

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-101
May 27, 2004

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 <i>Houston, Tx. 77253</i>		² OGRID Number 014021
⁴ Property Code 6399	⁵ Property Name Dayton Hardy	³ API Number 30-025-36963
⁹ Proposed Pool 1 Penrose Skelly Grayburg		⁶ Well No. 4
¹⁰ Proposed Pool 2		

⁷Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
J	20	21-S	37-E		2310'	South	2310'	East	Lea

⁸Proposed 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

Additional Well Location

¹¹ Work Type Code N	¹² Well Type Code Oil	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3500'
¹⁶ Multiple	¹⁷ Proposed Depth 4,500'	¹⁸ Formation Grayburg	¹⁹ Contractor Unknown	²⁰ Spud Date ASAP
Depth to ground water > 50'		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 MTL mils thick Clay <input type="checkbox"/> Pit Volume 2,000 bbls Drilling Method: 21 28 29 30 37 Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input checked="" type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11"	8.625"	24#	400'	150	surface
7.875"	5.5"	17	4,500'	820	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.

Surface casing: 150 Sks. Class C W/ 2% CACL₂, yield 1.34, wt.-14.8 ppg
Production casing: Lead-550 sks. class H 35/65 POZ w/ 6% gel, 5% salt, .25# cell., yield 2.14, ppg.12.4
Tail- 270 sks. class H, 50/50 poz w/ 2% gel, 5% salt, .25# cell., 1.35 yield, wt. 14.2ppg.
Mud program: 0-400' fresh water, CIRC pits or reserve, visc 28.
400'-4,500'- Brine water, 10ppg., circ. Reserves, Lime PH9, VISC 29, gel if needed.
BOPE- 11' 3M, Dual rams, rotating head, -installed and tested to OCD rules 109 & 114

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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 NMOCD guidelines <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> . Signature: <i>M+Mick</i>		OIL CONSERVATION DIVISION	
Printed name: Mike Mick		Approved by: <i>PETROLEUM ENGINEER</i>	
Title: Adv. Sr. Eng. Tech.		Title:	
E-mail Address: mfmick@marathonoil.com		Approval Date: NOV 23 2004	
Date: 11-20-04		Expiration Date:	
Phone: 713-296-3254		Conditions of Approval:	
		Attached <input type="checkbox"/>	

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 and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36963	Pool Code 50350	Pool Name Pewerose Skelly (Grayburg)
Property Code 006399	Property Name DAYTON HARDY	Well Number 4
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3500'

Surface Location

UL or lot No. J	Section 20	Township 21-S	Range 37-E	Lot Idn	Feet from the 2310	North/South line SOUTH	Feet from the 2310	East/West line EAST	County LEA
---------------------------	----------------------	-------------------------	----------------------	---------	------------------------------	----------------------------------	------------------------------	-------------------------------	----------------------

