BLM-CARLSBAD FIELD OFFICE

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
SHL: NM094191 BHL:NM017435A

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
SDL Federal Com #1

2. Name of Operator
Marbob Energy Corporation

9. API Well No.

3a. Address
P.O. Box 227, Artesia, NM 88211-0227

3b. Phone No. *(include area code)*
575-748-3303

10. Field and Pool or Exploratory Area
Lusk; Bone Spring, North

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
Surf: 990' FNL & 330' FWL, BHL: 380' FNL & 1650' FEL
Section 31, T18S - R3E

11. Country or Parish, State
Lea County, New Mexico

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Change in location.
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Marbob Energy respectfully requests approval for the following location change:

From: SHL: 530' FNL & 330' FWL, BHL: 380' FNL & 1650' FEL
To: Surf: 990' FNL & 330' FWL, BHL: 380' FNL & 1650' FEL

See new well plan attached.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Nancy Agnew

Title Land Department

Signature Nancy Agnew

Date 08/21/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

AUG 19 2009

State of New Mexico
Energy, Minerals and Natural Resources Department

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PART

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	35118	Lusk; Bone Spring, North

Property Code	Property Name	Well Number
	SDL FEDERAL COM	1

OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	3673'

Surface Location

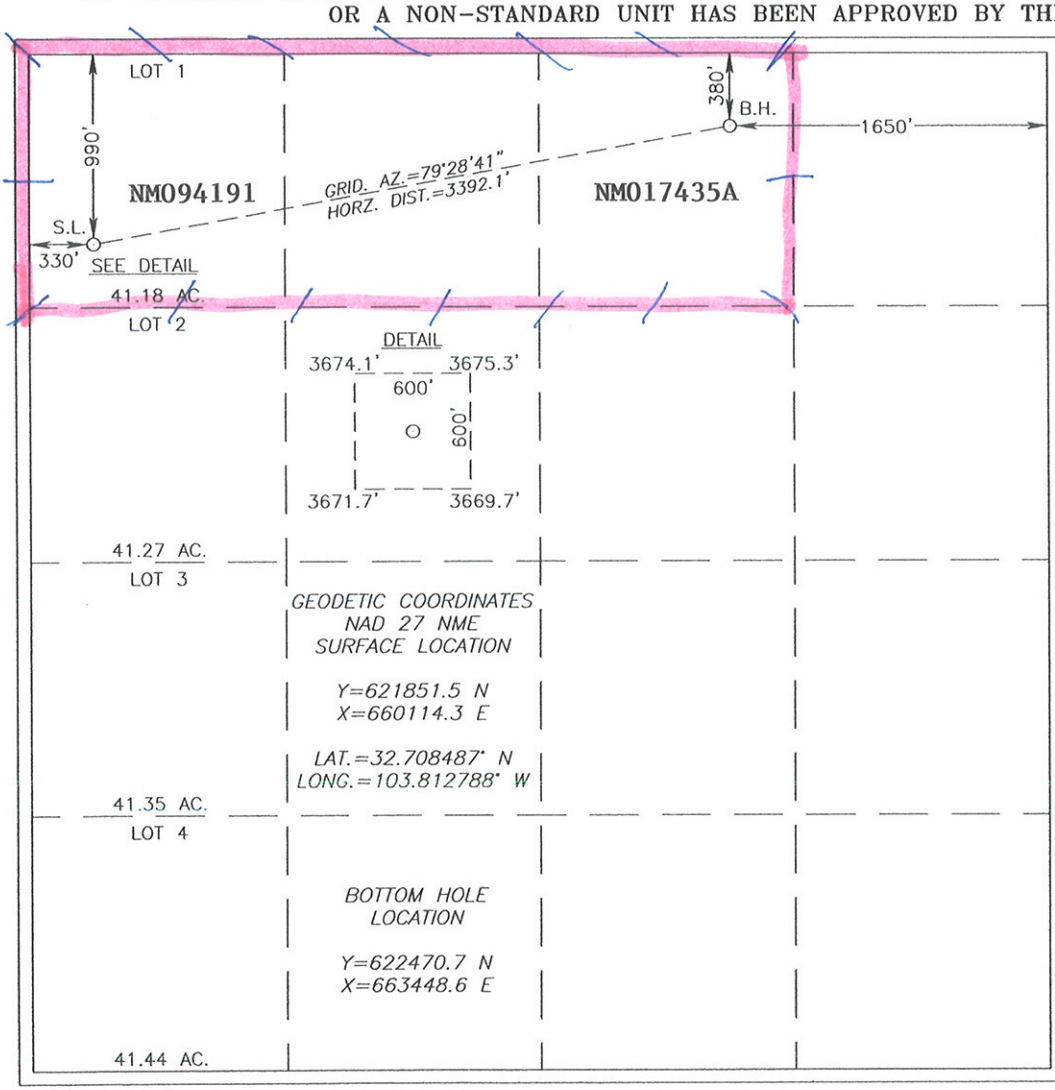
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	31	18-S	32-E		990	NORTH	330	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	31	18-S	32-E		380	NORTH	1650	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
120			

