

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 339548

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

1. Operator Name and Address Marlin Operating, LLC 1371 Brumlow Avenue Southlake, TX 76092		2. OGRID Number 331054
		3. API Number 30-025-51534
4. Property Code 332942	5. Property Name PEGASUS 16 STATE	6. Well No. 353H

7. Surface Location

UL - Lot P	Section 16	Township 23S	Range 35E	Lot Idn P	Feet From 500	N/S Line S	Feet From 980	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

UL - Lot B	Section 16	Township 23S	Range 35E	Lot Idn B	Feet From 2	N/S Line N	Feet From 1750	E/W Line E	County Lea
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9. Pool Information

WC-025 G-08 S233528D;LWR BONE SPRIN	97958
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3467
16. Multiple N	17. Proposed Depth 16600	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 9/1/2023
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	1750	2100	0
Int1	12.25	9.625	40	5748	1500	0
Prod	8.75	5.5	20	16600	2800	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	3000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature:	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Dallas Rysavy	Approved By: Paul F Kautz	
Title: CEO	Title: Geologist	
Email Address: dallas@marlinoperating.com	Approved Date: 5/26/2023	Expiration Date: 5/26/2025
Date: 5/5/2023	Phone: 817-675-8328	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 30-025-51534	² Pool Code 97958	³ Pool Name WC-025 G-08 S233528D; LWR BONE SPRIN
⁴ Property Code 332942	⁵ Property Name PEGASUS 16 ST	⁶ Well Number 353H
⁷ GRID No. 331054	⁸ Operator Name MARLIN OPERATING, LLC	⁹ Elevation 3467'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	16	23-S	35-E	-	500'	SOUTH	980'	EAST	LEA

¹¹Bottom 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
B	16	23-S	35-E	-	2'	NORTH	1750'	EAST	LEA

¹² Dedicated Acres 160	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.

		¹⁷OPERATOR 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 undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the Division. Signature: <i>[Signature]</i> Date: 5/31/2023 Dallas Rysavy Printed Name dallas@marlinoperating.com E-mail Address ¹⁸SURVEYOR 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 to the best of my belief. 03/31/2023 Date of Survey Signature and Seal of Professional Surveyor <i>[Signature]</i> Stan W. Lloyd Professional Surveyor Certificate Number: 19642												
NEW MEXICO EAST NAD 1983 <table border="1"> <tr> <td> <u>SURFACE LOCATION (SHL)</u> 500' FSL - SEC. 16 980' FEL - SEC. 16 X=839859 Y=473765 LAT.: N 32.2987564 LONG.: W 103.3671970 </td> <td> <u>KICK OFF POINT (KOP)</u> 2' FSL - SEC. 16 1750' FEL - SEC. 16 X=839094 Y=473260 LAT.: N 32.2973863 LONG.: W 103.3696891 </td> <td> <u>FIRST TAKE POINT (FTP)</u> 100' FSL - SEC. 16 1750' FEL - SEC. 16 X=839093 Y=473358 LAT.: N 32.2976556 LONG.: W 103.3696890 </td> </tr> <tr> <td> <u>LAST TAKE POINT (LTP)</u> 100' FNL - SEC. 16 1750' FEL - SEC. 16 X=839047 Y=478435 LAT.: N 32.3116129 LONG.: W 103.3696902 </td> <td colspan="2"> <u>BOTTOM HOLE LOCATION (BHL)</u> 2' FNL - SEC. 16 1750' FEL - SEC. 16 X=839046 Y=478533 LAT.: N 32.3118822 LONG.: W 103.3696903 </td> </tr> </table>		<u>SURFACE LOCATION (SHL)</u> 500' FSL - SEC. 16 980' FEL - SEC. 16 X=839859 Y=473765 LAT.: N 32.2987564 LONG.: W 103.3671970	<u>KICK OFF POINT (KOP)</u> 2' FSL - SEC. 16 1750' FEL - SEC. 16 X=839094 Y=473260 LAT.: N 32.2973863 LONG.: W 103.3696891	<u>FIRST TAKE POINT (FTP)</u> 100' FSL - SEC. 16 1750' FEL - SEC. 16 X=839093 Y=473358 LAT.: N 32.2976556 LONG.: W 103.3696890	<u>LAST TAKE POINT (LTP)</u> 100' FNL - SEC. 16 1750' FEL - SEC. 16 X=839047 Y=478435 LAT.: N 32.3116129 LONG.: W 103.3696902	<u>BOTTOM HOLE LOCATION (BHL)</u> 2' FNL - SEC. 16 1750' FEL - SEC. 16 X=839046 Y=478533 LAT.: N 32.3118822 LONG.: W 103.3696903		NEW MEXICO EAST NAD 1927 <table border="1"> <tr> <td> <u>SURFACE LOCATION (SHL)</u> X=798675 Y=473705 LAT. N 32.2986312 LONG. W 103.3667242 </td> <td> <u>KICK OFF POINT (KOP)</u> X=797905 Y=473200 LAT. N 32.2972610 LONG. W 103.3692162 </td> </tr> <tr> <td> <u>FIRST TAKE POINT (FTP)</u> X=797908 Y=473296 LAT. N 32.2975304 LONG. W 103.3692151 </td> <td> <u>LAST TAKE POINT (LTP)</u> X=797862 Y=478275 LAT. N 32.3114877 LONG. W 103.3692165 </td> </tr> <tr> <td colspan="2"> <u>BOTTOM HOLE LOCATION (BHL)</u> X=797861 Y=478473 LAT. N 32.3118771 LONG. W 103.3692170 </td> </tr> </table>	<u>SURFACE LOCATION (SHL)</u> X=798675 Y=473705 LAT. N 32.2986312 LONG. W 103.3667242	<u>KICK OFF POINT (KOP)</u> X=797905 Y=473200 LAT. N 32.2972610 LONG. W 103.3692162	<u>FIRST TAKE POINT (FTP)</u> X=797908 Y=473296 LAT. N 32.2975304 LONG. W 103.3692151	<u>LAST TAKE POINT (LTP)</u> X=797862 Y=478275 LAT. N 32.3114877 LONG. W 103.3692165	<u>BOTTOM HOLE LOCATION (BHL)</u> X=797861 Y=478473 LAT. N 32.3118771 LONG. W 103.3692170	
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EXHIBIT 2B

