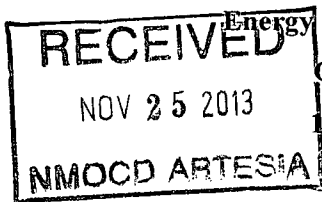


District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis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

State of New Mexico

Form C-101
Revised July 18, 2013



Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

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

Operator Name and Address Memorial Production Operating, LLC 1301 McKinney St., Suite 2100 Houston TX 77010		UGRID Number 303900
		API Number 30-015- 4825
Property Code 312803	Property Name North Square Lake Unit	Well No. 203

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	32	16 S	31 E		1830	S	1780	E	Eddy

* Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
O	32	16 S	31 E		1155	S	1485	E	Eddy

9. Pool Information

Pool Name Square Lake; Grayburg-San Andres	Pool Code 57570
--	---------------------------

Additional Well Information

¹¹ Work Type N	¹² Well Type O	¹³ Cable/Rotary R	¹⁴ Lease Type S	¹⁵ Ground Level Elevation 3909
¹⁶ Multiple N	¹⁷ Proposed Depth TVD: 3600 MD: 3698	¹⁸ Formation San Andres	¹⁹ Contractor	²⁰ Spud Date Upon Approval
Depth to Ground water >300' (well L 10203)		Distance from nearest fresh water well >3.8 miles (well L 10203)		Distance to nearest surface water >3,000' northwest

☒ 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
Surface	12-1/4"	8-5/8"	24	400'	330	GL
Product'n	7-7/8"	5-1/2"	17	3698'	800	GL

Casing/Cement Program: Additional Comments

--

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
	2000	1500	

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 I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature:

Printed name: **Brian Wood**

Title: **Consultant**

E-mail Address: **brian@permitswest.com**

Date: **11-15-13**

Phone: **(505) 466-8120**

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6720
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DISTRICT IV
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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, New Mexico 87505

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 41825	Pool Code 57570	Pool Name Square Lake; Grayburg-San Andres
Property Code 312803	Property Name North Square Lake Unit	Well Number 203
OGRID No. 303900	Operator Name Memorial Production Operating, LLC	Elevation 3909'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	32	16 S	31 E		1830	SOUTH	1780	EAST	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
O	32	16 S	31 E		1155	SOUTH	1485	EAST	EDDY

Dedicated Acres 40	Joint or Infill	Consolidated Code	Order No.
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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.

NW COR SEC 32 NMSP-E (NAD 83) N(Y) = 686078.8 E(X) = 674191.6 NMSP-E (NAD 27) N(Y) = 686014.4 E(X) = 633013.0	NE COR SEC 32 NMSP-E (NAD 83) N(Y) = 686112.3 E(X) = 679471.9 NMSP-E (NAD 27) N(Y) = 686048.1 E(X) = 638293.4
NSLU 203 SHL NMSP-E (NAD 83) N(Y) = 682651.7 E(X) = 677710.1 LAT. = 32°52'33.03"N LONG. = 103°53'20.88"W NMSP-E (NAD 27) N(Y) = 682587.6 E(X) = 636531.5 LAT. = 32.875724383°N LONG. = 103.888625030°W	
NSLU 203 BHL NMSP-E (NAD 83) N(Y) = 681978.7 E(X) = 678008.2 LAT. = 32°52'26.36"N LONG. = 103°53'17.41"W SW COR SEC 32 NMSP-E (NAD 83) N(Y) = 680798.0 E(X) = 674219.9 NMSP-E (NAD 27) N(Y) = 680733.9 E(X) = 633041.3 SE COR SEC 32 NMSP-E (NAD 83) N(Y) = 680833.8 E(X) = 679498.8 NMSP-E (NAD 27) N(Y) = 680769.6 E(X) = 638320.3	

1780'

1485'

1830'

1155'

S23°53'34"E 736.1'

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 voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Brian Wood 11-15-13
Signature Date
Brian Wood
Print Name
brian@permitswest.com
E-mail Address

SURVEYORS 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.

September 23, 2013
Date of Survey
Signature and Seal of Professional Surveyor
James E. Tompkins
JAMES E. TOMPKINS
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
14729
Job No.: WTC49112
JAMES E. TOMPKINS 14729
Certificate Number

Eddy County, NM
NSLU
No. 203
Plan #1
GL: 3909' TVD



US State Plane 1983
North American Datum 1983
GRS 1980
New Mexico Eastern Zone
Mean Sea Level

RKB Elevation: WELL @ 3909.00usft (GL: 3909' TVD)



Azimuths to Grid North
True North: -0.24°
Magnetic North: 7.24°

Magnetic Field
Strength: 48728.2snT
Dip Angle: 60.67°
Date: 11/13/2013
Model: IGRF2010

