

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 365474

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

1. Operator Name and Address Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701		2. OGRID Number 372165
		3. API Number 30-015-55132
4. Property Code 335406	5. Property Name BARNEY	6. Well No. 423H

7. Surface Location

UL - Lot F	Section 4	Township 22S	Range 27E	Lot Idn	Feet From 1436	N/S Line N	Feet From 1571	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot L	Section 6	Township 22S	Range 27E	Lot Idn 6	Feet From 2200	N/S Line S	Feet From 100	E/W Line W	County Eddy
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9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
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Additional Well Information

11. Work Type New Well	12. Well Type GAS	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3163
16. Multiple N	17. Proposed Depth 18350	18. Formation Wolfcamp	19. Contractor	20. Spud Date 8/5/2024
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	300	250	0
Int1	12.25	9.625	40	10649	510	0
Prod	7.875	5.5	20	18350	1590	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
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:

Printed Name: Electronically filed by Stephanie Rabadue

Title: Regulatory Manager

Email Address: stephanie.rabadue@permianres.com

Date: 5/14/2024

Phone: 432-260-4388

OIL CONSERVATION DIVISION

Approved By: Ward Rikala

Title:

Approved Date: 6/10/2024

Expiration Date: 6/10/2026

Conditions of Approval Attached

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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 30-015-55132	² Pool Code 98220	³ Pool Name Purple Sage, Wolfcamp (Gas)
⁴ Property Code 335406	⁵ Property Name BARNEY	⁶ Well Number 423H
⁷ OGRID No. 372165	⁸ Operator Name PERMIAN RESOURCES OPERATING, LLC	⁹ Elevation 3,163'

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
F	4	22 S	27 E		1,436'	NORTH	1,571'	WEST	EDDY

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
LOT 6	6	22 S	27 E		2,200'	SOUTH	100'	WEST	EDDY

¹² Dedicated Acres 478.44	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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
1,436' FNL & 1,571' FWL
ELEV. = 3,163.00'

NAD 83 X = 583,012.58'
NAD 83 Y = 518,421.87'
NAD 83 LAT = 32.425136°
NAD 83 LONG = -104.198266°
NAD 27 X = 541,831.34'
NAD 27 Y = 518,361.88'
NAD 27 LAT = 32.425017°
NAD 27 LONG = -104.197762°

FIRST TAKE POINT &
PENETRATION POINT 1
2,200' FSL & 2,540' FWL

NAD 83 X = 578,695.61'
NAD 83 Y = 516,788.26'
NAD 83 LAT = 32.420659°
NAD 83 LONG = -104.212263°
NAD 27 X = 537,514.38'
NAD 27 Y = 516,728.37'
NAD 27 LAT = 32.420541°
NAD 27 LONG = -104.211759°

LAST TAKE POINT &
BOTTOM HOLE LOCATION
2,200' FSL & 100' FWL

NAD 83 X = 570,994.28'
NAD 83 Y = 516,723.78'
NAD 83 LAT = 32.420504°
NAD 83 LONG = -104.237221°
NAD 27 X = 529,813.13'
NAD 27 Y = 516,663.97'
NAD 27 LAT = 32.420386°
NAD 27 LONG = -104.236717°

CORNER COORDINATES NEW MEXICO EAST - NAD 83	
A - CALCULATED CORNER	N:519,685.71' E:570,880.76'
B - CALCULATED CORNER	N:519,766.44' E:573,482.44'
C - 1/2" IRON ROD	N:519,847.17' E:576,084.12'
D - CALCULATED CORNER	N:519,859.02' E:578,746.76'
E - IRON PIPE W/ BRASS CAP	N:519,870.86' E:581,409.40'
F - 1/2" IRON ROD	N:517,282.02' E:581,466.79'
G - IRON PIPE W/ BRASS CAP	N:514,624.77' E:581,530.34'
H - CALCULATED CORNER	N:514,590.43' E:578,868.47'
I - CALCULATED CORNER	N:514,556.09' E:576,206.59'
J - CALCULATED CORNER	N:514,539.63' E:573,555.46'
K - CALCULATED CORNER	N:514,523.18' E:570,904.33'
L - CALCULATED CORNER	N:517,104.44' E:570,892.54'
M - CALCULATED CORNER	N:517,201.63' E:576,145.36'

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.

Cassie Evans

5/9/24

Signature

Date

Cassie Evans

Printed Name

Cassie.Evans@permianres.com

Email Address

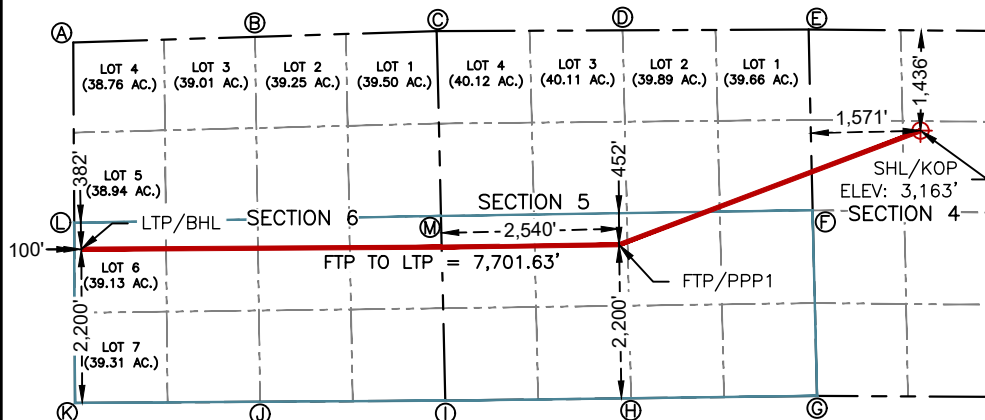
¹⁸ SURVEYOR CERTIFICATION

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.

