

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

AUG 03 2007 ☐ AMENDED REPORT
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 - 015-32818
⁴ Property Code 32426	⁵ Property Name Edsel's Wand Waver Fee	⁶ Well No 1
⁹ Proposed Pool 1 Wildcat Strawn		¹⁰ Proposed Pool 2 Wolfcamp ¹¹ Proposed Pool 3 Delaware

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
5	6	24S	28E		1650	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 P	¹⁵ Ground Level Elevation 3096' GL
¹⁶ Multiple Y	¹⁷ Proposed Depth 12820'	¹⁸ Formation Morrow	¹⁹ Contractor	²⁰ Spud Date 6/23/03
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
²¹ 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"	48#	513'	560 sx	0
12 1/4"	9 5/8"	36#	2203'	710 sx	0
8 3/4"	7"	23#	10164'	1870 sx	0
6 1/8"	4 1/2"	11.6#	12820'	280 sx	8500'

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 Strawn, Wolfcamp & Delaware zones:

Strawn	CIBP + 35' cmt set @ 11425'	11168' - 11172' (10 shots)	2000 gal NE Fe 15% HCl
Wolfcamp	CIBP + 35' cmt set @ 11125'	10040' - 10068' (12 shots)	2000 gal NE Fe 15% HCl
Delaware 1	CIBP + 35' cmt set @ 10000' & CIBP + 35' cmt set within 50' of csg stub	5779' - 5788' (30 shots)	500 gal NE Fe 7 1/2% HCl
Delaware 2		5660' - 5669' (30 shots)	500 gal NE Fe 7 1/2% HCl
Delaware 3		5286' - 5292' (21 shots)	500 gal NE Fe 7 1/2% HCl
Delaware 4		4008' - 4016' (27 shots)	500 gal NE Fe 7 1/2% HCl

(See attached procedure & wellbore schematics)

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 NMOC 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 7/31/07

Phone (505) 748-3303

OIL CONSERVATION DIVISION

Approved by

BRYAN G. ARANT
DISTRICT II GEOLOGIST

Title.

Approval Date AUG 20 2007

Expiration Date

AUG 20 2008

Conditions of Approval Attached ☐

Edsel's Wand Waver 1
E-6-24S-28E
Eddy Co., NM

Recompletion Procedure
26 July 07

Basic Data:

13-3/8" @ 508' Circ. Cmt.
9-5/8" @ 2203' Circ. Cmt.
7" @ 10164' Circ. Cmt.
4.5"/11.6ppf/M95-110/LTC Burst=10690 psi, 8552 psi at 80% Nom. ID=4.000" Drift ID=3.875"
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: Complete well in the Strawn, Wolfcamp and/or Delaware.

Procedure:

1. When ready to move to next zone, RU lubricator, run gauge ring to 11950' and set CIBP + 35' cement at 11950' (Morrow). Set another CIBP + 35' cement at 11425' (Atoka). RU lubricator and perf Strawn with 3-1/8" or 3-3/8" deep penetrating casing guns loaded 2 spf at any phasing at the depths shown below (inclusive):

Strawn: 11168-72' (10) OH Log
Strawn: 11164-68' (10) GR/CCL

2. RIH with packer assembly with pump out plug on bottom, set packer, test annulus to 1000 psi, install treesaver and acidize with 2000 gals. NE Fe 15% HCL acid. Pump acid at 3-5 bpm while limiting treating pressure to 9500 psi and holding 2000 psi on annulus. No ballsealers will be used. Swab/flow test until notified to do otherwise.