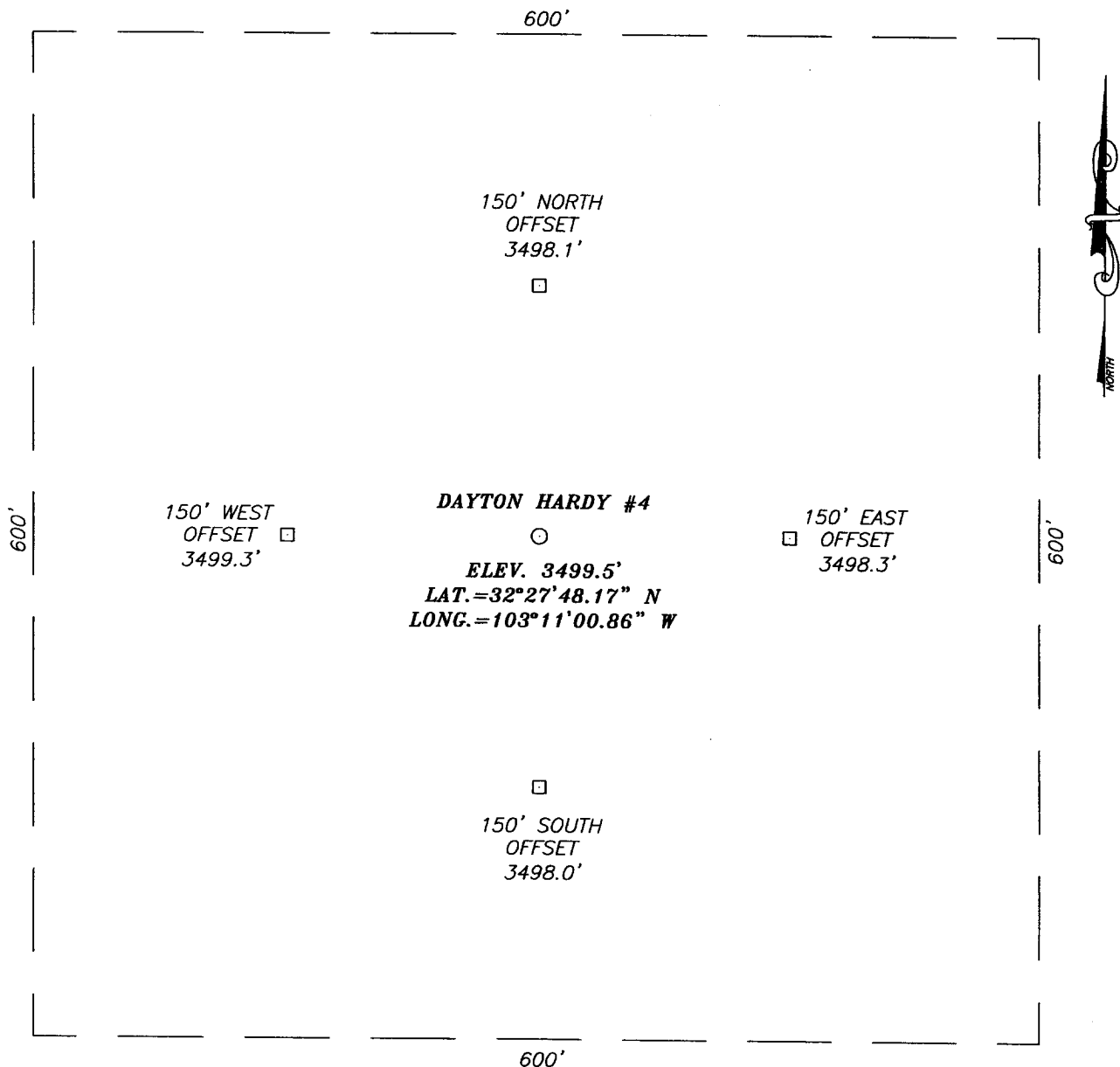
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	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

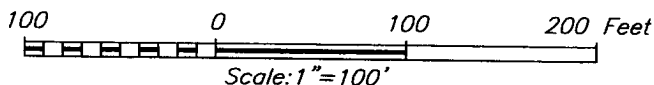
<p>GEODETIC COORDINATES NAD 27 NME Y=534201.7 N X=854626.0 E LAT.=32°27'48.17" N LONG.=103°11'00.86" W</p>		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>m7mick Signature Mike Mick Printed Name Adv. Sr. Eng. Tech Title 11-20-04 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>OCTOBER 12, 2004</p> <p>Date Surveyed Signature & Seal of Professional Surveyor GARY KIDSON 04.11.1335 Certificate No. GARY KIDSON 12641</p>
<p>40. AC.</p> <p>2310'</p> <p>#5</p>		

SECTION 20, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #176 AND CO. RD. #E33 (N. TURNER RD.) GO NORTH ON N. TURNER RD. FOR APPROX. 1.5 MILES TO A CALICHE ROAD ON THE LEFT. TURN LEFT (WEST) AND GO APPROX. 0.4 MILES. PROPOSED LOCATION IS APPROX. 400' NW.



