32° 28' 35.942 N	103° 25' 32.386 W
12,000.0	90.00	359.52	10,250.0	985.5	813.4	538,426.91	821,243.38	32° 28' 36.932 N	103° 25' 32.386 W
12,100.0	90.00	359.52	10,250.0	1,085.5	812.6	538,526.90	821,242.55	32° 28' 37.921 N	103° 25' 32.386 W
12,200.0	90.00	359.52	10,250.0	1,185.5	811.8	538,626.90	821,241.71	32° 28' 38.911 N	103° 25' 32.385 W
12,300.0	90.00	359.52	10,250.0	1,285.5	810.9	538,726.90	821,240.88	32° 28' 39.900 N	103° 25' 32.385 W
12,400.0	90.00	359.52	10,250.0	1,385.5	810.1	538,826.89	821,240.05	32° 28' 40.890 N	103° 25' 32.385 W
12,500.0	90.00	359.52	10,250.0	1,485.5	809.3	538,926.89	821,239.22	32° 28' 41.879 N	103° 25' 32.385 W
12,600.0	90.00	359.52	10,250.0	1,585.5	808.4	539,026.89	821,238.38	32° 28' 42.869 N	103° 25' 32.385 W
12,700.0	90.00	359.52	10,250.0	1,685.5	807.6	539,126.88	821,237.55	32° 28' 43.858 N	103° 25' 32.384 W

