

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-025-51731
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name DOVETAIL 18 7 STATE COM
8. Well Number 221H
9. OGRID Number 331165
10. Pool name or Wildcat Wilson; Bone Spring, North (97704)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3639' GR

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator EARTHSTONE OPERATING, LLC	
3. Address of Operator 300 N. Marienfeld Street; Suite 1000 Midland, TX 79701	
4. Well Location Unit Letter <u>M</u> : <u>510</u> feet from the <u>South</u> line and <u>493</u> feet from the <u>West</u> line Section <u>18</u> Township <u>21S</u> Range <u>35E</u> NMPM County <u>LEA</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3639' GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Sundry to Revise Well Name/Number/SHL/Drilling Plan/Revise

Target Depth Well Name Change

From: Dovetail 18 7 State Com 221H

To: Dovetail 18 7 State Com 121H

Surface Hole Change

From: M (Lot 4)-18-21S-35E; 510 FSL & 493 FWL

To: M (Lot 4)-18-21S-35E; 524 FSL & 536 FWL

Bottom Hole Change

From: D (Lot 1)-7-21S-35E; 50 FNL & 330 FWL

To: D (Lot 1)-7-21S-35E; 100 FNL & 330 FWL

*CHANGES TO DRILLING PLAN ATTACHED

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jennifer Elrod TITLE SR. REGULATORY ANALYST DATE 05/07/2024

Type or print name JENNIFER ELROD E-mail address: jelrod@permianres.com PHONE: (940)452-6214

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

☒ AMENDED REPORT
WELL NAME/NUMBER/
SHL/BHL

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-51731	² Pool Code 97704	³ Pool Name WILSON; BONE SPRING, NORTH
⁴ Property Code 334547	⁵ Property Name DOVETAIL 18-7 STATE	
⁷ OGRID No. 372165	⁸ Operator Name PERMIAN RESOURCES OPERATING, LLC	⁶ Well Number 121H ⁹ Elevation 3,638.66'

¹⁰ Surface Location

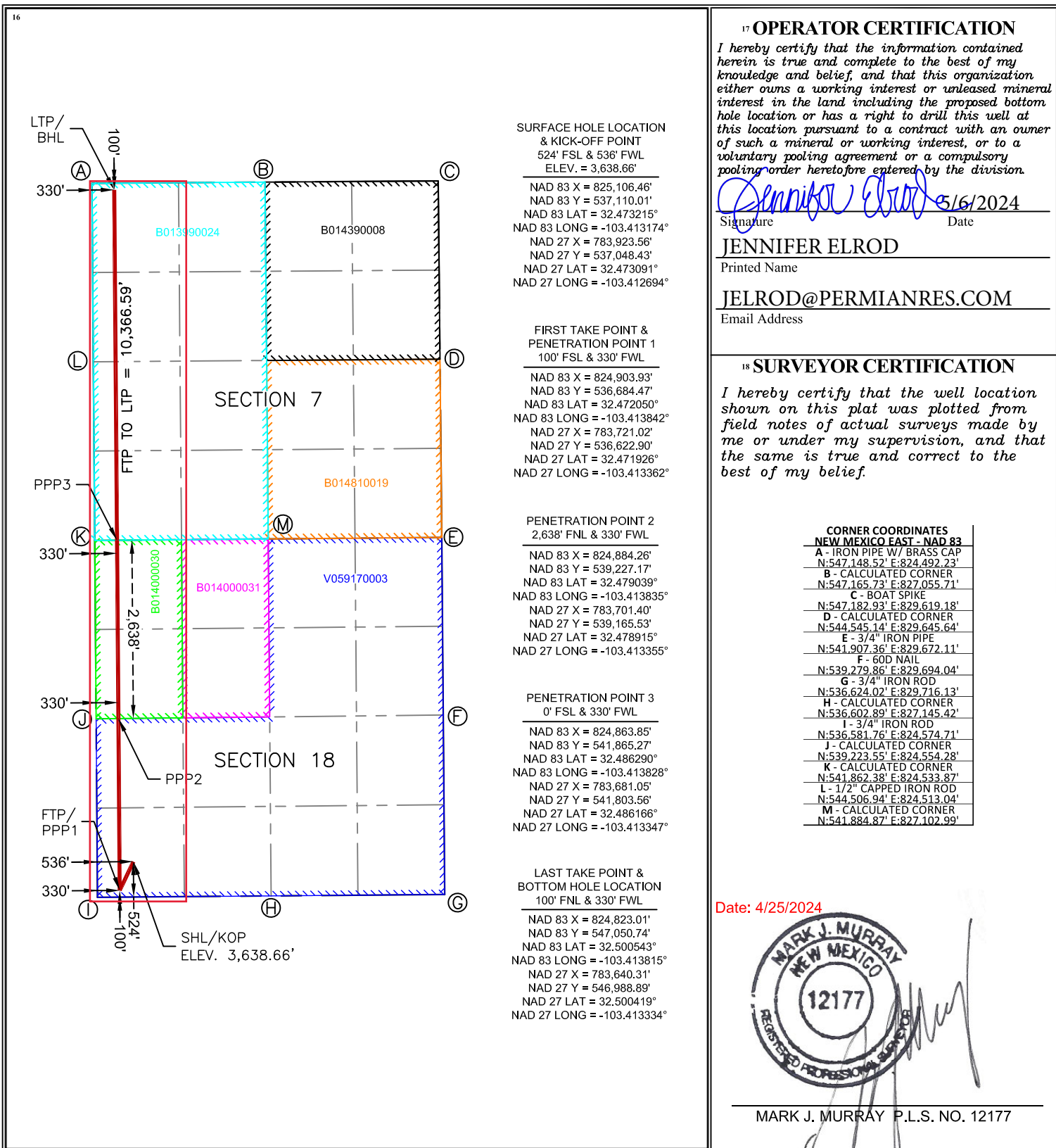
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 4	18	21 S	35 E		524'	SOUTH	536'	WEST	LEA

"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
LOT 1	7	21 S	35 E		100'	NORTH	330'	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
284.999			

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.



