

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. 1st Street, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

Form C-101  
Revised March 17, 1999

Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Submit to appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address <b>Marathon Oil Company</b> <b>P.O. Box 552</b>		<sup>2</sup> OGRID Number <b>14021</b>
<sup>4</sup> Property Code <b>22575</b>	<sup>5</sup> Property Name <b>INDIAN BASIN "32" STATE</b>	<sup>3</sup> APL Number <b>30-015-33121</b>
		<sup>6</sup> Well No. <b># 5</b>

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>D</b>	<b>32</b>	<b>21-S</b>	<b>24-E</b>		<b>628</b>	<b>North</b>	<b>820</b>	<b>West</b>	<b>EDDY</b>

<sup>8</sup> 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

<sup>9</sup> Proposed Pool 1

**Indian Basin U.P. Assoc.**

<sup>10</sup> Proposed Pool 2

<sup>11</sup> Work Type Code <b>N</b>	<sup>12</sup> Well Type Code <b>G</b>	<sup>13</sup> Cable/Rotary <b>ROTARY</b>	<sup>14</sup> Lease Type Code <b>S</b>	<sup>15</sup> Ground Level Elevation <b>3796'</b>
<sup>16</sup> Multiple <b>NO</b>	<sup>17</sup> Proposed Depth <b>8600'</b>	<sup>18</sup> Formation <b>U. PENN</b>	<sup>19</sup> Contractor <b>McVAY</b>	<sup>20</sup> Spud Date <b>1/1/04</b>

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
<b>12.250</b>	<b>9-5/8"</b>	<b>36#</b>	<b>1250'</b>	<b>630</b>	<b>SURFACE</b>
<b>8.750"</b>	<b>7"</b>	<b>23#/26#</b>	<b>8600'</b>	<b>1280</b>	<b>SURFACE</b>

<sup>22</sup> 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 drill a directional Upper Penn. well to Standard target. When received directional plan will be submitted on a Sundry notice.

BOPE: 11" 3M DUAL RAM, ANNULAR & ROTATING HEAD.

ALL BOPE SHALL BE INSTALLED AND TESTED ACCORDING TO OCD RULES #109 & #114.

ALL CASING SHALL BE RUN AND CEMENTED IN ACCORDANCE WITH OCD RULE #107.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Jerry Fletcher*  
Printed name: **Jerry Fletcher**

Title: **Engineer Tech.**

Date: **8/25/03**

Phone: **432-687-8360**

OIL CONSERVATION DIVISION

Approved by:

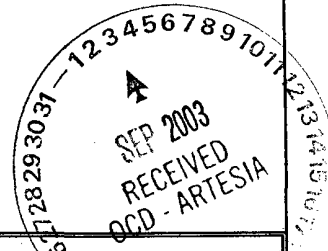
Title:

Approval Date: **DEC 01 2003**

Expiration Date: **DEC 01 2004**

Conditions of Approval:

Attached ☐



Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
811 South First, Artesia, NM 87210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-103  
Revised March 25, 1999

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	<b>RECEIVED</b>
2. Name of Operator <b>Marathon Oil Company</b>	<b>NOV 8 5 2003</b>
3. Address of Operator <b>P.O. Box 552, Midland, TX 79702</b>	<b>OCD-ARTESIA</b>
4. Well Location Unit Letter <b>D</b> : <b>628'</b> feet from the <b>NORTH</b> line and <b>820</b> feet from the <b>WEST</b> line Section <b>32</b> Township <b>21-S</b> Range <b>24-E</b> NMPM County <b>EDDY</b>	
10. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>G.L. 3796</b>	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: **X Directional plan**

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Please see attached directional plan.

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

SIGNATURE *Jerry F Fletcher* TITLE Engineer Technician DATE 11/24/03

Type or print name **Jerry Fletcher**

Telephone No. **432-687-8360**

(This space for State use)

FOR RECORDS ONLY

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE **DEC 01 2003**  
Conditions of approval, if any:

DISTRICT I  
P.O. Box 1960, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0718

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

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 33685	Pool Name Indian Basin Upper Penn. Associated
Property Code	Property Name INDIAN BASIN STATE 32	Well Number 5
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3796'

Surface Location

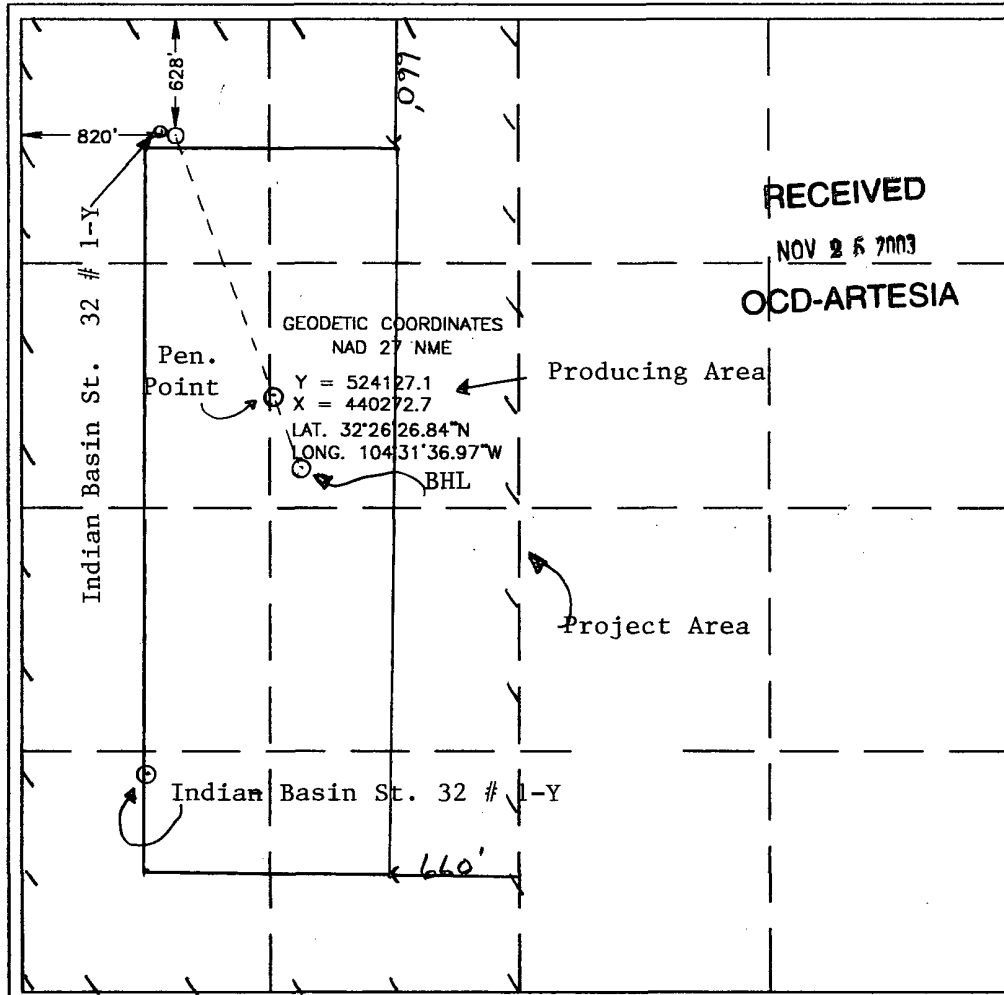
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	21-S	24-E		628'	NORTH	820'	WEST	EDDY

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
F	32	21-S	24-E		2458'	NORTH	1450'	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320 W/2			

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



OPERATOR CERTIFICATION

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

*Jerry Fletcher*  
Signature

Jerry Fletcher

Printed Name  
Engineer Tech.

Title  
11/24/03

Date

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.

May 20, 2003

Date Surveyed IDSON AWB

Signature & Seal of  
Professional Surveyor

*Ronald J. Edson*  
12241  
03.11.0536

Certificate No. RONALD J. EDSON 3239  
GARY EDSON 12641

RECEIVED

NOV 25 7003

OCD-ARTESIA

Marathon Oil Company  
Indian Basin "32" State #5

slot #1  
INDIAN BASIN  
Eddy County New Mexico

P R O P O S A L L I S T I N G

by  
Baker Hughes INTEQ

Your ref : Plan 1  
Our ref : prop4059  
License :

Date printed : 20-Nov-2003  
Date created : 20-Nov-2003  
Last revised : 20-Nov-2003

Field is centred on 445535.500,521332.200,-105.00000,N  
Structure is centred on 440272.700,524127.100,-105.00000,N

Slot location is n32 26 26.842,w104 31 36.974  
Slot Grid coordinates are N 524127.100, E 440272.700  
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is Grid North

Marathon Oil Company  
Indian Basin "32" State #5, slot #1  
INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 1  
Your ref : Plan 1  
Last revised : 20-Nov-2003

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect	G R I D Easting	C O O R D S Northing
0.00	0.00	160.99	0.00	0.00N	0.00E	0.00	0.00	440272.70	524127.10
500.00	0.00	160.99	500.00	0.00S	0.00E	0.00	0.00	440272.70	524127.10
1000.00	0.00	160.99	1000.00	0.00S	0.00E	0.00	0.00	440272.70	524127.10
1300.00	0.00	160.99	1300.00	0.00S	0.00E	0.00	0.00	440272.70	524127.10
1400.00	2.50	160.99	1399.97	2.06S	0.71E	2.50	2.18	440273.41	524125.04
1500.00	5.00	160.99	1499.74	8.25S	2.84E	2.50	8.72	440275.54	524118.85
1600.00	7.50	160.99	1599.14	18.54S	6.39E	2.50	19.61	440279.09	524108.56
1700.00	10.00	160.99	1697.97	32.92S	11.34E	2.50	34.82	440284.04	524094.18
1800.00	12.50	160.99	1796.04	51.36S	17.70E	2.50	54.33	440290.40	524075.74
1900.00	15.00	160.99	1893.17	73.83S	25.44E	2.50	78.09	440298.14	524053.27
1947.20	16.18	160.99	1938.63	85.83S	29.57E	2.50	90.78	440302.27	524041.27
2000.00	16.18	160.99	1989.34	99.74S	34.36E	0.00	105.49	440307.06	524027.36
2500.00	16.18	160.99	2469.54	231.47S	79.75E	0.00	244.82	440352.45	523895.63
3000.00	16.18	160.99	2949.73	363.20S	125.13E	0.00	384.15	440397.83	523763.90
3500.00	16.18	160.99	3429.93	494.93S	170.52E	0.00	523.48	440443.22	523632.17
4000.00	16.18	160.99	3910.12	626.65S	215.90E	0.00	662.80	440488.60	523500.45
4500.00	16.18	160.99	4390.32	758.38S	261.29E	0.00	802.13	440533.99	523368.72
5000.00	16.18	160.99	4870.51	890.11S	306.67E	0.00	941.46	440579.37	523236.99
5500.00	16.18	160.99	5350.71	1021.84S	352.06E	0.00	1080.79	440624.76	523105.26
6000.00	16.18	160.99	5830.90	1153.57S	397.44E	0.00	1220.12	440670.14	522973.53
6500.00	16.18	160.99	6311.10	1285.30S	442.83E	0.00	1359.45	440715.53	522841.80
7000.00	16.18	160.99	6791.29	1417.03S	488.21E	0.00	1498.77	440760.91	522710.07
7500.00	16.18	160.99	7271.49	1548.76S	533.60E	0.00	1638.10	440806.30	522578.34
7529.69	16.18	160.99	7300.00	1556.58S	536.29E	0.00	1646.37	440808.99	522570.52
8000.00	16.18	160.99	7751.69	1680.49S	578.98E	0.00	1777.43	440851.68	522446.61
8500.00	16.18	160.99	8231.88	1812.21S	624.36E	0.00	1916.75	440897.06	522314.89
8570.93	16.18	160.99	8300.00	1830.90S	630.80E	0.00	1936.52	440903.50	522296.20

U.P. TOP  
2184' FNL \* 1356'  
FWL

Terminus  
2458' FNL  
1450' FWL

All data in feet unless otherwise stated. Calculation uses minimum curvature method.

Coordinates from slot #1 and TVD from rotary table.

Bottom hole distance is 1936.52 on azimuth 160.99 degrees from wellhead.

Vertical section is from wellhead on azimuth 160.99 degrees.

Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid

Presented by Baker Hughes INTEQ

Marathon Oil Company  
Indian Basin "32" State #5, slot #1  
INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 2  
Your ref : Plan 1  
Last revised : 20-Nov-2003

				Comments in wellpath
				=====
MD	TVD	Rectangular Coords.		Comment
-----				
7529.69	7300.00	1556.58S	536.29E	Top of UP
8570.93	8300.00	1830.90S	630.80E	TD Proposed BHL

Targets associated with this wellpath				
=====				
Target name	Geographic Location	T.V.D.	Rectangular Coordinates	Revised
-----				
Top of UP		7300.00	1556.58S 536.29E	20-Nov-2003
TD Proposed BHL		8300.00	1830.90S 630.80E	20-Nov-2003



Marathon Oil Company

Structure : Indian Basin 32 State #5

Slot : slot #1

Field : INDIAN BASIN

Location : Eddy County New Mexico

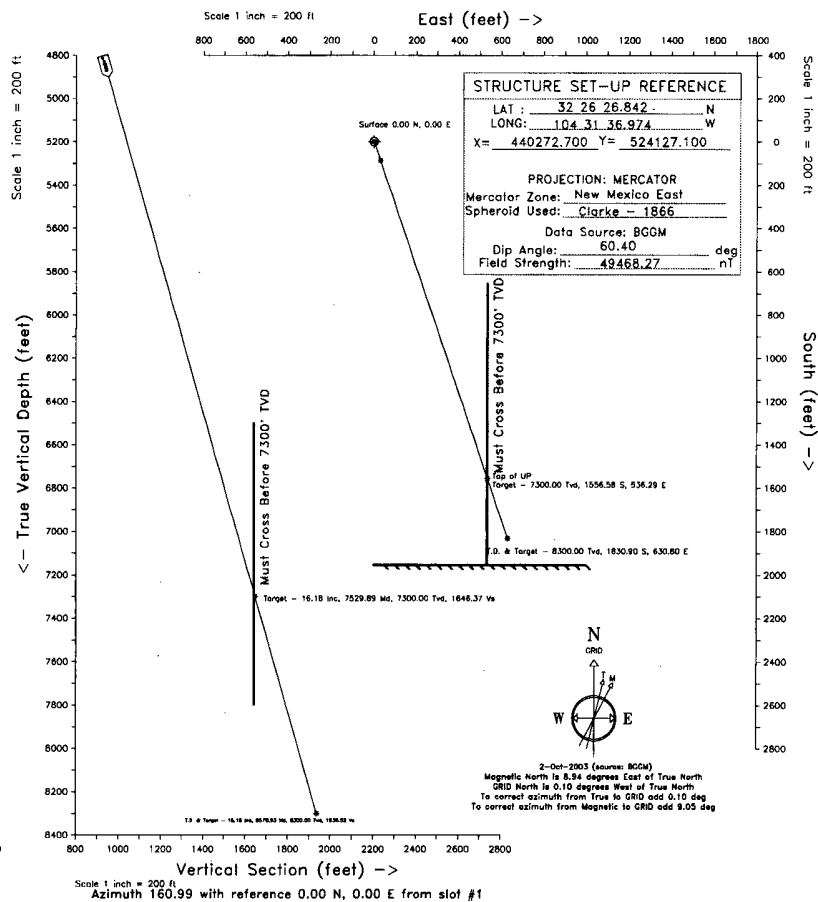
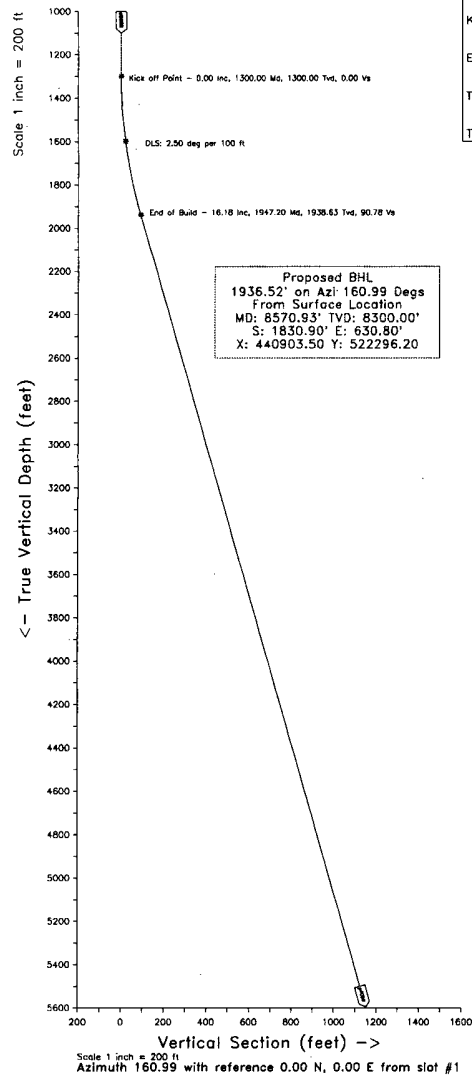
Created by: danf  
Date plotted : 20-Nov-2003  
Plot Reference is Plan 1.  
Coordinates are in feet reference slot #1.  
True Vertical Depths are reference rotary table.  
sl5wm  
--- Baker Hughes INTEQ ---



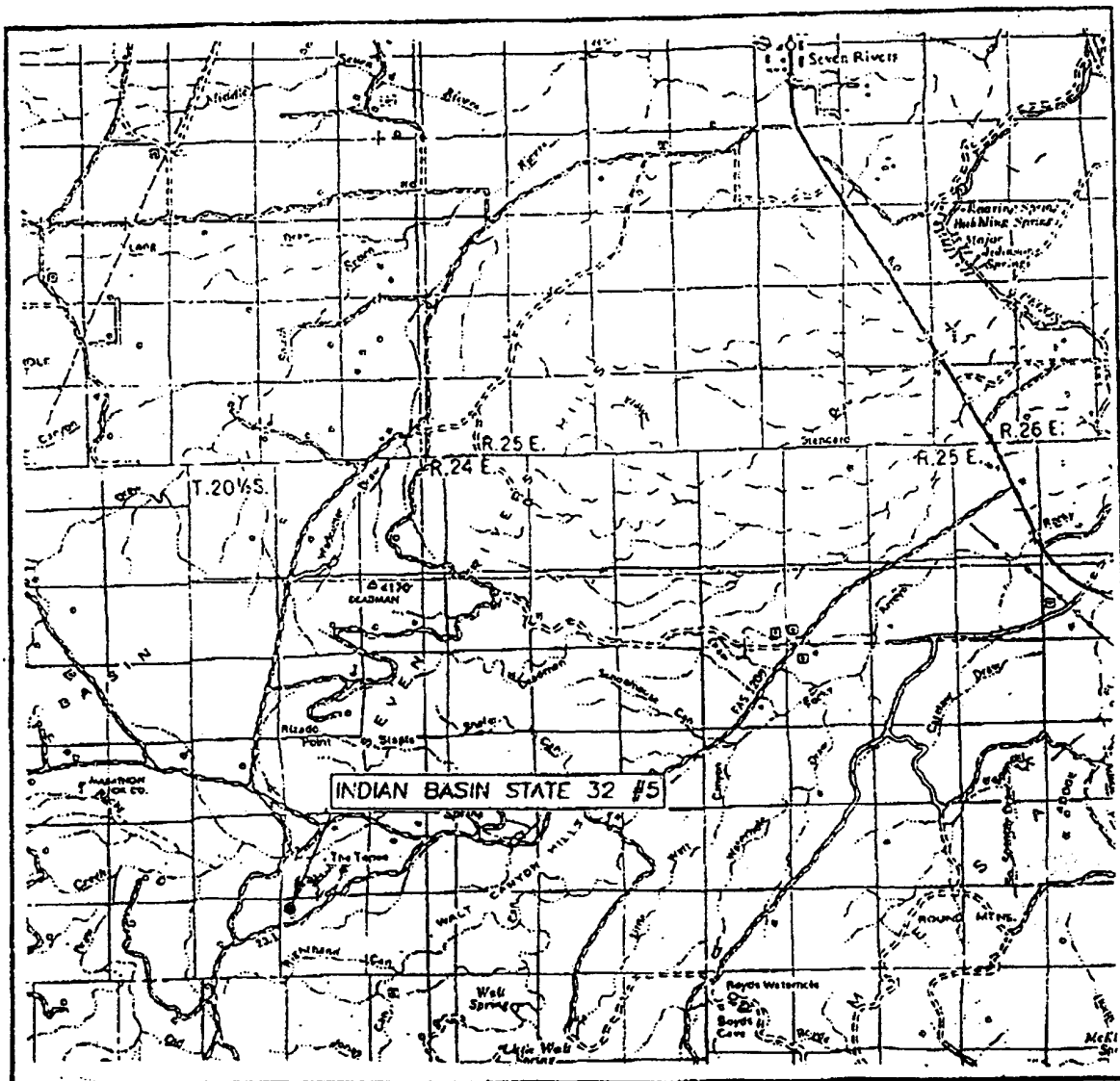
INTEQ

## WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100
Tie on	0.00	0.00	160.99	0.00	0.00	0.00	0.00	0.00
KOP	1300.00	0.00	160.99	1300.00	0.00	0.00	0.00	0.00
End of Build	1947.20	16.18	160.99	1938.63	-85.83	29.57	90.78	2.50
Target Top of UP	7529.69	16.18	160.99	7300.00	-1556.58	536.29	1646.37	0.00
T.D. & Target TD Propos	8570.93	16.18	160.99	8300.00	-1830.90	630.80	1936.52	0.00



## VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 32 TWP. 21-S RGE. 24-ESURVEY N.M.P.M.COUNTY EDDYDESCRIPTION 628' FNL 820' FWLELEVATION 3796'OPERATOR MARATHON OIL COMPANYLEASE INDIAN BASIN STATE 32

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117



[illegible]

CONTOUR INTERVAL: 20'  
MARTHA CREEK, N.M.

U.S.G.S. TOPOGRAPHIC MAP  
MARTHA CREEK, N.M.

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

ARCHAEOLOGICAL SURVEY of the MARATHON OIL COMPANY  
INDIAN BASIN 32 STATE WELL NO. 4 RELOCATION  
T21S, R24E, SECTION 32 (NW $\frac{1}{4}$ NW $\frac{1}{4}$ )  
[660 FNL, 810 FWL]. EDDY COUNTY, NEW MEXICO

SPLIT ESTATE: FEDERAL LAND SURFACE & NEW MEXICO STATE MINERALS  
[U.S.G.S. 7.5 minute series, MARTHA CREEK, NEW MEXICO, 1978]

ASC Report 99-027

by Dorothy M. Griffiths, Project Archaeologist  
and James V. Sciscenti, Principal Investigator

ARCHAEOLOGICAL SURVEY CONSULTANTS  
P.O. Drawer D, Roswell, New Mexico 88202  
[505] 623-5012

BUREAU OF LAND MANAGEMENT PERMIT NO.: 18-2920-98-M  
NEW MEXICO STATE LAND ANNUAL PERMIT NO.: NM-98-070

March 26, 1999

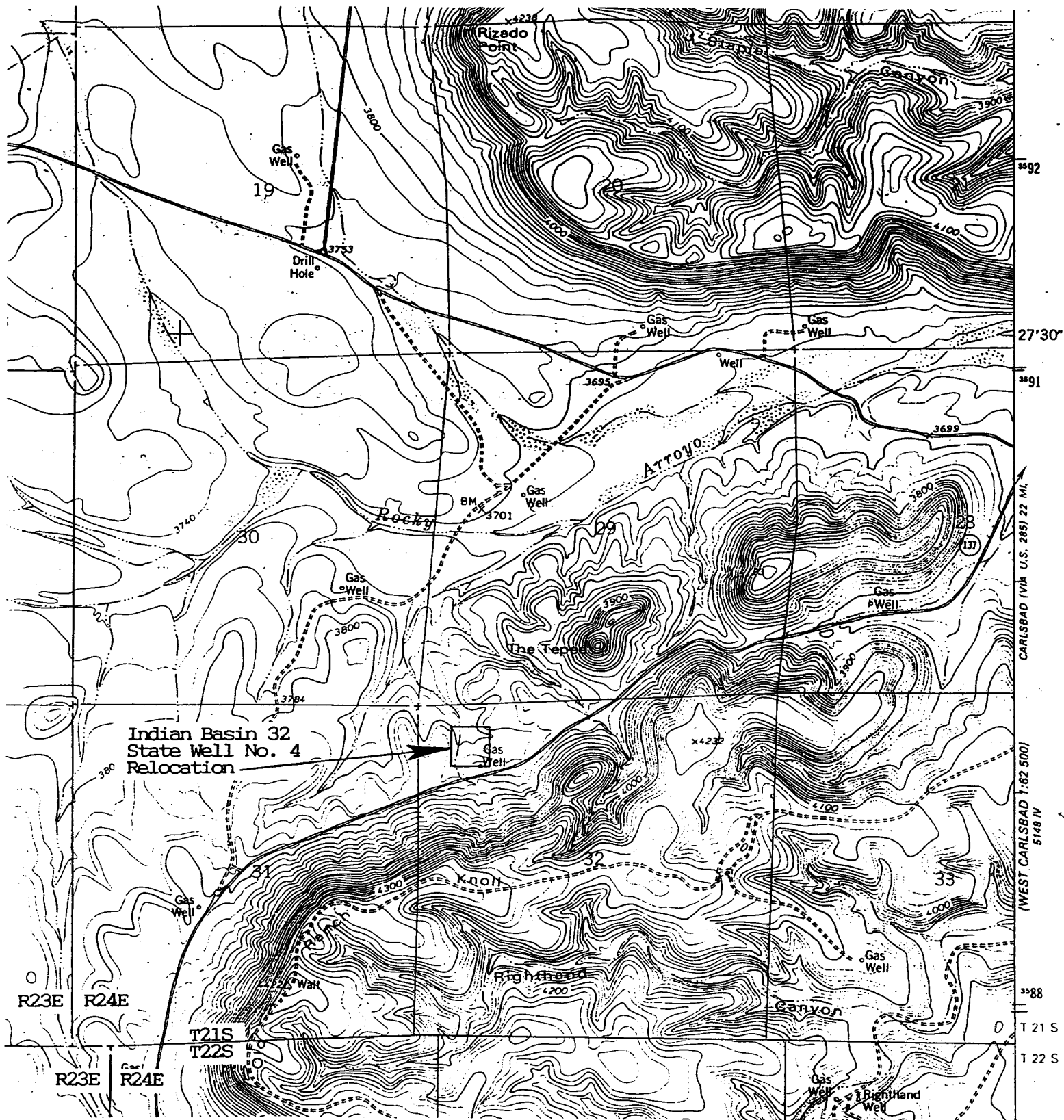
Prepared for:

Marathon Oil Company  
P.O. Box 552  
Midland, Texas 79702

Attention: Walter Dueease

Distribution:

Marathon Oil Company (1)  
BLM - Carlsbad Resource Area (2)  
Griffiths (1)



ARCHAEOLOGICAL SURVEY CONSULTANTS  
P.O. Box 2285  
Roswell, New Mexico 88202-2285  
Phone: 505-623-5012  
Fax: 505-623-3121

TO: Tiffany Sullivan-Owens, Carlsbad Field Office, Bureau of Land Management, New Mexico.

FROM: D.M. Griffiths, Principal Investigator, Archaeological Survey Consultants.

