

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

RECEIVED  
MAR - 1 2004  
OCD-ARTESIA  
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 3128, Houston, Tx. 77253</b>		<sup>2</sup> OGRID Number <b>30- 30-015-27235</b>
<sup>4</sup> Property Code <b>6408</b>	<sup>5</sup> Property Name <b>INDIAN HILLS ST COMM</b>	<sup>6</sup> Well No. <b>4</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>E</b>	<b>36</b>	<b>20S</b>	<b>24E</b>		<b>1880'</b>	<b>North</b>	<b>660'</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 <b><del>INDIAN HILLS ST COMM</del></b>					<sup>10</sup> Proposed Pool 2				

<sup>11</sup> Work Type Code <b>PPB</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>3634'</b>
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth <b>9600'</b>	<sup>18</sup> Formation <b>Morrow</b>	<sup>19</sup> Contractor <b>Key Energy</b>	<sup>20</sup> Spud Date <b>ASAP</b>

<sup>21</sup> Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
<b>20"</b>	<b>16"</b>	<b>55</b>	<b>40'</b>	<b>redi-mix</b>	<b>surface</b>
<b>12.25"</b>	<b>9.625"</b>	<b>32.3</b>	<b>1220'</b>	<b>1100</b>	<b>surface</b>
<b>8.75"</b>	<b>7"</b>	<b>23 &amp; 26</b>	<b>7999'</b>	<b>1100</b>	<b>+/- 1000'</b>
<b>6.125"</b>	<b>4.5"</b>	<b>10.5#</b>	<b>9600'</b>	<b>175</b>	<b>7300'</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 INTENDS TO Squeeze off Dagger Draw ; Upper Perm Assoc. perms from 7516' to 7746' with approx. 150 sks. of cement.  
Will then drill a 6.125" hole to 9600'. Set a 4.5" liner from 9600'+/- to 7300'+/-, cement in place with 175 sks. of premium cement.  
Well then will be completed in the Morrow.  
All BOPE shall be installed and tested according to OCD rules #109 & #114  
7 1/16" 3M Dual Ram, annular.  
Well site H2S plan attached. Complete H2S contingency Plan on File at OCD's Artesia Office.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <b>Mike Mick</b>		Approved by: <b>ORIGINAL SIGNED BY TIM W. GUM</b> <b>DISTRICT II SUPERVISOR</b>	
Printed name: <b>Mike Mick</b>		Title:	
Title: <b>Sr. Adv. Eng. Tech.</b>		Approval Date: <b>MAR 03 2004</b> Expiration Date: <b>MAR 03 2005</b>	
Date: <b>2-19-04</b>	Phone: <b>713-296-3254</b>	Conditions of Approval:	
		Attached <input type="checkbox"/>	

## **MARATHON OIL COMPANY**

### **H2S DRILLING OPERATIONS PLAN**

#### **• 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 (H<sub>2</sub>S)**
- 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 H<sub>2</sub>S 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. H<sub>2</sub>S EQUIPMENT AND SYSTEMS**