-
3. When ready to move to next zone, RU lubricator, run gauge ring to 11125' and set CIBP + 35' cement at 11125' (Strawn). RU lubricator and perf Wolfcamp with 3-1/8" or 3-3/8" deep penetrating casing guns loaded 2 spf at any phasing at the depths shown below (inclusive):

Wolfcamp: 10040-42', 10066-68' (12) OH Log
Wolfcamp: 10030-32', 10056-58' (12) GR/CCL

4. RIH with packer assembly with pump out plug on bottom, set packer, test annulus to 1000 psi, install treesaver and acidize with 2000 gals. NE Fe 15% HCL acid. Pump acid at 3-5 bpm while limiting treating pressure to 9500 psi and holding 2000 psi on annulus. Drop 2 slugs of 6 ballsealers through job. Swab/flow test until notified to do otherwise.
-

5. When ready to move to next zone, RU lubricator, run gauge ring to 10000' and set CIBP + 35' cement at 10000'. ND tubing head, weld extension onto 4-1/2" casing, remove slips, run a freepoint and cut casing with chemical or jet cutter 50' above free point (TOC 8500' TS). RU casing handling equipment and pull and lay down casing. When bottom of casing is at 6000' circulate the well bore full of clean 2% KCl water. Decision might be made to run a scraper inside the 7" casing after laying down the 4-1/2" casing—let's discuss.

Note: If frac is to be pumped down tubing and/or a zone is to be put on pump, lay down 2-3/8" tubing and pick up 2-7/8"/6.5ppf/J55/EUE production tubing for frac or PWOP.

-
6. Install lubricator, run gauge ring within 50' of 4-1/2" casing stub and set CIBP + 35' cement within 50' of casing stub. Run GR/CCL from 6000' to 3500' and perf the Delaware 1 with 3 spf at 60-120° phasing as shown below using a 4" casing gun.

Delaware 1: 5779-88' (30) OH Log

7. RIH with packer, spot acid close to packer, close bypass then acidize with 500 gals. NE Fe 7.5% HCl at 3-5 bpm while limiting surface pressure to 5500 psi and holding 1000 psi on annulus. Drop slug of 15 ballsealers half way through job. Swab test until notified to do otherwise.
8. If decision made to frac, install frac valve onto tubing, and frac down tubing at 10-15 bpm using low gel XL carrying 30,000 lbs 1630 expedite coated brown sand (4 ppg max). Limit treating pressure to 5500 psi while holding 1000 psi on annulus. Have pump on annulus ready to reverse circulate in case well screens out. When concentration falls below 4 ppg, bypass blender and go to quick flush.
9. Will likely PWOP and test this zone if fraced—let's discuss.

-
10. When ready to move up hole, RU lubricator and perf the Delaware 2 with 3 spf at 60-120° phasing as shown below using a 4" casing gun.

Delaware 2: 5660-69' (30) OH Log

11. RIH with packer, spot acid close to packer, close bypass then acidize with 500 gals. NE Fe 7.5% HCl at 3-5 bpm while limiting surface pressure to 5500 psi and holding 1000 psi on annulus. Drop slug of 15 ballsealers half way through job. Swab test until notified to do otherwise.
12. If decision made to frac, install frac valve onto tubing, and frac down tubing at 8-10 bpm using low gel XL carrying 15,000 lbs 1630 expedite coated brown sand (4 ppg max). Limit treating pressure to 5500 psi while holding 1000 psi on annulus. Have pump on annulus ready to reverse circulate in case well screens out. When concentration falls below 4 ppg, bypass blender and go to quick flush.
13. Will likely PWOP and test this zone if fraced—let's discuss.

-
14. When ready to move up hole, RU lubricator and perf the Delaware 3 with 3 spf at 60-120° phasing as shown below using a 4" casing gun.

Delaware 3: 5286-92' (21) OH Log

15. RIH with packer, spot acid close to packer, close bypass then acidize with 500 gals. NE Fe 7.5% HCl at 3-5 bpm while limiting surface pressure to 5500 psi and holding 1000 psi on annulus. Drop slug of 10 ballsealers half way through job. Swab test until notified to do otherwise.
 16. If decision made to frac, install frac valve onto tubing, and frac down tubing at 8-10 bpm using low gel XL carrying 15,000 lbs 1630 expedite coated brown sand (4 ppg max). Limit treating pressure to 5500 psi while holding 1000 psi on annulus. Have pump on annulus ready to reverse circulate in case well screens out. When concentration falls below 4 ppg, bypass blender and go to quick flush.
 17. Will likely PWOP and test this zone if fraced—let's discuss.
-

18. When ready to move up hole, RU lubricator and perf the Delaware 4 with 3 spf at 60-120° phasing as shown below using a 4" casing gun.