Intent ☒ As Drilled ☐

API # 30-025-51731		
Operator Name: PERMIAN RESOURCES OPERATING, LLC	Property Name: DOVETAIL 18-7 STATE	Well Number 121H

Kick Off Point (KOP)

UL LOT 4	Section 18	Township 21 S	Range 35 E	Lot	Feet 524	From N/S S	Feet 536	From E/W W	County LEA
Latitude 32.473215					Longitude -103.413174			NAD 83	

First Take Point (FTP)

UL LOT 4	Section 18	Township 21 S	Range 35 E	Lot	Feet 100	From N/S S	Feet 330	From E/W W	County LEA
Latitude 32.472050					Longitude -103.413842			NAD 83	

Last Take Point (LTP)

UL LOT 1	Section 7	Township 21 S	Range 35 E	Lot	Feet 100	From N/S N	Feet 330	From E/W W	County LEA
Latitude 32.500543					Longitude -103.413815			NAD 83	

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

NEW MEXICO

(SP) LEA

DOVETAIL 18-17 PROJECT

DOVETAIL 18-7 ST 121H

OWB

Plan: PWP0

Standard Planning Report - Geographic

03 May, 2024

Permian Resources
Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	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		DOVETAIL 18-17 PROJECT			
Site Position:		Northing:	537,106.63 usft	Latitude:	32° 28' 23.538 N
From:	Map	Easting:	825,139.29 usft	Longitude:	103° 24' 47.043 W
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	

Well	DOVETAIL 18-7 ST 121H					
Well Position	+N/-S	0.0 usft	Northing:	537,110.01 usft	Latitude:	32° 28' 23.574 N
	+E/-W	0.0 usft	Easting:	825,106.46 usft	Longitude:	103° 24' 47.426 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,639.0 usft
Grid Convergence:		0.49 °				

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.69	60.50	48,959.78931085

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	358.37

Plan Survey Tool Program	Date	5/3/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,504.3 PWP0 (OWB)	MWD	
			OWSG_Rev2_ MWD - Star	

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	10.00	203.07	2,497.5	-40.0	-17.1	2.00	2.00	0.00	203.07	
4,975.1	10.00	203.07	4,934.9	-435.5	-185.5	0.00	0.00	0.00	0.00	
5,475.1	0.00	0.00	5,432.4	-475.5	-202.5	2.00	-2.00	0.00	180.00	
9,815.2	0.00	0.00	9,772.5	-475.5	-202.5	0.00	0.00	0.00	0.00	
10,565.2	90.00	359.55	10,250.0	1.9	-206.2	12.00	12.00	-0.06	359.55	
20,504.3	90.00	359.55	10,250.0	9,940.7	-283.4	0.00	0.00	0.00	0.00	BHL-DOVETAIL 18-

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

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	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
100.0	0.00	0.00	100.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
200.0	0.00	0.00	200.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
300.0	0.00	0.00	300.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
400.0	0.00	0.00	400.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
500.0	0.00	0.00	500.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
600.0	0.00	0.00	600.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
700.0	0.00	0.00	700.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
800.0	0.00	0.00	800.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
900.0	0.00	0.00	900.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	537,110.01	825,106.46	32° 28' 23.574 N	103° 24' 47.426 W	
Start Build 2.00										
2,100.0	2.00	203.07	2,100.0	-1.6	-0.7	537,108.41	825,105.77	32° 28' 23.559 N	103° 24' 47.434 W	
2,200.0	4.00	203.07	2,199.8	-6.4	-2.7	537,103.59	825,103.72	32° 28' 23.511 N	103° 24' 47.458 W	
2,300.0	6.00	203.07	2,299.5	-14.4	-6.1	537,095.57	825,100.31	32° 28' 23.432 N	103° 24' 47.499 W	
2,400.0	8.00	203.07	2,398.7	-25.7	-10.9	537,084.36	825,095.53	32° 28' 23.322 N	103° 24' 47.556 W	
2,500.0	10.00	203.07	2,497.5	-40.0	-17.1	537,069.97	825,089.40	32° 28' 23.180 N	103° 24' 47.629 W	
Start 2475.1 hold at 2500.0 MD										
2,600.0	10.00	203.07	2,595.9	-56.0	-23.9	537,053.99	825,082.60	32° 28' 23.022 N	103° 24' 47.710 W	
2,700.0	10.00	203.07	2,694.4	-72.0	-30.7	537,038.02	825,075.79	32° 28' 22.865 N	103° 24' 47.791 W	
2,800.0	10.00	203.07	2,792.9	-88.0	-37.5	537,022.04	825,068.99	32° 28' 22.707 N	103° 24' 47.872 W	
2,900.0	10.00	203.07	2,891.4	-103.9	-44.3	537,006.07	825,062.18	32° 28' 22.550 N	103° 24' 47.953 W	
3,000.0	10.00	203.07	2,989.9	-119.9	-51.1	536,990.09	825,055.38	32° 28' 22.392 N	103° 24' 48.034 W	
3,100.0	10.00	203.07	3,088.3	-135.9	-57.9	536,974.11	825,048.58	32° 28' 22.235 N	103° 24' 48.115 W	
3,200.0	10.00	203.07	3,186.8	-151.9	-64.7	536,958.14	825,041.77	32° 28' 22.077 N	103° 24' 48.196 W	
3,300.0	10.00	203.07	3,285.3	-167.8	-71.5	536,942.16	825,034.97	32° 28' 21.920 N	103° 24' 48.277 W	
3,400.0	10.00	203.07	3,383.8	-183.8	-78.3	536,926.19	825,028.16	32° 28' 21.762 N	103° 24' 48.358 W	
3,500.0	10.00	203.07	3,482.3	-199.8	-85.1	536,910.21	825,021.36	32° 28' 21.605 N	103° 24' 48.439 W	
3,600.0	10.00	203.07	3,580.8	-215.8	-91.9	536,894.23	825,014.55	32° 28' 21.447 N	103° 24' 48.520 W	
3,700.0	10.00	203.07	3,679.2	-231.8	-98.7	536,878.26	825,007.75	32° 28' 21.290 N	103° 24' 48.601 W	
3,800.0	10.00	203.07	3,777.7	-247.7	-105.5	536,862.28	825,000.94	32° 28' 21.132 N	103° 24' 48.682 W	
3,900.0	10.00	203.07	3,876.2	-263.7	-112.3	536,846.31	824,994.14	32° 28' 20.975 N	103° 24' 48.763 W	
4,000.0	10.00	203.07	3,974.7	-279.7	-119.1	536,830.33	824,987.33	32° 28' 20.817 N	103° 24' 48.844 W	
4,100.0	10.00	203.07	4,073.2	-295.7	-125.9	536,814.35	824,980.53	32° 28' 20.660 N	103° 24' 48.925 W	
4,200.0	10.00	203.07	4,171.6	-311.6	-132.7	536,798.38	824,973.72	32° 28' 20.502 N	103° 24' 49.007 W	
4,300.0	10.00	203.07	4,270.1	-327.6	-139.5	536,782.40	824,966.92	32° 28' 20.345 N	103° 24' 49.088 W	
4,400.0	10.00	203.07	4,368.6	-343.6	-146.3	536,766.43	824,960.11	32° 28' 20.187 N	103° 24' 49.169 W	
4,500.0	10.00	203.07	4,467.1	-359.6	-153.1	536,750.45	824,953.31	32° 28' 20.030 N	103° 24' 49.250 W	
4,600.0	10.00	203.07	4,565.6	-375.5	-160.0	536,734.47	824,946.51	32° 28' 19.872 N	103° 24' 49.331 W	
4,700.0	10.00	203.07	4,664.0	-391.5	-166.8	536,718.50	824,939.70	32° 28' 19.715 N	103° 24' 49.412 W	
4,800.0	10.00	203.07	4,762.5	-407.5	-173.6	536,702.52	824,932.90	32° 28' 19.557 N	103° 24' 49.493 W	
4,900.0	10.00	203.07	4,861.0	-423.5	-180.4	536,686.55	824,926.09	32° 28' 19.400 N	103° 24' 49.574 W	
4,975.1	10.00	203.07	4,934.9	-435.5	-185.5	536,674.55	824,920.98	32° 28' 19.282 N	103° 24' 49.635 W	
Start Drop -2.00										

