

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 343996

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

1. Operator Name and Address MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241		2. OGRID Number 14744
		3. API Number 30-015-53960
4. Property Code 334301	5. Property Name Casamigos 2 State Com	6. Well No. 578H

7. Surface Location

UL - Lot O	Section 2	Township 26S	Range 29E	Lot Idn O	Feet From 400	N/S Line S	Feet From 2220	E/W Line E	County Eddy
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	-------------------	---------------	----------------

8. Proposed Bottom Hole Location

UL - Lot A	Section 2	Township 26S	Range 29E	Lot Idn A	Feet From 100	N/S Line N	Feet From 440	E/W Line E	County Eddy
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	----------------

9. Pool Information

CORRAL CANYON;BONE SPRING, SOUTH	13354
----------------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3036
16. Multiple N	17. Proposed Depth 14865	18. Formation 1st Bone Spring Sand	19. Contractor	20. Spud Date 7/29/2023
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	48	600	470	0
Int1	12.25	9.625	36	3453	0	0
Int1	12.25	9.62	40	4300	870	0
Prod	8.75	7	26	9180	720	0
Liner1	6.125	4.5	13.5	14865	380	8980

Casing/Cement Program: Additional Comments

MOC proposed to drill & test the Bone Springs formation. H2S rule 118 does not apply because MOC has researched the area & no high concentrations were found. Will have on location & working all H2S safety equipment before Yates formation for safety & insurance purposes. Will stimulate as needed for production.

22. Proposed Blowout Prevention Program

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

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.

OIL CONSERVATION DIVISION

Signature:

Printed Name: Electronically filed by Monty Whetstone

Title: Vice President Operations

Email Address: fking@mewbourne.com

Date: 7/7/2023

Phone: 903-561-2900

Approved By: Ward Rikala

Title:

Approved Date: 7/10/2023

Expiration Date: 7/10/2025

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53960	² Pool Code 13354	³ Pool Name CORRAL CANYON; BONE SPRING SOUTH
⁴ Property Code 334301	⁵ Property Name CASAMIGOS 2 STATE COM	⁶ Well Number 578H
⁷ GRID NO. 14744	⁸ Operator Name MEWBOURNE OIL COMPANY	⁹ Elevation 3036'

