

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

12/22/05 11:00:38
OGOMES -TPYC
PAGE NO: 1

Sec : 16 Twp : 22S Rng : 36E Section Type : NORMAL

D 40.00 CS B01167 0028 BRUCE A WILBANKS 09/15/42 A	C 40.00 CS B01103 0002 MARATHON OIL CO C 08/23/37 A	B 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A	A 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A
E 40.00 CS B01536 0000 CONOCOPHILLIPS CO C 09/25/38 A	F 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A C	G 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A	H 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A A A A A
L 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A	K 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A A	J 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A A	I 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A A
M 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A C	N 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A A	O 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A	P 40.00 CS A02614 0000 MARATHON OIL CO C 04/21/40 A

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
May 27, 2004

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

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

¹ Operator Name and Address Marathon Oil Company P.O. Box 3487 Houston, TX 77253-3487		² OGRID Number 14021
		³ API Number 30- 25-31268
⁴ Property Code 35238	⁵ Property Name McDonald State A/C 1 (Non-Unit)	⁶ Well No. 1
⁹ Proposed Pool 1 Wildcat Grayburg		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Ida	Feet from the	North/South Line	Feet from the	East/West line	County
J	16	22-s	36-e		2480'	South	1660'	East	Lea

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Ida	Feet from the	North/South Line	Feet from the	East/West line	County

Additional Well Location

¹¹ Work Type Code P	¹² Well Type Code O	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3551'
¹⁶ Multiple N	¹⁷ Proposed Depth	¹⁸ Formation Grayburg	¹⁹ Contractor	²⁰ Spud Date
Depth to ground water		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic ☐ _____ mils thick Clay ☐ Pit Volume _____ bbls Drilling Method: No Pit Closed-Loop System ☐ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	9 5/8"	32 & 36 #	453'	400	Live Surface
8 3/4"	7"	23#	4696'	1500	OCD Surface

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.

Marathon Oil Company is proposing to plug back the McDonald State A/C 1 WSW # 1 and recomple the well as a producing Grayburg well. The well will be renamed to McDonald State A/C (Non-Unit) No. 1 to designate that is not included with unitized production in the McDonald State A/C 1. The well was a water source well for the flood project that no longer needed in that capacity. Marathon is proposing to set a CIPB above the existing San Andres perfs @ 4078-4612', and re-perforate the well in the Grayburg formation.

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: *Charles E. Kendrick*

Printed name: **Charles E. Kendrick**

Title: **Engineering Technician**

E-mail Address: **cekendrix@marathonoil.com**

Date: **11/14/2005**

Phone: **713-296-2096**

OIL CONSERVATION DIVISION

Approved by:

Title: **PETROLEUM ENGINEER**

Approval Date:

Expiration Date:

NOV 28 2005
"CONDITION FOR APPROVAL" Approval for Plugback only, CANNOT Produce well until Non-Standard Location is approved by the Santa Fe OCD Office.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-102
Revised June 10, 2003

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-31268	² Pool Code ✓	³ Pool Name Wildcat Grayburg
⁴ Property Code 35238	⁵ Property Name McDonald State A/C 1 (Non Unit)	⁶ Well Number 1
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company	⁹ Elevation 3551'

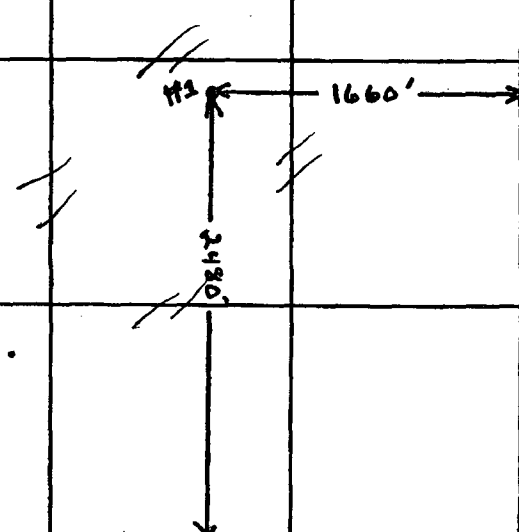
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	16	22-S	36-E		2480'	South	1660'	East	Lea