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,800.0	90.00	359.52	10,250.0	1,785.5	806.8	539,226.88	821,236.72	32° 28' 44.848 N	103° 25' 32.384 W
12,900.0	90.00	359.52	10,250.0	1,885.5	805.9	539,326.87	821,235.89	32° 28' 45.837 N	103° 25' 32.384 W
13,000.0	90.00	359.52	10,250.0	1,985.5	805.1	539,426.87	821,235.06	32° 28' 46.827 N	103° 25' 32.384 W
13,100.0	90.00	359.52	10,250.0	2,085.5	804.3	539,526.87	821,234.22	32° 28' 47.816 N	103° 25' 32.383 W
13,200.0	90.00	359.52	10,250.0	2,185.5	803.4	539,626.86	821,233.39	32° 28' 48.805 N	103° 25' 32.383 W
13,300.0	90.00	359.52	10,250.0	2,285.5	802.6	539,726.86	821,232.56	32° 28' 49.795 N	103° 25' 32.383 W
13,400.0	90.00	359.52	10,250.0	2,385.5	801.8	539,826.86	821,231.73	32° 28' 50.784 N	103° 25' 32.383 W
13,500.0	90.00	359.52	10,250.0	2,485.5	800.9	539,926.85	821,230.89	32° 28' 51.774 N	103° 25' 32.383 W
13,600.0	90.00	359.52	10,250.0	2,585.4	800.1	540,026.85	821,230.06	32° 28' 52.763 N	103° 25' 32.382 W
13,700.0	90.00	359.52	10,250.0	2,685.4	799.3	540,126.85	821,229.23	32° 28' 53.753 N	103° 25' 32.382 W
13,800.0	90.00	359.52	10,250.0	2,785.4	798.4	540,226.84	821,228.40	32° 28' 54.742 N	103° 25' 32.382 W
13,900.0	90.00	359.52	10,250.0	2,885.4	797.6	540,326.84	821,227.57	32° 28' 55.732 N	103° 25' 32.382 W
14,000.0	90.00	359.52	10,250.0	2,985.4	796.8	540,426.84	821,226.73	32° 28' 56.721 N	103° 25' 32.382 W
14,087.0	90.00	359.52	10,250.0	3,072.4	796.1	540,513.81	821,226.01	32° 28' 57.582 N	103° 25' 32.381 W
B068070010 Exit at 14087.0 MD									
14,100.0	90.00	359.52	10,250.0	3,085.4	796.0	540,526.83	821,225.90	32° 28' 57.711 N	103° 25' 32.381 W
14,200.0	90.00	359.52	10,250.0	3,185.4	795.1	540,626.83	821,225.07	32° 28' 58.700 N	103° 25' 32.381 W
14,300.0	90.00	359.52	10,250.0	3,285.4	794.3	540,726.83	821,224.24	32° 28' 59.690 N	103° 25' 32.381 W
14,400.0	90.00	359.52	10,250.0	3,385.4	793.5	540,826.82	821,223.40	32° 29' 0.679 N	103° 25' 32.381 W
14,500.0	90.00	359.52	10,250.0	3,485.4	792.6	540,926.82	821,222.57	32° 29' 1.669 N	103° 25' 32.380 W
14,600.0	90.00	359.52	10,250.0	3,585.4	791.8	541,026.82	821,221.74	32° 29' 2.658 N	103° 25' 32.380 W
14,700.0	90.00	359.52	10,250.0	3,685.4	791.0	541,126.81	821,220.91	32° 29' 3.648 N	103° 25' 32.380 W
14,800.0	90.00	359.52	10,250.0	3,785.4	790.1	541,226.81	821,220.07	32° 29' 4.637 N	103° 25' 32.380 W
14,900.0	90.00	359.52	10,250.0	3,885.4	789.3	541,326.81	821,219.24	32° 29' 5.627 N	103° 25' 32.380 W
15,000.0	90.00	359.52	10,250.0	3,985.4	788.5	541,426.80	821,218.41	32° 29' 6.616 N	103° 25' 32.379 W
15,100.0	90.00	359.52	10,250.0	4,085.4	787.6	541,526.80	821,217.58	32° 29' 7.606 N	103° 25' 32.379 W