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



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nancy T. Agnew 8/21/09
Signature Date

Nancy T. Agnew
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

AUGUST 12, 2009
Date Surveyed LA

Signature & Seal of Professional Surveyor

Ronald J. Eidson 8-17-09

09.11.0718

Certificate No. GARY G. EIDSON 12641
RONALD J. EIDSON 3239

marbob
energy corporation
Artesia, N.M.

Marbob

Lea County
SDL Federal Com
#1H
OH

Plan: Plan #1

Bureau of Land Management
RECEIVED
SEP 02 2009
Carlsbad Field Office
Carlsbad, N.M.

Pathfinder X & Y Planning Report

31 August, 2009

PATHFINDER

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County	**TVD Reference:**	WELL @ 3688.00ft (Original Well Elev)
Site:	SDL Federal Com	**MD Reference:**	WELL @ 3688.00ft (Original Well Elev)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Project Lea County, New Mexico

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site SDL Federal Com

Site Position:		**Northing:**	621,851.500 ft	**Latitude:**	32° 42' 30.552 N
From:	Map	**Easting:**	660,114.300 ft	**Longitude:**	103° 48' 46.035 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.28 °

Well #1H

Well Position	**+N/-S**	0.00 ft	**Northing:**	621,851.500 ft	**Latitude:**	32° 42' 30.552 N
	+E/-W	0.00 ft	**Easting:**	660,114.300 ft	**Longitude:**	103° 48' 46.035 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,674.00 ft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	06/18/2009	7.96	60.66	49,135

Design Plan #1

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	79.48

Survey Tool Program **Date** 08/31/2009

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	11,473.36	Plan #1 (OH)	MWD	MWD - Standard

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Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
0.00	0.00	0.00	0.00	-3,688.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
100.00	0.00	0.00	100.00	-3,588.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
200.00	0.00	0.00	200.00	-3,488.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
300.00	0.00	0.00	300.00	-3,388.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
400.00	0.00	0.00	400.00	-3,288.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
500.00	0.00	0.00	500.00	-3,188.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
600.00	0.00	0.00	600.00	-3,088.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
700.00	0.00	0.00	700.00	-2,988.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
800.00	0.00	0.00	800.00	-2,888.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
900.00	0.00	0.00	900.00	-2,788.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,000.00	0.00	0.00	1,000.00	-2,688.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,100.00	0.00	0.00	1,100.00	-2,588.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,200.00	0.00	0.00	1,200.00	-2,488.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,300.00	0.00	0.00	1,300.00	-2,388.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,400.00	0.00	0.00	1,400.00	-2,288.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,500.00	0.00	0.00	1,500.00	-2,188.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,600.00	0.00	0.00	1,600.00	-2,088.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,700.00	0.00	0.00	1,700.00	-1,988.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,800.00	0.00	0.00	1,800.00	-1,888.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
1,900.00	0.00	0.00	1,900.00	-1,788.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,000.00	0.00	0.00	2,000.00	-1,688.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,100.00	0.00	0.00	2,100.00	-1,588.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,200.00	0.00	0.00	2,200.00	-1,488.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,300.00	0.00	0.00	2,300.00	-1,388.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,400.00	0.00	0.00	2,400.00	-1,288.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,500.00	0.00	0.00	2,500.00	-1,188.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,600.00	0.00	0.00	2,600.00	-1,088.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30