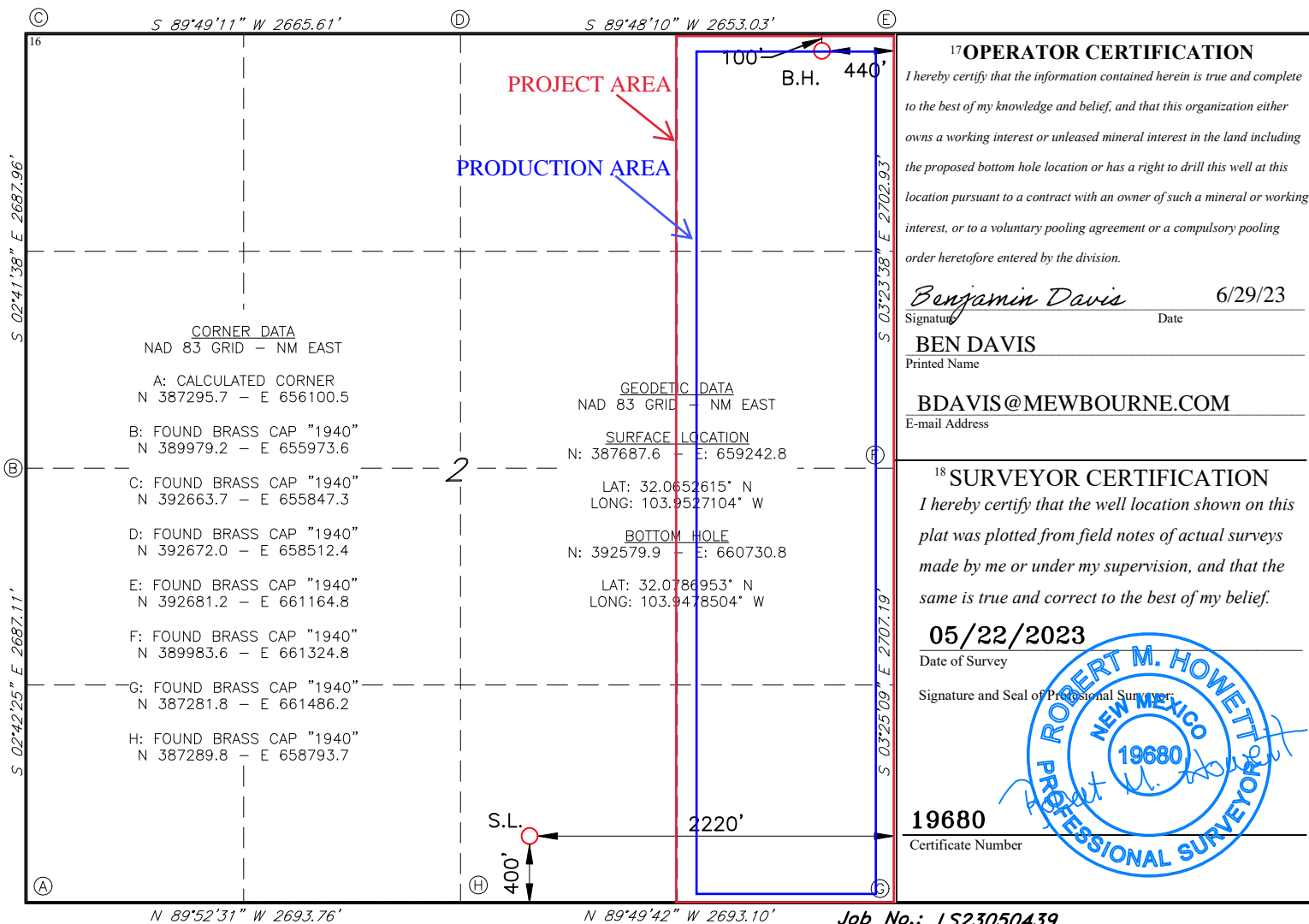
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
0	2	26S	29E		400	SOUTH	2220	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	2	26S	29E		100	NORTH	440	EAST	EDDY
¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



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 APD Conditions

Permit 343996

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MEWBOURNE OIL CO [14744] P.O. Box 5270 Hobbs, NM 88241	API Number: 30-015-53960
	Well: Casamigos 2 State Com #578H

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

Page 5

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

I. Operator: Mewbourne Oil Co. **OGRID:** 14744 **Date:** 5/2/22

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
CASAMIGOS 2 STATE COM 578H		O 2 26S 29E	400' FSL x 2220' FBL	1500	3500	4000

IV. Central Delivery Point Name: CASAMIGOS 2 STATE COM 578H [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
CASAMIGOS 2 STATE COM 578H		7/2/22	8/2/22	9/2/22	9/17/22	9/17/22

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.

Page 8

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

Signature:	<i>Bradley Bishop</i>
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	5/2/22
Phone:	575-393-5905
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Mewbourne Oil Company (MOC) will take following actions to comply with the regulations listed in 19.15.27.8 :
- A. MOC will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. MOC will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
 - B. All drilling operations will be equipped with a rig flare located at least 100 ft from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flow will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, MOC will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. MOC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(1) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. MOC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs in order to minimize the waste. Production storage tanks constructed after May 25, 2021 will be equipped with automatic gauging system. Flares constructed after May 25, 2021 will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. MOC 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. MOC will install equipment to measure

the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021 that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, MOC 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. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production and compression equipment the associated producing wells will be shut in to eliminate venting. For maintenance of VRUs all gas normally routed to the VRU will be routed to flare to eliminate venting.