¹¹ 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
¹² Dedicated Acres 40	¹³ Joint or Infill N	¹⁴ Consolidation Code	¹⁵ 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

16						¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <u>Charles E. Kendrick</u> Signature <u>Charles E. Kendrick</u> Printed Name <u>Engineering Technician</u> <u>cekendrix@marathonoil.com</u> Title and E-mail Address <u>11/14/2005</u> Date
						¹⁸ 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.
						Date of Survey Signature and Seal of Professional Surveyer:
						Certificate Number

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesa, NM 88210

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO.	30-025-31268
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	A-2614

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER <u>Water Supply Well</u>	7. Lease Name or Unit Agreement Name McDonald State A/C 1 WSW			
b. Type of Completion: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DEEP RESER ☐ OTHER ☐	8. Well No. 1			
2. Name of Operator Marathon Oil Company	9. Pool name or Wildcat San Andres			
3. Address of Operator P.O. Box 552, Midland, TX				
4. Well Location Unit Letter <u>J</u> : <u>2480</u> Feet From The <u>South</u> Line and <u>1660</u> Feet From The <u>East</u> Line Section <u>16</u> Township <u>22-S</u> Range <u>36-E</u> NMPM Lea County				
10. Date Spudded 6/21/91	11. Date T.D. Reached 6/30/91	12. Date Compl. (Ready to Prod.) 9/24/91	13. Elevations (DF & RKB, RT, GR, etc.) 3551' GR	14. Elev. Casinghead 3551' GR
15. Total Depth 4700'	16. Plug Back T.D. 4665'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools All	Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name Producing Water 4078'-4180', 4228'-4395', 4491'-4612' San Andres				20. Was Directional Survey Made Yes
21. Type Electric and Other Logs Run CBL/CNL/GR/CCL				22. Was Well Cored No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	32.3# + 36.0#	453'	12 1/4"	400sx Class "C"+1% CaCl ₂	
				Circ'd 140sx	
7"	23#	4696'	8 3/4"	150sx Class "C"+3% KCl	
				+ 1250sx 65/35 Class "C" +	
				4% gel+100sx Class "C"+3% KCl	

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					3 1/2"	4200'	

26. Perforation record (interval, size, and number) 4078' - 4180', .4" shot, 153 holes 4228' - 4395', .4" shot, 222 holes 4491' - 4612', .4" shot, 153 holes	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	4491'-4612'	Acid w/4000 gals 15% NFFF
	4228'-4395'	Acid w/4000 gals 15% NFFF
	4078'-4180'	Acid w/4000 gals 15% NFFF

PRODUCTION

Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

Signature Carl A. Bagwell Printed Name Carl A. Bagwell Title Eng. Technician Date 11/19/91

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen 3672'	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg 3836'	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Otzte _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Delaware Sand _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Bone Springs _____	T. Entrada _____	T. _____
T. Abo _____	T. _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from to
No. 2, from to
No. 3, from to
No. 4, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet

No. 2, from to feet

No. 3, from to feet

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology
3672'	3836'	164'	Queen (Sand/Dolomite)
3836'	4665'	829'	Grayburn (Dolomite)

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-31268
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. A-2614

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER Water Supply Well	7. Lease Name or Unit Agreement Name McDonald State A/C1 WSW
2. Name of Operator Marathon Oil Company	8. Well No. 1
3. Address of Operator P.O. Box 552, Midland, TX 79702	9. Pool name or Wildcat San Andres
4. Well Location Unit Letter <u>J</u> : <u>2480</u> Feet From The <u>South</u> Line and <u>1660</u> Feet From The <u>East</u> Line Section <u>16</u> Township <u>22-S</u> Range <u>36-E</u> NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) <u>3551' GR</u>	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
PLUG AND ABANDON ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	COMMENCE DRILLING OPNS. ☐
CHANGE PLANS ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	CASING TEST AND CEMENT JOB ☐
OTHER: ☐	OTHER: <u>Complete water supply well in the San Andres Formation.</u> ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Marathon Oil Company initiated operations on 7/31/91 to complete water supply well in the San Andres Formation.