Date: 5/7/2024



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



Intent ☒ As Drilled ☐

API #		
Operator Name: PERMIAN RESOURCES OPERATING, LLC	Property Name: BARNEY	Well Number 423H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
F	4	22 S	27 E		1,436'	N	1,571'	W	EDDY
Latitude 32.425136					Longitude -104.198266				NAD 83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
K	5	22 S	27 E		2,200'	S	2,540'	W	EDDY
Latitude 32.420659					Longitude -104.212263				NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
L6	6	22 S	27 E		2,200'	S	100'	W	EDDY
Latitude 32.420504					Longitude -104.237221				NAD 83

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

☐ NO

Is this well an infill well?

☐ YES

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

API # 30-015-49097		
Operator Name: Permian Resources Operating LLC	Property Name: Barney	Well Number 404H

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 Comments

Permit 365474

PERMIT COMMENTS

Operator Name and Address: Permian Resources Operating, LLC [372165] 300 N. Marienfeld St Ste 1000 Midland, TX 79701		API Number: 30-015-55132
		Well: BARNEY #423H

Created By	Comment	Comment Date
ward.rikala	Given the close proximity of this well to the Canyon Reef, an additional intermediate casing string may be required to protect the aquifer if the Canyon Reef is encountered during drilling. Additionally, only a fresh water system can be used until below the Canyon Reef then produced water is acceptable.	6/10/2024

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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 365474

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Permian Resources Operating, LLC [372165] 300 N. Marienfeld St Ste 1000 Midland, TX 79701		API Number: 30-015-55132
		Well: BARNEY #423H

OCD Reviewer	Condition
ward.rikala	Notify OCD 24 hours prior to casing & cement
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ward.rikala	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
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing
ward.rikala	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
ward.rikala	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
ward.rikala	Please see comments. If the Canyon Reef is present, an additional intermediate casing string shall be sat and cemented to surface to protect the aquifer. Only fresh water system can be used below this point.

State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil 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:** Permian Resources Operating, LLC **OGRID:** 372165 **Date:** 05/10/2024**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 BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
██████████	██████	██████████	██████████	██████	██████	██████
██████████	██████	██████████	██████████	██████	██████	██████
██████████	██████	██████████	██████████	██████	██████	██████
██████████	██████	██████████	██████████	██████	██████	██████
██████████	██████	██████████	██████████	██████	██████	██████

IV. Central Delivery Point Name: Betty/Barney CTB [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 proposed to be 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
Barney 223H	TBD	<u>8/5/24</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Barney 423H	TBD	<u>8/5/24</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Betty 221H	TBD	<u>8/5/24</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Betty 222H	TBD	<u>8/5/24</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Betty 421H	TBD	<u>8/5/24</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational 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	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
Barney 223H		1859	678443
Barney 423H		1859	678443
Betty 221H		3413	1245691
Betty 222H		3413	1245691
Betty 421H		3413	1245691

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

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 gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☒ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. 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 attaches 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, no 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 an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an 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 that, 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: <i>Cassie Evans</i>
Printed Name: Cassie Evans
Title: Regulatory Specialist
E-mail Address: Cassie.Evans@permianres.com
Date: 5/10/24
Phone: 432-313-1732
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

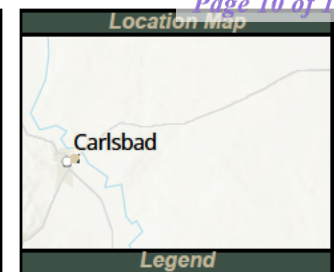
22S
27E
Sec: 4

3126 ft

Betty /
Barney CTB

Maximum Daily Capacity: TBD

3124 ft

 CTB Facility

● SHL

— Flowlines

 Well Pad

— — Est. Gas Takeaway



0 100 200 400 Feet

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

This map and its contents are not a legal surveyed document. It is meant for the use of Permian Resources and its employees and cannot be shared without expressed written authorization.

PERMIAN
RESOURCES

NM APD NGMP
Betty 221H/222H/421H
Barney 223H/423H

Eddy County, New Mexico

Created Date: 5/6/2024	Revised Date: 5/6/2024
------------------------	------------------------

Author: A. Brown	Drafter: T. Douglass
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Path: E:\WCComp\Popul\Regulatory\WV_APO\Popul\WVAMP_APO.aprx

NEW MEXICO

**(SP) EDDY
BETTY & BARNEY
BARNEY 423H**

OWB

Plan: PWP0

Standard Planning Report - Geographic

02 May, 2024

Permian Resources
Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well BARNEY 423H
Company:	NEW MEXICO	TVD Reference:	KB @ 3190.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3190.0usft
Site:	BETTY & BARNEY	North Reference:	Grid
Well:	BARNEY 423H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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

Site		BETTY & BARNEY			
Site Position: From:	Map	Northing:	515,425.82 usft	Latitude:	32° 25' 0.874 N
		Easting:	580,274.89 usft	Longitude:	104° 12' 25.739 W
		Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "

Well	BARNEY 423H					
Well Position	+N/-S	0.0 usft	Northing:	518,421.87 usft	Latitude:	32° 25' 30.489 N
	+E/-W	0.0 usft	Easting:	583,012.58 usft	Longitude:	104° 11' 53.756 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,160.0 usft
Grid Convergence:	0.07 °					

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.05	60.32	48,845.77232549

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	261.96

Plan Survey Tool Program		Date 5/2/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,350.7 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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,901.6	28.03	247.91	1,846.3	-126.4	-311.4	2.00	2.00	0.00	247.91	
10,115.0	28.03	247.91	9,096.2	-1,578.3	-3,887.9	0.00	0.00	0.00	0.00	
10,649.1	90.00	269.52	9,360.0	-1,633.6	-4,317.0	12.00	11.60	4.05	24.17	FTP-BARNEY 423
18,350.7	90.00	269.52	9,360.0	-1,698.1	-12,018.3	0.00	0.00	0.00	0.00	BHL-BARNEY 423

