Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO 1004-0137
Expires: March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. **NMNM18613A**

1a. Type of Well ☐ Oil Well ☑ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr, .
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. NM NM 119899

2. Name of Operator **Marbob Energy Corporation**

8. Lease Name and Well No. **Woody's Hope Federal Com #1**

3. Address **PO Box 227, Artesia, NM 88211-0227**

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

9. AFI Well No. **30-015-35495**

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface **660 FNL 660 FEL, Unit A**

At top prod. interval reported below

At total depth **693 FNL 724 FEL, Unit A**

FEB 28 2008
OCD-ARTESIA

10. Field and Pool, or Exploratory **Black River; Morrow, South (G)**

11. Sec., T., R., M., on Block and Survey or Area **Sec. 24-T24S-R27E**

12. County or Parish **Eddy** 13. State **NM**

14. Date Spudded **11/05/2007**
15. Date T.D. Reached **12/28/2007**
16. Date Completed **01/29/2008** ☐ D & A ☑ Ready to Prod.
17. Elevations (DF, RKB, RT, GL)* **3105' GL**

18. Total Depth. MD **13010'** TVD **13008'**
19. Plug Back T.D. MD **12490'** TVD **12488'**
20. Depth Bridge Plug Set: MD **12525'** TVD **12523'**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
DLL, DSN

22. Was well cored? ☑ No ☐ Yes (Submit analysis)
Was DST run? ☑ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☑ Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	48#	0	378'		749 sx		0	None
12 1/4"	9 5/8"	36#	0	2300'		925 sx		0	None
8 3/4"	7"	23#	0	9764'		1610 sx		0	None
6 1/8"	4 1/2"	11.6#	0	13010'		300 sx		8900' TS	None

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 3/8"	12310'	12299'						

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Morrow	12361'	12400'	12543' - 12548'		36	Closed - CIBP @ 12525'
B)			12361' - 12400'		126	Open
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
12543' - 12548'	Acdz w/ 1000 gal NE Fe 7 12% HCl Morrow acid.
12361' - 12400'	Acdz w/ 2000 gal NE Fe 7 1/2% HCl Morrow acid. Frac w/ 19140 gal fluid & 35489# proppant.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
02/07/2008	02/08/2008	24	→	0	559	3			Flowing
Choke Size	**Tbg Press Flwg SI**	**Csg Press**	**24 Hr. Rate**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas/Oil Ratio**	**Well Status**	
			→						Producing

28a Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	**Tbg. Press. Flwg SI**	**Csg Press**	**24 Hr Rate**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas/Oil Ratio**	**Well Status**	
			→						

(See instructions and spaces for additional data on page 2)

ACCEPTED FOR RECORD
FEB 24 2008
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg Press Flwg. SI	Csg Press	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				Salado	**757'**
				BOS	**2211'**
				Delaware	**2413'**
				Bone Spring	**5933'**
				Wolfcamp	**9778'**
				Strawn	**11308'**
				Atoka	**11568'**
				Morrow	**12356'**

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

☑ Electrical/Mechanical Logs (1 full set req'd) ☐ Geologic Report ☐ DST Report ☑ Directional Survey
☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☑ Other:

34 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* **Diana J. Briggs** Title **Production Analyst**

Signature Date **02/20/2008**

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.

OPERATOR: Marbob Energy Corp.
WELL/LEASE: Woody's Hope Fed. Com. # 1
COUNTY: Eddy Co., NM
Sec.24T24 S R 27E

STATE OF NEW MEXICO
DEVIATION REPORT

Depth	Deviation	Depth	Deviation
355	1 1/2	5,773	1/2
631	2	6,270	1
875	2	6,770	1
1,125	1 3/4	7,181	3/4
1,383	1/2	7,690	2 1/2
1,637	3/4	7,940	1
1,858	3/4	8,450	1/2
2,082	1 3/4	8,960	3/4
2,241	1 1/4	9,760	1
2,795	1	9,723	1/2
3,295	1	10,223	1
3,795	1	10,707	1 1/2
4,287	3/4	10,833	1 1/4
4,796	1	11,381	1 1/2
5,273	1		

Patriot Drilling, LLC

M. Leroy Peterson, Executive Vice-President

The foregoing instrument was acknowledged before me on this 4th day of January, 2008 by M. Leroy Peterson, Executive Vice-President of Patriot Drilling, LLC.

My Commission Expires: 5/29/2009

DORA H. DUARTE
NOTARY PUBLIC
STATE OF TEXAS
My Comm. Exp 5-29-2009

Dora H. Duarte
Notary Public for Midland Co., Texas

DIRECTIONAL DRILLING CO.