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2,700.00	0.00	0.00	2,700.00	-988.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,800.00	0.00	0.00	2,800.00	-888.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
2,900.00	0.00	0.00	2,900.00	-788.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,000.00	0.00	0.00	3,000.00	-688.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,100.00	0.00	0.00	3,100.00	-588.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,200.00	0.00	0.00	3,200.00	-488.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,300.00	0.00	0.00	3,300.00	-388.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,400.00	0.00	0.00	3,400.00	-288.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,500.00	0.00	0.00	3,500.00	-188.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,600.00	0.00	0.00	3,600.00	-88.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,700.00	0.00	0.00	3,700.00	12.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,800.00	0.00	0.00	3,800.00	112.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
3,900.00	0.00	0.00	3,900.00	212.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,000.00	0.00	0.00	4,000.00	312.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,100.00	0.00	0.00	4,100.00	412.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,200.00	0.00	0.00	4,200.00	512.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,300.00	0.00	0.00	4,300.00	612.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,400.00	0.00	0.00	4,400.00	712.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,500.00	0.00	0.00	4,500.00	812.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,600.00	0.00	0.00	4,600.00	912.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,700.00	0.00	0.00	4,700.00	1,012.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,800.00	0.00	0.00	4,800.00	1,112.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
4,900.00	0.00	0.00	4,900.00	1,212.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,000.00	0.00	0.00	5,000.00	1,312.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,100.00	0.00	0.00	5,100.00	1,412.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,200.00	0.00	0.00	5,200.00	1,512.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,300.00	0.00	0.00	5,300.00	1,612.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County	**TVD Reference:**	WELL @ 3688.00ft (Original Well Elev)
Site:	SDL Federal Com	**MD Reference:**	WELL @ 3688.00ft (Original Well Elev)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,400.00	0.00	0.00	5,400.00	1,712.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,500.00	0.00	0.00	5,500.00	1,812.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,600.00	0.00	0.00	5,600.00	1,912.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,700.00	0.00	0.00	5,700.00	2,012.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,800.00	0.00	0.00	5,800.00	2,112.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
5,900.00	0.00	0.00	5,900.00	2,212.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,000.00	0.00	0.00	6,000.00	2,312.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,100.00	0.00	0.00	6,100.00	2,412.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,200.00	0.00	0.00	6,200.00	2,512.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,300.00	0.00	0.00	6,300.00	2,612.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,400.00	0.00	0.00	6,400.00	2,712.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,500.00	0.00	0.00	6,500.00	2,812.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,600.00	0.00	0.00	6,600.00	2,912.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,700.00	0.00	0.00	6,700.00	3,012.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,800.00	0.00	0.00	6,800.00	3,112.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
6,900.00	0.00	0.00	6,900.00	3,212.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,000.00	0.00	0.00	7,000.00	3,312.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,100.00	0.00	0.00	7,100.00	3,412.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,200.00	0.00	0.00	7,200.00	3,512.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,300.00	0.00	0.00	7,300.00	3,612.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,400.00	0.00	0.00	7,400.00	3,712.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,500.00	0.00	0.00	7,500.00	3,812.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,600.00	0.00	0.00	7,600.00	3,912.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,700.00	0.00	0.00	7,700.00	4,012.00	0.00	0.00	0.00	0.00	621,851.50	660,114.30
7,809.50	0.00	0.00	7,809.50	4,121.50	0.00	0.00	0.00	0.00	621,851.50	660,114.30
KOP-7809.50'MD,0.00°INC,0.00°AZI										
7,825.00	1.86	79.48	7,825.00	4,137.00	0.05	0.25	0.25	12.00	621,851.55	660,114.55