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well BARNEY 423H
Company:	NEW MEXICO	TVD Reference:	KB @ 3190.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3190.0usft
Site:	BETTY & BARNEY	North Reference:	Grid
Well:	BARNEY 423H	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	518,421.87	583,012.58	32° 25' 30.489 N	104° 11' 53.756 W
100.0	0.00	0.00	100.0	0.0	0.0	518,421.87	583,012.58	32° 25' 30.489 N	104° 11' 53.756 W
200.0	0.00	0.00	200.0	0.0	0.0	518,421.87	583,012.58	32° 25' 30.489 N	104° 11' 53.756 W
300.0	0.00	0.00	300.0	0.0	0.0	518,421.87	583,012.58	32° 25' 30.489 N	104° 11' 53.756 W
400.0	0.00	0.00	400.0	0.0	0.0	518,421.87	583,012.58	32° 25' 30.489 N	104° 11' 53.756 W
500.0	0.00	0.00	500.0	0.0	0.0	518,421.87	583,012.58	32° 25' 30.489 N	104° 11' 53.756 W
Start Build 2.00									
600.0	2.00	247.91	600.0	-0.7	-1.6	518,421.22	583,010.97	32° 25' 30.482 N	104° 11' 53.775 W
700.0	4.00	247.91	699.8	-2.6	-6.5	518,419.25	583,006.12	32° 25' 30.463 N	104° 11' 53.831 W
800.0	6.00	247.91	799.5	-5.9	-14.5	518,415.97	582,998.04	32° 25' 30.430 N	104° 11' 53.926 W
900.0	8.00	247.91	898.7	-10.5	-25.8	518,411.39	582,986.75	32° 25' 30.385 N	104° 11' 54.057 W
1,000.0	10.00	247.91	997.5	-16.4	-40.3	518,405.50	582,972.26	32° 25' 30.327 N	104° 11' 54.227 W
1,100.0	12.00	247.91	1,095.6	-23.5	-58.0	518,398.32	582,954.58	32° 25' 30.256 N	104° 11' 54.433 W
1,200.0	14.00	247.91	1,193.1	-32.0	-78.8	518,389.86	582,933.74	32° 25' 30.173 N	104° 11' 54.676 W
1,300.0	16.00	247.91	1,289.6	-41.7	-102.8	518,380.13	582,909.76	32° 25' 30.077 N	104° 11' 54.956 W
1,400.0	18.00	247.91	1,385.3	-52.7	-129.9	518,369.13	582,882.67	32° 25' 29.968 N	104° 11' 55.272 W
1,500.0	20.00	247.91	1,479.8	-65.0	-160.1	518,356.89	582,852.50	32° 25' 29.848 N	104° 11' 55.625 W
1,600.0	22.00	247.91	1,573.2	-78.5	-193.3	518,343.41	582,819.30	32° 25' 29.715 N	104° 11' 56.012 W
1,700.0	24.00	247.91	1,665.2	-93.2	-229.5	518,328.71	582,783.10	32° 25' 29.570 N	104° 11' 56.435 W
1,800.0	26.00	247.91	1,755.8	-109.1	-268.6	518,312.82	582,743.94	32° 25' 29.413 N	104° 11' 56.892 W
1,901.6	28.03	247.91	1,846.3	-126.4	-311.4	518,295.46	582,701.18	32° 25' 29.242 N	104° 11' 57.391 W
Start 8213.4 hold at 1901.6 MD									
2,000.0	28.03	247.91	1,933.2	-143.8	-354.3	518,278.07	582,658.33	32° 25' 29.070 N	104° 11' 57.891 W
2,100.0	28.03	247.91	2,021.5	-161.5	-397.8	518,260.39	582,614.79	32° 25' 28.896 N	104° 11' 58.400 W
2,200.0	28.03	247.91	2,109.7	-179.2	-441.3	518,242.71	582,571.24	32° 25' 28.721 N	104° 11' 58.908 W
2,300.0	28.03	247.91	2,198.0	-196.8	-484.9	518,225.04	582,527.70	32° 25' 28.547 N	104° 11' 59.416 W
2,400.0	28.03	247.91	2,286.3	-214.5	-528.4	518,207.36	582,484.15	32° 25' 28.372 N	104° 11' 59.924 W
2,500.0	28.03	247.91	2,374.5	-232.2	-572.0	518,189.68	582,440.61	32° 25' 28.198 N	104° 12' 0.433 W
2,600.0	28.03	247.91	2,462.8	-249.9	-615.5	518,172.01	582,397.06	32° 25' 28.024 N	104° 12' 0.941 W
2,700.0	28.03	247.91	2,551.1	-267.5	-659.1	518,154.33	582,353.52	32° 25' 27.849 N	104° 12' 1.449 W
2,800.0	28.03	247.91	2,639.4	-285.2	-702.6	518,136.65	582,309.97	32° 25' 27.675 N	104° 12' 1.958 W
2,900.0	28.03	247.91	2,727.6	-302.9	-746.2	518,118.98	582,266.42	32° 25' 27.500 N	104° 12' 2.466 W
3,000.0	28.03	247.91	2,815.9	-320.6	-789.7	518,101.30	582,222.88	32° 25' 27.326 N	104° 12' 2.974 W
3,100.0	28.03	247.91	2,904.2	-338.2	-833.2	518,083.62	582,179.33	32° 25' 27.152 N	104° 12' 3.483 W
3,200.0	28.03	247.91	2,992.4	-355.9	-876.8	518,065.94	582,135.79	32° 25' 26.977 N	104° 12' 3.991 W
3,300.0	28.03	247.91	3,080.7	-373.6	-920.3	518,048.27	582,092.24	32° 25' 26.803 N	104° 12' 4.499 W
3,400.0	28.03	247.91	3,169.0	-391.3	-963.9	518,030.59	582,048.70	32° 25' 26.628 N	104° 12' 5.008 W
3,500.0	28.03	247.91	3,257.2	-409.0	-1,007.4	518,012.91	582,005.15	32° 25' 26.454 N	104° 12' 5.516 W
3,600.0	28.03	247.91	3,345.5	-426.6	-1,051.0	517,995.24	581,961.61	32° 25' 26.280 N	104° 12' 6.024 W
3,700.0	28.03	247.91	3,433.8	-444.3	-1,094.5	517,977.56	581,918.06	32° 25' 26.105 N	104° 12' 6.533 W
3,800.0	28.03	247.91	3,522.0	-462.0	-1,138.1	517,959.88	581,874.52	32° 25' 25.931 N	104° 12' 7.041 W
3,900.0	28.03	247.91	3,610.3	-479.7	-1,181.6	517,942.21	581,830.97	32° 25' 25.757 N	104° 12' 7.549 W
4,000.0	28.03	247.91	3,698.6	-497.3	-1,225.2	517,924.53	581,787.43	32° 25' 25.582 N	104° 12' 8.057 W
4,100.0	28.03	247.91	3,786.8	-515.0	-1,268.7	517,906.85	581,743.88	32° 25' 25.408 N	104° 12' 8.566 W
4,200.0	28.03	247.91	3,875.1	-532.7	-1,312.2	517,889.18	581,700.34	32° 25' 25.233 N	104° 12' 9.074 W
4,300.0	28.03	247.91	3,963.4	-550.4	-1,355.8	517,871.50	581,656.79	32° 25' 25.059 N	104° 12' 9.582 W
4,400.0	28.03	247.91	4,051.7	-568.0	-1,399.3	517,853.82	581,613.25	32° 25' 24.885 N	104° 12' 10.091 W
4,500.0	28.03	247.91	4,139.9	-585.7	-1,442.9	517,836.15	581,569.70	32° 25' 24.710 N	104° 12' 10.599 W
4,600.0	28.03	247.91	4,228.2	-603.4	-1,486.4	517,818.47	581,526.15	32° 25' 24.536 N	104° 12' 11.107 W
4,700.0	28.03	247.91	4,316.5	-621.1	-1,530.0	517,800.79	581,482.61	32° 25' 24.361 N	104° 12' 11.616 W
4,800.0	28.03	247.91	4,404.7	-638.8	-1,573.5	517,783.12	581,439.06	32° 25' 24.187 N	104° 12' 12.124 W
4,900.0	28.03	247.91	4,493.0	-656.4	-1,617.1	517,765.44	581,395.52	32° 25' 24.013 N	104° 12' 12.632 W
5,000.0	28.03	247.91	4,581.3	-674.1	-1,660.6	517,747.76	581,351.97	32° 25' 23.838 N	104° 12' 13.141 W
5,100.0	28.03	247.91	4,669.5	-691.8	-1,704.2	517,730.09	581,308.43	32° 25' 23.664 N	104° 12' 13.649 W

