

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 Houston, Tx. 77253		² OGRID Number 014021
⁴ Property Code 6399	⁵ Property Name Dayton Hardy	³ API Number 30-025-37027
⁹ Proposed Pool 1 Penrose Skelly Grayburg		⁶ Well No. 5
		¹⁰ Proposed Pool 2

⁷ 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	20	21-S	37-E		1800'	South	1500'	East	Lea

⁸ Proposed 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 3491'
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 MIL mils thick Clay <input type="checkbox"/> Pit Volume 2,000 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed 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 Skts. Class C W/ 2% CACL₂, yield 1.34, wt.-14.8 ppg
Production casing: Lead-550 skts. class H 35/65 POZ w/ 6% gel, 5% salt, .25# cell., yield 2.14, ppg.12.4
Tail- 270 skts. 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

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: **mzmick**

Printed name: **Mike Mick**

Title: **Adv. Sr. Eng. Tech.**

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

Date: **11-20-04**

Phone: **713-296-3254**

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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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 30-025-37027	Pool Code 50350	Pool Name Penerose Skelly (Grayburg)
Property Code 006399	Property Name DAYTON HARDY	Well Number 5
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3491'

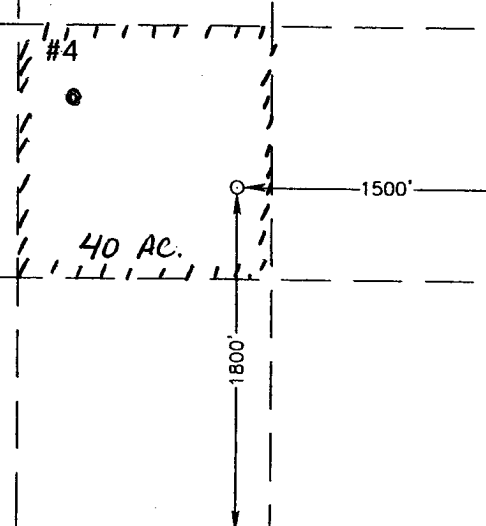
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	20	21-S	37-E		1800	SOUTH	1500	EAST	LEA

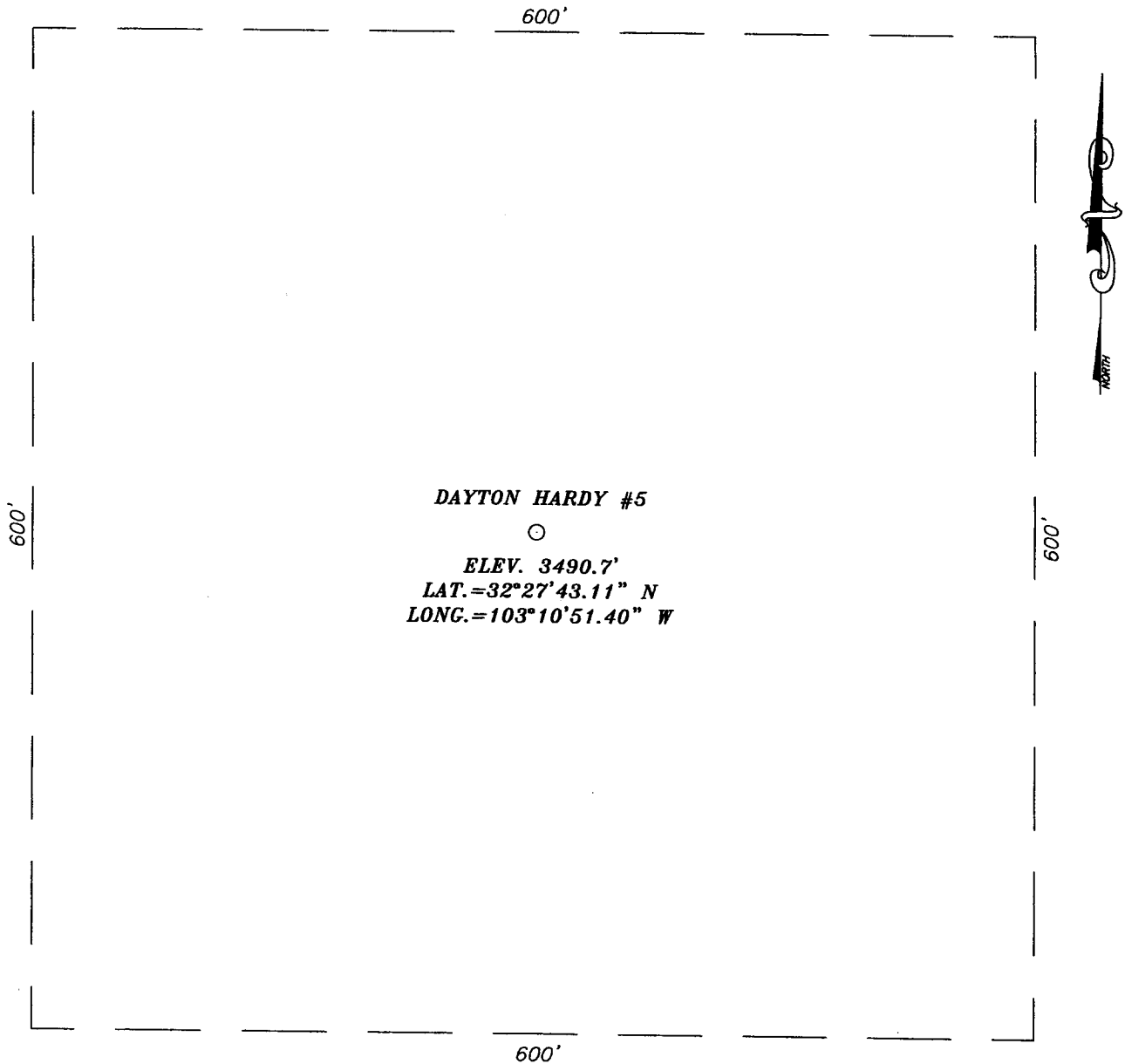
Bottom Hole Location If Different From Surface

