

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

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

Submit to appropriate District Office

☐ AMENDED REPORT

JAN 23 2008

OCD-ARTESIA



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

¹ Operator Name and Address Marbob Energy Corporation PO Box 227 Artesia, NM 88211-0227		² OGRID Number 14049
		³ API Number 30 - 015-33559
⁴ Property Code 34158	⁵ Property Name Bobber State	⁶ Well No. 1
⁹ Proposed Pool 1 Memilan, Escartment Bone Spring 97316		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	30	20S	27E		1980	North	660	West	Eddy

⁸ Proposed 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

Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3241'
¹⁶ Multiple N	¹⁷ Proposed Depth 10680'	¹⁸ Formation Morrow	¹⁹ Contractor	²⁰ Spud Date 9/3/04
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: _____				
Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	54 5#	433'	550 sx	0
12 1/4"	9 5/8"	36#	2470'	800 sx	0
8 3/4"	5 1/2"	17#	10680'	1900 sx	2350'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Marbob Energy Corporation proposes to perforate, acidize, test & possibly frac the following Bone Spring Sand zones:

Set CIBP + 35' cmt @ 9700' & @ 8230'.
2nd Bone Spring Sand 6162' - 6455' (15 shots) 2000 gal NE Fe 7 1/2% HCl

Set CIBP @ 6125'.
1st Bone Spring Sand 5429' - 5440' (24 shots) 1000 gal NE Fe 7 1/2% HCl

(See attached procedure & wellbore schematic)

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Signature: _____

Printed name: Diana J. Briggs

Title: Production Analyst

E-mail Address: production@marbob.com

Date: 1/21/08

Phone: (575) 748-3303

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARRAÑT
DISTRICT II GEOLOGIST

Title:

Approval Date: FEB 14 2008

Expiration Date:

FEB 14 2010

Conditions of Approval Attached ☐

**Bobber State 1
E-30-20s-27e
Eddy Co., NM**

**Recompletion Procedure 1
2 Jan 07**

Basic Data:

13-3/8" @ 433' Circ. Cmt.

9-5/8" @ 2470' Circ. Cmt.

5-1/2" @ 10680', DV @ 8253', TOC 2350' TS

5.5"/17ppf/M95-110/LTC Burst=10640 psi, 8512 psi at 80% Nom. ID=4.892" Drift ID=4.767"

2.375"/4.7ppf/L80/EUE Burst=11200 psi, 8960 psi at 80% Nom ID=1.995" Drift ID=1.901"

Collapse=11780 psi, 9424 at 80%

Tensile=104,300 lb with no safety factor

Objective: Recomplete well in the Bone Spring.

Procedure:

1. When ready to move up hole, POOH laying down tubing to leave 6500' in derrick. Note: If either BS zone is to be put on pump, will lay down rest of 2-3/8" tubing and pick up 2-7/8"/6.5ppf/J55/EUE when PWOP.
2. RU lubricator, run gauge ring if necessary and set CIBP + 35' cement at 9700' and at 8230'. Run GR/CCL from 6600' to 5200'.
3. RU lubricator and perf 2nd Bone Spring Sand with 1 spf at any phasing as shown below using a 4" casing gun.

2nd BS Sand: 6162', 6164', 6166', 6168', 6170', 6172', 6174', 6176', 6178', 6180',
6447', 6449', 6451', 6453', 6455' (15)

4. RIH with packer, set packer, open bypass, pump acid close to packer, close bypass (another option is to use pump out plug and run tubing empty) then acidize with 2000 gals. NE Fe 7.5% HCl at 3-5 bpm while limiting surface pressure to 5500 psi and holding 1000 psi on annulus. Decision might be made to spot 300 gals acid at 6450', pull up to 6100', reverse 5 bbls down annulus, set packer and acidize with remaining 1700 gals acid (with tubing volume ahead)—let's discuss. Drop 45 ballsealers through job. Swab test until notified to do otherwise.
5. If decision made to frac, install frac valve with BOP on top, unseat packer/on-off tool, POOH with packer and tubing and frac down casing at 45-50 bpm using low gel XL carrying 200,000 lbs 1630 white sand (last 75,000 lbs expedite coated, 4 ppg max).
6. Will PWOP and test this zone if fraced.