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	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	
5,000.0	9.50	203.07	4,959.5	-439.3	-187.1	536,670.67	824,919.33	32° 28' 19.243 N	103° 24' 49.654 W	
5,100.0	7.50	203.07	5,058.4	-452.9	-192.9	536,657.07	824,913.54	32° 28' 19.109 N	103° 24' 49.723 W	
5,200.0	5.50	203.07	5,157.8	-463.4	-197.4	536,646.65	824,909.10	32° 28' 19.007 N	103° 24' 49.776 W	
5,300.0	3.50	203.07	5,257.4	-470.6	-200.4	536,639.43	824,906.02	32° 28' 18.935 N	103° 24' 49.813 W	
5,400.0	1.50	203.07	5,357.3	-474.6	-202.1	536,635.42	824,904.31	32° 28' 18.896 N	103° 24' 49.833 W	
5,475.1	0.00	0.00	5,432.4	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
Start 4340.1 hold at 5475.1 MD										
5,500.0	0.00	0.00	5,457.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
5,600.0	0.00	0.00	5,557.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
5,700.0	0.00	0.00	5,657.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
5,800.0	0.00	0.00	5,757.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
5,900.0	0.00	0.00	5,857.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,000.0	0.00	0.00	5,957.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,100.0	0.00	0.00	6,057.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,200.0	0.00	0.00	6,157.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,300.0	0.00	0.00	6,257.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,400.0	0.00	0.00	6,357.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,500.0	0.00	0.00	6,457.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,600.0	0.00	0.00	6,557.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,700.0	0.00	0.00	6,657.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,800.0	0.00	0.00	6,757.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
6,900.0	0.00	0.00	6,857.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,000.0	0.00	0.00	6,957.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,100.0	0.00	0.00	7,057.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,200.0	0.00	0.00	7,157.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,300.0	0.00	0.00	7,257.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,400.0	0.00	0.00	7,357.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,500.0	0.00	0.00	7,457.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,600.0	0.00	0.00	7,557.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,700.0	0.00	0.00	7,657.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,800.0	0.00	0.00	7,757.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
7,900.0	0.00	0.00	7,857.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,000.0	0.00	0.00	7,957.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,100.0	0.00	0.00	8,057.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,200.0	0.00	0.00	8,157.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,300.0	0.00	0.00	8,257.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,400.0	0.00	0.00	8,357.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,500.0	0.00	0.00	8,457.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,600.0	0.00	0.00	8,557.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,700.0	0.00	0.00	8,657.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,800.0	0.00	0.00	8,757.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
8,900.0	0.00	0.00	8,857.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,000.0	0.00	0.00	8,957.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,100.0	0.00	0.00	9,057.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,200.0	0.00	0.00	9,157.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,300.0	0.00	0.00	9,257.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,400.0	0.00	0.00	9,357.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,500.0	0.00	0.00	9,457.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,600.0	0.00	0.00	9,557.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,700.0	0.00	0.00	9,657.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,800.0	0.00	0.00	9,757.3	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
9,815.2	0.00	0.00	9,772.5	-475.5	-202.5	536,634.51	824,903.93	32° 28' 18.887 N	103° 24' 49.838 W	
Start DLS 12.00 TFO 359.55										
9,825.0	1.18	359.55	9,782.3	-475.4	-202.5	536,634.61	824,903.93	32° 28' 18.888 N	103° 24' 49.838 W	