15,200.0	90.00	359.52	10,250.0	4,185.4	786.8	541,626.80	821,216.75	32° 29' 8.595 N	103° 25' 32.379 W
15,300.0	90.00	359.52	10,250.0	4,285.4	786.0	541,726.79	821,215.91	32° 29' 9.585 N	103° 25' 32.379 W
15,400.0	90.00	359.52	10,250.0	4,385.4	785.1	541,826.79	821,215.08	32° 29' 10.574 N	103° 25' 32.378 W
15,407.0	90.00	359.52	10,250.0	4,392.4	785.1	541,833.76	821,215.02	32° 29' 10.643 N	103° 25' 32.378 W
E085870001 Exit at 15407.0 MD									
15,500.0	90.00	359.52	10,250.0	4,485.4	784.3	541,926.78	821,214.25	32° 29' 11.563 N	103° 25' 32.378 W
15,600.0	90.00	359.52	10,250.0	4,585.4	783.5	542,026.78	821,213.42	32° 29' 12.553 N	103° 25' 32.378 W
15,700.0	90.00	359.52	10,250.0	4,685.4	782.6	542,126.78	821,212.58	32° 29' 13.542 N	103° 25' 32.378 W
15,800.0	90.00	359.52	10,250.0	4,785.4	781.8	542,226.77	821,211.75	32° 29' 14.532 N	103° 25' 32.378 W
15,900.0	90.00	359.52	10,250.0	4,885.4	781.0	542,326.77	821,210.92	32° 29' 15.521 N	103° 25' 32.377 W
16,000.0	90.00	359.52	10,250.0	4,985.4	780.1	542,426.77	821,210.09	32° 29' 16.511 N	103° 25' 32.377 W
16,100.0	90.00	359.52	10,250.0	5,085.4	779.3	542,526.76	821,209.25	32° 29' 17.500 N	103° 25' 32.377 W
16,200.0	90.00	359.52	10,250.0	5,185.4	778.5	542,626.76	821,208.42	32° 29' 18.490 N	103° 25' 32.377 W
16,300.0	90.00	359.52	10,250.0	5,285.4	777.6	542,726.76	821,207.59	32° 29' 19.479 N	103° 25' 32.377 W
16,400.0	90.00	359.52	10,250.0	5,385.4	776.8	542,826.75	821,206.76	32° 29' 20.469 N	103° 25' 32.376 W
16,500.0	90.00	359.52	10,250.0	5,485.3	776.0	542,926.75	821,205.93	32° 29' 21.458 N	103° 25' 32.376 W
16,600.0	90.00	359.52	10,250.0	5,585.3	775.1	543,026.75	821,205.09	32° 29' 22.448 N	103° 25' 32.376 W
16,700.0	90.00	359.52	10,250.0	5,685.3	774.3	543,126.74	821,204.26	32° 29' 23.437 N	103° 25' 32.376 W
16,800.0	90.00	359.52	10,250.0	5,785.3	773.5	543,226.74	821,203.43	32° 29' 24.427 N	103° 25' 32.375 W
16,900.0	90.00	359.52	10,250.0	5,885.3	772.6	543,326.74	821,202.60	32° 29' 25.416 N	103° 25' 32.375 W
17,000.0	90.00	359.52	10,250.0	5,985.3	771.8	543,426.73	821,201.76	32° 29' 26.406 N	103° 25' 32.375 W
17,100.0	90.00	359.52	10,250.0	6,085.3	771.0	543,526.73	821,200.93	32° 29' 27.395 N	103° 25' 32.375 W
17,200.0	90.00	359.52	10,250.0	6,185.3	770.2	543,626.73	821,200.10	32° 29' 28.385 N	103° 25' 32.375 W
17,300.0	90.00	359.52	10,250.0	6,285.3	769.3	543,726.72	821,199.27	32° 29' 29.374 N	103° 25' 32.374 W
17,400.0	90.00	359.52	10,250.0	6,385.3	768.5	543,826.72	821,198.44	32° 29' 30.364 N	103° 25' 32.374 W
17,500.0	90.00	359.52	10,250.0	6,485.3	767.7	543,926.72	821,197.60	32° 29' 31.353 N	103° 25' 32.374 W
17,600.0	90.00	359.52	10,250.0	6,585.3	766.8	544,026.71	821,196.77	32° 29' 32.342 N	103° 25' 32.374 W