HORIZONTAL SURVEY PROGRAM

ORIGINAL — MINIMUM CURVATURE CALCULATIONS(SPE-3362) — ORIGINAL

OPERATOR: **MARBOB ENERGY**
WELL: WOODY'S HOPE
LOCATION: EDDY CO. N.M.
JOB NO:

START: 12/15/2007
FINISH:
INFORMATION PROVIDED BY: RIG
DIRECTIONAL COORDINATOR: C. HUBER

DIP1 =	0.00	deg =	deg	DIP2 =	0.00	deg =	
TARGET1 =	0	ft TVD		TARGET2 =	0	ft TVD	
VS1 =	0	ft		VS2 =	0	ft	

DATE:09/30/06 | TIME: 11:20 AM | DECLINATION= 8.5 | DIRECTION. **234.50** 359.5

SVY #	MEASURED DEPTH	INC (DRIFT)	AZIMUTH (DIR)	TRUE VERTICAL DEPTH	VERTICAL SECTION	DLS/ 100	ACTUAL BUR	CENTER ABOVE(+) BELOW(-)	RIGHT(+) LEFT(-)	NORTH(+) SOUTH(-)	EAST(+) WEST(-)	QUAD FORMAT
TIE	10500	0.00	0.00	10500.0	0.0		0.0	-10500.0	0.0	0.0	0.0	0
1	10548	3.87	40.22	10548.0	-1.6	8.1	8.1	-10548.0	0.4	1.2	1.0	N 40.2 E
2	10580	4.70	45.32	10579.9	-3.9	2.9	2.6	-10579.9	0.9	3.0	2.7	N 45.3 E
3	10643	0.97	178.35	10642.8	-6.2	8.6	-5.9	-10642.8	0.8	4.3	4.5	S 1.7 E
4	10706	1.58	203.96	10705.8	-5.1	1.3	1.0	-10705.8	0.0	2.9	4.2	S 24.0 W
5	10770	1.58	198.42	10769.8	-3.6	0.2	0.0	-10769.8	-1.0	1.3	3.6	S 18.4 W
6	10833	1.58	202.29	10832.7	-2.2	0.2	0.0	-10832.7	-2.0	-0.3	2.9	S 22.3 W
7	10928	1.67	210.02	10927.7	0.2	0.2	0.1	-10927.7	-3.3	-2.7	1.8	S 30.0 W
8	11023	1.41	209.15	11022.7	2.5	0.3	-0.3	-11022.7	-4.3	-5.0	0.5	S 29.2 W
9	11101	0.88	217.93	11100.7	3.9	0.7	-0.7	-11100.7	-4.9	-6.3	-0.3	S 37.9 W
10	11244	2.20	213.19	11243.6	7.5	0.9	0.9	-11243.6	-6.2	-9.4	-2.5	S 33.2 W
11	11308	3.34	236.22	11307.5	10.5	2.5	1.8	-11307.5	-6.6	-11.5	-4.7	S 56.2 W
12	11371	5.54	238.76	11370.3	15.4	3.5	3.5	-11370.3	-6.3	-14.1	-8.9	S 58.8 W
13	11444	5.10	235.80	11443.0	22.2	0.7	-0.6	-11443.0	-6.0	-17.7	-14.6	S 55.8 W
14	11538	4.50	242.10	11536.7	30.0	0.8	-0.6	-11536.7	-5.4	-21.8	-21.3	S 62.1 W
15	11665	3.40	249.40	11663.4	38.6	1.0	-0.9	-11663.4	-3.8	-25.5	-29.2	S 69.4 W
16	11823	2.50	262.90	11821.2	46.1	0.7	-0.6	-11821.2	-0.9	-27.6	-37.0	S 82.9 W
17	11950	1.80	262.50	11948.1	50.3	0.6	-0.6	-11948.1	1.3	-28.2	-41.7	S 82.5 W
18	12080	1.70	278.30	12078.0	53.5	0.4	-0.1	-12078.0	3.6	-28.1	-45.7	N 81.7 W
19	12139	1.40	247.50	12137.0	54.9	1.5	-0.5	-12137.0	4.4	-28.3	-47.2	S 67.5 W
20	12429	1.00	234.50	12426.9	60.8	0.2	-0.1	-12426.9	5.2	-31.1	-52.5	S 54.5 W
21	12785	1.00	265.60	12782.9	66.6	0.2	0.0	-12782.9	6.8	-33.2	-58.2	S 85.6 W
22	13010	1.80	268.30	13007.8	71.2	0.4	0.4	-13007.8	9.8	-33.4	-63.6	S 88.3 W
23												
24												
25												
26												
27												
28												
29												
30												