Subject: proposed Marathon Oil Company Wells situated on extant, previously inspected, well pads.

Marathon Oil Company proposes to drill 6 wells (for oil and/or gas), within Township 21 South, Range 24 East, Township 21 South, Range 23 East, and Township 22 South, Range 23 East (Eddy County, New Mexico), which are situated on extant well pads. All of the extant well pads have been previously inspected for archaeological remains, and reports of the archaeological inspections have been filed with the Carlsbad Field Office, Bureau of Land Management (Dept. of the Interior), New Mexico.

A list of the proposed wells, and the data concerning the prior Archaeological Survey Consultants surveys are discussed below.

Priority 1: Marathon Oil Company Indian Hills Unit Fed. Well No. 53 (T21S, R24E, Section 28, 1383 FNL, 1586 FWL, Eddy Co., N.M.): situated on the previously inspected Indian Hills Unit Fed. Well No. 34 (T21S, R24E, Section 28, 1416 FNL, 1607 FWL, Eddy Co., N.M.). ASC Report 01-022 (22-March-2001) covered the archaeological survey of the Indian Hills Unit Fed. Well No. 34 well pad; there were 8 Isolated Finds (consisting of 19 widely scattered artifacts) within the 600 ft. square well pad. The proposed Indian Hills Unit Fed. Well No. 53 is an offset, 33 ft. north & 21 ft. west of the Indian Hills Unit Fed. Well No. 34 well bore.

An archaeological survey is not required for the proposed Marathon Oil Company Indian Hills Unit Fed. Well No. 53, since the well falls entirely within the previously inspected area, and no new construction is envisioned outside of the originally inspected well pad.

Priority 2, Alternate 1: Marathon Oil Company Indian Hills Unit Fed. Well No. 55 (T21S, R24E, Section 20, 1166 FNL, 1272 FEL, Eddy Co., N.M.): situated on the previously inspected Indian Hills Unit Fed. Well No. 25 (T21S, R24E, Section 20, 1093 FNL, 1367 FEL, Eddy Co., N.M.). ASC Report 00-036 (08-June-2000) covered the archaeological survey within the well pad. No cultural material was found within the surveyed well pad. The proposed Indian Hills Unit Fed. Well No. 55 (Alternate 1) is an offset, 73 ft. south & 95 ft. east of the Indian Hills Unit Fed. Well No. 25 well bore.

An archaeological survey is not required for the proposed Marathon Oil Company Indian Hills Unit Fed. Well No. 55 (Alternate 1), since the well falls entirely within the previously inspected 600 ft. square area, and no new construction is envisioned outside of the originally inspected well pad.

Priority 2, Alternate 2: Marathon Oil Company Indian Hills Unit Fed. Well No. 55 (T21S, R24E, Section 20, 1105 FNL, 635 FEL, Eddy Co., N.M.): situated on the previously inspected Indian Hills Unit Fed. Well No. 26 (T21S, R24E, Section 20, 1069 FNL, 685 FEL, Eddy Co., N.M.). ASC Report 00-037 (09-June-2000) covered the archaeological survey within the well pad. No cultural material was found within the surveyed well pad. The proposed Indian Hills Unit Fed. Well No. 55 (Alternate 2) is an offset, 36 ft. south & 50 ft. east of the Indian Hills Unit Fed. Well No. 26 well bore.

An archaeological survey is not required for the proposed Marathon Oil Company Indian Hills Unit Fed. Well No. 55 (Alternate 2), since the well falls entirely within the previously inspected 600 ft. square area, and no new construction is envisioned outside of the originally inspected well pad.

ARCHAEOLOGICAL SURVEY CONSULTANTS  
P.O. Box 2285  
Roswell, New Mexico 88202-2285  
Phone: 505-623-5012  
Fax: 505-623-3121

TO: Tiffany Sullivan-Owens, Carlsbad Field Office, Bureau of Land Management, New Mexico.

FROM: D.M. Griffiths, Principal Investigator, Archaeological Survey Consultants.

Subject: proposed Marathon Oil Company Wells situated on extant, previously inspected, well pads.

Priority 2, Alternate 3: Marathon Oil Company Indian Hills Unit Fed. Well No. 55 (T21S, R24E, Section 21, 460 FSL, 529 FWL, Eddy Co., N.M.): situated on the previously inspected Indian Hills Unit Fed. Well No. 36 well pad (T21S, R24E, Section 21, 429 FSL, 506 FWL, Eddy Co., New Mexico).

ASC Report 01-101 (15-Nov.-2001) covered the archaeological survey within the Indian Hills Unit Fed. Well No. 36 well pad. Some 3 archaeological sites occurred within the well pad: LA 134690 consisted of a BLM Category 1 site (a low density, assemblage of lithic debitage and minimal ceramic sherds) not significant past the level of field recording. LA 121206 and LA 132271 consist of BLM Category 2 sites, significant past the level of field recording.

Since the un-damaged part of LA 121206 was in excess of 150 ft. to the south of the proposed Indian Hills Unit Federal Well No. 36, archaeological CLEARANCE for the Marathon Oil Company Indian Hills Unit Federal Well No. 36 was RECOMMENDED, with the proviso that all well pad activity be restricted on the south side to an area no greater than 150 ft. south of the proposed drill hole.

Since LA 132271 was situated ca. 180 ft. (54.9 metres) southeast of the proposed Indian Hills Unit Federal Well No. 36 borehole, archaeological CLEARANCE for the Marathon Oil Company Indian Hills Unit Federal Well No. 36 was RECOMMENDED, with the proviso that all well pad activity be restricted on the south side to an area no greater than 150 ft. south of the proposed drill hole, and restricted on the east side to a distance no greater than 200 ft. east of the proposed drill hole.

An L-shaped barb-wire fenceline, trending east/west and north/south, had been previously erected at a distance of 150 ft. south and 212 ft. east of the proposed Indian Hills Unit Federal Well No. 36 borehole (for protective measures during construction and drilling of the Marathon Indian Hills Unit Federal Well No. 33: see ASC Report 01-019). Because of the fenceline, LA 132271 was not endangered by construction activity. An archaeological monitor occurred during construction activity at the Indian Hills Unit Fed. Well No. 36 well pad (ASC Report 01-101A).

The proposed Indian Hills Unit Fed. Well No. 55 (Alternate 3) is an offset, 31 ft. north & 23 ft. east of the Indian Hills Unit Fed. Well No. 36 well bore.

An archaeological survey is not required for the proposed Marathon Oil Company Indian Hills Unit Fed. Well No. 55 (Alternate 3), since the well falls entirely within the previously inspected 600 ft. square area, and no new construction is envisioned outside of the originally constructed and fenced well pad area.

No construction or vehicular activity should occur south or east of the established fenceline. An archaeologist should monitor construction activity at the proposed Indian Hills Unit Fed. Well No. 55 (Alternate 3) wellpad.

ARCHAEOLOGICAL SURVEY CONSULTANTS  
P.O. Box 2285  
Roswell, New Mexico 88202-2285  
Phone: 505-623-5012  
Fax: 505-623-3121

TO: Tiffany Sullivan-Owens, Carlsbad Field Office, Bureau of Land Management, New Mexico.

FROM: D.M. Griffiths, Principal Investigator, Archaeological Survey Consultants.

Subject: proposed Marathon Oil Company Wells situated on extant, previously inspected, well pads.

Priority 3: Marathon Oil Company Indian Hills Unit Fed. Well No. 56 (T21S, R24E, Section 21, 453 FSL, 350 FWL, Eddy Co., N.M.): situated on the previously inspected Indian Hills Unit Fed. Well No. 33 well pad (T21S, R24E, Section 21, 429 FSL, 326 FWL, Eddy Co., New Mexico).

ASC Report 01-019 (10-Apr.-2001) covered the archaeological survey of the Marathon Oil Company Indian Hills Unit Fed. Well No. 33 well pad. Archaeological survey revealed the occurrence of 5 Isolated Finds, none of which appeared significant past the level of field recording.

In addition, archaeological survey revealed the occurrence of 2 BLM Category 2 (significant) sites: LA 121206 and LA 132271. LA 121206 is a previously recorded, archaeological site, situated to the south and SE of the previously built, fenced, and drilled Indian Hills Unit Fed. Well No. 1 (see ASC Report 98-009).

LA 132271 is situated SE of the proposed Indian Hills Unit Federal Well No. 33, with only the extreme SE quadrant of the staked 600 ft. square well pad impinging on the site. Since LA 132271 was essentially outside of the proposed Indian Hills Unit Federal Well No. 33, the site was in minimal danger from construction activity.

Since the un-damaged part of LA 121206 was to the south and SE of the previously disturbed and bladed area of the original Indian Hills Unit Federal Well No. 1, and south of the proposed Indian Hills Unit Federal Well No. 33, archaeological CLEARANCE for the Marathon Oil Company Indian Hills Unit Federal Well No. 33 was RECOMMENDED, with the proviso that all well pad activity be restricted on the south and southeast side to an area no greater than 150 ft. south of the proposed drill hole. An east-west trending barb-wire fence was erected prior to all well pad activity at a distance of 150 ft. south of the proposed borehole. An archaeologist monitored the erection of the fence.

The proposed Indian Hills Unit Fed. Well No. 56 is an offset, 24 ft. north & 24 ft. east of the Indian Hills Unit Fed. Well No. 33 well bore.

An archaeological survey is not required for the proposed Marathon Oil Company Indian Hills Unit Fed. Well No. 56, since the well falls entirely within the previously inspected 600 ft. square area, and no new construction is envisioned outside of the originally constructed and fenced well pad area.

No construction or vehicular activity should occur south or east of the established fenceline. An archaeologist should monitor construction activity at the proposed Indian Hills Unit Fed. Well No. 56 wellpad.

ARCHAEOLOGICAL SURVEY CONSULTANTS  
P.O. Box 2285  
Roswell, New Mexico 88202-2285  
Phone: 505-623-5012  
Fax: 505-623-3121

TO: Tiffany Sullivan-Owens, Carlsbad Field Office, Bureau of Land Management, New Mexico.

FROM: D.M. Griffiths, Principal Investigator, Archaeological Survey Consultants.

Subject: proposed Marathon Oil Company Wells situated on extant, previously inspected, well pads.

Priority 4: Marathon Oil Company Smith Fed. Well No. 4 (T22S, R23E, Section 11, 1511 FNL, 839 FEL, Eddy Co., N.M.): situated on the previously inspected Smith Federal Well No. 3 well pad (T22S, R23E, Section 11, 1514 FNL, 870 FEL, Eddy Co., New Mexico).

ASC Report 00-040 (25-Aug.-2000) covered the archaeological survey of the Marathon Oil Company Smith Federal Well No. 3 well pad and Access Road R/W. Archaeological survey revealed the occurrence of 4 Isolated Finds, none of which appear significant past the level of field recording.

In addition, archaeological survey revealed the occurrence of 2 BLM Category 2 sites (significant past the level of field recording): LA 120252, straddling the initially staked (and cancelled) access road R/W, and LA 130972 situated in the SE quadrant of the finally staked well pad, to the SE of a NE trending barbwire fenceline.

The proposed Smith Federal Well No. 4 is an offset, 3 ft. north and 31 ft. east of the Smith Federal Well No. 3 well bore, within the built wellpad. LA 130972 should not be endangered by well drilling activity.

An archaeological survey is not required, since the well falls entirely within the previously inspected 400 ft. square area, and no new construction is envisioned outside of the originally inspected well pad. A BLM stipulation should state that no new construction, vehicular, or drilling activity should occur SE of the extant NE trending barbwire fenceline.

Priority 5: Marathon Oil Company Indian Basin State 32 Well No. 5 (T21S, R24E, Section 32, 628 FNL, 820 FWL, Eddy Co., N.M.): situated on the previously inspected Indian Basin State 32 Well No. 4 well pad (T21S, R24E, Section 32, 660 FNL, 810 FWL, Eddy Co., New Mexico).

ASC Report 99-027 (26-March-1999) covered the archaeological survey within the Indian Basin State 32 Well No. 4 well pad. No cultural material was found within the surveyed well pad. The proposed Indian Basin State 32 Well No. 5 is an offset, 32 ft. north & 10 ft. east of the Indian Basin State 32 Well No. 4 well bore.

