

COPY FOR O.C.D.

Form 3160-5
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

I&E-CFO

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other2. Name of Operator **Marbob Energy Corporation**3a. Address
PO Box 227, Artesia, NM 88211-02273b. Phone No. (include area code)
505-748-33034. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660 FSL 1980 FWL, Sec. 11-T17S-R29E, Unit N

5. Lease Serial No.

NMLC028731B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

NMNM111789X

8. Well Name and No.

Dodd Federal Unit #17

9. API Well No.

30-015-20029

10. Field and Pool, or Exploratory Area

Grbg Jackson SR Q Grbg SA

11. County or Parish, State

Eddy Co., NM

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

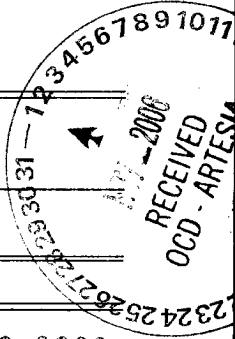
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Plug and abandon as follows:

Notify BLM 24 hours before starting plugging operation.

1. POOH w/ pkr & tbq.
2. Shoot 4 sqz holes @ 895' (50' below base salt @ 845').
3. Set CIBP on tbq @ 2400'. Spot 10 sx Class "C" neat cmt on top of CIBP. Pull up to 2100' & circ well bore full of 9 ppg brine mixed w/ 25 sx per 100 bbs of salt gel (appx 35 bbls csg volume).
4. Pull tbq to 745'. Pump 45 sx Class "C" + 2% CaCl₂ to the end of the tbq (placing cmt inside & outside the csg). TOOH w/ tbq, load csg. WOC a couple of hours & tag cmt w/ tbq.
5. Shoot 4 sqz holes @ 562' (50' below 8 5/8" shoe @ 512'). Pump 175 sx Class "C" + 2% CaCl₂ down 5 1/2" csg & up 8 5/8" x 5 1/2" annulus to fill the well from 562' to surface w/ cmt.
6. Cut wellhead & csg off 3' below ground level & remove. Weld plate onto 8 5/8" stub. Weld 4" dry hole marker onto plate such that 4' of it is above ground level.
7. Cut off anchors & reclaim location per BLM specs.

Accepted for record
NMOCENTERED IN
AFMSS14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Diana J. Briggs

Title **Production Analyst**

Signature

Date

06/13/2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

(ORIG. SGD.) ALEXIS C. SWOBODA

PETROLEUM ENGINEER

Date

JUN 19 2006

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



INSPECTION RECORD - ABANDONMENT

Lease No./Unit/CA NMNM111789X	State NM	District CARLSBAD FIELD OFFICE	Field Area GRAYBURG
Well Name: DODD FEDERAL UNIT		Well Number: 17	Hazard? No
API No. 300152002900S1	Location 1/4, 1/4, S-T-R (Lat/Long) SESW 11 17S 29E		Spud Date 06/12/1967
Operator/Representative MARBOB ENERGY CORPORATION		Rig/Contractor/Representative PETE - MAYO HARRIS 432-940-0653	

Well Type: (Circle One)

Dry Hole

Depleted Producer

Service

Water Well

Etc.

INSP. TYPE	ACT. CODE	INSPECTOR	OPEN DATE	CLOSED DATE	OFFICE TIME	TRAVEL TIME	INSPECT. TIME	TRIPS
PD		CARTER	10-26-06	10-27-06	.6	2	8	2
PD					.			

PLUGGING OPERATIONS

WITNESSED

YES NO N/A

1. Plugs spotted across perforations if casing set?	1		
2. Plugs spotted at casing stubs?			11
3. Open hole plugs spotted as specified?			
4. Retainers, bridge plugs, or packers set as specified?	11		
5. Cement quantities as specified?	11		
6. Method of verifying and testing plugs as specified?	11		
7. Pipe withdrawal rate satisfactory after spotting plugs?	11		
8. All annular spaces plugged to surface?	11		
9. INC issued?		1	

Plug Tested: ☐ No ☐ Pressured ☒ Tagged

If tested, which plug(s): BOTTOM

Bottom Plug: Type Plug C10D Depth(s) 2400 Amount of Cement 25 SXS

Stub Plug: Type Plug _____ Depth(s) _____ Amount of Cement _____

Intermediate Plug: Type Plug 502 Depth(s) 895' Amount of Cement 45 SXS

SET @ 895' - 774'

