

District I1625 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 358203

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 30-025-52910
4. Property Code 335863	5. Property Name PEGASUS 16 STATE COM	6. Well No. 353H

7. Surface Location

UL - Lot P	Section 9	Township 23S	Range 35E	Lot Idn P	Feet From 500	N/S Line S	Feet From 925	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

UL - Lot O	Section 21	Township 23S	Range 35E	Lot Idn O	Feet From 2	N/S Line S	Feet From 1650	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 3485
16. Multiple N	17. Proposed Depth 22151	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 8/26/2024
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	1764	2100	0
Int1	12.25	9.625	40	6132	1500	0
Prod	8.75	5.5	20	22151	3500	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	10000	5000	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: Printed Name: Electronically filed by Dallas Rysavy Title: CEO Email Address: dallas@marlinoperating.com Date: 4/30/2024	OIL CONSERVATION DIVISION Approved By: Paul F Kautz Title: Geologist Approved Date: 5/9/2024 Expiration Date: 5/9/2026 Conditions of Approval Attached
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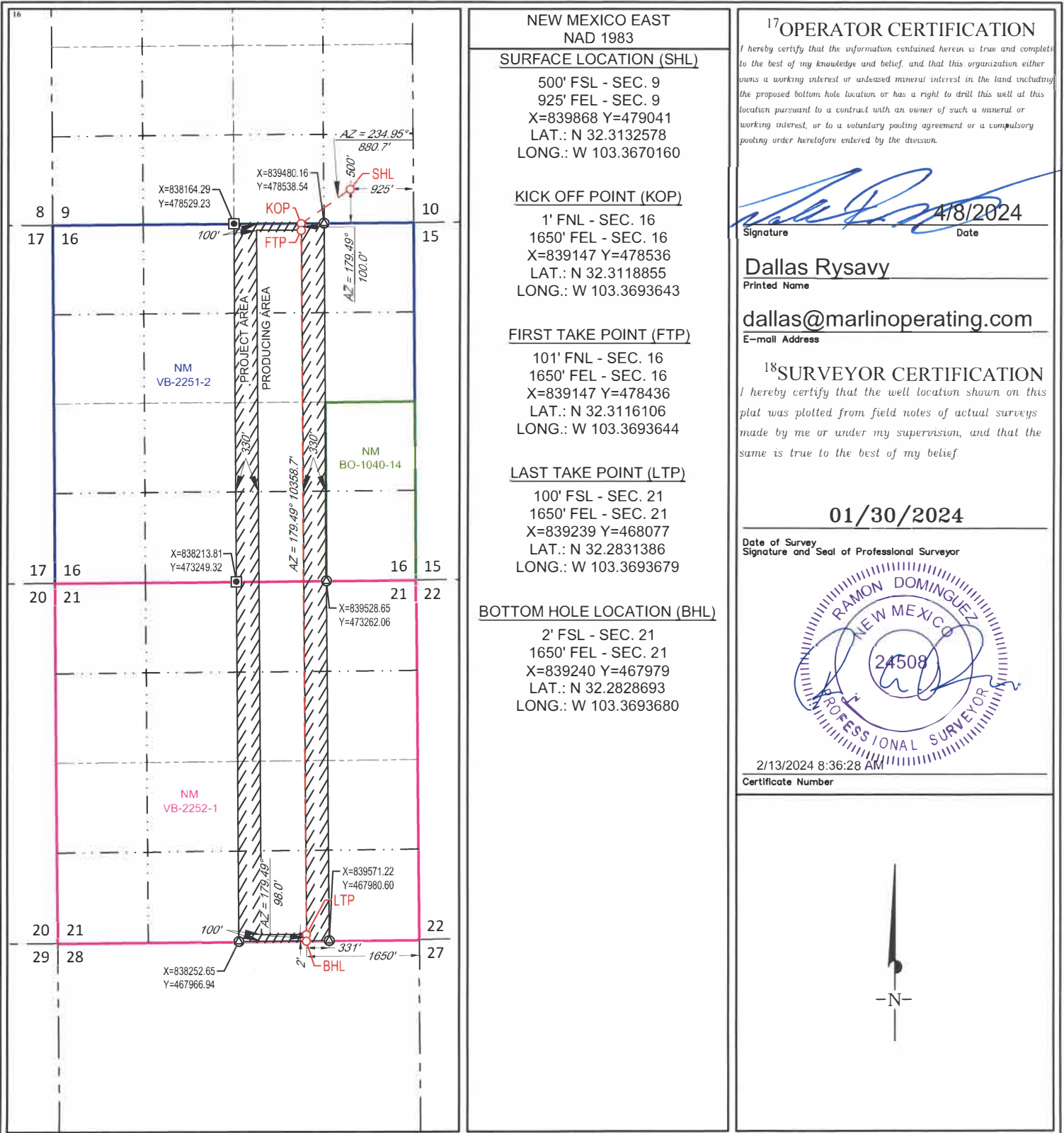
State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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 30-025-		² Pool Code 97958		³ Pool Name WC-025 G-08 S233528D; LWR BONE SPRIN					
⁴ Property Code 332942		⁵ Property Name PEGASUS UNIT STATE COM			⁶ Well Number 353H				
⁷ OGRID No. 331054		⁸ Operator Name MARLIN OPERATING, LLC			⁹ Elevation 3485'				
¹⁰ Surface Location									
UL or lot no. P	Section 9	Township 23-S	Range 35-E	Lot Idn -	Feet from the 500'	North/South line SOUTH	Feet from the 925'	East/West line EAST	County LEA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. O	Section 21	Township 23-S	Range 35-E	Lot Idn -	Feet from the 2'	North/South line SOUTH	Feet from the 1650'	East/West line EAST	County LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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.





SCALE: 1" = 2000'

A horizontal graphic scale bar with a black and white alternating pattern. It is marked with '1000'' and '2000'' below the bar.

LEASE NAME & WELL NO.: PEGASUS UNIT STATE COM 353H

SECTION 9 TWP 23-S RGE 35-E SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 500' FSL & 925' FEL

DISTANCE & DIRECTION

FROM INT. OF NM-128 AND DELAWARE BASIN RD. GO NORTH ON
DELAWARE BASIN RD. ±15.6 MILES, THENCE SOUTHEAST (RIGHT) ON
A LEASE RD. ±1.0 MILE TO A POINT ±2,320 FEET NORTHWEST OF THE
LOCATION.

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

THIS EASEMENT/SERVITUDE 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. 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.

AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.