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well BARNEY 423H
Company:	NEW MEXICO	TVD Reference:	KB @ 3190.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3190.0usft
Site:	BETTY & BARNEY	North Reference:	Grid
Well:	BARNEY 423H	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	
5,200.0	28.03	247.91	4,757.8	-709.5	-1,747.7	517,712.41	581,264.88	32° 25' 23.489 N	104° 12' 14.157 W	
5,300.0	28.03	247.91	4,846.1	-727.1	-1,791.2	517,694.73	581,221.34	32° 25' 23.315 N	104° 12' 14.665 W	
5,400.0	28.03	247.91	4,934.3	-744.8	-1,834.8	517,677.05	581,177.79	32° 25' 23.141 N	104° 12' 15.174 W	
5,500.0	28.03	247.91	5,022.6	-762.5	-1,878.3	517,659.38	581,134.25	32° 25' 22.966 N	104° 12' 15.682 W	
5,600.0	28.03	247.91	5,110.9	-780.2	-1,921.9	517,641.70	581,090.70	32° 25' 22.792 N	104° 12' 16.190 W	
5,700.0	28.03	247.91	5,199.1	-797.8	-1,965.4	517,624.02	581,047.16	32° 25' 22.617 N	104° 12' 16.699 W	
5,800.0	28.03	247.91	5,287.4	-815.5	-2,009.0	517,606.35	581,003.61	32° 25' 22.443 N	104° 12' 17.207 W	
5,900.0	28.03	247.91	5,375.7	-833.2	-2,052.5	517,588.67	580,960.07	32° 25' 22.269 N	104° 12' 17.715 W	
6,000.0	28.03	247.91	5,463.9	-850.9	-2,096.1	517,570.99	580,916.52	32° 25' 22.094 N	104° 12' 18.224 W	
6,100.0	28.03	247.91	5,552.2	-868.6	-2,139.6	517,553.32	580,872.98	32° 25' 21.920 N	104° 12' 18.732 W	
6,200.0	28.03	247.91	5,640.5	-886.2	-2,183.2	517,535.64	580,829.43	32° 25' 21.745 N	104° 12' 19.240 W	
6,300.0	28.03	247.91	5,728.8	-903.9	-2,226.7	517,517.96	580,785.89	32° 25' 21.571 N	104° 12' 19.748 W	
6,400.0	28.03	247.91	5,817.0	-921.6	-2,270.2	517,500.29	580,742.34	32° 25' 21.396 N	104° 12' 20.257 W	
6,500.0	28.03	247.91	5,905.3	-939.3	-2,313.8	517,482.61	580,698.79	32° 25' 21.222 N	104° 12' 20.765 W	
6,600.0	28.03	247.91	5,993.6	-956.9	-2,357.3	517,464.93	580,655.25	32° 25' 21.048 N	104° 12' 21.273 W	
6,700.0	28.03	247.91	6,081.8	-974.6	-2,400.9	517,447.26	580,611.70	32° 25' 20.873 N	104° 12' 21.782 W	
6,800.0	28.03	247.91	6,170.1	-992.3	-2,444.4	517,429.58	580,568.16	32° 25' 20.699 N	104° 12' 22.290 W	
6,900.0	28.03	247.91	6,258.4	-1,010.0	-2,488.0	517,411.90	580,524.61	32° 25' 20.524 N	104° 12' 22.798 W	
7,000.0	28.03	247.91	6,346.6	-1,027.6	-2,531.5	517,394.23	580,481.07	32° 25' 20.350 N	104° 12' 23.307 W	
7,100.0	28.03	247.91	6,434.9	-1,045.3	-2,575.1	517,376.55	580,437.52	32° 25' 20.176 N	104° 12' 23.815 W	
7,200.0	28.03	247.91	6,523.2	-1,063.0	-2,618.6	517,358.87	580,393.98	32° 25' 20.001 N	104° 12' 24.323 W	
7,300.0	28.03	247.91	6,611.4	-1,080.7	-2,662.2	517,341.20	580,350.43	32° 25' 19.827 N	104° 12' 24.831 W	
7,400.0	28.03	247.91	6,699.7	-1,098.4	-2,705.7	517,323.52	580,306.89	32° 25' 19.652 N	104° 12' 25.340 W	
7,500.0	28.03	247.91	6,788.0	-1,116.0	-2,749.2	517,305.84	580,263.34	32° 25' 19.478 N	104° 12' 25.848 W	
7,600.0	28.03	247.91	6,876.2	-1,133.7	-2,792.8	517,288.17	580,219.80	32° 25' 19.303 N	104° 12' 26.356 W	