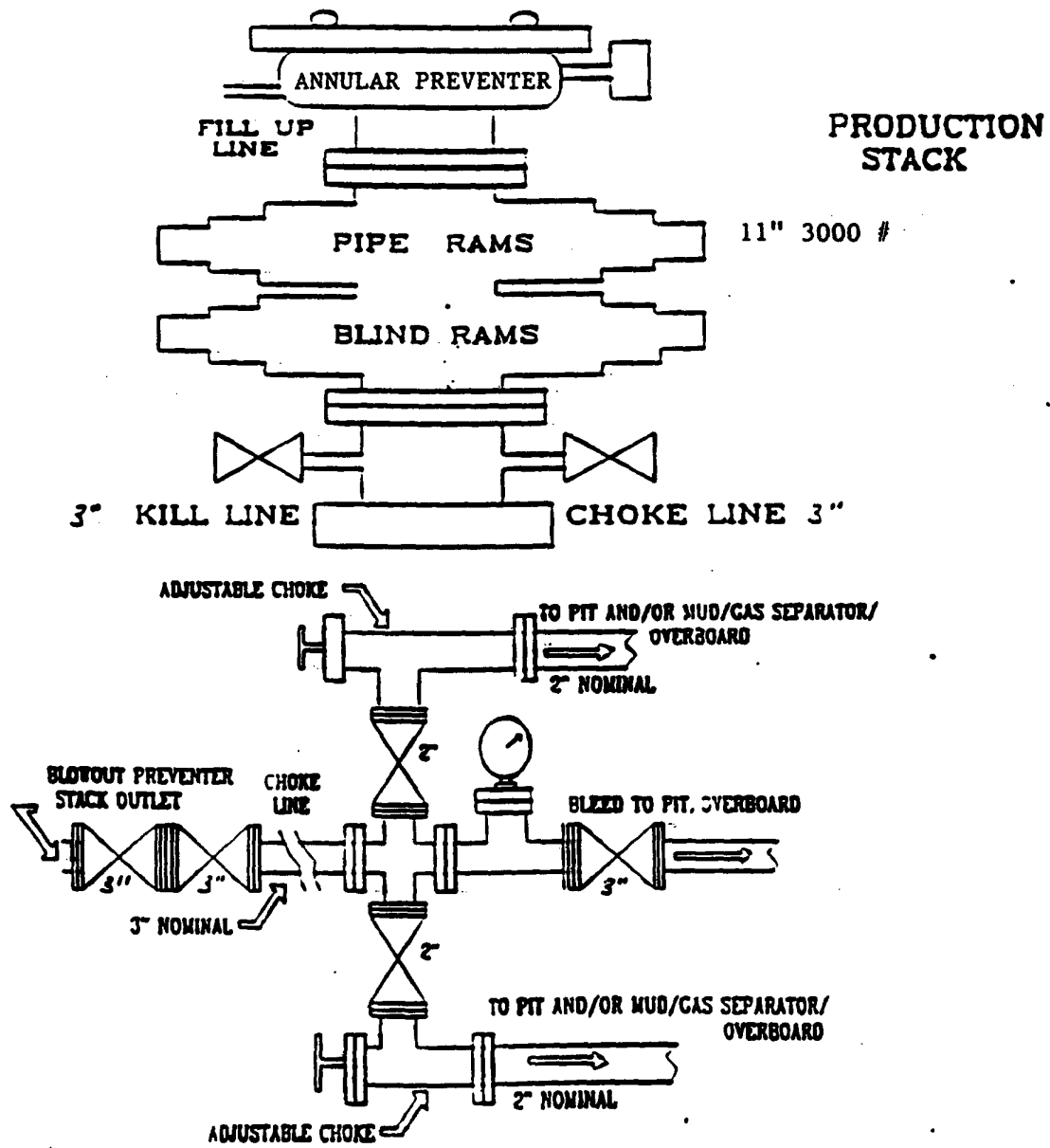
An archaeological survey is not required, since the well falls entirely within the previously inspected 600 ft. square area, and no new construction is envisioned outside of the originally inspected well pad.

Priority 6: Marathon Oil Company North Indian Basin Unit Federal Well No. 35 (T21S, R23E, Section 10, 1650 FNL, 1650 FWL, Eddy Co., N.M.): situated on the previously inspected North Indian Basin Unit Federal Well No. 33 (Alternate Location # 2) well pad (T21S, R23E, Section 10, 1650 FNL, 1650 FWL, Eddy Co., New Mexico).

ASC Report 96-123 (24-Nov.-1996) covered the archaeological survey within the North Indian Basin Unit Federal Well No. 33 (Alternate Location # 2) well pad. Only 4 Isolated Finds occurred within the well pad.

An archaeological survey is not required, since the well falls entirely within the previously inspected 400 ft. square area, and no new construction is envisioned outside of the originally inspected well pad.

D.M. Griffiths.





# **MARATHON OIL COMPANY**

## **H2S DRILLING OPERATIONS PLAN**

### ***I. HYDROGEN SULFIDE TRAINING***

All contractors and subcontractors employed by Marathon Oil Company will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### **II. H2S EQUIPMENT AND SYSTEMS**

#### **1. Safety Equipment**

The following safety equipment will be on location.

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached diagram.

## 2. WELL CONTROL SYSTEMS

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accomodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxillary equipment added as appropriate includes:

- a. annular preventor ☒
- b. rotating head ☒
- c. mud- gas separator ☒
- d. flare line and means of ignition ☐
- e. remote operated choke ☒

### B. Communication

The rig contractor will be required to have two-way communication capability. Marathon Oil Company will have either land-line or mobile telephone capabilities.

### C. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

D. Drill Stem Test intervals are as follows:

DST No. 1	_____ ft. to _____ ft.
DST No. 2	_____ ft. to _____ ft.
DST No. 3	_____ ft. to _____ ft.

Drill Stem Testing Safety Rules are attached.

## III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

- 1. Rig orientation
- 2. Terrain
- 3. Briefing areas
- 4. Ingress and egress
- 5. Pits and flare lines
- 6. Caution and danger signs
- 7. Wind indicators and prevailing wind direction

**PUBLIC PROTECTION PLAN  
MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

**TABLE OF CONTENTS**

	<u>SECTION</u>
<u>PURPOSE</u> .....	1
<u>SCOPE</u> .....	2
<u>DEFINITIONS</u> .....	3
<u>THE PLAN</u> .....	4
<u>DISTRIBUTION AND REVIEW</u> .....	5
<u>APPROVALS</u> .....	6
<u>APPENDIX 'A'</u> <u>Plat Map (AutoCad)*</u> .....	7
	ROE calculation data
<u>APPENDIX 'B'</u> <u>Indian Basin ICS Structure *</u> .....	8
	<u>IB Contact Information *</u>
<u>APPENDIX 'C'</u> <u>Site specific plans</u> .....	9
	C-1 <u>Indian Basin Gas Plant</u>
<u>APPENDIX 'D'</u> <u>Emergency Equipment*</u> .....	10
<u>APPENDIX 'E'</u> <u>ICS Table Layout Diagram</u> .....	11
<u>APPENDIX 'F'</u> <u>Revision Log</u> .....	12

\* = Link to an external document

# **PUBLIC PROTECTION PLAN**

## **MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

### **1. PURPOSE**

**(Back to Top)**

This plan is intended to protect the health and safety of the public, contractors and Marathon personnel should an unanticipated release of a potentially hazardous volume of *Hydrogen Sulfide* (H<sub>2</sub>S) occur.

Further to;

- Comply with the Bureau of Land Management's (BLM) Onshore Oil and Gas Operations; Onshore Oil and Gas Order No. 6, Hydrogen Sulfide Operations (43 CFR Part 3160:
- Comply with State of New Mexico Oil Conservation Division's (NMOCD) rule 19 NMAC 15.C.118.
- Comply with Marathon's Emergency Preparedness Policy & Plan located at; <http://mweb2.hst.moc.com/epg/eppp/eppp1.htm>
- Comply with EPA's Risk Management Plan (RMP)
- Assure proper notification of the appropriate parties and agencies

### **2. SCOPE**

**(Back to Top)**

The provisions of this document are intended address hydrogen sulfide (H<sub>2</sub>S) releases and H<sub>2</sub>S emergencies at Marathon's Indian Basin Gas Plant and all surrounding Marathon operated field locations in the Indian Basin field. Facilities for which calculations indicate a potentially hazardous volume of H<sub>2</sub>S could occur have additional site specific response information and radius of exposure drawn on the attached plat map. The field is located in Eddy County New Mexico, approximately 20 miles west of Carlsbad New Mexico.

This plan is intended to be used in conjunction with the Southern Business Unit's Emergency Response Plan, available electronically on the company intranet at [http://mweb.mid.moc.com/SBU\\_WEB/SBUHES/Emergency\\_Response/ERP2002.doc](http://mweb.mid.moc.com/SBU_WEB/SBUHES/Emergency_Response/ERP2002.doc) and applies to RMS Level I incidents, those that can be reasonably addressed by the Indian Basin Area field office and resolved within two days (approximate). Any incident which exceeds this scope will be managed by progressive levels of company resource. These are the Southern Business Unit and then by the Corporate Emergency Response Team (CERT).

### **3. DEFINITIONS**

**(Back to Top)**

**All Clear** – Notification of effected personnel, by the response leader, that the incident has ended and the area is safe to re-enter.

**A Potentially Hazardous Volume** means a volume of hydrogen sulfide (H<sub>2</sub>S) gas of such concentration that:

- The 100-ppm ROE includes any public area.
- The 500-ppm ROE includes any public road.
- The 100-ppm ROE exceeds 3,000 feet.

**Facility** – Equipment involved in producing, processing, or transporting natural gas and/or crude oil, including the property to the edge of the pad or fence.

## **PUBLIC PROTECTION PLAN**

### **MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

**Hydrogen Sulfide Gas (H<sub>2</sub>S)** - is a extremely flammable, colorless, poisonous gas that may occur naturally as a component of production streams, such as crude oil, produced water and natural gas. At low concentrations it has a rotten egg odor, but at higher concentrations deadens the sense of smell. Its specific gravity is heavier than air giving it a tendency to collect in low-lying areas on still days. The permissible exposure limit is 10 ppm and the short term exposure limit is 15 ppm. It is considered to be immediately dangerous to life and health at 300 ppm. H<sub>2</sub>S is readily dispersed in air and is water soluble.

**ICS (Incident Command System)** – A team based concept for emergency response in which roles and responsibilities are predetermined.

**Incident Commander (IC)** – Senior Marathon employee in charge of an emergency response.

**Incipient Stage Fire** – A fire in the beginning or very early stages of development, which can be effectively extinguished by one or more persons with portable fire fighting equipment.

**Muster site** - A pre-defined staging or meeting area.

**RMS (Response Management System)** - A project management system which facilitates taking command of an emergency event when response is initiated and turning the event into a controlled project with strategic objectives by providing daily and long-range planning.

**RMS Level I** – an emergency that can be reasonably addressed by SBU Area Office in which the incident occurs and that can be resolved in approximately two days or less.

**ROE (Radius of Exposure)** – The radius constructed with the point of escape (of gas) as its starting point and its length calculated using the Pasquill-Gifford derived equation or computer modeling where the H<sub>2</sub>S concentration is greater than 10%.

**PPM** – Parts per Million

**Public Area** – Any building or structure that is not associated with the well, facility or operation for which the ROE is being calculated and that is used as a dwelling, office, place of business, church, school, hospital, or government building, or any portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be present.

**Public Road** – Any federal, state, municipal or county road or highway.

**SBU** – Southern Business Unit

**Serious Incident** – An event which results or has the potential to result in severe personal injury and / or significant equipment damage.

**Sulfur Dioxide (SO<sub>2</sub>)** - A heavy colorless toxic gas that is formed when hydrogen sulfide is burned. It has a pungent odor and is a respiratory irritant. The permissible exposure limit is 2 ppm, the short term exposure limit is 5 ppm, It is considered to be immediately dangerous to life and health at 100 ppm. SO<sub>2</sub> is readily dispersed in air and is water soluble.

**Total Personnel Evacuation** - An evacuation of all person (Marathon employees, contract employees, or visitors) from the emergency area to a muster area.

#### **4. THE PLAN**

**(Back to Top)**

# **PUBLIC PROTECTION PLAN**

## **MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

### **Training:**

All personnel (company, contractors and sub-contractors) working in the plant or field for Marathon Oil Company are required to complete hydrogen sulfide training before beginning work and annually thereafter.

Training on the contents of this plan shall be provided to all Marathon and appropriate contract personnel working at Indian Basin:

- initially when the plan is first implemented,
- whenever the employees' responsibilities or designated actions under the plan change,
- whenever the contents of the plan are changed/revised,
- whenever a new employee begins employment, and
- periodically as needed for all employees.

Marathon supervision is responsible for this training. Mock emergency drills involving facility evacuation and public protection measures shall be held periodically. Training and drills shall be critiqued, documented and kept on file for future reference.

### **Orientation:**

All persons visiting or working at Indian Basin shall receive an orientation covering the following minimum items:

- ☐ Southern Business Unit safety & environmental orientation
- ☐ What types of emergencies are possible,
- ☐ What the emergency evacuation alarm sounds like in the gas plant,
- ☐ How to report an incident/emergency,
- ☐ Who will be in charge during an emergency,
- ☐ How to safely evacuate the plant, and
- ☐ Where to assemble so that all persons can be accounted for.

The Marathon representative responsible for the contractors or visitors shall conduct the orientations and shall document attendees and dates.

### **H<sub>2</sub>S Monitors:**

All personnel working at Indian Basin are required to wear a personal H<sub>2</sub>S monitor at all times when working in the plant or field. Monitors should have a vibrating alarm if used in high noise areas.

### **Activation:**

Phase I - activated when:

1. Sustained H<sub>2</sub>S concentration reaches 10 parts per million (ppm) in any work area and the source is not readily identified and/or controllable.
2. Continuous H<sub>2</sub>S levels are detected at 10 ppm (or greater) at any public road, near an occupied residence or bus stop, and the source is not readily identified and/or immediately controlled.

Phase II – activated when :

1. A potentially hazardous volume of H<sub>2</sub>S is detected.
2. When sustained H<sub>2</sub>S concentrations exceed 50 ppm at any facility boundary.

### **Phase I:**

## PUBLIC PROTECTION PLAN MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS

Upon discovery on-site personnel should;

- ☐ Make others on-site aware of the presence of H<sub>2</sub>S and leave the area upwind or crosswind to a safe location. (Pre-determined if a pre-job tailgate meeting was conducted).
- ☐ Prevent unauthorized persons from entering the area. Request assistance if needed.
- ☐ If a residence or other public area is in the vicinity, monitor for H<sub>2</sub>S to ensure exposure is less than 10 ppm. Notify supervision if higher exposures are noted or if any other questions arise about steps necessary to protect these sensitive areas.
- ☐ If considering re-entering the area to assess the H<sub>2</sub>S source, ensure you have been properly trained to respond. Use an H<sub>2</sub>S monitor with digital display (preferably a multi-gas monitor) and have a supplied air respirator (SAR) and back up person with SAR readily available. Consider notification of supervisor if appropriate.
- ☐ Proceed with caution. If H<sub>2</sub>S concentration reaches 10 ppm in your breathing zone, back out and use SAR to re-enter. **If H<sub>2</sub>S concentration reaches 50 ppm at the facility boundary immediately notify supervision.**
- ☐ If source can be safely controlled, monitor area to ensure H<sub>2</sub>S levels are below 10 ppm. End response here and sound all clear to allow others to re-enter the area. Report length of release and volume to supervisor.
- ☐ If the source of H<sub>2</sub>S cannot be identified and/or controlled, or if you cannot do so without exposing yourself to danger, leave the area to a safe distance.
- ☐ Notify supervision
- ☐ Continue to monitor for H<sub>2</sub>S and maintain site security until instructed by supervision to do otherwise.