Mewbourne Oil Company, Casamigos 2 State Com578H**Sec 02, T26S, R29E****SHL: 400' FSL & 2220' FEL (Sec 2)****BHL: 100' FNL & 440' FEL (Sec 2)**

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Casamigos 2 State Com	578H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	2	26S	29E	-	10'	FSL	440'	FEL	Eddy
Latitude					Longitude			NAD	
32.0641595					-103.9468980			83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	2	26S	29E	-	100'	FSL	440'	FEL	Eddy
Latitude					Longitude			NAD	
32.064407					-103.9469142			83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	2	26S	29E	-	100'	FNL	440'	FEL	Eddy
Latitude					Longitude			NAD	
32.0786953					-103.9478504			83	

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

Y

Is this well an infill well?

N

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

API #

Operator Name:	Property Name:	Well Number

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Casamigos 2 State Com #578H

Sec 02, T26S, R29E

SHL: 400' FSL & 2220' FEL (Sec 2)

BHL: 100' FNL & 440' FEL (Sec 2)

Plan: Design #1

Standard Planning Report

23 June, 2023

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Casamigos 2 State Com #578H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3064.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3064.0usft (Original Well Elev)
Site:	Casamigos 2 State Com #578H	North Reference:	Grid
Well:	Sec 02, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 440' FEL (Sec 2)		
Design:	Design #1		

Project	Eddy County, New Mexico NAD 83		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Casamigos 2 State Com #578H			
Site Position:		Northing:		387,687.60 usft	
From:		Easting:		659,242.80 usft	
Position Uncertainty:		Slot Radius:		13-3/16 "	
Map				Latitude: 32.0652615	
				Longitude: -103.9527104	
0.0 usft					

Well	Sec 02, T26S, R29E					
Well Position	+N/-S	0.0 usft	Northing:	387,687.60 usft	Latitude:	32.0652615
	+E/-W	0.0 usft	Easting:	659,242.80 usft	Longitude:	-103.9527104
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,064.0 usft	Ground Level:	3,036.0 usft
Grid Convergence:		0.20 °				

Wellbore	BHL: 100' FNL & 440' FEL (Sec 2)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.31	59.89	48,103.28957723

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	16.92

Plan Survey Tool Program	Date	6/23/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	14,864.8	Design #1 (BHL: 100' FNL & 440'	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
650.0	0.00	0.00	650.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,323.0	13.46	102.35	1,316.8	-16.8	76.9	2.00	2.00	0.00	102.35	
8,571.4	13.46	102.35	8,366.2	-377.7	1,725.1	0.00	0.00	0.00	0.00	
9,244.5	0.00	0.00	9,033.0	-394.5	1,801.9	2.00	-2.00	0.00	180.00	KOP: 10' FSL & 440' F
10,136.7	90.00	356.60	9,601.0	172.5	1,768.3	10.09	10.09	0.00	-3.40	
14,864.8	90.00	356.60	9,601.0	4,892.3	1,488.0	0.00	0.00	0.00	0.00	BHL: 100' FNL & 440'