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

**The following safety equipment will be on location.**

**A. Wind direction indicators.**

**B. Automatic H<sub>2</sub>S detection alarm equipment (both audio and visual).**

**C. Clearly visible warning signs. 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.**

## **2. WELL CONTROL SYSTEMS**

### **A. Blowout Prevention Equipment**

**Equipment includes but is not limited to:**

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

**Auxiliary 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**

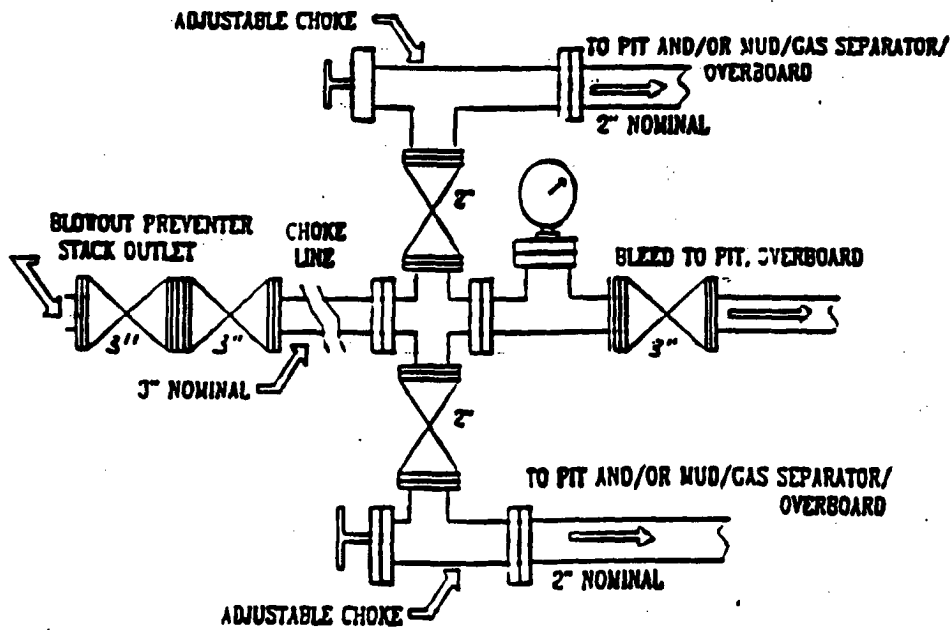
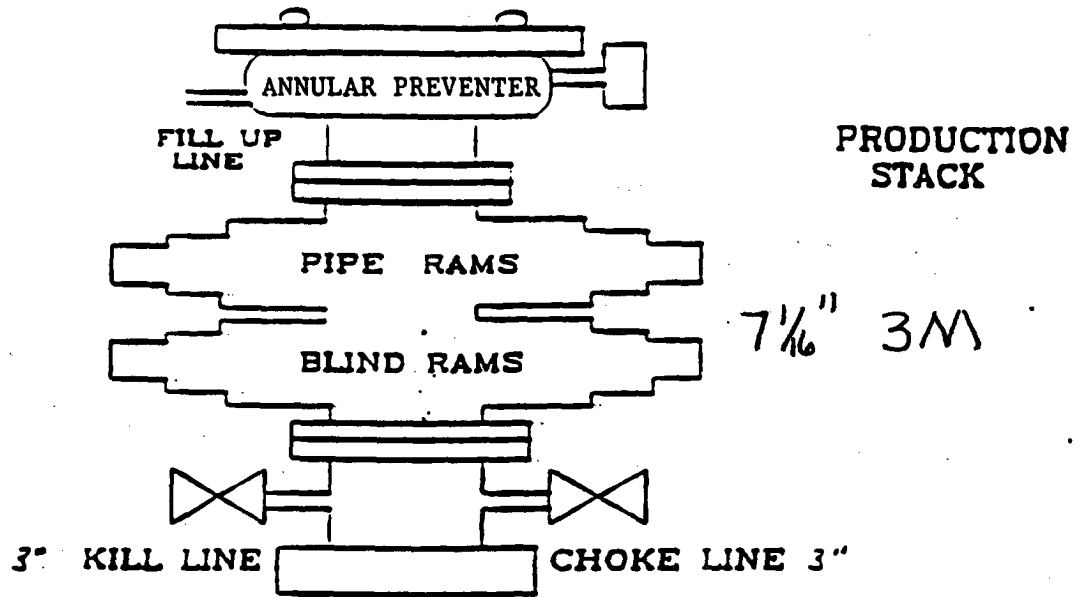
### **B. Communication**