7/31/91 - SICP = 0 psig. RU Pool W/S. Removed csg swage & inst 6" 900 series flg type wellhead. NU BOP. PU & RIH w/6 1/8" bit, 4-4 1/2" DC's, SN on 2 7/8" 6.5#, J-55 cond 1 tbq. Closed pipe rams & press to 1000 psig. Held OK. Tagged TOC @ 3986' KB. Etab rev circ & drilled hard cmt to DV tool @ 3993'. Drilled out DV tool & cmt f/3993' to 4006'. Closed pipe rams & tested DV tool to 1000 psig f/10 min & held OK. RIH & tagged @ 4605'. Reversed hole clean. SI & secured well. SDFN.

(Continued on Page Two)

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

SIGNATURE Carl A. Bagwell TITLE Engineering Technician DATE 11/19/91
TYPE OR PRINT NAME Carl A. Bagwell TELEPHONE NO. 915/ 687-8329

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

INCLINATION REPORT

SU 025-51268

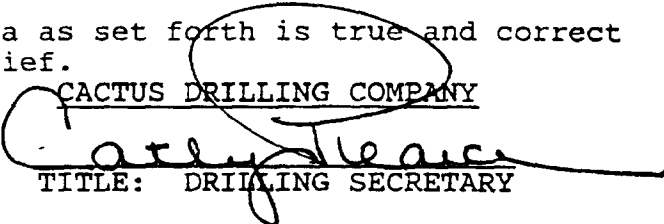
OPERATOR: MARATHON OIL CO

ADDRESS: P. O. BOX 552
MIDLAND, TX 79702LEASE NAME: MCDONALD STATE, ^{AK-1 USW} SW
LOCATION: LEA COUNTY, NEW MEXICOWELL: #1 FIELD: _____
2480/811660/E
16-22-36

Measured Depth	Angle of Inc.	Displacement Per 100 ft.	Accumulative Displacement
185 *	0.50	0.87 *	1.6095
480 *	0.75	1.31 *	5.4740
935 *	1.00	1.75 *	13.4365
1435 *	0.75	1.31 *	19.9865
1897 *	0.75	1.31 *	26.0387
2390 *	1.75	3.05 *	41.0752
2575 *	3.00	5.23 *	50.7507
2853 *	2.75	4.80 *	64.0947
2935 *	2.75	4.80 *	68.0307
3060 *	2.50	4.36 *	73.4807
3130 *	1.75	3.05 *	75.6157
3375 *	1.25	2.18 *	80.9567
3878 *	1.25	2.18 *	91.9221
4262 *	1.25	2.18 *	100.2933
4700 *	1.25	2.18 *	109.8417

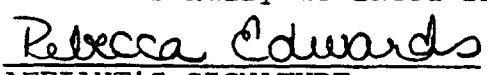
I hereby certify that the above data as set forth is true and correct to the best of my knowledge and belief.

CACTUS DRILLING COMPANY

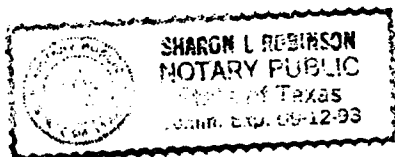
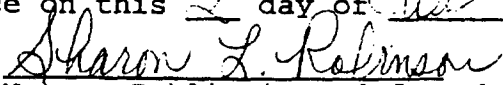

 TITLE: DRILLING SECRETARY

AFFIDAVIT:

Before me, the undersigned authority, appeared Cathy Pearce known to me to be the person whose name is subscribed hereabove, who, on making deposition, under oath states that she is acting for and in behalf of the Operator of the well identified above, and that to the best of her knowledge and belief such well was not intentionally deviated from the true vertical whatsoever.