NEW MEXICO EAST
NAD 1983
SURFACE LOCATION (SHL)

500' FSL - SEC. 9
925' FEL - SEC. 9
X=839868 Y=479041
LAT.: N 32.3132578
LONG.: W 103.3670160

KICK OFF POINT (KOP)

1' FNL - SEC. 16
1650' FEL - SEC. 16
X=839147 Y=478536
LAT.: N 32.3118855
LONG.: W 103.3693643

FIRST TAKE POINT (FTP)

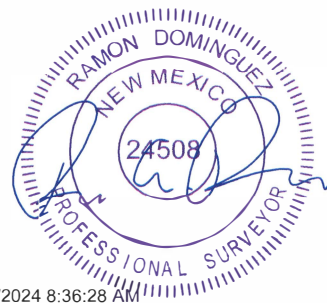
101' FNL - SEC. 16
1650' FEL - SEC. 16
X=839147 Y=478436
LAT.: N 32.3116106
LONG.: W 103.3693644

LAST TAKE POINT (LTP)

100' FSL - SEC. 21
1650' FEL - SEC. 21
X=839239 Y=468077
LAT.: N 32.2831386
LONG.: W 103.3693679

BOTTOM HOLE LOCATION (BHL)

2' FSL - SEC. 21
1650' FEL - SEC. 21
X=839240 Y=467979
LAT.: N 32.2828693
LONG.: W 103.3693680



2/13/2024 8:36:28 AM

Ramon A. Dominguez, P.S. No. 24508





SECTION 9, TOWNSHIP 23-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



Ramon A. Dominguez, P.S. No. 24508

CENTER OF PAD IS 500' FSL & 913' FEL

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



Released to Imaging: 5/9/2024 3:04:34 PM

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

Form APD Comments

Permit 358203

PERMIT COMMENTS

Operator Name and Address: Marlin Operating, LLC [331054] 1371 Brumlow Avenue Southlake, TX 76092		API Number: 30-025-52910
		Well: PEGASUS 16 STATE COM #353H
Created By	Comment	Comment Date
jrosales	Regarding dedicated acreage, unable to map out section 9, 16, and 21. OCD to address.	4/30/2024

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Form APD Conditions
Permit 358203

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Marlin Operating, LLC [331054] 1371 Brumlow Avenue Southlake, TX 76092	API Number: 30-025-52910
	Well: PEGASUS 16 STATE COM #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	If cement does not circulate on any string, a CBL is required for that string of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

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 Unit State Com #353 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.

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:** Marlin Operating, LLC**OGRID:** 331054**Date:** 4/25/2024**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
Pegasus Unit State Com 353H	30-025-	P-9-23S-35E	500 FSL & 925 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 Unit State Com 353H	30-025-	8-26-24	9-21-24	11-15-24	11-20-24	11-23-24

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
Pegasus Unit State Com 353H	30-025-	523	191231000

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:

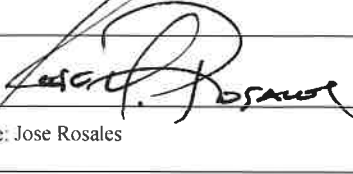
(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit 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: April 25, 2024

Phone: 432-209-1090

OIL CONSERVATION DIVISION**(Only applicable when submitted as a standalone form)**

Approved By:

Title:

Approval Date:

Conditions of Approval:

Pegasus Unit State Com #353H

Drill Plan

Well Name: Pegasus Unit State Com #353H

SL: 500' FSL & 925' FEL Section 9, TN 23S, RGE 35 E, State Lands Survey, Lea Co, N.M.

BHL 2' FSL & 1650' FEL Section 21, TN 23S, RGE 35 E, State Lands Survey, Lea Co, N.M.

Casing Program

	Hole Size	Casing	Weight	Top	Bottom Depth	Cement	TOC
Surface	17.50	13.375	54.5	0	1764'	2100	0
Intermediate	12.25	9.625	40	0	6132'	1500	0
Production	8.75	5.5	20	0	22150.80'	3500	0

Plan to drill a 17-1/2" hole to 1764' with fresh water. Run 13-3/8" 54.5# J-55 casing and cement to surface. Drill 12-1/4" hole to 6132' 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 22150.80'. 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

Marlin Operating

Lea County, NM (NAD83 NME)

Pegasus 16 State

PEGASUS UNIT STATE COM 353H

OH

Plan: Plan 3

Standard Planning Report

29 April, 2024



www.scientificdrilling.com



Scientific Drilling

Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

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:	Map	Northing:	473,569.00 usft
From:		Easting:	837,700.00 usft
Position Uncertainty:	0.00 ft	Slot Radius:	48.000 in
		Latitude:	32.2982708
		Longitude:	-103.3741898
		Grid Convergence:	0.51 °

Well	PEGASUS UNIT STATE COM 353H		
Well Position	+N/-S	5,472.01 ft	Northing:
	+E/-W	2,168.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
		Latitude:	32.3132570
		Longitude:	-103.3670145
		Ground Level:	3,485.00 ft

Wellbore	OH		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	12/31/2022	6.37	59.90	47,613.70000000
	HDGM2024	2/28/2024	6.28	59.85	47,451.30000000

Design	Plan 3		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft) Direction (°)
	0.00	0.00	0.00 179.49

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,328.22	4.92	266.29	2,327.81	-0.91	-14.06	1.50	1.50	-28.55	266.29	
10,476.56	4.92	266.29	10,446.09	-46.15	-711.90	0.00	0.00	0.00	0.00	
10,804.77	0.00	0.00	10,773.90	-47.06	-725.96	1.50	-1.50	0.00	180.00	
11,689.78	88.50	179.49	11,346.67	-605.00	-721.00	10.00	10.00	0.00	179.49	
22,052.76	88.50	179.49	11,617.93	-10,964.02	-628.79	0.00	0.00	0.00	0.00	LTP - Pegasus 16 S
22,150.80	88.50	179.49	11,620.49	-11,062.02	-627.91	0.00	0.00	0.00	0.00	BHL - Pegasus 16 S

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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"									
1,764.00	0.00	0.00	1,764.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start DLS 1.50 TFO 266.29									
2,100.00	1.50	266.29	2,099.99	-0.08	-1.31	0.07	1.50	1.50	0.00
2,200.00	3.00	266.29	2,199.91	-0.34	-5.22	0.29	1.50	1.50	0.00
2,227.14	3.41	266.29	2,227.01	-0.44	-6.74	0.38	1.50	1.50	0.00
Salado									
2,300.00	4.50	266.29	2,299.69	-0.76	-11.75	0.66	1.50	1.50	0.00
2,328.22	4.92	266.29	2,327.81	-0.91	-14.06	0.79	1.50	1.50	0.00
Start 8148.34 hold at 2328.22 MD									
2,400.00	4.92	266.29	2,399.33	-1.31	-20.21	1.13	0.00	0.00	0.00
2,500.00	4.92	266.29	2,498.96	-1.87	-28.77	1.61	0.00	0.00	0.00
2,600.00	4.92	266.29	2,598.59	-2.42	-37.34	2.09	0.00	0.00	0.00
2,700.00	4.92	266.29	2,698.22	-2.98	-45.90	2.57	0.00	0.00	0.00
2,800.00	4.92	266.29	2,797.86	-3.53	-54.47	3.05	0.00	0.00	0.00
2,900.00	4.92	266.29	2,897.49	-4.09	-63.03	3.52	0.00	0.00	0.00
3,000.00	4.92	266.29	2,997.12	-4.64	-71.60	4.00	0.00	0.00	0.00
3,100.00	4.92	266.29	3,096.75	-5.20	-80.16	4.48	0.00	0.00	0.00
3,200.00	4.92	266.29	3,196.38	-5.75	-88.72	4.96	0.00	0.00	0.00
3,300.00	4.92	266.29	3,296.01	-6.31	-97.29	5.44	0.00	0.00	0.00
3,400.00	4.92	266.29	3,395.64	-6.86	-105.85	5.92	0.00	0.00	0.00
3,500.00	4.92	266.29	3,495.27	-7.42	-114.42	6.40	0.00	0.00	0.00
3,600.00	4.92	266.29	3,594.90	-7.97	-122.98	6.88	0.00	0.00	0.00
3,700.00	4.92	266.29	3,694.54	-8.53	-131.54	7.36	0.00	0.00	0.00
3,800.00	4.92	266.29	3,794.17	-9.08	-140.11	7.84	0.00	0.00	0.00
3,900.00	4.92	266.29	3,893.80	-9.64	-148.67	8.31	0.00	0.00	0.00
4,000.00	4.92	266.29	3,993.43	-10.19	-157.24	8.79	0.00	0.00	0.00
4,098.18	4.92	266.29	4,091.24	-10.74	-165.65	9.26	0.00	0.00	0.00
Yates									