7,700.0	28.03	247.91	6,964.5	-1,151.4	-2,836.3	517,270.49	580,176.25	32° 25' 19.129 N	104° 12' 26.865 W	
7,800.0	28.03	247.91	7,052.8	-1,169.1	-2,879.9	517,252.81	580,132.71	32° 25' 18.955 N	104° 12' 27.373 W	
7,900.0	28.03	247.91	7,141.1	-1,186.7	-2,923.4	517,235.13	580,089.16	32° 25' 18.780 N	104° 12' 27.881 W	
8,000.0	28.03	247.91	7,229.3	-1,204.4	-2,967.0	517,217.46	580,045.62	32° 25' 18.606 N	104° 12' 28.389 W	
8,100.0	28.03	247.91	7,317.6	-1,222.1	-3,010.5	517,199.78	580,002.07	32° 25' 18.431 N	104° 12' 28.898 W	
8,200.0	28.03	247.91	7,405.9	-1,239.8	-3,054.1	517,182.10	579,958.52	32° 25' 18.257 N	104° 12' 29.406 W	
8,300.0	28.03	247.91	7,494.1	-1,257.4	-3,097.6	517,164.43	579,914.98	32° 25' 18.083 N	104° 12' 29.914 W	
8,400.0	28.03	247.91	7,582.4	-1,275.1	-3,141.1	517,146.75	579,871.43	32° 25' 17.908 N	104° 12' 30.423 W	
8,500.0	28.03	247.91	7,670.7	-1,292.8	-3,184.7	517,129.07	579,827.89	32° 25' 17.734 N	104° 12' 30.931 W	
8,600.0	28.03	247.91	7,758.9	-1,310.5	-3,228.2	517,111.40	579,784.34	32° 25' 17.559 N	104° 12' 31.439 W	
8,700.0	28.03	247.91	7,847.2	-1,328.2	-3,271.8	517,093.72	579,740.80	32° 25' 17.385 N	104° 12' 31.947 W	
8,800.0	28.03	247.91	7,935.5	-1,345.8	-3,315.3	517,076.04	579,697.25	32° 25' 17.210 N	104° 12' 32.456 W	
8,900.0	28.03	247.91	8,023.7	-1,363.5	-3,358.9	517,058.37	579,653.71	32° 25' 17.036 N	104° 12' 32.964 W	
9,000.0	28.03	247.91	8,112.0	-1,381.2	-3,402.4	517,040.69	579,610.16	32° 25' 16.862 N	104° 12' 33.472 W	
9,100.0	28.03	247.91	8,200.3	-1,398.9	-3,446.0	517,023.01	579,566.62	32° 25' 16.687 N	104° 12' 33.981 W	
9,200.0	28.03	247.91	8,288.5	-1,416.5	-3,489.5	517,005.34	579,523.07	32° 25' 16.513 N	104° 12' 34.489 W	
9,300.0	28.03	247.91	8,376.8	-1,434.2	-3,533.1	516,987.66	579,479.53	32° 25' 16.338 N	104° 12' 34.997 W	
9,400.0	28.03	247.91	8,465.1	-1,451.9	-3,576.6	516,969.98	579,435.98	32° 25' 16.164 N	104° 12' 35.505 W	
9,500.0	28.03	247.91	8,553.3	-1,469.6	-3,620.1	516,952.31	579,392.44	32° 25' 15.989 N	104° 12' 36.014 W	
9,600.0	28.03	247.91	8,641.6	-1,487.2	-3,663.7	516,934.63	579,348.89	32° 25' 15.815 N	104° 12' 36.522 W	
9,700.0	28.03	247.91	8,729.9	-1,504.9	-3,707.2	516,916.95	579,305.35	32° 25' 15.641 N	104° 12' 37.030 W	
9,800.0	28.03	247.91	8,818.2	-1,522.6	-3,750.8	516,899.28	579,261.80	32° 25' 15.466 N	104° 12' 37.539 W	
9,900.0	28.03	247.91	8,906.4	-1,540.3	-3,794.3	516,881.60	579,218.25	32° 25' 15.292 N	104° 12' 38.047 W	
10,000.0	28.03	247.91	8,994.7	-1,558.0	-3,837.9	516,863.92	579,174.71	32° 25' 15.117 N	104° 12' 38.555 W	
10,100.0	28.03	247.91	9,083.0	-1,575.6	-3,881.4	516,846.24	579,131.16	32° 25' 14.943 N	104° 12' 39.063 W	
10,115.0	28.03	247.91	9,096.2	-1,578.3	-3,887.9	516,843.60	579,124.65	32° 25' 14.917 N	104° 12' 39.139 W	
Start DLS 12.00 TFO 24.17										
10,125.0	29.13	248.92	9,105.0	-1,580.0	-3,892.4	516,841.83	579,120.18	32° 25' 14.899 N	104° 12' 39.192 W	
10,150.0	31.91	251.16	9,126.5	-1,584.4	-3,904.3	516,837.51	579,108.25	32° 25' 14.857 N	104° 12' 39.331 W	