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	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	
9,850.0	4.18	359.55	9,807.3	-474.2	-202.5	536,635.78	824,903.92	32° 28' 18.900 N	103° 24' 49.838 W	
9,875.0	7.18	359.55	9,832.2	-471.8	-202.6	536,638.26	824,903.90	32° 28' 18.924 N	103° 24' 49.838 W	
9,900.0	10.18	359.55	9,856.9	-468.0	-202.6	536,642.03	824,903.87	32° 28' 18.961 N	103° 24' 49.838 W	
9,925.0	13.18	359.55	9,881.4	-462.9	-202.6	536,647.09	824,903.83	32° 28' 19.011 N	103° 24' 49.838 W	
9,950.0	16.18	359.55	9,905.5	-456.6	-202.7	536,653.42	824,903.78	32° 28' 19.074 N	103° 24' 49.837 W	
9,975.0	19.18	359.55	9,929.4	-449.0	-202.7	536,661.01	824,903.72	32° 28' 19.149 N	103° 24' 49.837 W	
10,000.0	22.18	359.55	9,952.7	-440.2	-202.8	536,669.84	824,903.65	32° 28' 19.237 N	103° 24' 49.837 W	
10,025.0	25.18	359.55	9,975.6	-430.1	-202.9	536,679.88	824,903.58	32° 28' 19.336 N	103° 24' 49.837 W	
10,050.0	28.18	359.55	9,998.0	-418.9	-203.0	536,691.10	824,903.49	32° 28' 19.447 N	103° 24' 49.837 W	
10,075.0	31.18	359.55	10,019.7	-406.5	-203.1	536,703.48	824,903.39	32° 28' 19.569 N	103° 24' 49.837 W	
10,100.0	34.18	359.55	10,040.7	-393.0	-203.2	536,716.98	824,903.29	32° 28' 19.703 N	103° 24' 49.837 W	
10,125.0	37.18	359.55	10,061.0	-378.5	-203.3	536,731.56	824,903.17	32° 28' 19.847 N	103° 24' 49.837 W	
10,150.0	40.18	359.55	10,080.6	-362.8	-203.4	536,747.18	824,903.05	32° 28' 20.002 N	103° 24' 49.837 W	
10,175.0	43.18	359.55	10,099.2	-346.2	-203.5	536,763.80	824,902.92	32° 28' 20.166 N	103° 24' 49.836 W	
10,200.0	46.18	359.55	10,117.0	-328.6	-203.7	536,781.37	824,902.79	32° 28' 20.340 N	103° 24' 49.836 W	
10,225.0	49.18	359.55	10,133.8	-310.2	-203.8	536,799.86	824,902.64	32° 28' 20.523 N	103° 24' 49.836 W	
10,250.0	52.18	359.55	10,149.7	-290.8	-204.0	536,819.19	824,902.49	32° 28' 20.714 N	103° 24' 49.836 W	
10,275.0	55.18	359.55	10,164.5	-270.7	-204.1	536,839.33	824,902.34	32° 28' 20.914 N	103° 24' 49.836 W	
10,300.0	58.18	359.55	10,178.2	-249.8	-204.3	536,860.22	824,902.17	32° 28' 21.120 N	103° 24' 49.835 W	
10,325.0	61.18	359.55	10,190.8	-228.2	-204.5	536,881.80	824,902.01	32° 28' 21.334 N	103° 24' 49.835 W	
10,350.0	64.18	359.55	10,202.3	-206.0	-204.6	536,904.01	824,901.83	32° 28' 21.554 N	103° 24' 49.835 W	
10,375.0	67.18	359.55	10,212.6	-183.2	-204.8	536,926.79	824,901.66	32° 28' 21.779 N	103° 24' 49.835 W	
10,400.0	70.18	359.55	10,221.7	-159.9	-205.0	536,950.07	824,901.48	32° 28' 22.009 N	103° 24' 49.835 W	
10,425.0	73.18	359.55	10,229.5	-136.2	-205.2	536,973.80	824,901.29	32° 28' 22.244 N	103° 24' 49.834 W	
10,450.0	76.18	359.55	10,236.1	-112.1	-205.4	536,997.91	824,901.11	32° 28' 22.483 N	103° 24' 49.834 W	
10,475.0	79.18	359.55	10,241.5	-87.7	-205.5	537,022.33	824,900.92	32° 28' 22.724 N	103° 24' 49.834 W	
10,500.0	82.18	359.55	10,245.5	-63.0	-205.7	537,047.00	824,900.72	32° 28' 22.969 N	103° 24' 49.834 W	
10,525.0	85.18	359.55	10,248.3	-38.2	-205.9	537,071.84	824,900.53	32° 28' 23.214 N	103° 24' 49.833 W	
10,550.0	88.18	359.55	10,249.7	-13.2	-206.1	537,096.79	824,900.34	32° 28' 23.461 N	103° 24' 49.833 W	
10,565.2	90.00	359.55	10,250.0	1.9	-206.2	537,111.96	824,900.22	32° 28' 23.611 N	103° 24' 49.833 W	
Start 9939.1 hold at 10565.2 MD										
10,600.0	90.00	359.55	10,250.0	36.8	-206.5	537,146.79	824,899.95	32° 28' 23.956 N	103° 24' 49.833 W	
10,700.0	90.00	359.55	10,250.0	136.8	-207.3	537,246.79	824,899.17	32° 28' 24.945 N	103° 24' 49.832 W	
10,800.0	90.00	359.55	10,250.0	236.8	-208.1	537,346.78	824,898.40	32° 28' 25.935 N	103° 24' 49.831 W	
10,900.0	90.00	359.55	10,250.0	336.8	-208.8	537,446.78	824,897.62	32° 28' 26.924 N	103° 24' 49.830 W	
11,000.0	90.00	359.55	10,250.0	436.8	-209.6	537,546.78	824,896.84	32° 28' 27.914 N	103° 24' 49.829 W	
11,100.0	90.00	359.55	10,250.0	536.8	-210.4	537,646.78	824,896.06	32° 28' 28.903 N	103° 24' 49.828 W	
11,200.0	90.00	359.55	10,250.0	636.8	-211.2	537,746.77	824,895.29	32° 28' 29.893 N	103° 24' 49.827 W	
11,300.0	90.00	359.55	10,250.0	736.8	-211.9	537,846.77	824,894.51	32° 28' 30.882 N	103° 24' 49.826 W	
11,400.0	90.00	359.55	10,250.0	836.8	-212.7	537,946.77	824,893.73	32° 28' 31.872 N	103° 24' 49.825 W	
11,500.0	90.00	359.55	10,250.0	936.8	-213.5	538,046.76	824,892.96	32° 28' 32.861 N	103° 24' 49.824 W	
11,600.0	90.00	359.55	10,250.0	1,036.7	-214.3	538,146.76	824,892.18	32° 28' 33.851 N	103° 24' 49.823 W	
11,700.0	90.00	359.55	10,250.0	1,136.7	-215.1	538,246.76	824,891.40	32° 28' 34.840 N	103° 24' 49.822 W	
11,800.0	90.00	359.55	10,250.0	1,236.7	-215.8	538,346.75	824,890.63	32° 28' 35.830 N	103° 24' 49.821 W	
11,900.0	90.00	359.55	10,250.0	1,336.7	-216.6	538,446.75	824,889.85	32° 28' 36.819 N	103° 24' 49.820 W	
12,000.0	90.00	359.55	10,250.0	1,436.7	-217.4	538,546.75	824,889.07	32° 28' 37.809 N	103° 24' 49.819 W	
12,100.0	90.00	359.55	10,250.0	1,536.7	-218.2	538,646.75	824,888.30	32° 28' 38.798 N	103° 24' 49.818 W	
12,200.0	90.00	359.55	10,250.0	1,636.7	-218.9	538,746.74	824,887.52	32° 28' 39.788 N	103° 24' 49.817 W	
12,300.0	90.00	359.55	10,250.0	1,736.7	-219.7	538,846.74	824,886.74	32° 28' 40.777 N	103° 24' 49.816 W	
12,400.0	90.00	359.55	10,250.0	1,836.7	-220.5	538,946.74	824,885.97	32° 28' 41.767 N	103° 24' 49.815 W	
12,500.0	90.00	359.55	10,250.0	1,936.7	-221.3	539,046.73	824,885.19	32° 28' 42.756 N	103° 24' 49.814 W	
12,600.0	90.00	359.55	10,250.0	2,036.7	-222.0	539,146.73	824,884.41	32° 28' 43.746 N	103° 24' 49.813 W	
12,681.0	90.00	359.55	10,250.0	2,117.7	-222.7	539,227.70	824,883.78	32° 28' 44.547 N	103° 24' 49.812 W	
B014000030 Entry at 12681.0 MD										