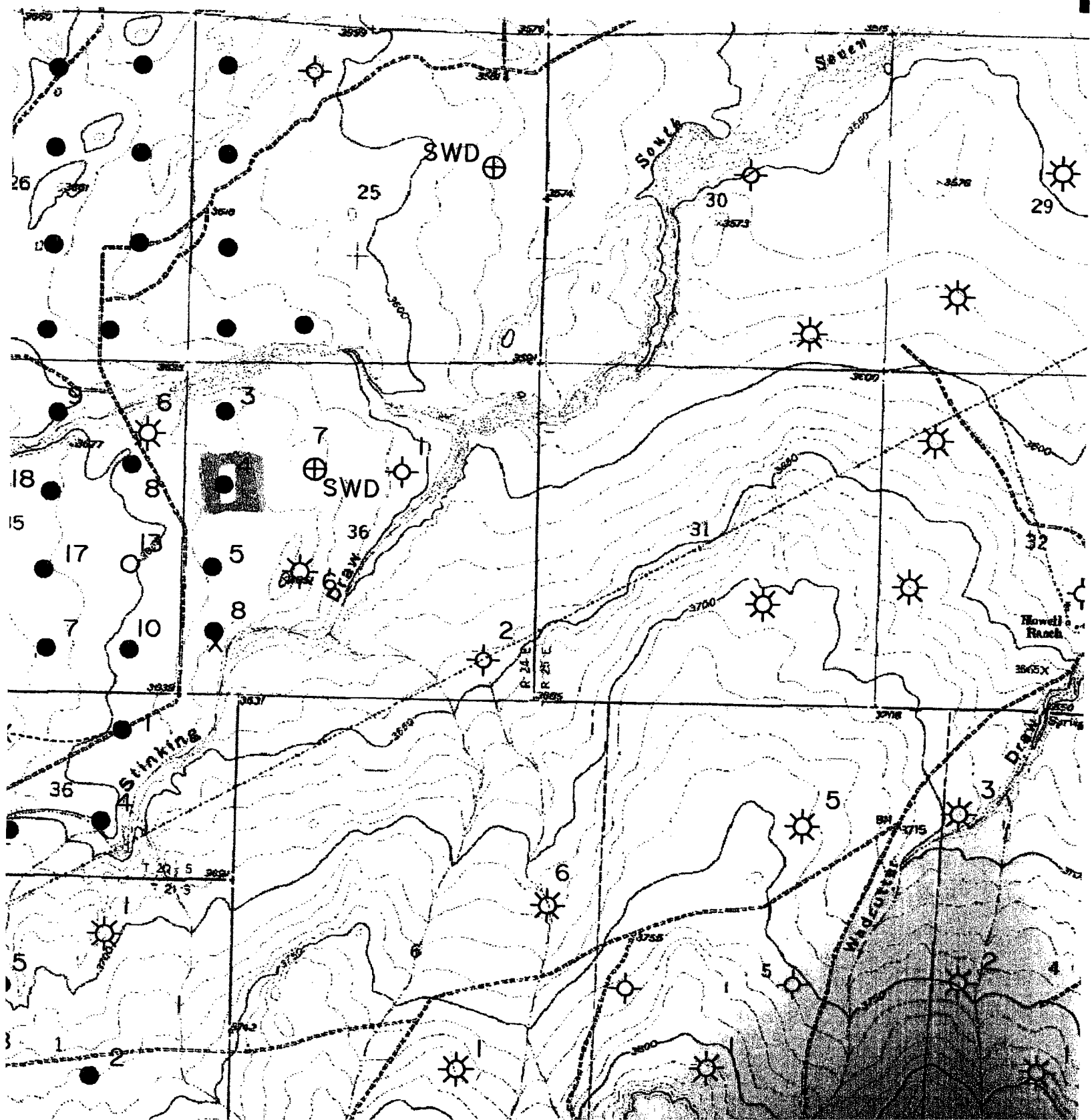
**The rig contractor will be required to have two-way communication capability. Marathon Oil Company will have either land-line or mobile telephone capabilities.**

### **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.**

## **III. WELL SITE DIAGRAM**





LEASE ROAD

LEASE Road  
Entrance

150'