Delaware 4: 4008-16' (27) OH Log

19. RIH with packer, spot acid close to packer, close bypass then acidize with 500 gals. NE Fe 7.5% HCl at 3-5 bpm while limiting surface pressure to 5500 psi and holding 1000 psi on annulus. Drop slug of 15 ballsealers half way through job. Swab test until notified to do otherwise.
20. If decision made to frac, install frac valve onto tubing, and frac down tubing at 8 bpm using low gel XL carrying 5,000 lbs 1630 expedite coated brown sand (4 ppg max). Limit treating pressure to 5500 psi while holding 1000 psi on annulus. Have pump on annulus ready to reverse circulate in case well screens out. When concentration falls below 4 ppg, bypass blender and go to quick flush.

Kbc/edsel's wand waver 1 str wc del

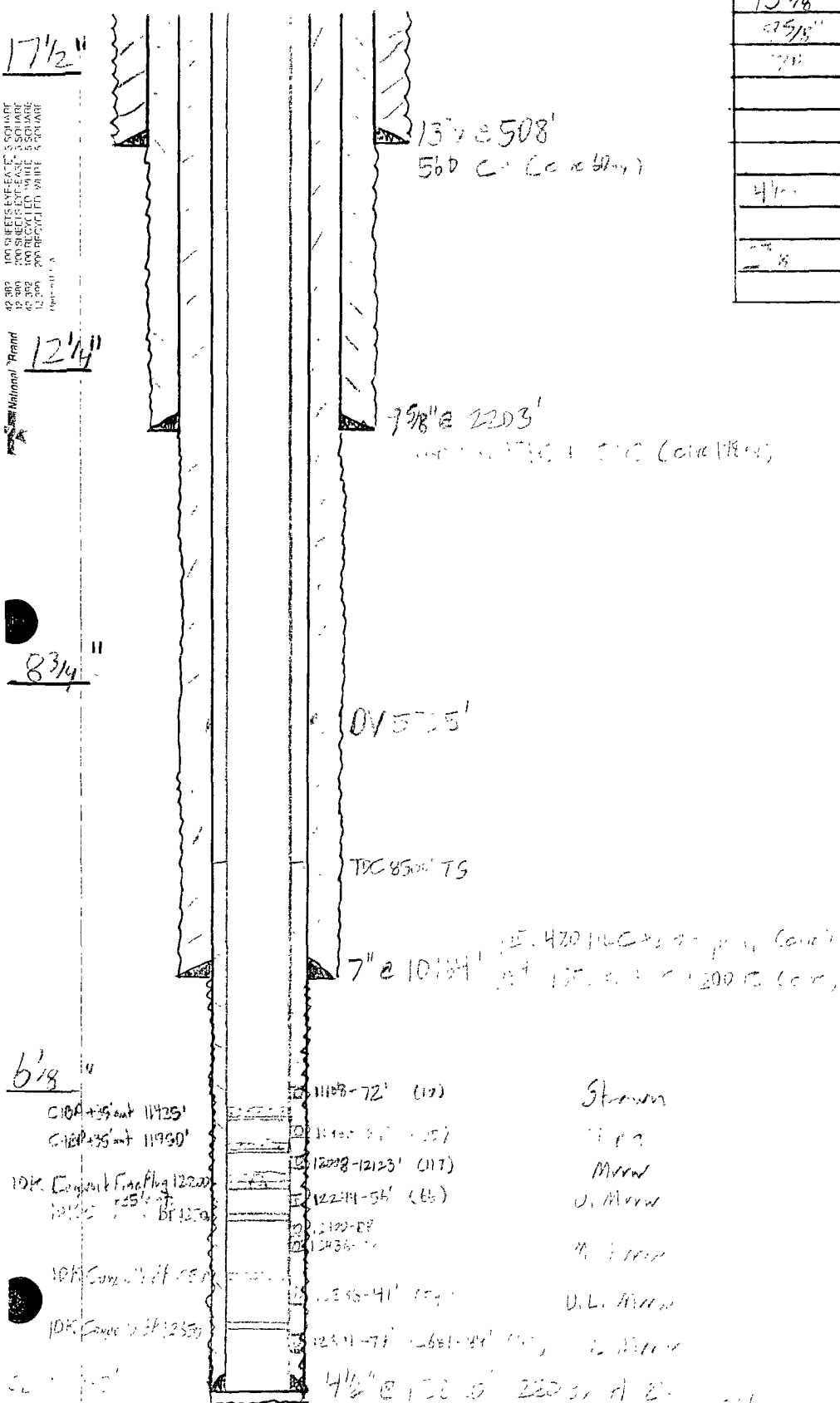
Zero: 22.96L

Location: 1650' N 160' W
E - 6 - 24: 00
500' N 160'

KB : _____
GL : _____

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	48	H4D	STC	508'
13 5/8"	76	J55	STC	2203'
7"	26	P110	LK	91'
2 1/2"	18	M80	LK	5563'
23	18	STC	STC	9594'
26	P110	STC	STC	10164'
4 1/2"	116	M80	STC	12820'
2 1/2"	18	L80	L/E	



AFTEIZ

Well: Edgell's Wand Waver 1

Zero: 22' AGL

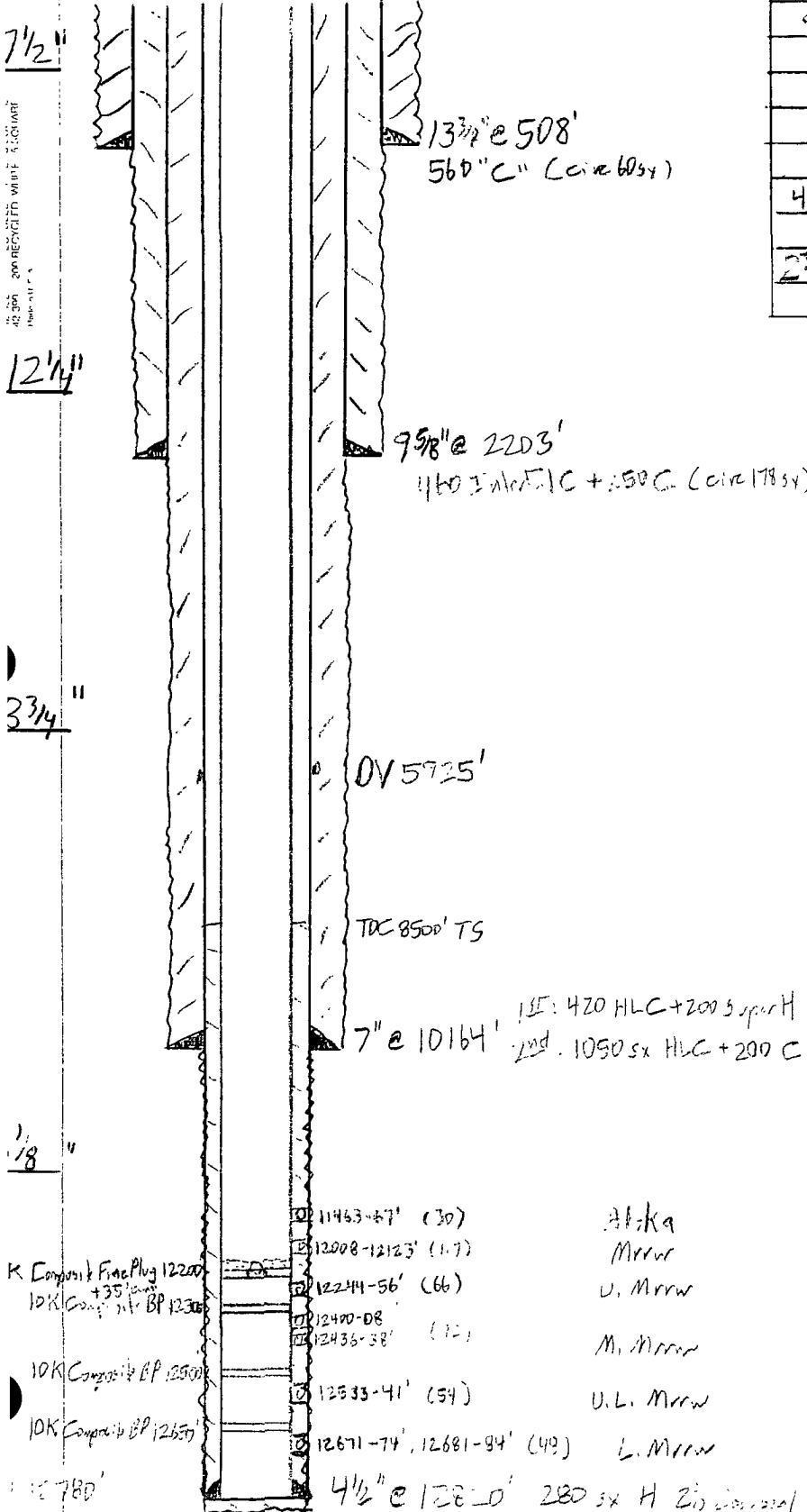
Location: 1650' N, 660' W
E-6-245-28e
Eddy NM