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	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	
12,700.0	90.00	359.55	10,250.0	2,136.7	-222.8	539,246.73	824,883.64	32° 28' 44.735 N	103° 24' 49.812 W	
12,800.0	90.00	359.55	10,250.0	2,236.7	-223.6	539,346.72	824,882.86	32° 28' 45.724 N	103° 24' 49.811 W	
12,900.0	90.00	359.55	10,250.0	2,336.7	-224.4	539,446.72	824,882.08	32° 28' 46.714 N	103° 24' 49.810 W	
13,000.0	90.00	359.55	10,250.0	2,436.7	-225.2	539,546.72	824,881.30	32° 28' 47.703 N	103° 24' 49.809 W	
13,100.0	90.00	359.55	10,250.0	2,536.7	-225.9	539,646.72	824,880.53	32° 28' 48.693 N	103° 24' 49.808 W	
13,200.0	90.00	359.55	10,250.0	2,636.7	-226.7	539,746.71	824,879.75	32° 28' 49.682 N	103° 24' 49.807 W	
13,300.0	90.00	359.55	10,250.0	2,736.7	-227.5	539,846.71	824,878.97	32° 28' 50.672 N	103° 24' 49.806 W	
13,400.0	90.00	359.55	10,250.0	2,836.7	-228.3	539,946.71	824,878.20	32° 28' 51.661 N	103° 24' 49.805 W	
13,500.0	90.00	359.55	10,250.0	2,936.7	-229.0	540,046.70	824,877.42	32° 28' 52.651 N	103° 24' 49.804 W	
13,600.0	90.00	359.55	10,250.0	3,036.7	-229.8	540,146.70	824,876.64	32° 28' 53.640 N	103° 24' 49.803 W	
13,700.0	90.00	359.55	10,250.0	3,136.7	-230.6	540,246.70	824,875.87	32° 28' 54.630 N	103° 24' 49.802 W	
13,800.0	90.00	359.55	10,250.0	3,236.7	-231.4	540,346.69	824,875.09	32° 28' 55.619 N	103° 24' 49.801 W	
13,900.0	90.00	359.55	10,250.0	3,336.7	-232.1	540,446.69	824,874.31	32° 28' 56.609 N	103° 24' 49.800 W	
14,000.0	90.00	359.55	10,250.0	3,436.7	-232.9	540,546.69	824,873.54	32° 28' 57.598 N	103° 24' 49.799 W	
14,100.0	90.00	359.55	10,250.0	3,536.7	-233.7	540,646.68	824,872.76	32° 28' 58.588 N	103° 24' 49.798 W	
14,200.0	90.00	359.55	10,250.0	3,636.7	-234.5	540,746.68	824,871.98	32° 28' 59.577 N	103° 24' 49.797 W	
14,300.0	90.00	359.55	10,250.0	3,736.7	-235.3	540,846.68	824,871.21	32° 29' 0.567 N	103° 24' 49.796 W	
14,400.0	90.00	359.55	10,250.0	3,836.7	-236.0	540,946.68	824,870.43	32° 29' 1.556 N	103° 24' 49.795 W	
14,500.0	90.00	359.55	10,250.0	3,936.7	-236.8	541,046.67	824,869.65	32° 29' 2.546 N	103° 24' 49.794 W	
14,600.0	90.00	359.55	10,250.0	4,036.7	-237.6	541,146.67	824,868.88	32° 29' 3.535 N	103° 24' 49.793 W	
14,700.0	90.00	359.55	10,250.0	4,136.7	-238.4	541,246.67	824,868.10	32° 29' 4.524 N	103° 24' 49.792 W	
14,800.0	90.00	359.55	10,250.0	4,236.7	-239.1	541,346.66	824,867.32	32° 29' 5.514 N	103° 24' 49.791 W	
14,900.0	90.00	359.55	10,250.0	4,336.6	-239.9	541,446.66	824,866.54	32° 29' 6.503 N	103° 24' 49.790 W	
15,000.0	90.00	359.55	10,250.0	4,436.6	-240.7	541,546.66	824,865.77	32° 29' 7.493 N	103° 24' 49.789 W	
15,100.0	90.00	359.55	10,250.0	4,536.6	-241.5	541,646.65	824,864.99	32° 29' 8.482 N	103° 24' 49.788 W	
15,200.0	90.00	359.55	10,250.0	4,636.6	-242.2	541,746.65	824,864.21	32° 29' 9.472 N	103° 24' 49.787 W	