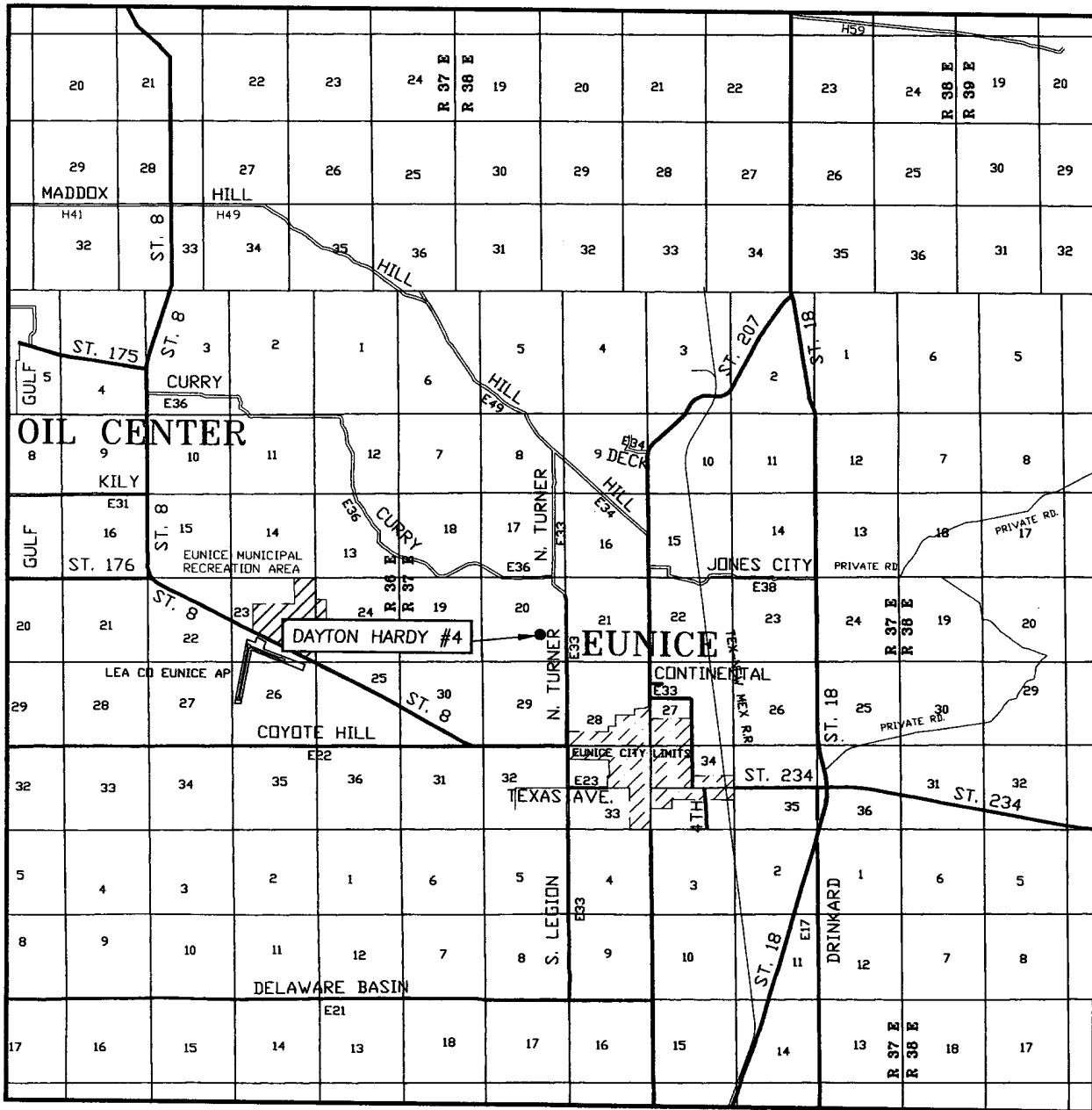
MARATHON OIL COMPANY

DAYTON HARDY #4 WELL
 LOCATED 2310 FEET FROM THE SOUTH LINE
 AND 2310 FEET FROM THE EAST LINE OF SECTION 20,
 TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 10/12/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.1335	Dr By: J.R. Rev 1:N/A
Date: 10/27/04	Disk: CD#10 04111335 Scale: 1"=100'

PROVIDING SURVEYING SERVICES
 SINCE 1948
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

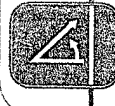
COUNTY LEA

DESCRIPTION 2310' FSL & 2310' FEL

ELEVATION 3500'