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,700.0	90.00	359.52	10,250.0	6,685.3	766.0	544,126.71	821,195.94	32° 29' 33.332 N	103° 25' 32.373 W
17,800.0	90.00	359.52	10,250.0	6,785.3	765.2	544,226.71	821,195.11	32° 29' 34.321 N	103° 25' 32.373 W
17,900.0	90.00	359.52	10,250.0	6,885.3	764.3	544,326.70	821,194.27	32° 29' 35.311 N	103° 25' 32.373 W
18,000.0	90.00	359.52	10,250.0	6,985.3	763.5	544,426.70	821,193.44	32° 29' 36.300 N	103° 25' 32.373 W
18,100.0	90.00	359.52	10,250.0	7,085.3	762.7	544,526.69	821,192.61	32° 29' 37.290 N	103° 25' 32.373 W
18,200.0	90.00	359.52	10,250.0	7,185.3	761.8	544,626.69	821,191.78	32° 29' 38.279 N	103° 25' 32.372 W
18,300.0	90.00	359.52	10,250.0	7,285.3	761.0	544,726.69	821,190.94	32° 29' 39.269 N	103° 25' 32.372 W
18,400.0	90.00	359.52	10,250.0	7,385.3	760.2	544,826.68	821,190.11	32° 29' 40.258 N	103° 25' 32.372 W
18,500.0	90.00	359.52	10,250.0	7,485.3	759.3	544,926.68	821,189.28	32° 29' 41.248 N	103° 25' 32.372 W
18,600.0	90.00	359.52	10,250.0	7,585.3	758.5	545,026.68	821,188.45	32° 29' 42.237 N	103° 25' 32.371 W
18,700.0	90.00	359.52	10,250.0	7,685.3	757.7	545,126.67	821,187.62	32° 29' 43.227 N	103° 25' 32.371 W
18,800.0	90.00	359.52	10,250.0	7,785.3	756.8	545,226.67	821,186.78	32° 29' 44.216 N	103° 25' 32.371 W
18,900.0	90.00	359.52	10,250.0	7,885.3	756.0	545,326.67	821,185.95	32° 29' 45.206 N	103° 25' 32.371 W
19,000.0	90.00	359.52	10,250.0	7,985.3	755.2	545,426.66	821,185.12	32° 29' 46.195 N	103° 25' 32.371 W
19,100.0	90.00	359.52	10,250.0	8,085.3	754.3	545,526.66	821,184.29	32° 29' 47.185 N	103° 25' 32.370 W
19,200.0	90.00	359.52	10,250.0	8,185.3	753.5	545,626.66	821,183.45	32° 29' 48.174 N	103° 25' 32.370 W
19,300.0	90.00	359.52	10,250.0	8,285.3	752.7	545,726.65	821,182.62	32° 29' 49.164 N	103° 25' 32.370 W
19,369.0	90.00	359.52	10,250.0	8,354.2	752.1	545,795.61	821,182.05	32° 29' 49.846 N	103° 25' 32.370 W
V046410005 Exit at 19369.0 MD									
19,400.0	90.00	359.52	10,250.0	8,385.2	751.8	545,826.65	821,181.79	32° 29' 50.153 N	103° 25' 32.370 W
19,500.0	90.00	359.52	10,250.0	8,485.2	751.0	545,926.65	821,180.96	32° 29' 51.142 N	103° 25' 32.369 W
19,600.0	90.00	359.52	10,250.0	8,585.2	750.2	546,026.64	821,180.13	32° 29' 52.132 N	103° 25' 32.369 W
19,700.0	90.00	359.52	10,250.0	8,685.2	749.3	546,126.64	821,179.29	32° 29' 53.121 N	103° 25' 32.369 W
19,800.0	90.00	359.52	10,250.0	8,785.2	748.5	546,226.64	821,178.46	32° 29' 54.111 N	103° 25' 32.369 W
19,900.0	90.00	359.52	10,250.0	8,885.2	747.7	546,326.63	821,177.63	32° 29' 55.100 N	103° 25' 32.369 W
20,000.0	90.00	359.52	10,250.0	8,985.2	746.8	546,426.63	821,176.80	32° 29' 56.090 N	103° 25' 32.368 W
20,100.0	90.00	359.52	10,250.0	9,085.2	746.0	546,526.63	821,175.96	32° 29' 57.079 N	103° 25' 32.368 W
20,200.0	90.00	359.52	10,250.0	9,185.2	745.2	546,626.62	821,175.13	32° 29' 58.069 N	103° 25' 32.368 W
20,300.0	90.00	359.52	10,250.0	9,285.2	744.4	546,726.62	821,174.30	32° 29' 59.058 N	103° 25' 32.368 W
20,400.0	90.00	359.52	10,250.0	9,385.2	743.5	546,826.62	821,173.47	32° 30' 0.048 N	103° 25' 32.368 W
20,500.0	90.00	359.52	10,250.0	9,485.2	742.7	546,926.61	821,172.63	32° 30' 1.037 N	103° 25' 32.367 W
20,589.6	90.00	359.52	10,250.0	9,574.8	741.9	547,016.25	821,171.89	32° 30' 1.924 N	103° 25' 32.367 W
TD at 20589.6									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP -OUTLAND STU 12	0.00	0.00	10,250.0	-789.1	828.7	536,652.32	821,258.65	32° 28' 19.372 N	103° 25' 32.384 W
- plan misses target center by 156.8usft at 10300.0usft MD (10132.1 TVD, -685.7 N, 827.3 E)									
- Point									
BHL-OUTLAND STU 12	0.00	0.00	10,250.0	9,574.8	741.9	547,016.25	821,171.89	32° 30' 1.924 N	103° 25' 32.367 W
- plan hits target center									
- Point									