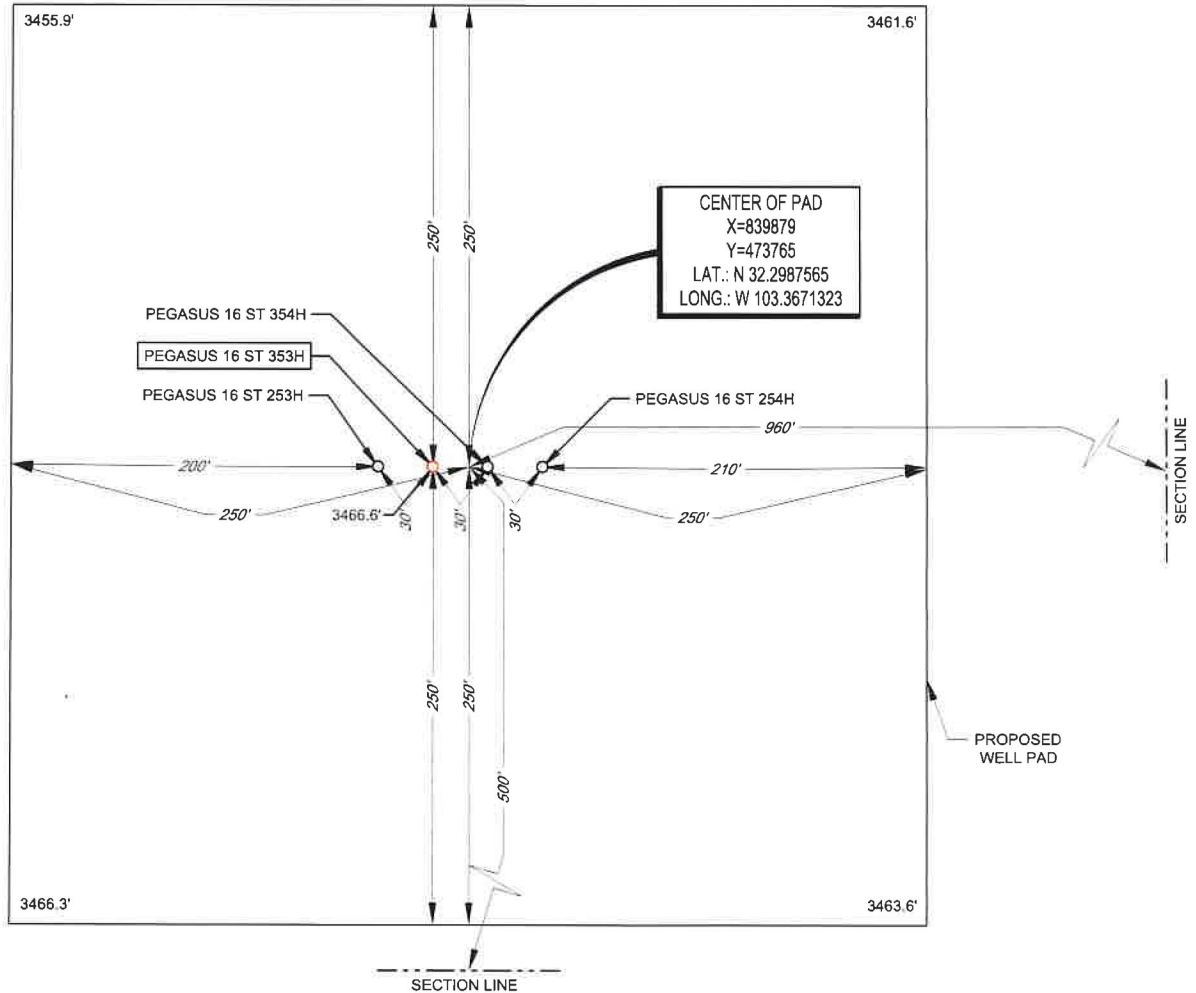


LEGEND

--- SECTION LINE
 --- PROPOSED ROAD

SECTION 16, TOWNSHIP 23-S, RANGE 35-E, N.M.P.M.
 LEA COUNTY, NEW MEXICO

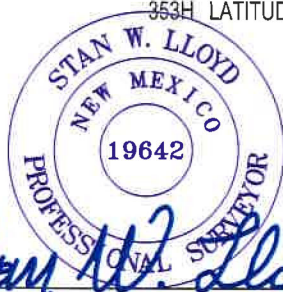
DETAIL VIEW
 SCALE: 1" = 100'



LEASE NAME & WELL NO.: PEGASUS 16 ST 353H

353H LATITUDE N 32.2987564 353H LONGITUDE W 103.3671970

CENTER OF PAD IS 500' FSL & 960' FEL



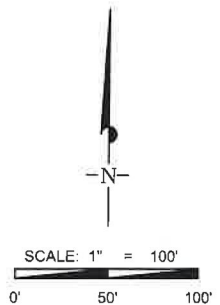
Stan W. Lloyd, P.S. No. 19642

March 31, 2023

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MARLIN OPERATING. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO. ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY
 481 WINSBOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
 TEXAS FIRM REGISTRATION NO. 10042504
 WWW.TOPOGRAPHIC.COM

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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 339548

PERMIT COMMENTS

Operator Name and Address: Marlin Operating, LLC [331054] 1371 Brumlow Avenue Southlake, TX 76092		API Number: 30-025-51534
		Well: PEGASUS 16 STATE #353H
Created By	Comment	Comment Date
pkautz	HOLD NGMP IS INCOMPLETE.	5/19/2023

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Form APD Conditions

Permit 339548

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Marlin Operating, LLC [331054] 1371 Brumlow Avenue Southlake, TX 76092	API Number: 30-025-51534
	Well: PEGASUS 16 STATE #353H

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

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

Submit Electronically
Via E-permitting

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: Marlin Operating, LLC

OGRID: 331054

Date: 5/5/2023

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
Pegasus 16 ST 353H	30-025-	P-16-23S-35E	500 FSL & 980 FEL	900	3150	1300

IV. Central Delivery Point Name: Targa Northern Delaware Midstream, LLC in N-16-23S-35E [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
Pegasus 16 ST 353H	30-025-	9-01-23	9-15-23	10-15-23	10-25-23	11-01-23

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

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

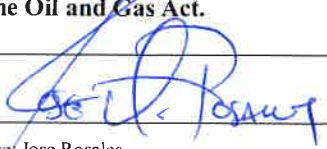
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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: 
Printed Name: Jose Rosales
Title: Chief Operating Officer
E-mail Address: jose@marlinoperating.com
Date: May 5, 2023
Phone: 432-209-1090
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Marlin Operating LLC Natural Gas Management Plan

VI. Separation Equipment

Separation equipment will be built on the Pegasus 23-35-16 #251H pad. The anticipated production rates from the Pegasus State 16 353H will be accounted for during design/construction to ensure sufficient capacity exists at the surface to capture all produced fluids.

VII. Operational Practices

Marlin Operating LLC will take the following actions outlined below to comply with 19.15.27.8 NMAC

A. Marlin Operating LLC plans to maximize recovery of natural gas and minimize waste thru venting/flaring

B. Marlin Operating LLC plans to flare during drilling operations from a location exceeding 100' away from the SHL. The flare will be used to combust natural gas brought to the surface during normal drilling operations. Safety will remain priority #1, and Marlin Operating LLC will account and report appropriately pertaining to any potential emergency.

C. Marlin Operating LLC plans flare any natural gas brought to the surface during normal completions operations. During flowback, fluids will immediately flow thru a separator on location. Gas will not be flared/vented unless there's a safety concern with pressures at the surface. Gas is expected to meet pipeline standards; if not, Marlin Operating LLC will flare for the allowed 60 days or less until the gas meets quality specifications. Marlin Operating LLC plans to sample the produced gas at a reasonable frequency or upon request from regulatory bodies.

D. Marlin Operating LLC does not plan to flare or vent natural gas except during the situations outlined in 19.15.27.8 D. (1-4).

E. Marlin Operating LLC will comply with standards outlined in 19.15.27.8 E. (1-8). Marlin Operating LLC will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, Marlin Operating LLC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

VIII. Best Management Practices

Pressure maintenance at surface is vital to maintain safe working conditions; venting will be utilized only to depressurize our surface equipment. When maintaining surface or downhole equipment associated with the current production, the well will be shut-in to eliminate venting. If maintenance work takes place on the gas gathering side, gas will route to the flare to eliminate venting.