15,300.0	90.00	359.55	10,250.0	4,736.6	-243.0	541,846.65	824,863.44	32° 29' 10.461 N	103° 24' 49.786 W	
15,319.0	90.00	359.55	10,250.0	4,755.6	-243.2	541,865.62	824,863.29	32° 29' 10.649 N	103° 24' 49.786 W	
B013990024 Entry at 15319.0 MD										
15,400.0	90.00	359.55	10,250.0	4,836.6	-243.8	541,946.65	824,862.66	32° 29' 11.451 N	103° 24' 49.785 W	
15,500.0	90.00	359.55	10,250.0	4,936.6	-244.6	542,046.64	824,861.88	32° 29' 12.440 N	103° 24' 49.784 W	
15,600.0	90.00	359.55	10,250.0	5,036.6	-245.4	542,146.64	824,861.11	32° 29' 13.430 N	103° 24' 49.783 W	
15,700.0	90.00	359.55	10,250.0	5,136.6	-246.1	542,246.64	824,860.33	32° 29' 14.419 N	103° 24' 49.782 W	
15,800.0	90.00	359.55	10,250.0	5,236.6	-246.9	542,346.63	824,859.55	32° 29' 15.409 N	103° 24' 49.781 W	
15,900.0	90.00	359.55	10,250.0	5,336.6	-247.7	542,446.63	824,858.78	32° 29' 16.398 N	103° 24' 49.780 W	
16,000.0	90.00	359.55	10,250.0	5,436.6	-248.5	542,546.63	824,858.00	32° 29' 17.388 N	103° 24' 49.779 W	
16,100.0	90.00	359.55	10,250.0	5,536.6	-249.2	542,646.62	824,857.22	32° 29' 18.377 N	103° 24' 49.778 W	
16,200.0	90.00	359.55	10,250.0	5,636.6	-250.0	542,746.62	824,856.45	32° 29' 19.367 N	103° 24' 49.777 W	
16,300.0	90.00	359.55	10,250.0	5,736.6	-250.8	542,846.62	824,855.67	32° 29' 20.356 N	103° 24' 49.776 W	
16,400.0	90.00	359.55	10,250.0	5,836.6	-251.6	542,946.62	824,854.89	32° 29' 21.346 N	103° 24' 49.775 W	
16,500.0	90.00	359.55	10,250.0	5,936.6	-252.3	543,046.61	824,854.12	32° 29' 22.335 N	103° 24' 49.774 W	
16,600.0	90.00	359.55	10,250.0	6,036.6	-253.1	543,146.61	824,853.34	32° 29' 23.324 N	103° 24' 49.773 W	
16,700.0	90.00	359.55	10,250.0	6,136.6	-253.9	543,246.61	824,852.56	32° 29' 24.314 N	103° 24' 49.772 W	
16,800.0	90.00	359.55	10,250.0	6,236.6	-254.7	543,346.60	824,851.78	32° 29' 25.303 N	103° 24' 49.771 W	
16,900.0	90.00	359.55	10,250.0	6,336.6	-255.5	543,446.60	824,851.01	32° 29' 26.293 N	103° 24' 49.770 W	
17,000.0	90.00	359.55	10,250.0	6,436.6	-256.2	543,546.60	824,850.23	32° 29' 27.282 N	103° 24' 49.769 W	
17,100.0	90.00	359.55	10,250.0	6,536.6	-257.0	543,646.59	824,849.45	32° 29' 28.272 N	103° 24' 49.768 W	
17,200.0	90.00	359.55	10,250.0	6,636.6	-257.8	543,746.59	824,848.68	32° 29' 29.261 N	103° 24' 49.767 W	
17,300.0	90.00	359.55	10,250.0	6,736.6	-258.6	543,846.59	824,847.90	32° 29' 30.251 N	103° 24' 49.766 W	
17,400.0	90.00	359.55	10,250.0	6,836.6	-259.3	543,946.59	824,847.12	32° 29' 31.240 N	103° 24' 49.765 W	
17,500.0	90.00	359.55	10,250.0	6,936.6	-260.1	544,046.58	824,846.35	32° 29' 32.230 N	103° 24' 49.764 W	
17,600.0	90.00	359.55	10,250.0	7,036.6	-260.9	544,146.58	824,845.57	32° 29' 33.219 N	103° 24' 49.763 W	
17,700.0	90.00	359.55	10,250.0	7,136.6	-261.7	544,246.58	824,844.79	32° 29' 34.209 N	103° 24' 49.762 W	
17,800.0	90.00	359.55	10,250.0	7,236.6	-262.4	544,346.57	824,844.02	32° 29' 35.198 N	103° 24' 49.761 W	