Surface Shoe Plug: Amount of Cement 155 SX Top of Plug SURF

Other: Type of Plug TD SURF Depth(s) 502' - SURF Amount of Cement 155 SXS

Cement and mechanical plug placement data(attach service company report, if available):

Remarks:

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BALANCE PLUG PROGRAM

CALCULATION

	Size	Weight	cf/lf	lf/cf	bbl/ft	ft/bbl
Hole/Casing						
Casing						
Tubing/D.P.						
Annular Volume						

Plug Set at _____ Size of Plug _____
H₂O Ahead _____ bbl Cement Class _____ Additions _____
H₂O Req: _____ gal/sk _____ cf/sk
Slurry Wt: _____ lbs/gal _____ lbs/cf
Slurry Vol: _____ cf/sk
CEMENT VOLUMES: _____ cf _____ bbls

Hole cap (cf/lf) x size of plug = cf x .1781 = bbls

SACKS OF CEMENT: _____ sks

Cmt vol (cf) / slurry vol (cf/sk)

MIXING H₂O REQUIRED: _____ bbls

Sks of cmt x H₂O req (gal/sk = gallons / 42)

H₂O BEHIND: _____ bbls

Annular vol (ft/bbl) x H₂O ahead = _____ x tubing/D.P.(bbl/ft)

DISPLACEMENT: _____ bbls

Top of plug x tubing/D.P.(bbl/ft) = _____ tubing volume

CALCULATION

	Size	Weight	cf/lf	lf/cf	bbl/ft	ft/bbl
Hole/Casing						
Casing						
Tubing/D.P.						
Annular Volume						

Plug Set at 562 Size of Plug _____
H₂O Ahead _____ bbl Cement Class _____ Additions _____
H₂O Req: _____ gal/sk _____ cf/sk
Slurry Wt: _____ lbs/gal _____ lbs/cf
Slurry Vol: _____ cf/sk
CEMENT VOLUMES: _____ cf _____ bbls

Hole cap (cf/lf) x size of plug = cf x .1781 = bbls

SACKS OF CEMENT: 155 sks

Cmt vol (cf) / slurry vol (cf/sk)

MIXING H₂O REQUIRED: _____ bbls

Sks of cmt x H₂O req (gal/sk = gallons / 42)

H₂O BEHIND: _____ bbls

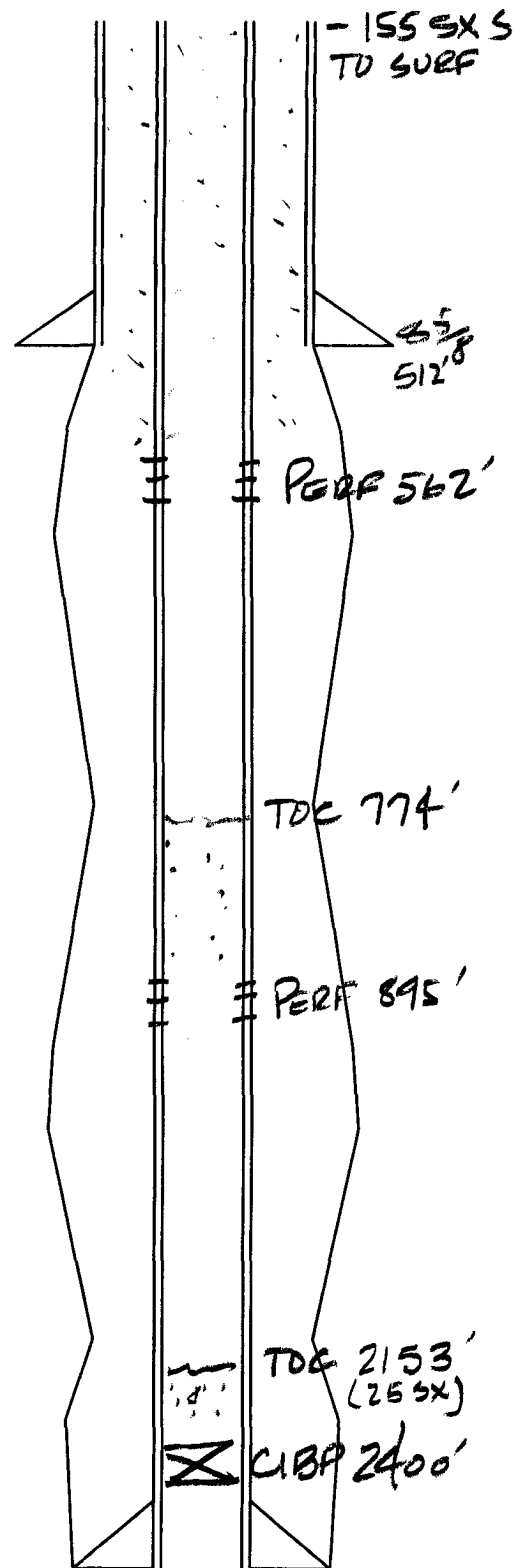
Annular vol (ft/bbl) x H₂O ahead = _____ x tubing/D.P.(bbl/ft)

DISPLACEMENT: _____ bbls

Top of plug x tubing/D.P.(bbl/ft) = _____ tubing volume

SEE WORKSHEETS FOR CALC.