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Casamigos 2 State Com #578H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3064.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3064.0usft (Original Well Elev)
Site:	Casamigos 2 State Com #578H	North Reference:	Grid
Well:	Sec 02, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 440' FEL (Sec 2)		
Design:	Design #1		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 400' FSL & 2220' FEL (Sec 2)									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
650.0	0.00	0.00	650.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.00	102.35	700.0	-0.1	0.4	0.0	2.00	2.00	0.00
800.0	3.00	102.35	799.9	-0.8	3.8	0.3	2.00	2.00	0.00
900.0	5.00	102.35	899.7	-2.3	10.6	0.9	2.00	2.00	0.00
1,000.0	7.00	102.35	999.1	-4.6	20.9	1.7	2.00	2.00	0.00
1,100.0	9.00	102.35	1,098.2	-7.5	34.5	2.8	2.00	2.00	0.00
1,200.0	11.00	102.35	1,196.6	-11.3	51.4	4.2	2.00	2.00	0.00
1,300.0	13.00	102.35	1,294.4	-15.7	71.7	5.8	2.00	2.00	0.00
1,323.0	13.46	102.35	1,316.8	-16.8	76.9	6.3	2.00	2.00	0.00
1,400.0	13.46	102.35	1,391.7	-20.7	94.4	7.7	0.00	0.00	0.00
1,500.0	13.46	102.35	1,489.0	-25.6	117.1	9.5	0.00	0.00	0.00
1,600.0	13.46	102.35	1,586.2	-30.6	139.9	11.4	0.00	0.00	0.00
1,700.0	13.46	102.35	1,683.5	-35.6	162.6	13.3	0.00	0.00	0.00
1,800.0	13.46	102.35	1,780.7	-40.6	185.3	15.1	0.00	0.00	0.00
1,900.0	13.46	102.35	1,878.0	-45.6	208.1	17.0	0.00	0.00	0.00
2,000.0	13.46	102.35	1,975.2	-50.5	230.8	18.8	0.00	0.00	0.00
2,100.0	13.46	102.35	2,072.5	-55.5	253.5	20.7	0.00	0.00	0.00
2,200.0	13.46	102.35	2,169.7	-60.5	276.3	22.5	0.00	0.00	0.00
2,300.0	13.46	102.35	2,267.0	-65.5	299.0	24.4	0.00	0.00	0.00
2,400.0	13.46	102.35	2,364.2	-70.4	321.8	26.2	0.00	0.00	0.00
2,500.0	13.46	102.35	2,461.5	-75.4	344.5	28.1	0.00	0.00	0.00
2,600.0	13.46	102.35	2,558.7	-80.4	367.2	29.9	0.00	0.00	0.00
2,700.0	13.46	102.35	2,656.0	-85.4	390.0	31.8	0.00	0.00	0.00
2,800.0	13.46	102.35	2,753.3	-90.4	412.7	33.7	0.00	0.00	0.00
2,900.0	13.46	102.35	2,850.5	-95.3	435.5	35.5	0.00	0.00	0.00
3,000.0	13.46	102.35	2,947.8	-100.3	458.2	37.4	0.00	0.00	0.00
3,100.0	13.46	102.35	3,045.0	-105.3	480.9	39.2	0.00	0.00	0.00
3,200.0	13.46	102.35	3,142.3	-110.3	503.7	41.1	0.00	0.00	0.00
3,300.0	13.46	102.35	3,239.5	-115.2	526.4	42.9	0.00	0.00	0.00
3,400.0	13.46	102.35	3,336.8	-120.2	549.2	44.8	0.00	0.00	0.00
3,500.0	13.46	102.35	3,434.0	-125.2	571.9	46.6	0.00	0.00	0.00
3,600.0	13.46	102.35	3,531.3	-130.2	594.6	48.5	0.00	0.00	0.00
3,700.0	13.46	102.35	3,628.5	-135.2	617.4	50.3	0.00	0.00	0.00
3,800.0	13.46	102.35	3,725.8	-140.1	640.1	52.2	0.00	0.00	0.00
3,900.0	13.46	102.35	3,823.0	-145.1	662.8	54.0	0.00	0.00	0.00
4,000.0	13.46	102.35	3,920.3	-150.1	685.6	55.9	0.00	0.00	0.00
4,100.0	13.46	102.35	4,017.5	-155.1	708.3	57.8	0.00	0.00	0.00
4,200.0	13.46	102.35	4,114.8	-160.0	731.1	59.6	0.00	0.00	0.00
4,300.0	13.46	102.35	4,212.1	-165.0	753.8	61.5	0.00	0.00	0.00
4,400.0	13.46	102.35	4,309.3	-170.0	776.5	63.3	0.00	0.00	0.00
4,500.0	13.46	102.35	4,406.6	-175.0	799.3	65.2	0.00	0.00	0.00
4,600.0	13.46	102.35	4,503.8	-180.0	822.0	67.0	0.00	0.00	0.00
4,700.0	13.46	102.35	4,601.1	-184.9	844.8	68.9	0.00	0.00	0.00
4,800.0	13.46	102.35	4,698.3	-189.9	867.5	70.7	0.00	0.00	0.00
4,900.0	13.46	102.35	4,795.6	-194.9	890.2	72.6	0.00	0.00	0.00
5,000.0	13.46	102.35	4,892.8	-199.9	913.0	74.4	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Casamigos 2 State Com #578H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3064.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3064.0usft (Original Well Elev)
Site:	Casamigos 2 State Com #578H	North Reference:	Grid
Well:	Sec 02, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 440' FEL (Sec 2)		
Design:	Design #1		