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference**	Well OUTLAND STATE UNIT 122H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3682.0usft
Project:	(SP) LEA	**MD Reference:**	KB @ 3682.0usft
Site:	OUTLAND STATE (FORMERLY CHOKEBERRY) PROJECT	**North Reference:**	Grid
Well:	OUTLAND STATE UNIT 122H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
1,000.0	1,000.0	0.0	0.0	Start Build 2.00
1,600.0	1,595.6	-44.8	43.7	Start 5104.4 hold at 1600.0 MD
6,704.4	6,588.5	-804.3	785.0	Start Drop -2.00
7,304.4	7,184.1	-849.1	828.7	Start 2588.4 hold at 7304.4 MD
9,892.8	9,772.5	-849.1	828.7	Start DLS 12.00 TFO 359.52
10,642.8	10,250.0	-371.7	824.7	Start 9946.8 hold at 10642.8 MD
14,087.0	10,250.0	3,072.4	796.1	B068070010 Exit at 14087.0 MD
15,407.0	10,250.0	4,392.4	785.1	E085870001 Exit at 15407.0 MD
19,369.0	10,250.0	8,354.2	752.1	V046410005 Exit at 19369.0 MD
20,589.6	10,250.0	9,574.8	741.9	TD at 20589.6

State of New Mexico
Energy, Minerals and Natural Resources Department

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Earthstone Operating, LLC **OGRID:** 331165 **Date:** 5/2/2024

II. Type: ☑ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.
If Other, please describe: _____.

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil	Anticipated Gas	Anticipated Prod Water
Outland State Unit 121H		M-13-21S-34E	897' FSL – 1125' FWL	1500 BOPD	1900 MCFD	4900 BWPD
Outland State Unit 122H		M-13-21S-34E	897' FSL – 1158' FWL	1500 BOPD	1900 MCFD	4900 BWPD
Outland State Unit 131H		M-13-21S-34E	897' FSL – 1059' FWL	1700 BOPD	2100 MCFD	2500 BWPD
Outland State Unit 132H		M-13-21S-34E	897' FSL – 1092' FWL	1700 BOPD	2100 MCFD	2500 BWPD

IV. Central Delivery Point Name: Outland State Unit SWSW 13CTB [See 19.15.27.9(D)(1)NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Outland State Unit 121H		7/5/2024	7/22/2024	9/18/2024	10/22/2024	10/22/2024
Outland State Unit 122H		7/22/2024	8/8/2024	9/18/2024	10/22/2024	10/22/2024
Outland State Unit 131H		8/9/2024	8/22/2024	9/18/2024	10/22/2024	10/22/2024
Outland State Unit 132H		8/22/2024	9/5/2024	9/18/2024	10/22/2024	10/22/2024

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

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

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

Section 2 – Enhanced Plan

Effective April 1, 2022

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

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

IX. Anticipated Natural Gas Production:

Well Name	API	Anticipated Average Natural Gas Rate	Anticipated Volume of Natural Gas for the First Year
Outland State Unit 121H		1100 MCFD	394,000 MCF
Outland State Unit 122H		1100 MCFD	394,000 MCF
Outland State Unit 131H		550 MCFD	195,000 MCF
Outland State Unit 132H		550 MCFD	195,000 MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Volume of Natural Gas for the First Year
Targa	Targa-Versado Gathering System	N-8-22S-35E	10/22/2024	40 MMSCFD

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

XII. Line Capacity. Operator ☑ does □ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).
☑ Attach Operator's plan to manage production in response to the increased line pressure.