155 SACKS
CEMENT @ 562'
PERF - CEMENT
CIRC TO SURF
& OUT 8 5/8"



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PRIORITY REMARKS

SUNDRY(ABD): NOI to P+A

**Accepted for record
NMOCD**

10-27-06

Marlot Drad Fed #17

Balanced Plug Work Sheet for Two Diameter Plugs

Hole Size	<u>7.875</u>	inches	Hole Capacity	<u>.3382</u>	cuft/ft
Pipe Size	<u>5.5</u>	inches	Pipe Capacity	<u>.1805</u>	cuft/ft
Pipe Wt.	<u>17</u>	lbs/ft			
Plug Length	<u>100</u>	feet	Annular Vol. hole & Ws	<u>.3075</u>	cuft/ft
Plug Depth	<u>895</u>	feet	Annular Vol. pipe & Ws	<u>.0994</u>	cuft/ft
Workstring	<u>2.375</u>	inches			<u>.0178</u> bbls/ft
Workstring Wt.	<u>47</u>	lbs/ft	Workstring Capacity	<u>.0217</u>	cuft/ft
Cmt. Type	<u>C</u>	Class	Ws cap.		<u>.00387</u> bbls/ft
Cmt. Yield	<u>1.32</u>	cuft/sx			AV 2
Mix H2O	<u>6.32</u>	gals/sx	Preflush length		Ws cap.2
			Spacer length		

1. How much cement is needed in cubic feet?

$$\frac{100}{\text{Plug Length in casing}} \text{ ft plug} \times \frac{.1305}{\text{Pipe capacity}} \text{ cuft/ft} = 13.05 \text{ cuft}$$

$$\frac{100}{\text{Plug Length in hole}} \text{ ft plug} \times \frac{.3382}{\text{Hole capacity}} \text{ cuft/ft} = 33.82 \text{ cuft}$$

$$A1 + A2 = \frac{46.88}{A} \text{ cuft}$$

2. How many sacks is that?

$$\frac{46.88}{A} \text{ cuft} \div \frac{1.32}{\text{Cement Yield}} \text{ cuft/sx} = 35.51 \text{ sxs}$$

ROUND UP TO THE NEXT HIGHEST 5 SACKS

$$\frac{40}{B} \text{ sxs}$$

3. Convert sacks back to cubic feet.

$$\frac{40}{B} \text{ sxs} \times \frac{1.32}{\text{Cement Yield}} \text{ cuft/sx} = 52.8 \text{ cuft}$$

4. How many barrels of cement slurry?

$$\frac{52.8}{C} \text{ cuft} \times \frac{0.1781}{\text{Constant}} \text{ bbls/cuft} = 9.4 \text{ bbls cement to pump}$$

5. How much mix water will be needed?

$$\frac{40}{B} \text{ sxs} \times \frac{6.32}{\text{Mix H2O}} \text{ gals/sx} \div 42 \text{ gal/bbl} = 6.04 \text{ bbls}$$

6. What is the height of the cement inside outside of the workstring in feet?

a. Hole volume with workstring in hole.

$$\frac{.3075}{\text{AV b/t hole & workstring}} \text{ (cuft/ft} + \frac{.0217}{\text{Ws cap.}} \text{ cuft/ft)} \times \frac{100}{\text{Plug Length in hole}} \text{ ft} = 32.92 \text{ cuft}$$

b. Height of cement column from bottom of workstring

$$\frac{52.8}{C} \text{ cuft} - \frac{32.92}{\text{HV}} \text{ cuft} = 19.88 \text{ cuft}$$

$$\frac{.0994}{\text{AV b/t Pipe & workstring}} \text{ cuft/ft} + \frac{.0217}{\text{Ws cap.}} \text{ cuft/ft} = 12.15 \text{ cuft/ft}$$

$$\frac{19.88}{C - HV} \text{ cuft} \div \frac{12.15}{Y} \text{ cuft/ft} = 1.63 \text{ ft}$$

