

NMOC-D-irtesia

c/SP

Form 3160-5
(June 1990)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Mewbourne Oil Co.

3. Address and Telephone No.

P.O. BOX 5270 - Hobbs, New Mexico 88241

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

660' FNL & 510' FWL Unit "D"
Sec. 29-T18S-R30E

5. Lease Designation and Serial No.

NM-27279

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Santo Nino 29 Fed. #2

9. API Well No.

10. Field and Pool, or Exploratory Area

Santo Nino Bone Spring

11. County or Parish, State

Eddy County, N. Mex.

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒
- Notice of Intent
-
- ☐
- Subsequent Report
-
- ☐
- Final Abandonment Notice

TYPE OF ACTION

- ☐
- Abandonment
-
- ☐
- Recompletion
-
- ☐
- Plugging Back
-
- ☐
- Casing Repair
-
- ☐
- Altering Casing
-
- ☒
- Other
- Submit Casing Design
-
- ☐
- Change of Plans
-
- ☐
- New Construction
-
- ☐
- Non-Routine Fracturing
-
- ☐
- Water Shut-Off
-
- ☐
- Conversion to Injection
-
- ☐
- Dispose Water

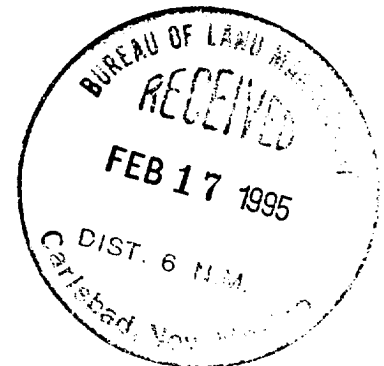
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The attached documentation is provided to the Carlsbad BLM office with sufficient information to enable Mewbourne to run 5 1/2" production casing as shown in Exhibit "D". Exhibit "A" shows a design for new casing, Exhibit "B" a design for white band (12.5% rating loss) casing and Exhibit "C" a design for yellow band (15% rating loss). As shown by the Exhibits, our casing design far exceeds any parameter required by the BLM. Mewbourne requests approval for the Exhibit "D" casing design.

RECEIVED

FEB 17 1995

OIL OIL OIL
UNIT

14. I hereby certify that the foregoing is true and correct

Signed

Title Drilling SuperintendentDate 2-16-95

(This space for Federal or State office use)

Approved by Shannon J. Shaw
Conditions of approval, if any:Title PETROLEUM ENGINEERDate 2/17/95

Title 18 U.S.C. Section 1001, makes 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.

*See instruction on Reverse Side

Operator: MEWBOURNE OIL COMPANY | Well Name: Santo Nino 29 Fed. #2

Project ID: Bone Spring Oilwell | Location: NW4/NW4 29-T18S-R30E

Design Parameters:

Mud Weight (9.63 ppg) : 0.500 psi/ft
Shut in casing pressure : 2000 psi
Internal gradient (burst) : 0.262 psi/ft
Annular gradient (burst) : 0.499 psi/ft
Tensile load is determined using buoyed weight
Service rating is "Sweet"

Design Factors:

Collapse : 1.125
Burst : 1.00
8 Round : 1.80 (J)
Buttress : 1.60 (J)
Other : 1.50 (J)
Body Yield : 1.50 (B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost	
1	7,000	5.500	15.50	K-55	ST&C	7,000	4.825		
2	1,400	5.500	17.00	K-55	ST&C	8,400	4.767		
	Collapse Load Strgth S.F. (psi) (psi)			Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load Strgth S.F. (kips) (kips)		
1	3500	3941	1.126	2000	4810	2.41	112.83	222	1.97 J
2	4200	4910	1.169	342	5320	15.54	20.30	252	12.42 J

Prepared by : , Roswell, New Mexico

Date : 02-15-1995

Remarks :

New 5.5 inch prod. csg.

Minimum segment length for the 8,400 foot well is 100 feet.

An annular mud weight of 10.000 ppg was used for burst purposes. The differential mud gradient below any lost-circulation depth is -0.237 psi/ft and the bottom hole pressure load is 11 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guide-line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

EXHIBIT "A"

Operator: MEWBOURNE OIL COMPANY | Well Name: Santo Nino 29 Fed. #2

Project ID: Bone Spring Oilwell | Location: NW4/NW4 29-T18S-R30E

Design Parameters:

Mud Weight (9.63 ppg) : 0.500 psi/ft
 Shut in casing pressure : 2000 psi
 Internal gradient (burst) : 0.262 psi/ft
 Annular gradient (burst) : 0.499 psi/ft
 Tensile load is determined using buoyed weight
 Service rating is "Sweet"