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

Section 3 – Certifications

Effective May 25, 2021

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

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

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

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

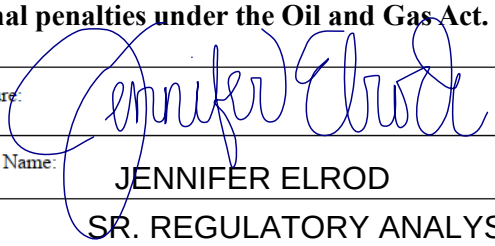
Venting and Flaring Plan. □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

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

Section 4 – Notices

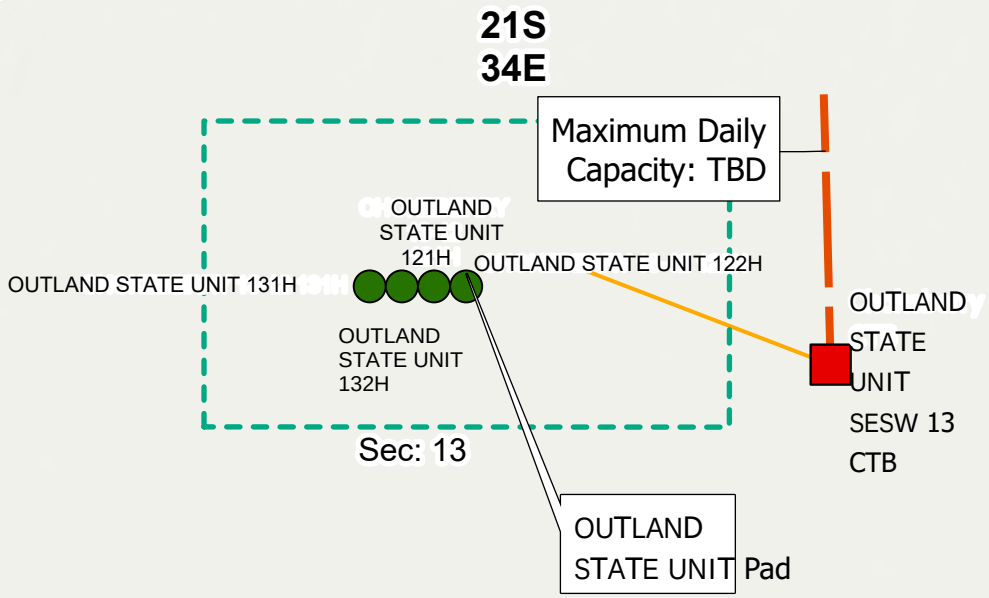
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
   - **(a)** Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
   - **(b)** Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, not later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file and update for each Natural Gas Management Plan until the Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
   - **(c)** OCD may deny or conditionally approve and APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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

Signature:	
Printed Name:	JENNIFER ELROD
Title:	SR. REGULATORY ANALYST
E-mail Address:	JENNIFER.ELROD@PERMIANRES.COM
Date:	5/17/2024
Phone:	940-452-6214

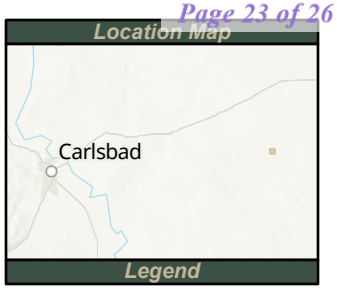
OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

167244



County Road 30

Location Map



Legend

- CTB
- SHL
- Well Pad
- Est. Gas Takeaway
- Flowline

N
W E
S

0 50 100 200 Feet

Spatial Reference
Name: GCS North American 1983
GCS: GCS North American 1983
Datum: North American 1983
Map Units: Degree

PERMIAN RESOURCES

NM APD NGMP
Chokeberry 13-12
121H/122H/131H/132H

Lea County, New Mexico

Created Date: 5/6/2024	Revised Date: 5/8/2024
Author: T. Via	Drafter: T. Douglass

Path: X:\GIS\CorpProjects\Regulatory\NM_APD\Projects\NGMP_APD.aprx

Permian Resources Operating, LLC (372165)
Earthstone Operating, LLC (331165)

Natural Gas Management Plan Descriptions

VI. Separation Equipment:

Permian Resources Operating, LLC (Permian) utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations. Our goal is to maintain 5 minutes of retention time in the test vessel and 20 minutes in the heater treater at peak production rates. The gas produced is routed from the separator to the gas sales line.