⊗  
WIND  
SOCK

• ←  
IH State Comm #4

240'  
AREA

WIND SOCK  
⊗

↑  
LEASE ROAD  
Entrance

↑ ↑  
Prevailing  
Wind Direction

NOT to scale

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☐ AMENDED REPORT

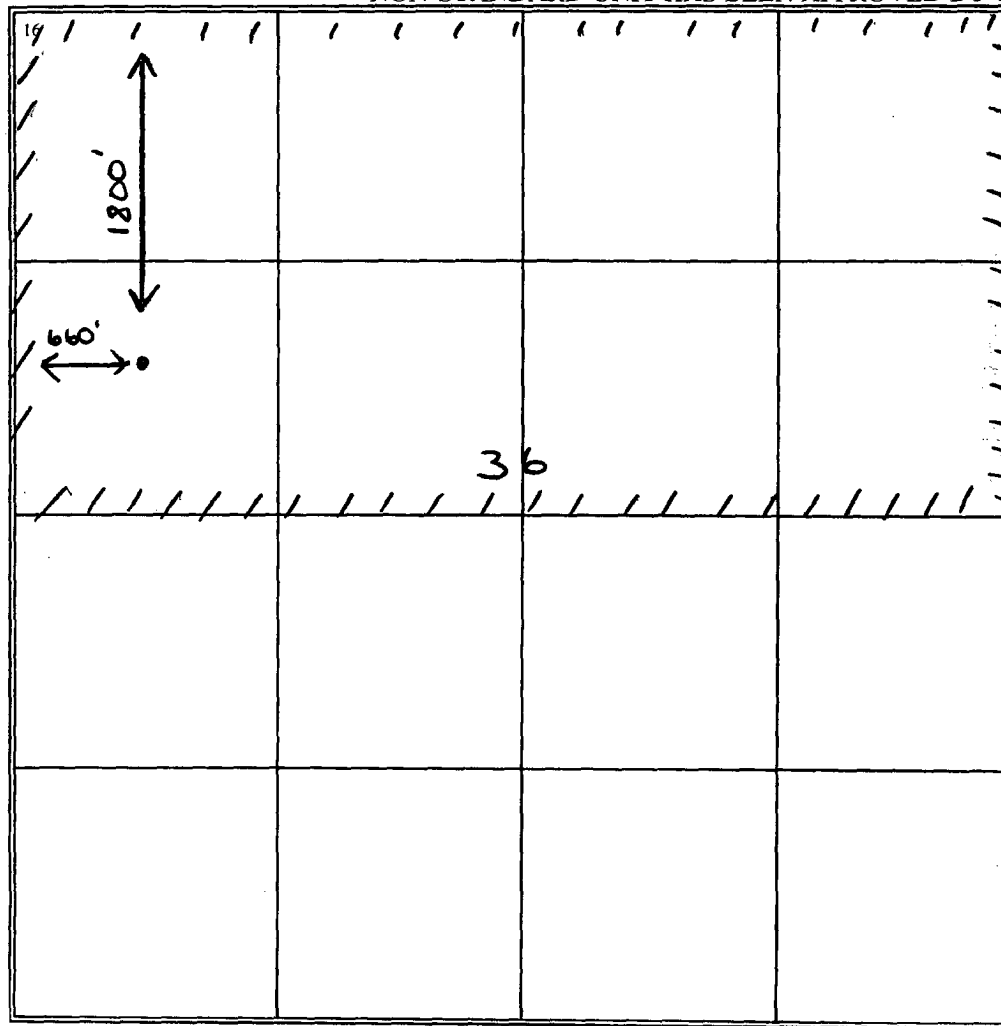
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015-27235</b>	<sup>2</sup> Pool Code <b>078960</b>	<sup>3</sup> Pool Name <b>I.B. Morrow Gas Pool</b>
<sup>4</sup> Property Code <b>6408</b>	<sup>5</sup> Property Name <b>INDIAN HILLS STATE COM</b>	<sup>6</sup> Well Number <b>4</b>
<sup>7</sup> OGRID No. <b>014021</b>	<sup>8</sup> Operator Name <b>Marathon Oil Company</b>	<sup>9</sup> Elevation <b>GL: 3634</b>

<sup>10</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>E</b>	<b>36</b>	<b>20S</b>	<b>24E</b>		<b>1880'</b>	<b>North</b>	<b>660</b>	<b>WEST</b>	<b>EDDY</b>

<sup>11</sup> 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>12</sup> Dedicated Acres <b>320 N/2</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A  
NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>mtmick</i></p> <p>Signature <b>Mike Mick</b></p> <p>Printed Name <b>Sr. Adv. Engineer Technician</b></p> <p>Title <b>2-19-04</b></p> <p>Date</p>
	<p><sup>18</sup> 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.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>