

District I  
PO Box 1980, Hobbs, NM 88241-1980  
  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, ~~DEEPEN OR PLUG BACK~~, OR ADD A ZONE

<sup>2</sup> Operator Name and Address. Devon Energy Corporation (Nevada) 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 6137
		<sup>3</sup> API Number 30-015-30051
<sup>4</sup> Property Code 22549	<sup>5</sup> Property Name KAISER	<sup>6</sup> Well No. 4

<sup>7</sup> Surface Location

UL or lot no. H	Section 18	Township 18S	Range 27E	Lot Ids	Feet from the 2200	North/South line North	Feet from the <del>660</del> 600	East/West line East	County Eddy
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<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1 Red Lake (Q-GB-SA), Red Lake;Glorieta-Yeso						<sup>10</sup> Proposed Pool 2			

<sup>11</sup> Work Type Code D	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3286'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 4500'	<sup>18</sup> Formation Yeso	<sup>19</sup> Contractor Unknown	<sup>20</sup> Spud Date December 1, 1999

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

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24 ppf	1018' existing	650 sx	surface
7 7/8"	5 1/2"	15.5 ppf	2350' existing	350 sx	surface
4 3/4"	4"	10.46 ppf	2250'-4500'	150 sx	top of liner

<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.

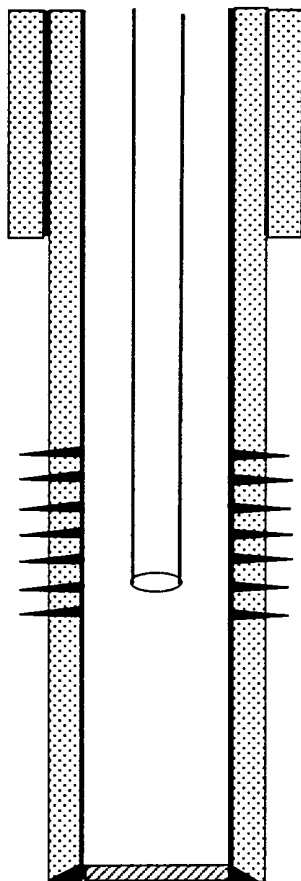
Devon Energy plans to TA San Andres perfs @ 1594'-1938' by squeezing w/ cement. The well will then be deepened to +/- 4500' to the Yeso Formation. After logging, a 4" liner will be run and cemented from 2250'-4500'. Plans are to perforate, stimulate, and pump test the Yeso. After approval of our downhole commingling application, the San Andres perforations will be re-opened by acidizing and the Yeso and San Andres zones will be downhole commingled.

Attached: Current & Proposed wellbore schematics, Exhibit #1 - Blowout Prevention Equipment, Exhibit #2 - Location and Elevation Plat, H2S Operating Plan.

<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: <i>E. L. Buttross Jr.</i>		Approved by: ORIGINAL SIGNED BY TIM W. GUM <i>B6x</i>	
Printed name: E. L. Buttross Jr.		Title: DISTRICT II SUPERVISOR	
Title: District Engineer		Approval Date: 9-27-99	Expiration Date: 9-27-00
Date:	Phone: (405) 235-3611 x 4509	Conditions of Approval:	
		Attached <input type="checkbox"/>	

# DEVON ENERGY CORPORATION - WELLBORE SCHEMATIC

WELL NAME: Kaiser #4			FIELD: Red Lake			
LOCATION: 2200' FNL & 600' FEL. Sec. 18-18S-27E			COUNTY: Eddy		STATE: NM	
ELEVATION: GL = 3287', KB 3296'			SPUD DATE: 10/30/98		COMP DATE: 11/20/98	
API#: 30-015-30051		PREPARED BY: T. Rutelonis			DATE: 9/16/99	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 1018'	8-5/8"	24#	J-55		12-1/4"
CASING:	0' - 2350'	5 1/2"	15.5#	J-55		7-7/8"
CASING:						
TUBING:	0' - 1865'	2-7/8"				
TUBING:						