Permian Resources
Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

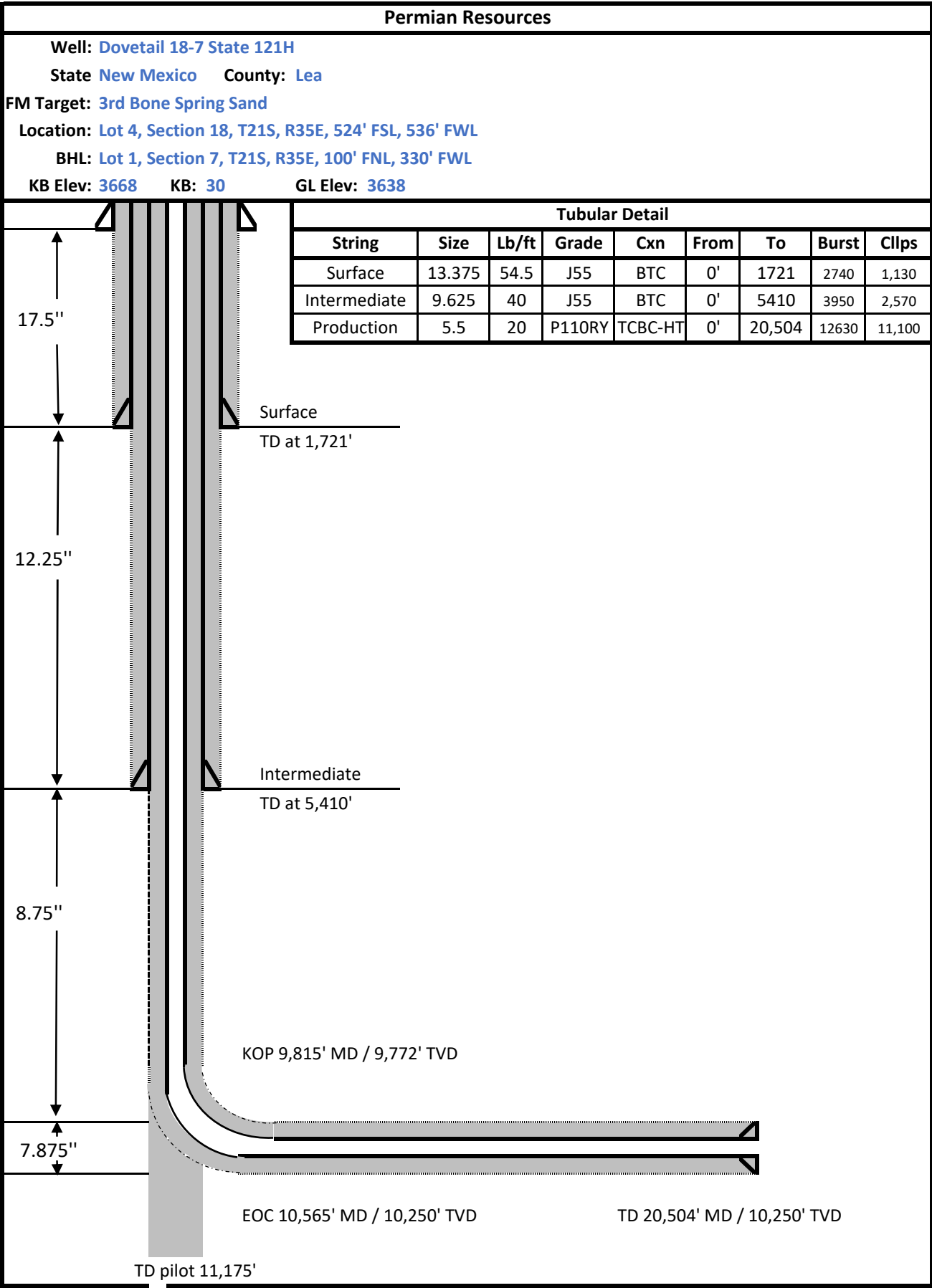
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
17,900.0	90.00	359.55	10,250.0	7,336.6	-263.2	544,446.57	824,843.24	32° 29' 36.188 N	103° 24' 49.760 W	
18,000.0	90.00	359.55	10,250.0	7,436.6	-264.0	544,546.57	824,842.46	32° 29' 37.177 N	103° 24' 49.759 W	
18,100.0	90.00	359.55	10,250.0	7,536.6	-264.8	544,646.56	824,841.69	32° 29' 38.167 N	103° 24' 49.758 W	
18,200.0	90.00	359.55	10,250.0	7,636.5	-265.5	544,746.56	824,840.91	32° 29' 39.156 N	103° 24' 49.757 W	
18,300.0	90.00	359.55	10,250.0	7,736.5	-266.3	544,846.56	824,840.13	32° 29' 40.146 N	103° 24' 49.756 W	
18,400.0	90.00	359.55	10,250.0	7,836.5	-267.1	544,946.56	824,839.36	32° 29' 41.135 N	103° 24' 49.755 W	
18,500.0	90.00	359.55	10,250.0	7,936.5	-267.9	545,046.55	824,838.58	32° 29' 42.124 N	103° 24' 49.754 W	
18,600.0	90.00	359.55	10,250.0	8,036.5	-268.7	545,146.55	824,837.80	32° 29' 43.114 N	103° 24' 49.753 W	
18,700.0	90.00	359.55	10,250.0	8,136.5	-269.4	545,246.55	824,837.02	32° 29' 44.103 N	103° 24' 49.752 W	
18,800.0	90.00	359.55	10,250.0	8,236.5	-270.2	545,346.54	824,836.25	32° 29' 45.093 N	103° 24' 49.751 W	
18,900.0	90.00	359.55	10,250.0	8,336.5	-271.0	545,446.54	824,835.47	32° 29' 46.082 N	103° 24' 49.750 W	
19,000.0	90.00	359.55	10,250.0	8,436.5	-271.8	545,546.54	824,834.69	32° 29' 47.072 N	103° 24' 49.749 W	
19,100.0	90.00	359.55	10,250.0	8,536.5	-272.5	545,646.53	824,833.92	32° 29' 48.061 N	103° 24' 49.748 W	
19,200.0	90.00	359.55	10,250.0	8,636.5	-273.3	545,746.53	824,833.14	32° 29' 49.051 N	103° 24' 49.747 W	
19,300.0	90.00	359.55	10,250.0	8,736.5	-274.1	545,846.53	824,832.36	32° 29' 50.040 N	103° 24' 49.746 W	
19,400.0	90.00	359.55	10,250.0	8,836.5	-274.9	545,946.53	824,831.59	32° 29' 51.030 N	103° 24' 49.745 W	
19,500.0	90.00	359.55	10,250.0	8,936.5	-275.6	546,046.52	824,830.81	32° 29' 52.019 N	103° 24' 49.744 W	
19,600.0	90.00	359.55	10,250.0	9,036.5	-276.4	546,146.52	824,830.03	32° 29' 53.009 N	103° 24' 49.743 W	
19,700.0	90.00	359.55	10,250.0	9,136.5	-277.2	546,246.52	824,829.26	32° 29' 53.998 N	103° 24' 49.742 W	
19,800.0	90.00	359.55	10,250.0	9,236.5	-278.0	546,346.51	824,828.48	32° 29' 54.988 N	103° 24' 49.741 W	
19,900.0	90.00	359.55	10,250.0	9,336.5	-278.8	546,446.51	824,827.70	32° 29' 55.977 N	103° 24' 49.740 W	
20,000.0	90.00	359.55	10,250.0	9,436.5	-279.5	546,546.51	824,826.93	32° 29' 56.967 N	103° 24' 49.739 W	
20,100.0	90.00	359.55	10,250.0	9,536.5	-280.3	546,646.50	824,826.15	32° 29' 57.956 N	103° 24' 49.738 W	
20,200.0	90.00	359.55	10,250.0	9,636.5	-281.1	546,746.50	824,825.37	32° 29' 58.945 N	103° 24' 49.737 W	
20,300.0	90.00	359.55	10,250.0	9,736.5	-281.9	546,846.50	824,824.60	32° 29' 59.935 N	103° 24' 49.736 W	
20,400.0	90.00	359.55	10,250.0	9,836.5	-282.6	546,946.49	824,823.82	32° 30' 0.924 N	103° 24' 49.735 W	
20,504.3	90.00	359.55	10,250.0	9,940.7	-283.4	547,050.74	824,823.01	32° 30' 1.956 N	103° 24' 49.734 W	
TD at 20504.3										