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7. When ready to move up hole, RU lubricator, run gauge ring if necessary and set CIBP at 6125'. RU lubricator and perf 1st Bone Spring Sand with 2 spf at 180° phasing as shown below using a 4" casing gun.

1st BS Sand: 5429-40' (24)

8. RIH with packer, set packer, open bypass, pump acid close to packer, close bypass (another option, assuming 2nd BS Sand was permanently abandoned, is to use pump out plug and run tubing empty) then acidize with 1000 gals. NE Fe 7.5% HCl at 3-5 bpm while limiting surface pressure to 5500 psi and holding 1000 psi on annulus. Drop 50 ballsealers through job. Swab test until notified to do otherwise.
9. If decision made to frac, install frac valve with BOP on top, unseat packer/on-off tool, POOH with packer and tubing and frac down casing at 20-25 bpm using low gel XL carrying 75,000 lbs 1630 white sand (last 25,000 lbs expedite coated, 4 ppg max).
10. Will PWOP and test this zone if fraced.

----- Additional Procedures Will Be Issued If/As Necessary -----

Kbc/bobber 1 bs

Well: Bubber State 1

Len: 18' 16L

Location: 1980' FML, 660' FWL

KB : 3258

GL 32401

30-209-27e

Ed., NM

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 ³ / ₈ "	54.5	J55	STC	433'
9 ⁵ / ₈ "	76	J55	STC	2470'
5 ¹ / ₂ "	17	M75-110	LTC	10680'
2 ³ / ₈	4.7	L80	EE	

17 1/2"

137 1/2' @ 433'

550 °C" (c. 125 yr)

12 1/4" ii

TOC 2350
TG

9 5/8" @ 3470'

550 InterFIC + 250°C
(c. 155 s_x)

8 3/4"

8 6162-6455' (15)

2nd BS Sd.

CIBP+35'cut 82.30'

DV 9253'

C13P135' at 9700'

File # 4230

~~0~~ 9732-50' (28)

0 - (9863-10121' (15)

C16P + c.m.f. 10230'

10249' (35)

1044/1 (35)

СІБ 19475'

17512-17515' (12)

5/20/68

FC 17637'

10630

AFTER

Atka

Mr. W.

L. P. New

191: 600 Squared 1.0 1.0 1.0

20 1100 HLC + 20 C. H.