 AFFIANT'S SIGNATURE

Sworn and subscribed to in my presence on this 2 day of Nov, 1991.



 Notary Public in and for the
 County of Midland, State of Texas.

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-31268
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name McDonald St. A/C1 WSW
8. Well No. 1
9. Pool name or Wildcat San Andres
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3551 GL

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER Water Supply Well
2. Name of Operator Marathon Oil Company
3. Address of Operator P.O. Box 552 Midland, Texas 79702
4. Well Location Unit Letter J : 2480 Feet From The South Line and 1660 Feet From The East Line Section 16 Township 22-5 Range 36-E NMPM Lea County

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☒
OTHER: ☐	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☒
	OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Pre-set 14" conductor @56'KB. MIRU Cactus #4. Spud 12½" hole @ 12:15 hrs 6/21/91. Drilled to 453'. Ran 11 JTS 9 5/8", 32.3#, 36.0#, K-55 STC casing to 453'. Insert float @ 417'. Tested lines to 2000 PSI. Cemented w/400 SX "C"+1% CACL₂, circulated 140 SX to pit. Nippled up 11" 3M dual ram and annular BOP. Tested rams, choke, safety valves and mudlines 300/3000 PSI. Tested annular 300/1000 PSI. TIH and tagged TOC @ 380'. Total WOC time - 18½ hrs. Tested casing to 1000 PSI. Drilled cement and float to 729'. Test shoe to 1000 PSI. Resumed drilling w/7 7/8" Bit

Drilled to 4700'. R.U. packoff, lubricator & W.L. BOP., tested to 400 PSI. Attempted to log, stuck log in casing, recovered same, made 2nd attempt, had 780' of fill. Changed rams to 7". Tested seals to 1500 PSI. Ran 109 JTS 7", 23#, K-55, LTC casing to 4696' FC @ 4615', ECP/DV@ 3993'. Cemented 1st stage w/150 SX 'C'+3% KCL, set ECP & circulated 42 SX to surface. Mixed & pumped 2nd stage w/1250 SX 65/35 "C"+4% gel, tailed w/100 SX 'C'+3% KCL, cement in place @ 0945 did not circulate cement. N.D. BOP's & set slips. Rig release @ 11:30 hrs 6/30/91.

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

SIGNATURE [Signature] TITLE Drilling Superintendent DATE 7-5-91
(915)
TYPE OR PRINT NAME TELEPHONE NO. 682-1626