Marlin Operating

Lea County, NM (NAD83 NME)

Pegasus 16 State

Pegasus 16 ST 353H

OH

Plan: Plan 1 - adjusted KOP

Standard Planning Report

17 April, 2023



Scientific Drilling
Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well Pegasus 16 ST 353H
Company:	Marlin Operating	TVD Reference:	3467 GL 30 KB @ 3497.00usft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3467 GL 30 KB @ 3497.00usft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	Pegasus 16 ST 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 - adjusted KOP		

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Pegasus 16 State, Site Center: Phoenix 16 ST 252H		
Site Position:		Northing:	473,569.00 usft
From:	Map	Easting:	837,700.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	48 "
		Latitude:	32.298271
		Longitude:	-103.374190
		Grid Convergence:	0.51 °

Well	Pegasus 16 ST 353H		
Well Position	+N/-S	196.00 usft	Northing: 473,765.00 usft
	+E/-W	2,159.00 usft	Easting: 839,859.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 32.298756
			Longitude: -103.367198
			Ground Level: 3,467.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	12/31/2022	6.37	59.87	47,598.30000000

Design	Plan 1 - adjusted KOP			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.48

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,850.00	0.00	0.00	1,850.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,239.51	5.84	232.79	2,238.84	-12.00	-15.80	1.50	1.50	0.00	232.79	
10,052.43	5.84	232.79	10,011.17	-493.00	-649.20	0.00	0.00	0.00	0.00	
10,441.94	0.00	0.00	10,400.00	-505.00	-665.00	1.50	-1.50	0.00	180.00	KOP - Pegasus 16 :
11,044.39	0.00	0.00	11,002.46	-505.00	-665.00	0.00	0.00	0.00	0.00	
11,809.37	91.80	350.50	11,479.69	-19.31	-746.28	12.00	12.00	-1.24	350.50	Target Line: 11479.:
12,108.61	91.81	359.48	11,470.24	278.33	-772.37	3.00	0.01	3.00	89.75	
16,600.72	91.81	359.48	11,328.00	4,768.00	-813.00	0.00	0.00	0.00	0.00	BHL - Pegasus 16 :

Scientific Drilling

Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well Pegasus 16 ST 353H
Company:	Marlin Operating	TVD Reference:	3467 GL 30 KB @ 3497.00usft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3467 GL 30 KB @ 3497.00usft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	Pegasus 16 ST 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 - adjusted KOP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL - Pegasus 16 ST 353H									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,750.00	0.00	0.00	1,750.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,850.00	0.00	0.00	1,850.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
1,900.00	0.75	232.79	1,900.00	-0.20	-0.26	-0.20	1.50	1.50	0.00
2,000.00	2.25	232.79	1,999.96	-1.78	-2.35	-1.76	1.50	1.50	0.00
2,100.00	3.75	232.79	2,099.82	-4.95	-6.51	-4.89	1.50	1.50	0.00
2,200.00	5.25	232.79	2,199.51	-9.69	-12.76	-9.57	1.50	1.50	0.00
2,239.51	5.84	232.79	2,238.84	-12.00	-15.80	-11.86	1.50	1.50	0.00
Start 7812.92 hold at 2239.51 MD									
2,300.00	5.84	232.79	2,299.01	-15.72	-20.71	-15.54	0.00	0.00	0.00
2,400.00	5.84	232.79	2,398.49	-21.88	-28.81	-21.62	0.00	0.00	0.00
2,500.00	5.84	232.79	2,497.97	-28.04	-36.92	-27.70	0.00	0.00	0.00
2,600.00	5.84	232.79	2,597.45	-34.19	-45.03	-33.78	0.00	0.00	0.00
2,700.00	5.84	232.79	2,696.93	-40.35	-53.13	-39.87	0.00	0.00	0.00
2,800.00	5.84	232.79	2,796.41	-46.51	-61.24	-45.95	0.00	0.00	0.00
2,900.00	5.84	232.79	2,895.89	-52.66	-69.35	-52.03	0.00	0.00	0.00
3,000.00	5.84	232.79	2,995.37	-58.82	-77.46	-58.11	0.00	0.00	0.00
3,100.00	5.84	232.79	3,094.86	-64.98	-85.56	-64.20	0.00	0.00	0.00
3,200.00	5.84	232.79	3,194.34	-71.13	-93.67	-70.28	0.00	0.00	0.00
3,300.00	5.84	232.79	3,293.82	-77.29	-101.78	-76.36	0.00	0.00	0.00
3,400.00	5.84	232.79	3,393.30	-83.45	-109.88	-82.44	0.00	0.00	0.00
3,500.00	5.84	232.79	3,492.78	-89.60	-117.99	-88.53	0.00	0.00	0.00
3,600.00	5.84	232.79	3,592.26	-95.76	-126.10	-94.61	0.00	0.00	0.00
3,700.00	5.84	232.79	3,691.74	-101.91	-134.20	-100.69	0.00	0.00	0.00
3,800.00	5.84	232.79	3,791.22	-108.07	-142.31	-106.77	0.00	0.00	0.00
3,900.00	5.84	232.79	3,890.70	-114.23	-150.42	-112.86	0.00	0.00	0.00
4,000.00	5.84	232.79	3,990.18	-120.38	-158.53	-118.94	0.00	0.00	0.00
4,100.00	5.84	232.79	4,089.66	-126.54	-166.63	-125.02	0.00	0.00	0.00
4,200.00	5.84	232.79	4,189.14	-132.70	-174.74	-131.10	0.00	0.00	0.00
4,300.00	5.84	232.79	4,288.62	-138.85	-182.85	-137.19	0.00	0.00	0.00
4,400.00	5.84	232.79	4,388.10	-145.01	-190.95	-143.27	0.00	0.00	0.00
4,500.00	5.84	232.79	4,487.58	-151.17	-199.06	-149.35	0.00	0.00	0.00
4,600.00	5.84	232.79	4,587.06	-157.32	-207.17	-155.43	0.00	0.00	0.00