+N/-S
0.00
+E/-W
0.00
Northing
682651.70
Easting
677710.10
Latitude
32° 52' 33.029 N
Longitude
103° 53' 20.876 W

Section Details

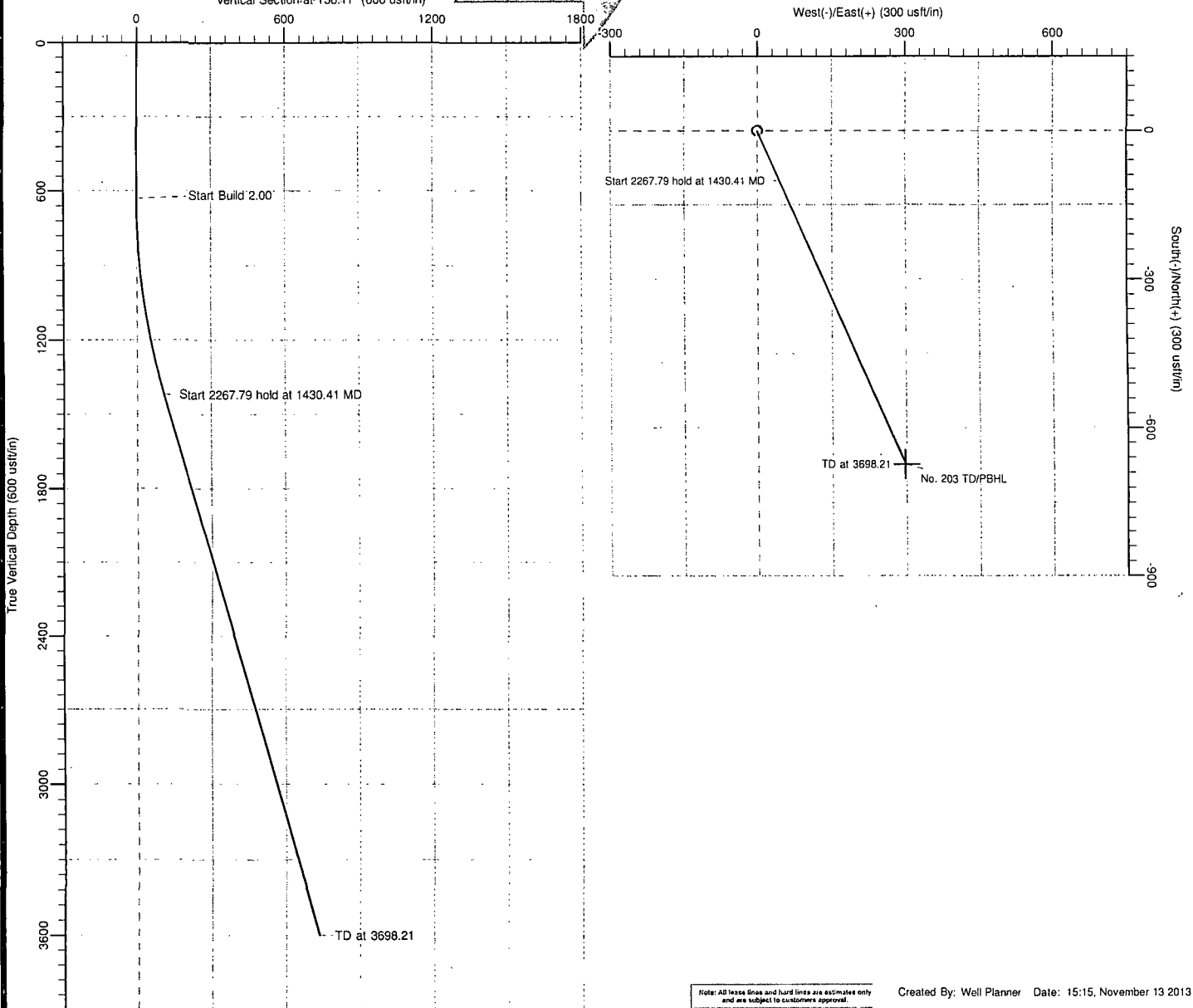
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	630.41	0.00	0.00	630.41	0.00	0.00	0.00	0.00
3	1430.41	16.00	156.11	1420.06	-101.47	44.94	2.00	110.98
4	3698.21	16.00	156.11	3600.00	-673.00	298.10	0.00	736.07

No. 203 TD/PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
No. 203 TD/PBHL	3600.00	-673.00	298.10	681978.70	678008.20	Point

Vertical Sectional: 156.11° (600 usft/in)



Note: All lines and hard lines are estimates only and are subject to customer approval.

Created By: Well Planner Date: 15:15, November 13 2013