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
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Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
7,850.00	4.86	79.48	7,849.95	4,161.95	0.31	1.69	1.72	12.00	621,851.81	660,115.99
7,875.00	7.86	79.48	7,874.79	4,186.79	0.82	4.41	4.49	12.00	621,852.32	660,118.71
7,900.00	10.86	79.48	7,899.46	4,211.46	1.56	8.41	8.55	12.00	621,853.06	660,122.71
7,925.00	13.86	79.48	7,923.88	4,235.88	2.54	13.67	13.90	12.00	621,854.04	660,127.97
7,950.00	16.86	79.48	7,947.98	4,259.98	3.75	20.18	20.52	12.00	621,855.25	660,134.48
7,975.00	19.86	79.48	7,971.71	4,283.71	5.18	27.92	28.39	12.00	621,856.68	660,142.22
8,000.00	22.86	79.48	7,994.99	4,306.99	6.85	36.87	37.50	12.00	621,858.35	660,151.17
8,025.00	25.86	79.48	8,017.76	4,329.76	8.73	47.01	47.81	12.00	621,860.23	660,161.31
8,050.00	28.86	79.48	8,039.96	4,351.96	10.83	58.30	59.30	12.00	621,862.33	660,172.60
8,075.00	31.86	79.48	8,061.53	4,373.53	13.13	70.72	71.93	12.00	621,864.63	660,185.02
8,100.00	34.86	79.48	8,082.41	4,394.41	15.64	84.23	85.67	12.00	621,867.14	660,198.53
8,125.00	37.86	79.48	8,102.54	4,414.54	18.35	98.80	100.49	12.00	621,869.85	660,213.10
8,150.00	40.86	79.48	8,121.87	4,433.87	21.24	114.39	116.35	12.00	621,872.74	660,228.69
8,175.00	43.86	79.48	8,140.34	4,452.34	24.32	130.95	133.19	12.00	621,875.82	660,245.25
8,200.00	46.86	79.48	8,157.90	4,469.90	27.57	148.43	150.97	12.00	621,879.07	660,262.73
8,225.00	49.86	79.48	8,174.52	4,486.52	30.98	166.80	169.65	12.00	621,882.48	660,281.10
8,250.00	52.86	79.48	8,190.13	4,502.13	34.54	186.00	189.18	12.00	621,886.04	660,300.30
8,275.00	55.86	79.48	8,204.69	4,516.69	38.25	205.97	209.49	12.00	621,889.75	660,320.27
8,300.00	58.86	79.48	8,218.18	4,530.18	42.09	226.66	230.54	12.00	621,893.59	660,340.96
8,325.00	61.86	79.48	8,230.54	4,542.54	46.06	248.02	252.26	12.00	621,897.56	660,362.32
8,350.00	64.86	79.48	8,241.75	4,553.75	50.14	269.99	274.61	12.00	621,901.64	660,384.29
8,375.00	67.86	79.48	8,251.78	4,563.78	54.32	292.50	297.51	12.00	621,905.82	660,406.80
8,400.00	70.85	79.48	8,260.59	4,572.59	58.59	315.50	320.90	12.00	621,910.09	660,429.80
8,425.00	73.85	79.48	8,268.17	4,580.17	62.94	338.92	344.72	12.00	621,914.44	660,453.22
8,450.00	76.85	79.48	8,274.49	4,586.49	67.36	362.70	368.90	12.00	621,918.86	660,477.00
8,475.00	79.85	79.48	8,279.53	4,591.53	71.83	386.77	393.39	12.00	621,923.33	660,501.07
8,500.00	82.85	79.48	8,283.29	4,595.29	76.34	411.07	418.10	12.00	621,927.84	660,525.37