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well BARNEY 423H
Company:	NEW MEXICO	TVD Reference:	KB @ 3190.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3190.0usft
Site:	BETTY & BARNEY	North Reference:	Grid
Well:	BARNEY 423H	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	
10,175.0	34.72	253.08	9,147.4	-1,588.6	-3,917.4	516,833.30	579,095.18	32° 25' 14.815 N	104° 12' 39.483 W	
10,200.0	37.55	254.74	9,167.6	-1,592.6	-3,931.6	516,829.23	579,081.02	32° 25' 14.775 N	104° 12' 39.649 W	
10,225.0	40.41	256.20	9,187.0	-1,596.6	-3,946.8	516,825.29	579,065.79	32° 25' 14.736 N	104° 12' 39.826 W	
10,250.0	43.28	257.50	9,205.6	-1,600.4	-3,963.0	516,821.50	579,049.55	32° 25' 14.699 N	104° 12' 40.016 W	
10,275.0	46.17	258.67	9,223.4	-1,604.0	-3,980.2	516,817.87	579,032.34	32° 25' 14.663 N	104° 12' 40.217 W	
10,300.0	49.06	259.73	9,240.3	-1,607.5	-3,998.4	516,814.41	579,014.20	32° 25' 14.629 N	104° 12' 40.428 W	
10,325.0	51.97	260.70	9,256.2	-1,610.7	-4,017.4	516,811.14	578,995.19	32° 25' 14.597 N	104° 12' 40.650 W	
10,350.0	54.88	261.59	9,271.0	-1,613.8	-4,037.2	516,808.05	578,975.36	32° 25' 14.567 N	104° 12' 40.882 W	
10,375.0	57.80	262.43	9,284.9	-1,616.7	-4,057.8	516,805.16	578,954.75	32° 25' 14.538 N	104° 12' 41.122 W	
10,400.0	60.72	263.21	9,297.7	-1,619.4	-4,079.1	516,802.48	578,933.43	32° 25' 14.512 N	104° 12' 41.371 W	
10,425.0	63.65	263.95	9,309.3	-1,621.9	-4,101.1	516,800.00	578,911.46	32° 25' 14.488 N	104° 12' 41.627 W	
10,450.0	66.58	264.65	9,319.9	-1,624.1	-4,123.7	516,797.75	578,888.90	32° 25' 14.466 N	104° 12' 41.890 W	
10,475.0	69.52	265.32	9,329.2	-1,626.1	-4,146.8	516,795.73	578,865.80	32° 25' 14.446 N	104° 12' 42.160 W	
10,500.0	72.46	265.97	9,337.3	-1,627.9	-4,170.3	516,793.93	578,842.24	32° 25' 14.428 N	104° 12' 42.435 W	
10,525.0	75.40	266.59	9,344.3	-1,629.5	-4,194.3	516,792.37	578,818.27	32° 25' 14.413 N	104° 12' 42.715 W	
10,550.0	78.34	267.20	9,349.9	-1,630.8	-4,218.6	516,791.06	578,793.96	32° 25' 14.401 N	104° 12' 42.998 W	
10,575.0	81.28	267.80	9,354.4	-1,631.9	-4,243.2	516,789.98	578,769.38	32° 25' 14.390 N	104° 12' 43.285 W	
10,600.0	84.22	268.38	9,357.5	-1,632.7	-4,268.0	516,789.16	578,744.60	32° 25' 14.382 N	104° 12' 43.574 W	
10,625.0	87.16	268.96	9,359.4	-1,633.3	-4,292.9	516,788.58	578,719.68	32° 25' 14.377 N	104° 12' 43.865 W	
10,649.1	90.00	269.52	9,360.0	-1,633.6	-4,317.0	516,788.26	578,695.61	32° 25' 14.374 N	104° 12' 44.146 W	
Start 7701.6 hold at 10649.1 MD										
10,700.0	90.00	269.52	9,360.0	-1,634.0	-4,367.9	516,787.84	578,644.69	32° 25' 14.370 N	104° 12' 44.740 W	
10,800.0	90.00	269.52	9,360.0	-1,634.9	-4,467.9	516,787.00	578,544.69	32° 25' 14.363 N	104° 12' 45.906 W	
10,900.0	90.00	269.52	9,360.0	-1,635.7	-4,567.9	516,786.16	578,444.70	32° 25' 14.356 N	104° 12' 47.073 W	
11,000.0	90.00	269.52	9,360.0	-1,636.5	-4,667.9	516,785.32	578,344.70	32° 25' 14.349 N	104° 12' 48.240 W	
11,100.0	90.00	269.52	9,360.0	-1,637.4	-4,767.9	516,784.49	578,244.71	32° 25' 14.342 N	104° 12' 49.406 W	