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

- 8/01/91 - SICP = 0 psig. Estab rev circ & tagged FC @ 4605'. DO FC & 60' cmt to 4660' (tbg tally) KB. Rev hole clean & POOH w/2 7/8" 6.5#, J-55 tbg, 4-4 1/2" DC's & 6 1/8" bit. PU & RIH w/6 1/8" bit, 7" csg scraper on 2 7/8" tbg. Dress off DV tool @ 3993' & RIH to PBTD @ 4660' & pick up 5'. RU Western Co. & pumped 500 gals 15% NEFE HCl acid (no other additives) to btm of tbg @ 4655' @ .75 BPM to pickle tbg. Reversed acid to pit & displ hole w/180 bbls 2% KCl. Started OOH w/2 7/8" tbg. SI & secured well. SDFN.
- 8/02/91 - SICP = 0 psig. FOOH w/2 7/8" 6.5# J-55 workstring, 7" csg scraper, 6 1/8" bit. RU Schlumberger & RIH w/CBL-CNL-GR-CCL tools in tandem & ran repeat f/loggers PBTD of 4665' to 4200' under 0 psig. Pulled main pass f/loggers PBTD to surface under 1000 psig. CBL indic good bond f/3130' to 4665' (exc 4300' to 4350' - fair bond). Fair bond f/2720'-3130'. Poor bond & scattered f/880'-2720' & free pipe f/880' to surface. POOH & RD Schlum. RIH w/2 7/8" workstring open-ended & POOH laying down in singles. SI & secured well. RD Pool W/S. Drop from report evaluating cased hole logs.
- 9/19/91 - RU PU. ND 7" csg collar & 7" x 2" csg swedge. NU 7" x 6" 900 series tbg spool. NU 6" 900 dual manual BOP. Test blind rams to 1000 psig. RIH w/7" Halliburton R-4 pkr on 3 1/2" N-80 tbg. Set pkr @ 61'. Test pipe rams to 1000 psig. POOH w/tbg & pkr. SDFN.
- 9/20/91 - RU Wedge. Test full lubricator on BOP to 1000#. RIH w/4" perf guns. Perforate 4078-91', 4098-4114', 4120-42', 49-64', 72-80' w/2 JSPF (153 holes). 4228'-81', 4305-14', 21-31', 42-50', 60-77', 84-95' w/2 JSPF (222 holes). 4491-95', 4502-14', 31-48', 61-74', 4584-4612' w/2 JSPF (153 holes). Total 528 holes. RD Wedge. RIH w/40 jts 3-1/2" N-80 tbg f/killstring. SDFN.
- 9/21/91 - POOH w/killstring. RIH w/7" Halliburton RTTS pkr, 2 7/8" SN & 6' x 2 7/8" N-80 sub on 3 1/2" N-80 tbg. Ran SV in place. Set pkr @ 4449'. RU BJ. Test tbg to 4000 psig. Fished SV. Test lines to 5000 psig. Est rate into perfs 3 bpm @ 1600 psig. Acidized perfs 4491'-4612' w/4000 gals 15% NEFE & 1050# rock salt. Saw good divert. Max - 1600 psig. Avg - 800 psig @ 5.3 bpm. ISIP - Vac. RD BJ. POOH w/tbg & pkr. RIH w/7" Halliburton RBP & RTTS pkr on 3 1/2" N-80 tbg. Set RBP @ 4450'. Test RBP to 1000 psig. Pulled up & set pkr @ 4202'. SDFN.
- 9/22/91 - SDFWE.
- 9/23/91 - SDFWE.
- 9/24/91 - Dropped SV & test tbg to 4000 psig. Fished SV. RU BJ. Test lines to 4000 psig. Acidized perfs 4228'-4395' w/4000 gals 15% NEFE & 1400# rock salt. Saw slight diversion. Max - 1200 psig. Avg - 500 psig @ 5.8 bpm. ISIP - 340 psig. P3 min - Vac. Released pkr & RBP. Pulled up & set RBP @ 4219'. Test to 1000 psig. Reset pkr @ 4048'. Pressure backside to 500 psig. Dropped SV. Test tbg to 4000 psig. Fished SV. Test lines to 4000 psig. Acidized perfs 4078'-4180' w/4000 gals 15% NEFE HCl & 1050# rock salt. Saw no diversion. Max - 2100 psig. Avg - 700 psig 5.5 bpm. ISIP - Vac. RD BJ. POOH w/tbg, pkr & RBP. RIH w/3 1/2" N-80 tbg open-ended to 4200'. RD PU. Drop from report, waiting on completion of facilities.

FINAL REPORT.

Submit to Appropriate
District Office
State Lease -- 6 copies
Fee Lease -- 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-101
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

API NO. (assigned by OCD on New Wells)
30-025-31268
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.

Amended

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL ☒ RE-ENTER ☐ DEEPEN ☐ PLUG BACK ☐			7. Lease Name or Unit Agreement Name		
b. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER Water Supply Well ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐			McDonald St. A/C 1 WSW		
2. Name of Operator Marathon Oil Company			8. Well No. 1		
3. Address of Operator P O Box 552, Midland, TX 79702			9. Pool name or Wildcat San Andres		
4. Well Location Unit Letter <u>J</u> : <u>2480</u> Feet From The <u>south</u> Line and <u>1660</u> Feet From The <u>east</u> Line Section <u>16</u> Township <u>22-S</u> Range <u>36-E</u> NMPM Lea County					
10. Proposed Depth 4700'		11. Formation San Andres		12. Rotary or C.T. Rotary	
13. Elevations (Show whether DF, RT, GR, etc.) 3551.9' G.L.		14. Kind & Status Plug. Bond Blanket/Current		15. Drilling Contractor Cactus	
16. Approx. Date Work will start 6-20-91					
17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	9-5/8"	32.3#	450'	220	Circulate
8-3/4"	7"	20#, 23#	4700'	750	Circulate