CURRENT



PROPOSED

OPERATOR: DEVON ENERGY CORPORATION

8-5/8" Casing, Set @ 1018' w/ 650 sxs cmt. TOC @ surface

SAN ANDRES PERFORATIONS:

1594'-1938' (38 holes, .40", ALPHA, "A" & "B")

2-7/8" tbg w/ SN @ 1865'

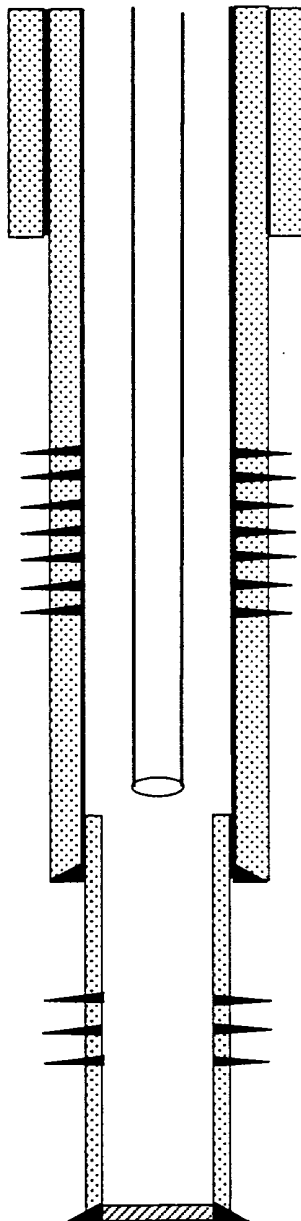
PBTD @ 2306'

5 1/2" 15.5# J-55 Casing Set @ 2350' w/ 350 sxs cmt. TOC @ surf.

TD @ 2354'

# DEVON ENERGY CORPORATION - WELLBORE SCHEMATIC

WELL NAME: Kaiser #4			FIELD: Red Lake			
LOCATION: 2200' FNL & 600' FEL, Sec. 18-18S-27E			COUNTY: Eddy			STATE: NM
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CASING:	0' - 2350'	5 1/2"	15.5#	J-55		7-7/8"
LINER:	2250' - 4500'	4"	10.46#	J-55	FL4S	4-3/4"
TUBING:	0' - 2220'	2-7/8"				
TUBING:						



☐ CURRENT

☒ PROPOSED

OPERATOR: DEVON ENERGY CORPORATION

8-5/8" Casing, Set @ 1018' w/ 650 sxs cmt. TOC @ surface

SAN ANDRES PERFORATIONS:

1594'-1938' (38 holes, .40", ALPHA, "A" & "B")  
(PERFS SQZ'D & TA'D)

2-7/8" tbg w/ SN @ 2220'

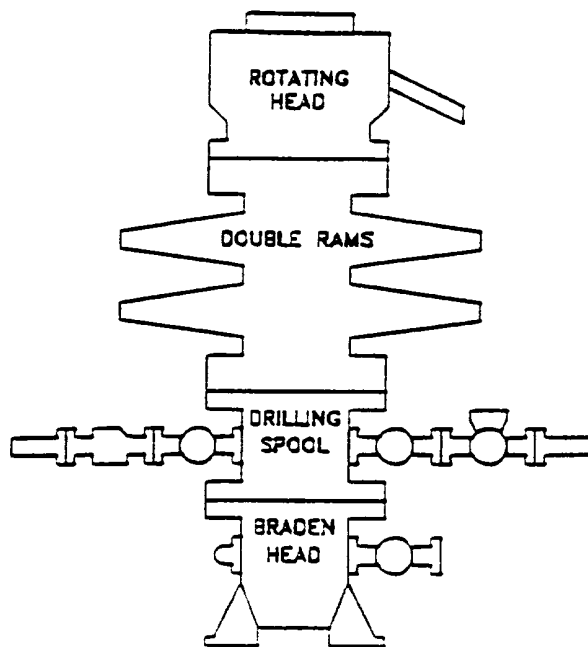
TOL @ 2250'

5 1/2" 15.5# J-55 Casing Set @ 2350' w/ 350 sxs cmt. TOC @ surf.

