

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

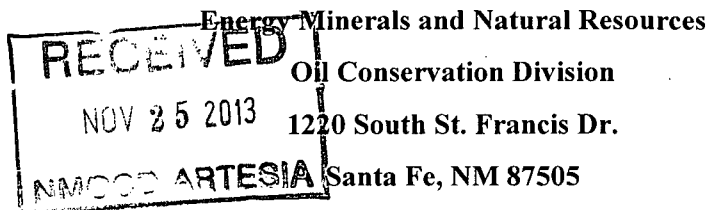
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

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



☐ 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- 41824
Property Code 312803	Property Name North Square Lake Unit	Well No. 202

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	1880	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	2475	E	Eddy

9. Pool Information

Pool Name Square Lake; Grayburg-San Andres	Pool Code 57570
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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: 3748	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	3748'	800	GL

Casing/Cement Program: Additional Comments

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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:

Brian Wood

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:

T. C. Shigard

Title:

"Geologist"

Approved Date:

11/26/2013

Expiration Date:

11/26/2015

Conditions of Approval Attached

NWCOR SEC 32 NMSP-E (NAD 83) N(Y)= 686078.6 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 202 SHL NMSP-E (NAD 83) N (Y) = 682650.8' E (X) = 677609.8' LAT. = 32°52'33.02"N LONG. = 103°53'22.05"W NMSP-E (NAD 27) N (Y) = 682586.7' E (X) = 636431.2' LAT. = 32.875723093°N LONG. = 103.888951750°W NSLU 202 BHL NMSP-E (NAD 83) N (Y) = 681972.0' E (X) = 677018.3' LAT. = 32° 52' 26.33"W LONG. = 103° 53' 29.02"W NMSP-E (NAD 27) N (Y) = 681907.8' E (X) = 635839.7' LAT. = 32.873864103°N LONG. = 103.890887709°W
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SWCOR 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	SEC 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
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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.

Signature

11-15-13

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

Job No. WTC49112

JAMES E. TOMPKINS 14729

Certificate Number

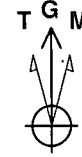
Eddy County, NM
NSLU
No. 202
Plan #1
Original Well Elev



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

RKB Elevation: WELL @ 3909.00usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	682650.80	677609.80	32° 52' 33.024 N	103° 53' 22.052 W



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

Magnetic Field
Strength: 48728.1nT
Dip Angle: 60.67°
Date: 11/13/2013
Model: IGRF2010

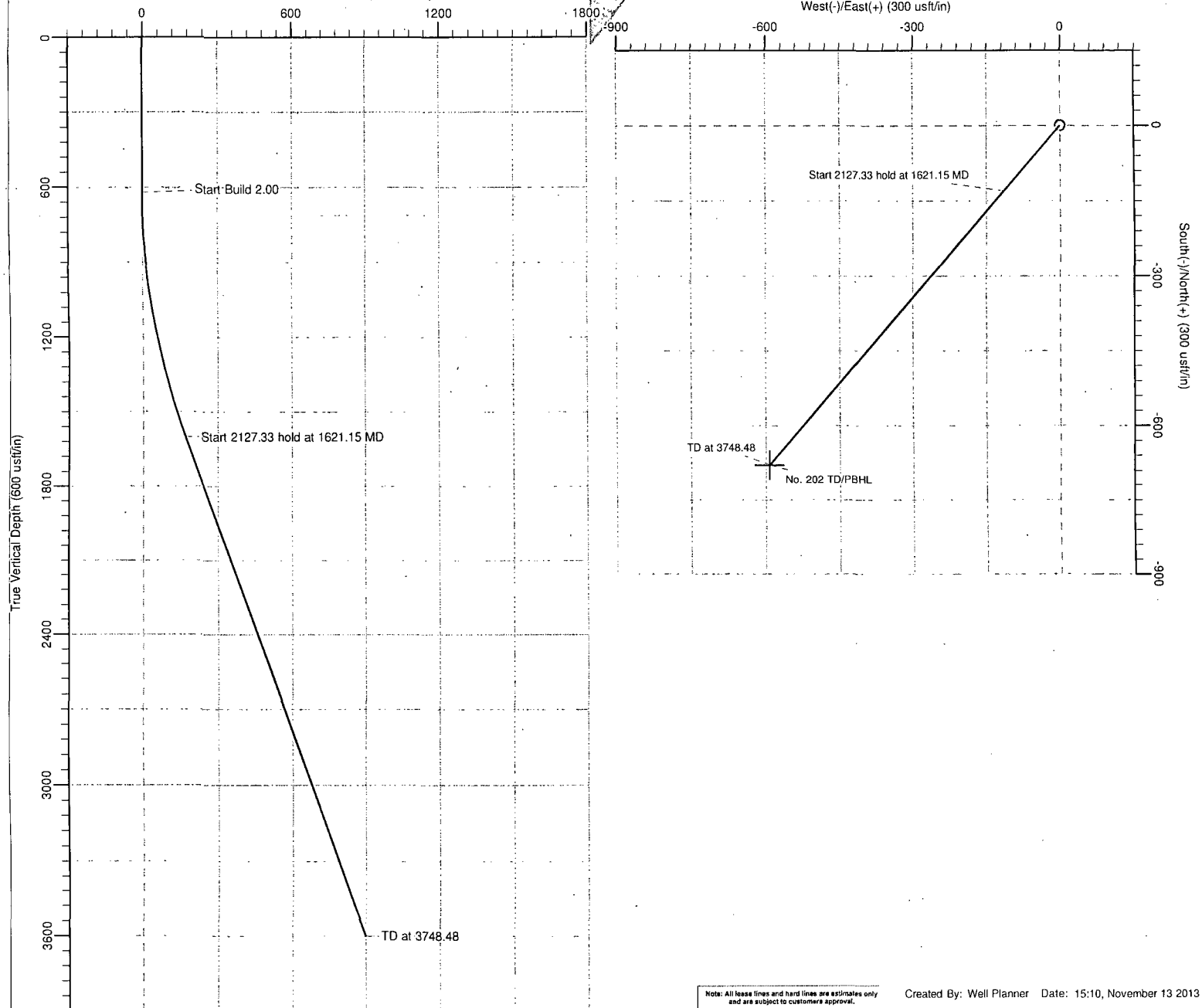
Section Details

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	621.15	0.00	0.00	621.15	0.00	0.00	0.00	0.00	
3	1621.15	20.00	221.07	1600.97	-130.25	-113.50	2.00	172.77	
4	3748.48	20.00	221.07	3600.00	-678.80	-591.50	0.00	900.36	No. 202 TD/PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape Point
No. 202 TD/PBHL	3600.00	-678.80	-591.50	681972.00	677018.30	

Vertical Section at 221.07° (600 usft/in)



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

Created By: Well Planner Date: 15:10, November 13 2013