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well Pegasus 16 ST 353H
Company:	Marlin Operating	TVD Reference:	3467 GL 30 KB @ 3497.00usft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3467 GL 30 KB @ 3497.00usft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	Pegasus 16 ST 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 - adjusted KOP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	5.84	232.79	4,686.54	-163.48	-215.28	-161.52	0.00	0.00	0.00
4,800.00	5.84	232.79	4,786.02	-169.64	-223.38	-167.60	0.00	0.00	0.00
4,900.00	5.84	232.79	4,885.50	-175.79	-231.49	-173.68	0.00	0.00	0.00
5,000.00	5.84	232.79	4,984.99	-181.95	-239.60	-179.77	0.00	0.00	0.00
5,100.00	5.84	232.79	5,084.47	-188.11	-247.70	-185.85	0.00	0.00	0.00
5,200.00	5.84	232.79	5,183.95	-194.26	-255.81	-191.93	0.00	0.00	0.00
5,300.00	5.84	232.79	5,283.43	-200.42	-263.92	-198.01	0.00	0.00	0.00
5,400.00	5.84	232.79	5,382.91	-206.57	-272.02	-204.10	0.00	0.00	0.00
5,500.00	5.84	232.79	5,482.39	-212.73	-280.13	-210.18	0.00	0.00	0.00
5,600.00	5.84	232.79	5,581.87	-218.89	-288.24	-216.26	0.00	0.00	0.00
5,700.00	5.84	232.79	5,681.35	-225.04	-296.35	-222.34	0.00	0.00	0.00
5,748.91	5.84	232.79	5,730.00	-228.05	-300.31	-225.32	0.00	0.00	0.00
9 5/8"									
5,800.00	5.84	232.79	5,780.83	-231.20	-304.45	-228.43	0.00	0.00	0.00
5,900.00	5.84	232.79	5,880.31	-237.36	-312.56	-234.51	0.00	0.00	0.00
6,000.00	5.84	232.79	5,979.79	-243.51	-320.67	-240.59	0.00	0.00	0.00
6,100.00	5.84	232.79	6,079.27	-249.67	-328.77	-246.67	0.00	0.00	0.00
6,200.00	5.84	232.79	6,178.75	-255.83	-336.88	-252.76	0.00	0.00	0.00
6,300.00	5.84	232.79	6,278.23	-261.98	-344.99	-258.84	0.00	0.00	0.00
6,400.00	5.84	232.79	6,377.71	-268.14	-353.09	-264.92	0.00	0.00	0.00
6,500.00	5.84	232.79	6,477.19	-274.30	-361.20	-271.00	0.00	0.00	0.00
6,600.00	5.84	232.79	6,576.67	-280.45	-369.31	-277.09	0.00	0.00	0.00
6,700.00	5.84	232.79	6,676.15	-286.61	-377.42	-283.17	0.00	0.00	0.00
6,800.00	5.84	232.79	6,775.63	-292.77	-385.52	-289.25	0.00	0.00	0.00
6,900.00	5.84	232.79	6,875.12	-298.92	-393.63	-295.33	0.00	0.00	0.00
7,000.00	5.84	232.79	6,974.60	-305.08	-401.74	-301.42	0.00	0.00	0.00
7,100.00	5.84	232.79	7,074.08	-311.23	-409.84	-307.50	0.00	0.00	0.00
7,200.00	5.84	232.79	7,173.56	-317.39	-417.95	-313.58	0.00	0.00	0.00
7,300.00	5.84	232.79	7,273.04	-323.55	-426.06	-319.66	0.00	0.00	0.00
7,400.00	5.84	232.79	7,372.52	-329.70	-434.16	-325.75	0.00	0.00	0.00
7,500.00	5.84	232.79	7,472.00	-335.86	-442.27	-331.83	0.00	0.00	0.00
7,600.00	5.84	232.79	7,571.48	-342.02	-450.38	-337.91	0.00	0.00	0.00
7,700.00	5.84	232.79	7,670.96	-348.17	-458.49	-343.99	0.00	0.00	0.00
7,800.00	5.84	232.79	7,770.44	-354.33	-466.59	-350.08	0.00	0.00	0.00
7,900.00	5.84	232.79	7,869.92	-360.49	-474.70	-356.16	0.00	0.00	0.00
8,000.00	5.84	232.79	7,969.40	-366.64	-482.81	-362.24	0.00	0.00	0.00
8,100.00	5.84	232.79	8,068.88	-372.80	-490.91	-368.33	0.00	0.00	0.00
8,200.00	5.84	232.79	8,168.36	-378.96	-499.02	-374.41	0.00	0.00	0.00
8,300.00	5.84	232.79	8,267.84	-385.11	-507.13	-380.49	0.00	0.00	0.00
8,400.00	5.84	232.79	8,367.32	-391.27	-515.23	-386.57	0.00	0.00	0.00
8,500.00	5.84	232.79	8,466.80	-397.43	-523.34	-392.66	0.00	0.00	0.00
8,600.00	5.84	232.79	8,566.28	-403.58	-531.45	-398.74	0.00	0.00	0.00
8,700.00	5.84	232.79	8,665.76	-409.74	-539.56	-404.82	0.00	0.00	0.00
8,800.00	5.84	232.79	8,765.25	-415.89	-547.66	-410.90	0.00	0.00	0.00
8,900.00	5.84	232.79	8,864.73	-422.05	-555.77	-416.99	0.00	0.00	0.00
9,000.00	5.84	232.79	8,964.21	-428.21	-563.88	-423.07	0.00	0.00	0.00
9,100.00	5.84	232.79	9,063.69	-434.36	-571.98	-429.15	0.00	0.00	0.00
9,200.00	5.84	232.79	9,163.17	-440.52	-580.09	-435.23	0.00	0.00	0.00
9,300.00	5.84	232.79	9,262.65	-446.68	-588.20	-441.32	0.00	0.00	0.00
9,400.00	5.84	232.79	9,362.13	-452.83	-596.31	-447.40	0.00	0.00	0.00
9,500.00	5.84	232.79	9,461.61	-458.99	-604.41	-453.48	0.00	0.00	0.00
9,600.00	5.84	232.79	9,561.09	-465.15	-612.52	-459.56	0.00	0.00	0.00
9,700.00	5.84	232.79	9,660.57	-471.30	-620.63	-465.65	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well Pegasus 16 ST 353H
Company:	Marlin Operating	TVD Reference:	3467 GL 30 KB @ 3497.00usft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3467 GL 30 KB @ 3497.00usft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	Pegasus 16 ST 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 - adjusted KOP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,800.00	5.84	232.79	9,760.05	-477.46	-628.73	-471.73	0.00	0.00	0.00
9,900.00	5.84	232.79	9,859.53	-483.62	-636.84	-477.81	0.00	0.00	0.00
10,000.00	5.84	232.79	9,959.01	-489.77	-644.95	-483.89	0.00	0.00	0.00
10,052.43	5.84	232.79	10,011.17	-493.00	-649.20	-487.08	0.00	0.00	0.00
Start Drop -1.50									
10,100.00	5.13	232.79	10,058.52	-495.75	-652.82	-489.80	1.50	-1.50	0.00
10,200.00	3.63	232.79	10,158.23	-500.37	-658.90	-494.36	1.50	-1.50	0.00
10,300.00	2.13	232.79	10,258.10	-503.41	-662.90	-497.36	1.50	-1.50	0.00
10,400.00	0.63	232.79	10,358.07	-504.86	-664.82	-498.80	1.50	-1.50	0.00
10,441.94	0.00	0.00	10,400.00	-505.00	-665.00	-498.94	1.50	-1.50	0.00
Start 602.46 hold at 10441.94 MD - KOP - Pegasus 16 ST 353H - (Adjusted) - KOP - Pegasus 16 ST 353H - (Plat)									
10,500.00	0.00	0.00	10,458.06	-505.00	-665.00	-498.94	0.00	0.00	0.00
10,600.00	0.00	0.00	10,558.06	-505.00	-665.00	-498.94	0.00	0.00	0.00
10,700.00	0.00	0.00	10,658.06	-505.00	-665.00	-498.94	0.00	0.00	0.00
10,800.00	0.00	0.00	10,758.06	-505.00	-665.00	-498.94	0.00	0.00	0.00
10,900.00	0.00	0.00	10,858.06	-505.00	-665.00	-498.94	0.00	0.00	0.00
11,000.00	0.00	0.00	10,958.06	-505.00	-665.00	-498.94	0.00	0.00	0.00
11,044.39	0.00	0.00	11,002.46	-505.00	-665.00	-498.94	0.00	0.00	0.00
Start DLS 12.00 TFO 350.50									
11,100.00	6.67	350.50	11,057.94	-501.81	-665.53	-495.74	12.00	12.00	0.00
11,200.00	18.67	350.50	11,155.32	-480.21	-669.15	-474.11	12.00	12.00	0.00
11,300.00	30.67	350.50	11,246.03	-439.12	-676.03	-432.96	12.00	12.00	0.00
11,400.00	42.67	350.50	11,326.09	-380.32	-685.86	-374.07	12.00	12.00	0.00
11,499.91	54.66	350.50	11,391.95	-306.46	-698.22	-300.10	12.00	12.00	0.00
FTP - Pegasus 16 ST 353H									
11,500.00	54.67	350.50	11,392.00	-306.39	-698.24	-300.03	12.00	12.00	0.00
11,600.00	66.67	350.50	11,440.89	-220.56	-712.60	-214.08	12.00	12.00	0.00
11,700.00	78.67	350.50	11,470.62	-126.58	-728.33	-119.96	12.00	12.00	0.00
11,705.43	79.32	350.50	11,471.66	-121.32	-729.21	-114.69	12.00	12.00	0.00
Target Line: 11479.29' KBTVD, 0' VS, 91.82° (Pegas)									
11,800.00	90.67	350.50	11,479.89	-28.55	-744.73	-21.79	12.00	12.00	0.00
11,809.37	91.80	350.50	11,479.69	-19.31	-746.28	-12.53	12.00	12.00	0.00
Start DLS 3.00 TFO 89.75									
11,900.00	91.81	353.22	11,476.84	70.35	-759.10	77.24	3.00	0.01	3.00
12,000.00	91.81	356.22	11,473.68	169.86	-768.30	176.84	3.00	0.01	3.00
12,100.00	91.81	359.22	11,470.51	269.72	-772.27	276.73	3.00	0.00	3.00
12,108.61	91.81	359.48	11,470.24	278.33	-772.37	285.33	3.00	0.00	3.00
Start 4492.11 hold at 12108.61 MD									
12,200.00	91.81	359.48	11,467.34	369.67	-773.19	376.68	0.00	0.00	0.00
12,300.00	91.81	359.48	11,464.18	469.62	-774.10	476.63	0.00	0.00	0.00
12,400.00	91.81	359.48	11,461.01	569.56	-775.00	576.58	0.00	0.00	0.00
12,500.00	91.81	359.48	11,457.84	669.51	-775.91	676.53	0.00	0.00	0.00
12,600.00	91.81	359.48	11,454.68	769.45	-776.81	776.48	0.00	0.00	0.00
12,700.00	91.81	359.48	11,451.51	869.40	-777.71	876.43	0.00	0.00	0.00
12,800.00	91.81	359.48	11,448.34	969.34	-778.62	976.38	0.00	0.00	0.00
12,900.00	91.81	359.48	11,445.18	1,069.29	-779.52	1,076.33	0.00	0.00	0.00
13,000.00	91.81	359.48	11,442.01	1,169.24	-780.43	1,176.28	0.00	0.00	0.00
13,100.00	91.81	359.48	11,438.85	1,269.18	-781.33	1,276.23	0.00	0.00	0.00
13,200.00	91.81	359.48	11,435.68	1,369.13	-782.24	1,376.18	0.00	0.00	0.00
13,300.00	91.81	359.48	11,432.51	1,469.07	-783.14	1,476.13	0.00	0.00	0.00
13,400.00	91.81	359.48	11,429.35	1,569.02	-784.05	1,576.08	0.00	0.00	0.00
13,500.00	91.81	359.48	11,426.18	1,668.96	-784.95	1,676.03	0.00	0.00	0.00
13,600.00	91.81	359.48	11,423.01	1,768.91	-785.86	1,775.98	0.00	0.00	0.00