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. NSL-5151					

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

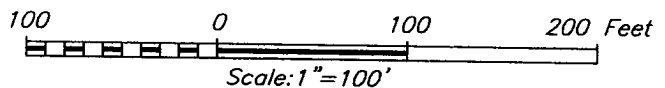
<p>GEODETIC COORDINATES NAD 27 NME Y=533699.0 N X=855441.2 E LAT.=32°27'43.11" N LONG.=103°10'51.40" W</p> 	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Mike Mick Signature MIKE Mick Printed Name Adv. Sn. 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 JR Signature & Seal of Professional Surveyor GARY EIDSON 11/17/04 04.11.1336 Certificate No. GARY EIDSON 12841</p>
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SECTION 20, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

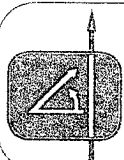
FROM THE INTERSECTION OF ST. HWY. #8 AND
CO. RD. #E33 (N. TURNER RD.) GO NORTH ON N.
TURNER RD. FOR APPROX. 1.5 MILES TO A
CALICHE ROAD ON THE LEFT. TURN LEFT (WEST)
AND GO APPROX. 0.3 MILES. PROPOSED LOCATION
IS APPROX. 300' SOUTH.



MARATHON OIL COMPANY

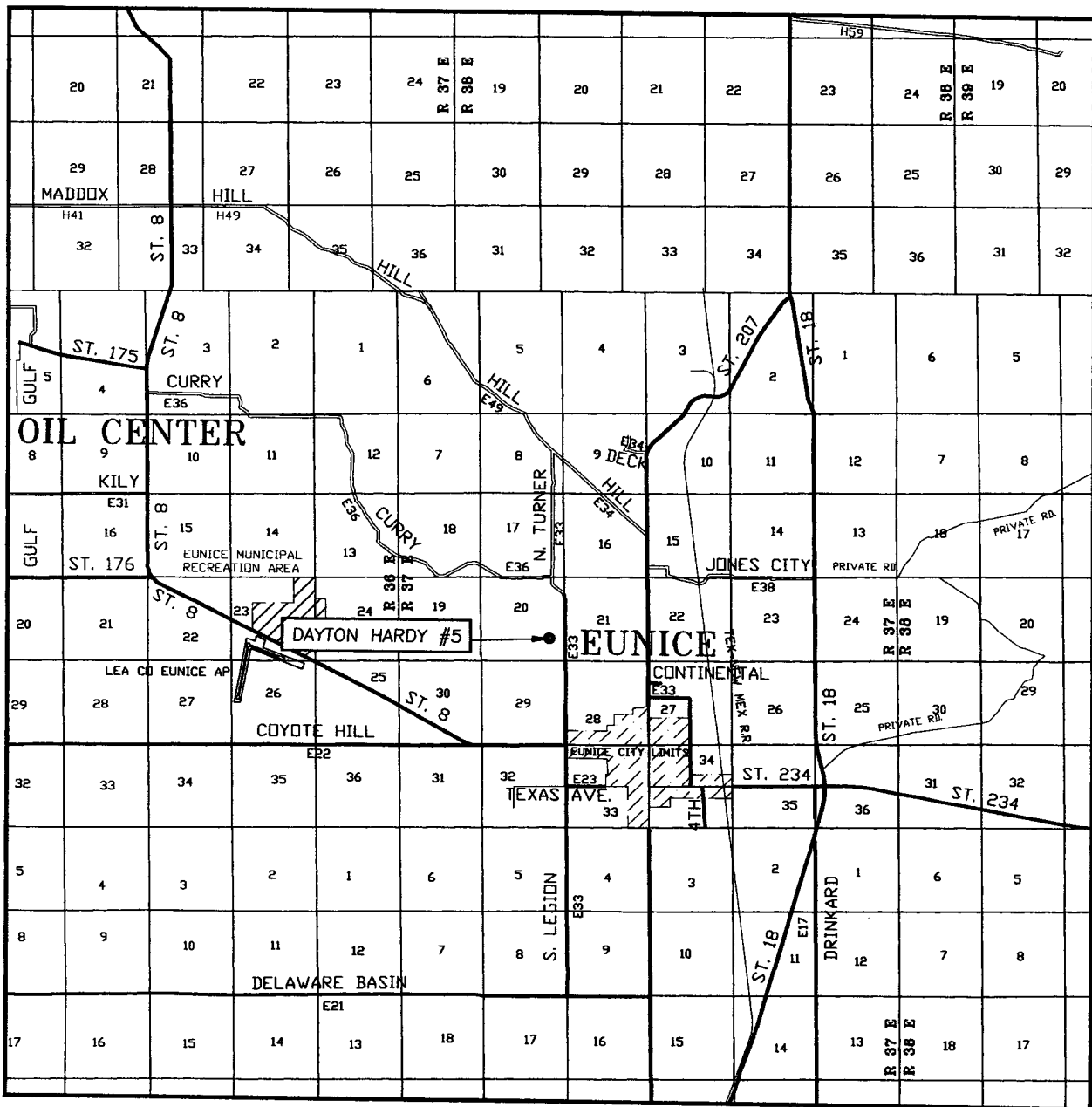
DAYTON HARDY #5 WELL
LOCATED 1800 FEET FROM THE SOUTH LINE
AND 1500 FEET FROM THE EAST LINE OF SECTION 20,
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 10/12/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.1336	Dr By: J.R.	Rev 1:N/A	
Date: 11/16/04	Disk: CD#10	04111336	Scale: 1"=100'