Supervision;

- ☐ Gather necessary information to determine the course of action and level of response.
- ☐ Mobilize any additional man power or equipment necessary.
- ☐ Ensure Phase II measures are implemented if appropriate.
- ☐ Continue to monitor situation until incident is over.
- ☐ Make notifications if required.
- ☐ Complete reports if required.
- ☐ Investigate as indicated.

*Reference: SBU Emergency Response Plan for reporting guidance.*

[http://mweb.mid.moc.com/SBU WEB/SBUHES/Emergency\\_Response/ERP2002.doc](http://mweb.mid.moc.com/SBU_WEB/SBUHES/Emergency_Response/ERP2002.doc)

### Phase II

Upon discovery on-site personnel should;

- ☐ Make others on-site aware of the presence of H<sub>2</sub>S and leave the area upwind or crosswind to a safe location. (Pre-determined if a pre-job tailgate meeting was conducted).
- ☐ Active the facility ESD if available and it can be safely done.
- ☐ Prevent unauthorized persons from entering the area.
- ☐ **Notify Supervisor.**

Supervision;

- ☐ Initiate the Incident Command System as deemed appropriate.
- ☐ Mobilize the resources necessary to maintain site security and provide for the protection of personnel and the public.
- ☐ Issue warnings to all MOC personnel by radio and or phone (IB Contact List) to make them aware of the incident and its location. Have non-essential personnel leave the area. If deemed necessary, order a total personnel evacuation of the area.

## PUBLIC PROTECTION PLAN MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS

- ❑ Notify non-company personnel known to work or reside in the area (IB Contact List). If necessary to ensure their safety, dispatch MOC personnel with the appropriate monitor, supplied air respirators and means of communication to these locations. (Appendix B)
- ❑ Have MOC personnel set up road blocks to prevent unauthorized entry into impacted areas until relieved by law enforcement or other authorized personnel.
- ❑ Make all appropriate notifications to MOC, Federal, State and local authorities.  
*Reference: SBU Emergency Response Plan for reporting guidance (section 9.0)*
- ❑ When the release has been contained and monitoring indicates the area is safe to re-enter, terminate operations and sound the all clear.
- ❑ Complete reports if required.
- ❑ Investigate as indicated.
- ❑ For spills, well blowouts, fires, natural disasters and terrorist or bomb threats are found in the *SBU Emergency Response Plan (Appendix B Response Guidance Documents)*.
- ❑ Refer to the facility specific response documents in Appendix C for more specific information.

All other personnel not involved in the immediate response;

- ❑ If a total evacuation is ordered, report to the Incident command center or nearest muster site to which you have safe access. (*See appendix A for muster site locations*)
- ❑ Ensure all contract personnel working for you (or in your area) are accounted for and have them report to a safe muster site.
- ❑ Senior employee at each muster site should make a roster of all personnel reporting to that muster site and be prepared to make it available to the incident commander (IC).
- ❑ Maintain communication with the IC and be prepared to offer assistance as it is requested.

### Ignition of H<sub>2</sub>S:

While no uncontrollable release of H<sub>2</sub>S is anticipated, should ignition of gas be necessary for the protection of personnel or the public, the determination would be made by the Marathon Incident Commander. The method of ignition will maintain the safety of the person performing this task as the primary concern. The most likely method would be the use of a flare gun from a safe distance.

If this becomes necessary, monitoring will include sulfur dioxide (SO<sub>2</sub>) in addition to H<sub>2</sub>S.

## 5. DISTRIBUTION AND REVIEW

(Back to Top)

After approval, copies of this Plan shall be distributed to the following:

KA Tatarzan  
RV Coleman  
DA Brodbeck  
JJ Harrison  
CM Schweser



**PUBLIC PROTECTION PLAN  
MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

**6. APPROVALS**

(Back to Top)

Approved by:	Name: _____	Date _____
	Title: Maintenance Supervisor	
	Name: _____	Date _____
	Title: Production Supervisor	
	Name: _____	Date _____
	Title: Plant Superintendent	
	Name: _____	Date _____
	Title: Operations Superintendent	

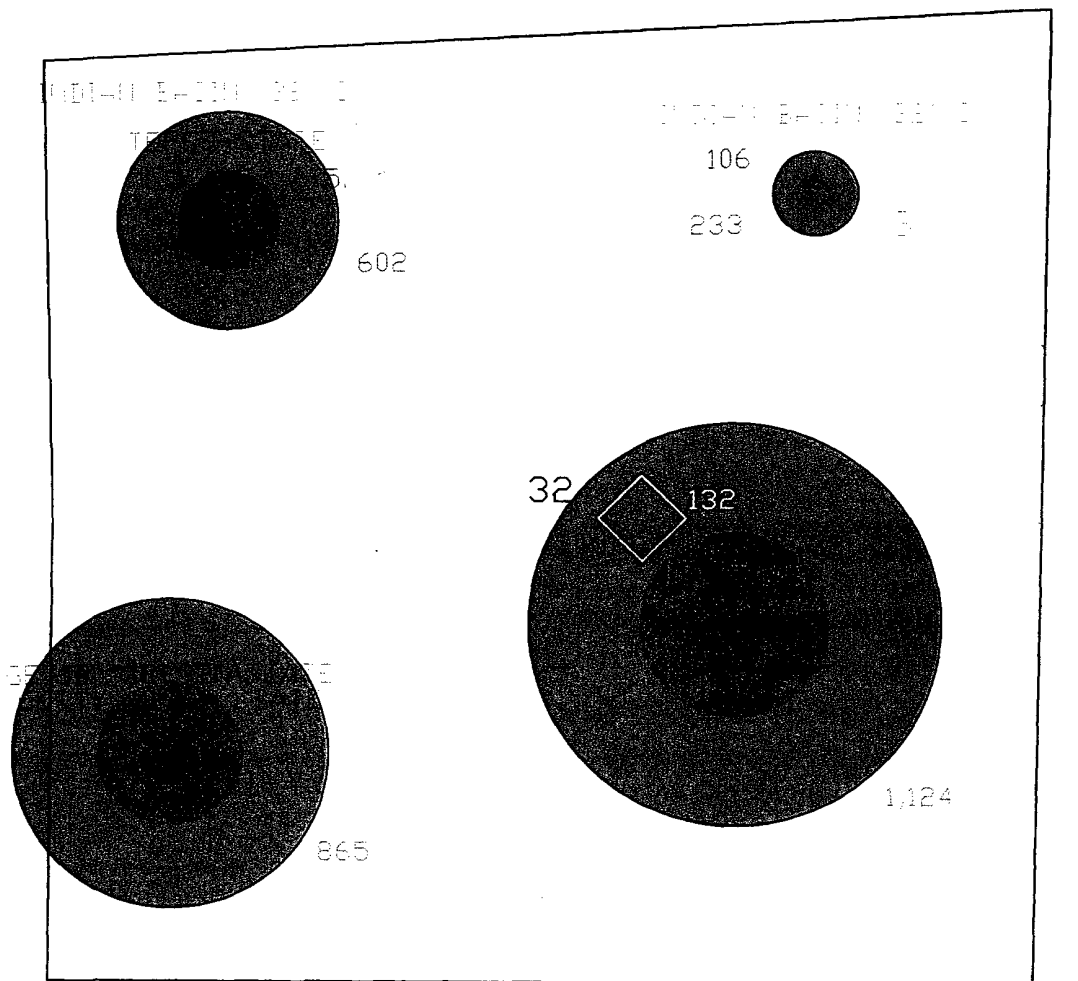
**PUBLIC PROTECTION PLAN  
MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

**7. Appendix A**

**(Back to Top)**

**ROE PLAT  
ROE Calculations**

21S R 24 E



● 100 PPM

● 500 PPM

MARATHON OIL COMPANY  
SOUTHERN BUSINESS UNIT

INDIAN BASIN FIELD  
AREA MAP  
EDDY COUNTY, NEW MEXICO

**PUBLIC PROTECTION PLAN  
MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

**8. Appendix B**

**(Back to Top)**

**Contacts List All IB contact Info List.xls**

**Maintained at O:/Permanent/Indian Basin Contacts**

## REGULATORY CONTACTS

Agency	Contact Name		Division/Area	Main Phone Number	Cell Phone 1	Home Phone Number	
	First	Last					
NMOCD	Emergency Number		Distict 2	(505) 746-4302			
NMOCD	Field Rep On-Call		Distict 2	(505) 939-8622			
NMOCD	Tim	Gum	Distict 2	(505) 748-1283	(505) 365-7566	(505) 324-1387	
NMOCD	Mike	Stubblefield	Distict 2	(505) 748-1283	(505) 365-8211	(505) 746-6422	
NMOCD	Gary	Williams	Distict 2	(505) 748-1283	(505) 365-7562	(505) 748-2259	
NMOCD	Gerry	Guye	Distict 2	(505) 748-1283	(505) 365-7563	(505) 887-3254	
NMOCD	Phil	Hawkins	Distict 2	(505) 748-1283	(505) 365-7564	(505) 746-9272	
NMOCD	Bryan	Arrant	Distict 2	(505) 748-1283	(505) 365-7565	(505) 748-2092	
NMOCD	Lori	Wortenberhy	Santa Fe Division Offices	(505) 827-7131	(505) 476-3460	(505) 466-0134	
NMOCD	Ed	Martin	Santa Fe Division Offices	(505) 827-7131	(505) 476-3492	(505) 685-4056	
NMOCD	Roger	Anderson	Santa Fe Division Offices	(505) 827-7131	(505) 476-3490	(505) 471-2017	
NM State Police			District 3, Roswell	(505) 827-9312			
NM State Police			Sub-District 3, Roswell	(505) 622-7200	(call this number for dispatch to our area)		
BLM			Carlsbad	(505) 887-6544			
US Coast Guard			National Response Center	(800) 424-8802			
NMED			Air Quality Bureau	(505) 827-1494			
	State Emergency Response Center			(505) 827-9126			
LEPC	Local Emerg Planning Commission		Eddy County	(505) 885-2111			
NM OSHA	New Mexico OSHA Office			(505) 827-2850			

# Emergency Services

<i>Service Provider</i>	<i>Description</i>	<i>Main Phone</i>			
<b>General Emergency</b>	<b>Police, Fire, Ambulance</b>	<b>911</b>			
Carlsbad Police, Fire & Ambulance Service		(505) 885-2111			
Artesia General Hospital	Medical Services	(505) 748-3333			
Carlsbad Fire Dept.	Fire Control	(500) 885-3124			
Artesia Fire Dept.	Fire Control	(505) 746-2701			
Happy Valley Fire Dept.	Fire Control	(505) 885-1982			
NM State Police	Sub-District 3, Carlsbad				
NM State Police	District 3, Roswell	(505) 622-7200	Dispatcher for our area		
Eddy County Sheriff	Law enforcement	(505) 887-7551			