VII. Operational Practices:

Drilling

During Permian's drilling operations it is uncommon for venting or flaring to occur. If flaring is needed due to safety concerns, gas will be routed to a flare and volumes will be estimated.

Flowback

During completion/recompletion flowback operations, after separation flowback begins and as soon as it is technically feasible, Permian routes gas though a permanent separator and the controlled facility where the gas is either sold or flared through a high-pressure flare if needed.

Production

Per 19.15.27.8.D, Permian's facilities are designed to minimize waste. Our produced gas will only be vented or flared in an emergency or malfunction situation, except as allowed for normal operations noted in 19.15.27.8.D(2) & (4). All gas that is flared is metered. All gas that may be vented will be estimated.

Performance Standards

Permian utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations.

All of Permian's permanent storage tanks associated with production operations which are routed to a flare or control device are equipped with an automatic gauging system.

All of Permian's flare stacks, both currently installed and for future installation, are:

1) Appropriately sized and designed to ensure proper combustion effciency.

2)Equipped with an automatic ignitor or continuous pilot.

3) Anchored and located at least 100 feet from the well and storage tanks.

Permian's field operations and HSE teams have implemented an AVO inspection schedule that adheres to the requirements of 19.15.27.8.E(5).

All of our operations and facilities are designed to minimize waste. We routinely employ the following methods and practices:

- Closed-loop systems
- Enclosed and properly sized tanks

- Vapor recovery units to maximize recovery of low-pressure gas streams and potential unauthorized emissions
- Low-emitting or electric engines whenever practical
- Combustors and flare stacks in the event of a malfunction or emergency
- Routine facility inspections to identify leaking components, functioning control devices, such as flares and combustors, and repair / replacement of malfunctioning components where applicable

Measurement or estimation

Permian measures or estimates the volumes of natural gas vented, flared and/or beneficially used for all of our drilling, completing and producing wells. We utilize accepted industry standards and methodology which can be independently verified. Annual GOR testing is completed on our wells and will be submitted as required by the OCD. None of our equipment is designed to allow diversion around metering elements except during inspection, maintenance and repair operations.

VIII. Best Management Practices:

Permian Resources utilizes the following BMPs to minimize venting during active and planned maintenance activities:

- Use a closed-loop process wherever possible during planned maintenance activities, such as blowdowns, liquid removal, and work over operations.
- Employ low-emitting or electric engines for equipment, such as compressors
- Adhere to a strict preventative maintenance program which includes routine facility inspections, identification of component malfunctions, and repairing or replacing components such as hatches, seals, valves, etc. where applicable
- Utilize vapor recovery units (VRU's) to maximize recovery of volumes of low-pressure gas streams and potential unauthorized emissions
- Route low pressure gas and emissions streams to a combustion device to prevent venting where necessary

Enhanced Natural Gas Management Plan

Operator's Plan to Manage Production in Response to Increased Line Pressure

Permian Resources Operating, LLC (Permian) anticipates that its existing wells connected to the same portion of the natural gas gathering system will continue to meet anticipated increases in line pressure caused by the new wells. Permian will actively monitor line pressure throughout the field and will make necessary adjustments to existing production separators' pressures to send gas to sales. Permian also plans to implement automated alarms on all flare meters to alert of flaring events as they occur. The alarms will send notifications to field operations and engineering staff via text message and email at every occurrence of flaring. In addition, Permian plans to implement automated alarms on all flare meters to alert of any continuous flaring event that has continued for at least 4 hours. The alarms will send notifications to field operations and engineering management. Permian personnel will promptly respond to these alarms, communicate with midstream partners, and take the appropriate action to reduce flaring caused by high line pressure from new well production.