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,100.00	4.92	266.29	4,093.06	-10.75	-165.80	9.27	0.00	0.00	0.00
4,200.00	4.92	266.29	4,192.69	-11.30	-174.37	9.75	0.00	0.00	0.00
4,300.00	4.92	266.29	4,292.32	-11.86	-182.93	10.23	0.00	0.00	0.00
4,400.00	4.92	266.29	4,391.95	-12.41	-191.49	10.71	0.00	0.00	0.00
4,500.00	4.92	266.29	4,491.58	-12.97	-200.06	11.19	0.00	0.00	0.00
4,600.00	4.92	266.29	4,591.21	-13.52	-208.62	11.67	0.00	0.00	0.00
4,700.00	4.92	266.29	4,690.85	-14.08	-217.19	12.15	0.00	0.00	0.00
4,800.00	4.92	266.29	4,790.48	-14.63	-225.75	12.62	0.00	0.00	0.00
4,900.00	4.92	266.29	4,890.11	-15.19	-234.31	13.10	0.00	0.00	0.00
5,000.00	4.92	266.29	4,989.74	-15.74	-242.88	13.58	0.00	0.00	0.00
5,100.00	4.92	266.29	5,089.37	-16.30	-251.44	14.06	0.00	0.00	0.00
5,200.00	4.92	266.29	5,189.00	-16.86	-260.01	14.54	0.00	0.00	0.00
5,300.00	4.92	266.29	5,288.63	-17.41	-268.57	15.02	0.00	0.00	0.00
5,400.00	4.92	266.29	5,388.26	-17.97	-277.14	15.50	0.00	0.00	0.00
5,500.00	4.92	266.29	5,487.89	-18.52	-285.70	15.98	0.00	0.00	0.00
5,600.00	4.92	266.29	5,587.53	-19.08	-294.26	16.46	0.00	0.00	0.00
5,700.00	4.92	266.29	5,687.16	-19.63	-302.83	16.94	0.00	0.00	0.00
5,745.46	4.92	266.29	5,732.45	-19.88	-306.72	17.15	0.00	0.00	0.00
Del Marker									
5,748.91	4.92	266.29	5,735.89	-19.90	-307.02	17.17	0.00	0.00	0.00
9 5/8"									
5,800.00	4.92	266.29	5,786.79	-20.19	-311.39	17.41	0.00	0.00	0.00
5,900.00	4.92	266.29	5,886.42	-20.74	-319.96	17.89	0.00	0.00	0.00
6,000.00	4.92	266.29	5,986.05	-21.30	-328.52	18.37	0.00	0.00	0.00
6,100.00	4.92	266.29	6,085.68	-21.85	-337.08	18.85	0.00	0.00	0.00
6,146.99	4.92	266.29	6,132.50	-22.11	-341.11	19.08	0.00	0.00	0.00
Cherry Canyon									
6,200.00	4.92	266.29	6,185.31	-22.41	-345.65	19.33	0.00	0.00	0.00
6,300.00	4.92	266.29	6,284.94	-22.96	-354.21	19.81	0.00	0.00	0.00
6,400.00	4.92	266.29	6,384.57	-23.52	-362.78	20.29	0.00	0.00	0.00
6,500.00	4.92	266.29	6,484.20	-24.07	-371.34	20.77	0.00	0.00	0.00
6,600.00	4.92	266.29	6,583.84	-24.63	-379.91	21.25	0.00	0.00	0.00
6,700.00	4.92	266.29	6,683.47	-25.18	-388.47	21.72	0.00	0.00	0.00
6,800.00	4.92	266.29	6,783.10	-25.74	-397.03	22.20	0.00	0.00	0.00
6,900.00	4.92	266.29	6,882.73	-26.29	-405.60	22.68	0.00	0.00	0.00
7,000.00	4.92	266.29	6,982.36	-26.85	-414.16	23.16	0.00	0.00	0.00
7,100.00	4.92	266.29	7,081.99	-27.40	-422.73	23.64	0.00	0.00	0.00
7,200.00	4.92	266.29	7,181.62	-27.96	-431.29	24.12	0.00	0.00	0.00
7,300.00	4.92	266.29	7,281.25	-28.51	-439.85	24.60	0.00	0.00	0.00
7,400.00	4.92	266.29	7,380.88	-29.07	-448.42	25.08	0.00	0.00	0.00
7,500.00	4.92	266.29	7,480.52	-29.62	-456.98	25.56	0.00	0.00	0.00
7,600.00	4.92	266.29	7,580.15	-30.18	-465.55	26.03	0.00	0.00	0.00
7,632.66	4.92	266.29	7,612.69	-30.36	-468.34	26.19	0.00	0.00	0.00
Brushy Canyon									
7,700.00	4.92	266.29	7,679.78	-30.73	-474.11	26.51	0.00	0.00	0.00
7,800.00	4.92	266.29	7,779.41	-31.29	-482.68	26.99	0.00	0.00	0.00
7,900.00	4.92	266.29	7,879.04	-31.85	-491.24	27.47	0.00	0.00	0.00
8,000.00	4.92	266.29	7,978.67	-32.40	-499.80	27.95	0.00	0.00	0.00
8,100.00	4.92	266.29	8,078.30	-32.96	-508.37	28.43	0.00	0.00	0.00
8,200.00	4.92	266.29	8,177.93	-33.51	-516.93	28.91	0.00	0.00	0.00
8,300.00	4.92	266.29	8,277.56	-34.07	-525.50	29.39	0.00	0.00	0.00
8,400.00	4.92	266.29	8,377.19	-34.62	-534.06	29.87	0.00	0.00	0.00
8,500.00	4.92	266.29	8,476.83	-35.18	-542.62	30.35	0.00	0.00	0.00