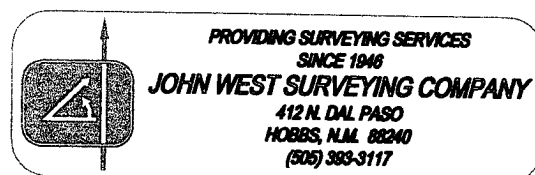
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

VICINITY MAP

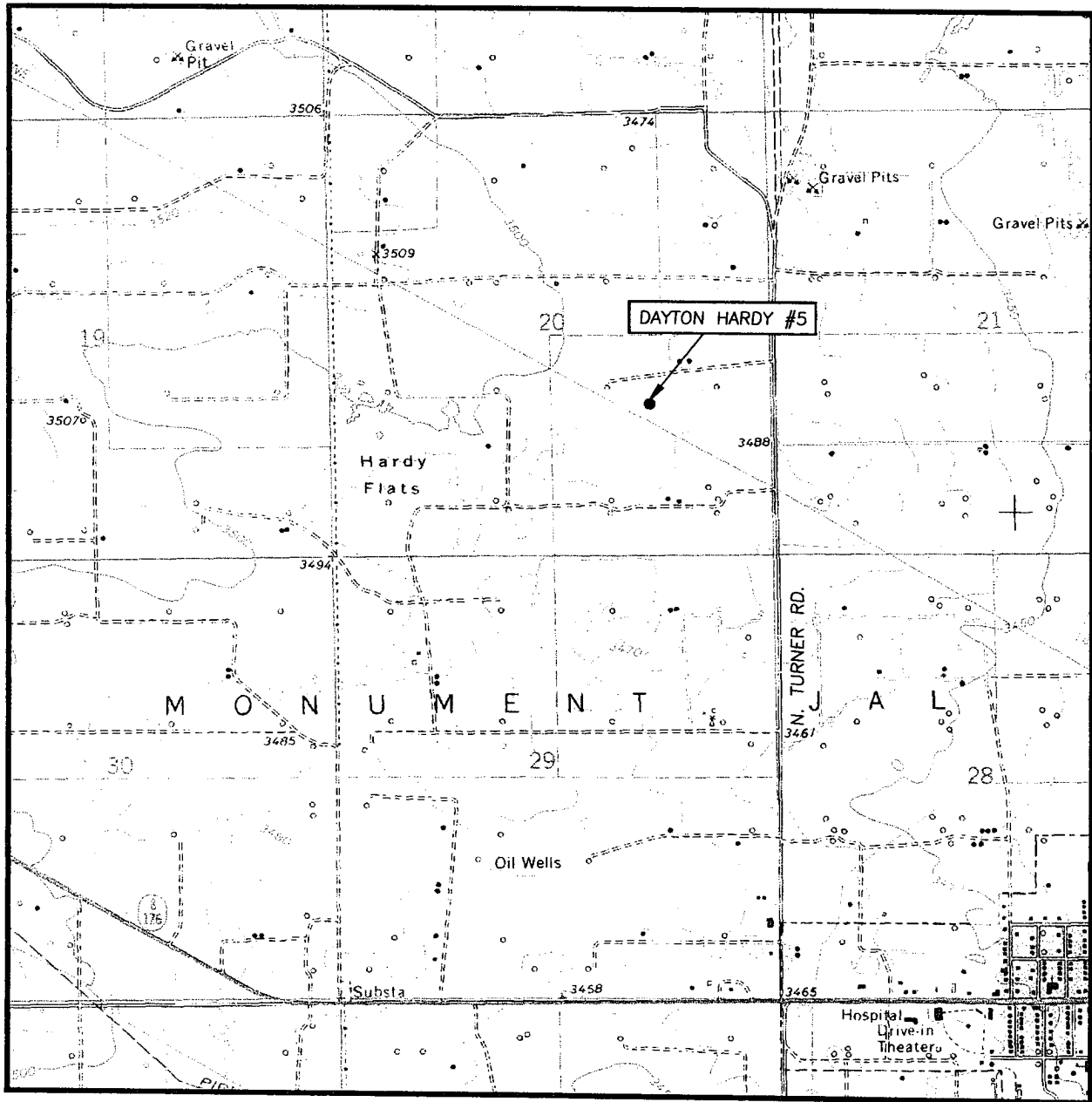


SCALE: 1" = 2 MILES

SEC. 20 TWP. 21-S RGE. 37-E
 SURVEY N.M.P.M.
 COUNTY LEA
 DESCRIPTION 1800' FSL & 1500' FEL
 ELEVATION 3491'
 OPERATOR MARATHON OIL COMPANY
 LEASE DAYTON HARDY



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

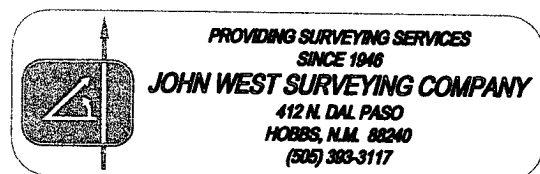
DESCRIPTION 1800' FSL & 1500' FEL

ELEVATION 3491'

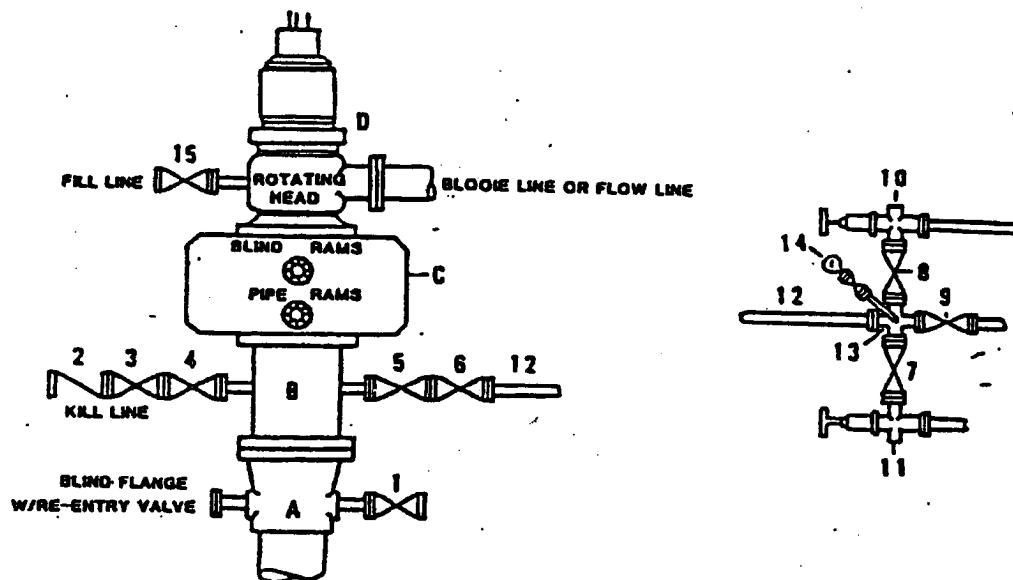
OPERATOR MARATHON OIL COMPANY

LEASE DAYTON HARDY

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



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 Bloode Line. |
| 1,3,4,7,8, | 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve. |
| 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. |

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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 #5 API #: 30-025-37027 U/L or Qtr/Qtr_NWSE Sec 20 T 21 S_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 <input checked="" type="checkbox"/>	(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 <input checked="" type="checkbox"/>	(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 <input checked="" type="checkbox"/>	(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 mfmick

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: DEC 30 2004

Date: _____
Printed Name/Title PETROLEUM ENGINEER Signature [Signature]