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)	
5,100.0	13.46	102.35	4,990.1	-204.8	935.7	76.3	0.00	0.00	0.00	
5,200.0	13.46	102.35	5,087.3	-209.8	958.4	78.2	0.00	0.00	0.00	
5,300.0	13.46	102.35	5,184.6	-214.8	981.2	80.0	0.00	0.00	0.00	
5,400.0	13.46	102.35	5,281.8	-219.8	1,003.9	81.9	0.00	0.00	0.00	
5,500.0	13.46	102.35	5,379.1	-224.8	1,026.7	83.7	0.00	0.00	0.00	
5,600.0	13.46	102.35	5,476.3	-229.7	1,049.4	85.6	0.00	0.00	0.00	
5,700.0	13.46	102.35	5,573.6	-234.7	1,072.1	87.4	0.00	0.00	0.00	
5,800.0	13.46	102.35	5,670.8	-239.7	1,094.9	89.3	0.00	0.00	0.00	
5,900.0	13.46	102.35	5,768.1	-244.7	1,117.6	91.1	0.00	0.00	0.00	
6,000.0	13.46	102.35	5,865.4	-249.7	1,140.4	93.0	0.00	0.00	0.00	
6,100.0	13.46	102.35	5,962.6	-254.6	1,163.1	94.8	0.00	0.00	0.00	
6,200.0	13.46	102.35	6,059.9	-259.6	1,185.8	96.7	0.00	0.00	0.00	
6,300.0	13.46	102.35	6,157.1	-264.6	1,208.6	98.5	0.00	0.00	0.00	
6,400.0	13.46	102.35	6,254.4	-269.6	1,231.3	100.4	0.00	0.00	0.00	
6,500.0	13.46	102.35	6,351.6	-274.5	1,254.1	102.3	0.00	0.00	0.00	
6,600.0	13.46	102.35	6,448.9	-279.5	1,276.8	104.1	0.00	0.00	0.00	
6,700.0	13.46	102.35	6,546.1	-284.5	1,299.5	106.0	0.00	0.00	0.00	
6,800.0	13.46	102.35	6,643.4	-289.5	1,322.3	107.8	0.00	0.00	0.00	
6,900.0	13.46	102.35	6,740.6	-294.5	1,345.0	109.7	0.00	0.00	0.00	
7,000.0	13.46	102.35	6,837.9	-299.4	1,367.7	111.5	0.00	0.00	0.00	
7,100.0	13.46	102.35	6,935.1	-304.4	1,390.5	113.4	0.00	0.00	0.00	
7,200.0	13.46	102.35	7,032.4	-309.4	1,413.2	115.2	0.00	0.00	0.00	
7,300.0	13.46	102.35	7,129.6	-314.4	1,436.0	117.1	0.00	0.00	0.00	
7,400.0	13.46	102.35	7,226.9	-319.3	1,458.7	118.9	0.00	0.00	0.00	
7,500.0	13.46	102.35	7,324.2	-324.3	1,481.4	120.8	0.00	0.00	0.00	
7,600.0	13.46	102.35	7,421.4	-329.3	1,504.2	122.6	0.00	0.00	0.00	
7,700.0	13.46	102.35	7,518.7	-334.3	1,526.9	124.5	0.00	0.00	0.00	
7,800.0	13.46	102.35	7,615.9	-339.3	1,549.7	126.4	0.00	0.00	0.00	
7,900.0	13.46	102.35	7,713.2	-344.2	1,572.4	128.2	0.00	0.00	0.00	
8,000.0	13.46	102.35	7,810.4	-349.2	1,595.1	130.1	0.00	0.00	0.00	
8,100.0	13.46	102.35	7,907.7	-354.2	1,617.9	131.9	0.00	0.00	0.00	
8,200.0	13.46	102.35	8,004.9	-359.2	1,640.6	133.8	0.00	0.00	0.00	
8,300.0	13.46	102.35	8,102.2	-364.1	1,663.3	135.6	0.00	0.00	0.00	
8,400.0	13.46	102.35	8,199.4	-369.1	1,686.1	137.5	0.00	0.00	0.00	
8,500.0	13.46	102.35	8,296.7	-374.1	1,708.8	139.3	0.00	0.00	0.00	
8,571.4	13.46	102.35	8,366.2	-377.7	1,725.1	140.7	0.00	0.00	0.00	
8,600.0	12.89	102.35	8,394.0	-379.1	1,731.4	141.2	2.00	-2.00	0.00	
8,700.0	10.89	102.35	8,491.8	-383.5	1,751.6	142.8	2.00	-2.00	0.00	
8,800.0	8.89	102.35	8,590.3	-387.1	1,768.3	144.2	2.00	-2.00	0.00	
8,900.0	6.89	102.35	8,689.4	-390.1	1,781.7	145.3	2.00	-2.00	0.00	
9,000.0	4.89	102.35	8,788.8	-392.3	1,791.8	146.1	2.00	-2.00	0.00	
9,100.0	2.89	102.35	8,888.6	-393.7	1,798.4	146.6	2.00	-2.00	0.00	
9,200.0	0.89	102.35	8,988.5	-394.4	1,801.6	146.9	2.00	-2.00	0.00	
9,244.5	0.00	0.00	9,033.0	-394.5	1,801.9	146.9	2.00	-2.00	0.00	
KOP: 10' FSL & 440' FEL (Sec 2)										
9,250.0	0.56	356.60	9,038.5	-394.5	1,801.9	147.0	10.09	10.09	0.00	
9,300.0	5.60	356.60	9,088.5	-391.8	1,801.8	149.5	10.09	10.09	0.00	
9,350.0	10.65	356.60	9,137.9	-384.7	1,801.4	156.1	10.09	10.09	0.00	
9,400.0	15.69	356.60	9,186.6	-373.4	1,800.7	166.8	10.09	10.09	0.00	
9,450.0	20.73	356.60	9,234.1	-357.8	1,799.8	181.4	10.09	10.09	0.00	
9,500.0	25.78	356.60	9,280.0	-338.1	1,798.6	199.9	10.09	10.09	0.00	
9,550.0	30.82	356.60	9,324.0	-314.4	1,797.2	222.2	10.09	10.09	0.00	
9,568.9	32.73	356.60	9,340.1	-304.5	1,796.6	231.5	10.09	10.09	0.00	
FTP: 100' FSL & 440' FEL (Sec 2)										