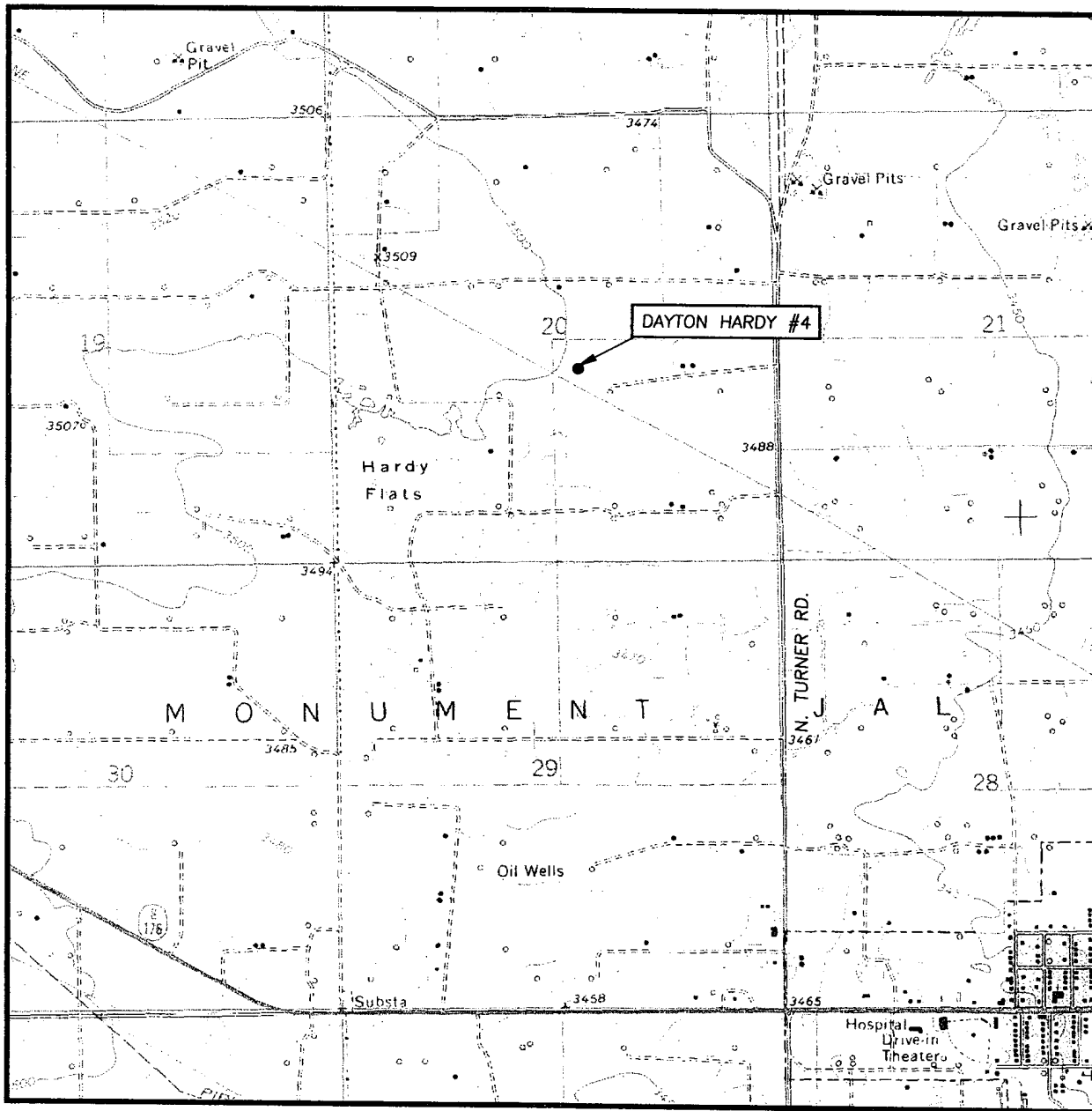
OPERATOR MARATHON OIL COMPANY

LEASE DAYTON HARDY



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 20 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

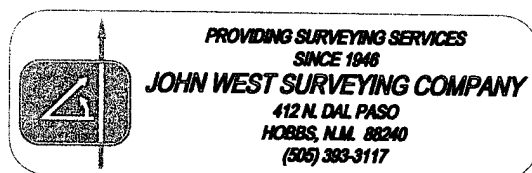
DESCRIPTION 2310' FSL & 2310' FEL

ELEVATION 3500'

OPERATOR MARATHON OIL COMPANY

LEASE DAYTON HARDY

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.