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County	**TVD Reference:**	WELL @ 3688.00ft (Original Well Elev)
Site:	SDL Federal Com	**MD Reference:**	WELL @ 3688.00ft (Original Well Elev)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,525.00	85.85	79.48	8,285.75	4,597.75	80.88	435.53	442.97	12.00	621,932.38	660,549.83
8,550.00	88.85	79.48	8,286.90	4,598.90	85.44	460.08	467.95	12.00	621,936.94	660,574.38
8,559.56	90.00	79.48	8,287.00	4,599.00	87.18	469.47	477.50	12.00	621,938.68	660,583.77
EOC-8559.56'MD,90.00°INC,87.27°AZI,12.00°DLS, 477.50'VS, 22.74'N, 476.96'E										
8,600.00	90.00	79.48	8,287.00	4,599.00	94.57	509.24	517.94	0.00	621,946.07	660,623.54
8,700.00	90.00	79.48	8,287.00	4,599.00	112.83	607.56	617.94	0.00	621,964.33	660,721.86
8,800.00	90.00	79.48	8,287.00	4,599.00	131.09	705.88	717.94	0.00	621,982.59	660,820.18
8,900.00	90.00	79.48	8,287.00	4,599.00	149.34	804.20	817.94	0.00	622,000.84	660,918.50
9,000.00	90.00	79.48	8,287.00	4,599.00	167.60	902.51	917.94	0.00	622,019.10	661,016.81
9,100.00	90.00	79.48	8,287.00	4,599.00	185.86	1,000.83	1,017.94	0.00	622,037.36	661,115.13
9,200.00	90.00	79.48	8,287.00	4,599.00	204.12	1,099.15	1,117.94	0.00	622,055.62	661,213.45
9,300.00	90.00	79.48	8,287.00	4,599.00	222.38	1,197.47	1,217.94	0.00	622,073.88	661,311.77
9,400.00	90.00	79.48	8,287.00	4,599.00	240.64	1,295.79	1,317.94	0.00	622,092.14	661,410.09
9,500.00	90.00	79.48	8,287.00	4,599.00	258.89	1,394.11	1,417.94	0.00	622,110.39	661,508.41
9,600.00	90.00	79.48	8,287.00	4,599.00	277.15	1,492.43	1,517.94	0.00	622,128.65	661,606.73
9,700.00	90.00	79.48	8,287.00	4,599.00	295.41	1,590.75	1,617.94	0.00	622,146.91	661,705.05
9,800.00	90.00	79.48	8,287.00	4,599.00	313.67	1,689.07	1,717.94	0.00	622,165.17	661,803.37
9,900.00	90.00	79.48	8,287.00	4,599.00	331.93	1,787.39	1,817.94	0.00	622,183.43	661,901.69
10,000.00	90.00	79.48	8,287.00	4,599.00	350.19	1,885.70	1,917.94	0.00	622,201.69	662,000.00
10,100.00	90.00	79.48	8,287.00	4,599.00	368.45	1,984.02	2,017.94	0.00	622,219.95	662,098.32
10,200.00	90.00	79.48	8,287.00	4,599.00	386.70	2,082.34	2,117.94	0.00	622,238.20	662,196.64
10,300.00	90.00	79.48	8,287.00	4,599.00	404.96	2,180.66	2,217.94	0.00	622,256.46	662,294.96
10,400.00	90.00	79.48	8,287.00	4,599.00	423.22	2,278.98	2,317.94	0.00	622,274.72	662,393.28
10,500.00	90.00	79.48	8,287.00	4,599.00	441.48	2,377.30	2,417.94	0.00	622,292.98	662,491.60
10,600.00	90.00	79.48	8,287.00	4,599.00	459.74	2,475.62	2,517.94	0.00	622,311.24	662,589.92
10,700.00	90.00	79.48	8,287.00	4,599.00	478.00	2,573.94	2,617.94	0.00	622,329.50	662,688.24
10,800.00	90.00	79.48	8,287.00	4,599.00	496.25	2,672.26	2,717.94	0.00	622,347.75	662,786.56

Company:	Marbob	Local Co-ordinate Reference:	Well #1H
Project:	Lea County	TVD Reference:	WELL @ 3688.00ft (Original Well Elev)
Site:	SDL Federal Com	MD Reference:	WELL @ 3688.00ft (Original Well Elev)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,900.00	90.00	79.48	8,287.00	4,599.00	514.51	2,770.58	2,817.94	0.00	622,366.01	662,884.88
11,000.00	90.00	79.48	8,287.00	4,599.00	532.77	2,868.89	2,917.94	0.00	622,384.27	662,983.19
11,100.00	90.00	79.48	8,287.00	4,599.00	551.03	2,967.21	3,017.94	0.00	622,402.53	663,081.51
11,200.00	90.00	79.48	8,287.00	4,599.00	569.29	3,065.53	3,117.94	0.00	622,420.79	663,179.83
11,300.00	90.00	79.48	8,287.00	4,599.00	587.55	3,163.85	3,217.94	0.00	622,439.05	663,278.15
11,400.00	90.00	79.48	8,287.00	4,599.00	605.81	3,262.17	3,317.94	0.00	622,457.31	663,376.47
11,428.72	90.00	79.48	8,287.00	4,599.00	611.05	3,290.41	3,346.67	0.00	622,462.55	663,404.71
BHL-11428.72'MD,90.00°INC,87.27°AZI, 8287.00'TVD, 3346.66'VS, 159.40'N, 3342.87'E										
11,473.36	90.00	79.48	8,287.00	4,599.00	619.20	3,334.30	3,391.31	0.00	622,470.70	663,448.60