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Casamigos 2 State Com #578H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3064.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3064.0usft (Original Well Elev)
Site:	Casamigos 2 State Com #578H	North Reference:	Grid
Well:	Sec 02, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 440' FEL (Sec 2)		
Design:	Design #1		

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)
9,600.0	35.87	356.60	9,365.8	-287.0	1,795.6	247.9	10.09	10.09	0.00
9,650.0	40.91	356.60	9,405.0	-256.0	1,793.7	277.0	10.09	10.09	0.00
9,700.0	45.95	356.60	9,441.3	-221.7	1,791.7	309.3	10.09	10.09	0.00
9,750.0	51.00	356.60	9,474.4	-184.3	1,789.5	344.3	10.09	10.09	0.00
9,800.0	56.04	356.60	9,504.1	-144.2	1,787.1	382.0	10.09	10.09	0.00
9,850.0	61.08	356.60	9,530.2	-101.7	1,784.6	422.0	10.09	10.09	0.00
9,900.0	66.13	356.60	9,552.4	-57.0	1,781.9	464.0	10.09	10.09	0.00
9,950.0	71.17	356.60	9,570.6	-10.5	1,779.1	507.7	10.09	10.09	0.00
10,000.0	76.21	356.60	9,584.6	37.4	1,776.3	552.7	10.09	10.09	0.00
10,050.0	81.26	356.60	9,594.4	86.3	1,773.4	598.6	10.09	10.09	0.00
10,097.7	86.07	356.60	9,599.7	133.6	1,770.6	643.0	10.09	10.09	0.00
LP: 583' FSL & 440' FEL (Sec 2)									
10,100.0	86.30	356.60	9,599.8	135.9	1,770.4	645.2	10.09	10.09	0.00
10,136.7	90.00	356.60	9,601.0	172.5	1,768.3	679.6	10.09	10.09	0.00
10,200.0	90.00	356.60	9,601.0	235.7	1,764.5	739.0	0.00	0.00	0.00
10,300.0	90.00	356.60	9,601.0	335.6	1,758.6	832.8	0.00	0.00	0.00
10,400.0	90.00	356.60	9,601.0	435.4	1,752.7	926.6	0.00	0.00	0.00
10,500.0	90.00	356.60	9,601.0	535.2	1,746.7	1,020.3	0.00	0.00	0.00
10,600.0	90.00	356.60	9,601.0	635.0	1,740.8	1,114.1	0.00	0.00	0.00
10,700.0	90.00	356.60	9,601.0	734.9	1,734.9	1,207.9	0.00	0.00	0.00
10,800.0	90.00	356.60	9,601.0	834.7	1,728.9	1,301.7	0.00	0.00	0.00
10,900.0	90.00	356.60	9,601.0	934.5	1,723.0	1,395.4	0.00	0.00	0.00
11,000.0	90.00	356.60	9,601.0	1,034.3	1,717.1	1,489.2	0.00	0.00	0.00
11,100.0	90.00	356.60	9,601.0	1,134.2	1,711.2	1,583.0	0.00	0.00	0.00
11,200.0	90.00	356.60	9,601.0	1,234.0	1,705.2	1,676.8	0.00	0.00	0.00
11,300.0	90.00	356.60	9,601.0	1,333.8	1,699.3	1,770.6	0.00	0.00	0.00
11,400.0	90.00	356.60	9,601.0	1,433.6	1,693.4	1,864.3	0.00	0.00	0.00