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,600.00	4.92	266.29	8,576.46	-35.73	-551.19	30.82	0.00	0.00	0.00
8,700.00	4.92	266.29	8,676.09	-36.29	-559.75	31.30	0.00	0.00	0.00
8,800.00	4.92	266.29	8,775.72	-36.84	-568.32	31.78	0.00	0.00	0.00
8,900.00	4.92	266.29	8,875.35	-37.40	-576.88	32.26	0.00	0.00	0.00
8,954.70	4.92	266.29	8,929.85	-37.70	-581.57	32.52	0.00	0.00	0.00
Avalon									
9,000.00	4.92	266.29	8,974.98	-37.95	-585.45	32.74	0.00	0.00	0.00
9,100.00	4.92	266.29	9,074.61	-38.51	-594.01	33.22	0.00	0.00	0.00
9,200.00	4.92	266.29	9,174.24	-39.06	-602.57	33.70	0.00	0.00	0.00
9,205.66	4.92	266.29	9,179.88	-39.09	-603.06	33.72	0.00	0.00	0.00
Bone Spring									
9,300.00	4.92	266.29	9,273.87	-39.62	-611.14	34.18	0.00	0.00	0.00
9,400.00	4.92	266.29	9,373.51	-40.17	-619.70	34.66	0.00	0.00	0.00
9,500.00	4.92	266.29	9,473.14	-40.73	-628.27	35.13	0.00	0.00	0.00
9,600.00	4.92	266.29	9,572.77	-41.28	-636.83	35.61	0.00	0.00	0.00
9,700.00	4.92	266.29	9,672.40	-41.84	-645.39	36.09	0.00	0.00	0.00
9,800.00	4.92	266.29	9,772.03	-42.39	-653.96	36.57	0.00	0.00	0.00
9,900.00	4.92	266.29	9,871.66	-42.95	-662.52	37.05	0.00	0.00	0.00
9,928.42	4.92	266.29	9,899.97	-43.11	-664.96	37.19	0.00	0.00	0.00
BS1									
10,000.00	4.92	266.29	9,971.29	-43.50	-671.09	37.53	0.00	0.00	0.00
10,100.00	4.92	266.29	10,070.92	-44.06	-679.65	38.01	0.00	0.00	0.00
10,200.00	4.92	266.29	10,170.55	-44.61	-688.22	38.49	0.00	0.00	0.00
10,300.00	4.92	266.29	10,270.18	-45.17	-696.78	38.97	0.00	0.00	0.00
10,400.00	4.92	266.29	10,369.82	-45.72	-705.34	39.44	0.00	0.00	0.00
10,450.41	4.92	266.29	10,420.04	-46.00	-709.66	39.69	0.00	0.00	0.00
BS 2									
10,476.56	4.92	266.29	10,446.09	-46.15	-711.90	39.81	0.00	0.00	0.00
Start Drop -1.50									
10,500.00	4.57	266.29	10,469.45	-46.28	-713.84	39.92	1.50	-1.50	0.00
10,600.00	3.07	266.29	10,569.23	-46.71	-720.49	40.29	1.50	-1.50	0.00
10,700.00	1.57	266.29	10,669.14	-46.97	-724.53	40.52	1.50	-1.50	0.00
10,800.00	0.07	266.29	10,769.13	-47.06	-725.96	40.60	1.50	-1.50	0.00
10,804.77	0.00	0.00	10,773.90	-47.06	-725.96	40.60	1.50	-1.50	0.00
Start Build 10.00									
10,900.00	9.52	179.49	10,868.69	-54.96	-725.89	48.49	10.00	10.00	0.00
11,000.00	19.52	179.49	10,965.37	-80.00	-725.67	73.54	10.00	10.00	0.00
11,100.00	29.52	179.49	11,056.24	-121.45	-725.30	114.99	10.00	10.00	0.00
11,200.00	39.52	179.49	11,138.52	-178.05	-724.80	171.59	10.00	10.00	0.00
11,251.03	44.63	179.49	11,176.39	-212.23	-724.49	205.77	10.00	10.00	0.00
BS3 Upper target top									
11,300.00	49.52	179.49	11,209.73	-248.08	-724.17	241.62	10.00	10.00	0.00
11,400.00	59.52	179.49	11,267.70	-329.40	-723.45	322.95	10.00	10.00	0.00
11,443.85	63.91	179.49	11,288.47	-368.00	-723.11	361.55	10.00	10.00	0.00
BS 3									
11,500.00	69.52	179.49	11,310.66	-419.56	-722.65	413.11	10.00	10.00	0.00
11,589.01	78.42	179.49	11,335.21	-505.03	-721.89	498.58	10.00	10.00	0.00
KOP - Pegasus 16 ST 353H									
11,600.00	79.52	179.49	11,337.31	-515.81	-721.79	509.36	10.00	10.00	0.00
11,689.78	88.50	179.49	11,346.67	-605.00	-721.00	598.56	10.00	10.00	0.00
Start 10362.98 hold at 11689.78 MD - FTP - Pegasus 16 ST 353H									
11,700.00	88.50	179.49	11,346.93	-615.22	-720.91	608.78	0.00	0.00	0.00
11,800.00	88.50	179.49	11,349.55	-715.18	-720.02	708.74	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,900.00	88.50	179.49	11,352.17	-815.14	-719.13	808.71	0.00	0.00	0.00
12,000.00	88.50	179.49	11,354.79	-915.11	-718.24	908.68	0.00	0.00	0.00
12,100.00	88.50	179.49	11,357.40	-1,015.07	-717.35	1,008.64	0.00	0.00	0.00
12,200.00	88.50	179.49	11,360.02	-1,115.03	-716.46	1,108.61	0.00	0.00	0.00
12,300.00	88.50	179.49	11,362.64	-1,214.99	-715.57	1,208.57	0.00	0.00	0.00
12,400.00	88.50	179.49	11,365.26	-1,314.95	-714.68	1,308.54	0.00	0.00	0.00
12,500.00	88.50	179.49	11,367.88	-1,414.91	-713.79	1,408.50	0.00	0.00	0.00
12,600.00	88.50	179.49	11,370.49	-1,514.88	-712.90	1,508.47	0.00	0.00	0.00
12,700.00	88.50	179.49	11,373.11	-1,614.84	-712.01	1,608.44	0.00	0.00	0.00
12,800.00	88.50	179.49	11,375.73	-1,714.80	-711.12	1,708.40	0.00	0.00	0.00
12,900.00	88.50	179.49	11,378.35	-1,814.76	-710.23	1,808.37	0.00	0.00	0.00
13,000.00	88.50	179.49	11,380.96	-1,914.72	-709.34	1,908.33	0.00	0.00	0.00
13,100.00	88.50	179.49	11,383.58	-2,014.68	-708.45	2,008.30	0.00	0.00	0.00
13,200.00	88.50	179.49	11,386.20	-2,114.65	-707.56	2,108.26	0.00	0.00	0.00
13,300.00	88.50	179.49	11,388.82	-2,214.61	-706.67	2,208.23	0.00	0.00	0.00
13,400.00	88.50	179.49	11,391.43	-2,314.57	-705.78	2,308.20	0.00	0.00	0.00
13,500.00	88.50	179.49	11,394.05	-2,414.53	-704.89	2,408.16	0.00	0.00	0.00
13,600.00	88.50	179.49	11,396.67	-2,514.49	-704.00	2,508.13	0.00	0.00	0.00
13,700.00	88.50	179.49	11,399.29	-2,614.46	-703.11	2,608.09	0.00	0.00	0.00
13,800.00	88.50	179.49	11,401.90	-2,714.42	-702.22	2,708.06	0.00	0.00	0.00
13,900.00	88.50	179.49	11,404.52	-2,814.38	-701.33	2,808.02	0.00	0.00	0.00
14,000.00	88.50	179.49	11,407.14	-2,914.34	-700.44	2,907.99	0.00	0.00	0.00
14,100.00	88.50	179.49	11,409.76	-3,014.30	-699.55	3,007.96	0.00	0.00	0.00
14,200.00	88.50	179.49	11,412.37	-3,114.26	-698.66	3,107.92	0.00	0.00	0.00
14,300.00	88.50	179.49	11,414.99	-3,214.23	-697.77	3,207.89	0.00	0.00	0.00
14,400.00	88.50	179.49	11,417.61	-3,314.19	-696.88	3,307.85	0.00	0.00	0.00
14,500.00	88.50	179.49	11,420.23	-3,414.15	-695.99	3,407.82	0.00	0.00	0.00
14,600.00	88.50	179.49	11,422.84	-3,514.11	-695.10	3,507.79	0.00	0.00	0.00
14,700.00	88.50	179.49	11,425.46	-3,614.07	-694.21	3,607.75	0.00	0.00	0.00
14,800.00	88.50	179.49	11,428.08	-3,714.04	-693.32	3,707.72	0.00	0.00	0.00
14,900.00	88.50	179.49	11,430.70	-3,814.00	-692.43	3,807.68	0.00	0.00	0.00
15,000.00	88.50	179.49	11,433.32	-3,913.96	-691.54	3,907.65	0.00	0.00	0.00
15,100.00	88.50	179.49	11,435.93	-4,013.92	-690.65	4,007.61	0.00	0.00	0.00
15,200.00	88.50	179.49	11,438.55	-4,113.88	-689.76	4,107.58	0.00	0.00	0.00
15,300.00	88.50	179.49	11,441.17	-4,213.84	-688.87	4,207.55	0.00	0.00	0.00
15,400.00	88.50	179.49	11,443.79	-4,313.81	-687.98	4,307.51	0.00	0.00	0.00
15,500.00	88.50	179.49	11,446.40	-4,413.77	-687.09	4,407.48	0.00	0.00	0.00
15,600.00	88.50	179.49	11,449.02	-4,513.73	-686.20	4,507.44	0.00	0.00	0.00
15,700.00	88.50	179.49	11,451.64	-4,613.69	-685.31	4,607.41	0.00	0.00	0.00
15,800.00	88.50	179.49	11,454.26	-4,713.65	-684.42	4,707.37	0.00	0.00	0.00
15,900.00	88.50	179.49	11,456.87	-4,813.61	-683.53	4,807.34	0.00	0.00	0.00
16,000.00	88.50	179.49	11,459.49	-4,913.58	-682.64	4,907.31	0.00	0.00	0.00
16,100.00	88.50	179.49	11,462.11	-5,013.54	-681.75	5,007.27	0.00	0.00	0.00
16,200.00	88.50	179.49	11,464.73	-5,113.50	-680.86	5,107.24	0.00	0.00	0.00
16,300.00	88.50	179.49	11,467.34	-5,213.46	-679.97	5,207.20	0.00	0.00	0.00
16,400.00	88.50	179.49	11,469.96	-5,313.42	-679.09	5,307.17	0.00	0.00	0.00
16,500.00	88.50	179.49	11,472.58	-5,413.39	-678.20	5,407.13	0.00	0.00	0.00
16,600.00	88.50	179.49	11,475.20	-5,513.35	-677.31	5,507.10	0.00	0.00	0.00
16,700.00	88.50	179.49	11,477.81	-5,613.31	-676.42	5,607.07	0.00	0.00	0.00
16,800.00	88.50	179.49	11,480.43	-5,713.27	-675.53	5,707.03	0.00	0.00	0.00
16,900.00	88.50	179.49	11,483.05	-5,813.23	-674.64	5,807.00	0.00	0.00	0.00
17,000.00	88.50	179.49	11,485.67	-5,913.19	-673.75	5,906.96	0.00	0.00	0.00
17,100.00	88.50	179.49	11,488.29	-6,013.16	-672.86	6,006.93	0.00	0.00	0.00
17,200.00	88.50	179.49	11,490.90	-6,113.12	-671.97	6,106.89	0.00	0.00	0.00