Design Factors:

Collapse : 1.266
 Burst : 1.13
 8 Round : 2.03 (J)
 Buttress : 1.60 (J)
 Other : 1.50 (J)
 Body Yield : 1.69 (B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	400	5.500	15.50	K-55	LT&C	400	4.825	
2	5,700	5.500	15.50	K-55	ST&C	6,100	4.825	
3	1,500	5.500	17.00	K-55	ST&C	7,600	4.767	
4	800	5.500	17.00	N-80	LT&C	8,400	4.767	

	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Tension Strgth (kips)	S.F.
1	200	3200	9.999	2000	4810	2.41	113.98	239	2.10 J
2	3050	3865	1.267	1905	4810	2.52	108.69	222	2.04 J
3	3800	4852	1.277	556	5320	9.58	33.35	252	7.56 J
4	4200	6280	1.495	200	7740	38.63	11.60	348	30.01 J

Prepared by : Roswell, New Mexico

Date : 02-15-1995

Remarks :

White band 5.5 inch csg.

Minimum segment length for the 8,400 foot well is 100 feet.

An annular mud weight of 10.000 ppg was used for burst purposes. The differential mud gradient below any lost-circulation depth is -0.237 psi/ft and the bottom hole pressure load is 11 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guide-line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

EXHIBIT "B"

Operator: MEWBOURNE OIL COMPANY | Well Name: Santo Nino 29 Fed. #2

Project ID: Bone Spring Oilwell | Location: NW4/NW4 29-T18S-R30E

Design Parameters:

Mud Weight (9.63 ppg) : 0.500 psi/ft
 Shut in casing pressure : 2000 psi
 Internal gradient (burst) : 0.262 psi/ft
 Annular gradient (burst) : 0.499 psi/ft
 Tensile load is determined using buoyed weight
 Service rating is "Sweet"

Design Factors:

Collapse : 1.294
 Burst : 1.15
 8 Round : 2.07 (J)
 Buttress : 1.60 (J)
 Other : 1.50 (J)
 Body Yield : 1.73 (B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	600	5.500	15.50	K-55	LT&C	600	4.825	
2	5,300	5.500	15.50	K-55	ST&C	5,900	4.825	
3	1,500	5.500	17.00	K-55	ST&C	7,400	4.767	
4	1,000	5.500	17.00	N-80	LT&C	8,400	4.767	

	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Tension Strgth (kips)	S.F.
1	300	3227	9.999	2000	4810	2.41	114.24	239	2.09 J
2	2950	3846	1.304	1858	4810	2.59	106.31	222	2.09 J
3	3700	4836	1.307	603	5320	8.82	36.25	252	6.95 J
4	4200	6280	1.495	248	7740	31.25	14.50	348	24.00 J

Prepared by : Roswell, New Mexico

Date : 02-15-1995

Remarks :

Yellow band 5.5 inch csg.

Minimum segment length for the 8,400 foot well is 100 feet.

An annular mud weight of 10.000 ppg was used for burst purposes. The differential mud gradient below any lost-circulation depth is -0.237 psi/ft and the bottom hole pressure load is 11 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guide-line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

EXHIBIT "C"

Operator: MEWBOURNE OIL COMPANY | Well Name: Santo Nino 29 Fed. # 2

Project ID: Bone Spring Oilwell | Location: NW4/NW4 29-T18S-R30E

Design Parameters:

Mud Weight (9.63 ppg) : 0.500 psi/ft
 Shut in casing pressure : 2000 psi
 Internal gradient (burst) : 0.262 psi/ft
 Annular gradient (burst) : 0.499 psi/ft
 Tensile load is determined using buoyed weight
 Service rating is "Sweet"

Design Factors:

Collapse : 1.294
 Burst : 1.15
 8 Round : 2.07 (J)
 Buttress : 9.90 (J)
 Other : 1.50 (J)
 Body Yield : 1.73 (R)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost	
1	7,400	5.500	17.00	K-55	LT&C	7,400	4.767		
2	1,000	5.500	17.00	N-80	LT&C	8,400	4.767		
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Tension Strgth (kips)	S.F.
1	3700	4836	1.307	2000	5320	2.66	121.78	272	2.23 J
2	4200	6280	1.495	248	7740	31.25	14.50	348	24.00 J

Prepared by : , Roswell, New Mexico

Date : 02-15-1995

Remarks :

Yellow band 5.5 inch csg.

Minimum segment length for the 8,400 foot well is 100 feet.

An annular mud weight of 10.000 ppg was used for burst purposes. The differential mud gradient below any lost-circulation depth is -0.237 psi/ft and the bottom hole pressure load is 11 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guide-line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Keeler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

EXHIBIT "D"