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL OH(#1H) - plan hits target - Point	0.00	0.00	8,287.00	619.20	3,334.30	622,470.700	663,448.600	32° 42' 36.516 N	103° 48' 6.976 W

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
7,809.50	7,809.50	0.00	0.00	KOP-7809.50'MD,0.00°INC,0.00°AZI
8,559.56	8,287.00	22.74	476.96	EOC-8559.56'MD,90.00°INC,87.27°AZI,12.00°DLS, 477.50'VS, 22.74'N
11,428.72	8,287.00	159.40	3,342.87	BHL-11428.72'MD,90.00°INC,87.27°AZI, 8287.00'TVD, 3346.66'VS, 15

Checked By: _____ Approved By: _____ Date: _____

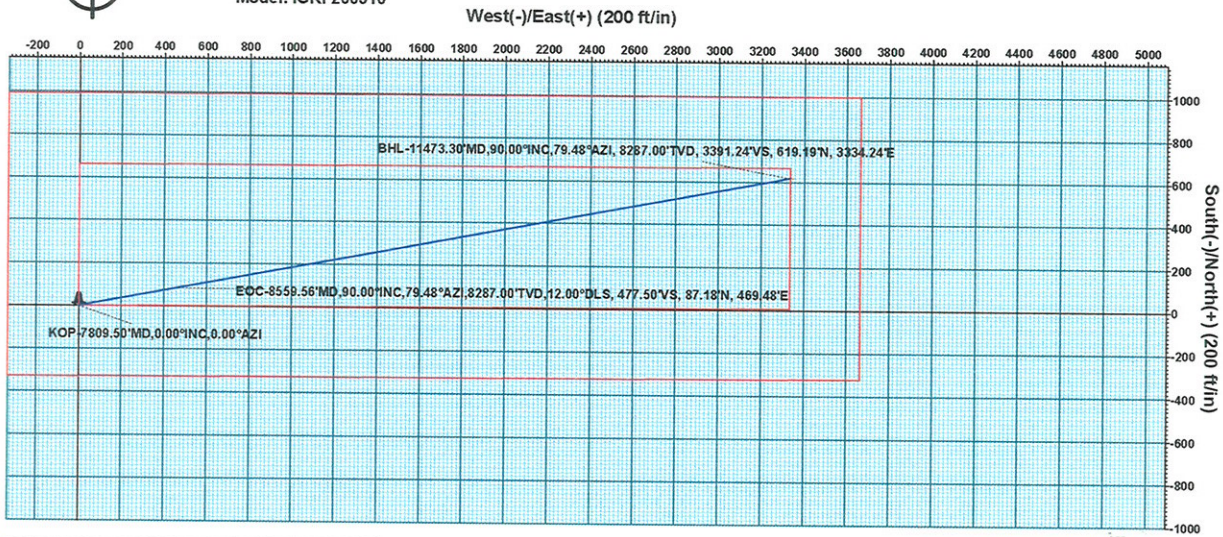
marbob energy corporation
Artesia, N.M.