Filed to change location from 1684 S + 2632/E to 2480 S + 1660/E
also change well number from #49 to #1
Plan to drill to 4700'.

Cement & test all casing by approved methods.

Blowout prevention equipment will be a 13-5/8" 3M dual ram and annular preventer for the surface and production holes.

This well is anticipated to be completed as a San Andres water supply well for the South Eunice 7-Rivers/Queen unit.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE [Signature] TITLE Drilling Superintendent DATE 6/19/91

TYPE OR PRINT NAME S. L. Atnipp

TELEPHONE NO. 915/682-1620

(This space for State Use)

APPROVED BY [Signature] TITLE [Signature] DATE JUN 19 1991

CONDITIONS OF APPROVAL, IF ANY:

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MARATHON OIL CO.		Lease MCDONALD STATE A/C 1 WSW		Well No. 1
Unit Letter J	Section 16	Township 22 SOUTH	Range 36 EAST	County MIAMI LEA
Actual Footage Location of Well: 2480 feet from the SOUTH line and 1660 feet from the EAST line				
Ground level Elev. 3551.9	Producing Formation SAN ANDRES		Pool <i>No pool water supply well</i>	Dedicated Acreage: Acres
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? ☐ Yes ☐ No If answer is "yes" type of consolidation _____ If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.				
			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <i>W. J. Duease for S. L. Atmipp</i> Printed Name W. J. DUEASE FOR S. L. ATMIPP Position DRILLING SUPERINTENDENT Company MARATHON OIL COMPANY Date 6/19-91	
			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 knowledge and belief. Signature <i>John W. West</i> Printed Name JOHN W. WEST Date 6-14-91	
			REGISTERED PROFESSIONAL SURVEYOR AND LAND ENGINEER NEW MEXICO No. 676 Signature <i>Ronald J. Edison</i> Printed Name RONALD J. EDISON Date 6-14-91	

Amended

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-101
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

API NO. (assigned by OCD on New Wells) <u>30-025-31268</u>
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL ☒ RE-ENTER ☐ DEEPEN ☐ PLUG BACK ☐			7. Lease Name or Unit Agreement Name McDonald State A/C 1 WSW		
b. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER ☐ <u>Water Supply Well</u> SINGLE ZONE ☐ MULTIPLE ZONE ☐					
2. Name of Operator <u>Marathon Oil Company</u>			8. Well No. <u>49</u>		
3. Address of Operator <u>P O Box 552, Midland, TX 79702</u>			9. Pool name or Wildcat <u>San Andres</u>		
4. Well Location Unit Letter <u>K</u> : <u>1680</u> Feet From The <u>south</u> Line and <u>2632</u> Feet From The <u>west</u> Line Section <u>16</u> Township <u>22-S</u> Range <u>36-E</u> NMPM Lea County					
10. Proposed Depth <u>4700'</u>		11. Formation <u>San Andres</u>		12. Rotary or C.T. <u>Rotary</u>	
13. Elevations (Show whether DF, RT, GR, etc.) <u>3546</u>		14. Kind & Status Plug. Bond <u>Blanket Current</u>		15. Drilling Contractor <u>Cactus</u>	
16. Approx. Date Work will start <u>6-04-91</u>					
17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
<u>12-1/4"</u>	<u>9-5/8"</u>	<u>32.3#</u>	<u>450'</u>	<u>220</u>	<u>Circulate</u>
<u>8-3/4"</u>	<u>7"</u>	<u>20#, 23#</u>	<u>4700'</u>	<u>750</u>	<u>Circulate</u>

Plan to drill to 4700'.