11,200.0	90.00	269.52	9,360.0	-1,638.2	-4,867.9	516,783.65	578,144.71	32° 25' 14.335 N	104° 12' 50.573 W	
11,300.0	90.00	269.52	9,360.0	-1,639.1	-4,967.9	516,782.81	578,044.71	32° 25' 14.327 N	104° 12' 51.740 W	
11,400.0	90.00	269.52	9,360.0	-1,639.9	-5,067.9	516,781.97	577,944.72	32° 25' 14.320 N	104° 12' 52.906 W	
11,500.0	90.00	269.52	9,360.0	-1,640.7	-5,167.9	516,781.14	577,844.72	32° 25' 14.313 N	104° 12' 54.073 W	
11,600.0	90.00	269.52	9,360.0	-1,641.6	-5,267.9	516,780.30	577,744.72	32° 25' 14.306 N	104° 12' 55.240 W	
11,700.0	90.00	269.52	9,360.0	-1,642.4	-5,367.9	516,779.46	577,644.73	32° 25' 14.299 N	104° 12' 56.406 W	
11,800.0	90.00	269.52	9,360.0	-1,643.2	-5,467.9	516,778.63	577,544.73	32° 25' 14.291 N	104° 12' 57.573 W	
11,900.0	90.00	269.52	9,360.0	-1,644.1	-5,567.8	516,777.79	577,444.73	32° 25' 14.284 N	104° 12' 58.740 W	
12,000.0	90.00	269.52	9,360.0	-1,644.9	-5,667.8	516,776.95	577,344.74	32° 25' 14.277 N	104° 12' 59.906 W	
12,100.0	90.00	269.52	9,360.0	-1,645.8	-5,767.8	516,776.11	577,244.74	32° 25' 14.270 N	104° 13' 1.073 W	
12,200.0	90.00	269.52	9,360.0	-1,646.6	-5,867.8	516,775.28	577,144.74	32° 25' 14.263 N	104° 13' 2.240 W	
12,300.0	90.00	269.52	9,360.0	-1,647.4	-5,967.8	516,774.44	577,044.75	32° 25' 14.255 N	104° 13' 3.406 W	
12,400.0	90.00	269.52	9,360.0	-1,648.3	-6,067.8	516,773.60	576,944.75	32° 25' 14.248 N	104° 13' 4.573 W	
12,500.0	90.00	269.52	9,360.0	-1,649.1	-6,167.8	516,772.77	576,844.75	32° 25' 14.241 N	104° 13' 5.740 W	
12,600.0	90.00	269.52	9,360.0	-1,649.9	-6,267.8	516,771.93	576,744.76	32° 25' 14.234 N	104° 13' 6.906 W	
12,700.0	90.00	269.52	9,360.0	-1,650.8	-6,367.8	516,771.09	576,644.76	32° 25' 14.226 N	104° 13' 8.073 W	
12,800.0	90.00	269.52	9,360.0	-1,651.6	-6,467.8	516,770.25	576,544.76	32° 25' 14.219 N	104° 13' 9.240 W	
12,900.0	90.00	269.52	9,360.0	-1,652.5	-6,567.8	516,769.42	576,444.77	32° 25' 14.212 N	104° 13' 10.406 W	
13,000.0	90.00	269.52	9,360.0	-1,653.3	-6,667.8	516,768.58	576,344.77	32° 25' 14.205 N	104° 13' 11.573 W	
13,100.0	90.00	269.52	9,360.0	-1,654.1	-6,767.8	516,767.74	576,244.78	32° 25' 14.198 N	104° 13' 12.740 W	
13,200.0	90.00	269.52	9,360.0	-1,655.0	-6,867.8	516,766.90	576,144.78	32° 25' 14.190 N	104° 13' 13.906 W	
13,300.0	90.00	269.52	9,360.0	-1,655.8	-6,967.8	516,766.07	576,044.78	32° 25' 14.183 N	104° 13' 15.073 W	
13,400.0	90.00	269.52	9,360.0	-1,656.6	-7,067.8	516,765.23	575,944.79	32° 25' 14.176 N	104° 13' 16.240 W	
13,500.0	90.00	269.52	9,360.0	-1,657.5	-7,167.8	516,764.39	575,844.79	32° 25' 14.169 N	104° 13' 17.406 W	
13,600.0	90.00	269.52	9,360.0	-1,658.3	-7,267.8	516,763.56	575,744.79	32° 25' 14.161 N	104° 13' 18.573 W	
13,700.0	90.00	269.52	9,360.0	-1,659.2	-7,367.8	516,762.72	575,644.80	32° 25' 14.154 N	104° 13' 19.740 W	
13,800.0	90.00	269.52	9,360.0	-1,660.0	-7,467.8	516,761.88	575,544.80	32° 25' 14.147 N	104° 13' 20.906 W	
13,900.0	90.00	269.52	9,360.0	-1,660.8	-7,567.8	516,761.04	575,444.80	32° 25' 14.140 N	104° 13' 22.073 W	