11,500.0	90.00	356.60	9,601.0	1,533.5	1,687.5	1,958.1	0.00	0.00	0.00
11,600.0	90.00	356.60	9,601.0	1,633.3	1,681.5	2,051.9	0.00	0.00	0.00
11,700.0	90.00	356.60	9,601.0	1,733.1	1,675.6	2,145.7	0.00	0.00	0.00
11,800.0	90.00	356.60	9,601.0	1,832.9	1,669.7	2,239.5	0.00	0.00	0.00
11,900.0	90.00	356.60	9,601.0	1,932.7	1,663.7	2,333.2	0.00	0.00	0.00
12,000.0	90.00	356.60	9,601.0	2,032.6	1,657.8	2,427.0	0.00	0.00	0.00
12,100.0	90.00	356.60	9,601.0	2,132.4	1,651.9	2,520.8	0.00	0.00	0.00
12,200.0	90.00	356.60	9,601.0	2,232.2	1,646.0	2,614.6	0.00	0.00	0.00
12,300.0	90.00	356.60	9,601.0	2,332.0	1,640.0	2,708.4	0.00	0.00	0.00
12,400.0	90.00	356.60	9,601.0	2,431.9	1,634.1	2,802.1	0.00	0.00	0.00
12,500.0	90.00	356.60	9,601.0	2,531.7	1,628.2	2,895.9	0.00	0.00	0.00
12,600.0	90.00	356.60	9,601.0	2,631.5	1,622.2	2,989.7	0.00	0.00	0.00
12,700.0	90.00	356.60	9,601.0	2,731.3	1,616.3	3,083.5	0.00	0.00	0.00
12,800.0	90.00	356.60	9,601.0	2,831.2	1,610.4	3,177.3	0.00	0.00	0.00
12,900.0	90.00	356.60	9,601.0	2,931.0	1,604.5	3,271.0	0.00	0.00	0.00
13,000.0	90.00	356.60	9,601.0	3,030.8	1,598.5	3,364.8	0.00	0.00	0.00
13,100.0	90.00	356.60	9,601.0	3,130.6	1,592.6	3,458.6	0.00	0.00	0.00
13,200.0	90.00	356.60	9,601.0	3,230.5	1,586.7	3,552.4	0.00	0.00	0.00
13,300.0	90.00	356.60	9,601.0	3,330.3	1,580.8	3,646.2	0.00	0.00	0.00
13,400.0	90.00	356.60	9,601.0	3,430.1	1,574.8	3,739.9	0.00	0.00	0.00
13,500.0	90.00	356.60	9,601.0	3,529.9	1,568.9	3,833.7	0.00	0.00	0.00
13,600.0	90.00	356.60	9,601.0	3,629.8	1,563.0	3,927.5	0.00	0.00	0.00
13,700.0	90.00	356.60	9,601.0	3,729.6	1,557.0	4,021.3	0.00	0.00	0.00
13,800.0	90.00	356.60	9,601.0	3,829.4	1,551.1	4,115.1	0.00	0.00	0.00
13,900.0	90.00	356.60	9,601.0	3,929.2	1,545.2	4,208.8	0.00	0.00	0.00
14,000.0	90.00	356.60	9,601.0	4,029.1	1,539.3	4,302.6	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Casamigos 2 State Com #578H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3064.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3064.0usft (Original Well Elev)
Site:	Casamigos 2 State Com #578H	North Reference:	Grid
Well:	Sec 02, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 440' FEL (Sec 2)		
Design:	Design #1		