Cement and test all casing by approved methods.

Blowout prevention equipment will be a 13-5/8" 3M dual ram and annular preventer for the surface and production holes.

Well is anticipated to be completed as a San Andres water supply well for the South Eunice 7R/Q unit.

see Amended C-101

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE C.T. Pearce TITLE Production Supt. DATE 5/28-91

TYPE OR PRINT NAME C. T. Pearce TELEPHONE NO. 915/682-1626

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE MAY 29 1991

CONDITIONS OF APPROVAL, IF ANY:

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
of Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

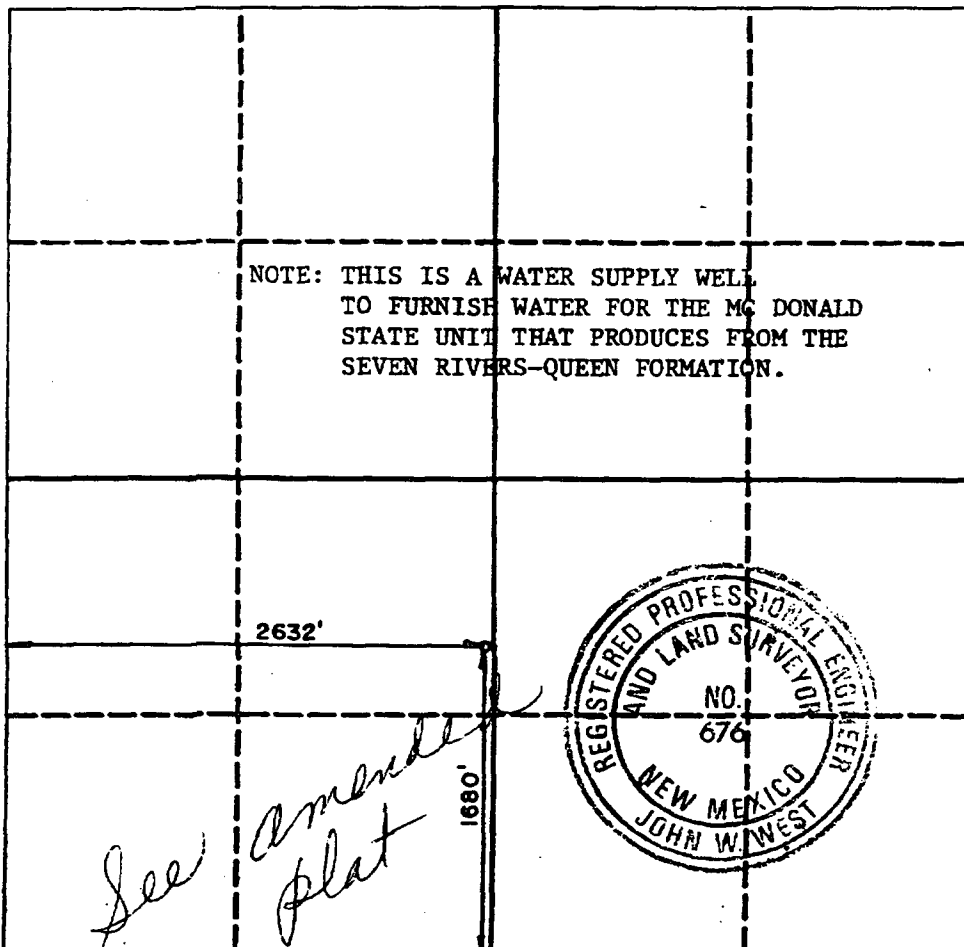
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Marathon Oil Co.		Lease McDonald St. WSW		Well No. 49
Unit Letter K	Section 16	Township 22-South	Range 36-East	County Lea
Actual Footage Location of Well: 1680 feet from the South line and 2632 feet from the West line				
Ground level Elev. 3546.0	Producing Formation SAN ANDRES		Pool	Dedicated Acreage: Acres

- Outline the acreage dedicated to the subject well by colored pencil or lacquer marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature
W. J. DUEASE FOR S. L. ATNIPP
Printed Name
W. J. DUEASE FOR S. L. ATNIPP
Position
DRILLING SUPERINTENDENT
Company
MARATHON OIL COMPANY
Date
5/29-91

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 knowledge and belief.