## IB MARATHON EMPLOYEES

PRINTED 7/8/2003

Updated 6/25/03											
First	Last	Spouse	Extension	Cell Phone 1	Cell Phone 2	Pager Number	Radio #	Home Number	Home Address 1	City	Zip
Keith	Anderson	Jo		156 (505) 365-7592	(505) 361-7592		hand held	(505) 628-1494	1218 MIEHLS	Carlsbad	88220
Shawna	Austin	Lee		102 (505) 365-8258	(505) 361-8258		hand held	(505) 885-1626	306 DAGGER RD	Carlsbad	88220
Richard	Aves			105 (505) 365-8417			hand held	(505) 885-1990	1705 TREVINO COURT	Carlsbad	88220
Winston	Ballard	Jan		128 (505) 365-8417		866-499-7610	18	(505) 885-5325	1819 #2 N CANAL	Carlsbad	88220
Jimmey	Barnett	Linda		110 (505) 366-5040	(505) 365-4471	866-499-7623	hand held	(505) 746-2818	P O BOX 1173	Artesia	88210
Javier	Barcoza	Jessica		133 (505) 365-8411	(505) 365-8422		26	(505) 748-2885	#3 NORTHGATE PLACE	Artesia	88210
Pat	Bowen	Terri		110 (505) 365-7253	(505) 746-7593	866-499-5220	hand held	(505) 365-2116	#16 SHEILA RD	Artesia	88210
Gerald	Brasfield	Lauri		131 (505) 365-7607	(505) 361-7607		36	(505) 887-9097	305 FARRELL	Carlsbad	88220
Dwight	Brodbeck	Brenda		103 (505) 361-0898			1	(505) 628-0048	612 RIDGECREST DR	Carlsbad	88220
Robert (Bob)	Coleman	Kim		140 (505) 365-7607			34	(505) 628-3298	1701 N Mesa	Carlsbad	88220
Monty	Corbett	Bart		(915) 258-7726		(915) 488-3062		(915) 381-2447	#2 BROKEN BOW	Odessa	79766
Rick	Crawford	Lisa		(915) 528-1099		(915) 560-8804	5	(505) 748-9747	1404 HERMOSA DRIVE	Artesia	88210
Archie	Crossland	Vickie		110 (505) 365-8214	(505) 365-4471	866-499-7619	hand held	(505) 885-0824	1422 VERDEL	Carlsbad	88220
Larry	Davis	Meilinda		151 (505) 365-8259	(505) 361-8280		38	(505) 392-8575	308 E ORCHARD LN #3	Carlsbad	88220
Dan	Dowhower	Norma		114 (505) 361-3459			hand held	(505) 748-2932	390 S. Haldeman Rd	Artesia	88210
James	Faught	Debra		(505) 365-8413	(505) 365-4459		41	(505) 885-7680	PO Box 890	Carlsbad	88220
Kenny	Garrett			142 (505) 365-7614	(505) 365-4531		40	(505) 361-0991	921 N GUADALUPE	Artesia	88210
Dolores	Gonzales	Hamilton		121 (505) 365-5863	(505) 365-5864		3	(505) 746-6754	34 W. BLEVINS ROAD	Artesia	88210
Jeffery (Bubba)	Harrison	Lynn		138 (505) 365-8442	(505) 365-4859	866-499-7639	17	(505) 748-2763	2007 W RUNYAN	Artesia	88210
Jack	Ivy	Gayle		(505) 365-6573		866-499-7620	33	(505) 746-0852	611 S. ROSELAWN	Artesia	88210
Morris	Jones	Rhonda		(505) 365-5518	(505) 365-5606		hand held	(505) 885-2883	14 TOBYN ROAD	Carlsbad	88220
Clint	Kirkes	Stephanie		108 (505) 365-6854			13	(505) 484-3675	P O BOX 1463	Carlsbad	88250
Timmy	Klein	Tammy					22	(505) 704-9071		Carlsbad	88220
Tanner	Larke	Corina		110 (505) 365-7464			hand held	(505) 887-5607	1900 W Church Apt 29	Carlsbad	88220
Al	Leyva			111 (505) 365-7618		877-210-6841	16	(505) 748-2575	2 E BLEVINS RD	Artesia	88210
Wendell	Melone	Judy		115 (505) 365-7650	(505) 365-7660		hand held	(505) 885-4582	1300 North Pale St #F162	Loving	88256
Steve (Sharky)	Morgan	Niam		146 (505) 365-6776		866-499-7612	10	(505) 887-3836	1814 SOLANA	Carlsbad	88220
Kalpersn (Ken)	Nasif	Becky		139 (505) 365-7514	(505) 365-4871	866-499-7617	hand held	(505) 885-8440	2129 HASTON RD	Carlsbad	88220
John	Norris					none	hand held	(505) 748-1472	1002 W CLAYTON AVE	Artesia	88210
Jack	Rauch	Cyndi		110 (505) 365-7514	(505) 365-4871	866-499-7624	hand held	(505) 746-2619	2108 CENTER	Artesia	88210
Pat	Reynolds	Karen		101 (505) 365-7623	(505) 365-4459		hand held	(505) 887-2025	2315 Washington	Carlsbad	88220
David	Rouse			104 (505) 361-7331			42	(505) 746-9364	1403 Hawk Apt 13	Artesia	88210
Margie	Ruiz			137 (505) 365-7528			2	(505) 885-0716	1535 ARBOR COURT	Carlsbad	88220
Tito	Salmon	Leigh Ann		126 (505) 365-8403	(505) 361-8404		8	(505) 885-6226	818 E Orchard Ln	Carlsbad	88220
Mike	Schweser	Jena		148 (505) 365-5899			35	(505) 885-1868	1903 CALLOWAY DR	Carlsbad	88220
Grant	Smith	Todd		110 (505) 365-8403		866-499-7629	9	(915) 352-5262	P O BOX 1372	Carlsbad	88221
Donna	Suter	Sara		110 (505) 365-6562			hand held	(505) 887-6225	P O BOX 1372	Artesia	88220
Jim	Tomlinson	Terry		110 (505) 365-8403			hand held	(505) 746-6213	705 MANN	Artesia	88210
Will	Tran	Lanette		110 (505) 365-8403			hand held	(505) 887-1961	1901 Boyd DR #37	Carlsbad	88220
Joe	Trevino	Debra		110 (505) 365-8403		866-499-7621	hand held	(505) 628-8782	4214 HARMON LN	Carlsbad	88220
Reggie	Turner	Delma		107 (505) 365-8441	(505) 365-4864	866-499-7641	hand held	(505) 457-2252	508 LAKE ROAD	Artesia	88210
Bruce	Velasquez	Jan		142 (505) 365-5585	(505) 361-5586		6	(505) 457-2393	5857 S 7 RIVERS	Artesia	88210
Charlie	Williams	Paula		117 (505) 365-5585	(505) 361-5586		11	(505) 628-8048	1418 S. Country Club Cric	Carlsbad	88220
Don	Wilson	Dorothy		106 (505) 365-4257			hand held	(505) 746-6461	P O BOX 351	Artesia	88210
Chelsea	Winters	Rile		125 (505) 365-7589			4	(505) 746-4662	2301 BULLOCK	Artesia	88210
Tim	Winters			120 (505) 365-7589		364-1910		(505) 746-4662	2301 BULLOCK	Artesia	88210
CERT - (cell free) 1-866-662-2378											
Field Radio Frequency (repeater) 451.650 MHz receive, 456.650 MHz transmi, tone 127.3 Hz											
Plant Radio Frequency 462.525 MHz (receive and transmi), tone 127.3 Hz											
Highlighted names are personnel that can be expected to lead an emergency response											

Field Radio Frequency (repeater) 451.650 MHz receive, 456.650 MHz transmit, tone 127.3 Hz  
 Plant Radio Frequency 462.525 MHz (receive and transmit), tone 127.3 Hz

Highlighted names are personnel that can be expected to lead an emergency response

# MCR EMERGENCY RESPONSE PLAN

## INDIAN BASIN PRODUCTION AREA ICS STRUCTURE

<b>Incident Commander</b>									
Bob Coleman	(505) 457-2621 (Ext 103)	(505) 361-0898			(505) 628-0049		40	1	
<b>Operations Section</b>									
Dwight Brodbeck * Field ♦	(505) 457-2621 (Ext 131)	(505) 365-7253			(505) 887-9097		24	36	
Mike Schweser * IGBP ♦	(505) 457-2621 (Ext 104)	(505) 361-7331			(505) 885-0716		24	2	
Jerry Harrison	(505) 457-2621 (Ext 121)	(505) 365-5864		(505) 365-5863	(505) 746-6754		24	3	
Timmy Klein	(505) 457-2621 (Ext 108)	(505) 361-5606		(505) 365-5518	(505) 484-3675		24	13	
Tim Winters	(505) 457-2621 (Ext 120)			(505) 365-7589	(505) 746-4662		24	4	
<b>Planning Section</b>									
Grant Smith	(505) 457-2621 (Ext 137)	(505) 365-7528			(505) 887-8245		0	8	
Jim Tomlinson	(505) 457-2621 (Ext 126)	(505) 361-8404		(505) 365-8403	(505) 885-1838		0	35	
Richard Aves	(505) 457-2621 (Ext 105)	(505) 361-8258		(505) 365-8258	(505) 885-1990				
Ken Nasit	(505) 457-2621 (Ext 115)	(505) 365-7650		(505) 365-7660	(505) 885-4582				
Monty Corbett	(505) 457-2621 (Ext 140)	(505) 365-7607		(505) 361-7607	(505) 628-3298			34	
<b>Logistics Section</b>									
James Faught*	(505) 457-2162 (Ext 151)	(505) 361-8260		(505) 365-8259	(505) 392-6575		24	32	
Sharky Morgan	(505) 457-2621 (Ext 111)	877-210-6841		(505) 365-7618	(505) 745-3327		24	16	
Bruce Waldrip*	(505) 457-2621 (Ext 107)	(866) 499-7641			(505) 457-2252		24	13	
<b>Safety</b>									
Pat Reynolds*	(505) 457-2621 (Ext 139)	(505) 365-4871		(505) 365-7514	(505) 748-1472		40	Handfield	
Jim Wilson	(505) 457-2621 (Ext 106)	(505) 365-4257			(505) 746-6481		40	Handfield	
Jack Ivy	(505) 457-2621 (Ext 128)	(505) 365-4859		(505) 365-8442	(505) 748-2763		24	17	
<b>Public Affairs</b>									
Pat Bowen	(505) 457-2621 (Ext 133)	(505) 365-8422		(505) 365-8411	(505) 748-2885		24	26	

\* Denotes Command Staff/Section Chief "Lead" if applicable.

♦ Denotes Alternate Incident Commanders





# IB CONTRACTORS

PRINTED 7/8/2003

updated 6/25/03							
Company	First	Last	Ext.	Cell Phone 1	Cell Phone 2	Pager Number	Radio # Home Number
Aranda's Welding	Joe	Aranda		(505) 365-8079			19
B&H Construction	Mike	Wright		(505) 706-0550			
B&H Construction	Alan	Walker		(505) 706-0565		(800) 647-4350	
Centrilt	Steve	Fulwider	134	(915) 413-9324		(877) 405-2413	30
Centrilt	Daniel	Ruiz		(915) 413-2144		(877) 715-5026	
Centrilt	Joe	Lisenbe	134	(915) 413-2117		(888) 848-2491	
Champion Technologies	Jay	McKee	145	(505) 361-0656			
Champion Technologies	Tommy	Morrison		(915) 661-9195			(915) 758-5855
Corrosion Specialties	Ronnie	Parish		(915) 638-5834			
Dean's Elect	JD	Atkins		(505) 748-5861		(500) 364-1237	
Hanover	Neil	Estes		(505) 706-0900		(505) 339-1309	
Hanover	Billy	Bryan		(505) 706-0890		(505) 339-1400	
Hanover	Jr.	Rocha		(505) 706-0901		(505) 339-1404	24
Hanover	Chris	Goff		(505) 706-0903		(505) 339-1402	
Indian Fire & Safety	Travis	Cochran		(505) 369-8629			
Key Energy	Marcos	Hernandez	136	(505) 706-0228	(505) 706-0229		31
Key Energy	Jimmy	Houchin					109
Key Energy	Tony	Cope		(505) 910-5056	(505) 420-4399	1-800-560-9557	108
Mesquite Services	Arturo	Moreno					107
Mesquite Services	Ricky	Buendia		(432) 208-2280		(877) 209-7701	105
Naico/Exxon	Randy	Fulwider	155	(806) 893-1462			
Naico/Exxon	Brad	Howell		(806) 215-0771			
Naico/Exxon	Ismael	Porras		(505) 420-7752	(505) 420-7751		
NGM	Larry	Lejune		(505) 910-0319			
NGM	Alfonso	Fuentez		(505) 365-5172		866-499-7637	
RedMan	David	Anaya	457-2163				
Ryder Welding	David	Bustamente		(505) 390-3542	(505) 390-9633		14
TESSCO	Gary	Hodge		(505) 631-7660	(505) 631-9492	Office 236-6266	
TESSCO	Mike	Whitaker		(505) 390-5836	(505) 390-5871		
TESSCO	Tim	Metrola		(505) 390-6520			
TESSCO	Jr.	Hernandez		(505) 390-6520			
TESSCO	Michael	Sanchez		(505) 365-6758		800-232-3073	
Truck & Tractor	David	Wilson		(505) 365-4735		(505) 364-1872	101
WSI / Unit101	James	Perez		(505) 361-3804	302-3086	(505) 364-1871	103
WSI / Unit103	Thomas	Martinez					103
WSI Unit 103	Juan	Chavez					103
WSI Unit 100	Luis	Olivas					100
WSI Unit 100	George	Martinez		(505) 361-2027		(505) 364-1858	100
WSI Unit 100	Fernando	Fierro					100
WSI Unit 100	Jesse	Franco					100
WSI Unit 110	Ramon	Contreras		(505) 361-2002		(505) 234-2448	110
WSI Unit 110	Ramon	Ortega					110

**IB CONTRACTORS**

PRINTED 7/8/2003

WSI Unit 110	Anthony	Trevino								110	(505)887-8043
Weatherford	Barney										
Wild Well Control											

To view the most current it

go to: O:\Permanent\Indian Basin Contacts\All IB contact Info List.xls

# **PUBLIC PROTECTION PLAN MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

## **9. Appendix C**

[\(Back to Top\)](#)

### **C-1 Indian Basin Gas Plant - Site specific response information**

#### **Content**

##### **Facilities Data**

- A. Location
- B. Operations
- C. Fire Protection
- D. Emergency Alarm System
- E. Plant Communications
- F. Emergency Shutdown System
- G. Manning

##### Action Plans for Emergency Situations

##### Response Equipment

#### **FACILITIES DATA**

##### **A. Location**

The Indian Basin Gas Plant (IBGP) is located in Eddy County of southeastern New Mexico approximately 24 miles from Carlsbad, New Mexico and 30 miles from Artesia, New Mexico. The plant is surrounded by Federal Government lands managed by the Bureau of Land Management (BLM). There are no residences or private dwellings in close proximity to the plant; however, much of the land is used for cattle grazing. County road 401 runs east west directly to the north of the plant and carries very light public traffic. The terrain is uneven with hills and dry waterways. Vegetation in the area is sparse.

##### **B. Operations**

The plant is currently processing approximately 300 MMSCF/D. Residue gas is sold on a spot market basis. Approximately 12,500 BPD of natural gas liquids (NGL) and 360 BPD of condensate are recovered.

Gas from the field passes through inlet separators, and then into one of two parallel treating units to remove hydrogen sulfide and carbon dioxide. Gas from the first amine unit (A-1) flows to a glycol contactor to remove moisture, molecular sieve beds to remove remaining moisture, a dust filter and then on to one of two cryogenic units for NGL extraction. Demethanizer towers adjacent to the cryo skids provide final separation of the methane sales gas and NGL product.

Overhead sales gas from the demethanizers pass through heat exchangers, the expander booster compressors and is compressed further by one of four solar turbine compressors.

Gas that passes through the second amine system (A-2) then flows to a molecular sieve treater (GTU) to remove water and any remaining sulfur compounds, residue from the GTU recombines with the residue from the cryogenic plants prior to being compress to pipeline pressure in the tubing outlet compressor.

NGL's from the two demethanizers flow to their respective product surge tanks at 320 to 360 psig. From there the NGL's are pumped by booster pumps to a Chevron Operated product pipeline, via pipeline pumps. located inside the plant fence at the southeast corner of the yard approximately 50 feet from condensate storage bullets located immediately outside the south fence. Occasionally, NGL's are stored in three of the bullets when product cannot be shipped.