Scientific Drilling Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,300.00	88.50	179.49	11,493.52	-6,213.08	-671.08	6,206.86	0.00	0.00	0.00
17,400.00	88.50	179.49	11,496.14	-6,313.04	-670.19	6,306.83	0.00	0.00	0.00
17,500.00	88.50	179.49	11,498.76	-6,413.00	-669.30	6,406.79	0.00	0.00	0.00
17,600.00	88.50	179.49	11,501.37	-6,512.96	-668.41	6,506.76	0.00	0.00	0.00
17,700.00	88.50	179.49	11,503.99	-6,612.93	-667.52	6,606.72	0.00	0.00	0.00
17,800.00	88.50	179.49	11,506.61	-6,712.89	-666.63	6,706.69	0.00	0.00	0.00
17,900.00	88.50	179.49	11,509.23	-6,812.85	-665.74	6,806.65	0.00	0.00	0.00
18,000.00	88.50	179.49	11,511.84	-6,912.81	-664.85	6,906.62	0.00	0.00	0.00
18,100.00	88.50	179.49	11,514.46	-7,012.77	-663.96	7,006.59	0.00	0.00	0.00
18,200.00	88.50	179.49	11,517.08	-7,112.74	-663.07	7,106.55	0.00	0.00	0.00
18,300.00	88.50	179.49	11,519.70	-7,212.70	-662.18	7,206.52	0.00	0.00	0.00
18,400.00	88.50	179.49	11,522.31	-7,312.66	-661.29	7,306.48	0.00	0.00	0.00
18,500.00	88.50	179.49	11,524.93	-7,412.62	-660.40	7,406.45	0.00	0.00	0.00
18,600.00	88.50	179.49	11,527.55	-7,512.58	-659.51	7,506.41	0.00	0.00	0.00
18,700.00	88.50	179.49	11,530.17	-7,612.54	-658.62	7,606.38	0.00	0.00	0.00
18,800.00	88.50	179.49	11,532.78	-7,712.51	-657.73	7,706.35	0.00	0.00	0.00
18,900.00	88.50	179.49	11,535.40	-7,812.47	-656.84	7,806.31	0.00	0.00	0.00
19,000.00	88.50	179.49	11,538.02	-7,912.43	-655.95	7,906.28	0.00	0.00	0.00
19,100.00	88.50	179.49	11,540.64	-8,012.39	-655.06	8,006.24	0.00	0.00	0.00
19,200.00	88.50	179.49	11,543.25	-8,112.35	-654.17	8,106.21	0.00	0.00	0.00
19,300.00	88.50	179.49	11,545.87	-8,212.31	-653.28	8,206.17	0.00	0.00	0.00
19,400.00	88.50	179.49	11,548.49	-8,312.28	-652.39	8,306.14	0.00	0.00	0.00
19,500.00	88.50	179.49	11,551.11	-8,412.24	-651.50	8,406.11	0.00	0.00	0.00
19,600.00	88.50	179.49	11,553.73	-8,512.20	-650.61	8,506.07	0.00	0.00	0.00
19,700.00	88.50	179.49	11,556.34	-8,612.16	-649.72	8,606.04	0.00	0.00	0.00
19,800.00	88.50	179.49	11,558.96	-8,712.12	-648.83	8,706.00	0.00	0.00	0.00
19,900.00	88.50	179.49	11,561.58	-8,812.09	-647.94	8,805.97	0.00	0.00	0.00
20,000.00	88.50	179.49	11,564.20	-8,912.05	-647.05	8,905.93	0.00	0.00	0.00
20,100.00	88.50	179.49	11,566.81	-9,012.01	-646.16	9,005.90	0.00	0.00	0.00
20,200.00	88.50	179.49	11,569.43	-9,111.97	-645.27	9,105.87	0.00	0.00	0.00
20,300.00	88.50	179.49	11,572.05	-9,211.93	-644.38	9,205.83	0.00	0.00	0.00
20,400.00	88.50	179.49	11,574.67	-9,311.89	-643.49	9,305.80	0.00	0.00	0.00
20,500.00	88.50	179.49	11,577.28	-9,411.86	-642.60	9,405.76	0.00	0.00	0.00
20,600.00	88.50	179.49	11,579.90	-9,511.82	-641.71	9,505.73	0.00	0.00	0.00
20,700.00	88.50	179.49	11,582.52	-9,611.78	-640.82	9,605.70	0.00	0.00	0.00
20,800.00	88.50	179.49	11,585.14	-9,711.74	-639.93	9,705.66	0.00	0.00	0.00
20,900.00	88.50	179.49	11,587.75	-9,811.70	-639.04	9,805.63	0.00	0.00	0.00
21,000.00	88.50	179.49	11,590.37	-9,911.67	-638.15	9,905.59	0.00	0.00	0.00
21,100.00	88.50	179.49	11,592.99	-10,011.63	-637.26	10,005.56	0.00	0.00	0.00
21,200.00	88.50	179.49	11,595.61	-10,111.59	-636.37	10,105.52	0.00	0.00	0.00
21,300.00	88.50	179.49	11,598.22	-10,211.55	-635.48	10,205.49	0.00	0.00	0.00
21,400.00	88.50	179.49	11,600.84	-10,311.51	-634.60	10,305.46	0.00	0.00	0.00
21,500.00	88.50	179.49	11,603.46	-10,411.47	-633.71	10,405.42	0.00	0.00	0.00
21,600.00	88.50	179.49	11,606.08	-10,511.44	-632.82	10,505.39	0.00	0.00	0.00
21,700.00	88.50	179.49	11,608.69	-10,611.40	-631.93	10,605.35	0.00	0.00	0.00
21,800.00	88.50	179.49	11,611.31	-10,711.36	-631.04	10,705.32	0.00	0.00	0.00
21,900.00	88.50	179.49	11,613.93	-10,811.32	-630.15	10,805.28	0.00	0.00	0.00
22,000.00	88.50	179.49	11,616.55	-10,911.28	-629.26	10,905.25	0.00	0.00	0.00
22,052.76	88.50	179.49	11,617.93	-10,964.02	-628.79	10,957.99	0.00	0.00	0.00
Start 98.04 hold at 22052.76 MD - LTP - Pegasus 16 ST 353H									
22,100.00	88.50	179.49	11,619.17	-11,011.24	-628.37	11,005.22	0.00	0.00	0.00
22,150.80	88.50	179.49	11,620.49	-11,062.02	-627.91	11,055.99	0.00	0.00	0.00
TD at 22150.80 - BHL - Pegasus 16 ST 353H									