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)	
14,100.0	90.00	356.60	9,601.0	4,128.9	1,533.3	4,396.4	0.00	0.00	0.00	
14,200.0	90.00	356.60	9,601.0	4,228.7	1,527.4	4,490.2	0.00	0.00	0.00	
14,300.0	90.00	356.60	9,601.0	4,328.5	1,521.5	4,583.9	0.00	0.00	0.00	
14,400.0	90.00	356.60	9,601.0	4,428.4	1,515.6	4,677.7	0.00	0.00	0.00	
14,500.0	90.00	356.60	9,601.0	4,528.2	1,509.6	4,771.5	0.00	0.00	0.00	
14,600.0	90.00	356.60	9,601.0	4,628.0	1,503.7	4,865.3	0.00	0.00	0.00	
14,700.0	90.00	356.60	9,601.0	4,727.8	1,497.8	4,959.1	0.00	0.00	0.00	
14,800.0	90.00	356.60	9,601.0	4,827.6	1,491.8	5,052.8	0.00	0.00	0.00	
14,864.8	90.00	356.60	9,601.0	4,892.3	1,488.0	5,113.6	0.00	0.00	0.00	
BHL: 100' FNL & 440' FEL (Sec 2)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
- hit/miss target										
- Shape										
SHL: 400' FSL & 2220' F	0.00	0.00	0.0	0.0	0.0	387,687.60	659,242.80	32.0652615		-103.9527104
- plan hits target center										
- Point										
KOP: 10' FSL & 440' FEL	0.00	0.00	9,033.0	-394.5	1,801.9	387,293.11	661,044.74	32.0641595		-103.9468980
- plan hits target center										
- Point										
FTP: 100' FSL & 440' FE	0.00	0.00	9,340.1	-304.5	1,796.6	387,383.13	661,039.40	32.0644070		-103.9469142
- plan hits target center										
- Point										
LP: 583' FSL & 440' FEL	0.00	0.00	9,599.7	133.6	1,770.6	387,821.21	661,013.39	32.0656115		-103.9469931
- plan hits target center										
- Point										
BHL: 100' FNL & 440' FE	0.00	0.00	9,601.0	4,892.3	1,488.0	392,579.90	660,730.80	32.0786955		-103.9478505
- plan hits target center										
- Point										