Date Surveyed
May 25, 1991

Signature & Seal of
Professional Surveyor

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

128630

WRS COMPLETION REPORTCOMPLETIONS SEC 16 TWP 22S RGE 36E
PI# 30-T-0032 12/13/91 30-025-31268-0000 PAGE 1

NMEX LEA * 2480FSL 1660FEL SEC NW SE
STATE COUNTY FOOTAGE SPOT
MARATHON OIL D U
OPERATOR WELL CLASS INIT FIN
WS-1 MCDONALD STATE A/C-1
WELL NO LEASE NAME
3562KB 3551GR LEA CO UNDESIGNTD
OPER ELEV FIELD/POOL/AREA
API 30-025-31268-0000
LEASE NO. PERMIT OR WELL I.D. NO.
06/21/1991 09/24/1991 ROTARY VERT SERVICE
SPUD DATE COMP. DATE TYPE TOOL HOLE TYPE STATUS
4700 SN ANDRS CACTUS DRLG 54 RIG SUB 10
PROJ. DEPTH PROJ. FORM CONTRACTOR
DTD 4700 PB 4665 FM/TD SN ANDRS
DRILLERS T.D. LOG T.D. PLUG BACK TD OLD T.D. FORM T.D.

LOCATION DESCRIPTION

7 MI SW EUNICE, NM

WELL IDENTIFICATION/CHANGES

WELL NBR CHGD FROM WS-49
FTG CHGD FROM 1680 FSL, 2632 FWL
INIT CLASS CHGD FROM U
WELL NBR CHGD FROM 1
FTG CHGD FROM 2480 FSL, 1660 FWL SEC

CASING/LINER DATA

CSG 9 5/8 @ 453 W/ 400 SACKS
CSG 7 @ 4696 W/ 1500 SACKS

TUBING DATA

TBG 3 1/2 AT 4200

TYPE	FORMATION	LTH	TOP DEPTH/SUB	BSE DEPTH/SUB
------	-----------	-----	---------------	---------------

LOG	QUEEN		3672	-121
LOG	GRAYBURG		3836	-285
LOG	SN ANDRS		4665	-1114

SUBSEA MEASUREMENTS FROM GR

PRODUCTION TEST DATA

GRAYBURG PERF W/ 528/IT 4078- 4612 GROSS

CONTINUED IC# 300257023491

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Petroleum Information
Corporation

PI-WRS-GET
Form No 187

COMPLETIONS SEC 16 TWP 22S RGE 36E
PI# 30-T-0032 12/13/91 30-025-31268-0000 PAGE 2

MARATHON OIL D U
WS-1 MCDONALD STATE A/C-1

PRODUCTION TEST DATA

PERF 4078- 4180 4228- 4395 4494- 4612
ACID 4078- 4612 12000GALS
15% NEFE

LOGS AND SURVEYS /INTERVAL,TYPE/

LOGS	CBL	CNL	GR
LOGS	CCL		

LOST CIRCULATION /DEPTH,FORMATION/

4175 GRAYBURG

DRILLING PROGRESS DETAILS

MARATHON OIL
BOX 552
MIDLAND, TX 79702
915-682-1626
WATER SUPPLY WELL
05/30 LOC/1991/
06/27 4175 TD, CIRC
07/05 4700 TD, WOCT
RIG REL 06/30/91
12/11 4700 TD, PB 4665
COMP 9/24/91, WSW
SUPPLY ZONE - GRAYBURG 4078-4612
NO CORES OR DSTS RPTD