## PUBLIC PROTECTION PLAN MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS

Condensate is received directly from the field and is recovered from inlet separators. Water is removed from the condensate by settling in the inlet tank. The condensate is then processed through a stabilizer and sent to storage. Two of the seven total bullet tanks are currently used for condensate storage. One bullet is a flare drum, three are designated for emergency product storage and one is idle. Condensate is shipped by truck from the rack located east of the plant approximately 100 feet from the fence. Truck shipments are usually two or three trucks per day. There are days when no truck shipments are made.

### C. Fire Protection

Gas plant employees and contract employees shall attempt to only extinguish incipient stage fires. Fires that cannot be effectively extinguished with hand or wheeled portable fire extinguishers shall not be fought by employees or contractors.

Portable 30 lb. And 150 lb. (wheeled ) fired extinguishers are strategically located throughout the gas plant. All company trucks are also equipped with 30 lb. fire extinguishers.

### D. Emergency Alarm System

The gas plant emergency alarm system has two encoders for activating the various system capabilities. These encoders are located in the gas plant main office and in the control room. The alarm system has several different tones that can be used; however, the WAIL tone is currently used for emergency evacuation purposes. The system also has the capability for delivering pre-programmed voice messages to warn of "high H<sub>2</sub>S", "fire", "high pressure line rupture", "tornado warning", and "plant evacuation". A public address (PA) system is also built into the system so that customized messages can be voiced over the speaker tower. The system utilizes one speaker tower located in the center of the plant.

**The IBGP radio must be set to CHANNEL F1 in the gas plant office for the emergency alarm system to be functional.**

The emergency evacuation alarm should be tested monthly at a minimum. This test should be documented and kept on file for future reference. Tests are performed at the start of each monthly safety meeting.

### E. Plant Communications

Aside from the PA function of the emergency alarm system, the gas plant has a telephone system with multiple lines. Phones are located throughout the gas plant offices and in the control room. Several hand-held radios are maintained and utilized by gas plant operators. Plant and field vehicles are equipped with radio as well.

An emergency telephone is located on County Road 401 approximately ¼ mile east of the gas plant (by borehole 84). In the event that a total personnel evacuation is initiated and appropriate calls cannot be made before leaving the plant, this telephone, equipped with a combination locked enclosure, can be accessed by gas plant personnel to notify Marathon supervision, nearby residents, support agencies, etc.

**Lock Box Combination: 2621**

**Telephone Number: 505-457-2486**

### F. Emergency Shutdown System

The gas plant is equipped with an emergency shutdown (ESD) system and a blowdown system. In the event of an emergency, appropriate personnel will determine the need for ESD and blowdown system actuation. Six (6) actuation stations are located throughout the gas plant. These locations are:

1 Southeast plant fence exit

4 West plant fence exit

## PUBLIC PROTECTION PLAN MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS

- |                                |                         |
|--------------------------------|-------------------------|
| 2 East plant fence exit        | 5 Near South amine pump |
| 3 Front plant gate (Northeast) | 6 Control room          |

### F. Hydrogen Sulfide Detection

Fixed hydrogen sulfide (H<sub>2</sub>S) detection equipment is located at the Sulfur Recovery Unit (SRU), the Acid Gas Compressor and throughout the Amine Systems. Upon detection of hydrogen sulfide, a beacon light and audible alarm will actuate in the area where H<sub>2</sub>S is detected. Personnel shall immediately evacuate the area. The alarm is also annunciated in the control room. Personal hydrogen sulfide monitors shall be worn at all times when in the gas plant.

### G. Manning

The plant is attended 24 hours per day, 365 days per year. A minimum of two operators are on duty in the plant at all times.

## ACTION PLANS FOR EMERGENCY SITUATIONS

The primary Incident Control Center will be the Gas Plant Office Conference Room. In the event that this area is deemed unsafe, the Gas Plant Superintendent will designate an alternative location.

The **primary muster area** is located across the road of the main office. If this primary location is deemed unsafe for assembly due to the close proximity of the incident site, wind direction, or other reason; an alternative (**secondary**) muster area has been designated southeast of the plant near the scrap metal storage area (beyond the horizontal storage bullet tanks). If this area is also deemed unsafe for any reason, another muster area will be announced over the PA speaker.

In the event of a serious incident within or in close proximity of the Indian Basin Gas Plant, the Plant Superintendent will assume emergency command. If the incident occurs on a lightly manned shift, the senior employee will assume emergency command until the Plant Superintendent or designee arrives on site.

### A. General Emergency Action

1. When a serious incident is discovered, the Plant Superintendent shall be immediately notified by radio or telephone. If this notification time increases the risk of injury to personnel or serious damage to facilities, the employee shall take immediate action (s) to control or attempt control of the incident if trained to do so. This action may include activation of the ESD system and /or plant evacuation alarm.
2. Once the Plant Superintendent assumes command of the incident, all other personnel, both Marathon and contractor, are responsible to take appropriate actions as directed by the plant Superintendent or designee.
3. If the incident cannot be immediately controlled and significant risk of injury to personnel is apparent, the Plant Superintendent shall order total personnel evacuation of the plant by activating the emergency alarm system for evacuation.

## **PUBLIC PROTECTION PLAN MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

Field personnel shall be notified by radio of the situation and instructed to proceed to one of the designated muster sites to await further instruction.

4. All personnel shall immediately take notice of the wind direction and proceed crosswind or upwind of the incident or plant to the main muster area, located at the front plant entrance gate. If this primary muster area is deemed unsafe, an alternative muster area will be announced over the PA system.
5. The Plant Superintendent shall designate one of the Marathon employees to take a written head count of all persons, both Marathon and contract employees and any visitors. IBGP employees and contractors/visitors should muster in separate groups to aid in a swift headcount. Personnel unaccounted for will then be reported to the Plant Superintendent as soon as possible.
6. A search for missing personnel will be made only if it can be performed safely. Two volunteer Marathon employees with appropriate training and personal protective gear shall perform the search. These searchers shall remain within eye contact of one another and in radio contact of the Plant Superintendent for the duration of the search. A backup team of two employees with appropriate training and gear shall be designated and on standby.
7. Once all personnel are accounted for at the muster area, the Plant Superintendent or his designee may assign incident-specific assignments to respond and attempt control of the emergency. Personnel designated to reenter the plant shall be provided all necessary personal protective and atmospheric monitoring equipment and shall at all times utilize the buddy system and maintain radio contact with the muster area.
8. Once the incident is determined by the Plant Superintendent to be under control, he/she shall appoint a team of at least two Marathon employees with appropriate personal protective and monitoring equipment to perform a post-incident survey.
9. Once the plant is determined by the survey team to be safe, the Plant Superintendent will give the "all clear" for personnel to reenter the plant.
10. Appropriate notification of Marathon and governmental agencies shall then be made.  
*Reference: SBU Emergency Response Plan for reporting guidance (section 9.0)*
11. While the incident scene remains undisturbed, an incident investigation team shall commence investigation as soon as possible.

### **Response Equipment:**

The following items and equipment should be located at or be readily accessible from the Incident Control Center for effective emergency assessment, communication and action:

- Company vehicles

## **PUBLIC PROTECTION PLAN**

### **MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS**

- Hand-held portable radios (intrinsically safe)
- Personal hydrogen sulfide monitors
- Multi-function gas detector (hydrogen sulfide, LEL, oxygen) *Normally found in plant control room.*
- Self-contained breathing apparatus (SCBA)\*
- This plan
- Gas plant layout maps
- Process flow diagrams
- Chemical resistant clothing, gloves, and boots\*
- Goggles, face shields, hearing protection, etc.\*
- Portable fire extinguishers.\*
- \* **Located in Emergency Response Trailer**

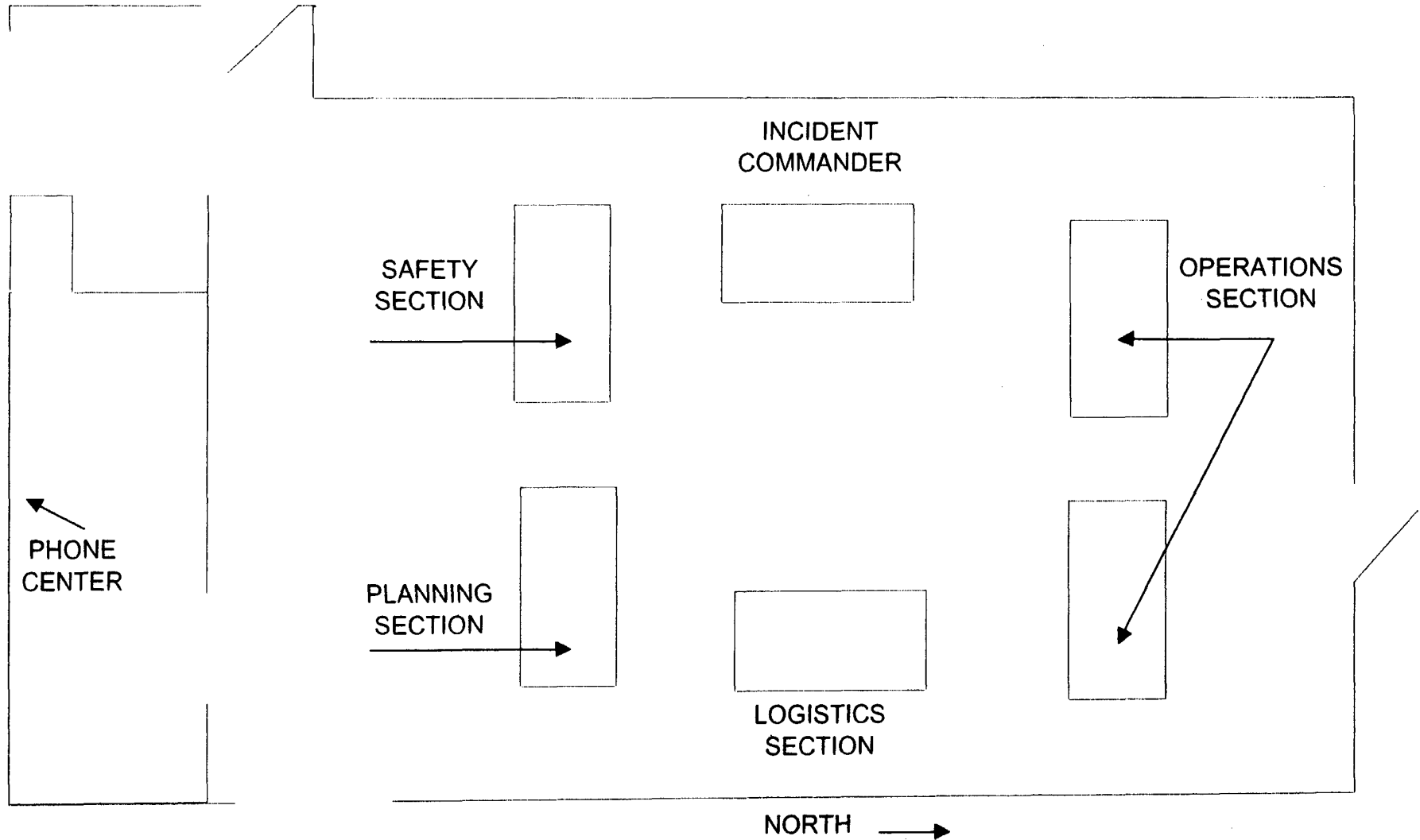


PUBLIC PROTECTION AND  
MARATHON OIL COMPANY - INDIAN BASIN OPERATIONS

11. Appendix E

(Back to Top)

Tables will be arranged according to the lay out below when implementing the ICS structure at Indian Basin in the plant office conference room.



# MARATHON OIL COMPANY -INDIAN BASIN INTEGRATED CONTINGENCY PLAN

## Section I – Plan Introduction Elements

### 1. Purpose and Scope of Plan Coverage

This integrated contingency plan is meant to provide guidance in the event of emergencies resulting from identified hazards for all of Marathon's Indian Basin Gas Plant and Field operations. These operations include normal gas production operations, drilling, workovers/completions, and salt water disposal. Events addressed by this plan include, uncontrolled gas release, fires, explosions, bomb threats, natural disasters and spills.

It provides site specific information and is intended to be used in conjunction with Marathon's corporate and Southern Business Unit emergency action plans. The main objective is to protect the safety and health of employees, the public and to protect the environment.

#### Reference:

EPA's Oil Pollution Prevention Regulation - 40 CFR part 112.7(d) and 112.20-.21  
EPA's Risk Management Programs - 40 CFR part 68  
EPA's RCRA Contingency Planning - 40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52  
OSHA's Emergency Action Plan - 29 CFR 191038(a)  
OSHA's Process Safety Standard - 29 CFR 1910.119  
OSHA's HAZWOPER Regulation - 29 CFR 1910.120  
BLM's Onshore Order 6  
OCD's Rule 118

### 2. Table of Contents

- Section I – Plan Introduction Elements
- Section II – Core Plan Elements
  - Discovery
  - Initial Response
  - Sustained Actions
  - Termination and Follow-Up Actions
- Section III – Annexes
  - 1. Facility and Locality Information
  - 2. Notification
  - 3. Response Management System
  - 4. Incident Documentation
  - 5. Response Critique and Plan Review and Modification Process
  - 6. Prevention
  - 7. Regulatory Compliance and Cross-Reference Matrices

### 3. Plan created date: 3/25/02

Revised date:

# MARATHON OIL COMPANY -INDIAN BASIN INTEGRATED CONTINGENCY PLAN

## 4. General Facility Identification Information

a. Indian Basin Gas Plant & Field Operations

b. Owner/Operator Marathon Oil Company

c. (1) Physical Address: 329 Marathon Road  
Lakewood, NM 88254

(2) Mailing Address: P.O. Box 1324  
Artesia, NM 88210

Phone: 1-505-457-2621

The Indian Basin Gas Plant is located approximately 25 miles West of Carlsbad in Eddy county New Mexico, Unit Letter G, Section 23, Township 21 South, Range 23 East. The Indian Basin field operations surround the plant location.