Permian Resources

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well BARNEY 423H
Company:	NEW MEXICO	TVD Reference:	KB @ 3190.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3190.0usft
Site:	BETTY & BARNEY	North Reference:	Grid
Well:	BARNEY 423H	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	
14,000.0	90.00	269.52	9,360.0	-1,661.7	-7,667.8	516,760.21	575,344.81	32° 25' 14.132 N	104° 13' 23.240 W	
14,100.0	90.00	269.52	9,360.0	-1,662.5	-7,767.8	516,759.37	575,244.81	32° 25' 14.125 N	104° 13' 24.406 W	
14,200.0	90.00	269.52	9,360.0	-1,663.3	-7,867.8	516,758.53	575,144.81	32° 25' 14.118 N	104° 13' 25.573 W	
14,300.0	90.00	269.52	9,360.0	-1,664.2	-7,967.8	516,757.69	575,044.82	32° 25' 14.110 N	104° 13' 26.740 W	
14,400.0	90.00	269.52	9,360.0	-1,665.0	-8,067.8	516,756.86	574,944.82	32° 25' 14.103 N	104° 13' 27.906 W	
14,500.0	90.00	269.52	9,360.0	-1,665.9	-8,167.8	516,756.02	574,844.82	32° 25' 14.096 N	104° 13' 29.073 W	
14,600.0	90.00	269.52	9,360.0	-1,666.7	-8,267.8	516,755.18	574,744.83	32° 25' 14.089 N	104° 13' 30.239 W	
14,700.0	90.00	269.52	9,360.0	-1,667.5	-8,367.8	516,754.35	574,644.83	32° 25' 14.081 N	104° 13' 31.406 W	
14,800.0	90.00	269.52	9,360.0	-1,668.4	-8,467.7	516,753.51	574,544.83	32° 25' 14.074 N	104° 13' 32.573 W	
14,900.0	90.00	269.52	9,360.0	-1,669.2	-8,567.7	516,752.67	574,444.84	32° 25' 14.067 N	104° 13' 33.739 W	
15,000.0	90.00	269.52	9,360.0	-1,670.0	-8,667.7	516,751.83	574,344.84	32° 25' 14.059 N	104° 13' 34.906 W	
15,100.0	90.00	269.52	9,360.0	-1,670.9	-8,767.7	516,751.00	574,244.85	32° 25' 14.052 N	104° 13' 36.073 W	
15,200.0	90.00	269.52	9,360.0	-1,671.7	-8,867.7	516,750.16	574,144.85	32° 25' 14.045 N	104° 13' 37.239 W	
15,300.0	90.00	269.52	9,360.0	-1,672.5	-8,967.7	516,749.32	574,044.85	32° 25' 14.038 N	104° 13' 38.406 W	
15,400.0	90.00	269.52	9,360.0	-1,673.4	-9,067.7	516,748.49	573,944.86	32° 25' 14.030 N	104° 13' 39.573 W	
15,500.0	90.00	269.52	9,360.0	-1,674.2	-9,167.7	516,747.65	573,844.86	32° 25' 14.023 N	104° 13' 40.739 W	
15,600.0	90.00	269.52	9,360.0	-1,675.1	-9,267.7	516,746.81	573,744.86	32° 25' 14.016 N	104° 13' 41.906 W	
15,700.0	90.00	269.52	9,360.0	-1,675.9	-9,367.7	516,745.97	573,644.87	32° 25' 14.008 N	104° 13' 43.073 W	
15,800.0	90.00	269.52	9,360.0	-1,676.7	-9,467.7	516,745.14	573,544.87	32° 25' 14.001 N	104° 13' 44.239 W	
15,900.0	90.00	269.52	9,360.0	-1,677.6	-9,567.7	516,744.30	573,444.87	32° 25' 13.994 N	104° 13' 45.406 W	
16,000.0	90.00	269.52	9,360.0	-1,678.4	-9,667.7	516,743.46	573,344.88	32° 25' 13.986 N	104° 13' 46.573 W	
16,100.0	90.00	269.52	9,360.0	-1,679.2	-9,767.7	516,742.62	573,244.88	32° 25' 13.979 N	104° 13' 47.739 W	
16,200.0	90.00	269.52	9,360.0	-1,680.1	-9,867.7	516,741.79	573,144.88	32° 25' 13.972 N	104° 13' 48.906 W	
16,300.0	90.00	269.52	9,360.0	-1,680.9	-9,967.7	516,740.95	573,044.89	32° 25' 13.964 N	104° 13' 50.073 W	
16,400.0	90.00	269.52	9,360.0	-1,681.8	-10,067.7	516,740.11	572,944.89	32° 25' 13.957 N	104° 13' 51.239 W	
16,500.0	90.00	269.52	9,360.0	-1,682.6	-10,167.7	516,739.28	572,844.89	32° 25' 13.950 N	104° 13' 52.406 W	
16,600.0	90.00	269.52	9,360.0	-1,683.4	-10,267.7	516,738.44	572,744.90	32° 25' 13.942 N	104° 13' 53.573 W	
16,700.0	90.00	269.52	9,360.0	-1,684.3	-10,367.7	516,737.60	572,644.90	32° 25' 13.935 N	104° 13' 54.739 W	
16,800.0	90.00	269.52	9,360.0	-1,685.1	-10,467.7	516,736.76	572,544.90	32° 25' 13.928 N	104° 13' 55.906 W	
16,900.0	90.00	269.52	9,360.0	-1,685.9	-10,567.7	516,735.93	572,444.91	32° 25' 13.920 N	104° 13' 57.073 W	
17,000.0	90.00	269.52	9,360.0	-1,686.8	-10,667.7	516,735.09	572,344.91	32° 25' 13.913 N	104° 13' 58.239 W	
17,100.0	90.00	269.52	9,360.0	-1,687.6	-10,767.7	516,734.25	572,244.92	32° 25' 13.906 N	104° 13' 59.406 W	
17,200.0	90.00	269.52	9,360.0	-1,688.5	-10,867.7	516,733.42	572,144.92	32° 25' 13.898 N	104° 14' 0.573 W	
17,300.0	90.00	269.52	9,360.0	-1,689.3	-10,967.7	516,732.58	572,044.92	32° 25' 13.891 N	104° 14' 1.739 W	
17,400.0	90.00	269.52	9,360.0	-1,690.1	-11,067.7	516,731.74	571,944.93	32° 25' 13.884 N	104° 14' 2.906 W	
17,500.0	90.00	269.52	9,360.0	-1,691.0	-11,167.7	516,730.90	571,844.93	32° 25' 13.876 N	104° 14' 4.073 W	
17,600.0	90.00	269.52	9,360.0	-1,691.8	-11,267.6	516,730.07	571,744.93	32° 25' 13.869 N	104° 14' 5.239 W	
17,700.0	90.00	269.52	9,360.0	-1,692.6	-11,367.6	516,729.23	571,644.94	32° 25' 13.861 N	104° 14' 6.406 W	
17,800.0	90.00	269.52	9,360.0	-1,693.5	-11,467.6	516,728.39	571,544.94	32° 25' 13.854 N	104° 14' 7.573 W	
17,900.0	90.00	269.52	9,360.0	-1,694.3	-11,567.6	516,727.55	571,444.94	32° 25' 13.847 N	104° 14' 8.739 W	
18,000.0	90.00	269.52	9,360.0	-1,695.2	-11,667.6	516,726.72	571,344.95	32° 25' 13.839 N	104° 14' 9.906 W	
18,100.0	90.00	269.52	9,360.0	-1,696.0	-11,767.6	516,725.88	571,244.95	32° 25' 13.832 N	104° 14' 11.073 W	
18,200.0	90.00	269.52	9,360.0	-1,696.8	-11,867.6	516,725.04	571,144.95	32° 25' 13.825 N	104° 14' 12.239 W	
18,300.0	90.00	269.52	9,360.0	-1,697.7	-11,967.6	516,724.21	571,044.96	32° 25' 13.817 N	104° 14' 13.406 W	
18,350.7	90.00	269.52	9,360.0	-1,698.1	-12,018.3	516,723.78	570,994.28	32° 25' 13.813 N	104° 14' 13.997 W	
TD at 18350.7										

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well BARNEY 423H
Company:	NEW MEXICO	TVD Reference:	KB @ 3190.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3190.0usft
Site:	BETTY & BARNEY	North Reference:	Grid
Well:	BARNEY 423H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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)		
BHL-BARNEY 423 H	0.00	0.00	9,360.0	-1,698.1	-12,018.3	516,723.78	570,994.28	32° 25' 13.813 N	104° 14' 13.997 W
- plan hits target center									
- Point									
FTP-BARNEY 423 H	0.00	0.00	9,360.0	-1,633.6	-4,317.0	516,788.26	578,695.61	32° 25' 14.374 N	104° 12' 44.146 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	Start Build 2.00
1,901.6	1,846.3	-126.4	-311.4	Start 8213.4 hold at 1901.6 MD
10,115.0	9,096.2	-1,578.3	-3,887.9	Start DLS 12.00 TFO 24.17
10,649.1	9,360.0	-1,633.6	-4,317.0	Start 7701.6 hold at 10649.1 MD
18,350.7	9,360.0	-1,698.1	-12,018.3	TD at 18350.7