7. How many barrels of preflush and spacer will be used?

$$\frac{\text{PL preflush length}}{\text{ft}} \times \frac{\text{AV 2}}{\text{bbls/ft in annulus}} = \text{bbls}$$

$$\frac{\text{SL spacer length}}{\text{ft}} \times \frac{\text{Ws cap.2}}{\text{bbls/ft in workstring}} = \text{bbls}$$

8. How many barrels of displacement to balance the plug?

$$\frac{563.68}{D} \text{ ft} + \frac{\text{SL spacer length}}{\text{ft}} = 563.68 \text{ ft}$$

$$\frac{895}{\text{Plug Depth}} \text{ ft} - \frac{563.68}{D + SL} \text{ ft} \times \frac{.00387}{\text{Ws cap.2}} \text{ bbls/ft} = 1.28 \text{ bbls to displace}$$

9. What is the length of the cement with the workstring out of the plug?

c. Hole volume with workstring out of hole.

$$\frac{.3382}{\text{Hole capacity}} \text{ cuft/ft} \times \frac{100}{\text{Plug Length in hole}} \text{ ft} = 33.82 \text{ cuft}$$

d. Total plug length with workstring out of hole.

$$\frac{52.8}{C} \text{ ((cuft} - \frac{33.8}{Z} \text{ cuft))} \div \frac{.1305}{\text{Pipe capacity}} \text{ cuft/ft} + \frac{100}{\text{Plug Length in hole}} \text{ ft} = 245.4 \text{ ft}$$

10. Where will top of cement be?

$$\frac{895}{\text{Plug Depth}} \text{ ft} - \frac{245.4}{E} \text{ ft} = 649.61 \text{ ft}$$

TAG @ 774'

Accepted for record
NMOCD

10-27-06

MARBOS DOOD FED #17

Balanced Plug Work Sheet for Single Diameter Plugs

Hole/Pipe Size	<u>4.892</u>	inches	Hole/Pipe Cap.	<u>.1305</u>	cuft/ft	
Plug Length	<u>247</u>	feet	Annular Vol.	<u>.0998</u>	cuft/ft	<u>.0178</u> bbls/ft
Plug Depth	<u>2400</u>	feet	AV			AV 2
Workstring	<u>2.375</u>	inches	Workstring Capacity	<u>.0217</u>	cuft/ft	<u>.00387</u> bbls/ft
Workstring Wt.	<u>4.7</u>	lbs/ft	Ws cap.			Ws cap.2
Cmt. Type	<u>C</u>	Class	Preflush length		feet	
Cmt. Yield	<u>1.32</u>	cuft/sx	Spacer length		feet	
Mix H2O	<u>6.32</u>	gals/sx				

1. How much cement is needed in cubic feet?

$$\frac{247}{\text{Plug Length}} \text{ ft plug} \times \frac{.1305}{\text{Hole/Pipe capacity}} \text{ cuft/ft} = \frac{32.23}{A} \text{ cuft}$$

2. How many sacks is that?

$$\frac{32.23}{A} \text{ cuft} \div \frac{1.32}{\text{Cement Yield}} \text{ cuft/sx} = \frac{24.49}{B} \text{ sxs}$$

ROUND UP TO THE NEXT HIGHEST 5 SACKS

3. Convert sacks back to cubic feet.

$$\frac{25}{B} \text{ sxs} \times \frac{1.32}{\text{Cement Yield}} \text{ cuft/sx} = \frac{33}{C} \text{ cuft}$$

4. How many barrels of cement slurry?

$$\frac{33}{C} \text{ cuft} \times \frac{0.1781}{\text{Constant}} \text{ bbls/cuft} = \frac{5.87}{D} \text{ bbls cement to pump}$$

5. How much mix water will be needed?

$$\frac{25}{B} \text{ sxs} \times \frac{158}{\text{Mix H2O}} \text{ gals/sx} \div 42 \text{ gal/bbl} = \frac{3.76}{E} \text{ bbls}$$

6. What is the height of the cement inside outside of the workstring in feet?

$$\frac{.0998}{AV} \text{ cuft/ft} + \frac{.0217}{Ws \text{ cap.}} \text{ cuft/ft} = \frac{.1215}{D} \text{ cuft/ft}$$

$$\frac{33}{C} \text{ cuft} \div \frac{.1215}{AV + Ws \text{ cap.}} \text{ cuft/ft} = \frac{271.6}{D} \text{ ft}$$