— Sketch Not To Scale —

KBC: 11ms /

Well: Bobber State 1

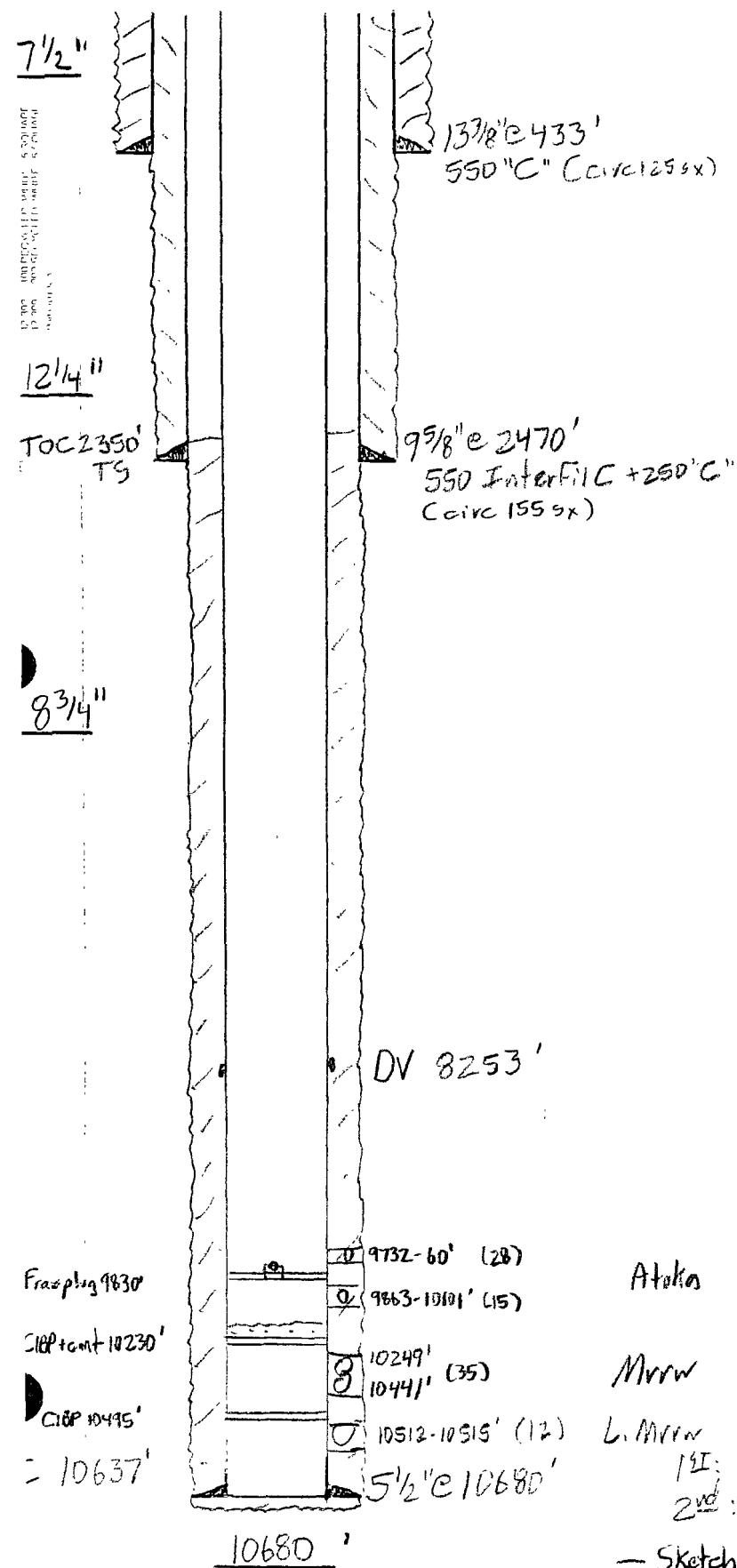
Zero: 18' AGL

Location: 1980' FML, 660' FWL
E-30-20s-27e
Eddy NM

KB: 3258'
GL: 3240'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 ³ / ₈ "	54.5	J55	STC	433'
9 ⁵ / ₈ "	36	J55	STC	2470'
5 ¹ / ₂ "	17	M95-110	LTC	10680'
2 ³ / ₈ "	4.7	L80	EVE	



BEFORE

Atoka

Mvrv

L. Mvrv

1st: 600 Super H (circ 151 x)

2nd: 1100 HLC + 200 Super H

- Sketch Not To Scale -

KBCollins/

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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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-33559	² Pool Code 97316	³ Property Name McMillan, Escarpment Bone Spring
⁴ Property Code 34158	⁵ Property Name Bobber State	⁶ Well Number 1
⁷ OGRID No. 14049	⁸ Operator Name Marbob Energy Corporation	⁹ Elevation 3241' GL

¹⁰ Surface Location

UL or lot no. E	Section 30	Township 20S	Range 27E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 660	East/West line West	County Eddy
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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
¹² Dedicated Acres 160	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.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature Date 1/21/08 Printed Name Diana J. Briggs Production Analyst
	¹⁸ 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. Date of Survey Signature and Seal of Professional Surveyor
	Certificate Number