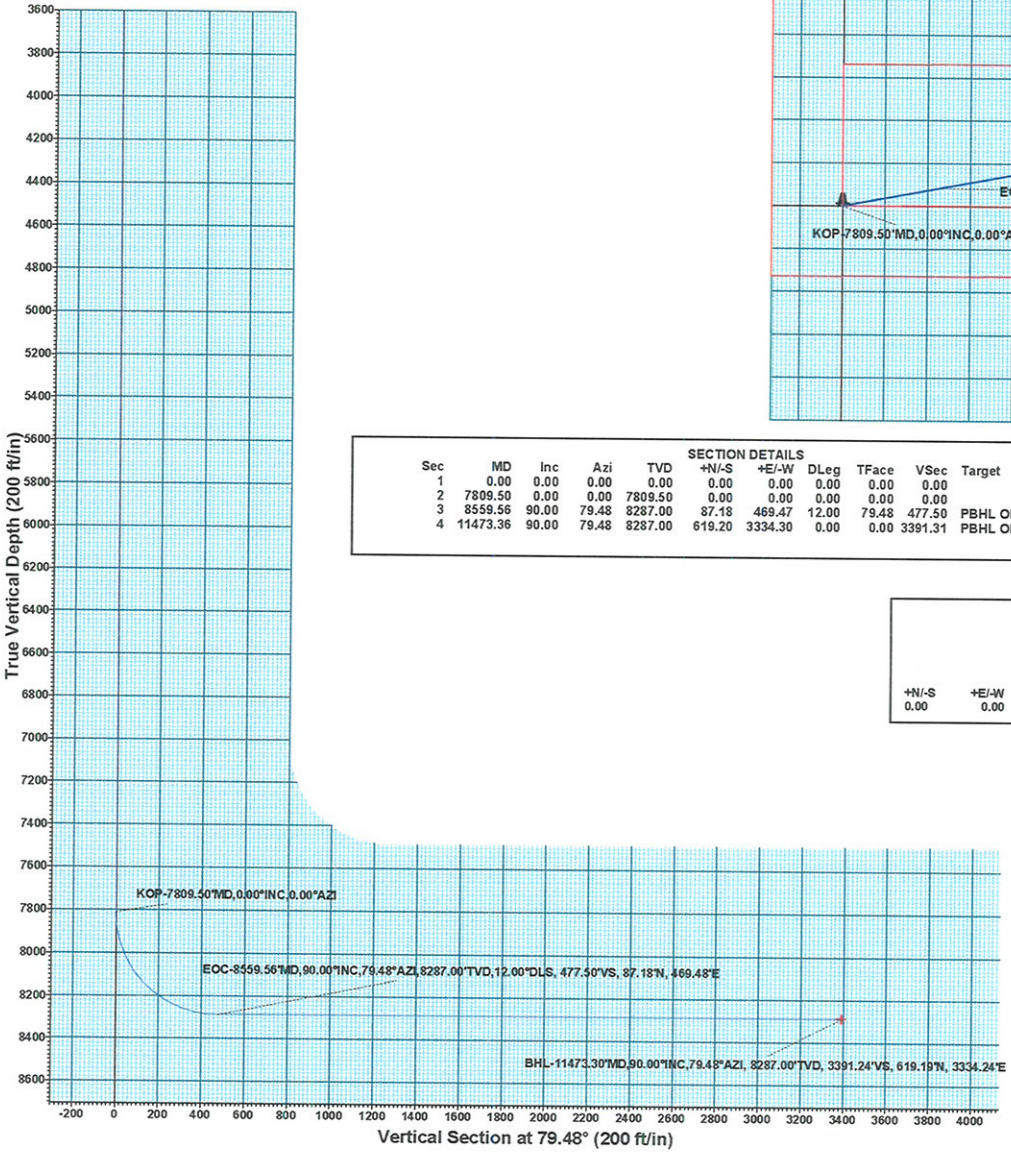
Project: Lea County
Site: SDL Federal Com
Well: #1H
Wellbore: OH
Plan: Plan #1 (#1H/OH)

Azimuths to Grid North
True North: -0.28°
Magnetic North: 7.68°

Magnetic Field
Strength: 49134.8snT
Dip Angle: 60.66°
Date: 06/18/2009
Model: IGRF200510

PATHFINDER





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	7809.50	0.00	0.00	7809.50	0.00	0.00	0.00	0.00	0.00	
3	8559.56	90.00	79.48	8287.00	87.18	469.47	12.00	79.48	477.50	PBHL OH(#1H)
4	11473.36	90.00	79.48	8287.00	619.20	3334.30	0.00	0.00	3391.31	PBHL OH(#1H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL OH(#1H)	8287.00	619.20	3334.30	622470.700	663448.600	Point

WELL DETAILS: #1H

Ground Elevation:: 3674.00
RKB Elevation: WELL @ 3688.00ft (Original Well Elev)
Rig Name: Original Well Elev

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	621851.500	660114.300	32° 42' 30.552 N	103° 48' 46.035 W	

LEGEND

Plan #1

PROJECT DETAILS: Lea County
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Local North: Grid

Plan: Plan #1 (#1H/OH)
Created By: Nate Bingham Date: 15:36, August 31 2009
Checked: _____ Date: _____