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
FTP-DOVETAIL 18-7	0.00	0.00	10,250.0	-425.5	-202.5	536,684.47	824,903.93	32° 28' 19.381 N	103° 24' 49.833 W	
- plan misses target center by 163.5usft at 10217.9usft MD (10129.1 TVD, -315.5 N, -203.8 E)										
- Point										
BHL-DOVETAIL 18-7	0.00	0.00	10,250.0	9,940.7	-283.4	547,050.74	824,823.01	32° 30' 1.956 N	103° 24' 49.734 W	
- plan hits target center										
- Point										

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well DOVETAIL 18-7 ST 121H
Company:	NEW MEXICO	TVD Reference:	KB @ 3669.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3669.0usft
Site:	DOVETAIL 18-17 PROJECT	North Reference:	Grid
Well:	DOVETAIL 18-7 ST 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	Start Build 2.00
2,500.0	2,497.5	-40.0	-17.1	Start 2475.1 hold at 2500.0 MD
4,975.1	4,934.9	-435.5	-185.5	Start Drop -2.00
5,475.1	5,432.4	-475.5	-202.5	Start 4340.1 hold at 5475.1 MD
9,815.2	9,772.5	-475.5	-202.5	Start DLS 12.00 TFO 359.55
10,565.2	10,250.0	1.9	-206.2	Start 9939.1 hold at 10565.2 MD
12,681.0	10,250.0	2,117.7	-222.7	B014000030 Entry at 12681.0 MD
15,319.0	10,250.0	4,755.6	-243.2	B013990024 Entry at 15319.0 MD
20,504.3	10,250.0	9,940.7	-283.4	TD at 20504.3



Permian Resources - Dovetail 18-7 State 121H

1. Geologic Formations

Formation	Elevation	TVD	Target
Rustler	1972	1696	No
Top of Salt	1573	2095	No
Yates	78	3590	No
Capitan	-325	3993	No
Cherry Canyon	-1792	5460	No
Brushy Canyon	-3052	6720	No
Bone Spring Lime	-4501	8169	No
1st Bone Spring Sand	-5703	9371	No
2nd Bone Spring Sand	-6223	9891	Yes
3rd Bone Spring Sand	-7110	10778	No
Wolfcamp	-7288	10956	No

2. Blowout Prevention

BOP installed and tested before drilling which hole?	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	10565	0	10250	10565	P110RY	20	TCBC-HT	1.98	2.07	Dry	2.10	Dry	2.10
Production	7.875	5.5	10565	20504	10250	10250	9939	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	Quantity (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	9815	710	2.41	11.5	1690	40%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Production	Tail	9815	20504	1390	1.73	12.5	2390	25%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Plug Back	Tail	9472	11175	440	0.97	17.5	420	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 other 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: 11410 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	10565	Water Based Mud	9	10.5
10565	20504	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:	11410 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:

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 341435

CONDITIONS

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 341435
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	ALL PREVIOUS COA'S APPLY.	6/5/2024