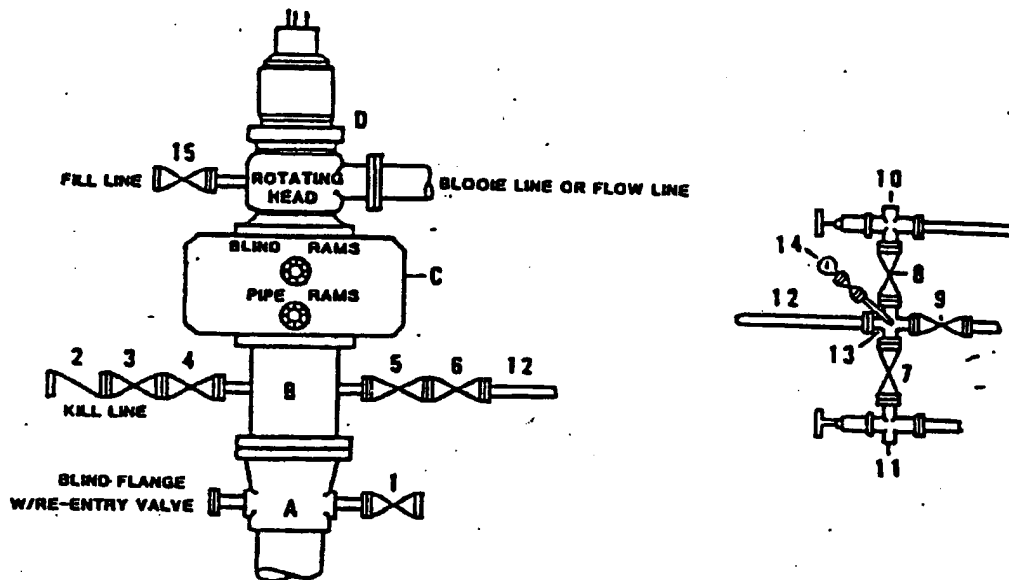


PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO
HOBBBS, N.M. 88240
(505) 383-3117

DRILLING CONTROL



DRILLING CONTROL

MATERIAL LIST - CONDITION II - B

- A Wellhead
- B 3000# W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line.
- C 3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram type preventers may be utilized).
- D Rotating Head with fill up outlet and extended Bloom Line.
- 1,3,4, 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
- 7,8,
- 2 2" minimum 3000# W.P. back pressure valve.
- 5,6,9 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
- 12 3" minimum schedule 80, Grade "B", seamless line pipe.
- 13 2" minimum x 3" minimum 3000# W.P. flanged cross.
- 10,11 2" minimum 3000# W.P. adjustable choke bodies.
- 14 Cameron Mud Gauge or equivalent (location optional in choke line).
- 15 2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Marathon Oil Co. Telephone: 713-296-3254 mail address: mfmick@marathonoil.co

Address: P.O. Box 3487 Houston, Tx. 77253

Facility or well name: Dayton Hardy #4 API #: 30-025-36963 U/L or Qtr/Qtr_NWSE_Sec_20_T_21S_R_37E

County: LEA Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 2000 bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____

Construction material: _____

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet	(20 points)
50 feet or more, but less than 100 feet	(10 points)
100 feet or more X	(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes	(20 points)
No X	(0 points)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
1000 feet or more X	(0 points)

Ranking Score (Total Points)

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☒ offsite ☐ If offsite, name of facility _____ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 11-20-04

Printed Name/Title Mike Mick- Adv. Sr. Eng. Tech Signature M7Mick

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Date: NOV 23 2004

Printed Name/Title _____ Signature [Signature]

PETROLEUM ENGINEER