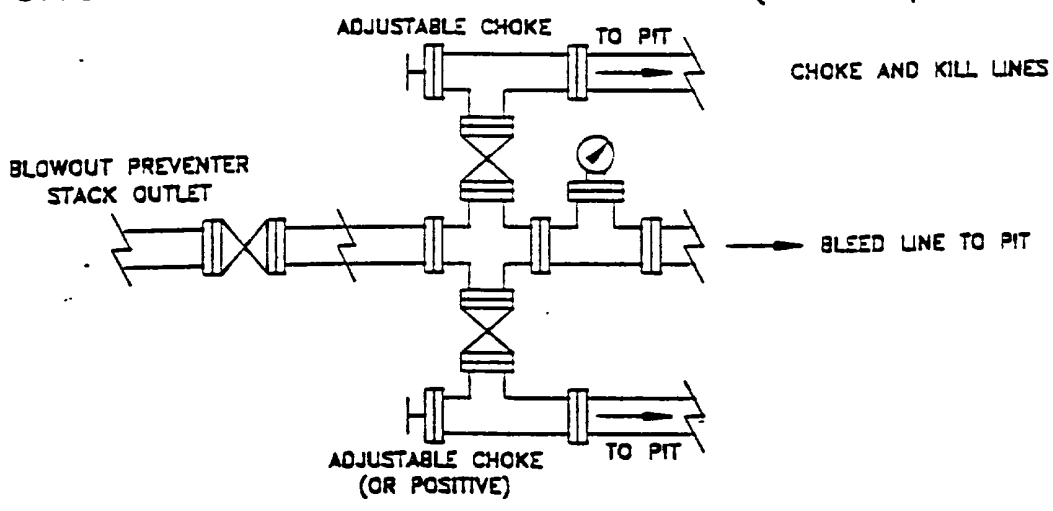
YESO PERFORATIONS:

±2750'- ±3050' (20 HOLES, .38")

TD @ 4500'



### CHOKE MANIFOLD REQUIREMENT (2000 psi WP)



**devon**

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**WEST RED LAKE AREA**  
CHRY COUNTY, NEW MEXICO

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SCHEMATIC  
**BLOWOUT PREVENTOR**  
(2000 PSI WORKING WP)

C:\PROJECTS\EXPANDED

WRHCP	

2/78

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

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

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

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Energy, Minerals and Natural Resources Department

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Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