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well Pegasus 16 ST 353H
Company:	Marlin Operating	TVD Reference:	3467 GL 30 KB @ 3497.00usft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3467 GL 30 KB @ 3497.00usft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	Pegasus 16 ST 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 - adjusted KOP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,700.00	91.81	359.48	11,419.85	1,868.86	-786.76	1,875.92	0.00	0.00	0.00
13,800.00	91.81	359.48	11,416.68	1,968.80	-787.67	1,975.87	0.00	0.00	0.00
13,900.00	91.81	359.48	11,413.51	2,068.75	-788.57	2,075.82	0.00	0.00	0.00
14,000.00	91.81	359.48	11,410.35	2,168.69	-789.47	2,175.77	0.00	0.00	0.00
14,100.00	91.81	359.48	11,407.18	2,268.64	-790.38	2,275.72	0.00	0.00	0.00
14,200.00	91.81	359.48	11,404.02	2,368.59	-791.28	2,375.67	0.00	0.00	0.00
14,300.00	91.81	359.48	11,400.85	2,468.53	-792.19	2,475.62	0.00	0.00	0.00
14,400.00	91.81	359.48	11,397.68	2,568.48	-793.09	2,575.57	0.00	0.00	0.00
14,500.00	91.81	359.48	11,394.52	2,668.42	-794.00	2,675.52	0.00	0.00	0.00
14,600.00	91.81	359.48	11,391.35	2,768.37	-794.90	2,775.47	0.00	0.00	0.00
14,700.00	91.81	359.48	11,388.18	2,868.31	-795.81	2,875.42	0.00	0.00	0.00
14,800.00	91.81	359.48	11,385.02	2,968.26	-796.71	2,975.37	0.00	0.00	0.00
14,900.00	91.81	359.48	11,381.85	3,068.21	-797.62	3,075.32	0.00	0.00	0.00
15,000.00	91.81	359.48	11,378.68	3,168.15	-798.52	3,175.27	0.00	0.00	0.00
15,100.00	91.81	359.48	11,375.52	3,268.10	-799.42	3,275.22	0.00	0.00	0.00
15,200.00	91.81	359.48	11,372.35	3,368.04	-800.33	3,375.17	0.00	0.00	0.00
15,300.00	91.81	359.48	11,369.19	3,467.99	-801.23	3,475.12	0.00	0.00	0.00
15,400.00	91.81	359.48	11,366.02	3,567.93	-802.14	3,575.07	0.00	0.00	0.00
15,500.00	91.81	359.48	11,362.85	3,667.88	-803.04	3,675.02	0.00	0.00	0.00
15,600.00	91.81	359.48	11,359.69	3,767.83	-803.95	3,774.97	0.00	0.00	0.00
15,700.00	91.81	359.48	11,356.52	3,867.77	-804.85	3,874.92	0.00	0.00	0.00
15,800.00	91.81	359.48	11,353.35	3,967.72	-805.76	3,974.87	0.00	0.00	0.00
15,900.00	91.81	359.48	11,350.19	4,067.66	-806.66	4,074.82	0.00	0.00	0.00
16,000.00	91.81	359.48	11,347.02	4,167.61	-807.57	4,174.77	0.00	0.00	0.00
16,100.00	91.81	359.48	11,343.85	4,267.55	-808.47	4,274.72	0.00	0.00	0.00
16,200.00	91.81	359.48	11,340.69	4,367.50	-809.38	4,374.67	0.00	0.00	0.00
16,300.00	91.81	359.48	11,337.52	4,467.45	-810.28	4,474.62	0.00	0.00	0.00
16,326.37	91.81	359.48	11,336.69	4,493.80	-810.52	4,500.98	0.00	0.00	0.00
Target Line: 11479.32' KBTVD, 0' VS, 91.82°									
16,400.00	91.81	359.48	11,334.36	4,567.39	-811.18	4,574.57	0.00	0.00	0.00
16,500.00	91.81	359.48	11,331.19	4,667.34	-812.09	4,674.52	0.00	0.00	0.00
16,502.66	91.81	359.48	11,331.11	4,670.00	-812.11	4,677.18	0.00	0.00	0.00
LTP - Pegasus 16 ST 353H									
16,600.00	91.81	359.48	11,328.02	4,767.28	-812.99	4,774.47	0.00	0.00	0.00
16,600.72	91.81	359.48	11,328.00	4,768.00	-813.00	4,775.19	0.00	0.00	0.00
TD at 16600.72 - BHL - Pegasus 16 ST 353H									