PATHFINDER

DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

WOODY'S HOPE FED COM #1

EDDY COUNTY, NEW MEXICO

PREPARED BY: *CODY MEBANE*

Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

PATHFINDER
ENERGY SERVICES

6213 W. County Road 112 • Midland, TX 79706 • Phone: 432-681-6000 • Fax: 432-687-1544

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
   A) FRANK MIJARES
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 12/16/07 TO 12/20/07
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

   MARBOB ENERGY CORPORATION.
   WOODY'S HOPE FED COM # 1
   EDDY COUNTY, NM
   RIG: PATRIOT #3

9. SURVEY CERTIFIED FROM: 10548 TO 11371 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 27.22 FEET ON A BEARING OF 224.03 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11506 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

Cody Mebane
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.
BHL Report

Tie-in Date: 12/16/2007
Date Completed: 12/20/2007

MARBOB ENERGY
WOODY'S HOPE FED COM #1
EDDY COUNTY, NEW MEXICO
Rig:PATRIOT #3
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers:FRANK MIJARES

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.12.30.2652 N LON:104.8.13.5816 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coor: X: 560691.4938 Y: 439593.3733
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.14° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 20.00' Kelly Bushing To Ground
Altitude:3105.00' Ground To MSL

Measured Depth	11506.00	(feet)
Inclination	5.54	(deg)
Azimuth	238.76	(deg)
True Vertical Depth	11504.67	(feet)
Vertical Section	-19.57	(feet)
Survey X cord	560672.58	(feet)
Survey Y cord	439573.81	(feet)
Survey Lat	32.20835330 N	(deg)
Survey Lon	104.13716728 W	(deg)
Rectangular Corr. N/S	19.57 S	(feet)
Rectangular Corr. E/W	18.92 W	(feet)
Closure Distance	27.22	(feet)
Direction of Closure	224.03	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.
Survey Report

Tie-in Date: 12/16/2007
Date Completed: 12/20/2007

MARBOB ENERGY
WOODY'S HOPE FED COM #1
EDDY COUNTY, NEW MEXICO
Rig:PATRIOT #3
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: FRANK MIJARES

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.12.30.2652 N LON:104.8.13.5816 W
Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coor: X: 560691.4938 Y: 439593.3733
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.14° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 20.00' Kelly Bushing To Ground
Altitude:3105.00' Ground To MSL

Survey Calculations by PathCalc v1.97e using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Subsea Depth (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	(ft)	Closure Dist (ft)	Dir (deg)	DLS (dg/100ft)	TEMP (F)
TIE IN @ 10450' MD ASSUMING VERTICAL.											
10450.00	0.00	0.00	10450.00	10430.00	0.00	0.00	0.00	0.00@	0.00	0.00	0.00
THE FOLLOWING SURVEYS ARE PATHFINDER MWD SURVEYS.											
10548.00	3.87	40.22	10547.93	10527.93	2.53	2.53 N	2.14 E	3.31@	40.22	3.95	144.39
10580.00	4.70	45.32	10579.84	10559.84	4.27	4.27 N	3.77 E	5.70@	41.39	2.85	148.01
10643.00	0.97	178.35	10642.77	10622.77	5.56	5.56 N	5.62 E	7.90@	45.32	8.58	147.92
10706.00	1.58	203.96	10705.76	10685.76	4.23	4.23 N	5.28 E	6.76@	51.31	1.30	151.62
10770.00	1.58	198.42	10769.73	10749.73	2.59	2.59 N	4.64 E	5.31@	60.89	0.24	151.62
10833.00	1.58	202.29	10832.71	10812.71	0.96	0.96 N	4.04 E	4.15@	76.66	0.17	155.24
10928.00	1.67	210.02	10927.67	10907.67	-1.45	1.45 S	2.85 E	3.20@	117.01	0.25	155.24
11023.00	1.41	209.15	11022.64	11002.64	-3.67	3.67 S	1.59 E	4.00@	156.61	0.27	155.24
11101.00	0.88	217.93	11100.62	11080.62	-4.98	4.98 S	0.75 E	5.04@	171.41	0.71	158.85
11244.00	2.20	213.19	11243.57	11223.57	-8.15	8.15 S	1.42 W	8.27@	189.92	0.93	158.85
11308.00	3.34	236.22	11307.49	11287.49	-10.21	10.21 S	3.65 W	10.84@	199.66	2.46	158.85
11371.00	5.54	238.76	11370.30	11350.30	-12.81	12.81 S	7.77 W	14.98@	211.25	3.51	158.85
STRAIGHT LINE PROJECTION TO THE BIT AT 11506 FT. MD.											
11506.00	5.54	238.76	11504.67	11484.67	-19.57	19.57 S	18.92 W	27.22@	224.03	0.00	158.90