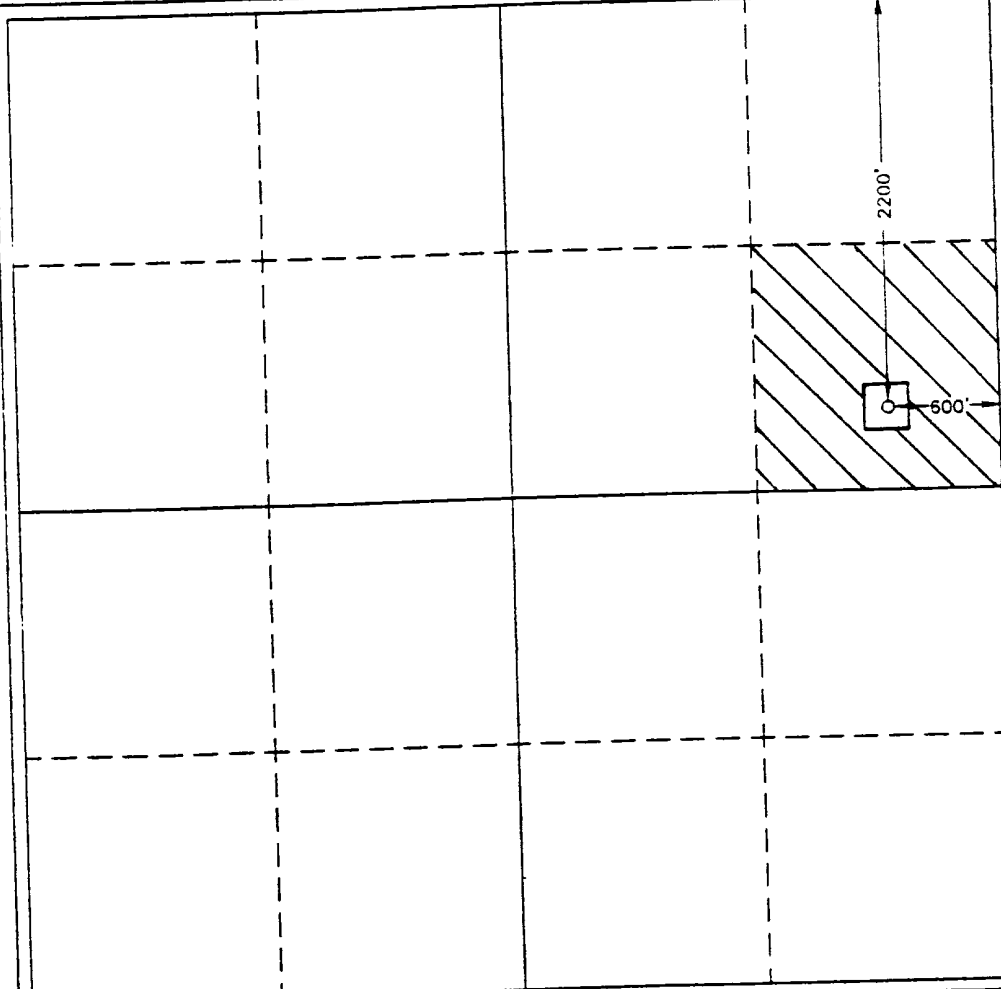
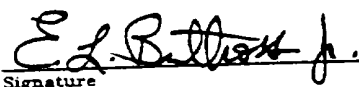
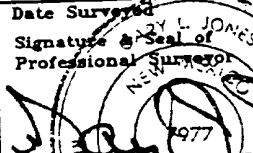
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-30051	Pool Code 51300	Pool Name Red Lake (Q-GB-SA) Red Lake: Glorieta-Yeso
Property Code 22549	Property Name KAISER	Well Number 4
OGRID No. 6137	Operator Name DEVON ENERGY CORPORATION	Elevation 3287'

Surface Location									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	18	18 S	27 E		2200	NORTH	600	EAST	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
Dedicated Acres		Joint or Infill		Consolidation Code		Order No.			

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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature E. L. Buttross, Jr. Printed Name District Engineer Title 1/23/98 Date
	<b>SURVEYOR CERTIFICATION</b>  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.  January 21, 1998 Date Surveyed  Signature & Seal of Professional Surveyor W.O. No. 80285 Certificate No. Gary L. Jones 7977 PROFESSIONAL LAND SURVEYOR BASEL SURVEYS

# **DEVON ENERGY CORPORATION**

## **HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

### **A. Hydrogen Sulfide Training**

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of the H<sub>2</sub>S safety equipment and of personal protective equipment to be utilized at the location such as H<sub>2</sub>S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H<sub>2</sub>S bearing formation, H<sub>2</sub>S training will be required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H<sub>2</sub>S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H<sub>2</sub>S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

### **B. H<sub>2</sub>S Safety Equipment And Systems**

All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H<sub>2</sub>S bearing formation. The safety systems to be utilized during drilling operations are as follows:

1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) - five minute escape packs located at strategic points around the rig.
- (b) Two (2) - thirty minute rescue packs to be located at the designated briefing areas.

4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road - providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

**5. Mud Program**

- (a) The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H<sub>2</sub>S bearing formations.

**6. Metallurgy**

- (a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.