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
SHL - Pegasus 16 ST	0.00	0.00	0.00	0.00	0.00	479,041.00	839,868.00	32.3132570	-103.3670145
- plan hits target center									
- Point									
KOP - Pegasus 16 ST	0.00	0.00	11,335.20	-505.00	-721.00	478,536.00	839,147.00	32.3118869	-103.3693628
- plan misses target center by 0.89ft at 11689.00ft MD (11335.20 TVD, -505.01 N, -721.89 E)									
- Point									
FTP - Pegasus 16 ST	0.00	0.00	11,346.67	-605.00	-721.00	478,436.00	839,147.00	32.3116120	-103.3693657
- plan misses target center by 0.01ft at 11689.78ft MD (11346.67 TVD, -605.00 N, -721.00 E)									
- Point									
LTP - Pegasus 16 ST	0.00	0.00	11,617.93	-10,964.02	-629.00	468,077.00	839,239.00	32.2831382	-103.3693693
- plan misses target center by 0.21ft at 22052.76ft MD (11617.93 TVD, -10964.02 N, -628.79 E)									
- Point									
BHL - Pegasus 16 ST	0.00	0.00	11,620.49	-11,062.02	-628.00	467,979.00	839,240.00	32.2828688	-103.3693689
- plan misses target center by 0.09ft at 22150.80ft MD (11620.49 TVD, -11062.02 N, -627.91 E)									
- Point									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(in)	(in)
	1,750.00	1,750.00	13 3/8"	13.375	17.500
	5,748.91	5,735.89	9 5/8"	9.625	12.250

Formations						
	Measured Depth	Vertical Depth			Dip	Dip Direction
	(ft)	(ft)	Name	Lithology	(°)	(°)
	1,764.00	1,764.00	Rustler		1.50	179.49
	2,227.14	2,227.01	Salado		1.50	179.49
	4,098.18	4,091.24	Yates		1.50	179.49
	5,745.46	5,732.45	Del Marker		1.50	179.49
	6,146.99	6,132.50	Cherry Canyon		1.50	179.49
	7,632.66	7,612.69	Brushy Canyon		1.50	179.49
	8,954.70	8,929.85	Avalon		1.50	179.49
	9,205.66	9,179.88	Bone Spring		1.50	179.49
	9,928.42	9,899.97	BS1		1.50	179.49
	10,450.41	10,420.04	BS 2		1.50	179.49
	11,251.03	11,176.39	BS3 Upper target top		1.50	179.49
	11,443.85	11,288.47	BS 3		1.50	179.49