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well Pegasus 16 ST 353H
Company:	Marlin Operating	TVD Reference:	3467 GL 30 KB @ 3497.00usft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3467 GL 30 KB @ 3497.00usft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	Pegasus 16 ST 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 - adjusted KOP		

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)		
SHL - Pegasus 16 ST - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	473,765.00	839,859.00	32.298756	-103.367198
KOP - Pegasus 16 ST - plan hits target center - Point	0.00	0.00	10,400.00	-505.00	-665.00	473,260.00	839,194.00	32.297385	-103.369364
KOP - Pegasus 16 ST - plan misses target center by 100.00usft at 10441.94usft MD (10400.00 TVD, -505.00 N, -665.00 E) - Point	0.00	0.00	10,400.00	-505.00	-765.00	473,260.00	839,094.00	32.297387	-103.369688
BHL - Pegasus 16 ST - plan hits target center - Point	0.00	0.00	11,328.00	4,768.00	-813.00	478,533.00	839,046.00	32.311881	-103.369690
LTP - Pegasus 16 ST - plan misses target center by 0.11usft at 16502.66usft MD (11331.10 TVD, 4670.00 N, -812.11 E) - Point	0.00	0.00	11,331.10	4,670.00	-812.00	478,435.00	839,047.00	32.311612	-103.369690
FTP - Pegasus 16 ST - plan misses target center by 157.20usft at 11499.91usft MD (11391.95 TVD, -306.46 N, -698.22 E) - Point	0.00	0.00	11,492.00	-407.00	-766.00	473,358.00	839,093.00	32.297657	-103.369688

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,750.00	1,750.00	13 3/8"	13-3/8	17-1/2	
5,748.91	5,730.00	9 5/8"	9-5/8	12-1/4	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
16,326.37	11,336.69	Target Line: 11479.32' KBTVD, 0' V		-1.82	359.48

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,850.00	1,850.00	0.00	0.00	Start Build 1.50	
2,239.51	2,238.84	-12.00	-15.80	Start 7812.92 hold at 2239.51 MD	
10,052.43	10,011.17	-493.00	-649.20	Start Drop -1.50	
10,441.94	10,400.00	-505.00	-665.00	Start 602.46 hold at 10441.94 MD	
11,044.39	11,002.46	-505.00	-665.00	Start DLS 12.00 TFO 350.50	
11,809.37	11,479.69	-19.31	-746.28	Start DLS 3.00 TFO 89.75	
12,108.61	11,470.24	278.33	-772.37	Start 4492.11 hold at 12108.61 MD	
16,600.72	11,328.00	4,768.00	-813.00	TD at 16600.72	