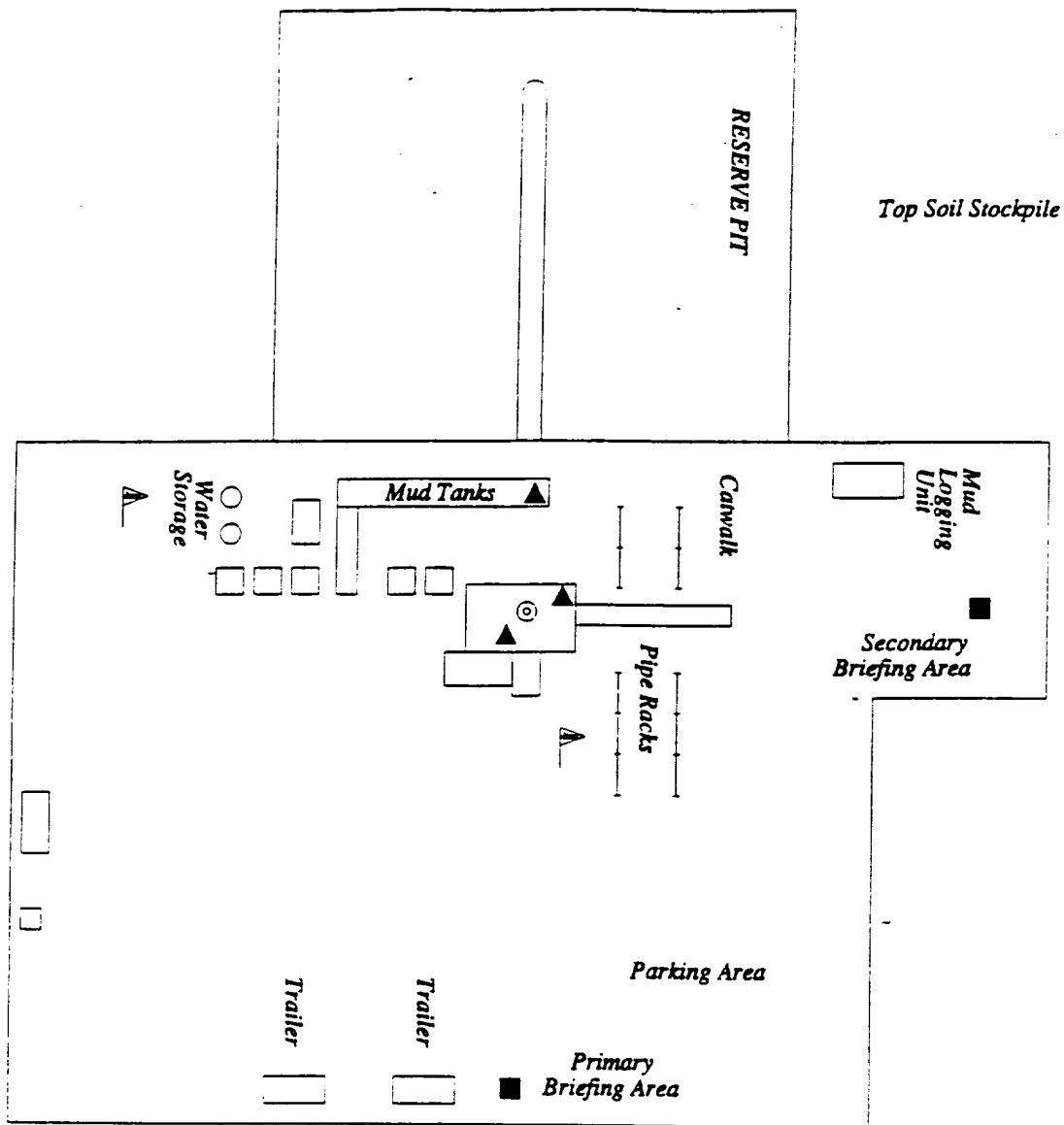
**7. Communication**

- (a) Two way radio and cellular telephone communication will be available in company vehicles.

**C. Diagram of Drilling Location**

- 1. Attached is a diagram representing a typical location layout as well as the location of H<sub>2</sub>S monitors, briefing areas, and wind direction indicators.





- ▲ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- A WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



**devon**

**WEST RED LAKE AREA**  
±EDDY COUNTY, NEW MEXICO

**H2S PLAN**

Scale in Feet  
 25 0 25 50 75 100