7. How many barrels of preflush and spacer will be used?

$$\frac{PL \text{ preflush length}}{\text{ft}} \times \frac{AV 2}{\text{bbls/ft in annulus}} = \text{bbls}$$

$$\frac{SL \text{ spacer length}}{\text{ft}} \times \frac{Ws \text{ cap.2}}{\text{bbls/ft in workstring}} = \text{bbls}$$

8. How many barrels of displacement to balance the plug?

$$\frac{271.6}{D} \text{ ft} + \frac{271.6}{D + SL} \text{ ft} = \frac{271.6}{D + SL} \text{ ft}$$

$$\frac{2400}{\text{Plug Depth}} \text{ ft} - \frac{271.6}{D + SL} \text{ ft} \times \frac{.00387}{Ws \text{ cap.2}} \text{ bbls/ft} = \frac{8.23}{E} \text{ bbls to disp.}$$

9. What is the height of the cement with the workstring out of the plug?

$$\frac{33}{C} \text{ cuft} + \frac{.1305}{\text{Hole/Pipe capacity}} \text{ cuft/ft} = \frac{252.8}{E} \text{ ft}$$

10. Where will top of cement be?

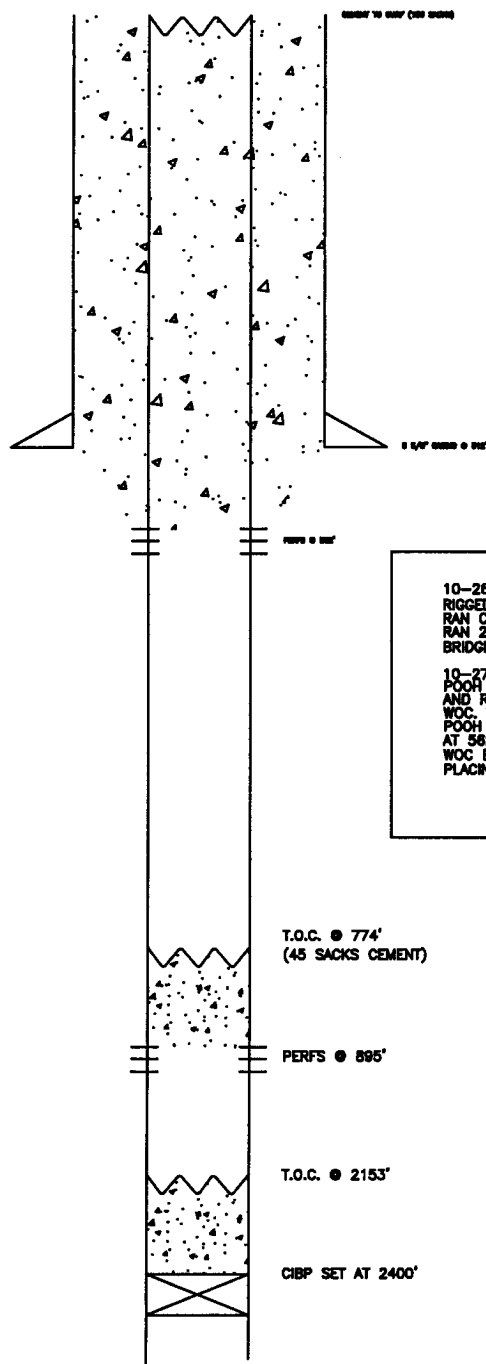
$$\frac{2400}{\text{Plug Depth}} \text{ ft} - \frac{252.8}{E} \text{ ft} = \frac{2147.2}{F} \text{ ft Calc.}$$

2153 T.O.C.

$$62.0156 - 30.25 = 31.7656 = 1733$$

$$23.931 - 5.64 = 18.291 \times .005454 = .0998$$

Accepted for record
NMOCD



10-26-06
RIGGED UP, PULLED TBG,
RAN CIBP
RAN 25 SACKS ON TOP OF
BRIDGE PLUG. TOC @ 2153'

10-27-06
POOH W/TBG TO 895' PERF'D
AND RAN 45 SACKS OF CEMENT
WOC. TAGGED AT 774'.
POOH W/TBG AND PACKER. PERF'D
AT 582'—RAN 155 SACKS TO SURF.
WOC BEFORE CUTTING WELLHEAD AND
PLACING MARKER.

T.O.C. @ 774'
(45 SACKS CEMENT)

PERFS @ 895'

T.O.C. @ 2153'

CIBP SET AT 2400'

Accepted for record
NMOCD

MARBOB ENERGY CORP.
DODD FEDERAL UNIT #17
SEC 11 17S 29E