KB: 3118'
 GL: 5076'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	48	H40	STC	508'
9 5/8"	36	J55	STC	2203'
7"	26	P110	LTC	91'
	23	N80	LTC	5563'
	23	P110	LTC	9554'
	26	P110	LTC	10164'
4 1/2"	11.6	M95-110	LTC	12820'
2 3/8"	4.7	L80	E/E	

7 1/2"
 12 1/4"
 3 3/4"
 1 1/8"



K Composite Fine Plug 12200
 +35' BP 12300
 10K Composite BP 12500
 10K Composite BP 12650
 12780'

Alka
 Mrrw
 U. Mrrw
 M. Mrrw
 U.L. Mrrw
 L. Mrrw

DET-RE

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Aztec, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87604-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-32818	Pool Code	Pool Name WOLFCAMP
Property Code 32426	Property Name EDEL'S WAND WAYER FEE COM	Well Number 1
GRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3096'

Surface Location

UL or lot No. 5	Section 6	Township 24-S	Range 28-E	Lot Idn	Feet from the 1650'	North/South line NORTH	Feet from the 660'	East/West line WEST	County EDDY
--------------------	--------------	------------------	---------------	---------	------------------------	---------------------------	-----------------------	------------------------	----------------

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
Dedicated Acres 320	Joint or Infill	Consolidation Code	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

LOT 4	LOT 3	LOT 2	LOT 1
LOT 5	LOT 6		
LOT 7			

1650'

3099.1'

3097.1'

660'

600'

3095.3'

3093.1'

GEODETTIC COORDINATES
NAD 27 NME
Y = 454570.5 N
X = 561972.0 E
LAT. 32°14'58.46"N
LONG. 104°07'58.35"W

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature
DIANA J. BRIGGS
Printed Name
PRODUCTION ANALYST
Title
JULY 31, 2007
Date

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.

May 29, 2003

Date Surveyed
Signature & Seal of Professional Surveyor
RONALD J. EIDSON
5/30/03
03.11.05284

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

DISTRICT I
P.O. Box 1880, Hobbs, NM 88241-1880

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088
WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-32818	Pool Code 97636	Pool Name STRAWN
Property Code 32426	Property Name EDEL'S WAND WAVER FEE COM	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3096'

Surface Location

UL or lot No. 5	Section 6	Township 24-S	Range 28-E	Lot Idn	Feet from the 1650'	North/South line NORTH	Feet from the 660'	East/West line WEST	County EDDY
--------------------	--------------	------------------	---------------	---------	------------------------	---------------------------	-----------------------	------------------------	----------------

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
Dedicated Acres 320	Joint or Infill	Consolidation Code	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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature DIANA J. BRIGGS Printed Name PRODUCTION ANALYST Title JULY 31, 2007 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>May 29, 2003 Date Surveyed A.W.B. Signature & Seal of Professional Surveyor RONALD J. EIDSON Certificate No. 12641 3239</p>
--	--