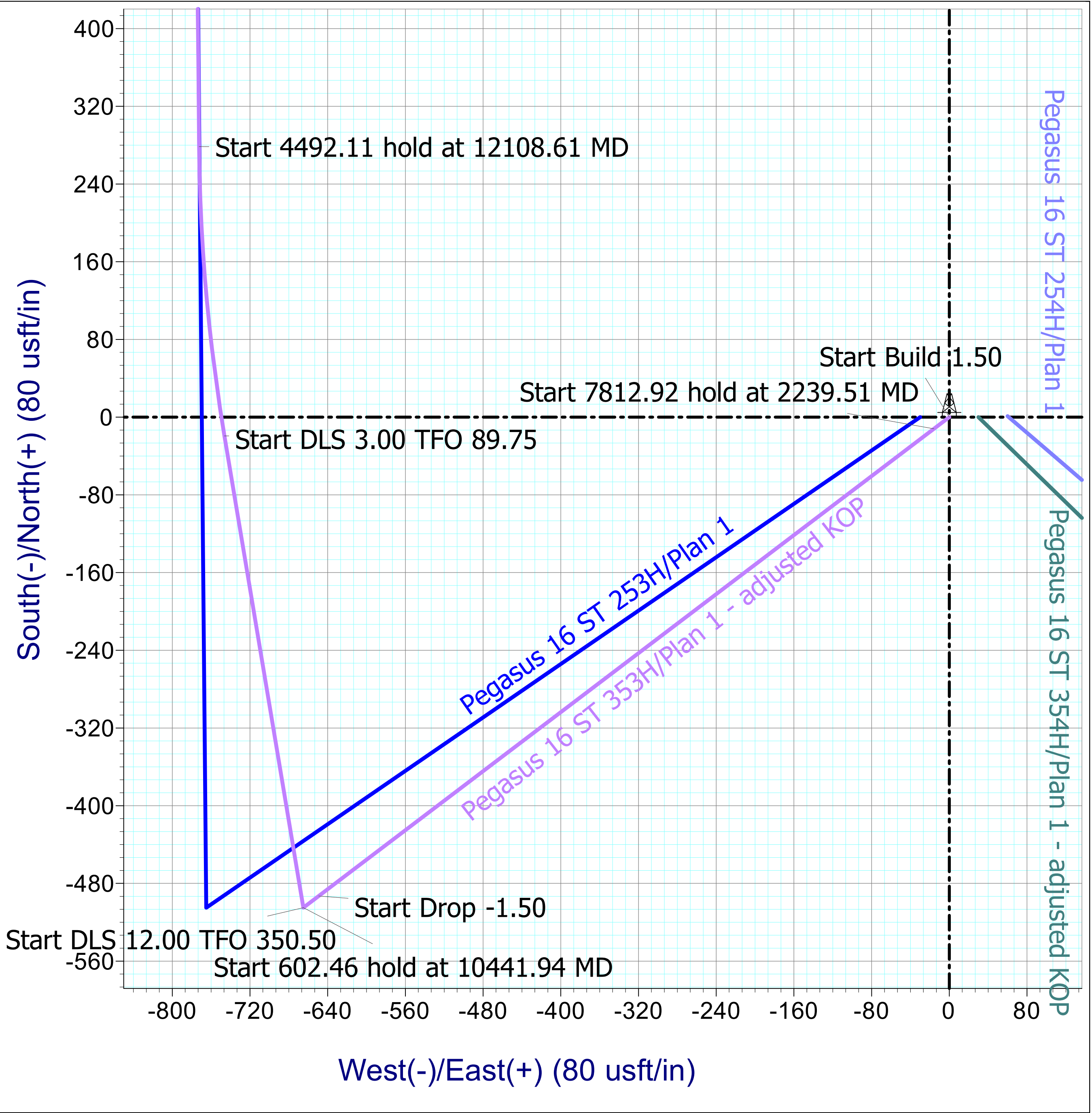
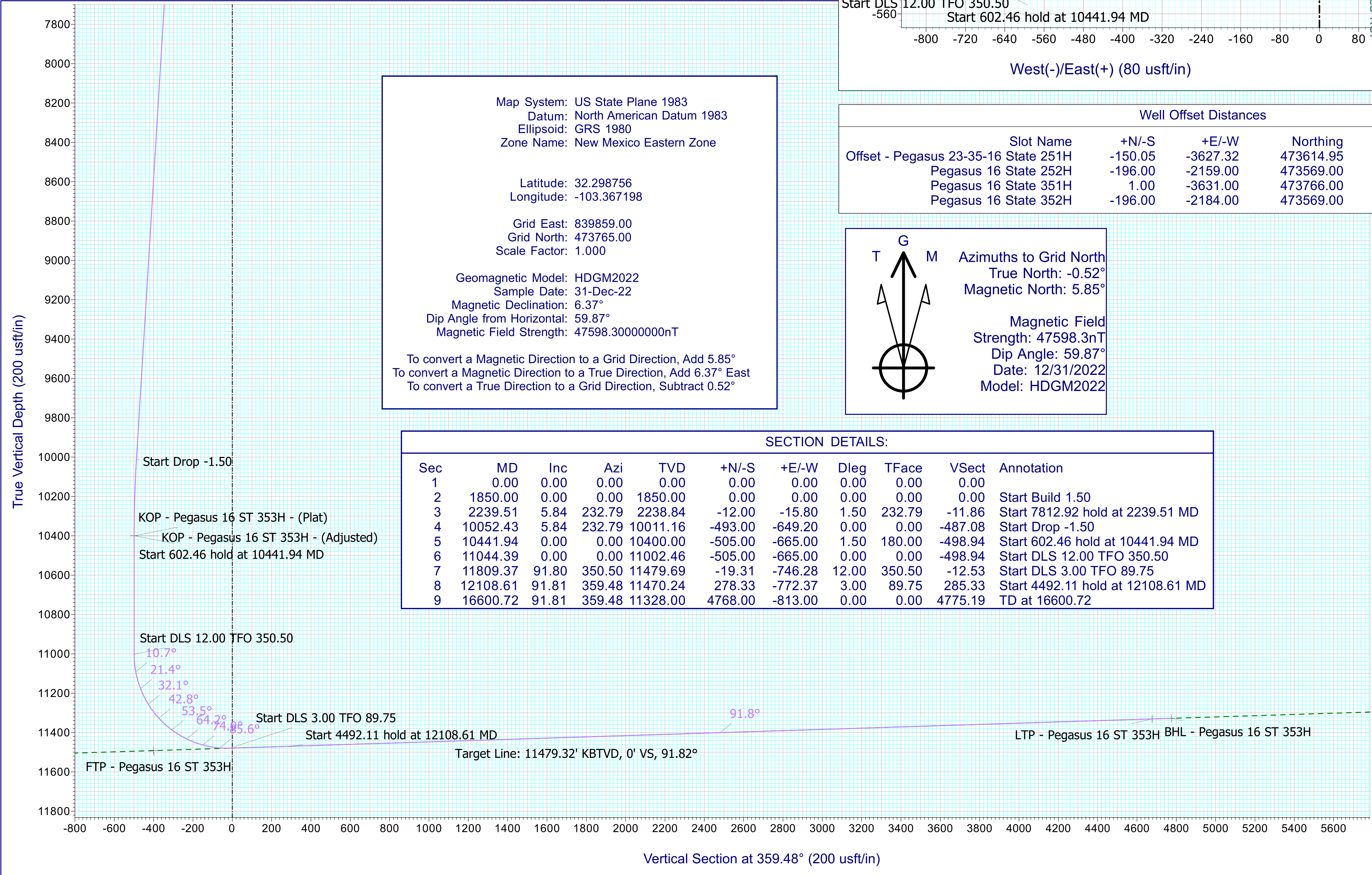
Marlin Operating
Pegasus 16 ST 353H
Lea County, NM (NAD83 NME)
Wellbore: OH
Plan: Plan 1 - adjusted KOP
Rig:

SURFACE LOCATION			Ground Elevation: 3467.00	3467 GL 30 KB @ 3497.00usft	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	473765.00	839859.00	32.298756	-103.367198