### Driving instructions:

From Carlsbad, NM drive North on US Hwy 285 for approximately 12 miles until you reach the NM 137 turn off, just past mile marker 45, turn left (south west) onto NM 137 and drive approximately 8 miles to the junction of NM 137 and Marathon Road (also County Road 401). Turn right onto Marathon Road. Drive approximately 7 miles. The plant and field offices are located on the left hand (South) side of the road.

From Artesia, NM drive South on US Hwy 285 to mile marker 51. Turn right onto White Pine (also called County road 28) and drive until the paved road dead ends at the intersection with Marathon Road (Cty 401). Turn right and drive approximately 3 miles. The plant and field offices are located on the left hand (South) side of the road.

d. Send correspondence to the address above (4.c.2).

Attention: C.M. Schweser for plant related items.

Attention: D.A. Brodbeck for field related items

e. Other identifying information

SIC codes:

f. Contacts for plan development and maintenance.

R.V. Coleman – Operations Superintend Ext. 103

C.M Schweser - Plant Superintend Ext. 104

D.A. Brodbeck – Production Supervisor Ext. 131

P.J. Reynolds – E&S Technician Ext 139

g. Phone number for contacts: 1-505-457-2621 + extension.

## **MARATHON OIL COMPANY -INDIAN BASIN INTEGRATED CONTINGENCY PLAN**

- h. Facility phone number is 1-505-457-2621,  
For emergencies dial 8 to ring all extensions.
- i. Facility fax number is 1-505-457-2621.

# MARATHON OIL COMPANY -INDIAN BASIN INTEGRATED CONTINGENCY PLAN

## Section II – Core Plan Elements

1. Discovery
  - ☐ Ensure safety of yourself and all other personnel working in the area by moving to a safe area.
  - ☐ Notify Marathon supervision of the emergency. Specify nature and extent.
  - ☐ If you can safely shut in the source, (i.e. remote ESD or valves) do so, otherwise await instructions.
2. Initial Response
  - a. Procedures for notifications.
  - b. IC System

Marathon utilizes the ICS (Incident Command System). The Production Superintendent or his designee serves as incident commander for local responses. The ICS structure for Indian Basin operations is attached.
  - c. Procedures for incident assessment.
  - d. Response Procedures
    - 1 Immediate goals
    - 2 Mitigating actions
    - 3 Response resources
  - e. Procedures for implementation of tactical plan
  - f. Procedure for resource mobilization.
3. Sustained Actions:
4. Termination and Follow-Up Actions.

NOTE: Test Gas Rate is highest monthly test three (3) most recent tests as of 9/30/02

NOTE: Test Gas Rate is under assumption that well is vented to atmosphere with artificial lift st

Percentage over test buffer = 20%

Pasquill - Gifford

Lease	Well	Gas Rate (MSCFD)	Gas Rate (MSCFD) w/Buffer	100 ppm	500 ppm
Bone Flats Federal 12	1	8	10	26	12
Bone Flats Federal 12	2	4	5	17	8
Bone Flats Federal 12	3	30	36	60	27
Bone Flats Federal 12	4	144	173	159	73
Bone Flats Federal 12	5	44	53	76	35
Bone Flats Federal 12	6	28	34	57	26
Comanche Federal 3	1	795	954	372	170
Comanche Federal 3	2	295	354	200	91
Federal C 35	1	2234	2681	547	250
Federal C 35	2	120	144	88	40
Federal C 35	3	4040	4848	793	362
Federal Indian Basin A Gas Com	1	461	553	222	101
Federal Indian Basin A Gas Com	2	1044	1253	370	169
Federal Indian Basin B Gas Com	1	233	280	160	73
Federal Indian Basin C Gas Com	1	529	635	304	139
Federal Indian Basin C Gas Com	2	791	949	391	179
Federal Indian Basin D Gas Com	2	0	0	0	0
Indian Basin A	1	770	924	306	140
Indian Basin A	2	1120	1344	387	177
Indian Basin A	3	384	461	198	90
Indian Basin A	4	807	968	315	144
Indian Basin C	1	487	584	230	105
Indian Basin C	2	96	115	83	38
Indian Basin C	3	2072	2486	570	260
Indian Basin D	1	588	706	244	111
Indian Basin D	2	1131	1357	367	168
Indian Basin E	1	299	359	160	73
Indian Basin E	2	6	7	14	6
Indian Basin State 32	1-Y	6401	7681	1,083	495
Indian Basin State 32	2	8512	10214	1,294	591
Indian Basin State 32	3	924	1109	322	147
Indian Basin State 32	4	4152	4982	775	354
Indian Federal Gas Com	1	74	89	0	0
Indian Federal Gas Com	2	620	744	0	0
Indian Hills State Com	1	345	414	275	125
Indian Hills State Com	3	62	74	94	43
Indian Hills State Com	4	72	86	103	47
Indian Hills State Com	5	136	163	153	70
Indian Hills State Com	6	99	119	126	57
Indian Hills State Com	8	41	49	72	33
Indian Hills Unit	1	5423	6508	930	425
Indian Hills Unit	6	411	493	185	85
Indian Hills Unit	8	1457	1748	451	206
Indian Hills Unit	9	1300	1560	420	192
Indian Hills Unit	10	6747	8096	1,066	487
Indian Hills Unit	11	1828	2194	520	238
Indian Hills Unit	12	1689	2027	495	226
Indian Hills Unit	17	2713	3256	603	276
Indian Hills Unit	18	2681	3217	599	274
Indian Hills Unit	19	5082	6098	893	408
Indian Hills Unit	20	2341	2809	550	251
Indian Hills Unit	21	10367	12440	1,395	638
Indian Hills Unit	22	10277	12332	1,532	700
Indian Hills Unit	24	2913	3496	630	288
Indian Hills Unit	25	5250	6300	894	408
Indian Hills Unit	26	1047	1256	0	0
Indian Hills Unit	28	3718	4462	720	329

#5 on same location as 32 #4

NOTE: Test Gas Rate is highest monthly test three (3) most recent tests as of 9/30/02

NOTE: Test Gas Rate is under assumption that well is vented to atmosphere with artificial lift st

Percentage over test buffer = 20%

Pasquill - Gifford

Lease	Well	Gas Rate		Pasquill - Gifford	
		Gas Rate (MSCFD)	Gas Rate (MSCFD) w/Buffer	100 ppm	500 ppm
Indian Hills Unit	29	3574	4289	791	361
Indian Hills Unit	31	2118	2542	506	231
Indian Hills Unit	32	5952	7142	967	442
Indian Hills Unit	33	4185	5022	791	361
Indian Hills Unit	34	1405	1686	399	183
Indian Hills Unit	35	2150	2580	575	263
Indian Hills Unit	36	2184	2621	526	241
Indian Hills Unit	37 Y	2248	2698	526	240
Indian Hills Unit	39	1880	2256	470	215
Indian Hills Unit	40	6450	7740	1,016	464
Indian Hills Unit	42	2143	2572	510	233
Indian Hills Unit	43	3905	4686	836	382
Indian Hills Unit	45	143	172	96	44
Indian Hills Unit	50	996	1195	316	144
<hr/>					
Indian Hills Unit Gas Com	3	3141	3769	651	297
<hr/>					
Indian Hills Unit Gas Com	13	7159	8591	1,090	498
Indian Hills Unit Gas Com	14	5031	6037	874	399
Indian Hills Unit Gas Com	27	7492	8990	1,139	520
Indian Hills Unit Gas Com	47		0	0	0
<hr/>					
J.C. Williamson	1	88	106	87	40
<hr/>					
MOC Federal	1	156	187	167	76
MOC Federal	2	123	148	144	66
MOC Federal	3	212	254	202	93
MOC Federal	4	89	107	118	54
MOC Federal	5	159	191	169	77
MOC Federal	6	410	492	306	140
MOC Federal	7	24	29	52	24
MOC Federal	8	184	221	0	0
<hr/>					
North Indian Basin Unit	1	1724	2069	499	228
North Indian Basin Unit	4	997	1196	354	162
North Indian Basin Unit	5	1584	1901	473	216
North Indian Basin Unit	7	56	67	88	40
North Indian Basin Unit	8	388	466	196	90
North Indian Basin Unit	9	1685	2022	492	225
North Indian Basin Unit	10	51	61	67	30
North Indian Basin Unit	11	2	2	9	4
North Indian Basin Unit	12	124	149	116	53
North Indian Basin Unit	13	287	344	245	112
North Indian Basin Unit	14	190	228	189	86
North Indian Basin Unit	15	259	311	230	105
North Indian Basin Unit	16	279	335	193	88
North Indian Basin Unit	17	175	210	144	66
North Indian Basin Unit	18	125	150	117	53
North Indian Basin Unit	19	163	196	138	63
North Indian Basin Unit	20	108	130	107	49
North Indian Basin Unit	21	0	0	0	0
North Indian Basin Unit	22	96	115	99	45
North Indian Basin Unit	23	44	53	76	35
North Indian Basin Unit	24	188	226	151	69
North Indian Basin Unit	25	218	262	166	76
North Indian Basin Unit	26	85	102	114	52
North Indian Basin Unit	27	1	1	6	3
North Indian Basin Unit	30	410	492	246	112
North Indian Basin Unit	31	1004	1205	356	162
North Indian Basin Unit	34	74	89	0	0
North Indian Basin Unit	36	1485	1782	454	208
<hr/>					
North Indian Basin Unit Gas Com	3	1549	1859	565	258

NOTE: Test Gas Rate is highest monthly test three (3) most recent tests as of 9/30/02

NOTE: Test Gas Rate is under assumption that well is vented to atmosphere with artificial lift st

Percentage over test buffer = 20%

Pasquill - Gifford


Lease	Well	Gas Rate (MSCFD)	Gas Rate (MSCFD) w/Buffer	100 ppm	500 ppm
North Indian Basin Unit Gas Com	32	1573	1888	478	219
Pronghorn Federal	1	28	34	43	19
Smith Federal	1	812	974	292	133
Smith Federal	2	243	292	137	63
Smith Federal	3	2366	2839	569	260
Stinking Draw	1	11	13	32	15
Stinking Draw	2	73	88	104	47
Stinking Draw	3	14	17	37	17
Stinking Draw	4	9	11	28	13



# EMERGENCY REPORTING GUIDELINES

## Southern Business Unit – Marathon Oil Company

April 2002

 Emergency Type	SBU		HOUSTON	CERT
	Asset Manager	Unit Manager	Sr. Vice President	Team Leader
	Report-Yes/No	Report-Yes/No	Report-Yes/No	Report-Yes/No
<b>Company/Contractor Injury or Illness</b>				
Fatality	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
LTA - w/Hospitalization: < 3	Yes - ASAP	Yes - ASAP	Yes - 24 hrs	No
LTA - w/Hospitalization: 3 or Greater	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
LTA - w/o Hospitalization	Yes - ASAP	Yes - ASAP	Yes - 24 hrs	No
OSHA Recordable	Yes - ASAP	Yes - 24 hrs	Yes - 24 hrs	No
Compensable	Yes - 8hrs	Yes - 24 hrs	No	No
Minor w/First Aid	Yes - 24 hrs	No	No	No
<b>Company Vehicle/Property Damage</b>				
Vehicle damage \$1,001 to \$5,000	Yes - ASAP	Yes - 8 hrs	No	No
Vehicle damage >\$5,000	Yes - ASAP	Yes - ASAP	No	No
MOC Property Damage - \$1,000 to \$4,999	Yes - 8 hrs	Yes - 24 hrs	No	No
MOC Property Damage - \$5,000 to \$250,000	Yes - ASAP	Yes - ASAP	No	No
MOC Property Damage - >\$250,000	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
3rd Party Damage > \$100,000	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
<b>Explosion/Fire</b>				
Company Controlled	Yes - 8 hrs	Yes - 24 hrs	No	No
Local Resource Controlled	Yes - ASAP	Yes - 8 hrs	Yes - 8 hrs	No
Uncontrolled by Local Resources	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
<b>Spills/Releases</b>				
Any Spill/Release - Sensitive Area	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Any Spill/Release - Local Media	Yes - ASAP	Yes - ASAP	Yes - 8 hrs	No
Any Spill/Release - Regional/National Media	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Any HC Spill > 500 bbls	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Any HC Spill to Water > 50 bbls	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Any HC Spill to Water < 50 bbls	Yes - ASAP	Yes - 8 hrs	No	No
Hazardous Mat Spill/Rel>3 x Fed RQ	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Hazardous Mat Spill/Rel<3 x Fed RQ	Yes - ASAP	Yes - ASAP	No	No
Any Produced Fluid Spill > RQ	Yes - ASAP	Yes - ASAP	No	No
Any Designated Env. Incident (DEI)	Yes - ASAP	Yes - ASAP	No	No
Non-Reportable to any Agency	Yes - 12 hrs	No	No	No
<b>Evacuation, Well Control, Media Attention &amp; PSI</b>				
Potentially Serious Incident	Yes - 8 hrs	Yes - 24 hrs	No	No
Evacuation of Residences, Public Building or Blocked Public Road	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Loss of Well Control	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Natural Disasters w/major emergency	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Significant Media Attention	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP
Terrorist Activities	Yes - ASAP	Yes - ASAP	Yes - ASAP	Yes - ASAP

**LTA:** Lost Time Accident; **RQ:** Reportable Quantity; **PSI:** Potentially Serious Incident

**MOC CERT Team Leader: 1-713-629-7118 (Available 24 hours - ask for CERT Team Leader)**

**Note:** CERT notifications to be made by SBU Manager or designee.