Scientific Drilling

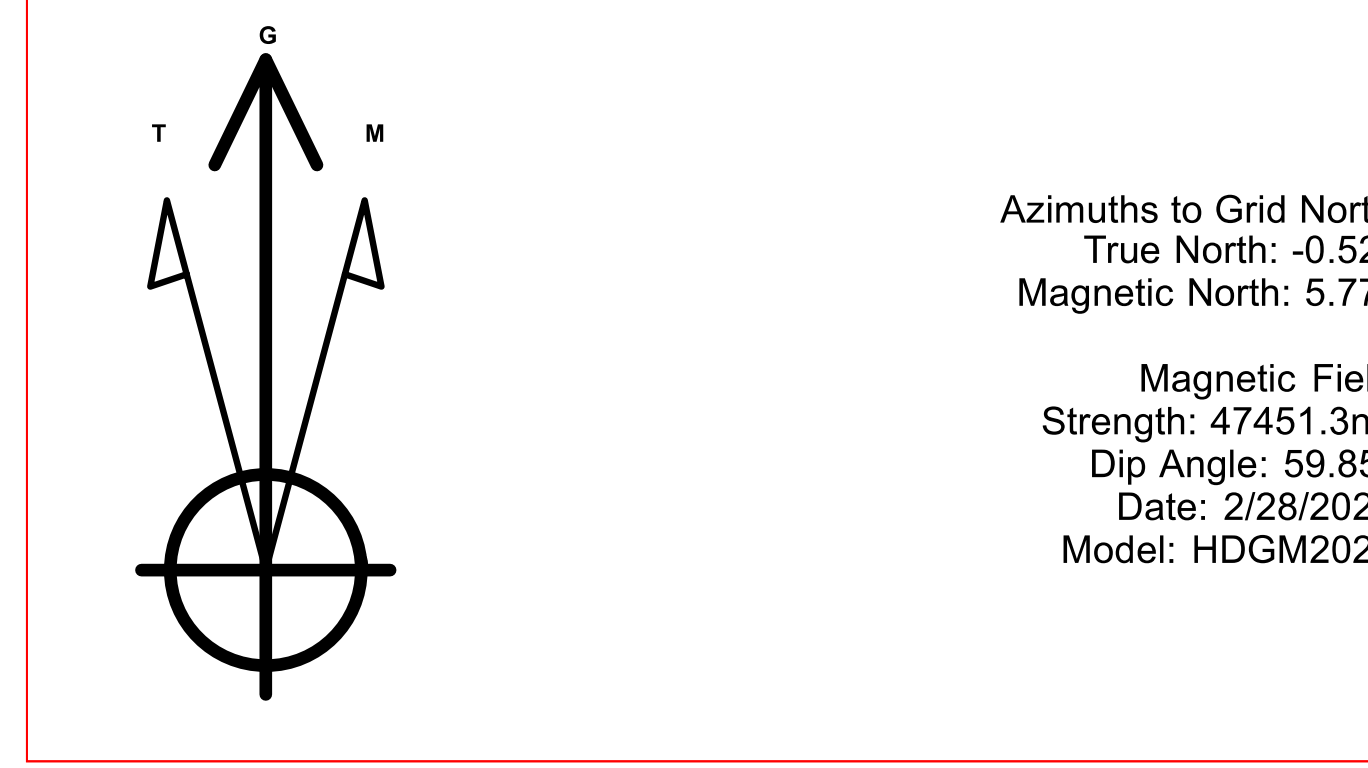
Planning Report

Database:	Midland	Local Co-ordinate Reference:	Well PEGASUS UNIT STATE COM 353H
Company:	Marlin Operating	TVD Reference:	3485 GL 30 KB EST @ 3515.00ft
Project:	Lea County, NM (NAD83 NME)	MD Reference:	3485 GL 30 KB EST @ 3515.00ft
Site:	Pegasus 16 State	North Reference:	Grid
Well:	PEGASUS UNIT STATE COM 353H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,000.00	2,000.00	0.00	0.00	Start DLS 1.50 TFO 266.29
2,328.22	2,327.81	-0.91	-14.06	Start 8148.34 hold at 2328.22 MD
10,476.56	10,446.09	-46.15	-711.90	Start Drop -1.50
10,804.77	10,773.90	-47.06	-725.96	Start Build 10.00
11,689.78	11,346.67	-605.00	-721.00	Start 10362.98 hold at 11689.78 MD
22,052.76	11,617.93	-10,964.02	-628.79	Start 98.04 hold at 22052.76 MD
22,150.80	11,620.49	-11,062.02	-627.91	TD at 22150.80



PEGASUS UNIT STATE COM 353H
Lea County, NM (NAD83 NME)
Northing: 479041.00
Easting: 839868.00
Plan 3