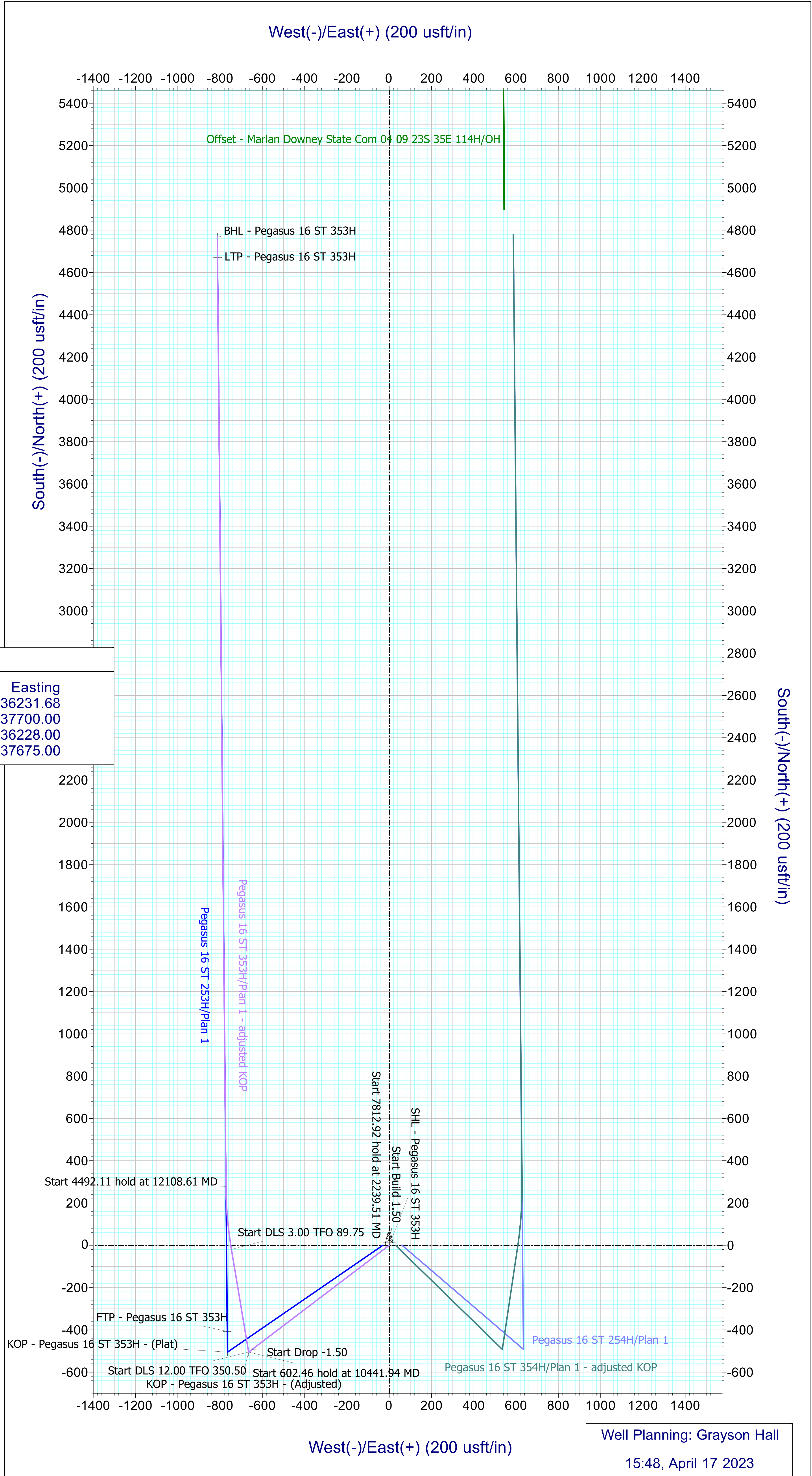
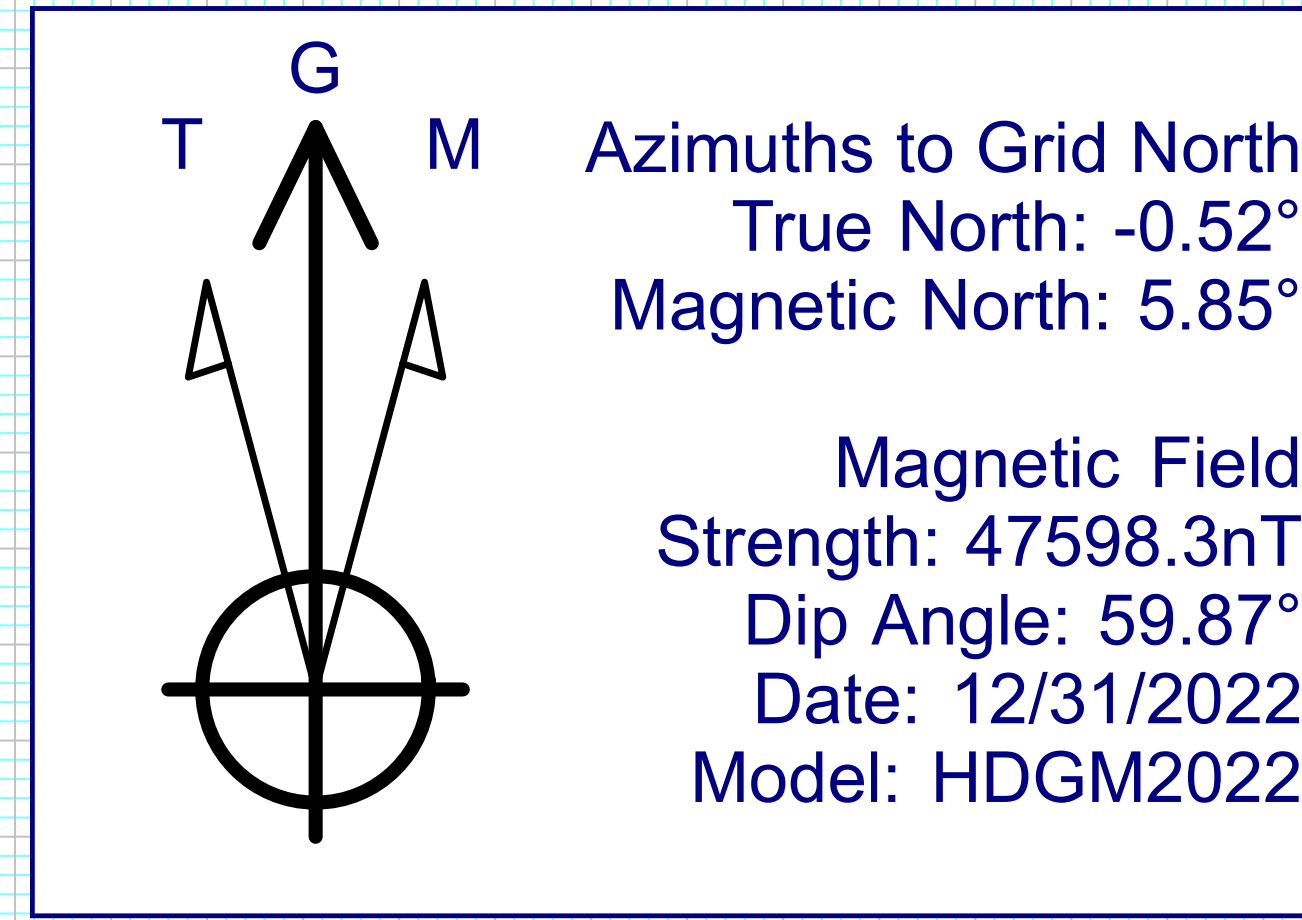
TARGET LOCATIONS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL - Pegasus 16 ST 353H	0.00	0.00	0.00	473765.00	839859.00
KOP - Pegasus 16 ST 353H - (Adjusted)	10400.00	-505.00	-665.00	473260.00	839194.00
KOP - Pegasus 16 ST 353H - (Plat)	10400.00	-505.00	-765.00	473260.00	839094.00
BHL - Pegasus 16 ST 353H	11328.00	4768.00	-813.00	478533.00	839046.00
LTP - Pegasus 16 ST 353H	11331.10	4670.00	-812.00	478435.00	839047.00
FTP - Pegasus 16 ST 353H	11492.00	-407.00	-766.00	473358.00	839093.00



CASING DETAILS			
TVD	MD	Name	Size
1750.00	1750.00	13 3/8"	13-3/8
5730.00	5748.91	9 5/8"	9-5/8



Well Offset Distances				
Offset - Pegasus 23-35-16 State 251H	+N/-S	+E/-W	Northing	Easting
Pegasus 16 State 252H	-150.05	-3627.32	473614.95	836231.68
Pegasus 16 State 351H	-196.00	-2159.00	473569.00	837700.00
Pegasus 16 State 351H	1.00	-3631.00	473766.00	836228.00
Pegasus 16 State 352H	-196.00	-2184.00	473569.00	837675.00



Pegasus 16 State #353H

Drill Plan

Well Name: Pegasus 16 State #353H

SL: 500' FSL & 980' FEL Section 16, TN 23, RGE 35, State Lands Survey, Lea Co, New Mexico

BHL 2' FNL & 1750' FEL Section 16, TN 23, RGE 35, State Lands Survey, Lea Co, New Mexico

Casing Program

	Hole Size	Casing	Weight	Top	Bottom Depth	Cement	TOC
Surface	17.50	13.375	54.5	0	1750'	2100	0
Intermediate	12.25	9.625	40	0	5748'	1500	0
Production	8.75	5.5	20	0	16,600'	2800	0

Plan to drill a 17-1/2" hole to 1750' with water. Run 13-3/8" 54.4# J-55 casing and cement to surface. Drill 12-1/4" hole to 5748' with brine water. Run 9-5/8" 40# HCL-80 casing and cement to surface. Drill 8-3/4" vertical/curve/lateral with OBM to 16,600'. Run 5-1/2" 20# HCP-110 and cement to surface.

Well Control

Type 13-5/8" Double Ram 10M
 13-5/8" Single Ram 10M
 13-5/8" Annular Ram 5M

Test 5,000 psi

Manufacturer: Cameron