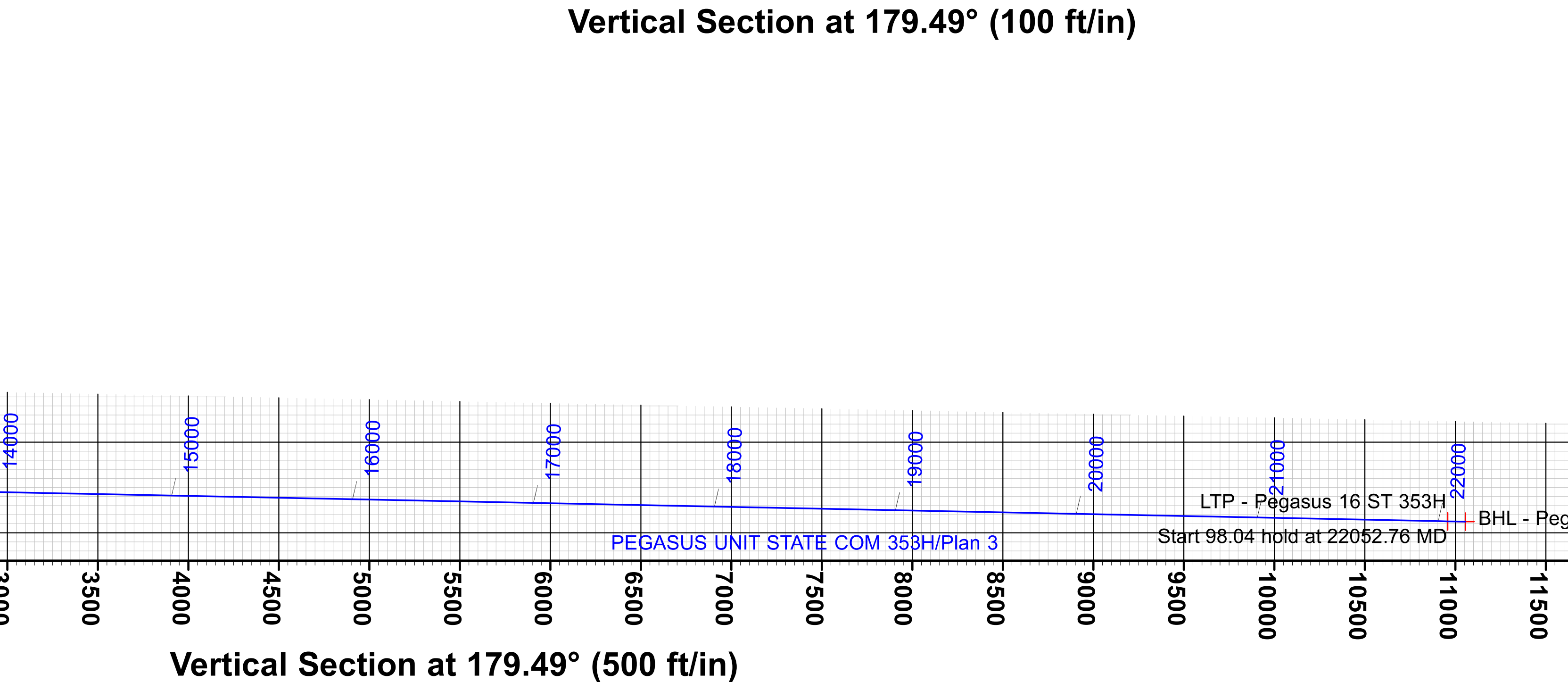
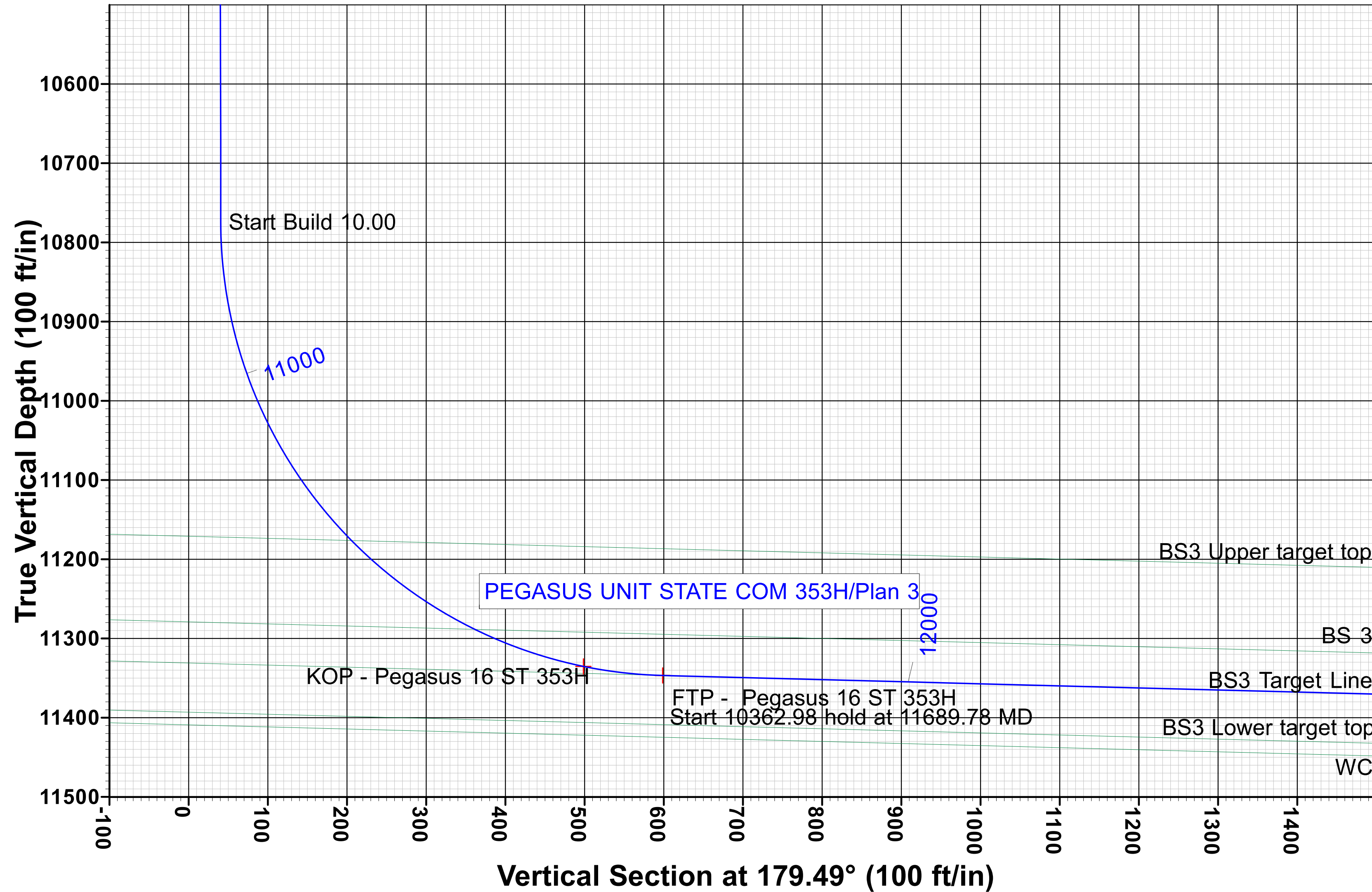
Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone
Local Origin: Well PEGASUS UNIT STATE COM 353H, Grid North
Latitude: 32.3132570
Longitude: -103.3670145
Grid East: 839868.00
Grid North: 479041.00
Scale Factor: 1.000
Geomagnetic Model: HDGM2024
Sample Date: 28-Feb-24
Magnetic Declination: 6.28°
Dip Angle from Horizontal: 59.85°
Magnetic Field Strength: 47451.3000000nT
To convert a Magnetic Direction to a Grid Direction, Add 5.77°
To convert a Magnetic Direction to a True Direction, Add 6.28° East
To convert a True Direction to a Grid Direction, Subtract 0.52°

PROJECT DETAILS: Lea County, NM (NAD83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

3485 GL 30 KB EST @ 3515.00ft
Gr@ 3485.00



WELL DETAILS PEGASUS UNIT STATE COM 353H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	479041.00	839868.00	32.3132570	-103.3670145

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	V/Sect	Departure	Annotation	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	Start DLS 1.50 TFO 266.29	
2328.22	4.92	266.29	2327.81	-0.91	-14.06	0.79	14.09	Start 8148.34 hold at 2328.22 MD	
10476.56	4.92	266.29	10446.09	-46.15	-711.90	39.81	713.39	Start Drop -1.50	
10804.77	0.00	0.00	10773.90	-47.06	-725.96	40.60	727.49	Start Build 10.00	
11689.78	88.50	179.49	11346.67	-605.00	-721.00	598.56	1285.45	Start 10362.98 hold at 11689.78 MD	
22052.76	88.50	179.49	11617.93	-10964.02	-628.79	10957.99	11644.88	Start 98.04 hold at 22052.76 MD	
22150.80	88.50	179.49	11620.49	-11062.02	-627.91	11055.99	11742.88	TD at 22150.80	
All lease line calls are estimates only									

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
2328.22	4.92	266.29	2327.81	-0.91	-14.06	1.50	266.29	0.79	
10476.56	4.92	266.29	10446.09	-46.15	-711.90	0.00	0.00	39.81	
10804.77	0.00	0.00	10773.90	-47.06	-725.96	1.50	180.00	40.60	
11689.78	88.50	179.49	11346.67	-605.00	-721.00	10.00	179.49	598.56	
22052.76	88.50	179.49	11617.93	-10964.02	-628.79	0.00	0.00	10957.99	
22150.80	88.50	179.49	11620.49	-11062.02	-627.91	0.00	0.00	11055.99	

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	DipAngle DipDir
1764.00	1764.00	Rustler	1.50 179.49
2227.01	2227.14	Salado	1.50 179.49
4091.24	4098.18	Yates	1.50 179.49
5732.45	5745.46	Del Marker	1.50 179.49
6132.50	6146.99	Cherry Canyon	1.50 179.49
7612.69	7632.66	Brushy Canyon	1.50 179.49
8929.85	8954.70	Avalon	1.50 179.49
9179.88	9205.66	Bone Spring	1.50 179.49
9899.97	9928.42	BS1	1.50 179.49
10420.04	10450.41	BS 2	1.50 179.49
11176.39	11251.03	BS Upper target top	1.50 179.49
11288.47	11443.85	BS 3	1.50 179.49

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL - Pegasus 16 ST 353H	0.00	0.00	0.00	479041.00	839868.00
KOP - Pegasus 16 ST 353H	11335.20	-505.00	-721.00	478536.00	839147.00
FTP - Pegasus 16 ST 353H	11346.67	-605.00	-721.00	478436.00	839147.00
LTP - Pegasus 16 ST 353H	11617.93	-10964.02	-628.79	468077.00	839239.00
BHL - Pegasus 16 ST 353H	11620.49	-11062.02	-628.00	467979.00	839240.00

